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Sandra Leonor Cabrera Moreno

Candidate

Language, Literacy and Sociocultural Studies

Department

This dissertation is approved, and it is acceptable in quality and form for publication:

Approved by the Dissertation Committee:

Dr. Carlos López-Leiva, Chairperson

Dr. Holbrook Mahn

Dr. Richard Meyer

Dr. Pisarn Chamcharatsri

Dr. Prisca Martens

Dr. Sylvia Celedón-Pattichis

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by

SANDRA LEONOR CABRERA MORENO

BA in English Language and Literature, Universidad de Cuenca, 2009
Master in Educational Leadership, UTPL, 2011

DISSERTATION

Submitted in Partial Fulfillment of the
Requirements for the Degree of

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Educational Linguistics**

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DEDICATION

To Hilda and Leslie

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ABSTRACT

Meaning construction is a complex concept that encapsulates language and thought as a whole system in which sense and meaning have a unique relationship highly marked by the social and cultural environment of the reader. Hence, Kichwa-Spanish bilinguals' reading practices in the Southern Andes of Ecuador cannot be discussed as two separate processes but as an integrated structure embedded in a speech community. This perspective of the bilingual mind is founded on Vygotsky's sociocultural theory of learning in which language is a psychological tool that shapes and is shaped by our modes of thinking. This unification is a complex process in which biological, social, cultural and historical foundations contribute to the qualitative transformations of the human mind and shape the way bilingual readers understand, interpret and retell narrative texts after an L2 reading event. To unveil the complexity of the construction of the meaning of an L2 narrative text, this multiple case study incorporated retrospective miscue analysis to collect data and understand what emerges in readers' consciousness after a reading event. The analysis of miscues, retellings and retrospective reflections suggested that the pedagogical environment, cross-linguistic influence, sociolinguistic factors and

intertextuality led Kichwa-Spanish bilinguals to the creation of a new text as they retold the story.

Key words: Kichwa-Spanish bilinguals, L2 reading, narrative texts, L2 miscues, retellings, meaning construction, Kichwa, Spanish, cross-linguistic influence, intertextuality.

TABLE OF CONTENTS

DEDICATION	iii
ACKNOWLEDGMENTS	iv
ABSTRACT.....	v
List of Figures	xii
List of Tables	xiii
List of Matrices	xiv
List of Appendices	xv
CHAPTER I: INTRODUCTION.....	1
Background and Context.....	1
Problem Statement	2
Statement of Purpose and Research Questions	2
Research Approach.....	3
Rationale and Significance	4
Positionality of the Researcher.....	4
CHAPTER II: CONCEPTUAL FRAMEWORK	6
2.1. Conceptualizing reading.....	6
2.2. Conceptualizing Meaning Construction	7
2.3. How Language Shapes Thinking at Different Ages.....	13
2.4. From Elementary to Higher Psychological Functions	13
2.5. Periods in the Development of Children’s Language and Thinking.....	18
2.5.1. Infancy	18
2.5.2. Early Childhood.....	19
2.5.3. Preschool Age.....	22
2.5.4. Literacy and the Language of School Age	24

2.6. The Development of Academic Concepts.....	27
2.6.1. Syncretic Modes of Thinking	29
2.6.2. Complexive Thinking and Early Literacy	30
2.6.3. Chained and Diffuse Complexes	32
2.6.4. Potential Concepts	33
2.6.5. Abstract Thinking and True Concepts	34
CHAPTER III: LITERATURE REVIEW	37
3.1. The Role of Everyday and Academic Concepts in Miscue Analysis.....	37
3.2. Miscues as Semantic Associations	41
3.3. The Relationship between Miscues and the Development of Perception and	
Memory	43
3.4. What Miscue Analysis Reveals about Proficient Readers	44
3.5. What Miscue Analysis Reveals about “Struggling” Readers.....	46
3.6. Eye Movement and Reading Miscues	48
3.6.1. EMMA and Visual Resources in the Text.....	53
3.7. Text Genre, Miscues and Meaning Construction in Bilinguals	56
3.8. Defining Retrospective Miscue Analysis	63
3.9. RMA and the Development of Metacognition in L1 and L2	65
CHAPTER IV: METHODOLOGY	73
4.1. Rationale for Case Study Design	73
4.2. The Research Sample	73
4.3. Recruitment and Screening Procedures.....	74
4.4. Inclusion and Exclusion Criteria	74
4.5. Participants	74
4.6. Research Venue.....	75

4.7. Data Collection Procedures	76
4.7.1. Phase I: Interviews.....	77
4.7.2. Phase II: Oral reading	77
4.7.3. Phase III: Oral Retellings	79
4.7.4. Phase IV: Metacognitive Reflections	79
4.8. Data Analysis Procedures.....	81
4.8.1. Phase I: Coding and Analysis of Interview Data.....	83
4.8.2. Phase II: Analyzing Miscues through the In-Depth Procedure	86
4.8.3. Phase III: Retelling Analysis	91
4.8.4. Phase IV: Analyzing Metacognitive Reflections.....	92
4.9. Holistic Account of Participants’ Meanings	93
4.10. Participant Compensation	93
4.11. Project Resources	93
4.12. Ethical Considerations.....	93
4.12.1. Informed Consent and Student Assent	93
4.12.2. Privacy of Participants.....	94
4.12.3. Participant Withdrawal	95
4.12.4. Potential Risks	95
4.12.5. Benefits for Participants	95
4.12.6. Pedagogical Incidence in Intercultural Education	95
4.13. Data Management Procedures and Confidentiality.....	96
4.14. Validity of the Design.....	96
4.15. Validity Threats	96
CHAPTER V: RESULTS AND ANALYSIS.....	98
5.1. Analytic Category 1: Kichwa-Spanish Readers’ Perceptions of their Role as.....	98

Readers of Two Languages and their Influence on L2 Reading Strategies	98
5.1.1. Learning to Read in Kichwa and Spanish	99
5.1.2. Kichwa-Spanish Bilinguals' Conception of a Good Reader	101
5.1.3. Self-Reported Strategies for Sections Readers did not Understand in a Text	104
5.1.4. How Teachers Should Help Struggling Readers	111
5.1.5. Becoming Better Readers	113
5.2. Analytic Category 2: L2 Oral Miscues, Reading Strategies and their Relation to L2 Retellings.....	118
5.2.1. Reading Strategies and Common Types of L2 Miscues.....	118
5.2.2. The Role of Text Genre in Shaping the Meaning and Sense of L2 Narratives	122
5.2.3. The Role of Readers' Knowledge of their L2 in Shaping the Sense and Meaning of L2 Narratives during Oral Reading.....	124
5.2.4. Intertextuality, Intercontextuality and the Construction of a Parallel Text	130
5.3. Analytic Category 3: Syntactic and Semantic Patterns of Meaning Construction in Retellings	133
5.3.1. The Influence of Kichwa on Spanish Syntactic Constructions	133
5.3.2. The Influence of Spanish on Kichwa Syntactic Constructions	142
5.3.3. Semantic Patterns in Retellings	144
5.3.4. Intertextuality and Cultural Elements of the Andes in Retellings	150
5.4. Retrospective Miscue Analysis: Revaluing Readers' Miscues and Reading Strategies	155
CHAPTER VI: SYNTHESIS OF FINDINGS AND CONCLUSIONS	162
6.1. The Influence of Bilingual Readers' Perceptions on their L2 Reading Strategies	163
6.2. Self-Reported Reading Strategies and L2 Miscue Production.....	165

6.3. Syntactic and Semantic Patterns in Kichwa and Spanish Retellings	166
6.4. Readers' Perception of their Own L2 Reading Strategies and Miscues.....	168
6.5. Conclusions	171
APPENDICES	174
References.....	307

List of Figures

Figure 1. Stages in Concept Formation	29
Figure 2. Miscues Produced by a Proficient Reader	45
Figure 3. The Influence of Contextual Clues on Word Substitutions	51
Figure 4. The influence of Contextual Clues on Word Omissions and Verbalizations	52
Figure 5. Quechua-Spanish Semantic Construction of the Storytelling of a Picture Book.....	62
Figure 6. Syntactic and Semantic Acceptability in Miscue Analysis	64
Figure 7. Ingapirca Archeological Complex in Cañar, Southern Andes of Ecuador.....	75
Figure 8. Stone Walls at Ingapirca Archeological Complex	76
Figure 9. Units to Be Analyzed in Meaning Construction of L2 Narratives	83
Figure 10. In-depth Questions and Indicators for Classifying L2 Reading Miscues	87
Figure 11. Kichwa and Spanish Retelling Scores	146
Figure 12. A Holistic Account of Four Interrelated Factors of L2 Meaning Construction in Kichwa Spanish Bilinguals	162

List of Tables

Table 1. <i>Psychomotor Skills and Complex Associations in Early Literacy</i>	31
Table 2. <i>Oral Reading Miscues Produced by a First Grade Child</i>	41
Table 3. <i>Characteristics of the Subgenres of a Complex Text</i>	58
Table 4. <i>Summary of Data Collection Instruments and Purpose</i>	81
Table 5. <i>Patterns for Evaluating Levels of Meaning Construction</i>	89
Table 6. <i>Patterns for Evaluating Levels of Grammatical Interrelations</i>	90
Table 7. <i>Inductively Developed Analytic Category: Perceptions and Reading Strategies</i>	116
Table 8. <i>Graphemic and Phonological Similarities in Word Substitutions during the Oral Reading of Two Narrative Texts in Spanish</i>	119
Table 9. <i>Miscue Production in Text 1 – Felicidad</i>	129
Table 10. <i>Miscue Production in Text 2 – El Río</i>	129

List of Matrices

Case-Level Display Matrix 1	85
Case-Level Display Matrix 2	85
Case-Level Display Matrix 3	86
Retelling Matrix	92

List of Appendices

Appendix A. The Burke Reading Interview.....	175
Appendix B. Goodman’s Taxonomy for Miscue Analysis: Miscue Marking as Done on the Typescript of a Text	177
Appendix C. In-Depth Procedure Coding Forms	183
Appendix D. Informed Consent	230
Appendix E. Student Assent	237
Appendix F. Retelling Forms	241
Appendix G. Retelling Guides and Scores	283

CHAPTER I: INTRODUCTION

Background and Context

The bilingual mind is an integrated system that combines the linguistic and cultural elements available to the individual. Due to this complexity, bilingualism cannot be discussed as the use of two separate languages but as a whole system of meaning construction. This perspective of the bilingual mind is founded on a sociocultural theory of learning in which language shapes and is shaped by our modes of thinking (Vygotsky, 1987). This unification is indeed a complex system in which biological, social, cultural and historical foundations contribute to the qualitative transformations of the human mind (Mahn, 2012).

Then the purpose of this study was to understand how Kichwa-Spanish bilinguals between 12 and 14 years old constructed the meaning of Spanish narratives after a reading event. This study originated from the desire to delve into the uniqueness of the bilingual mind and the necessity to expand the literature exploring reading and meaning construction in the Southern Andes of Ecuador. For the purpose of this study, the term “meaning construction” referred to the Vygotskian relationship between meaning and sense. That is, “meaning is nothing more than a potential that can only be realized in living speech,” as meaning is a socially constructed manifestation of a particular moment in time and space, inherently connected to sense, which “is the aggregate of all psychological facts that arise in our consciousness as a result of the word” (Vygotsky, 1987, p. 276).

What emerges in readers’ consciousness after a reading event is, therefore, intrinsically connected to the social and cultural meanings readers have developed in their first and second languages, as exposure to the practices of their communities highly influences their development of biliteracy (De Jong, 2011).

Problem Statement

Much of what has been studied regarding readers' construction of the meaning of a text focuses on monolingual reading. Considering the uniqueness of the bilingual mind, meaning construction of an L2 narrative text requires the analysis and understanding of the influence of bilinguals' first language on the way they transact with written texts in their second language. Therefore, to understand meaning construction during an L2 reading event, this study incorporated retrospective miscue analysis (Goodman, Martens & Flurkey, 2014; Goodman, Watson & Burke, 2005) to discuss how readers' modes of thinking shaped and were shaped by the languages of their speech community. The lack of information on Kichwa-Spanish bilinguals' unexpected responses or miscues and their reading strategies for meaning construction made it pivotal to conduct a multiple case study to analyze how Kichwa-Spanish speakers in the Southern Andes of Ecuador constructed the meaning of narrative texts in relation to linguistic, social and cultural factors.

Statement of Purpose and Research Questions

The purpose of this multiple case study was to analyze how Kichwa-Spanish bilinguals between 12 and 14 years old constructed the meaning of narrative texts after a reading event, with a focus on the influence of their first language on this construction. The following questions were addressed.

Research Questions:

What does Retrospective Miscue Analysis reveal about Kichwa-Spanish bilinguals' construction of the meaning of L2 narratives?

How does Kichwa influence readers' construction of the meaning of narrative texts in Spanish?

Sub-questions:

- 1) How do readers' perceptions of their role as bilingual readers influence their L2 reading strategies?
- 2) What is the relationship between reading strategies and miscue production in their L2?
- 3) What syntactic and semantic patterns do Kichwa and Spanish retellings show?
- 4) How do readers perceive their own reading strategies and miscues in their L2?

Research Approach

With the approval of the University of New Mexico's Institutional Review Board (IRB), I conducted a multiple case study to analyze what RMA revealed about Kichwa-Spanish bilinguals' meaning construction of L2 narrative texts, with an emphasis on how Kichwa influenced bilingual readers' construction of the meaning of narrative texts in Spanish.

I adapted the questions of the Burke Reading Interview (Goodman, Watson & Burke, 2005) to generate data and analyze readers' perceptions of their roles as bilingual readers and how these perceptions influenced their strategies for meaning construction in Kichwa and Spanish. With regard to the relationship between readers' strategies and miscues during oral reading, I used two short stories from the book "Verde fue mi selva" (My forest was green) by Edna Iturralde (2013) to engage learners in reading and story retelling. Finally, a dialogue with each reader was conducted with the purpose of having readers reflect on their own miscues and reading strategies.

For data analysis and interpretation, I drew on Goodman, Watson and Burke's (2005) miscue analysis, a process in which "miscues" refer to the unexpected responses readers produce as they read a text, overcoming the negative connotations that come with the term error. Goodman et al.'s (2005) taxonomy for miscue analysis was a useful tool to

understand the complex syntactic and semantic relations among different miscue categories.

Furthermore, Vygotsky's sociocultural theory of learning served as a solid conceptual framework for understanding how readers constructed the meaning of L2 narrative texts greatly influenced by their linguistic and cultural background. Readers' perceptions of their roles as bilingual learners, their production of miscues and the construction of the meaning of a written text were congruent with sociolinguistic factors and literacy practices in school.

This means that the new narratives that came with retellings reflected how the strategies readers have developed in the classroom played a role in their meaning construction of the text. In addition, language status and geographical proximity allowed readers to incorporate linguistic and cultural elements from Kichwa and Spanish in their new narratives, leading them to the construction of a parallel text.

Rationale and Significance

The rationale for this study was that the linguistic and cultural elements of the Kichwa language, an agglutinative language, are very different from that of Spanish. Linguistically, the Kichwa language follows a Subject-Object-Verb pattern while Spanish follows a Subject-Verb-Object pattern, which suggests cross-linguistic influence on meaning construction. Culturally, Kichwa-Spanish bilinguals are part of a community with different traditions still connected to the Andean Cosmovision.

Positionality of the Researcher

As a language professor at a public university in the Southern Andes of Ecuador, I have always respected linguistic and cultural diversity and regarded intercultural bilingual education as a fundamental pillar for the preservation of indigenous languages and their culture. Hence, I have a profound respect for those female indigenous leaders who first

fought to ensure that the rights of indigenous children were respected. Their assiduous activism in the twentieth century is a legacy for all educators, because even though the Ecuadorian Constitution recognizes our plurinational, pluricultural and multiethnic condition, Spanish is the official and dominant language in our country. Its dominance and eminent high status in language hierarchy raises challenges and demands for educators and those in charge of the formation of new professionals for the National Education System.

Bearing this in mind, while I was studying at the University of New Mexico, I engaged in meaningful conversations about language revitalization and the actions people were taking to preserve indigenous languages in North America, conversations that mainly focused on Navajo and Cherokee. Due to those passionate dialogues, I changed my mind about conducting a study on the learning of English as a foreign language and decided that, as an Ecuadorian educator and citizen, I could contribute in some way to understand bilingualism in a diglossic society and its implications for education. Therefore, I became a passionate learner of the Kichwa language, which, of course, led me to expand my knowledge of the Andean Cosmivision, because as Vygotsky says language can never be detached from its social, cultural and historical foundations.

Then, it became my desire to understand how Kichwa-Spanish speakers in the Southern Andes of Ecuador constructed the meaning of narrative texts in their L2 and how their L1 shaped such construction linguistically, socially and culturally. Language status, the linguistic complexity of this agglutinative ancestral language and the richness of the Kichwa Cosmivision awoke in me a profound interest in understanding Kichwa-Spanish speakers' reading practices and their educational implications.

CHAPTER II: CONCEPTUAL FRAMEWORK

This section provides a brief conceptualization of reading as a transactional process embedded in a sociocultural theory of learning. Here, the relationship between sense and meaning is pivotal to understand learners' development of language and thinking at different ages and thus their development of everyday and academic concepts.

2.1. Conceptualizing reading

Reading is a social practice. It is a transactional process (Rosenblatt, 1978) in which readers delve into the meaning of a text bringing with them their own social norms, cultural elements and language, to understand the senses embedded in texts. Therefore, reading is never detached from a speech community and thus any reading experience becomes a socio-psycholinguistic experience (Goodman, 1967; Goodman, 1996). This socio-psycholinguistic process is highly marked by readers' knowledge, beliefs, expectations and social uses of language. In this transactional process, reading goes beyond mere letter or word decoding and focuses on meaning and sense. This assertion implies that meaning construction is not the result or final stage of a reading event but the core of reading itself (Kabuto, 2016).

Goodman and Marek (1996) state that during a reading event, the reader uses her language, cultural and social clues to guide her interpretations of the syntactic and semantic elements in the text. It is an extraordinary process in which the reader engages in a meaningful journey. This journey starts with the intention of constructing meaning and making sense of the meanings already expressed in the text. The reader travels within and across the text focusing on the sense that words and sentences evoke in her mind. As meaning construction is both the core and the outcome of the journey, readers produce miscues, commonly but erroneously known as mistakes. These miscues are unexpected, but most of the time, coherent changes of the graphemes, phonemes and syntactic and

semantic elements in the text. Indeed, miscues appear since the reader processes the text holistically through the use of the cognitive strategies of sampling, inferring, predicting, confirming and self-correcting. Decades of miscue analysis (Goodman, 1967; Goodman & Gollasch, 1982; Goodman, 1996; Goodman, Watson & Burke, 2005) have led to the conclusion that all readers use these strategies. However, how and to what extent they use them depends on how readers sense the meanings of the text and how their interpretations are constructed in relation to who readers are socially and culturally. Thus, the context in which a reader reads also influences their construction of meaning.

2.2. Conceptualizing Meaning Construction

To understand the concept of meaning construction during a reading event, we must first analyze the complex system of language and thinking that Vygotsky calls “rechnoi myshlenie,” a system with “znachenie slova” or meaning through the use of language at its core (Mahn, 2012). To Vygotsky, *znachenie slova* is the only unit to be analyzed that has “*all the basic characteristics of the whole*” (Vygotsky, 1987, p. 46, emphasis in original). Since the complexity of the system of language and thinking obeys the dynamics of the systems embedded in it, the way young readers sense and construct meaning is tailored to the qualitative transformations they undergo as they develop their language and modes of thinking within their social and cultural environment.

Relying upon the analysis of language and thinking as processes in motion, it is possible to fully understand meaning through the use of language and thus meaning construction during a reading event. As language and thinking are governed by the dialectical logic that “nothing is constant but change” (Mahn, 2012, p. 103), we must regard meaning construction as the result of a process in which the language of the reader shapes her modes of thinking as her modes of thinking shape her language (Vygotsky, 1987). Therefore, the meaning constructed after the encounter with a text is the result of

meaningful interactions between the social and cultural meanings that the reader brings to the text and those meanings rooted in the text itself. What the reader has synthesized in her mind becomes a stable complex idea that emerges from such interaction.

Considering Vygotsky's sociocultural theory, individual development cannot be detached from culture, social interaction and linguistic signs. Therefore, the development of literacy must always consider that "human activities take place in cultural contexts, are mediated by language and other symbol systems, and can be best understood when investigated in their historical development" (John-Steiner & Mahn, 1996, p. 191). Hence, a reading act is always an act of mediation between sociocultural and linguistic signs.

According to Mahn (2012), the Vygotskian perspective of meaning construction embraces the interrelation of two predominant systems: the internal system of the individual mind and the external system of the social, cultural and historical foundations. In Vygotsky's languaging and thinking system, meaning has its roots in the physical brain and its development is highly marked by the sociocultural environment, which shapes the mind of the child and creates the particularities of her language and modes of thinking. This influences the way the reader understands the meanings embedded in a written text.

The relationship between the social environment and the qualitative transformations in language and thought at different ages is referred to as "the social situation of development" (Mahn, 2012). This social factor is a determinant of the way a person perceives and interprets a particular situation or text. Such experience is unique and no one else can have the same feeling or emotion. Vygotsky calls this complex process "perezhivanie," which refers to "the way people perceive, emotionally experience, appropriate, internalize, and understand interactions in their social situations of development" (Mahn, 2012, p. 111).

Perezhivanie is a unit where, on the one hand, in an indivisible state, the environment is represented, i.e., that which is being experienced—an emotional experience is always related to something which is found outside the person—and on the other hand, what is represented is how I, myself, am experiencing this, i.e., all the personal characteristics and all the environmental characteristics are represented in an emotional experience (Vygotsky, 1994, 342).

The concept of perezhivanie is essential to understand readers' modes of thinking in relation to their motivations and attitudes and, consequently, their interpretations of written texts. In the construction of meaning, readers' environment can be as powerful as the social environment of the text. Readers, with their socially evolved language and cultural patterns, approach texts with certain expectations that dialogue with the ideas of the author, making the transaction between the reader and the text unique (Rosenblatt, 1995).

This emotional experience underscores reading as a continuum of efferent and aesthetic elements (Rosenblatt, 1994). Efferent elements refer to the information the reader extracts from the text, while aesthetic elements refer to the ideas, feelings or associations that the written signs evoke in the mind of the reader. Science readers, for example, adopt an efferent behavior towards the text since they are interested in grasping the actual facts and concepts. However, this experience cannot be regarded as a simple binary process. It is more like a relationship in which some texts bring forward more efferent responses than aesthetic, but the aesthetic elements are quite present, and vice versa.

In contrast, during a mostly aesthetic transaction, "*the reader's attention is centered directly on what he is living through during his relationship with that particular text*" (Rosenblatt, 1994, p. 25, emphasis in original), as the aesthetic elements create in

the reader a sense of belonging to the ideas in the text. Then, the reader is consciously aware of her senses, feelings, emotions, and experiences as she transacts with the written signs, because “reading is what happens when written words begin to live in the mind, heart, relationships, spirit, and world of someone engaging with text” (Meyer, 2002, p. 26). Here Meyer suggests the overlap between aesthetic and efferent in the construction of the transactional nature of reading—always specific to the individual.

Focusing on one element or the other depends on the situation of reading taking place at that time. For example, when children first encounter poetry, teachers must mediate the process by promoting an aesthetic perspective towards the language, the metaphors, the emotions and all the different aspects that poetry entails. Since language is socially constructed, previous experiences, preconceptions, ideologies, and emotions shape readers’ understandings and interpretations. There is an efferent reality to poetry, as well, as poetry is lived in a context and in relationships that readers come to understand and build upon in their construction of meaning.

According to Smagorinsky (2001), culture as an individual and social construct mediates the relation between readers and texts because “no text or reader comes to the experience alone; rather, reading is fundamentally relational and *dialogic*” (p. 141, emphasis in original). Considering Vygotsky’s sociocultural theory, Smagorinsky emphasizes the importance of “transactional zones” as mediators in the construction of meaning. According to Smagorinsky, as children progress in speech, they adopt cultural means of mediation to develop their consciousness socially, culturally and historically. Transactional zones, then, refer to different but interrelated dialogic experiences that occur as a phenomenon of enculturation, including literacy practices.

Since the development of literacy is never detached from the environment where the reader grows up, external and semantic paths of speech development are highly

influenced by social and cultural connotations. During childhood, the external path leads the child to an inductive process in which speech goes from the part to the whole, while the semantic path involves a deductive process in which speech goes from the whole to particular units of language (Vygotsky, 1987).

To illustrate these divergent but still intrinsically connected paths, we can say, for example, that a child whose first language is Kichwa will use one single word like “mama” to call her mother’s attention or persuade her to do something. This means that, in the external path, the child uses a single word to convey a complete thought. Only gradually with cognitive, social and cultural development, she will add more words to her language to build on phrases and sentences like “Ñuka kaypi kawsani,” meaning “I live here.” This means that, in the semantic path, the child conveys a complete thought through the use of new words or meanings that emerge as she develops her language and thought within her speech community.

According to Vygotsky (1987), these opposing paths—external and semantic spheres—lay the groundwork for understanding the complexity of logical relations. In this complexity, a more divergent relation is that of “the grammatical and the psychological subject and predicate” (p. 251). To clarify this, Vygotsky takes us into a syntactic and semantic journey into the human mind to show us how emotional experiences can lead to changes in the sense of grammar structures. In the sphere of meaning, a phrase like “the clock fell” can convey different meanings, but the representation that emerges in our consciousness is unique. According to Vygotsky, what is first represented in our mind determines the psychological subject and the predicate, depending on whether the representation of the object or the idea of an object falling comes first. The representations that come into our mind are of great importance to reading and meaning construction, because as readers transact with the text, they actively

combine their language and modes of thinking to sense and internalize the written signs. This internalization of sense highly depends on how we perceive language in relation to the social and cultural meanings attached to it (Mahn, 2012). Consequently, “a change in a single, seemingly insignificant, grammatical detail can lead to a change in the whole meaningful aspect of speech” (Vygotsky, 1987, p. 253).

We can analyze this complex connection between external and semantic spheres of speech based on two meanings of the Kichwa word “killa,” considering the cyclical conception of time in the Andean Cosmivision. According to Estermann (2006), the Andean perception of time is not quantitative but qualitative, as there is a specific time for a specific activity such as planting or harvesting. This qualitative conception of time is tailored to the solstices of June 21 and December 21 and the phases of the moon. Then, the fact that the Kichwa word “killa” has the meanings of “moon” and “month” is not arbitrary. A month was calculated considering the phases of the moon from new moon to new moon, which implies a relation between the word and the sense it acquired in consciousness.

During centuries, the Andean people or *runakuna* decided how and when to cultivate their soil based on a cyclical perspective of time. Guaman Poma de Ayala’s chronicle (contextualized between 1583 and 1615) shows how Andean people’s sense of time was incorporated into their language, evidencing that meaning depends on the sense that words acquire historically, socially and culturally. In his chronicle, Guaman Poma provides a register of the names used to refer to the months of the year in relation to agriculture. A couple of examples are “pacha pukuy killa” and “hatun kuski, aymuray killa” (Guaman Poma de Ayala, Murra & Adorno, 2006). The first expression refers to the third month of the year, March, and literally means “the moon of soil maturity,” while the second expression refers to the fifth month of the year, May, and its literal meaning is

“the great search, the moon of the harvest.” Isolated in a lexicon, the word “killa” or any word in any language may have one or various literal meanings, but it is only in living speech that words evidence their social and cultural sense. This is especially pertinent to the process of reading because readers construct the meaning of a text based on the sense that words create in their consciousness.

Since our ways of sensing reality are expressed through living language, they are of great importance to understand readers’ transactions with texts. In their construction of meaning, language—readers’ psychological tool—mediates between the written sign and the social and cultural environment. As reading takes place, readers “engage in culturally mediated processes, in dialogue with the great history of texts, contexts, intertexts, and intercontexts” (Smagorinsky, 2011, p. 163). A reading event, apparently a solitary encounter with a text, is indeed a dialogue among the historical, social, cultural and contextual circumstances of both readers and texts.

2.3. How Language Shapes Thinking at Different Ages

As children learn to read, they form unique interpretations of the written texts they encounter at school. However, these interpretations are not fortuitous; they evolve from the unification of natural, cultural, and social factors that make us who we are. As Smith (1997) states “It is not in print that the meaning of written language lies. Readers must bring meaning *to* print rather than expect to receive meaning *from* it” (p. 58). Therefore, to understand how readers construct meaning, we must first analyze how young learners make the qualitative transition from elementary to higher psychological processes and how language shapes thinking at different ages.

2.4. From Elementary to Higher Psychological Functions

To Vygotsky, natural and cultural forces play a significant role in the qualitative transition from elementary mental functions into higher psychological processes. That is,

a qualitative leap from involuntary attention, visual perception and unmediated memory to voluntary attention, verbal perception and logical memory. Elementary and higher functions constitute a system and, thus, modifying the structure of any of its components modifies the structure of the system as a whole (Toomela, 2016; Vygotsky, 1998).

According to Toomela, the Vygotskian definition of higher psychological processes refers to complex forms of the human mind inherently related to people and their cultural environment and social relationships, which form a whole, meaning this that “the qualities of the components change when they enter the whole; and whole emerges with qualities that do not characterize the components before they have entered the whole” (Toomela, 2016, p. 99).

This perspective of the human mind as a whole complex formation in which its components are no longer the same can help us understand the complexity of bilingual reading. Since the day infants are born, they develop the ability to discriminate sounds and forms. As they grow and interact with caregivers, they learn to distinguish the sounds of their language from other sounds in their environment. They recognize prosodic patterns and develop speech perception and thus the language or languages of their community. They also develop abilities “to make visual discriminations, to categorize and count, and to detect meaning in what is seen” (Cullingford, 2001, p. 41). What the child perceives is influenced by what he retrieves from memory, a process that is mediated by language and culture. To Vygotsky, the overlapping relationship between stable and critical periods of development is connected to individuals’ interactions and experiences in their social situations of development, which influence the mastering of cultural practices like literacy (Mahn, 2012).

Concerning the development of elementary mental functions into higher processes, voluntary attention begins in early childhood “with the first pointing gesture

with which adults try to direct the attention of the child and from the first independent pointing gesture with which the child himself begins to direct the attention of others” (Vygotsky, 1998, p. 103). As children grow and develop language, they use iconic forms of meaning to call the attention of their caregivers. An example is the child who grasping and releasing an object conveys the meaning of “I want to hold that object” (Halliday, 1993, p. 95).

During school age, hearing children encounter the abstract system of writing and they must use their visual and auditory skills to develop the literacy practices of their social context. Depending on their culture and language, young readers become consciously aware of the spatial orientation that the written symbols in texts have. Therefore, the development of psychomotor skills in different languages follows different trajectories. In the case of bilingual children, their visual and auditory skills not only develop to discriminate symbols and sounds, but also to influence their L2. For instance, Kichwa-Spanish bilinguals from Otavalo in Ecuador show that these discrimination skills do not prevent them from using strong L1 patterns in their pronunciation of L2 sentences (Guion, Flege & Loftin, 2000).

This cross-linguistic influence evidences that bilingualism cannot be thought of as two separate languages. Hence, the development of biliteracy must consider that natural and cultural forces intertwine and influence children’s perception and construction of meaning through language (Mahn, 2012). From this perspective, reading is a cyclical process of visual, perceptual, syntactic, and semantic construction (Goodman, 1996), in which the visual input is perceived in the human mind in different ways, and consequently, the interpretations readers give to the signs of a written text are connected to experiences stored in their long-term memory and contextualized within a speech community. In this context, “[p]erception is a process of constructing images from visual

input by drawing on the schemas we've formed for organizing what we see to fit what we know" (p. 97).

Indeed, visual perception is crucial in the development of reading as there is always an act of interpretation in the shapes we see (Cullingford, 2001). These visual interpretations have a role in the development of syntactic structures in one or more languages as well as in their social and cultural meanings, as children always look for visual analogies in the images they are exposed to. During school age and formal instruction, children continue to develop their visual and verbal perception. At the very early stages of reading and writing, attention is connected to psychomotor skills, as children are in their process of coordinating sounds and visual clues. They recognize, manipulate, and categorize objects to understand their symmetry and proportion, and develop their gross and fine motor skills through social and individual activities (Cullingford, 2001). These mediated interactions enhance children's voluntary attention, verbal perception and memory.

Having in mind Vygotsky's concept of *perezhivanie*, the formation of memories has to be thought of as a system of natural, cultural, social and emotional factors that influence children's construction of meaning as they learn to read. There are three interrelated types of memory that have a fundamental role in perception and learning (Russell & Connor, 2016). Sensory memory allows the perception of stimuli through the senses while short-term or working memory receives, processes and integrates new information with prior knowledge, which if considered culturally and socially relevant is restructured and stored in long-term memory. In the construction of meaning from written texts, this interrelation is a unique and individual process since "[t]he act of reading cannot take place unless one can hold information in memory while simultaneously

processing information, linking it to previous knowledge and creating a coherent mental structure” (p. 62).

According to Vygotsky (1998), during school age, memory is a system of “remembering, imagining, and thinking” (p. 92), elements that are essential to the development of mediated memory. Considering previous studies, Vygotsky states that children’s thinking relies on concrete experiences stored in long-term memory. In his studies with children, defining abstract concepts like “sympathy” or “justice” resulted in answers connected to concrete experiences. For example, one child provided a definition of “sympathy” by recalling his mother’s generosity with a hungry beggar (p. 93). Before adolescence, thinking depends on recollections, general impressions, and remembering concrete experiences. For example, the definition of an object at age 12 is connected to socially-constructed generalizations. A table is “a four-angled board with four legs” (p. 95) even when other forms exist.

To sum up, in the development of biliteracy, involuntary attention, visual perception and unmediated memory are socially and culturally shaped, leading subsequently to the development of voluntary attention, verbal perception and logical memory. These higher psychological processes cannot be detached from their elementary mental functions, and thus literacy, and specifically the process of reading, highly depends on the social and cultural environment in which these functions develop. The complexity of the human mind can then be only understood when analyzed in its social, cultural and historical context. In this complexity, understanding bilinguals’ meaning construction during a reading event demands the analysis of different periods of language development and thinking.

2.5. Periods in the Development of Children's Language and Thinking

In "The Problem of Age," Vygotsky (1998) uses the term neo-formations to refer to the overlapping relationship between critical and stable periods of development that come with age. These stages are qualitative transformations of the personality of the child that occur in social environments. These transformations are not linear; they are rather dynamic and marked by processes of involution or regression (p. 194). These periods or new formations of the personality are: (1) infancy, (2) early childhood, (3) pre-school age, (4) school age, and (5) adolescence (Vygotsky, 1998; Mahn, 2003).

2.5.1. Infancy

Even before birth, infants encounter language. There is a strong physiological, affective and linguistic relationship between the fetus and her mother. Research suggests that babies learn the prosodic patterns of their native language ever since they are in the womb of their mothers. In a study conducted by DeCasper and Fifer in 1980, 10 newborns listened to the recorded reading of a story in the voice of different women. While listening, newborns were given a pacifier connected to a pressure transducer. Newborns modified their sucking rate when they heard the voice of their mothers, which suggested that prosody might be prenatal and that it might carry affective meaning and a sense of protection for the child (as cited in Gerken, 2009, p. 43).

During the first months of life, children engage in symbolic and iconic forms of meaning (Halliday, 1993). Symbolic forms represent the first sociocultural interactions between children and their caregivers. An example of this symbolic communication is the interpretation that parents give to the way infants respond to loud sounds. As children grow, these symbolic forms become iconic, and they represent a regular association between expression and meaning.

From about 6 to 9 months, neurological transformations change children's attention and they get involved in their first social interactions (Vihman, 2014). As they grow as members of a community and a culture, babbling appears. Babbling represents the qualitative transition from recognition of prosodic patterns to the first vocalizations resembling syllables. Babbling occurs from about 7 to 12 months of age and it can be of two types: (1) reduplicated which refers to the repetition of the same consonant-vowel pattern as in [baba], and (2) non-reduplicated, the repetition of different consonant-vowel patterns as in [bamido] (Gerken, 2009, p. 70). To contextualize babbling at the age of 1, when going to the beach for the first time, my daughter Leslie used sequences of reduplicated babbling to "describe" the blue sea in front of her eyes. Facial expressions, body movements, and falling and rising intonations of an ongoing [tata] were her description of a first encounter with the sea. Since children have started to pay more attention to the sounds of their environment and to the sounds of the language or languages of their community, auditory perception and consonant discrimination develop.

2.5.2. Early Childhood

Early childhood is the period of development that takes place between ages 1 and 3. Central and peripheral lines of development influence the system of language and thinking and thus children's personality and their processes of meaning construction. As different aspects of personality change, personality as a whole is reconstructed (Vygotsky, 1998).

Thus, when the development of speech appears in early childhood, it is so closely and directly connected with the central neo-formations of the age that as soon as the child's social and objective consciousness appears in its most incipient configurations, speech development cannot but be attributed to the central lines of development of the period under consideration (p. 197).

This means that the central features of infancy are now peripheral. Infants' symbolic and iconic forms of meaning and their first vocalizations have evolved into a system (Halliday, 1993). There is a consistent relationship between meaning and action. Thus, there is a semantic reconstruction of the first words of the child which now have "instrumental, interactional and personal functions" (p. 96). As children continue to grow as members of a speech community, they narrow their auditory perception allowing the development of one or more languages. Vihman (2014) defines this qualitative transformation as "perceptual narrowing" (p.33). With the narrowing of speech perception, monolingual and bilingual children develop their languages and modes of thinking in different ways.

Kuhl (2011), from the Institute for Learning and Brain Sciences, suggests that innate and social factors are essential to speech perception and subsequent language development and learning. From an innate perspective of language, infants are born with universal linguistic abilities that are narrowed down as they identify themselves as members of a speech community. In addition, Kuhl suggests that the transition from universal to specific language patterns of speech perception enhances the development of a child's language or languages and inhibits non-native language patterns.

With their first words, children undergo a new qualitative transformation of their language, modes of thinking and processes of meaning construction. The central lines of language at this stage are "lexicogrammar" and the "explosion into grammar" (Halliday, 1993). Lexicogrammar refers to the use of a single word or some words to convey meaning, which, in addition, is the onset of grammatical formation. Signs and meanings are no longer equal; they are arbitrary. For example, "*quack* is no longer the imitation of the noise of a duck, it is the name of that noise, so we can say *it quacked*" (p. 97). At the age of 15 months, the child still uses non-referential signs (e.g., daddy means 'give me

that’). However, as the child explores the prosodic patterns of her language, a single sign conveys different meanings. For example, when a child says “dad,” she can express two different intentions depending on a low or high pitch in her voice. The intonation that the child attaches to the word is, in addition, a manifestation of her feelings.

Since the meaning of any word is a generalization in constant development, language does not represent simple associations but complex modes of thinking that vary from childhood to adolescence (Vygotsky, 1998). As children get more involved in their social environment, they learn to generalize linguistic input and thus to classify and create taxonomies. Since learning is highly social, different cultures have different ways of classifying objects and creating taxonomies. According to Rogoff (2003), people in western nations tend to classify objects considering taxonomic categories (e.g., fruits come together) while certain communities around the world classify objects according to their functionality (e.g., putting a hoe and seeds together).

These forms of thinking about classification are highly influenced by the social and cultural environment in which language develops. This type of influence extends to language and it has been evidenced in children’s understanding of syntax. Since meaning construction always implies a generalization, word order of syntactic constructions influences how children perceive the meaning of verbs at age 2. Gerken (2009) reports the results of a study conducted by Naigles in 1990 concerning the meaning children assign to a non-word functioning as a verb in two types of sentences.

One group of children heard the transitive sentence “The duck is gorging the bunny.” The other group heard the intransitive sentence “The duck and the bunny are gorging.” Then children watched two videos: one showing a duck pushing a rabbit up and down, the other showing both the duck and the rabbit moving their arms in circles. Children who heard the transitive sentence focused their attention on the action of

pushing up and down, while those who heard the intransitive sentence paid more attention to the action of moving arms in circles (as cited in Gerken, 2009, p. 167). This shows that the meaning of a syntactic construction is processed as a whole, as a generalization of the experience encountered in a specific context. In the case of bilinguals, we can infer that syntactic and semantic constructions are used cross linguistically, enhancing the complexity of the bilingual mind.

2.5.3. Preschool Age

This period of language and thinking develops between ages 3 and 7 (Vygotsky, 1998). Children become aware of their environment and there is a qualitative transformation of their personality.

After gaining an awareness of the objective environment through speech and social interaction, 3-year-olds become aware of their subjective environment—their relationship to others, their conscious contact with others to whom they become exposed through their ability to communicate. This awareness alters the way they perceive, experience, and appropriate their social interactions (Mahn, 2003, p. 131).

At this stage, children expand their meaning potential in relation to their environment. One key element in the construction of meaning is the development of the “grammatical metaphor” (Halliday, 1993), which is of great importance to readers in their interpretation of texts, as they socially and culturally develop literal and figurative language. Indeed, research suggests that analogical skills in preschoolers play a significant role in metaphorical understanding (Di Paola, Domaneschi & Pouscoulous, 2020). This implies that the visual analogies they start to develop in early childhood as they grow as members of a speech community are a fundamental basis for understanding metaphors in written texts.

Considering central and peripheral lines of development, Vygotsky (1998) places great emphasis on age 7 as a transitional period between preschool and school and, therefore, a transitional period into literacy. Even though children in different countries enter school at different ages, Vygotsky's analysis of the characteristics of the 7-year-old child allows a deeper understanding of children's processes of meaning construction and their impact on literacy. At age 7 children start to generalize their emotional experiences; they become aware of their feelings and use expressions syntactically and semantically appropriate to express their emotions. As children identify themselves as members of a community, the meanings they give to words and expressions are not fortuitous. Rather, word meaning denotes complex processes of intellectual activity (Vygotsky, 1998).

To Halliday (1993), the development of the concept of transitivity at age 7 is essential. Transitivity, which refers to the condition of a verb to be followed by a direct object, is closely related to children's everyday grammars. In this process, contradictory interpretations of syntactic constructions appear as they structure language and meaning as a whole. At age 7, the development of transitivity is highly marked by the linguistic environment. Children from speech communities, in which transitive utterances are commonly used, produce and better understand transitive statements. Indeed, there is a strong relationship between children's linguistic preference for transitive statements and their nonlinguistic understanding of causal events (Kline, Snedeker & Schulz, 2017).

This linguistic bias is always tailored to the social environment of the child. This means that language input is richer in describing actions and the objects that receive them. In the case of bilingual learners, ungrammatical utterances cannot be regarded as mistakes. Instead, they reflect the co-activation of the languages of their community (Shook & Marian, 2012). Indeed, complex cognitive connections and processes of linguistic regression interact when learning takes place in bilingual contexts.

2.5.4. Literacy and the Language of School Age

School age is the period between ages eight and twelve (Vygotsky, 1998). During the development of literacy, young readers encounter abstract symbols and signs that constitute a new and unknown structure of language and meaning. The child, in a mediated process towards the learning of reading and writing, must develop, on the one hand, the ability to contrast general and specific elements and, on the other, the ability to contrast abstract and concrete signs.

To Halliday (1993), children's new encounters with abstract language lead them to processes of reconstruction and regression that reveal the complexity of the written language as processed in the mind of the reader. The sense, meaning and interpretation of this new mode of language is challenging for the child. As an example of this complexity, Halliday suggests that children may know about a certain topic and still be unable to recognize that familiarity in the written text. Due to the complexity of the writing system of any language, children regress in semiotic age, so that the child whose oral language abilities correspond to a seven-year-old will probably use the written language corresponding to the oral language of a 3-year-old child (p. 110).

This semiotic regression in written language is coherent with the development of conscious awareness. Hence, to understand how children regress in language, as they become consciously aware of the linguistic signs in texts, it is essential to consider Vygotsky's (1987) analysis of the language and modes of thinking of the child during this period. The child between the ages of seven and twelve has the ability to perform "several logical operations when they arise spontaneously in the course of his thought," but his performance is limited when he has "to carry out completely analogous operations if they must be carried out with volition and intention" (p. 82). To Vygotsky, this is the reason

why children in Piaget's experiments were unable to perform the task of completing a sentence appropriately.

Vygotsky states that at age 7 the language of the child is syntactically and semantically appropriate when it is spontaneous, but when volition and intention are involved, her language is syntactically but not semantically correct. Since at age 7 the child has just started to develop her conscious awareness, utterances like "He fell from the bicycle because he fell and was then badly injured" (p. 182) are very common when volition is required.

According to Vygotsky, if we compare oral and written speech, we can realize that oral abilities embrace higher levels of abstraction, being the child more skilled to communicate meaning through oral speech when this speech is part of a spontaneous and familiar activity rather than through a conscious use of written signs. During school age, the qualitative transition from elementary mental functions to higher psychological processes comes with the development of literacy and biliteracy. These higher psychological functions are fully developed in adolescence and constitute a mediated process, in which voluntary attention, verbal perception and mediated memory are highly connected to socially and culturally constructed patterns in one or more languages.

To Vygotsky, at ages 8 and 9, for example, the child who witnesses a man riding a bike and then falling to the ground will never produce an inappropriate utterance to narrate the events. Her syntactic and semantic production will be meaningful since familiar language and everyday concepts are involved in the process. Recalling Piaget's experiments, children who were asked to complete information in a sentence were able to produce syntactically appropriate utterances but failed to produce statements that were semantically correct.

When a child is learning to read, she engages in a complex process of meaning construction in which her language and modes of thinking are socially and culturally restructured during her encounter with the written sign. An example of how our modes of thinking are restructured due to formal instruction is found in the relationship between memory and classification. According to Rogoff (2003), literacy has a powerful influence on the development of cognitive skills. For instance, remembering isolated items is easier for schooled individuals who have developed cognitive strategies for taxonomic organization, while for individuals whose education is not based on formal instruction, this is a more complex task. Individuals without formal instruction, however, possess great skills to recall complex narratives, as they are embedded in oral tradition and have developed spatial memory.

Regarding biliteracy, research suggests that bilinguals' cognitive skills outperform those developed by their monolingual counterparts, as bilingual children possess higher selective attention and stronger metacognitive awareness; this advantage, however, highly depends on social factors, which are a determinant of such superiority (Lü, 2020). With regard to selective attention, it plays a fundamental role in the development of readers' conscious awareness of the written sign, as selective attention allows young readers to focus on one or the other linguistic system. Likewise, bilinguals' metacognitive awareness is stronger when they deliberately contrast the systems of both languages. Then, bilingual children are more likely to develop conscious awareness of the linguistic features in a text through linguistic transferability as in the case of cognates and similar morpho-syntactic language structures.

In sum, with formal instruction readers become consciously aware of the complexity of the written sign and must develop cognitive and metacognitive strategies to

construct meaning in their L1 or L2, always considering their own social and cultural factors as well as those embedded in texts.

2.6. The Development of Academic Concepts

Academic concepts are consciously developed and they arise on the basis of spontaneously developed modes of thinking in one or more languages. According to Vygotsky (1987), the development of concepts in academic settings involves the transition from “elementary generalizations to higher forms of generalization” (p. 170), a transition that occurs through pedagogical mediation. Academic concepts, therefore, rely on everyday modes of thinking and are closely related to formal instruction and the development of conscious awareness and volition.

Vygotsky’s study on the relationship between everyday and academic concepts starts with a critique of Piaget’s assumption that there is no relationship between these two kinds of concepts. Vygotsky highlights that Piaget’s idea that child development is “a process through which one form of thought is gradually and continuously being forced out by another” (p. 175) implies that higher modes of thinking are the result of an accidental process in the mind of the child, thus minimizing the importance of social interaction and literacy practices. Reformulating Piaget’s ideas, Vygotsky makes three important considerations: (1) academic concepts reveal the qualitative transformations of children’s modes of thinking at different ages; (2) there is a reciprocal influence between academic and everyday concepts; and (3) formal instruction influences the development of concepts.

Despite their divergent paths of development, everyday and academic concepts are internally connected. To Vygotsky, every concept is a generalization and thus it “presupposes the presence of a certain system of concepts” (p. 224). According to Hedegaard (2007), “everyday concept formation dominates over scientific concept

formation, but changes around school age when the scientific concept formation dominates and thereby enriches the child's everyday concepts" (p. 249). With regard to beginning and proficient bilinguals, research suggests that everyday concepts are developed in their first language and consequently the development of a second language focuses on the learning of phonological and orthographic features rather than the learning of concepts themselves (Potter, So, Von Eckardt & Feldman, 1984; Traxler, 2011). This implies that academic concepts in bilinguals are likely to be influenced by the social and cultural meanings attached to their first language.

To better understand how concepts develop, in *Thinking and Speech* (1987), Vygotsky analyzes the qualitative transformations that children undergo in this process. Due to the limitations of a traditional approach, Vygotsky opted for the functional method of dual stimulation developed by L. S. Sakharov (1930) to explain how language mediates the formation of a concept through different phases. This experiment encouraged children to use language as a tool to carry out a series of intellectual operations to find patterns and categorize blocks. Based on the results of this experiment, Vygotsky suggests that the development of concepts is a continuum in which syncretic associations, complexive thinking, potential and true concepts are all mediated by language. In each of these stages, language shapes children's modes of thinking as their modes of thinking shape their language within the boundaries of their speech community and cultural context. Figure 1 has been created to summarize the stages in concept formation from childhood to adolescence.

Figure 1. Stages in Concept Formation

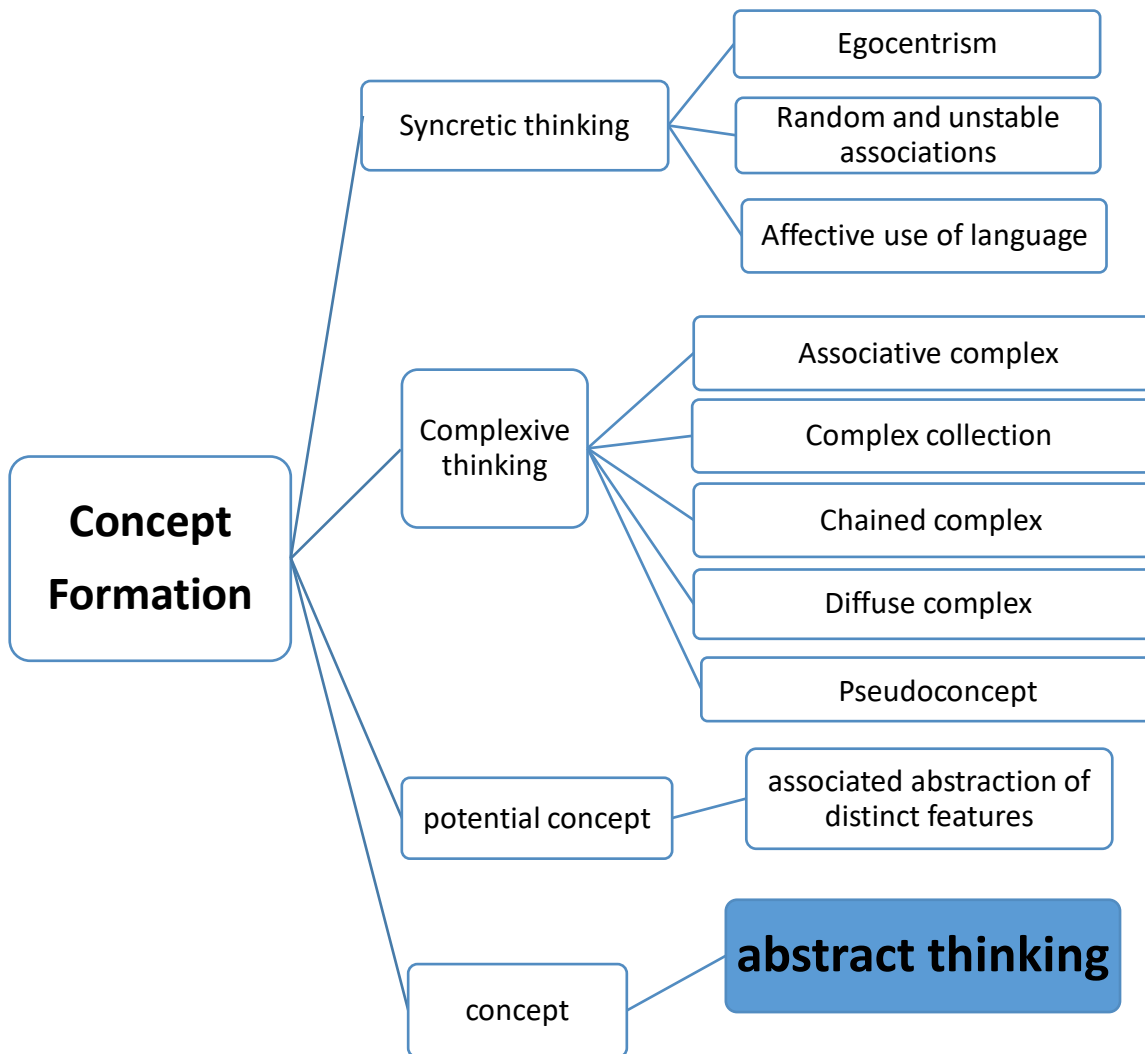


Figure 1 shows the different stages in concept formation from egocentric impressions in childhood to the formation of true concepts in adolescence. Adapted from Vygotsky, L. S. (1987). *Problems of general psychology. The collected works of L. S. Vygotsky: Vol. 1.* Including the volume *Thinking and Speech*. New York, NY: Plenum.

2.6.1. Syncretic Modes of Thinking

According to Vygotsky (1987), syncretic thinking refers to the association of objects that are not internally related. These associations come from children's egocentric

impressions and a process of trial and error. At this stage, associations represent “an incompletely defined, unformed, syncretic coupling of separate objects, objects that are in one way or another combined in a single fused image in the child’s representation and perception” (p. 134). Syncretic associations in learners’ L1 or L2, therefore, represent unstable linguistic patterns that young children produce in social interaction with their caregivers.

As children grow and develop speech, they form more complex syncretic representations that are “reduced to a single meaning” (p. 135). For example, the word “doggie” which embraces affective meaning for the child can be associated with any other objects that produce the same emotional response (Mahn, 2012). At this stage, children’s construction of meaning is based on momentary impressions related to their feelings and emotions.

2.6.2. Complexive Thinking and Early Literacy

The second stage of concept development is complexive thinking or the formation of complexes (Vygotsky, 1987). At this stage, children’s associations are homogeneous and they represent objective generalizations that include five levels of development: (1) associative complex, (2) complex collection, (3) chained complex, (4) diffuse complex, and (5) pseudoconcept (Vygotsky, 1987).

According to Vygotsky, an associative complex is formed considering a single characteristic—a nucleus or epicenter of the complex formation, e.g. joining different objects that share the same color or size. These associations gradually develop into complex collections that arise from “concrete, visual, and practical experience” (p. 138). That is, objects may not share the same features (e.g. cup and saucer), but they represent a generalization, a functional association (Fleer, 2009). During the development of early literacy, children develop their psychomotor skills and carry out tasks of visual and

auditory discrimination in one or more languages using concrete objects in relation to their functional cooperation.

According to Cullingford (2001), psychomotor skills are the connection between children’s mind and their physical world, and thus the development of these skills contributes to expand young children’s potentials. Table 1 is a synthesis of the functional roles or complex associations of six specific psychomotor skills that Cullingford recommends to develop early literacy.

Table 1.

Psychomotor Skills and Complex Associations in Early Literacy

Psychomotor skills	Functional role or complex association
Coordination	Assessing and expanding children’s understanding of symmetry and proportion (e.g. joining different objects considering a single characteristic like shape or size).
Categorization	Understanding classes of objects (e.g. classifying items in the classroom considering a single sound, letter or syllable; joining school supplies according to their functionality).
Physical abilities	Physical coordination (e.g. building a model with different objects to express a single concept).
Skills of manipulation	Developing physical focus (e.g. tracing a picture to develop finger movement and control).

Orientation	Developing writing orientation (e.g. recognizing letters and classifying them according to their spatial features).
The use of toys	Classifying toys according to their characteristics (e.g. size, shape, weight, etc.). Using them functionally (e.g. building up the setting of a story).

Adapted from Cullingford, C. (2001). *How children learn to read and how to help them*. London: Kogage.

2.6.3. Chained and Diffuse Complexes

Vygotsky (1987) states that a chained complex is “a *dynamic, temporal unification of isolated elements in a unified chain, and a transfer of meaning through the elements of that chain*” (p. 139, emphasis in original). That is, when children associate objects, the final element in the chain may be completely different from the initial element. To illustrate the dynamics of this kind of complex, Vygotsky provides the following example: a child focuses on one or more characteristics of an object (e.g., the corners and angles of a yellow triangle) and adds one or several items to the complex. Then, using another characteristic of the last object (e.g., size), the child adds more objects to the chain; however, these objects may not share any characteristic with the first one. At this point in concept formation, the child’s associations are unstable as they move from one feature to another.

What distinguishes a diffuse complex from a chained complex is that “children begin to link concepts in relation to knowledge outside their practical experience” (Fleer, 2009, p. 290). Diffuse thinking, therefore, focuses on an undefined but basic family of elements. The following description serves as an example of a diffuse association: “Given

a yellow triangle as a model, for example, the child selects not only a triangle but a trapezoid” (Vygotsky, 1987, p. 141). The generalizations children make at this stage in concept formation are tailored to subtle transitions outside concrete verification. With formal instruction and the development of early literacy, children undergo a new transition in their modes of thinking. When preschoolers, either monolingual or bilingual, encounter written symbols and signs, diffuse thinking represents a transition from their immediate knowledge to their first attempts to generalize beyond their concrete experience. Then, pseudo-concepts are the most representative form of complexive thinking, as these concepts are externally but not internally similar to those concepts in the domain of abstract thinking (Vygotsky, 1987). However similar in their superficial structure, pseudo-concepts do not represent abstract generalizations. Instead, they must be regarded as a bridge for communication between young children and their caregivers in their social and cultural context.

As children are first exposed to texts, the use of pseudo-concepts is essential to the mediated process of reading and writing. Parents, caregivers and teachers rely on this type of complexive thinking to assist young learners in their cognitive development. The functional nature of such concepts allows mutual understanding; however, the dynamics of the meanings and senses embedded in their language are different. While language represents a true generalization in the mind of the adult, the language of the child is still attached to concrete experiences.

2.6.4. Potential Concepts

Potential concepts represent the onset of abstract thinking which fully develops during adolescence.

It is in the potential concept, in the associated abstraction of distinct features, that the child first destroys the concrete situation and the concrete connections among

the object's features. In this process, he creates the prerequisites for the unification of these features on a new foundation. Only the mastery of the processes of abstracting, combined with the development of complexive thinking, can lead the child to the formation of true concepts (Vygotsky, 1987, p. 159).

Towards the development of abstract thinking, language becomes a fundamental psychological mediator. With formal instruction, children find in the language and modes of thinking of adults the basis for their first generalizations, which are now distant from concrete experience. As children continue to develop their language and conscious awareness, potential concepts arise on the basis of "abstracted similarities between all objects" (Hedegaard, 2007, p. 250). Subsequently, with cognitive development, learners' potential concepts will develop into true concepts during adolescence.

2.6.5. Abstract Thinking and True Concepts

Abstract thinking refers to our capacity to distinguish the essential elements that form a whole to discover its essence. According to Vygotsky (1987), abstract thinking aligns with the development of academic concepts in formal educational settings and it requires the development of logical reasoning. Around ages 11 and 12, the human brain increases its capacity to logically relate information, reaching higher levels of abstraction at age 17, as it is in adolescence that we increase our capacity to (a) maintain information in our working memory and retrieve it as necessary; (b) increase our voluntary attention to focus on relevant information; (c) dominate specific knowledge; and (d) combine abstract representations deliberately (Dumontheil, 2014).

From logical reasoning, learners undergo a qualitative transition towards abstract thinking, relying on their ability to follow logical sequences to solve problems, especially those in daily life (Jaramillo-Naranjo & Puga-Peña, 2016). As abstraction is the highest form of thinking, it embraces other higher processes such as deduction, synthesis,

interpretation and analysis. According to Toomela (2016), abstract thinking is the result of the interrelation among different higher psychological processes that form a whole—for example, natural processes of development, psychological systems in constant change, cultural signs, historical development, conscious awareness, volition, and active forms of adaptation to the sociocultural order.

Abstract thinking or the formation of true concepts has its basis on everyday modes of thinking that are intrinsically related to historical, cultural and social circumstances. In this sense, Hegel's (1830) perspective of the development of the concept is essential, as it focuses on the integration of internal and sociocultural processes of the human mind in which universal, particular and individual spheres all influence the formation of a concept (Blunden, 2012). The universal sphere refers to the symbols, tools and artifacts that emerge from society. These universal factors become particular when they enter the domain of social practices in specific speech communities. Consequently, universal and particular spheres shape individuals' formation of concepts.

Concerning the reading process, abstract thinking plays a fundamental role, as readers must logically connect information and extract essential elements from the text. What readers understand after their encounter with a written text becomes a generalization that is intrinsically connected to everyday and academic concepts as well as the social and cultural meanings of their speech community. In this process, language is a psychological tool that mediates between the written signs of a text and the meanings the reader brings to the act of reading. Readers, therefore, rely on linguistic and sociocultural clues that together with cognitive strategies lead them to unique forms of meaning construction.

Concerning abstract thinking in bilinguals, research suggests that proficient bilinguals show subtle differences in meaning construction depending on the language

they use. When using their dominant language, bilinguals show higher inferential thinking, relying on prior experience, knowledge of text genre, vocabulary and questioning, while inferences in their less dominant language are more limited as questioning and reliance on prior knowledge are less common (Friesen & Frid, 2021).

Higher inferences in readers' L1, the dominant language, can be explained through the reciprocal influence between language and thinking in concept formation. The qualitative transitions learners undergo from egocentric impressions to the development of abstract thinking depend on language and the sociocultural environment where children are raised. This implies that their L1, the dominant language, is more influential, as the formation of everyday concepts is intrinsically attached to their mother tongue and becomes the basis for the development of academic concepts. Consequently, due to those unconsciously developed modes of thinking, bilinguals' inferences may be higher in their L1, allowing them to better capture the essence of a text.

In sum, Vygotsky's sociocultural theory of learning allows a deeper understanding of the complexity of the human mind and serves as a basis for the analysis of bilinguals' processes of meaning construction during and after a reading event. Vygotsky's study of the qualitative transitions in language and thought at different ages allows a profound discussion of Kichwa-Spanish bilinguals' reading practices in the Southern Andes of Ecuador and their meaning construction of L2 narrative texts.

CHAPTER III: LITERATURE REVIEW

This section defines miscue analysis and retrospective miscue analysis, pointing out the importance of both procedures for understanding how readers construct the meaning of texts in their L1 and L2. In addition, this section discusses eye movement miscue analysis to support the fact that readers are not letter decoders but active language users who search for reasonable possibilities as their oral reading takes place. Therefore, their previous knowledge and contextual clues lead them to construct parallel texts through their retellings, emphasizing the complexity of reading as a social practice and the need to revalue readers linguistically, socially and culturally.

3.1. The Role of Everyday and Academic Concepts in Miscue Analysis

Miscue analysis refers to the study of what is observable during oral reading to understand how readers construct meaning from graphic, phonological, syntactic, and semantic language cueing systems (Goodman & Gollasch, 1982, p. 93). To challenge the traditional conception of an error, a miscue “is any observed oral response (OR) to print that does not match the expected response (ER)” (p. 103). Since reading is a psycholinguistic and social process of meaning construction (Goodman, 1996), the term “miscue” does not involve negative connotations about the reader. Rather, it allows the understanding of the reader’s linguistic and cognitive processes during a reading event.

To understand the relationship between observed and expected responses during oral reading, Goodman’s taxonomy of reading miscues serves as a basis for the analysis of syntactic and semantic acceptability, meaning change, correction, graphic similarity and sound similarity (Goodman & Gollasch, 1982; Goodman, Watson & Burke, 2005). Bearing these categories in mind, common reading miscues include word substitutions, omissions, insertions, repetitions, non-word substitutions, dialect variations, split syllables, pauses and repeated miscues (Goodman, Watson & Burke, 2005). None of

these categories occurs in isolation and their existence aligns with higher psychological processes within the boundaries of readers' speech communities.

Retelling, which is an essential part of miscue analysis, is used to discern comprehension and refers to what the reader has understood after transacting with a written text. This information, combined with the analysis of miscues, allows discovering "how concepts and language are actively used and developed throughout a reading event" (Goodman & Goodman, 2013, p. 530). Since retelling itself does not reveal readers' cognitive processes for understanding a text, we cannot detach retelling from the strategies readers use to make sense of what they read in their L1 or L2. According to Goodman, Watson and Burke (2005), retelling and miscue analysis provide insights into three intertwined phases of reading: (1) perceiving new information; (2) ideating on perceptions throughout conscious or intuitive thinking; and (3) presenting reflections, concepts and points of view. Considering Vygotsky's higher psychological processes, retelling must be understood in the context of voluntary attention, verbal perception and mediated memory. Indeed, it is in the interrelation of these processes that readers build up ideas in their minds according to their social, cultural and historical circumstances.

To delve into the construction of meaning that comes after reading a text, miscue analysis uses two types of retelling: unaided retelling and aided retelling (Goodman, Watson & Burke, 2005; Wilde, 2000). Unaided retelling refers to the reader's conceptualization of a text without the interference of someone else's ideas or points of view. This type of retelling allows readers "to reflect, retract, repeat; that is, to respond in any way that makes sense to them" (Goodman, Watson & Burke, 2005, p. 56). Therefore, unaided retellings provide information concerning what readers remember, what linguistic patterns stand out, and how readers organize ideas from a text.

On the other hand, aided retelling refers to a dialogic approach that encourages readers to provide more information about their understanding of a written text, by asking questions that “reflect, rather than correct, any of the reader’s misconceptions” (Wilde, 2000, p. 49). These questions must include the terms and concepts readers used in their unaided retellings to elicit meaningful responses and expand on them. For instance, Betsy (Goodman, Watson & Burke, 2005), a 9-year-old reader, substituted “worker” for “woodman” during her retelling of the folk tale “The Man Who Kept House”. The researcher maintained Betsy’s substitution to ask questions related to the woodman in the story and thus to understand the semantic associations embedded in her miscues. In addition, retelling procedures should take into account readers’ knowledge of retelling terminology. For instance, if readers are not familiar with terms such as theme, plot, protagonist, antagonist, setting, etc., the researcher should replace a question like, “Why do you think the antagonist did that?” with “Why do you think [character mentioned by reader] did that?” (p. 57).

Considering that reading is a social and cultural practice, the processes for comprehending and displaying comprehension must be analyzed as a whole. In this context, comprehending refers to a cognitive process that readers undergo to make sense of a written text, while comprehension refers to the display of the understanding of the meanings of that text (Goodman, 2015). For instance, Elaine’s retellings (Wilde, 2000) show how the processes of comprehending and comprehension are complementary and highly influenced by the academic and everyday concepts the third grader has already developed. The story she read was about a boy who wanted a dragon as his pet, so he decided to go out to catch a dragon but brought back a lizard, instead. During her oral reading, Elaine substituted “dinosaur” for “dragon” several times, a miscue that she maintained during her retelling. In this example, we can clearly see that her miscues

aligned with generalizations and personal experiences that were active as reading occurred.

As Wilde explains, Elaine's miscues underscore her understanding of the concept of "reptiles" and the features that characterize this class of animals. Her substitution of "dinosaur" shows the semantic associations that she makes to visualize and conceptualize the information in the text. Elaine is aware that dragons (legendary creatures), dinosaurs (extinct species), and lizards are reptiles and thus they share similar features. The conceptual activation that takes place in Elaine's mind leads her to substitute "dinosaur" for "dragon". During her aided retelling, Elaine affirms that small dinosaurs live in the desert. These "small dinosaurs" are the lizards that Elaine has seen in the Sonoran Desert in Arizona. Due to formal instruction, Elaine's miscues are semantic associations in which the concepts of classification and taxonomy are emerging.

In the case of bilingual readers, retellings are influenced by their everyday modes of thinking and the academic concepts they have developed through formal instruction in either their first or second language. For example, Spanish-English emergent bilinguals in dual language immersion programs show more comprehensible, sequential and detailed retellings of narratives in Spanish (L1) when they are in kindergarten; while in second grade, bilinguals' retellings of narratives are more accurate in English (L2) (Lucero, 2018).

The results in Lucero's study can be explained considering Vygotsky's (1987) analysis of the development of academic concepts in childhood. According to Vygotsky, academic concepts form a complex structure of language and thinking that comes with formal instruction and the development of "voluntary attention, logical memory, abstraction, comparison, and differentiation" (p. 170). In Lucero's study, bilinguals' accurate retellings in their L2 may be the result of pedagogic practices that reinforce the

understanding of concepts like conflict resolution, referencing and conclusion. This may facilitate a more accurate construction of the meanings of the narrative text. In sum, the relationship between miscues and retellings is highly influenced by social factors, experiences, pedagogical practices and readers' development of everyday and academic concepts.

3.2. Miscues as Semantic Associations

In 1967, Goodman already explained that miscues are not intuitive but represent very well-known linguistic patterns that unconsciously emerge during oral reading. To illustrate this principle, Goodman analyzes the semantic associations produced by a first-grade child as she reads a story about a toy. The first semantic association is the replacement of the noun "train" with the noun "toy"; the second is the replacement of the noun "toy" with the adverb "too". These semantic associations show the complex nature of the reading process, as the reader holistically processes the graphophonic, syntactic and semantic language cuing systems to construct meaning (Goodman, 1996). Table 2 compares the expected responses with the miscues produced by the first grade child in Goodman's study during her oral reading of the text.

Table 2.

Oral Reading Miscues Produced by a First Grade Child

<i>Text</i>	<i>Transcript</i>
Jimmy said, "Come here, Sue, Look at my toy train. See it go. Look at my little train go."	Jimmy said, "Come here, Sue, Look at my too . See it go. Look at my little toy go."
Sue said, "Stop the train . [...]"	Sue said, "Stop the toy [...]"
Sue said, "Look at my little red toy . See it go for a train ride."	Suzie said, "Look at my little red too . See it go for a toy ride."

Adapted from Goodman, K. S. (1967). Reading: A psycholinguistic guessing game. *Literacy Research and Instruction*, 6(4), 126-135.

These miscues show that the construction of meaning through the use of language triggers a psycholinguistic transactional process in which miscues are the outcome of a conceptual activation in the mind of the reader. Considering this study, we can say that miscue production in any language aligns with pre-existing semantic networks in readers' long-term memory. This unconscious activation is best known as semantic priming and refers to the associated representations between concepts that are revealed through language (Traxler & Tooley, 2012).

It is because of these unconscious associations that the young reader in Goodman's study talks about "a little red too" and explains that it refers to an airplane illustrated in the story. Then if the child associates "train" with "toy" and "toy" with "too", it makes sense that "a little red too" describes another airplane toy. At this point, the concept of perception is pivotal to understand these semantic associations. According to Paulson (2002), "perception—not what the eyes look at, but what the brain does with the visual information it receives" highly influences readers' construction of meaning and production of miscues (p. 60).

Therefore, a plausible explanation for the semantic associations produced by the first-grade reader in Goodman's study is that she perceives the graphophonic, syntactic and semantic input holistically. That is, readers do not decode letters but perceive words in relation to concepts. When the young reader substitutes "toy" for "train," she may refer to a general category for those toys she can play with on the ground. This assumption comes from the information the young reader provides when she explains the meaning of "a little red too". The child substitutes "too" for "toy" when "toy" refers to an airplane. Therefore, the use of "too" might refer to a category the child has created to include

flying toys. The expression “a little red too” produced by the first-grade reader in Goodman’s (1967) study suggests that intentional uses of language trigger semantic associations that would be very uncommon for young children when using language spontaneously.

Another way to explain this semantic association is connected to Halliday’s context of situation (Haratyan, 2011), which refers to the influence that our experience as language users in a social and cultural environment has on the way we process linguistic structures and produce discourse. The word “too” was probably taught and studied in isolation and since the word appears at the start of the story, the child may be still getting situated in the text. Until the reader has read sufficiently in the text, there may not have been enough information for the reader to construct something meaningful.

In general, we can say that these substitutions or reading miscues are manifestations of the complexity of transacting with the written sign. Then, these semantic associations appear as the outcome of the relationship between spontaneously developed modes of thinking and the development of conscious awareness that comes with formal instruction, within the social and cultural boundaries of the speech community where children are raised.

3.3. The Relationship between Miscues and the Development of Perception and Memory

As children grow, there is a qualitative change in their perception that depends on complex processes of memory stimulation and activation. Since visual perception—the ability to make sense of what we see—is not static, natural and cultural forces intertwine and influence children’s construction of meaning through language (Mahn, 2012). The semantic associations the young reader in Goodman’s (1967) study produced are also examples of the relationship between perception and memory and the transition from

visual to verbal perception. As previously mentioned, these miscues suggest that the reader perceives and remembers the graphophonic elements in “toy” and “too” as different concepts concerning two types of toys.

This occurs because “[p]erception is a process of constructing images from visual input by drawing on the schemas we’ve formed for organizing what we see to fit what we know” (Goodman, 1996, p. 97). Sensory memory allows perceiving stimuli through the senses while short-term or working memory receives, processes and integrates new information with prior knowledge, which if considered culturally and socially relevant, stays in long-term memory. Such an integration is a unique and individual process since “[t]he act of reading cannot take place unless one can hold information in memory while simultaneously processing information, linking it to previous knowledge and creating a coherent mental structure” (Russell & Connor, 2016, p. 62).

3.4. What Miscue Analysis Reveals about Proficient Readers

In this section, I analyze Goodman’s (1982) study of a proficient reader around the age of 14. If we look at the second line in Figure 2, we can see that during oral reading, the reader omits the subordinating conjunction “as” and changes the relationship between the dependent and the independent clause. This omission triggers semantic priming, which, in turn, influences readers’ visual perceptions to modify the syntactic patterns of the text. Without the subordinating conjunction, the reader creates two independent clauses, changes the reading intonation pattern, and inserts the coordinating conjunction “and” to successfully join these two independent structures.

Figure 2. Miscues Produced by a Proficient Reader

It must have been around mid-night
when I drove home, and as I approached
the gates of the bungalow ^{and} I
switched off the head lamps of the car
so the beam wouldn't swing in through
the window of the side ^{at} ^{of the} bedroom and
wake Harry Pope.

This example has been taken from Goodman, K., & Gollasch, F. (1982). *Language and literacy: The selected writings of Kenneth S. Goodman; edited and introduced by Frederick V. Gollasch*. Boston: Routledge & Kegan Paul. See appendix B for a detailed explanation of miscue marking.

This example aligns with Vygotsky's concept of "znachenie slova" or meaning through language, since the reader intuitively uses her linguistic knowledge to reconstruct meaning based on what is syntactically and semantically acceptable in her social and cultural environment.

Another interesting example of the construction of meaning through the use of language during reading is found in the substitution of "lights" for "lamps". This miscue involves two essential considerations. On the one hand, this substitution evidences a process of lexical and semantic anticipation that is culturally embedded. The reader unconsciously anticipates the use of the compound noun "headlights" considering her previous knowledge, familiar language, and the linguistic context of the text. On the other

hand, this substitution triggers self-correction, which supports the idea that effective readers also go back in the text (Paulson, 2002; Roschke & Radach, 2016; Traxler, 2011).

In sum, Goodman's study suggests that proficient readers engage in complex cognitive processes, to make sense of the graphophonic, syntactic and semantic information, which leads them to produce miscues. Sampling, predicting, confirming and inferring are universal cognitive strategies that monolingual and bilingual readers rely on to transact with written information and construct their own "internal texts" (Goodman, 2015, p. 99). Since reading is a visual, perceptual, syntactic and semantic cyclical process embedded in a sociocultural context (Goodman, 1996), the use of these strategies is never linear and reflects the ongoing decision-making processes inherent in meaning making, as when the reader regresses to change light to lamp.

In fact, the non-linearity of the reading process triggers cognitive challenges that lead all readers to produce miscues in their first or second language. The omissions, substitutions and changes in intonation of proficient readers are syntactically and semantically appropriate because their use of language and grammar is more active (Goodman, 2015). In addition to this active use of language, proficient readers are capable of combining efferent and aesthetic elements of reading (Rosenblatt, 1994) to construct meaning and develop their own interpretations.

3.5. What Miscue Analysis Reveals about "Struggling" Readers

Research suggests that struggling readers also engage in complex cognitive processes for meaning construction (Goodman & Goodman, 2013). To explain how "struggling" readers transact with written texts, I discuss Goodman and Goodman's (2013) analysis of the miscues produced by Betsy, a 9-year-old learner, considered as a reader with difficulties. To contextualize Betsy's oral miscues, we must keep in mind the plot of the story. "The Man Who Kept House" is about a woodman who criticizes his

wife's housekeeping, assuming that she does not do much at home. The woodman's wife argues that she works as hard as her husband and that they should change roles to prove it. As Betsy reads the story, she substitutes "Well you do it tomorrow!" for "We'll do it tomorrow!" a miscue that we can explain syntactically and aesthetically.

With regard to syntactic acceptability, we can see that Betsy omits the apostrophe in the grammatical construction "We'll do it tomorrow!" which makes Betsy change her intonation and insert the pronoun "you" to provide syntactic and semantic acceptability to her oral reading.

Let's consider another example (Goodman & Goodman, 2013, p. 528):

Text: "I'll light a fire in the fireplace and the porridge will be ready in a few minutes"

Transcript: "I'll light a fire in the fireplace and I'll... and the porridge will be ready in a flash...a few minutes"

Here, Betsy's replacement of the noun phrase "the porridge" with "I" corresponds to a cognitive strategy of prediction. Betsy predicts the use of "I" because the coordinating conjunction "and" suggests that a single agent will perform a series of actions. Regardless of the fact that Betsy is considered by some to be a reader with difficulties, her cognitive strategies to deal with miscues show an active language user, just as active as someone considered to be a proficient reader (Goodman & Goodman, 2013).

Concerning aesthetic reading, Goodman and Goodman report that Betsy's miscues are a manifestation of the reader feeling empathy with the character in the story, a dialogic strategy that children use to negotiate the meaning of a text (Maine, 2013). As Betsy develops her aesthetic thinking, she miscues to maintain the intentions and voice of

the woman in the story as we can see when Betsy substitutes “Well you do it tomorrow!” for “We’ll do it tomorrow”.

Sensing, feeling, imagining, thinking, synthesizing the states of mind, the reader who adopts the aesthetic attitude feels no compulsion other than to apprehend what goes on during this process, to concentrate on the complex structure of experience that he [or she] is shaping and that becomes for him [or her] the poem, the story, the play symbolized by the text. (Rosenblatt, 1994, p. 26).

In general, miscue analysis suggests that struggling readers undergo the same cognitive challenges as proficient readers, and that their aesthetic thinking highly influences their perceptions, leading them to particular ways of meaning construction and text reconstruction. Miscue analysis has shown that all readers are active language users (Goodman, 2015), and that processes of reconstruction and regression are typical stages of the development of language and literacy (Halliday, 1993).

3.6. Eye Movement and Reading Miscues

This section has been included to support the relevance of miscue analysis for understanding how readers construct the meaning of narrative texts. To analyze the relationship between eye movement and reading miscues, we must first discuss the physiology of the human eye and how fixations and saccades work. The retina has three regions that vary in visual acuity: the fovea, the parafovea and the periphery (Paulson, 2002; Traxler, 2011). The foveal region is the central area of the retina that extends about 3 to 6 letter spaces to each side of a fixation. The parafoveal region is adjacent to the fovea and it extends about 15 to 20 letter spaces, while the peripheral region encompasses the visual area outside of the parafovea (Paulson, 2002; Paulson, Flurkey, Goodman & Goodman, 2003).

When we read, the fixations we make “bring print into the reader’s foveal, parafoveal, and peripheral fields of vision” (Paulson, Flurkey, Goodman & Goodman, 2003, p. 345). When readers fixate on a text, their visual capacity allows them to perceive information beyond the fixated word boundaries. This visual capacity is known as the perceptual span—an asymmetric area of vision that is narrower in the preceding side of the fixation and broader in the following side of the fixation (Traxler, 2011). The asymmetry of the perceptual span “is an artifact of learning to read a specific kind of writing system” (p. 374). Spanish speakers, for example, have a broader perceptual span to the right while Arabic speakers’ side of fixation is broader to the left. However important the perceptual span is, previous knowledge, experience and contextual clues are essential to fixate or not on certain parts of the text.

Fixations and saccades or rapid eye movements are both essential to analyze the relationship between eye movement and reading miscues (Paulson, 2002; Paulson, Flurkey, Goodman & Goodman, 2003; Roschke & Radach, 2016; Traxler, 2011). When we read a text in any language, the fixations and progressive or regressive saccades we make, provide information on the strategies monolingual or bilingual readers use to understand the syntactic and semantic elements. When readers go back in the text, they use regressive saccades not only to correct their pronunciation but also to make syntactic and semantic connections from the information available. Contrary to traditional school practices in which readers must pay attention to every single phoneme, research on eye movement suggests that effective readers do not follow a linear sequence, nor do they look at every single word in the text. Instead, effective readers tend to skip predictable words in context and fixate on meaningful information that facilitates understanding and interpretation (Traxler, 2011).

In this non-linear context, eye movement miscue analysis (EMMA) is a process in which “both verbal and visual data are available to provide information about a reading” (Paulson, 2002, p. 52), allowing a holistic examination and a deeper understanding of the “constructive nature of the reading process” (Paulson, Flurkey, Goodman & Goodman, 2003, p. 349). In fact, EMMA has contributed to understand the strategies readers, either monolingual or bilingual, use to construct the meaning of the semantic, syntactic and graphophonic elements of a written text (Liwanag, Martens, Martens & Pelatti, 2017).

As part of these contributions, EMMA suggests that readers’ predictions depend on their ability to select reasonable possibilities based on their knowledge of text genre and their general knowledge of the world (Paulson, Flurkey, Goodman & Goodman, 2003). This means that readers’ ability to predict is highly constrained by contextual support which “[affects] how long, or even whether, a reader looks at a word” (p. 348) and, therefore, how readers in any language construct the meaning of a written text.

Paulson’s study (2002) of a reader’s observed responses shows the influence of contextual support on eye movement and miscue production. To understand why the reader substituted the word “unusable” for “usable,” we need to analyze miscues as the outcome of a conceptual activation highly influenced by contextual clues. The phrase “The house was run down” in Figure 3 conveys the idea of a place in bad condition, information that may have caused the reader’s substitution of the word “unusable” for “usable”. This semantic activation, therefore, refers to the conceptual networks that we use to analyze linguistic units for speech production (Traxler, 2011). During oral reading, these networks can trigger syntactically and semantically acceptable substitutions due to contextual support and readers’ previous knowledge.

Figure 3. The Influence of Contextual Clues on Word Substitutions

<i>line</i>					<i>unusable</i>				
205		The house was run down, but usable, and they hoped to rent							
		1	2	3	4 6 5	7	8	9	
		267	133	467	500 1,352 400	367	250	783	
206		it rather quickly.							
		1	2						
		917	133						

Figure 3 shows the fixations a reader made before replacing “usable” with “unusable” in response to contextual clues in the text. This example has been taken from Paulson, E. J. (2002). Are oral reading word omissions and substitutions caused by careless eye movements? *Reading Psychology*, 23(1), 45-66.

To better explain the influence of context on miscue production, we can analyze the relationship between readers’ fixations on the text and the verbalization of the words fixated. The numbers 4, 5 and 6 in Figure 3 show that there were three fixations on the word “usable” and that those fixations were longer than the gaze on other words that were not substituted. This “intra-word regression” (Paulson, 2002, p. 56) suggests that a substitution can occur even though the reader fixates on that word longer, since readers make predictions that are congruent with their previous knowledge and the contextual clues in the text.

With regard to omissions, Figure 4 shows that readers indeed fixate on words that they will omit during oral reading (Paulson, 2002). According to Paulson, readers can bring a word into the foveal region of the retina but still omit it during oral reading. For instance, the reader in Paulson’s study fixates on the conjunction “that” but does not verbalize it. This omission does not affect reading as it is syntactically and semantically acceptable.

Regarding words that are not fixated during a reading event, Figure 4 suggests that verbalizations are not necessarily connected to word fixations. For example, the reader in Paulson’s study verbalizes the article “the” in line 313 even though he does not fixate on it. This may occur because of the contextual clue “Waterford ghost,” which makes the reader use a definite article to introduce a noun phrase denoting a particular or specific thing.

Figure 4. The Influence of Contextual Clues on Word Omissions and Verbalizations

line

312	No one could explain the mysterious lights, but many
	1 2 3 4 6 5 7 8
	1,100 283 200 333 317 233 417 233
313	neighbors felt sure that the Waterford ghost had had its
	1 2 3 4 5 6 7 10 8 9
	183 250 233 217 117 100 633 533 283 450
314	revenge...
	1
	150

Figure 4 shows that word omissions can occur even though readers fixate on those words, and that words that are not fixated are still verbalized due to readers’ active use of language and contextual clues. This example has been taken from Paulson, E. J. (2002). Are oral reading word omissions and substitutions caused by careless eye movements? *Reading Psychology*, 23(1), 45-66.

Depending on readers’ particular modes of thinking and linguistic knowledge, contextual clues can trigger different kinds of miscues, which are the outcome of particular ways of perceiving the graphophonic, syntactic and semantic information in the text. Substituting or omitting a word not only implies the production of a miscue but also the creation of a mental or parallel text in which a particular word and its concept are

modified or adapted. This kind of text is what Paulson calls “the reader’s parallel, constructed text—a text that does not use that word in that specific place” (p. 59).

All this implies that miscues are the result of readers’ active use of language (Goodman, 2015). In brief, verbalizations of non-fixated words, word substitutions and omissions that are semantically and syntactically appropriate denote readers’ active use of the language of their speech community in relation to readers’ social and cultural modes of thinking.

3.6.1. EMMA and Visual Resources in the Text

Besides previous knowledge and experience, EMMA research suggests that both monolingual and bilingual readers rely on written information to construct meaning, while the visual resources available in the text are slightly fixated, affecting both the process of comprehending the text and comprehension as a whole (Liwanag, Martens, Martens & Pelatti, 2017; Liwanag, Pelatti, Martens & Martens, 2016). Liwanag, et al. (2017) analyzed how a seven-year-old second grader constructed meaning from two different kinds of texts: “Nana in the City,” (Castillo, 2014) an enhanced picture book, and “The Zoo,” (Lee, 2007) a counterpoint picture book. An enhanced picture book uses pictorial resources to support and extend the meaning of the written text, whereas a counterpoint picture book requires integrating both the written and the pictorial texts to construct meaning as a whole.

Considering the particularities of each text, Liwanag et al. (2017) combined EMMA methods and heat maps. That is, they used a visualization method that allowed to see readers’ fixation length on specific elements of the text in the form of a heat map, and thus to analyze the influence of both the enhanced picture book and the counterpoint picture book on the process of understanding the narrative text. The areas fixated during the reading of the enhanced picture book suggest that readers tend to focus most of their

attention on the written text, and that fixations on pictorial resources are used as a strategy for confirming readers' understanding of the story. Consequently, readers are more likely to preserve the meaning of the original story when the pictorial text supports the written passage. As Liwanag et al. state, "[t]he enhanced relationship between the written and pictorial texts, with the art adding details that extended the writing, facilitated [...] comprehension" (p. 11). Concerning counterpoint picture books, readers' meaning construction was greatly influenced by their unawareness that, in pictorial texts, "overlapping events that occur at the same time can be depicted simultaneously but have to be related sequentially" (Meek, 1988, p. 26).

The development of conscious awareness to understand the meanings embedded in the pictorial and written resources depends on the strategies and skills readers develop in formal settings of instruction. Research on EMMA foregrounds that the way readers construct the meaning of narrative texts aligns with the pedagogical culture to which they belong to. This is why readers' familiarity with enhanced picture books leads them to place greater emphasis on the written text and use the pictorial resources to confirm or disconfirm their understanding during a reading event.

Embedded in those research findings is Vygotsky's concept of the zone of proximal development (ZPD).

[The ZPD] is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978, p. 86, emphasis in original).

Vygotsky's concept of the zone of proximal development (ZPD) is pivotal in readers' process of meaning construction during a reading event, since "what a child can do with assistance today she will be able to do by herself tomorrow" (Vygotsky, 1978, p.

87). In this sense, Vygotsky (1998) uses the term “imitation” in its most qualitative form to refer to the importance of dialogic approaches in the classroom, a process in which more skilled peers consciously and unconsciously share different forms of thinking and reasoning with learners.

Considering Vygotsky’s ZPD, children’s use of language and reading strategies may be intellectually imitated, meaning that readers learn from more skilled peers’ ways to transact with texts, as they are part of pedagogic cultures that tend to reinforce particular literacy practices (Del Río & Álvarez, 2007). Aligned with these practices in the classroom is the cultural and affective environment of the child. Mexican-American preschoolers in dual language classrooms, for example, are highly engaged in story retellings when texts are culturally significant and one parent mediates the process (Garcia-Alvarado, Arreguin & Ruiz-Escalante, 2020). Garcia-Alvarado et al.’s study suggests that, on the one hand, when the narrative text is tailored to the cultural environment of the child, there is a deeper connection with the characters in the story, which enhances young learners’ use of language and prior knowledge. On the other hand, the affective interactions that take place while children retell culturally significant stories with the collaboration of a parent allow higher engagement in cognitively demanding activities, extending their ZPDs through meaningful dialogues in which parents’ prompting has a significant role.

In sum, we can say that readers’ miscues and ways of constructing the meaning of narrative texts align with language, modes of thinking about the world, cognitive development and readers’ culturally and socially developed strategies for transacting with written texts.

3.7. Text Genre, Miscues and Meaning Construction in Bilinguals

The term *genre*, according to Pappas and Pettegrew (1998), refers to a whole linguistic system which is not limited to the text itself but socially contextualized. During a reading event, genre is one of a series of intertwined elements influencing the understanding of the text, readers' production of miscues and comprehension itself. In this sense, "genre, the different ways in which language patterns are realized in written texts to meet various social, communicative goals, serves as the powerful engine that drives the expectations or guesses in this selection process" (p. 36). And it is precisely because of their social meanings, communicative functions and polysemous nature that texts have the power to influence what and how readers learn (Meek, 1998). When solving arithmetic story problems, a text genre contrived for academic purposes, first grade bilinguals' retellings show that their understanding of the mathematical problems embedded in the text is similar in their L1 and L2, being the stories with the concept of division the most challenging to retell (Ambrose & Molina, 2014).

Encouraged to solve the problems the way they prefer using either their L1 or L2, first grade bilinguals engage in cognitively demanding tasks that evidence the complexity of concept understanding at this age. Considering Vygotsky's ideas about the development of academic concepts, Ambrose and Molina's study illustrates the reciprocal relationship between language and modes of thinking, as the harder it is to retell the story problem, the harder to solve it. According to Ambrose and Molina, when dealing with unknown text genres, bilingual children are very likely to infer meanings from contextual clues that help them to build up meaningful representations that align with what they already know. In the case of bilinguals' retellings that involve the concept of "division," the complexity of understanding the text and thus retelling it lies on concept formation, as children have not fully developed this academic concept and they are not familiar with the

polysemous words and the question structures that appear in the text. Then, considering the unification of language and thinking for meaning construction, we can say that one thing is certain: using language appropriately for retelling a complex idea can only be possible when the reader has already developed the concept.

With regard to narratives, meaning construction is always idiosyncratic because “there are cultural features which locate [readers] in a tradition” (Meek, 1988, p. 13). Narrative writers take advantage of children’s innate curiosity to enhance cultural aspects which are taught and learned through language variations that contribute to “reconstruct, remake, extend and understand our experience of living in social contact with each other” (p. 16). For example, the linguistic patterns and intentions of humor and irony in a text represent cultural elements, capable of influencing readers’ miscue production as well as their strategies for constructing meaning. Therefore, “difficulties lie not in the words but in understanding something that lies behind the words, embedded in the sense” (p. 20).

To illustrate the influence of text genre on readers’ understanding of concepts, Pappas and Pettegrew (1998) analyze the use of a single noun in two different texts—a narrative versus a factual book. In a narrative, a noun like “woodpecker” is more likely to refer to a character, being the language highly marked by perceptions, thoughts, beliefs, feelings, and mental states, while the same noun in a factual text commonly includes general information to describe a noun class.

In addition, understanding a complex text highly depends on the characteristics of its subgenres. Flurkey and Goodman’s (2004) analysis of the miscues produced by a fourth grader during the oral reading and retelling of “The Magic School Bus at the Waterworks” (Cole, 1986), allows a deeper understanding of how readers construct the meaning of the subgenres of a complex text. “The Magic School Bus at the Waterworks” is a fictionalized documentary book embracing both science fantasy and facts about the

process of water purification. Considering the particularities of the text and the miscues readers produced, Flurkey and Goodman suggest that young readers are more likely to pay attention to speech balloons and narrative subgenres because of language familiarity, rich descriptions and social uses of language.

To visualize the characteristics of each subgenre, I have created Table 3 to provide a synthesis of the main characteristics of the subgenres described in Flurkey and Goodman’s study.

Table 3.

Characteristics of the Subgenres of a Complex Text

Subgenre	Characteristics
Narrative text	Detailed descriptions; fictional characters in imaginary settings and situations (e.g. children described as raindrops).
Factual text	Academic language and concepts.
Speech balloons	Familiar and predictable language.
Environmental text and author’s comments	Additional information; less predictable language; new concepts and unknown linguistic structures.

Adapted from Flurkey, A. D., & Goodman, Y. M. (2004). The role of genre in a text: Reading through the waterworks. *Language arts*, 81(3), 233-244.

The analysis of readers’ meaning construction of unconventional texts supports Flurkey and Goodman’s idea of text influence. For example, readers’ predictions during their transaction with the unconventional book “Ask Mr. Bear” (Flack, 1932, 1971), a text in which the meaning of a clause is incomplete until the reader finds complementary

information on the next page, suggests that placing clauses on different pages and supporting them with pictorial elements, engages children in meaningful and holistic uses of language to predict, confirm and disconfirm syntactic and semantic elements (Goodman & Goodman, 2011).

To understand the influence of text structure, Martens, Arya, Wilson and Jin (2007) analyze second graders' retellings of "There's Something in My Attic" (Mayer, 1988), a text with a traditional story structure and "Cherries and Cherry Pits" (Williams, 1986), a story in which pictorial elements do not enhance the written text, so that readers need to infer monologues and dialogues as they read.

On the one hand, "There's Something in My Attic" develops in a rural setting and it focuses on the dialogue between a girl and a nightmare in the attic. The narrator tells the story in first person and uses the past tense to connect a series of events that make children's fears and imagination explicit through the use of illustrations that enhance the written text. On the other hand, "Cherries and Cherry Pits," the postmodern story, develops in an urban setting and has two narrators who tell separate sub-stories. The illustrations in the text increase the complexity of meaning construction as they are not enhancing. In addition, the text uses simple, compound and complex sentences to present monologues and dialogues, making the understanding of the story more cognitively demanding since "readers must use their knowledge of language, story, and social relationships to discern which narrator is speaking" (Martens et al., 2007, p. 57).

After analyzing readers' retellings of both texts, Martens et al. conclude that meaning construction does not always depend on higher accuracy in understanding the graphophonic, lexical and syntactic clues. Rather, it depends on how readers use strategies to transact with different kinds of texts. A plausible explanation for Martens et al.'s finding that readers have more elaborated retellings of traditional texts may be

related to visual literacy—the ability that readers have to interpret the conventionalisms and meanings embedded in pictorial language (Díaz, 2007). Since a traditional text presents a conventional structure with enhancing pictorial resources, readers are more likely to understand the sense of the text and better reconstruct its meaning, always having in mind what is socially and culturally significant for themselves.

Considering that readers align their linguistic, social and cultural background with the meanings embedded in the text layout, the content and the grammatical structures (Martens et al., 2007), bilingual readers are more likely to interpret the grammar of their L2 relying on the concepts they have developed in their L1. Korean-English simultaneous bilinguals, for example, make cross-linguistic transfers to interpret transitive and causative constructions (Hwang, Shin & Hartsuiker, 2018). Grammatically speaking, a transitive structure indicates that the subject performs an action that requires a direct object to complete its semantic function (e.g. He fixed the car), while a causative structure indicates that the subject is not the agent, suggesting that someone else performs the action (e.g. He had his jacket cleaned). In monolingual contexts, Korean speakers use a transitive construction for both a causative and a transitive action, while English speakers use a causative grammatical construction for a causative action and a transitive construction for a transitive action. The results in Hwang et al.'s study show that Korean-English bilinguals make interpretations in their L2 relying on the sense syntactic structures acquire in their L1, then, suggesting that the use of two languages in a single speech community activates cross-linguistic transfer and supports bilinguals in their use of L1 to construct meaning in their L2.

Bearing these examples in mind, miscue production during reading goes beyond the decoding of graphemes and phonemes to focus on the relation between language and modes of thinking in social and cultural contexts. In the case of Peruvian Quechua, for

example, language contact has influenced bilinguals' use of grammar in two geographical areas of language proximity, Ulcumayo and Lamas. Through storytelling, cases of cross-linguistic influence have been evidenced in Quechua-Spanish bilinguals as they use (1) Quechua roots with Spanish inflections; (2) cases of intra-sentential code-mixing; and (3) the omission of the accusative suffix *-ta* (Sánchez, 2003). Figure 5 has been elaborated from Sánchez's (2003) study to illustrate the linguistic complexity of the bilingual mind in environments of language contact.

These semantic structures cast light on the complexity of the bilingual mind and suggest an intricate transaction between the reader and the text. In this sense, bilingual readers' production of miscues and their retellings greatly depend on readers' familiarity with text genre, understanding of the social and cultural meanings embedded in the grammar of the text and their consciously and unconsciously developed modes of thinking in their first and second language.

Figure 5. Quechua-Spanish Semantic Construction during the Storytelling of a Picture Book

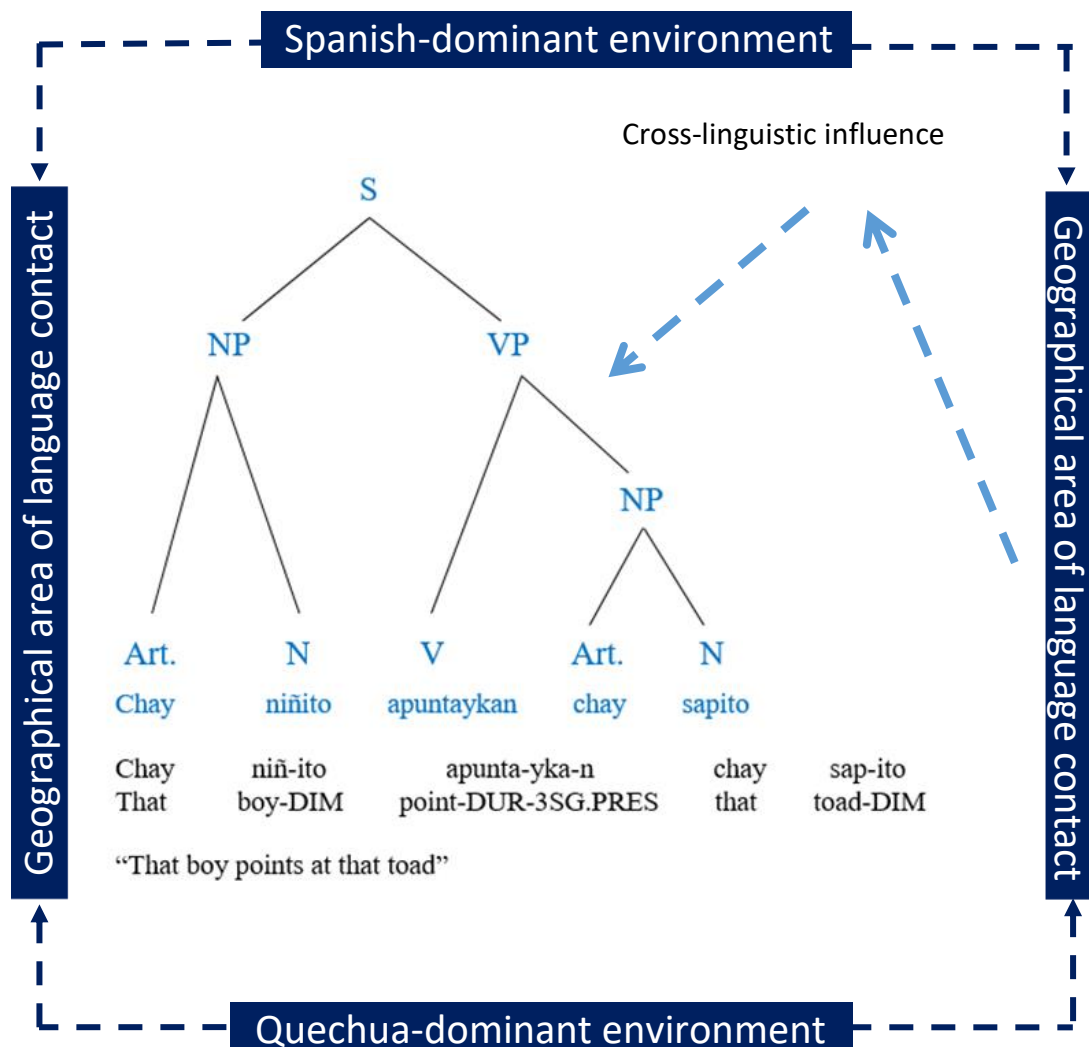


Figure 5 shows an example of an utterance produced by a Quechua-Spanish speaker in Peru. This semantic construction evidences how language contact influences bilinguals’ use of the morphology and syntax of both languages in their speech community. The construction “Chay niñito apuntaykan chay sapito” meaning “That boy points at that toad” is a code-mixed utterance that combines the Quechua article “chay” (that), the Spanish nouns “niño” (boy) and “sapo” (toad), both with the Spanish diminutive suffix *-ito*, and the Spanish-borrowed verb “apuntar” followed by two Quechua inflectional morphemes “yka” and “n”. In this semantic construction, the speaker uses the SVO pattern of the Spanish language and thus drops the Quechua accusative suffix *-ta* in the direct object “sapito”. This example has been adapted from Sánchez, L. (2003). *Quechua-Spanish Bilingualism: Interference and convergence in functional categories*. John Benjamins Publishing Company.

Terminology: NP = noun phrase; VP = verb phrase; Art. = article; N = noun; V = verb; DIM = diminutive; DUR = durative action; 3SG = third singular person; and PRES = present tense.

3.8. Defining Retrospective Miscue Analysis

Retrospective miscue analysis (RMA) is a reflective dialogue between a reader and a more skilled individual with the purpose of analyzing readers' miscue production and metacognitive processes in relation to their L1 or L2 reading skills. This reflective dialogue aims "to understand how readers' beliefs about reading, the reading process, and themselves as readers either constrain or liberate them" (Martens, 1998, p. 176). RMA is, therefore, an exploratory and instructional process that allows readers to develop confidence, explore their miscue production, articulate their processes of meaning construction and revalue themselves as readers (Goodman & Paulson, 2000).

It is precisely because of these characteristics that RMA contributes to understanding the strategies different readers in different sociocultural contexts use to make sense of texts, allowing identification of patterns in their use of language and empowering them to build on their reading strengths (Moore & Aspegren, 2001). According to Dean (2010), RMA promotes critical evaluations of readers' strategies and creates, through peer feedback, opportunities for expanding readers' awareness of their own strategies and the strategies other readers use. These critical discussions are not limited to strategic awareness, but they allow understanding different modes of thinking in given reading situations, contexts and languages.

Retrospective miscue analysis encompasses different procedures to holistically analyze readers' construction of meaning. RMA begins with establishing rapport with the reader through an interview that explores readers' first reflections on different aspects of the reading process (Goodman, Martens & Flurkey, 2014). Then the reader reads a piece and depending on the specific purposes of RMA, the researcher codes and analyzes readers' production of miscues considering one of these procedures: informal procedure, classroom procedure or in-depth procedure (Goodman, Watson & Burke, 2005).

The informal procedure analyzes if miscues are acceptable within the text, the paragraph and the sentence level, and its results are immediately applicable to the educational setting where the informal procedure takes place. The classroom procedure, on the other hand, examines the acceptability of miscues at the sentence level within the entire text. To analyze this acceptability, the classroom procedure includes questions concerning syntactic and semantic acceptability, meaning change and graphic and sound similarity (Goodman & Marek, 1996; Goodman, Watson & Burke, 2005).

Finally, the in-depth procedure focuses on the study of “each reading miscue in relation to other miscues within the sentence and within the entire text, evaluating how the text and the reader’s prior knowledge influence the reading” (Goodman et al., 2005, p. 131). The in-depth procedure is highly recommended for research on the development of reading. This procedure includes the evaluation of syntactic acceptability, semantic acceptability, meaning change, correction, graphic similarity and sound similarity. Figure 6 shows an example of the in-depth procedure for coding miscues. In this case, miscues are labelled YY since they are syntactically and semantically acceptable within the sentence and within the entire text (See Table 5 in Chapter IV). The numbers in the left-hand column address the line in the text.

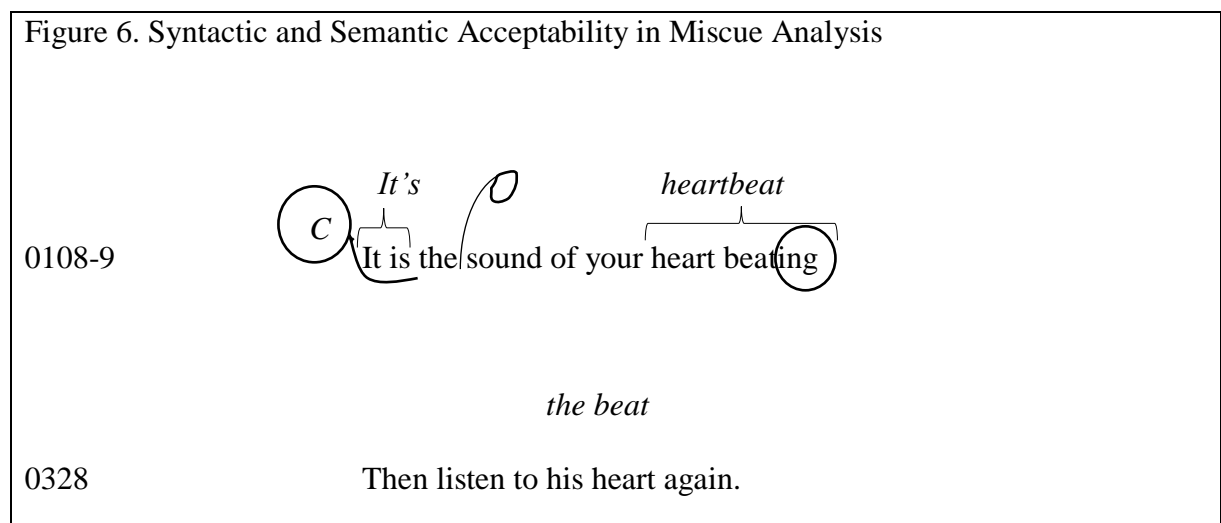


Figure 6 shows two miscues (word substitutions) that are syntactically and semantically acceptable within the sentence level and the entire text. Through an in-depth procedure, these miscues reveal that the reader is an active user of the language of her speech community. This example has been taken from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc., p. 138. See appendix B for a detailed explanation of miscue marking.

Each time the researcher and the reader discuss a miscue, the purpose is to analyze its nature with regard to meaning construction in either their L1 or L2. This is why these reflective dialogues not only focus on metacognitive reflections regarding low-quality responses but also high-quality miscues (Goodman, Martens & Flurkey, 2014, p. 35). Then, if the reader, for example, produces non-word substitutions, the researcher should also select syntactically and semantically acceptable substitutions to enhance positive reflections (Goodman & Marek, 1996, p. 43). Along with the metacognitive dialogues that come with RMA, readers develop conscious awareness of the nature of miscue production. For example, as readers engage in RMA, their assumption that good readers do not skip the words they do not know changes and they start to talk about omissions as acceptable miscues when meaning is not affected (Brown, 1996).

3.9. RMA and the Development of Metacognition in L1 and L2

Metacognition refers to the knowledge that individuals have about their own cognitive processes, including metacognitive knowledge and metacognitive experience (Flavell, 1979; Gombert, 1993; Israel, Collins, Bauserman & Kinnucan-Welsch, 2005). Metacognitive knowledge, on the one hand, refers to the information available at three different but interrelated levels: person, activity and strategies. To illustrate such interrelationship during a reading event, we can say that “person” refers to the knowledge that an individual has to engage and carry out a reading activity by means of different

cognitive strategies such as summarizing, paraphrasing, analyzing and using contextual clues (Ahmed, 2020). Therefore, the construction of the meaning of a written text encompasses the unconscious use of the graphophonic, syntactic and semantic language cueing systems as well as readers' conscious application of cognitive and metacognitive strategies that respond to text genre familiarity and their linguistic and sociocultural background.

Metacognitive experience, on the other hand, refers to “the sum of everything each individual has ever felt with regard to cognitive activity of any kind” (Gombert, 1993, p. 572). Thus, constructing the meaning of a written text and engaging in retelling can be either a frustrating or a rewarding cognitive activity for young readers depending on how they perceive their own reading process and the language in which reading takes place.

Due to the complexity of bilingual reading, researchers' analysis must go beyond readers' cognitive skills for transacting with a text. It is essential to promote bilingual readers' metacognitive awareness of their own reading strategies through reflective dialogues. In this sense, RMA becomes an essential tool to understand and expand readers' metacognitive activity, which can be defined as “the monitoring and regulative mechanisms that readers consciously use to enhance comprehension” (Karbalaeei, 2011, p. 8).

Since social and cultural factors influence both cognition and metacognition, we cannot detach metacognition from metapragmatics—the knowledge that individuals have concerning the use of language in social and cultural contexts of communication (Gombert, 1993). Hence, the metacognitive dialogues that RMA promotes are valuable because they allow (1) understanding readers' metacognitive knowledge and metacognitive experience in sociocultural settings; (2) developing metalanguage on

reading; and (3) enhancing their confidence to revalue themselves as readers of an L1 or L2.

RMA affords a more coherent understanding of the relationship among person, activity and strategy, as readers who engage in metacognitive reflections better understand their own reading and the strategies that other readers use to construct the social and cultural meanings of a written text (Goodman & Marek, 1996; Goodman, Watson & Burke, 2005). After oral reading and retelling, readers engage in reflective dialogues that provide meaningful information concerning their reading strategies and the way they perceive themselves as readers, perceptions that are highly influenced by social factors, as it has been evidenced through the relationship between gender and reading status (Davis, 2007).

These metacognitive dialogues promote readers' conscious awareness of their reading strategies. That is, how readers predict, confirm, disconfirm and self-correct information in their L1 or L2, allowing them to understand how intra- and inter-individual aspects affect their metacognitive experience (Black, 2004). Intra-individual aspects, on the one hand, enable readers to analyze the assumptions they have in relation to their own reading abilities, while inter-individual aspects concern readers' perceptions of their own cognitive abilities as compared to what other readers can do. For example, readers who have received word-oriented instructions assume that effective reading requires the correct pronunciation and understanding of the literal meaning of every single word in the text (intra-individual). Consequently, they also believe that proficient readers make pauses to consult dictionaries (inter-individual) (Marek, 1996). On the other hand, reading instruction that focuses on meaning construction creates meaning makers in any language (Freeman & Freeman, 2014). However, this type of instruction emphasizing the

importance of meaning construction is less frequent in educational contexts, largely due to the commodification of reading via instructional programs (Meyer & Whitmore, 2011).

These assumptions that are socially constructed affect readers' metacognitive experience because they may reinforce negative stereotypes about the reading process. To overcome this, RMA promotes the understanding of readers' metacognitive knowledge and metacognitive experience. This contributes to revalue and expand their potentials through a positive view of their miscues and the strategies they use to construct the meaning of a written text in any language.

RMA allows readers to engage in metacognitive discussions concerning three subdomains of metalinguistic knowledge—metaphonological knowledge, metasemantic knowledge and metasyntactic knowledge (Gombert, 1993). The metaphonological subdomain refers to the knowledge that readers have for transacting with the phonological features of a text, always in relation to the syntactic and semantic elements. The metasyntactic subdomain refers to the knowledge that readers have of the structure of a written text, while the metasemantic subdomain deals with readers' strategies to make sense of the social and cultural meanings that the text entails to understand it holistically.

In the case of bilingual readers, research suggests that the use of two languages enhances readers' metacognitive engagement and thus the development of more effective strategies for transacting with texts (Keshavarz & Ghamoushi, 2014). The idea that the use of two languages enhances reading strategies has to do with a "bilingual advantage," which basically underscores bilingual superiority in executive functioning and cognitive control (Van den Noort, Bosch & Struys, 2020). Since the executive functions of working memory, flexible thinking and self-control are responsible for skills such as paying attention or self-monitoring, bilinguals better process information and solve problems in

relation to their current goals, which, nonetheless, depend on their socioeconomic status, culture and age, factors that modulate this cognitive superiority.

Along with metacognitive reflections comes metalanguage. Goodman and Paulson (2000) suggest that the development of metalanguage arises from readers' conscious awareness of their use of language during and after a reading event. As readers discuss their miscues and strategies with a more skilled peer, usually a teacher or a researcher, they engage in reflective dialogues about their own language. For this purpose, RMA includes four interrelated phases: procedural phase, language use, interactional phase and ownership (Goodman & Paulson, 2000). The procedural phase refers to the organization of the RMA session, in which, for example, the researcher selects high-quality miscues for discussion. The language-use phase consists in the introduction of metalanguage and readers' gradual transition to the use of new language. The interactional phase enhances the use of metalanguage through dialogues, allowing readers to have a positive perception of their own miscues and reading strategies. Finally, ownership refers to readers' use of metalanguage and the development of their conscious awareness to build up their potentials.

Goodman and Paulson's (2000) study illustrates how reflective dialogues contribute to readers' meaning construction and the development of metalanguage. Here, a researcher focuses on the substitution of "vision" for "view" and invites Lamar, a sixth grader, to engage in a metacognitive reflection in which the young reader uses the term "miscue" to express that his substitution was indeed "a good miscue" (p. 8). In this case, the RMA session allowed the reader to use metalanguage and the researcher to infer Lamar's metasyntactic and metasemantic knowledge. Another example of metalinguistic awareness comes from Erica, a fifth grader, who uses her knowledge of grammar to determine whether a phrase requires a noun or a verb to complete its meaning. Her

metalinguistic knowledge is embedded in her words, “No, it couldn’t be an action. It has to be like a thing or something” (p. 11).

Besides promoting metalinguistic knowledge, these reflective dialogues promote the understanding of intertextuality—the way readers juxtapose texts or any configuration of signs to construct meaning in relation to their social and cultural conceptions (Smagorinsky, 2001). RMA researchers can use three questions to initiate readers’ metacognitive activity and analysis of intertextuality: (1) “Does the miscue make sense?” (2) “Was the miscue corrected?” and (3) “Should it have been?” (Goodman & Marek, 1996, p. 53). These questions lead readers to reflect on the acceptability of high-quality miscues to determine if self-correction is necessary in relation to what is socially and culturally acceptable for the reader (Goodman, Martens & Flurkey, 2014). For instance, Rolando, a 12-year-old Spanish-English bilingual, juxtaposes a verbal text and a visual evocation concerning his father. Due to this juxtaposition, Rolando changes the meaning of a sentence during his oral reading and produces miscues that are syntactically and semantically acceptable as seen below (Goodman, Martens & Flurkey, 2014, p. 33):

Text: “Mighty much obliged for the favor,” he called as he headed up the trail toward home.

Transcript: “Mighty much obliged for the favor,” he called as he headed from the rail toward home.

Rolando’s metacognitive reflections suggest that his substitutions are the outcome of a strong connection between his memory and the ideas in the text. As Rolando reads the story, he aligns the text with mental images concerning his father and his way home. During the RMA session, Rolando explains that “[he] was imagining stuff,” referring to an evocation in which his father “was walking toward home—*from the rail toward home*” (p. 33). In sum, the metacognitive reflections that come with RMA allow the

understanding of intertextuality by developing readers' conscious awareness of their modes of thinking during a reading event.

Finally, RMA enhances readers' confidence through a reconceptualization of their cognitive activity and their role as readers (Black, 2004). During initial sessions, readers' perceptions of their cognitive processes may be highly marked by negative language, including expressions such as "Oh, I messed up" or "I should have looked up the words in the dictionary" (Goodman, Martens & Flurkey, 2014, p. 44). As readers engage in metacognitive dialogues during RMA, readers' "self-perception", "self-efficacy" and "perspective taking" are modified (Wynne & Connor, 2016).

According to Wynne and Connor, the way readers perceive themselves may influence their cognitive strategies to cope with texts effectively. In this sense, RMA enhances both readers' positive self-perception and self-efficacy—the way readers use their perceived abilities for cognitive development in relation to individual and social factors (p. 103). This connection between self-perception and self-efficacy was evidenced in the reflective dialogues of two learners, Bin and Lili, concerning their reading abilities in Mandarin (L1) and English (L2) (Wang & Gilles, 2017). During their RMA sessions, Bin and Lili identified their reading strengths, revalued themselves as readers, enhanced self-efficacy and gained confidence to use their knowledge in both their L1 and L2. According to Wang and Gilles, "[readers'] knowledge about their miscues changed their perceptions and moved them to more complex understandings of the reading process" in both languages (p. 80). Therefore, the metacognitive awareness that comes with RMA leads to a reconceptualization of the reading process and thus to a more effective perspective taking.

According to Wynne and Connor (2016), perspective taking refers to the complex cognitive process that readers must undergo to make sense of the different perspectives

embedded in a written text, which allow readers to develop their confidence and higher levels of understanding and interpretation in their L1 or L2. These levels, however, are highly influenced by the cognitive maturity that comes with age and concept development (Vygotsky, 1987), as well as the complexity of the text itself and readers' understanding of the social context (Wynne & Connor, 2016). In this sense, RMA serves as a powerful source of information to curricular design and reading instruction, because it allows inquiring readers' dynamics for text understanding to "help them to develop the habit of mind of being reflective and thoughtful about their own reading" (Davenport & Lauritzen, 2002, p. 118).

To sum up, RMA contributes to the understanding of the nature of miscues and the strategies readers use for constructing the meaning of a text. Readers' engagement in metacognitive reflections provides essential information for analyzing the relationship between readers' miscues and meaning construction during a reading event, information that analyzed in light of Vygotsky's sociocultural theory of learning allows understanding reading in relation to readers' language and modes of thinking within the boundaries of their social and cultural settings.

CHAPTER IV: METHODOLOGY

4.1. Rationale for Case Study Design

To understand how a group of Kichwa-Spanish bilinguals constructed the meaning of narrative texts in Spanish, this study used a multiple case design with embedded units to be analyzed. An embedded unit or case, in this study, referred to the holistic analysis of each reader's perceptions about reading, miscues during oral reading and meaning construction through retellings. Among the rationales for selecting a multiple case design were (Yin, 2009):

1. **Representativeness:** a multiple case study enhances trustworthiness by replicating results. A replication refers to the finding of similar results in another embedded unit or case, increasing the strength of the study as the researcher replicates the results in at least 5 cases.
2. **Relevance:** multiple case studies allow a holistic understanding of the relationships among different variables in each unit to be analyzed and across cases within the boundaries of a social and cultural context.

4.2. The Research Sample

Participants were not randomly assigned. A convenient but homogeneous sample was used. Three female and three male participants with similar demographic features were selected to analyze how Kichwa-Spanish bilinguals constructed the meaning of Spanish narratives and how Kichwa influenced their construction linguistically and culturally. The size of the sample was appropriate for this multiple case study since the trustworthiness of multiple case studies lies in the fact that "if a finding holds in one setting, and given its profile, also holds in a comparable setting but does not in a contrasting case, the finding is more robust (Miles, Huberman & Saldaña, 2014, p. 34).

4.3. Recruitment and Screening Procedures

The procedure for the recruitment and screening of participants involved four phases:

- 1) Identifying one intercultural school in Sisid, a community in the Southern Andes of Ecuador, in which Kichwa and Spanish are used in the curriculum.
- 2) Asking for institutional cooperation through a formal petition to disseminate information about the objectives of the study and the criteria for selecting participants;
- 3) Asking for access to the telephone numbers of parents and legal guardians willing to allow students' participation in the study;
- 4) Contacting parents or legal guardians who expressed their interest in this study to provide details about students' engagement and the procedure for informed consent and student assent.

4.4. Inclusion and Exclusion Criteria

There were three inclusion criteria for participant eligibility. Participants who failed to meet all inclusion criteria were not eligible for the study.

- 1) Participants must be Kichwa-Spanish speakers.
- 2) Their ages should range between 12 and 14 years old.
- 3) Participants' parents or legal guardians must speak Kichwa.

4.5. Participants

The participants were three male and three female Kichwa-Spanish speakers between 12 and 14 years old. They were from a community with Cañari and Inca heritage, located in the Southern Andes of Ecuador. The rationale for including minors between 12 and 14 years old was that they are in a crucial age for developing abstract thinking. At this age, their formation of concepts starts to undergo a qualitative transition from potential concepts to higher levels of abstraction, as their modes of thinking shape

and are shaped by the language of the pedagogical environment and the culture to which they belong.

4.6. Research Venue

The research site for this multiple case study was Sisid Anejo, a community located in the Southern Andes of Ecuador, approximately three kilometers away from Ingapirca Archeological Complex. This indigenous community was an Inca settlement in the sixteenth century and its language, referred to as Quichua or Kichwa in Ecuador, is one of the fourteen ancestral languages resisting extinction. Regarded as one of the oldest communities in Ecuador, inhabitants in Sisid Anejo have maintained their social and cultural practices in balance with their Andean Cosmivision of the world.

Due to the importance of language maintenance, The Ministry of Education of Ecuador [MINEDUC, for its acronym in Spanish] implemented the National Curriculum for Intercultural and Bilingual Education, in an attempt to strengthen the teaching and learning of the language and culture of the indigenous nationalities in Ecuador (MINEDUC, 2019). Therefore, participants in this multiple case study were students in an intercultural-bilingual school that promoted the use of both languages, Kichwa and Spanish.

Figure 7. Ingapirca Archeological Complex, Southern Andes of Ecuador



Photograph: Sandra Cabrera-Moreno

Figure 8. Stone Walls at Ingapirca Archeological Complex



Photograph: Sandra Cabrera-Moreno

Concerning site-specific regulations, the principals of schools in Ecuador are legally authorized to allow research studies in the institutions they lead. As I conducted interviews, reading sessions and metacognitive reflections through the Zoom Platform, my presence neither changed the pedagogic dynamics of the school nor introduced any risk to the previously established environment. With regard to researcher safety, intercultural schools welcome researchers, especially those from the University of Cuenca, the university at which I have worked since 2010. The University of Cuenca is well known in the Ecuadorian context for conducting research in the educational field and making pedagogical contributions in the region.

4.7. Data Collection Procedures

This multiple case study included four phases of data collection through the Zoom Platform to understand how Kichwa-Spanish bilinguals construct the meaning of L2 narrative texts after a reading event and how Kichwa influences such construction. To

protect participants' privacy, they were asked to keep their cameras off during all sessions.

4.7.1. Phase I: Interviews

To build rapport with young Kichwa-Spanish readers and to develop understanding of their conceptualization of reading, I used the questions of the Burke Reading Interview (Goodman, Watson & Burke, 2005), a validated instrument that researchers can use for collecting data about readers' perceptions of themselves and the readers they know (Appendix A). To answer the first research sub-question "How do readers' perceptions of their role as bilingual readers influence their reading strategies?", I relied on the Burke Reading Interview to engage readers in a semistructured dialogue, i.e., other questions emerged during the interview, mainly to expand readers' answers and their specific examples. This interview was conducted in Spanish, the language of instruction in Ecuador, to first register how learners perceived their role as Kichwa readers and then as Spanish readers. It is worth mentioning that in intercultural schools in Ecuador the use of Spanish surpasses the use of Kichwa. Collecting data about students' perceptions of their own role as bilingual readers was the first step towards the understanding of bilingual readers' construction of the meaning of narrative texts in Spanish, since "what students believe about reading and reading instruction affect the decisions they make about their reading strategies" (Goodman, Watson & Burke, 2005, p. 179).

4.7.2. Phase II: Oral reading

To answer the second research sub-question "What is the relationship between reading strategies and miscue production?", I selected two narrative texts unfamiliar to the reader but still understandable and challenging enough (Marek & Goodman, 1996; Moore & Gilles, 2005) to reveal how readers transacted with a text in their L2 during oral

reading. There were two oral reading sessions, one in the morning and one in the afternoon. In the morning session, participants received the short story “Felicidad” (Happiness) and in the afternoon they received the story “El Río” (The River). Both texts were sent to the readers’ emails just moments prior to the Zoom meeting. These stories belong to the book “Verde Fue mi Selva” (My Rainforest was Green) by the Ecuadorian writer Edna Iturralde.

The rationale for using full stories is that as readers become familiar with the text, their production of miscues becomes lexically, syntactically and semantically acceptable, revealing their actual reading strategies (Goodman, Martens & Flurkey, 2014). The grammar structures and the number of pictorial resources were similar in both texts to strengthen the validity and reliability of the results. Three stories were available in case the text resulted linguistically complex and participants felt uncomfortable. During phase II, I audio-recorded bilinguals’ oral reading and used a blank typescript for marking miscues considering Goodman’s taxonomy for miscue analysis (Appendix B). After the reading, I went back and listened to the tape to confirm that I had marked all the miscues correctly.

4.7.2.1. About the narrative texts

“Verde fue mi selva” is a compilation of a series of stories written by the Ecuadorian writer Edna Iturralde. These stories developed in the Ecuadorian Amazon region and their characters belonged to different indigenous nationalities. “Felicidad” (Happiness) narrated the adventure of three Achuar boys, Ramu, Maskián and Antún, in an Amazon River. The boys navigated the river in a canoe looking for ants. As it was getting late and dark, they enjoyed the glowing fireflies and the sounds of the rainforest. They found happiness in sharing delicious ants with friends. “El Río” (The River), on the other hand, narrated the story of two Kichwa girls in the Amazon region who competed

against their rivals in a river race. After losing their floating rubber wheel full of patches, Ruth and Ester realized their rivals, Katy and Ana, were in danger, and without any hesitation, they decided to help them. They all felt winners and a beautiful friendship started.

4.7.3. Phase III: Oral Retellings

To generate data for the third research sub-question “What syntactic and semantic patterns do Kichwa and Spanish retellings show?”, participants produced two unaided retellings in Kichwa and two unaided retellings in Spanish. For the purpose of this study, the term “retelling” referred to the understanding that the reader had of a written text after oral reading. Prior to the reading of the first narrative text, *Felicidad* (Happiness), I told each student that once they had finished their oral reading, they would retell the story first in Kichwa and then in Spanish. I followed the same procedure with the second story. During these sessions, I limited my intervention to use Spanish and Kichwa prompts like “Continúe, por favor” or “Katipay,” meaning “Go on, please” to enhance retellings exclusively from the reader’s point of view (Wilde, 2000).

By doing this, I allowed readers to construct the meaning of narratives spontaneously to prioritize their own linguistic patterns and modes of thinking in both languages. At the end of the session, I had a total of four unaided retellings, two in Kichwa and two in Spanish. Then, I used my notes to generate some questions based on readers’ previous retellings in Spanish. These questions allowed me to get more information and encourage readers to add more details to their construction of the text in Spanish, without providing any additional information that might lead the reader to a specific response. All these questions respected readers’ language and points of view.

4.7.4. Phase IV: Metacognitive Reflections

To generate data for the last research sub-question “How do readers perceive their own reading strategies and miscues?”, I selected a sufficient number of high-quality and low-quality miscues in Spanish. That is, a number of miscues that allowed the researcher to collect enough information for discussing readers’ perceptions. High-quality referred to those miscues that were syntactically and semantically acceptable during oral reading (thus supporting meaning making), while low-quality concerned those miscues that were neither syntactically nor semantically acceptable (typically not supporting meaning making). Readers’ self-evaluation of miscues provided insights into their use of strategies for constructing the meaning of a narrative text in Spanish, as readers reflected on their expected and unexpected responses. Each reader listened to an audio recording containing selected miscues to enhance meaningful discussions leading to a deeper understanding of how bilingual readers perceived their own L2 reading strategies and how their first language may have influenced such perception, as readers analyzed their own miscues and reading strategies cross-linguistically.

To enhance metacognitive reflections on self-correction, I used three questions (1) Does the miscue make sense? (2) Did you correct the miscue? and (3) Was the correction necessary? (Goodman, Martens & Flurkey, 2014, p. 31). To enhance metacognitive reflections on the reading strategies of selection and prediction, I used two questions (1) Why do you think you made this miscue? and (2) Do you think that miscue affected your understanding of the text? (Goodman, Martens & Flurkey, 2014, p. 32). More questions emerged as readers reflected on their own reading strategies providing a semi-structured environment for generating data. Table 4 summarizes the instruments used for data collection and their purpose.

Table 4.

Summary of data collection instruments and purpose

Instrument / Procedure	Language	Purpose
The Reading Burke Interview	Spanish	To understand readers' perceptions about their own reading and the reading strategies they use when reading in both languages.
Narrative Texts	Spanish	To register the type of L2 miscues readers produce during the oral reading of two narrative texts in Spanish.
Retellings	Kichwa & Spanish	To register retellings in both languages. To have a basis for contrastive analysis of syntactic and semantic patterns in both languages. To determine the influence of Kichwa on Spanish syntactic and semantic constructions.
Metacognitive Dialogues	Spanish	To analyze readers' reflections on their own miscues, reading strategies and retellings.

4.8. Data Analysis Procedures

To enhance trustworthiness, triangulation of the different sources of information allowed a holistic understanding of the relationships among four interrelated units influencing L2 reading and meaning construction: (1) readers' perceptions of their role as bilingual readers and their reading strategies; (2) oral reading and miscue production; (3)

syntactic and semantic patterns identified in retellings; and (4) metacognitive reflections revealing strategies for constructing the meaning of a text. Considering that qualitative validity implies efforts to assess the accuracy of the findings using validity strengthening strategies (Creswell, 2014), I used a series of matrices proposed by Miles, Huberman and Saldaña (2014) to manually organize, condense and compare data sources across phases and across bilinguals. This process maximized the validity of the study and minimized the researcher's biases through pattern matching, explanation building and rival descriptions (Yin, 2009). Figure 10 shows the four interrelated units to be analyzed in this study.

Discourse analysis (DA) was used to explore how Kichwa influenced bilingual learners' construction of the meaning of narrative texts in Spanish. The rationale for using DA was that it constitutes a systematic approach to the understanding of the use of language in context beyond the boundaries of a sentence (Bernard & Ryan, 2010).

To generate qualitative codes, I classified the questions of the Burke Reading Interview into five categories for analysis:

1. Readers' perceptions of their own strategies for constructing the meaning of a text written in Kichwa.
2. Readers' perceptions of their own strategies for constructing the meaning of a text written in Spanish.
3. Readers' perceptions of a good Kichwa reader.
4. Readers' perceptions of a good Spanish reader.
5. Perceptions of useful strategies for struggling readers in both languages.

Figure 9. Units to Be Analyzed in Meaning Construction of L2 Narratives

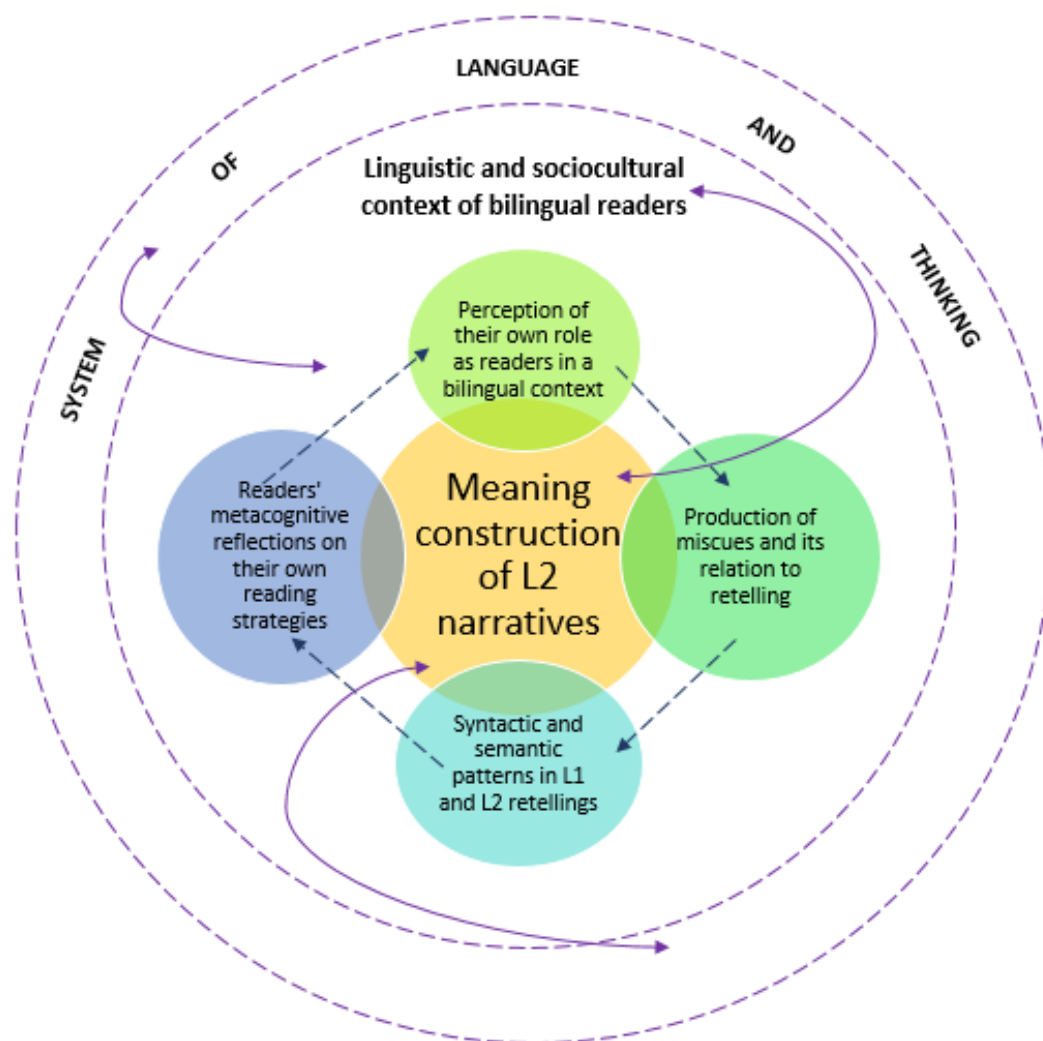


Figure 9 illustrates the relationships among four units to be analyzed to understand Kichwa-Spanish bilinguals' meaning construction of narrative texts in Spanish: (1) readers' perceptions of their role as bilingual readers; (2) production of miscues and its relation to retellings; (3) syntactic and semantic patterns in Kichwa and Spanish retellings; and (4) readers' metacognitive reflections on their own reading strategies and miscues. The analysis of these units as a whole allowed the understanding of meaning construction of L2 narratives and thus reading as a social practice.

Elaboration: Sandra Cabrera-Moreno

I coded and condensed the data generated through the Burke Reading Interview at two stages. The first stage allowed me to organize information through “descriptive coding,” “in vivo coding” and “values coding” (Miles et al., 2014). I used descriptive codes to label data sections with a phrase or a noun representing a concept that captured the essence of the ideas expressed. To support each descriptive label, I classified data into in vivo and values codes. In vivo codes, i.e. participants’ own words and phrases, were essential to “prioritize and honor the participant’s voice” (p. 74), while values codes unveiled what readers valued the most in the reading process.

Due to the qualitative nature of the study, values codes allowed me to classify more subjective data into three subcategories: values (V), attitudes (A) and beliefs (B) (p. 75). That is, codes considering three aspects: (1) the importance readers attribute to themselves as readers of two languages (V); the way readers think or feel about themselves and other readers (A); and readers’ experiences, opinions and perceptions of their own development as readers of two languages (B).

Regarding the second stage of coding, I analyzed the list of codes generated in the first stage to look for points of intersection. Since the descriptive codes that represented initial concepts were not static but dynamic, they were modified as in vivo and values codes allowed patterns to emerge. These patterns led to themes for each of the five overarching categories. For this analysis, I used three case-level display matrices (Miles et al., 2014, p. 135) to visualize the data condensed for each of the participants to be analyzed.

Case-Level Display Matrix 1

Bilinguals' Perceptions of their Own Strategies for Constructing the Meaning of Texts Written in Kichwa and Spanish

Participants	Readers' perceptions of reading strategies for constructing the meaning of a text written in Kichwa (RPS-K)	Readers' perceptions of reading strategies for constructing the meaning of a text written in Spanish (RPS-S)
Case 1: Pseudonym	subcategory: descriptive code	subcategory: descriptive code
	{ in vivo code in vivo code in vivo code	{ in vivo code in vivo code in vivo code
Case 2: Pseudonym	subcategory: descriptive code	subcategory: descriptive code
	{ in vivo code in vivo code in vivo code	{ in vivo code in vivo code in vivo code
Case 3:		
Case 4:		
Case 5:		
Case 6:		

Adapted from Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: a methods sourcebook*. Thousand Oaks, California: SAGE Publications, Inc.

Case-Level Display Matrix 2

Readers' Perceptions of a Good Reader in Kichwa and Spanish

Participants	Perception of a good Kichwa reader (PGR-K)	Perception of a good Spanish reader (PGR-S)
Case 1: Pseudonym	subcategory: descriptive code	subcategory: descriptive code
	{ in vivo code in vivo code in vivo code	{ in vivo code in vivo code in vivo code
Case 2: Pseudonym	subcategory: descriptive code	subcategory: descriptive code
	{ in vivo code in vivo code in vivo code	{ in vivo code in vivo code in vivo code

Adapted from Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: a methods sourcebook*. Thousand Oaks, California: SAGE Publications, Inc.

Case-Level Display Matrix 3

Perceptions of Useful Strategies for Struggling Readers in Kichwa and Spanish

Participants	Useful strategies for struggling readers (US-SR)			
Case 1: Pseudonym	subcategory: descriptive code		Value → in vivo codes	Theme
		Attitude → in vivo codes		
		Belief → in vivo codes		
Case 2: Pseudonym	subcategory: descriptive code	Value	in vivo codes	Theme
		Attitude	in vivo codes	
		Belief	in vivo codes	

Adapted from Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: a methods sourcebook*. Thousand Oaks, California: SAGE Publications, Inc.

4.8.2. Phase II: Analyzing Miscues through the In-Depth Procedure

The in-depth procedure for miscue analysis allowed me to understand “each reading miscue in relation to other miscues within the sentence and within the entire text, evaluating how the text and the reader’s prior knowledge influence the reading” (Goodman, Watson & Burke, 2005, p. 131). I used the in-depth coding form (Appendix C) to classify miscues in relation to six categories: syntactic acceptability, semantic acceptability, meaning change, self-correction, graphic similarity and sound similarity (Goodman & Marek, 1996; Goodman, Watson & Burke, 2005). I considered six general questions and indicators to (1) identify the characteristics of L2 miscue production in Kichwa-Spanish bilinguals and (2) analyze plausible patterns of L1 syntactic and semantic influence based on a contrastive analysis of the grammar of both languages. In addition, I evaluated levels of meaning and grammatical construction to understand readers’ use of language and reading strategies for constructing the meaning of narrative

texts in Spanish. Figure 10 shows the questions and indicators for classifying L2 reading miscues. Tables 5 and 6 show questions and answer patterns for evaluating readers' levels of meaning construction and grammatical interrelations.

Figure 10. In-depth Questions and Indicators for Classifying L2 Reading Miscues

Syntactic Acceptability in L2 reading

- 1) Considering the reader's dialect, is the miscue syntactically acceptable within the sentence and within the whole story?

Yes (Y) The miscue is syntactically acceptable within the sentence and within the story.

Partially (P) The first part of the sentence or the last part of the sentence where the miscue appears is syntactically acceptable, or syntactic acceptability occurs exclusively at the sentence level, but not within the entire story.

No (N) The sentence in which the miscue occurs is syntactically unacceptable.

Semantic acceptability in L2 reading

Syntactic and semantic acceptability have similar coding subcategories due to their intrinsic grammatical relationship.

- 2) Considering the reader's dialect, is the sentence semantically acceptable?

Yes (Y) The miscue is semantically acceptable within the sentence and the story.

Partially (P) Either the first part of the sentence or the last part of the sentence where the miscue appears is semantically acceptable. Or semantic acceptability occurs exclusively at the sentence level, not at the level of the entire story.

No (N) The miscue occurs in a sentence that is semantically unacceptable.

Meaning change in L2 reading

Meaning change can only be judged if the miscue is syntactically and semantically acceptable (i.e. questions 1 and 2 must be labeled Y).

3) Does the reader's miscue change the meaning of the whole story?

Yes (Y) Major ideas or concepts are inconsistent or they have changed.

Partially (P) Minor ideas or concepts are inconsistent or they have changed.

No (N) The intended meaning of the author has not been modified.

Self-correction

4) Does the reader correct the miscue?

Y (Yes) The reader corrects the miscue.

P (Partially) The reader is unable to correct the miscue; her attempt is unsuccessful. Or the reader verbalizes the expected response but abandons it.

N (No) The reader does not correct the miscue.

Graphic Similarity in L2 reading

5) How much do the observed response (OR) and expected response (ER) look alike?

H (High) Graphic similarity between the OR and the ER is high, which typically means that there is a 2/3 match.

S (Some) There is some degree of graphic similarity between the OR and the ER, which typically means there is a 1/3 match.

N (No) There is no graphic similarity between the OR and the ER.

Sound similarity in L2 reading

6) How much do the two words sound alike?

The analysis of sound similarity must consider the reader's dialect and not the researcher's preferences.

H (High) Sound similarity between the OR and the ER is high, which typically means that there is a 2/3 sound match.

S (Some) There is some degree of sound similarity between the OR and the ER, which typically means there is a 1/3 match.

N (No) There is no sound similarity between the OR and the ER.

Figure 10 has been adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.; and Goodman, Y. M., & Marek, A. M. (1996). *Retrospective miscue analysis. Revaluing readers and reading*. New York: Richard C. Owen Publishers, Inc.

Table 5.

Patterns for Evaluating Levels of Meaning Construction

Levels of meaning construction	Characteristics	Questions and patterns		
		Is the miscue semantically acceptable?	Does the miscue change the meaning of the text?	Does the reader correct the miscue?
No loss of meaning	Miscues are semantically acceptable. Meaning does not change. Self-correction.	Yes	No	Yes
		Yes	No	No
		Yes	Partially	Yes
		Yes	Yes	Yes
		Partially		Yes
		No		Yes
		Yes	Partially	No

Partial loss of meaning	Miscues are semantically acceptable	Yes	No	Partially
	with slight changes in meaning.	Yes	Yes	Partially
	Partial semantic acceptability with either no attempt or unsuccessful self-correction.	Yes	Yes	No
		Yes	Partially	Partially
		Partially		Partially
		Partially		No
Loss of meaning	Partial or null semantic acceptability with either no attempt or unsuccessful self-correction.	No		No
		No		Partially
		Partially		No

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Table 6.

Patterns for Evaluating Levels of Grammatical Interrelations

Levels of grammatical interrelations	Characteristics	Questions and patterns		
		Is the miscue syntactically acceptable?	Is the miscue semantically acceptable?	Does the reader correct the miscue?
Strong grammatical interrelation	The reader produces miscues that are syntactically and semantically acceptable with effective self-correction. The reader shows an appropriate integration of reading strategies.	No	No	Yes
		Partially	No	Yes
		Yes	No	Yes
		Partially	Partially	Yes
		Yes	Partially	Yes
		Yes	Yes	No
Partial interrelation	The reader produces miscues that are syntactically acceptable	Yes	No	No
		Yes	Partially	No
		Yes	No	Partially

	with partial acceptability in their semantic domain. Self-correction is ineffective. The reader evidences a strong use of linguistic knowledge but fails to integrate her knowledge towards meaning construction.	Yes	Partially	Partially
Overcorrection	The reader corrects miscues that are syntactically and semantically acceptable, evidencing that the reader focuses on decoding words rather than on making sense of the meanings embedded in the text.	Yes Yes	Yes Yes	Yes Partially
Weak grammatical interrelation	The reader produces miscues that are syntactically and semantically unacceptable. Self-correction is ineffective due to reader's weak use of reading strategies.	No Partially Partially No Partially Partially	No No Partially No No Partially	No No No Partially Partially Partially

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

4.8.3. Phase III: Retelling Analysis

Retelling transcriptions entered a two-stage cycle of data analysis. The first cycle included the organization of data in the retelling form (Wilde, 2000, p. 51). In the case of retellings in Kichwa, I populated the form considering the transcriptions and interpretations done by the professional translator. This was useful to analyze which information stood out and how readers organized ideas from the text in Kichwa and Spanish. In addition, it was possible to visualize inferences beyond the text itself, exposing social and cultural elements.

Retelling Matrix

Text Features	Text Information	Inferences beyond the text; other comments
Characters		
Development of characters		
Story line		
Underlying plot		
Major inferences		

Adapted from Wilde, S. (2000). *Miscue analysis made easy: Building on student strengths*. Portsmouth, NH: Heinemann.

The second cycle included linguistic-based discourse analysis which refers to the understanding of the rules governing the construction of narrative performances (Russell & Ryan, 2010, p. 223). For this purpose, I analyzed retelling transcriptions to look for syntactic and semantic evidence of the influence of Kichwa on the way readers construct the meaning of narrative texts in Spanish. Also, I used a retelling guide to evaluate and score readers' reconstruction of the original text (See appendix G). Consequently, understanding how the grammar of readers' L1 shaped their modes of thinking as they read and retold in their L2 gave me insights into the uniqueness of meaning construction in bilingual reading, allowing the discussion of findings within a complete system of language and thinking (Vygotsky, 1987).

4.8.4. Phase IV: Analyzing Metacognitive Reflections

Each participant engaged in a metacognitive dialogue with the researcher. The aim was to encourage readers to analyze their own miscues and strategies for constructing the

meaning of narrative texts in their L2. Therefore, readers reflected on how they predicted, confirmed, disconfirmed and self-corrected information as they read the texts. To analyze readers' perceptions of their own miscues and strategies, I generated in vivo and descriptive codes and clustered them into categories.

4.9. Holistic Account of Participants' Meanings

An exhaustive analysis of the relationships among readers' perceptions, miscues, retellings and readers' metacognitive reflections provided understanding on how Kichwa-Spanish bilinguals construct the meaning of L2 narratives in the Southern Andes of Ecuador and how Kichwa influences this process.

4.10. Participant Compensation

Participants received a cash award of \$15 and \$5 in school supplies. The amount was reasonable and appropriate since learners invested more than two hours as participants in this study and parents were aware of this compensation. Incentives were delivered to participants through closed envelopes a week after the sessions. I covered all expenses including incentives delivery.

4.11. Project Resources

The following resources and facilities were available to the researcher: (a) a laptop; (b) access to unlimited internet connection; (c) office supplies including paper and a printer; and (d) professional Kichwa-Spanish interpreter services paid by the student researcher. In addition, I had the intellectual and expert support of my committee on studies and my own experience as a teacher at the University of Cuenca. To strengthen my role as a researcher, I have studied Kichwa and taken a 330-clock-hour course in contrastive linguistics of Kichwa and Spanish.

4.12. Ethical Considerations

4.12.1. Informed Consent and Student Assent

Obtaining written consent (Appendix D) started with a phone meeting with parents who were willing to allow their sons or daughters to participate—the terms “sons” and “daughters” were incorporated in consents as the families and the participants identified as cisgender. During this phone meeting, I provided detailed information about the research study and answered all parents’ questions. Parents and legal guardians received the consent form and they had a week to review it and make a decision. Since the study involved no more than minimal risk, one parent or legal guardian signed the informed consent.

Obtaining student assent (Appendix E) included the following procedures: (1) once parents or legal guardians signed the informed consent, I used a script with simple language to explain to each learner how they would participate in the different phases of the study. The language of communication was Spanish since this language is widely used by indigenous communities for purposes of trade and education. Student assent took place through verbal agreement.

4.12.2. Privacy of Participants

To protect participants’ privacy, I used pseudonyms from data collection to final report. The study focused on the particularities of meaning construction as a unique and complex process inherent in bilinguals; therefore, interview questions were not related to sensitive topics, and retellings and metacognitive reflections included the analysis of reading aspects that students are normally exposed to in daily school activities.

With regard to the participation of a professional interpreter, she had access to the audio material of the retellings in Kichwa through her institutional email, which did not imply any disclosure of private information. The interpreter was in charge of transcribing and translating these retellings but did not have access to any information that might reveal participants’ identities. All the phases of this research, from data collection to data

analysis, were my exclusive responsibility and the responsibility of the principal investigator.

4.12.3. Participant Withdrawal

It was clearly specified in the informed consent that participants' decision to withdraw from the research would not affect their compensation. That is, each participant would receive incentives for each phase in which he or she participated whether or not they completed all phases of data collection. Monetary and non-monetary incentives were delivered to participants in closed envelopes. All participants completed the four phases of data collection and received their incentives.

4.12.4. Potential Risks

This research study implied minimal risk for participants. An anticipated problem was that students might feel to some extent uncomfortable analyzing their own reading during metacognitive reflections. To ease these feelings, I used simple language, addressed questions friendly and emphasized positive aspects of their reading.

4.12.5. Benefits for Participants

Participants in this project revalued themselves as readers of two languages and became aware of their own miscues and reading strategies. This was possible because readers engaged in metacognitive reflections to analyze their own reading practices. Participants became aware that learning about miscues is not typical evaluation, which often leaves students feeling vulnerable and low-performing. They came to realize that miscue analysis is a partnership and that their miscues and reading strategies show how they construct meaning in their L2.

4.12.6. Pedagogical Incidence in Intercultural Education

The results of this study will add to the literature discussing the complexity of the reading process in bilinguals. As I have not found evidence of studies on retrospective

miscue analysis with Kichwa-Spanish speakers, this investigation will contribute to a deeper understanding of how bilingual readers construct the meaning of narrative texts in their L2, which, in turn, will provide a basis for discussing literacy practices in intercultural schools.

4.13. Data Management Procedures and Confidentiality

To render data entirely anonymous, I removed direct identifiers even though this study did not involve the collection of sensitive data. I transcribed interviews, unaided retellings in Spanish and metacognitive dialogues, and I stored both recordings and transcriptions on a password protected computer. Considerations for securely storing data included:

- All the data collected was saved on a password protected computer.
- Identifiers were stored separately from project data.
- Informed consents were stored at my personal library.
- All digital records were deleted once the project was completed.

4.14. Validity of the Design

Triangulation of different sources of information enhances the validity of this multiple case study. The trustworthiness of the findings discussed in this investigation relies on literal and theoretical replications (Yin, 2009), which include the examination of the similarities and differences among the six cases analyzed to holistically understand how Kichwa influences the way bilingual readers in the Southern Andes of Ecuador construct the meaning of narrative texts in Spanish.

4.15. Validity Threats

Triangulation of different data sources and the discussion of literal and theoretical replications contributed to reduce the risk of biases in analysis and interpretation (Maxwell, 2012), while participants' engagement in different phases of data collection

allowed to build rapport with each student to decrease reactivity due to the influence that my presence may have had during data collection.

CHAPTER V: RESULTS AND ANALYSIS

The purpose of this multiple case study was to analyze how Kichwa-Spanish readers between 12 and 14 years old constructed the meaning of narrative texts written in Spanish. The discussion of such construction focused on readers' perceptions of their own reading strategies considering the discourse they have developed in their classroom in comparison to what they actually did during and after oral reading. In addition, I analyzed how Kichwa influenced the linguistic, social and cultural domains of the construction of the meaning of narrative texts written in Spanish, with the purpose to understand how the condition of being bilingual in the Southern Andes of Ecuador influenced readers' strategies, the perception of their role as bilingual readers and their construction of the meaning of L2 narrative texts.

The findings discussed in this section must therefore be understood considering that a Kichwa-Spanish bilingual is a person who is communicatively competent in Kichwa and Spanish in relation to the social and cultural demands of each language. For example, Spanish surpasses the use of Kichwa in academic settings, while Kichwa is more likely to be spoken at home. The use of both linguistic repertoires in concordance with the demands of the context within and across languages (De Jong, 2011) was a determinant of meaning construction. The following analytic categories responded each of the research sub questions which, in turn, contributed to a holistic account of Kichwa-Spanish readers' construction of the meaning of L2 narrative texts.

5.1. Analytic Category 1: Kichwa-Spanish Readers' Perceptions of their Role as Readers of Two Languages and their Influence on L2 Reading Strategies

The first research question sought to determine readers' perceptions of their role as bilingual readers. The following analytic subcategories derived from the data collected through the Burke Reading Interview and informed how bilingual readers in the Southern

Andes of Ecuador perceived themselves as readers of two languages and the implications that the social and pedagogical environment had on the development of their reading strategies, and thus on meaning construction of L2 narratives.

5.1.1. Learning to Read in Kichwa and Spanish

Considering the concept of *perezhivanie* (Vygotsky, 1994) or how we experience and internalize a social situation, readers' discourses on how they learned to read showed that reading in two languages implied different experiences. Learning to read in Spanish was embedded in formal instruction, while learning to read in Kichwa was inherently connected to family, as readers considered that the development of reading in Kichwa was the consequence of being familiar with the language at home. The following interview excerpts provide an example of this distinction:

Interviewer: ¿Cómo aprendió usted a leer en kichwa?

How did you learn to read in Kichwa?

Sisa: Yo aprendí a leer en kichwa porque mi familia habla solo kichwa.

I learnt to read in Kichwa because my family only speaks Kichwa.

Ana: Aprendí [a leer] de pequeña porque mis padres hablan kichwa.

I learnt [to read] when I was a little girl because my parents speak Kichwa.

Raúl: Desde pequeño sabía. Mis papás hablaban conmigo en kichwa y, como siempre hablaban conmigo en kichwa, reconocí las palabras que decían y fui entendiendo poco a

poco. Me enseñaron un poco cuando estaba en inicial. Ahí aprendí a leer las palabras en kichwa. Solo sabía decir y no sabía leer.

I knew it since I was a child. My parents spoke Kichwa and, as they always talked with me in that language, I recognized what they said and I started to understand [the language] little by little. They taught me [how to read] when I was in pre-primary school. There, I learnt to read words in Kichwa. I only knew [how to] say [those words] but I didn't know how to read.

Interviewer: ¿Cómo aprendió usted a leer en español?
How did you learn to read in Spanish?

Sisa: Me recuerdo un poco que los abecedarios en español íbamos primero poniendo en el pizarrón (a, b, c), todas esas palabras e íbamos haciendo oraciones. Así aprendí.
I remember that we used to write down the letters of the alphabet (a, b, c), all those words and that we used to make sentences. That's how I learned.

Ana: Desde niña así cuando sabíamos leer cuentos, fábulas, ahí fui aprendiendo. Mandaban a comprar un libro de fábulas y venían bastantes cuentos.
Since I was a child, we used to read tales and fables. That's how I started to learn. We had to buy a book full of fables and tales.

Raúl: Eso creo que aprendí en la escuela. Sabían hacer escribir párrafos, palabras, sabían hacer leer, hacer lecciones.

I guess I learned that at school. They used to make us write down paragraphs and words; they used to make us read and take quizzes.

Kichwa-Spanish bilinguals' discourses suggested that learning to read in two languages aligned with two different experiences that depended on learners' social situation of development and the social functions of each language in society. Hence, in light of Vygotsky's concept of *perezhivanie*, learning to read in Kichwa was connected to the familiar sphere or everyday concepts, as readers reported that they had acquired Kichwa from their parents who introduced them to literacy practices in their L1. On the other hand, bilinguals' discourses suggested that learning to read in Spanish involved a formal process of instruction, typically including academic concepts. These two paths of reading development, apparently divergent, are indeed complementary, since the transition from preschool to school age depends on the social and cultural interactions learners have been exposed to in their community. The interactions Kichwa-Spanish bilinguals have experienced in their L1 and L2, first at home and then at school, seemed to have shaped their modes of thinking and thus their conception of the reading process, which in turn, revealed the contribution of both languages and cultures to the construction of the meaning of narrative texts.

5.1.2. Kichwa-Spanish Bilinguals' Conception of a Good Reader

A good reader was perceived as someone who was academically successful. That definition included teachers and students who always got good grades, studied hard, made no mistakes and read a lot. In reflecting on the strategies that good readers used to understand a text, participants reported decoding strategies as a notable aspect of good

José: Explicándome las palabras que no entiendo, o sea que algunas palabras no conozco en el kichwa. Me dice el significado.

Explaining the words that I do not understand, that is, some words that I do not know in Kichwa. He tells me their meanings.

Interviewer: ¿Quién es un buen lector que usted conoce?
Who is a good reader that you know?

Raúl: La profe Antonia porque lee rápido y lee bien todo. Conoce todos los significados de las palabras y no se equivoca y no dice que esta palabra no conoce. Teacher Antonia because she reads fast and well. She knows all the meanings of words and she does not make mistakes. She never says that she does not know that word.

Interviewer: ¿Qué le ha visto hacer cuando lee?
What have you noticed about her reading?

Raúl: Yo he visto que va respetando los puntos y las comas y así a casi todos los profes he visto que leen así y no se equivocan y leen rápido las palabras.

I have noticed that she respects periods and commas and that almost every teacher reads that way, and they do not make mistakes and read words fast.

This conception of fluency was entirely connected to the idea that good readers do not make mistakes when reading a text, a common assumption that goes back to a decoding-based approach to reading, in which readers focus their attention on correct word pronunciation—graphemes and phonemes alignment. Connected to readers' conception of fluency is the fact that good reading needs opportunities for improvement, as Kichwa-Spanish bilinguals mentioned that reading every day was good for enhancing their decoding strategies and reading faster. Even though bilingual readers conceived reading fluency as the ability to join graphemes and phonemes appropriately, they never mentioned fluency as an indicator of readers' familiarity and thus understanding of the social and cultural meanings of a text. Then, they did not regard fluency as what it actually is—the bridge between decoding and text understanding (Pikulski & Chard, 2005). Kichwa-Spanish bilinguals in this case study believed that fluency was a consequence of good decoding, which, in turn, unveiled a pedagogical environment that prioritized good pronunciation of each word in a text. To delve into the pedagogical culture as a key factor that influenced readers' perceptions of their role as readers of two languages, the next three sections analyze the strategies readers reported they have used when they did not understand something in a text, as well as the strategies they assumed teachers should use with struggling readers and their reflections for becoming better readers.

5.1.3. Self-Reported Strategies for Sections Readers did not Understand in a Text

Participants first reflected on what they usually did when they came to something they did not know when reading a text in Kichwa. Then they reflected on what they usually did when they came to something they did not know in a text written in Spanish. The rationale for asking participants to first talk about what they commonly did when they read in Kichwa was to determine if readers' perceived strategies showed variations when discussing their L1 and L2 strategies, as they first visualized themselves as Kichwa readers and then as Spanish readers.

Kichwa-Spanish bilinguals underscored literal meaning search as their main strategy for understanding something they did not know in a text. Literal meaning search in this study referred to the non-figurative meaning of words, typically isolated from contextual clues. This decoding strategy replicated in all cases and suggested that readers assumed reading aligned with the knowledge of the literal meaning of every word in a text regardless of its language. This strategy included the use of dictionaries and asking teachers or parents about those meanings. The importance Kichwa-Spanish bilinguals in the Southern Andes of Ecuador gave to this decoding strategy can be interpreted in relation to Vygotsky's (1978) concept of the zone of proximal development, that is, how formal instruction attempts to expand their reading achievement.

The rationale for this interpretation is based on readers' discourses about good readers and their strategies. The influence of more skilled peers in the development of reading and readers' conscious awareness of the use of reading strategies can only be situated in a process of mediation within the boundaries of a pedagogical culture. The distance between readers' actual developmental level and readers' potential to solve problems during a reading event highly depends on processes of mediation, including unconsciously developed forms of thinking and reasoning that readers acquire from those whom they consider more skilled.

Anything else to help her improve reading?

Manuel:

Brindarle un texto de kichwa, un diccionario, un libro de lectura para practicar.

Give her a Kichwa text, a dictionary or a book for practicing reading.

Concerning their strategies for reading in Spanish, the following interaction exemplifies readers' emphasis on decoding.

Interviewer:

¿Cómo ayudaría usted a alguien que tiene problemas para leer en español?

How would you help someone having difficulty reading in Spanish?

Manuel:

Ayudándole a que pronuncie bien el español, las letras, identificando cada letra, leyendo diariamente para que no se equivoque.

Helping him to appropriately identify and pronounce letters in Spanish and reading every day so that he doesn't make mistakes.

However similar these strategies were in both languages, technology made a difference between them. Kichwa-Spanish bilinguals associated the use of decoding strategies with internet access and online resources only when they referred to their L2, while the use of these strategies for understanding something they did not know in a Kichwa text was detached from the use of technological devices. The following excerpts

from the interview with Tamia and Sisa show learners' typical responses concerning literal meaning search in Kichwa, responses that basically included the use of dictionaries and interactions with a more skilled peer, usually a parent or a teacher.

Interviewer: Cuando usted está leyendo en kichwa y hay algo que no sabe ¿qué hace?

When you are reading in Kichwa and you come to something you don't know, what do you do?

Tamia: Le pregunto a mi mamá o busco en diccionarios.

I ask my mom or I look it up in the dictionary.

Interviewer: Cuando usted está leyendo en kichwa y hay algo que no sabe ¿qué hace?

Sisa: When you are reading in Kichwa and you come to something you don't know, what do you do?

Para entender, pregunto a los profesores el significado.

To understand, I ask my teachers the meaning of words.

Literal meaning search in Spanish included the interaction with a more skilled peer, the use of dictionaries and the use of technological resources. The following excerpts from the interviews with Tamia and Sisa illustrate the relation between literal meaning search in Spanish and the use of technology.

Interviewer: Cuando usted está leyendo en español y hay algo que no sabe ¿qué hace?

When you are reading in Spanish and you come to something you don't know, what do you do?

Tamia: Busco en internet o en diccionarios.

I look it up online or in a dictionary.

Interviewer: Cuando usted está leyendo en español y hay algo que no sabe ¿qué hace?

When you are reading in Spanish and you come to something you don't know, what do you do?

Sisa: Yo sé investigar y a veces sé preguntar a los profesores.

I find out [what I don't know] and I sometimes ask my teachers.

Interviewer: ¿Cómo investiga?

How do you find out [what you don't know]?

Sisa: Poniendo la palabra. Lo que tengo que poner, sé investigar en la computadora.

I write down the word. What I have to write down, I look it up in the computer.

The distinction Kichwa-Spanish bilinguals made in relation to the use of technology was not arbitrary. Rather, it revealed that reading in two languages was associated with two major aspects: (1) the role of minority languages in a globalized world; and (2) the relationship between language contact and language shift.

First, despite the fact that technology has enhanced interconnectivity and thus supported diversity in a globalized world (De Jong, 2011), bilingual readers' discourses evidenced the fact that less dominant languages like Kichwa were not always part of the

technological world, as it was always the dominant language the one that imposed its linguistic and cultural norms on social media and everyday technology (Andersen, Thorbergsson, Thorsteinsson & Gudmundsson, 2020). Kichwa-Spanish bilinguals' discourses in this multiple case study clearly evidenced the relationship between language status and the use of technology, as readers accentuated internet access and the use of online resources only when referring to Spanish, the dominant language in Ecuador. When discussing decoding strategies for understanding a text in Kichwa, bilingual readers only mentioned the use of physical resources such as dictionaries and their interactions with a more skilled peer.

Second, there is a close relationship between the sociolinguistic phenomena of language contact and language shift. These two elements are inherently related in the Southern Andes of Ecuador due to the geographical proximity between the Kichwa communities in the province of Cañar and the Spanish-dominant territory. This geographical proximity has led Kichwa communities to use Kichwa mostly in their familiar context and prioritize the use of Spanish for purposes like education. Then, the use of technology was exclusively regarded as a tool for understanding a text in Spanish since online resources were available in the dominant language, Spanish. In this context, a major consequence of language contact and the use of technology is the risk of language shift, which refers to “the replacement of one language by another as the primary means of communication and socialization within a community” (Mesthrie et al., 2009, p. 245). Mesthrie et al. consider that indigenous languages are more likely to experience language shift due to a series of interrelated factors that may gradually lead to language extinction: (1) economic changes and their influence on the decline of bilingualism; (2) demographic aspects such as the number of speakers of the less dominant language; (3) institutional

support for language maintenance and the role of language in society (e.g. education); and (4) language status which has a close relationship with the factors previously mentioned.

In sum, Kichwa-Spanish readers have mentioned the use of decoding strategies to transact with written texts in Kichwa and Spanish, relying upon the use of technological devices as a key element to understand reading as a social practice. As the data showed, decoding strategies were combined with the use of technology when dealing with a text written in their L2, Spanish, while asking their parents or a more skilled peer occurred when readers did not know the meaning of words in their L1, Kichwa. Therefore, it can be suggested that reading in two languages, Kichwa and Spanish, is connected to social functions and the status languages have in society, two factors that may well determine the strategies readers apply for understanding a text in the L1 or L2. And yet, across both languages, they reach to more knowing others and do not rely upon the text teaching them (Meek, 1988) what they may need.

5.1.4. How Teachers Should Help Struggling Readers

When asking Kichwa-Spanish readers about the strategies teachers should use for helping struggling readers in both languages, their answers mainly focused on decoding—grapheme and phoneme association, keeping in mind language status and the social functions of their linguistic repertoires as essential elements of the reading process. Then, when discussing how teachers should help struggling readers, Kichwa-Spanish bilinguals highlighted not only that teachers should reinforce the decoding strategies they have learned in school but should foster the learning of the Kichwa language.

To understand readers' discourses about language status, we need to go back to readers mentioning the use of technology for transacting with the meaning of a text written in Spanish, as it is in this relationship that we can see the phenomenon of acculturation. The fact that Kichwa-Spanish bilinguals associated reading in Spanish with

in Kichwa. During recess, they used to speak only Spanish and use their cellphones in the same language.

Interviewer: ¿Y usted Ana que piensa de esta situación?
And you, Ana, what do you think about that situation?

Ana: A mí me gustaría aprender más el kichwa porque en mi casa mis papás son quichuas y a mí no me da vergüenza hablar. Hay nuevas palabras que han salido en kichwa y yo sabía anotar en mi cuaderno para aprender más.
I would like to learn more about the Kichwa language because in my house my parents are Kichwa speakers and I am not ashamed of my language. New Kichwa words have appeared and I used to write them down in my notebook to learn them better.

5.1.5. Becoming Better Readers

Kichwa-Spanish bilinguals in this multiple case study considered that there were some aspects they needed to improve to become better readers. Among the aspects bilinguals emphasized to become better readers in Kichwa were: (1) learning the language completely; (2) expanding vocabulary; and (3) reading fluently. The following interview excerpt shows bilinguals' need to expand their knowledge of the Kichwa language, emphasizing how the pedagogical environment has a major responsibility in this process.

Interviewer: ¿Qué le gustaría mejorar como lectora de Kichwa?

What would you like to improve as a Kichwa reader?

Tamia: Aprender el idioma completamente porque del colegio a veces es difícil aprender kichwa ya que ponen, los profesores solo te dicen hagan cinco oraciones en kichwa y nada más. No te dicen nada más ni cómo hacer las oraciones o con qué palabras.

I would like to learn the language completely because at school sometimes it is difficult to learn Kichwa since teachers just tell you “write down five sentences in Kichwa” and that’s all. They don’t tell you anything else, neither how to make sentences nor which words to use.

Interviewer: ¿Cree usted que es un buen lector?

Do you think you are a good reader?

José No tanto porque a veces así en textos vienen palabras diferentes, palabras nuevas y ya me confundo... el profesor sabía decir que están saliendo palabras nuevas en kichwa. Por ejemplo, *achik mama*, *madrina* o *achik yaya*, *achik taita* también eso no había. Eso es *padrino*. Nos sabía recomendar que quien esté interesado en estas palabras para que vaya aprendiendo más, que vayan buscando en los diccionarios y aprendiendo más.

Not really because sometimes texts have different and new words that can be confusing (...). Our teacher used to tell us that there are new Kichwa words. For example, *achik mama*, meaning godmother and *achik yaya* or *achik taita*,

meaning godfather. The teacher used to recommend those interested in learning these words to start looking them up in the dictionary to learn more.

Among the aspects bilinguals emphasized to become better readers in Spanish were: (1) learning new words; (2) improving pronunciation; and (3) reading fluently and perfectly rendering the text as it is written.

- Interviewer: ¿Qué le gustaría mejorar como lector en español?
What would you like to improve as a Spanish reader?
- Tamia: Pues entender palabras que no entiendo.
I'd like to understand words.
- Ana: Me gustaría pronunciar más clarito, leer más clarito, y así
poder explicarles bien.
I would like to pronounce and read clearly and so be able
to explain things well.
- Raúl: Leer más bien. Leer sin equivocarse. Ver bien las palabras.
Leer correctamente sin saltarse los signos de puntuación.
I would like to read better, without making mistakes. I
would like to read correctly respecting punctuation marks.

The fact that readers pointed out aspects to improve reading in both languages has to do with what Berry (2000) defined as an integrative view of acculturation. In this integrative perspective, both cultures play a role in society and thus they are conceived as essential elements of multiculturalism. Then, Kichwa-Spanish bilinguals' need to better

learn their first language and expand their knowledge of their L2 implies the coexistence of two cultures. That is, readers do not deny their language. Rather, they aim at improving their knowledge of both languages. This is congruent with García-Canclini's (1990; 2012) hybrid cultures. According to García-Canclini, cultural hybridity in Latin America refers to the natural coexistence of different languages, in which new representations emerge.

In sum, the data collected through the Burke Reading Interview has shown that Kichwa-Spanish bilinguals in the Southern Andes of Ecuador situated themselves in a pedagogical culture that prioritized the use of strategies for decoding words, evidencing the powerful influence of the social environment on their cognitive development. Readers' discourses also revealed that the condition of being bilingual made readers use their L1 and L2 in relation to their social functions and their status in society. Table 7 compiles the most common terms that appeared in the data in relation to readers' perceptions and self-reported use of strategies.

Table 7.

Inductively Developed Analytic Category 1: Perceptions and Reading Strategies

Subcategory	Thematic category	Key terms
Readers' perceived strategies for understanding unknown sections of a Kichwa text	Literal meaning search	Kichwa dictionaries, asking teachers and parents.
Readers' perceived strategies for understanding unknown sections of a Spanish text	Literal meaning search	Internet, online dictionaries, asking teachers and parents, synonyms.

<p>Readers' perception of the characteristics of a good reader in Kichwa and Spanish</p>	<p>Good readers are academically successful</p>	<p>Teachers, good students, good grades, experience, studying hard, contests, no mistakes, explaining, teaching.</p>
<p>Strategies learners recommend for struggling readers in Kichwa and Spanish</p>	<p>Good readers use decoding strategies</p>	<p>Dictionaries; writing graphemes, words and sentences; respecting periods and commas for fluent reading; reading fast; reading tales; making no mistakes.</p>
<p>Learning to read in Kichwa</p>	<p>Decoding strategies</p>	<p>Practicing the pronunciation of words; reading and repeating words and phrases; translating sentences; reading a paragraph; reading every day.</p>
<p>Learning to read in Spanish</p>	<p>Acquiring the target language</p>	<p>Learning Kichwa with a more skilled peer; learning Spanish through videos; using computers or cellphones.</p>
<p>Learning to read in Kichwa</p>	<p>Speaking the language leads to reading development through formal instruction.</p>	<p>My parents spoke only Kichwa; texts, tales.</p>
<p>Learning to read in Spanish</p>	<p>Formal instruction; auditory and visual discrimination.</p>	<p>Vowels, words, phrases, paragraphs, fables, tales, literature.</p>

Improving reading in Kichwa	Learning and using Kichwa holistically	Learning the language fully, limited use of L1 in school, Kichwa as a subject.
Improving reading in Spanish	Dealing with the text in a more appropriate way.	Reading words appropriately; pronunciation, punctuation and awareness.
Perception of teachers' strategies for supporting struggling readers in both Kichwa and Spanish	Decoding strategies	Explaining words and how to pronounce them (e.g., nouns and adjectives); reading a lot; teaching the language; using textbooks; dialogues about new vocabulary.

These self-reported strategies suggest that readers were mainly concerned about decoding words fast during oral reading to avoid mispronunciation and thus be done with the task at hand. In addition, their discourses evidenced that readers unconsciously regarded Kichwa and Spanish as languages with two different statuses in society.

5.2. Analytic Category 2: L2 Oral Miscues, Reading Strategies and their Relation to L2 Retellings

This section compares the miscues Kichwa-Spanish bilinguals produced during the oral reading of two Spanish narrative texts— “El Río” (The River) and “Felicidad” (Happiness) with their retellings in Spanish. For this comparison, I first discussed the types of miscues that replicated in all cases and how they related to the self-reported decoding strategies identified through the Burke Reading Interview. Then, I analyzed how these common miscues in connection to other factors influenced meaning and sense during L2 retellings.

5.2.1. Reading Strategies and Common Types of L2 Miscues

The analysis of the data collected during the oral reading of “El Río” (The River) and “Felicidad” (Happiness) suggested that decoding strategies were mainly responsible for the most common type of miscues—substitutions (See Appendix C for a detailed list of substitutions). The analysis of the first analytic category evidenced that Kichwa-Spanish bilinguals, primarily due to the influence of their pedagogical environment, regarded literal meaning search and correct word pronunciation as essential components of reading. It can be, therefore, inferred that reading practices in formal education have strongly shaped readers’ priorities during their encounter with a narrative text. Consequently, the majority of readers’ substitutions shared graphemic and phonological similarities as evidence of their focus on word decoding—a demand of formal instruction during a reading event.

The following are examples of readers’ typical word substitutions, which suggested that bilinguals’ decoding approach to reading triggered phonological anticipations that were graphemically similar but not necessarily semantically acceptable.

Table 8.

Graphemic and Phonological Similarities in Word Substitutions during the Oral Reading of Two Narrative Texts in Spanish

Word Substitutions in Spanish	English Translation
006 Muy cerca de allí, una pequeña canoa parecía <i>brillar</i>	006 Nearby, a small canoe seemed to <i>shine</i>
007 bailar sobre el agua.	007 dance on the water.

013 Pero lo más importante era que sin las	013 But the most important thing was that
	without
<i>nieve</i>	<i>snow</i>
014 lluvias el nivel del río se encontraba	014 the rain the level of the river was low.
bajo.	
061 Ayúdenme a amarrar la canoa – dijo	061 “Help me tie the canoe”—the boy
el niño	said.
<i>ramo</i>	<i>bouquet</i>
062 sacando el remo del agua.	062 while taking the paddle out of the
	water.
	<i>detuvieron</i>
067 Nadaron hasta la orilla y se subieron a	067 They swam toward the river bank and
un árbol.	<i>stopped at</i>
	climbed a tree.
	<i>prepararon</i>
048 Los concursantes se separaron del	048 The competitors parted from the
público y se	crowd and
049 acercaron al muchacho del megáfono.	049 approached the guy with the
	megaphone.
059 Ramu y Maskián, dándose cuenta del	059 Ramu and Maskián, noting their
cambio	

	<i>alternas</i>	<i>alternately</i>
060 en su amigo, miraron alertas hacia esa dirección.		friend's attitude change, looked alertly in that direction.
	<i>las partes</i>	<i>the parts</i>
064 Uno de los parches se despegó, y el flotador que-		064 One of the patches came off and the floating rubber ring
065 dó completamente desinflado.		065 deflated completely.
056 al mismo tiempo su mirada se detenía en el trayecto		056 at the same time his gaze stopped on the way
	<i>curiosidad</i>	
057 buscando en la oscuridad.		057 looking for something in the <i>curiosity</i> darkness.

The relationship between decoding strategies and word substitutions can be better explained considering Vygotsky's sociocultural theory of learning, as the social environment in which children are raised influences their literacy practices, shaping their cognitive development and thus internalizing specific ways to think and figure out things. At school age, the pedagogical culture is mainly responsible for the development of the reading strategies learners apply to transact with a text. Table 8 shows clear examples of substitutions that were syntactically acceptable, without any attempt of self-correction, suggesting that readers in this study prioritized syntax over semantic acceptability, showing, in addition, a tendency to keep their substitutions graphemically and

phonologically similar to the original text. This may be because the educational system expects readers to decode words while readers intuitively apply their syntactic knowledge to create a parallel text. Therefore, regarding decoding alone as a determinant of meaning construction would be a mistake, as there are other important factors to consider: (1) text genre; (2) readers' knowledge of the grammar of their L2; and (3) intertextuality and intercontextuality.

5.2.2. The Role of Text Genre in Shaping the Meaning and Sense of L2 Narratives

Text genre, as discussed in the literature review, refers to the combination of different linguistic, social and cultural elements in a written text (Pappas & Pettegrew, 1998). According to Flurkey and Goodman (2014), narratives are highly descriptive and allow readers to create imaginary settings and situations. Therefore, word substitutions in this study showed that readers created fictional settings through their use of language. In this context, readers' lack of an attempt to self-correct their miscues may well be the result of their unconscious understanding of the nature of narrative texts. Then, word substitutions were acceptable in the imaginary settings that readers created as they used their L2 and sensed the story. For instance, the substitution of "cuchillos" meaning "knives" for "chillidos" meaning "screeches" in line 008 may have occurred as the sounds in both Spanish words were similar and the contextual clue "agudos" meaning "sharp" following the substitution was congruent enough with one key characteristic of knives. As true meaning makers, readers may well know the fictional nature of narrative texts and allow their imagination guide the construction of meaning based on the linguistic and contextual clues they encountered during reading.

002 (...) Tres

color

003 niños achuar se habían reunido para mitigar el calor
004 en el río.

002 (...) Three

color

003 Achuar children had gathered to mitigate the heat
004 in the river.

cuchillos

008 Era la hora en que los tucanes, con sus chillidos
009 agudos y destemplados, se contaban los chismes más
010 recientes (...).

knives

008 It was time that the toucans, with their screeches
009 sharp and unsteady, told each other the most recent
010 gossips (...).

Readers' lack of an attempt to correct their miscues is congruent with Rosenblatt's (1994) aesthetic reading, a concept that describes reading as a process in which readers sense the text in relation to their emotions, feelings and the language of the text itself, demonstrating that text genre is highly influential in miscue production and the creation of fictional settings considered appropriate in the context of a narrative text.

5.2.3. The Role of Readers' Knowledge of their L2 in Shaping the Sense and Meaning of L2 Narratives during Oral Reading

The data collected through oral reading suggested that bilinguals' understanding of the grammar of the Spanish language enabled them to produce (1) syntactically acceptable substitutions which were not necessarily semantically acceptable miscues, as seen in Table 8 in the substitution of "las partes" meaning "the parts" for "los parches" meaning "the patches"; and (2) omissions and insertions that maintained the syntax of the Spanish language as illustrated below:

055 Antún remaba con gran determinación, pero al

056 mismo tiempo su mirada se detenía en el trayecto.

^

057 buscando en la oscuridad. Súbitamente remó con

058 más vigor hacia un saliente en la orilla.

055 Antún was paddling with great determination, but at

056 the same time his gaze stopped on the way.

^

057 Looking for something in the darkness. He suddenly paddled

058 vigorously toward the river bank.

The reader used falling intonation at the end of line 056, conveying a complete idea through a syntactically acceptable sentence. Then, he started a new sentence in line 057. Thus, he omitted the period after the word "darkness" and continued his reading

without any pause. These omissions and insertions were syntactically acceptable in Spanish but not semantically acceptable for the sense of the story (i.e., the author's intended meaning).

5.2.3.1. No Loss of Meaning

Kichwa-Spanish bilinguals' production of miscues can be classified into three different levels of meaning construction in their L2 as identified through Goodman et al.'s (2005) in-depth procedure for evaluating grammatical relations and meaning construction (See Chapter IV, p. 97). These levels are: (1) no loss of meaning; (2) partial loss of meaning; and (3) loss of meaning or parallel text construction.

No loss of meaning refers to the production of miscues that were semantically acceptable and that allowed readers to keep the sense of the story intact. The following examples show that (1) readers did not correct miscues that were semantically acceptable because (2) their knowledge of Spanish allowed them to make high quality miscues. However, these word substitutions, syntactically and semantically acceptable, were not common during Kichwa-Spanish bilinguals' oral reading. Thus, a precise reconstruction of the meaning of the text, at the sentence level, was not very common.

039 Ruth, que se encontraba a su lado, siguió

curiosamente

040 curiosa la dirección de la mirada de su prima (...).

039 Ruth, who was by her side, followed,

curiously

040 curious, the direction of her cousin's gaze (...).

012 Llevaban varios días recorriendo el pueblito más

comunidad

013 cercano a la comuna Rucullacta

012 During several days they were visiting the

community

013 closest town to the commune Rucullacta.

5.2.3.2. Partial Loss or Partial Meaning Reconstruction

Partial meaning reconstruction involved the production of miscues that were semantically acceptable with minimal changes in the sense of the story. These types of miscues were atypical during oral reading.

Llevan

012 Llevaban varios días recorriendo el pueblito más

013 cercano a la comuna Rucullacta

are

012 During several days they were visiting the

013 closest town to the commune Rucullacta

Miscues leading to either full or partial reconstructions of the meaning of narrative texts were uncommon, suggesting that readers' knowledge and use of the grammar of their L2 mainly focused on syntactic acceptability. Therefore, it can be inferred that Kichwa-Spanish bilinguals' knowledge of the syntax of their L2 allowed them to produce syntactically appropriate miscues capable of shaping the semantics of the text and thus the construction of the meaning of their retellings.

5.2.3.3. Loss of Meaning: The Construction of a Parallel Text

The great majority of word substitutions Kichwa-Spanish bilinguals produced during the oral reading of “Felicidad” (Happiness) and “El Río” (The River) changed the sense of the sentences where they appeared. This led Kichwa-Spanish bilinguals to construct a parallel text, building on a new narrative rather than producing a precise text reconstruction. The following are examples of miscues that disrupted their meaning making and the sense of the story. These miscues foregrounded that their goal in reading orally was to complete the task at hand—i.e., reading for another (the researcher) by saying all the words and being done, rather than keeping meaning intact. This suggests that reading became, at those moments, a horizontal list of words to be articulated aloud.

001 (...) el día

en tierra

002 terminaba caliente con el bochorno de la tarde.

001 (...) the day

in soil

002 warmly ended with the heat of the evening.

río

027 La misma mañana de las regatas, un tío

028 que llegó de la ciudad (...).

a river

027 The same morning of the competition, an uncle

028 who came from the city (...).

por

036 Remaron un buen trecho.

^

through good

036 They paddled a long way.

^

detuvieron

067 Nadaron hasta la orilla y se subieron a un árbol.

stopped at

067 They swam toward the river bank and climbed a tree.

una

106 ¡Ni en canoa pudieron ganar! – se burlaron de ellas.

a

106 Not even in canoe they could win! – they laughed at the girls.

Tables 9 and 10 show the percentages of different levels of meaning construction and graphic and sound similarities. These levels are the result of miscue production during oral reading and they underscore a positive correlation between graphic and sound similarities and meaning change—the higher the graphic and sound similarities, the higher the construction of a parallel text. For example, 62% of Tamia’s miscues during the oral reading of the story “Felicidad” (Happiness) were classified within the category of loss of meaning (i.e., they changed the author’s intended meaning). In addition, 67% of Tamia’s miscues (mostly word substitutions) shared high graphic similarities with the

original words in the text, while 56% of Tamia’s miscues shared high sound similarities with the original words in the text.

Table 9.

Miscue production in text 1 – Felicidad

		Tamia	Sisa	Ana	José	Raúl	Manuel
Meaning	No loss	15%	14%	24%	35%	47%	48%
	Partial loss	23%	8%	0%	4%	0%	0%
Construction	Loss	62%	78%	76%	61%	53%	52%
	Strength	23%	20%	21%	35%	40%	38%
Grammar	Partial strength	77%	33%	21%	38%	7%	0%
Relations	Overcorrection	0%	0%	0%	0%	3%	10%
	Weakness	0%	47%	58%	27%	50%	52%
Graphic	High	67%	47%	57%	39%	57%	50%
	Some	11%	41%	29%	57%	43%	50%
Similarity	None	22%	12%	14%	4%	0%	0%
Sound	High	56%	44%	43%	35%	57%	42%
	Some	22%	35%	43%	52%	24%	58%
Similarity	None	22%	21%	14%	13%	19%	0%

Table 10.

Miscue production in text 2 – El Río

		Tamia	Sisa	Ana	José	Raúl	Manuel
Meaning	No loss	33%	17%	14%	44%	69%	18%
Construction	Partial loss	17%	3%	0%	19%	0%	0%
	Parallel text	50%	80%	86%	37%	32%	82%
	Strength	33%	17%	18%	31%	63%	13%

Grammar	Partial strength	39%	33%	11%	38%	0%	5%
Relations	Overcorrection	6%	0%	0%	6%	5%	5%
	Weakness	22%	50%	71%	25%	32%	77%
Graphic	High	70%	34%	48%	33%	36%	44%
	Some	15%	59%	52%	67%	55%	38%
Similarity	None	15%	7%	0%	0%	9%	18%
	High	46%	24%	44%	42%	42%	44%
Sound	Some	31%	62%	48%	50%	42%	38%
Similarity	None	23%	14%	8%	8%	15%	18%

The following sections explain how this correlation between graphophonic similarities and meaning change influenced readers' construction of a parallel text that incorporated readers' knowledge of the grammar of their L2, text genre and intertextuality, leading Kichwa-Spanish bilinguals to unique retellings that were no longer similar to the original text (See Appendices F & G).

5.2.4. Intertextuality, Intercontextuality and the Construction of a Parallel Text

Intertextuality refers to readers' juxtaposition of the meanings embedded in one text with those embedded in another text. This juxtaposition influenced how readers sensed a narrative text and what they understood after oral reading. In this case study, the analysis of miscues and retellings in Spanish showed that sense and meaning were interdependent elements (Vygotsky, 1987) that influenced Kichwa-Spanish bilinguals' meaning construction of narrative texts in their L2. Sense, which refers to the way readers perceive and internalize the ideas, feelings and emotions that a narrative text evokes in their consciousness, highly depends on readers' use of language—a psychological tool that mediates between the social and cultural meanings in the text and the meanings

readers have developed in their speech community. Therefore, meaning construction is the understanding that readers have of a text within a particular time and space (context in which a text is read), understanding that is influenced by the juxtaposition of different sources of information.

In this multiple case study, miscues and retellings in Spanish showed that intertextuality and intercontextuality played a significant role in the construction of the meaning of L2 narratives. In “Felicidad” (Happiness), for example, the characters in the story were Ramu and Maskian, but one participant substituted Ruth for Ramu, who was a character from the story “El Río” (The River).

Ruth

059 Ramu y Maskián, dándose cuenta del cambio

un

060 en su amigo, miraron alertas hacia esa dirección.

Intercontextuality, which refers to the relationship between a text and a context beyond the text, is also present in the Spanish retelling of the story “Felicidad” (Happiness). In this example, Sisa, 13 years old, mentioned that three boys used to go to the seashore to collect turtles’ eggs, but in the original text, the boys were in a river in the Amazon Region where they could see turtles hiding their eggs. This suggested that Sisa’s construction of the meaning of the narrative was a combination of the meanings in the text and what the reader knew about sea turtles. The following excerpt from Sisa’s retelling in Spanish underscores intercontextuality as a key element of meaning construction.

Tres niños solían ir a la orilla del mar para ver las tortugas y recolectar sus huevos.

Three boys used to go to the seashore to see the turtles and collect their eggs.

Therefore, intercontextuality and intertextuality allow “a more comprehensive understanding of a text in terms of what the text means along with the way through which diverse meanings are being related in order to produce a particular text” (Khaghannejad, 2014, p. 69). For instance, in the story “El Río” (The River), it was mentioned that the girls received a rubber wheel full of patches from an uncle who came from the city. However, in his retelling, Raul mentioned that a man gave the girls a broken and useless wheel that they fixed with some patches they found around. This is a clear example that a precise reconstruction of the meaning of a text is atypical—i.e., readers do not always retell a narrative keeping its sense intact. Rather, they combine the ideas from the story with what they have read in other texts and their everyday experiences. Therefore, a plausible explanation for this change in meaning construction aligns with the activities that girls commonly do in their communities. Raul may have changed the intention of the original sentence as he might have sensed the text considering that indigenous girls in their communities always find creative ways to fix things as they have been raised to do so.

Miscues and retellings in this multiple case study also suggested that Kichwa-Spanish bilinguals’ constructions of the meaning of a narrative text emerged from the combination of the social and cultural meanings embedded in the story and those from other texts that readers have already internalized in their minds consciously or unconsciously. This included events they have experienced and the texts they have read

or studied at home or school. Then, intertextuality may be regarded as influencing meaning construction through the incorporation of different elements that contributed to the creation of a new narrative.

5.3. Analytic Category 3: Syntactic and Semantic Patterns of Meaning

Construction in Retellings

Meaning construction in bilinguals was analyzed as an integrated system in which sense and meaning were elements mediated by two languages. The analysis of the data collected through the retellings in Kichwa and Spanish of two narrative texts paved the way for a more detailed understanding of how Kichwa shaped the way bilinguals constructed syntactic structures in Spanish as well as how Spanish influenced their syntactic constructions in Kichwa. This reciprocal influence unveiled the uniqueness of the bilingual mind and highlighted Vygotsky's (1987) sociocultural perspective of meaning construction that points out that language shapes and is shaped by our modes of thinking. To delve into this relationship, I first discussed the influence of Kichwa and Spanish on bilinguals' syntactic constructions during their retellings and then I analyzed the semantics of their retellings.

5.3.1. The Influence of Kichwa on Spanish Syntactic Constructions

Kichwa-Spanish bilinguals possess two linguistic repertoires that overlap and influence one another. With regard to the influence of Kichwa on readers' syntactic constructions during their Spanish retellings, the analysis of the data allowed the identification of the following instances of cross linguistic transfer: (1) word order; (2) use of two verbs, (3) use of pronominal verbs, and (4) the omission of pronouns.

5.3.1.1. Kichwa Canonical Word Order in Spanish Syntactic Constructions

To better understand this cross-linguistic influence, we must first point out that Kichwa follows a subject-object-verb (SOV) grammatical pattern while Spanish follows a

subject-verb-object (SVO) grammatical structure. Kichwa, which is a very agglutinative language, uses a series of suffixes to express the sense of a word within a sentence. Examples (1) and (2), below, show the canonical word order of Kichwa and the incorporation of two discourse particles commonly used in Kichwa to mark the subject and the object of a transitive verb in the sentence (Sanchez, 2003). The statements below come from Tamia’s retellings in Kichwa and show the SOV structure of the Kichwa language and how discourse particles shape the meanings of the words they are attached to: (1) the suffix “-ka” marks the noun subject in the nominative case and (2) the suffix “-ta” marks the direct object of a transitive verb.

(1) Chay ishkay wawakunaka kushillami kan

Chay ishkay wawa-kuna-ka kushilla-mi kan

That two girl-PL-NOM happy-3rd.SING be.3rd.PL

“Those two girls are happy.”

(2) Tukuy wawakunaka sayata churarishkakuna

Tukuy wawa-kuna-ka saya-ta churari-shka-kuna

All girl-PL-NOM skirt-ACC wear-PAST.PART-3rd.PL

“All the girls have worn skirts”

Consistent with the canonical word order of Kichwa, example (1) includes the noun phrase “Chay ishkay wawakunaka” meaning “those two girls” in which the noun subject is “wawakunaka” meaning “girls”. In this word, we can see the suffix “-ka” which highlights the concept around which the whole idea develops as the speaker constructs her statement. In example (2), we can see the suffix “- ta” attached to the word

“saya” meaning “skirt” that functions as the direct object of the transitive verb

“churarina” meaning “to wear”.

With regard to syntactic constructions in Spanish, it is very common for speakers of the Spanish language to produce statements in which a transitive verb is followed by its direct object. The examples below clearly show the influence of the SOV pattern of the Kichwa language on the Spanish constructions bilingual readers produced during their retellings. For instance, example (3) shows a statement in Spanish that follows the SOV pattern of the Kichwa language. Here, the reader first mentioned the direct object “los demás” (the others) followed by the transitive verb “llamar” (to call).

(3) Uno de ellos nadó hacia la barca y se subió y empezó a los demás a llamar para que se subieran con él.

One of them swam toward the canoe and got into it and started the others to call so that they get into the canoe with him.

Other examples of this cross-linguistic influence are illustrated in statements (4) and (5). In his retelling of the story “El Río” (The River), Manuel used the SOV pattern of the Kichwa language in a syntactic construction in Spanish. The underlined section shows that the direct object “un bote o canoa,” which means “a boat or canoe,” appeared before the transitive verb “remar,” meaning “to paddle.”

(4) La competencia consistía en un bote o canoa en ir remando hasta llegar hasta El final hasta la meta.

The competition consisted in a boat or canoe paddling toward the final line.

Likewise, José’s retelling in Spanish showed the use of a direct object “esa pepita” meaning “that little seed” followed by the transitive verb “botaron” meaning “threw” in its simple past form.

(5) Esa pepita botaron al lado de la colmena o el nido.

That little seed they threw next to the hive or nest.

It can be inferred from the examples above that the canonical word order of the Kichwa language influenced the subject-verb-object pattern of the Spanish language, and thus readers may have unconsciously placed a direct object before a Spanish transitive verb.

5.3.1.2. The Influence of Kichwa on Spanish Syntactic Structures Including Two Verbs

Spanish speakers commonly use an infinitive verb preceded by the preposition “a,” which means “to,” as in the sentence “Los niños van a jugar,” meaning “The children are going to play.” Kichwa does not have an equivalent word to the Spanish preposition “a.” Rather, the Kichwa language uses the suffix “y” to mark the infinitive form of a verb. The following example taken from the book “Taruka” (Moya & Jara, 2009), which compiles a series of stories from the Kichwa oral tradition of the Sierra Region in Ecuador, shows the incorporation of the suffix “y” to convey the meaning of an infinitive verb when two verbs come together in the sentence.

(6) Pay chayakpika tukuy warmi wakraunami tayta Inpapurata rikushpaka
manchanayta wakay kallarin (Moya & Jara, 2009, p. 30).

Pay chaya – kpi – ka

He come – Conditional – PAST.PART

tukuy warmi wakra – kuna – mi

all female cattle – PL – FOC

tayta Inpapurata riku – shpa – ka

father Imbabura observe – GR – PAST

manchanayta waka – y kallari – n

a lot cry – INF. start – 3rd.PERS.PL

“When the cows saw father Imbabura arriving, they started to moo loudly”

In example (6), “wakay kallarin,” which means “started to moo,” shows that Kichwa speakers attach the suffix “-y” to the root of the verb to denote its most basic form, an infinitive. Considering this aspect of the grammar of the Kichwa language, example (7) shows that Kichwa-Spanish speakers in this study used their knowledge of the grammar of both languages to construct syntactic structures in Spanish. In her retelling of “El Río” (The River), Tamia omitted the Spanish preposition “a,” meaning “to,” in her Spanish syntactic construction, which resembled a Kichwa syntactic structure and suggested a direct influence of Kichwa on the syntactic construction of retellings.

(7) Las dos entraron rápido para ir ayudar y remaron hasta llegar a las dos chicas.

Both girls came in fast to go help them out and they paddled until they reached the other girls.

Similarly, in her retelling of “El Río” (The River), Ana omitted the Spanish preposition “a” and produced a syntactic construction with characteristics of the Kichwa language.

(8) Si no conseguían una rueda, iban dejar para competir el próximo año.

If they didn't get a wheel, they were going compete next year.

5.3.1.3. The Influence of Kichwa on Spanish Syntactic Structures with Pronominal Verbs.

A pronominal verb in Spanish indicates that the action of the verb affects the subject directly. This type of verb is always attached to one of these reflexive pronouns: “me” (myself), “te” (yourself), “se” (herself or himself) and “nos” (ourselves). Reflexive pronouns are commonly used in Spanish in the form of a suffix attached to the base form of the verb as in the phrase “Va a comprar(se) un auto,” which means “He’s going to buy (himself) a car.” Kichwa, on the other hand, uses two affixes “ku,” which indicates the verb is reflexive and “sha,” which indicates the verb is in its past participle form as exemplified in the verb conjugation “wañukusha.”

(9) Chaypi runaka rupaywan wañukusha, punchuta surkurka (Moya & Jara, 2009, p. 96)

Chaypi runa-ka rupay-wan wañu-ku-sha,

This man-FOC heat-with die-REFL-PAST.PART

punchu-ta surku-rka.

poncho-ACC take.out-3rd.PAST

“This man, with a feeling of dying (himself) of intense heat, had to take his poncho out”

Example (9) shows that Kichwa and Spanish pronominal verbs are marked differently. While Spanish attaches a reflexive pronoun to an infinitive verb, Kichwa drops the verb termination “y” as in “wañuy,” meaning “to die,” and adds the affixes—“ku” and “sha,” conveying an action in the past participle. Thus, considering data from retellings, it can be suggested that the condition of being bilingual influenced readers’ syntactic constructions, as their use of language was highly influenced by their modes of thinking. In this case, the complexity of the morphology of both languages led Kichwa-Spanish bilinguals to use their knowledge of both linguistic repertoires to shape their oral production. This means that bilinguals used Spanish pronominal verbs acceptably, with instances of cross-linguistic influence.

The following statements from Tamia’s, Sisa’s and Manuel’s retellings illustrate those instances of cross-linguistic influence. Examples (10), (11) and (12) show in parenthesis the reflexive pronoun marker that Spanish speakers would typically use in those sentences, which Kichwa-Spanish bilinguals in this multiple case study omitted due to the influence of Kichwa on Spanish.

(10) Él se limitó a quedar(se) en silencio.

He limited (himself) to remaining silent.

(11) Ha habido tres niños que han sabido ir(se) a la orilla del mar.

There have been three kids who used to go (themselves) to the seashore.

(12) Salió un parche de la canoa, luego empezó a llenar(se) de agua.

A patch came off the canoe, then it started to fill (itself) with water.

Due to the complexity of the morphology of both languages, the examples from Spanish retellings in which Kichwa-Spanish bilinguals omitted the reflexive pronoun “se”

in the pronominal verb can be interpreted as a complex process of the use of language as they retold the stories. In this particular case, we can clearly see that the omission of the reflexive pronoun “se” in the infinitive verb always followed a verb that was conjugated as seen in examples (10), (11) and (12). At this point, we can analyze this cross-linguistic influence in two senses. First, Kichwa does not possess pronominal verbs as Spanish does, rather as discussed in this section, Kichwa agglutinates a series of suffixes to convey the idea of a pronominal verb. In Spanish, infinitive verbs without a pronominal suffix are more commonly used, which sometimes may have led bilingual readers to produce syntactic structures with infinitive verbs when a pronominal verb is required. When a Kichwa-Spanish bilingual produces a sentence without a pronominal verb when required, it can be syntactically unacceptable, but Spanish native speakers can still recognize the intention of the utterance.

5.3.1.4. The Influence of Kichwa on the Omission of Pronouns that Function as Direct and Indirect Complements in Spanish

Kichwa does not possess equivalent words for the Spanish gender-specific pronouns that function as direct and indirect complements in the third person singular and plural. These Spanish gender-specific pronouns are “la” and “lo,” used in the third person singular to indicate a feminine or masculine direct complement, respectively. The pronouns “las” and “los” are used in the third person plural to indicate there is either a feminine or masculine direct complement (accusative case). The pronouns “le” (singular) and “les” (plural) are used to indicate an indirect complement (dative case) that can be either masculine or feminine. The Kichwa language indicates the presence of a direct complement through the use of the suffix “-ta” and the presence of an indirect object with the suffix “-man” attached to the nouns functioning as complements in the sentence.

The following contrastive analysis shows the differences between Spanish and Kichwa. In example (13), the Kichwa word “wawakuna,” meaning “children” is attached to the suffix “-ta” to show its function as the direct object of the conjugated Kichwa verb “charishka,” meaning “had.” Similarly, in example (14) the Kichwa pronoun “kan,” meaning “you” is attached to the suffix “-ta,” showing its accusative case. Example (15) shows the noun “wawa,” meaning “child” attached to the suffix “-man,” indicating its dative function.

(13) Shuk kari, shuk warmi wawakunata charishka nin (Moya & Jara, 2009, p. 65).

They say he had two children, a boy and a girl.

(14) Kanta mana shuyani (Moya & Jara, 2009, p. 214).

Kan-ta mana shuya-ni

You-DAT don't wait-1st.SING

“I won't wait for you.”

(15) Shuk misita apamushka wawaman.

Shuk misi-ta apamu-shka wawa-man.

One cat-ACC bring-PAST.3rd.SING. child-DAT

“He brought the child a cat.”

In Spanish, the use of gender-specific pronouns for the accusative case, is very common, and as they do not exist in Kichwa, their omission in Spanish statements can be regarded as the consequence of a cross-linguistic process of the bilingual mind. To illustrate this influence, let's consider some examples from Tamia's and Raul's retellings.

In parenthesis, I have included the pronouns that Spanish speakers would commonly use in these structures, which bilingual readers in this case study omitted.

(16) Buscaron un flotador, pero como no (lo) encontraron, una de ellas dijo
tendremos que esperar para el próximo año para poder ganar (les) a sus
rivales.

They looked for a floating rubber, but as they didn't find (it), one of them
said that they would have to wait another year to defeat (them) their rivals.

(17) Ellas intentaron y gritaron mucho fuerte, pero aun así no (les) escuchaban.

They tried and shouted loudly, but the girls didn't hear (them).

This cross-linguistic influence was found in all cases. That is, all readers showed instances of linguistic transfer from Kichwa to Spanish, suggesting that both linguistic repertoires were active during retellings. It can be, therefore, inferred that Kichwa-Spanish bilinguals in the Southern Andes of Ecuador perceived the symbols in a narrative text, drawing upon their knowledge of both languages and expressing their own voices as members of a hybrid culture.

5.3.2. The Influence of Spanish on Kichwa Syntactic Constructions

The condition of being bilingual represents a unique process in the development of the human mind. In the syntactic domain, growing up with two languages—two ways of looking at the world—unveils the reciprocal influence of these linguistic repertoires. As previously discussed, the influence of Kichwa on Spanish was highly morpho-syntactic, as the SOV pattern greatly influenced the Spanish structures produced by bilingual readers. With regard to the influence of Spanish on Kichwa, retellings showed two major

aspects: 1) the incorporation of Spanish nouns and 2) the incorporation of Spanish verbs conjugated with Kichwa suffixes.

The incorporation of L2 nouns and verbs replicated in all cases, supporting bilinguals' discourse on the necessity to fully develop their first language. In the first analytic category, bilingual readers emphasized that they needed to learn Kichwa completely, accentuating the status of languages in the Southern Andes of Ecuador. Such discourse unveiled through the Burke reading interview was also reflected on their oral narratives in Kichwa, as in all cases retellings incorporated Spanish nouns and verbs. The excerpts below illustrate this common incorporation in small caps.

(18) Chay tutamanta, chay puncha FREGATAS nishka shuk TÍO, kayshuk

llaktamanta chayashka, shuk REGALOTA apamushka wawakunaman, shuk
PARCHES, shuk PARCHES, shuk PARCHEstami REGALARka.

That morning, that day of the COMPETITION, an UNCLE, from another
community, had arrived and he brought some PATCHES as a GIFT for the
children.

(19) Chaymanta LOS GARA, LOS GARA, LOS GRILLOS, LOS SAPOS, kushilla,

kushilla, kushilla CANTakurkakuna, CANTakurkakuna, shuk alli ushayta
shuk hatun mayupi

Then, THE GUINEA PIGS, GUINEA PIGS, THE CRICKETS, THE TOADS, they were
singing, singing happily with a good power in a big river.

(20) FÓSFORO llukchishpaka rishka shuk PEPITA.

Taking out a MATCH, he went to look for the LITTLE SEED.

Concerning Spanish nouns, we have words such as “fregatas” (competitions), “tío” (uncle), “regalo” (gift), “parches” (patches), “gara” (guinea pig), “grillos” (crickets), “sapos” (toads), “fósforo” (a match) and “pepita” (little seed) and verbs such as “regalar” (to give) and “cantar” (to sing). Similar to Sánchez’s (2003) study on Quechua-Spanish bilinguals in Peru, Kichwa-Spanish bilinguals in the Southern Andes of Ecuador used linguistic elements from their L2 in their Kichwa constructions, thus informing that geographical proximity and the social functions of their languages played a significant role in their narrative constructions as members of a hybrid culture. These retelling excerpts evidenced two ways of incorporating nouns: (1) Spanish nouns in their original form without any Kichwa affixes as in “tío” (uncle), “gara” (guinea pig) or “pepita” (little seed); and (2) Spanish nouns with Kichwa affixes as in “parchestami,” which is a combination of the Spanish noun “parches,” meaning “patches” and the suffixes “-ta,” expressing its accusative case and “-mi,” expressing emphasis.

With regard to verbs, the analysis of retellings showed that Spanish verbs were always conjugated, i.e., bilingual readers used the infinitive form of the verb attached to Kichwa suffixes denoting grammatical tense as in “regalarka,” which included the Spanish infinitive verb “regalar,” meaning “to give” followed by the Kichwa suffix “-rka,” showing the verb was in its past tense. These two major incorporations of Spanish into Kichwa showed that syntactic changes were not merely grammatical issues but the confirmation that geographical proximity, language status and how readers sense the social and cultural meanings embedded in a text were intrinsically responsible for the particularities of Kichwa-Spanish bilinguals’ meaning construction of narratives.

5.3.3. Semantic Patterns in Retellings

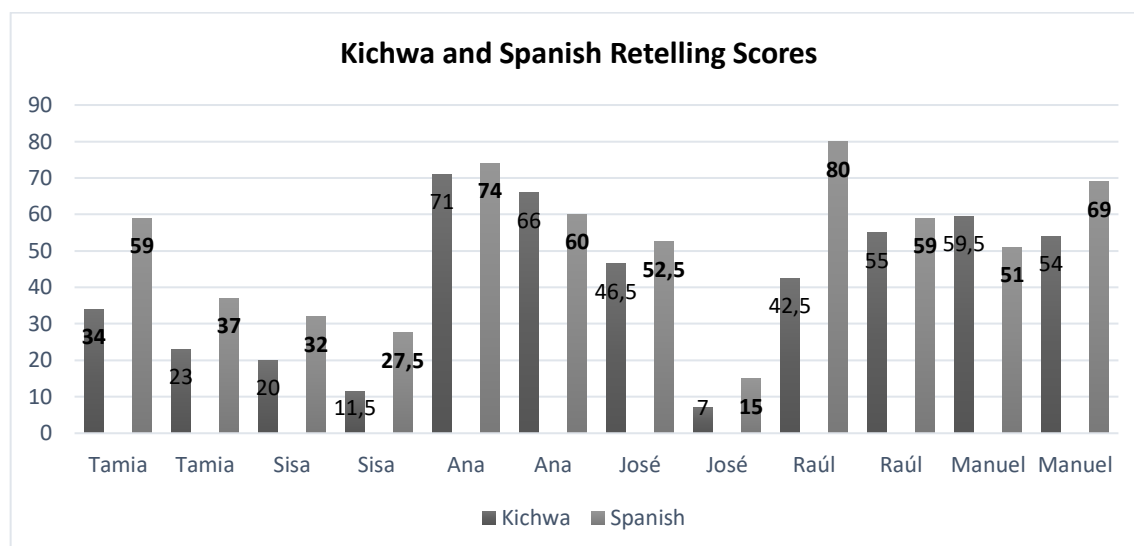
Sharing stories is a social and cultural act in which storytellers build their narratives in relation to the meanings they have constructed and internalized in their

speech community. Telling a story shows how readers sense the world and paves the way for a deeper understanding of how meaning is constructed through the use of language as well as how readers' L1 may influence retellings in their L2. In this case study, Kichwa and Spanish retellings suggested that "readers actively contribute to the ideas generated" (Kucer, 2011, p. 68), by relying on the intentions of the author but also incorporating their linguistic, social and cultural knowledge. This process highly differs from mere reading comprehension.

Figure 11 shows that Kichwa-Spanish bilinguals were more likely to keep the original sense of the story when retelling occurred in Spanish, and this may be due to the following reasons: (1) the story was written in Spanish; (2) Spanish is the dominant language in the Southern Andes of Ecuador and the language of formal instruction; (3) Kichwa is commonly used at the familiar sphere and has been recognized as a language that readers are still learning due to its status in society; and (4) the fact that Spanish nouns and verbs were inserted in Kichwa retellings (but not vice versa) evidences that the dominant language of formal instruction provides more linguistic resources for a reconstruction closer to the sense of the original text.

Bearing in mind that retelling scores were obtained considering sequential events from the original text, low scores in figure 11 cannot be regarded as readers' inability to retell the story. Rather, we must regard them as evidence of readers' great ability to construct parallel narratives in which intertextuality and intercontextuality play a fundamental role. That is, in both languages, Kichwa-Spanish bilinguals produced retellings that were coherent narratives full of sense and meaning.

Figure 11. Kichwa and Spanish Retelling Scores



The next two sections analyze the semantic patterns in Kichwa and Spanish retellings prior to a contrastive analysis of their major semantic features.

5.3.3.1. Semantic Patterns in Kichwa Retellings

Kichwa and Spanish retellings were highly marked by particular linguistic and cultural elements of the Southern Andes of Ecuador; however, these retellings were not similar. To understand why retellings differed in their meaning from language to language, we must keep in mind Vygotsky's concept of *znachenie slova* or meaning through the use of language and the three interrelated elements of the sign: the representamen, the object and the interpretant (Pharies, 1985; Smith, 2005).

Considering Peirce's (1931) interrelated elements of the sign, it can be suggested that interpretations and subsequent meaning construction in Kichwa after reading a text in Spanish involved the following dynamic process. The representamen or the written symbols in the L2 narrative text led the reader to mental representations or "objects" that arose in her consciousness mediated by her linguist, social and cultural background. The interpretant or reader's unique construction of meaning unveiled in living speech became a more complex system than the original sign in the text.

Readers' sense of belonging to their community aligned with Vygotsky's proposition that meaning through the use of language forms a whole unit with unique characteristics—if one element is modified, the whole system will be restructured. Therefore, we can say that reading and meaning construction of L2 narratives were embedded in the social environment of the reader and were very likely to be shaped. As Vygotsky stated, “[i]t is precisely by means of participating in this social interaction that interpretations are first proposed and worked out and, therefore, become available to be taken over by individuals” (Wertsch, 2007, p. 187).

The following excerpts from Kichwa retellings show the incorporation of cultural elements into the construction of the meaning of narrative texts. These elements of the Southern Andes of Ecuador differed from those of the Amazon region where the stories “El Río” (The River) and “Felicidad” (Happiness) took place, reinforcing the idea that retelling a text was shaped by the reader's sense of belonging to a specific or particular speech community.

(21) Tukuy wawakunaka sayata churarishkakuna, mayllata yallikuna wawakuna

All children were wearing traditional skirts; children were everywhere.

(22) Chaymanta Antun nirka: Mashkankapak ima pampapi tiyakta

Then Antún said: we look for what is in the large plain.

(23) Chaymanta los gara, los gara, los grillos, los sapos, kushilla, kushilla,

kushilla cantakurkakuna, cantakurkakuna, shuk alli ushayta shuk hatun

mayupi

Then, the guinea pigs, guinea pigs, the crickets, the toads, they were singing, singing happily with a good power in a big river.

The examples above illustrated the complex process of the bilingual mind to construct the meaning of a written text, underscoring that full or partial text reconstructions were atypical. The Kichwa word “saya” in example (21) refers to a traditional skirt women use in the Southern Andes of Ecuador while the narrative text mentioned kids wearing short pants and T-shirts in the Amazon region. Another example of a cultural symbol readers introduced in their retellings was the concept of “pampa,” a Kichwa word that means “vast plain” and which is commonly contextualized in the Sierra region. Example (23) included an animal that lives in the Sierra region and can be regarded as a cultural symbol as well. One reader mentioned that “los gara”, meaning “the guinea pigs” were singing happily. These animals were not part of the story and revealed how readers’ cultural symbols shaped their retellings as these symbols are everyday concepts deeply internalized in readers’ minds. Guinea pigs are always present in the Southern Andes of Ecuador as they are a symbol of sharing, being a main dish, a host offers their guests (Torres, 2002, p. 320).

5.3.3.2. Semantic Patterns in Spanish Retellings

Spanish retellings did not include any of the cultural signs that readers incorporated in their Kichwa retellings, reinforcing the idea that meaning is shaped as the reader uses her first or second language for retelling the story. The following Spanish excerpts are two clear examples of the interrelationship between language and thinking. These examples showed that readers did not incorporate cultural elements of the Southern Andes of Ecuador as they did when retelling in Kichwa. In the first example (24), the reader just mentioned that there were three children going camping, without including any description of their traditional clothes as stated in her Kichwa retelling. In the second example (25), the retelling included a “guinea pig,” a very common animal in the Andes of Ecuador, but that animal was not mentioned when retelling was done in Spanish.

(24)

Kichwa transcript: Tukuy wawakunaka sayata churarishkakuna, mayllata
yallikuna wawakuna

Translation: All children were wearing traditional skirts; children
were everywhere.

Spanish transcript: En una temporada de menor lluvia en una selva, estaban
tres niños que iban, que iban por un campamento...

Translation: During a period of time of light rain in the jungle, there
were three children going camping.

(25)

Kichwa transcript: Chaymanta los gara, los gara, los grillos, los sapos,
kushilla, kushilla, kushilla cantakurkakuna,
cantakurkakuna, shuk alli ushayta shuk hatun mayupi

Translation: Then, the guinea pigs, guinea pigs, the crickets, the
toads, they were singing, singing happily with power in a
big river.

Spanish transcript: Se quedaron dormidos con el ruido de los insectos, sapos
y animales y otros animales que cantaban ahí.

Translation: They fell asleep with the noise of the insects, toads,
animals and other animals that they singing there.

Considering the social situation of development (Mahn, 2012) and Peirce's
conception of the sign (as discussed by Smith, 2005), as Kichwa-Spanish bilinguals retold
the stories in two languages, sensory input and their own voices as story tellers, may have

led them to mental representations that were congruent with the cultural environment of the linguistic repertoire used. For example, the use of Kichwa triggered mental representations that included things, animals or events commonly known in Kichwa communities in the Southern Andes of Ecuador. This alignment between language and thought allowed a unique relationship between sensory input and mental representations outstandingly interpreted and deployed to convey meaning, as readers constructed two different narratives through their L1 and L2.

5.3.4. Intertextuality and Cultural Elements of the Andes in Retellings

Intertextuality or the incorporation of other texts in retellings replicated in all cases. This foregrounded the relevance of previous knowledge in the construction of meaning. According to Rosenblatt (2005), “[the reader’s] past experience and present preoccupations may actively condition his primary spontaneous response” (p. 75), which implies the existence of concepts that bilingual readers have unconsciously and consciously developed and which may have influenced the way retellings were constructed and the social functions they expressed. The following excerpts are examples of intertextuality and intercontextuality in both Kichwa and Spanish retellings. The underlined sections show readers’ creation of a parallel narrative that is no longer similar to the original text but still coherent and full of sense.

(26)

Kichwa transcript: Shuk mashika wawakunata pushashpa rirka,
pukllanaman rirkakuna. Yaku laduman yaku laduman.
Yachachikka wawakunata pukllan, pukllachinkapak rirka
yaku ladopi. Yachachikka wawakunata pushashpa rirka
yaku ladoman pukllachinkapamm, pukllachinkapa.

Wawakunata kaya kayarirkakuna Ana, Elsa, Kati. Kati, pay paykunaka paykunaka tukuy punchata pukllarkakuna mashiwan y paykunaka Ana, Kati y Elsa, Ana y Elsa yakuman urmarkakuna. Y Elsa y Ana, Elsa y Anaka chaypika Anaka, katika Anaka Elsawan rirkakuna.

Translation: The girls went with a friend to play by the river. The teacher plays with the girls, as she went there to make them play by the river, to make them play. The girls' names were Ana, Elsa and Katy. They played all day long with their friend and they, Ana, Katy, Elsa and Ana fell into the river. And Elsa and Ana went with Elsa.

(27)

Kichwa transcript: Chay ishka wawakunaka kushillami kan. Ayllukunawan yuya yuratami purikunkuna. Shuk wawaku wawaka yakutami upyarka hatun mayu. Chay kimsa wakuka yakupimi yakupimi yaykurkakuna hatun mayupi. Chay kimsa wawakunaka kushillami ya yallin yallirkakuna. Maykin wakuka wawakuka hatun muyupi pusirka, kushillataka.

Translation: The two girls were very happy. They were walking with their relatives by a tree. A little girl drank water from the big river. Then the three girls jumped into the water, in the big river. These three girls were very happy. The little kid Maskián jumped into the big river, happily.

(28)

Spanish transcript: Y uno de esos niños dijo que claro que ya que los Achuar somos los dueños de esta selva y de los ríos en ese instante el río se paró y dejó de moverse [porque] nadie es dueño de la selva ni de la naturaleza ya que al decir eso la selva y el río se pararon; los sapos, las aves se callaron ya que ellos tienen su propia vida y no dependen de uno.

Translation: And one of those children said that the Achuar were the owners of the rainforest and the rivers, and in that moment, the river stopped flowing [because] nobody is the owner of the rainforest or the nature. After saying that, the rainforest and the river stopped; the toads, the birds, they were silent as they are alive and they don't depend on us.

(29)

Spanish transcript: Ya que ellos se encontraban jugando en la orilla del río, veían a una hermosa canoa flotar y brillando, con el brillo del sol vieron que el agua se tornaba amarilla y al ver esto uno de ellos se subió a la canoa y empezó a jugar y empezaron a reírse demasiado y esta historia nos cuenta de las anacondas que si no fuera por los ríos las anacondas no tendrían ni donde esconderse ni donde estar.

Translation: As they were playing in the river bank, they saw a beautiful canoe floating and shining. With the sunlight,

they saw that water turned yellow and so one of them jumped into the canoe and started to play and laugh a lot. And this story tells us that it is because of the rivers that the anacondas have a place to hide and stay.

(30)

Spanish transcript: Ellos han sabido hacer educación física con el profesor varios días y así haciendo varios días educación física, uno de esos días Katy y Ana se han caído al mar y ellos han pensado que se van a morir ahogados, pero Ana ha logrado salir y ha querido ayudar a Katy y le ha sacado del río a Katy y otra vez ha venido un fuerte, ha venido el agua muy fuerte y ha ido nuevamente llevando a Katy, pero Ana le ha sostenido muy fuerte con sus brazos para que no se caiga y así ellos han salido ganando.

Translation: They used to exercise with their teacher during several days, and one of those days, Katy and Ana fell into the sea and thought they would drown, but Ana could get out of the water and she wanted to help Katy to get out of the river, but Katy was swept away by the strong river current, but Ana held her strongly by her arms so that she did not fall and in that way they won.

These transcripts revealed that Kichwa-Spanish bilinguals' construction of the meaning of narratives aligned with their experiences in their everyday life and the stories

they have heard. The excerpts above transcribed are examples of what retellings showed in general—a common tendency to construct a new text that combined the ideas from the original story with readers’ experiences in everyday life. In example (26), the reader incorporated Elsa in her retelling, a name that did not appear in the story, but which she often mentioned before or after the name Ana. It can be inferred that the reader was familiar with the movie in which these two characters appeared. Another example is, “Yachachikka wawakunata pukllan, pukllachinkapak rirka yaku ladopi,” meaning “The teacher plays with the girls; she went there to make them play by the river.” This event was not part of the original story “El Río” (The River), but showed that readers did not merely reconstruct the original text but incorporated experiences they recalled and which commonly appeared in their retrospective reflections. While retelling “Felicidad” (Happiness) in Kichwa, Tamia said, “Ayllukunawan yuratami purikunkuna,” meaning “They were walking with their relatives by a tree”. The original story only mentioned three kids in the river but it did not mention their relatives or the fact that they were walking by a tree. The mental representation of the kids walking by a tree actually came from what Tamia has kept in her mind after retelling the first story in which three girls climbed a tree, scene that the reader may have associated with what children commonly do in their communities—walk with their parents and be surrounded by nature.

The incorporation of the Andean Cosmovision into Spanish retellings elucidates that bilingualism cannot be conceived as two monolingual minds thinking separately. When Manuel retold the story “Felicidad” (Happiness), he mentioned that when the children said that they were the owners of the rainforest, “the river stopped flowing [because] nobody is the owner of the rainforest or the nature” and that because of those words “the toads [and] the birds were silent, as they are alive and they don’t depend on us”. In this statement, we can corroborate the Vygotskian relationship between sense and

meaning. On the one hand, the idea of a river that stopped its flow may have led the reader to a mental representation that was congruent with the Andean Cosmivision of the *Pachamama*, a concept that refers to Mother Earth, a divinity in the Kichwa mythology that shows her kindness by providing us with her fruits.

Therefore, the mental representation arising in the reader's consciousness referred to the sense that the words in the story had for the Kichwa reader and what the reader actually retold was congruent with the meaning he constructed at that particular moment with those particular contextual clues. That is, factors such as text genre, reader's prior experiences and his conception of the world may have influenced the construction of the meaning of Spanish retellings.

Similarly, in his Spanish retelling of "Felicidad" (Happiness), Manuel emphasized that it was because of the rivers that anacondas had a place to hide and stay, a phrase that unveiled how important nature was to the Kichwa people, considering that in the original story, it was mentioned that since the river water level was low, the anacondas could not hide in the river, so it was safe for the kids to swim. This is an example of how the construction of meaning is a complex process in which readers' modes of thinking about the world shape readers' use of language and the meanings embedded in it.

5.4. Retrospective Miscue Analysis: Revaluing Readers' Miscues and Reading Strategies

Retrospective dialogues with Kichwa-Spanish bilinguals confirmed that syntactically but not semantically acceptable word substitutions occurred during the oral reading of narrative texts mainly due to the reading strategies bilinguals have consciously or unconsciously developed as members of a pedagogical culture. Bilingual readers reported that they did not self-correct their miscues as they read the text fast and their

miscues looked and sounded similar to the word in the text. However, the strategy undermined the making of meaning.

Typical comments included “I didn’t correct the mistake because the word sounded Ok”; “long words are confusing and difficult”; “With difficult words, I first read them slowly and then fast”. These comments highlighted that, in most cases, readers paid more attention to grapheme and sound similarity rather than semantic aspects. For example, in the story “El Río” (The River), two names were mentioned, Ruth Tanguila and Ester Siguano, but the reader substituted “tranquila” (calm) for “Tanguila” (last name), emphasizing that sound similarity prevented her from correcting her miscue. In general, the first interactions with readers during metacognitive reflections showed a discourse highly marked by decoding strategies, which reflected the literacy practices prioritized in the classroom.

More thoughtful dialogues started to take place as the result of a process of mediation in which the researcher gradually replaced readers’ negative comments about their miscues with positive comments that included an explanation about word substitutions, omissions and insertions as semantic anticipations or predictions that readers unconsciously produced based on their previous knowledge and linguistic background. Here is one example:

Interviewer: Voy a hacerle escuchar un audio de su lectura oral. Quiero que por favor siga la lectura en el texto y me diga qué opina de lo que hizo en la frase. Comencemos en la página 35. Ahí usted hizo dos sustituciones “con” por “en” y “tarde” por “tierra”

Now you're going to listen to an audio recording of your oral reading. Please, follow the reading in the original text and then tell me what you think of what you made in the sentence. Let's start at page 35. There, you substituted "con" for "en" and "tarde" for "tierra"

Audio recording: "el día terminaba caliente en el bochorno de la tierra"

"the day warmly ended in the heat of the soil"

Original text: "el día terminaba caliente con el bochorno de la tarde"

"the day warmly ended with the heat of the evening"

Tamia: ¡Ay! he dicho otras palabras (risas). O sea, yo creo que cambié la palabra "con" porque si queda bien y de ahí he dicho "tierra" ya que he pensado que ha estado caliente la tierra.

Oh! I have said other words ((she laughs)). I mean, I guess I changed the word "con" because that sounds ok there, and I have said "tierra" as I thought that it was the soil which was warm.

Interviewer: Puedo ver que usted se anticipó a pensar que el texto hablaba de la tierra caliente y no de la tarde. Tiene sentido pensar que se trataba de la tierra que puede estar caliente al terminar la tarde ¿Verdad?

I can tell that you anticipated that the text would mention that the soil was warm and not the evening. That makes sense to think that the soil can be warm when the evening ends. Right?

Tamia: Sí, eso pensé.
Yes, that's what I thought.

Interviewer: Entonces, Tamia, cuénteme más sobre lo que opina de estas sustituciones.
Then, Tamia, tell me more about what you think of these substitutions.

Tamia: Creo que estas... ¿Cómo dijo? sus...
I think that these... How did you say? Subs...

Interviewer: Sustituciones
Substitutions

Tamia: Yo creo que si están bien las sustituciones que hice porque como le dije “con” si queda bien y también “tierra” porque yo estaba pensando en la tierra como queda en la tarde así cuando hace sol. Yo creo que por eso.
I think that the substitutions I made are ok because, as I told you, “con” and “tierra” sound ok because I was thinking of the soil; how it is in the evening after a sunny day. I guess that's why.

In our dialogues, readers' development of metalanguage—in which they discussed miscues such as: substitutions, omissions and insertions—enhanced their confidence and their reflections were more thoughtful, expanding their potentials toward a more insightful appreciation of their miscues. For example, when analyzing one of her word substitutions in the story “El Río” (The River), Sisa mentioned that she substituted “rematando” (a colloquial expression meaning that a person does her best effort at the

end) for “remando” (paddling), as they both conveyed the idea of effort. At this point, her miscue analysis abandoned her word decoding discourse and underscored a more reflective discourse in which the reader, as part of a process of mediation, went deeper into her reasoning to then affirm that her miscue was acceptable because it meant that the girls were trying to win the race, because if someone paddled in a competition, that person was doing her best effort to win.

Metacognitive dialogues with Kichwa-Spanish bilinguals also revealed that retelling a story implied a combination of what the text said and what readers have experienced in daily life. Readers recognized that when retelling their stories, they were imagining their own activities in their communities, which could be particularly evidenced in retellings that incorporated cultural aspects inherent to the Andean Cosmovision—e.g., the use of figures of speech such as personification to attribute human characteristics to elements in nature. For example, in the story “Felicidad” (Happiness), one reader mentioned that “the river stopped flowing” when the characters in the story said they were the owners of the rainforest. The reader said that that happened because the river heard the boys.

Kichwa-Spanish bilinguals agreed that their retellings were influenced by the languages and knowledge they have developed in their speech community. Consequently, retelling a story in two languages incorporated cultural elements that have arisen from geographical proximity as well as every day concepts. This geographic proximity of two cultures have undeniably led to language hierarchies and social functions of language in society. In this sense, readers considered that reading and retelling in Spanish became easier since Spanish was the language that they used the most in school. According to readers, vocabulary and syntactic structures were familiar as they were commonly used in

formal instruction, while Kichwa had been reduced to one single subject at school and was mainly spoken at home.

During interviews, readers' discourses suggested that language hierarchies appeared as a cornerstone for meaning construction in Kichwa and Spanish. Kichwa-Spanish bilinguals agreed that Kichwa had less words and thus retelling a story in Kichwa required adaptations to what they knew in their language; that is, everyday concepts in their first language were prioritized for storytelling, leading readers to very interesting ways to make sense, perceive and construct the meaning of a narrative text. Manuel, for example, recognized that Kichwa speakers needed to know more about their language, a point of view that replicated during the Burke Reading Interview. Manuel considered that retelling in two languages implied the creation of two narratives as inferred from his words.

(31)

Manuel's reflection transcript
excerpt

En kichwa, no dije las gotas sino solo el agua. En español se incluye más detalles porque hay más palabras. Hay que aprender más palabras en Kichwa ya que nadie sabe que palabras son más nuevas.

Translation

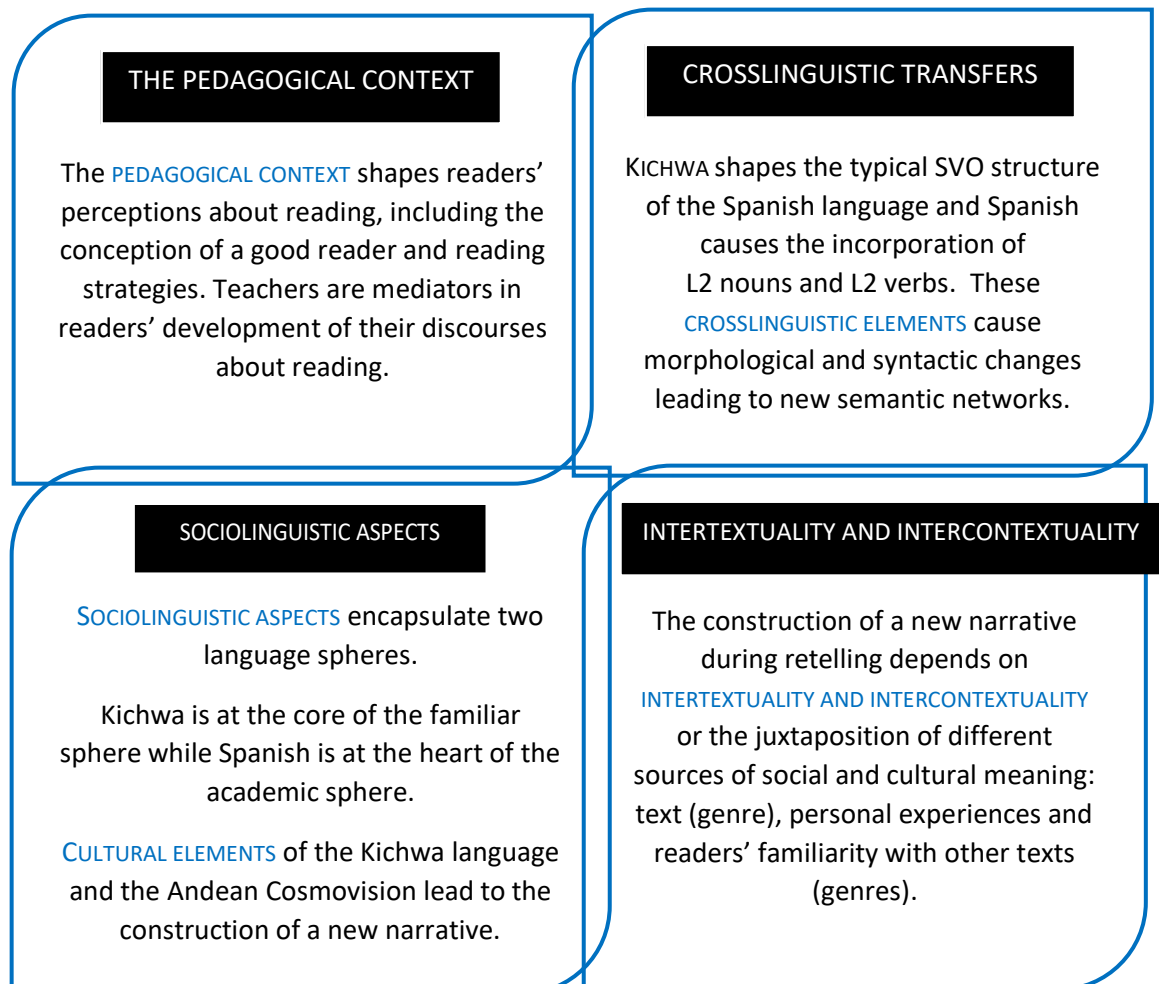
I didn't mention water drops in Kichwa; I just mentioned water, as in Spanish I can include more details because there are more words. We need to learn more words in Kichwa as nobody knows which words are new in the language.

Generally, retrospective miscue analysis allowed readers developing a more insightful appreciation of their miscues and retellings. Furthermore, these retrospective dialogues not only highlighted readers' need to fully develop their L1 in a diglossic society but underscored a very complex process of meaning construction. The analysis of readers' metacognitive reflections suggested that retelling a text in two languages triggered a unique process in which both linguistic and sociocultural repertoires led readers to the construction of parallel texts that, in addition, demanded readers making decisions about the sense and meanings they wanted to convey as they retold a narrative text in their L1 and L2, and that these decisions aligned with the social functions of each language.

CHAPTER VI: SYNTHESIS OF FINDINGS AND CONCLUSIONS

Retrospective miscue analysis in this study revealed that Kichwa-Spanish bilinguals' meaning construction of L2 narratives in the Southern Andes of Ecuador embraced four interrelated factors: (1) reading discourses developed in their pedagogical environment; (2) cross-linguistic transfers; (3) sociolinguistic aspects regarding the statuses of Kichwa and Spanish in a diglossic society and (4) the role of intertextuality and intercontextuality in meaning construction. Consequently, reading as a social practice in the Southern Andes of Ecuador must be understood from a holistic account of these aspects. Figure 12 shows the key elements of these interrelated factors.

Figure 12. A Holistic Account of Four Interrelated Factors of L2 Meaning Construction in Kichwa-Spanish bilinguals



The following sections synthesize the findings presented in chapter V considering each research sub question.

6.1. The Influence of Bilingual Readers' Perceptions on their L2 Reading Strategies

Kichwa-Spanish bilinguals in the Southern Andes of Ecuador perceived themselves as word decoders, prioritizing the correct association of graphemes and phonemes and the search for the non-figurative meanings of isolated words. These self-reported reading strategies were congruent with what readers actually did during the oral reading of both narrative texts in Spanish. Their miscues, mainly word substitutions, suggested that readers' main concern was to align graphemes and phonemes as oral reading took place.

In light of formal instruction, readers' discourses underscored a pedagogical environment that has strengthened the idea that good readers usually search for the meanings of isolated words in a text, do not make mistakes and practice reading to avoid mispronunciation. Bilingual readers in the Southern Andes of Ecuador regarded these decoding strategies as pivotal not only for their own reading but for improving struggling readers' oral performance. The focus of such a pedagogical culture may have developed in Kichwa-Spanish bilinguals the idea that oral reading is a mere process of decoding letters at fast speed. Therefore, it can be suggested that the reading practices developed in their classrooms were the result of a process of mediation in which someone who readers regarded as a more skilled individual, the teacher in this case, deliberately or even unconsciously shared her ways of thinking about reading and what was expected within the functional boundaries of school.

Scriber and Cole (1978) discussed the functional nature of literacy based on social expectations within and outside the classroom. They suggested that literacy practices in

formal and non-formal education obey the dynamics of social demands. Therefore, even though no extrapolation is intended, Kichwa-Spanish bilinguals' self-reported strategies for oral reading—word decoding—and their most common type of miscues—word substitutions that share grapheme and phoneme similarities—underscored readers' responses to the immediate demands of their formal education setting. Then, it is not surprising that Kichwa-Spanish bilinguals' oral reading focused on word decoding with the only purpose to carry out the reading task at hand.

The implications of such a pedagogical culture may be detrimental for bilinguals' reading practices and thus for their learning as a whole. Emphasis on decoding words during oral reading deprives readers from the essence of reading as a social transaction. This deeply rooted practice of traditional classrooms that, in addition, use Spanish as the only language of instruction may cause readers to erroneously perceive reading as a mere task of pronouncing words correctly and to internalize the idea that Spanish has a higher status than Kichwa.

Along with Kichwa-Spanish discourses regarding reading comes the necessity to reflect on a modern intercultural education ideal. According to Moya (1995), the Kichwa heritage in the Southern Andes of Ecuador is highly oral, and therefore, the decoding of written words in a text cannot be a priority for Kichwa speakers (Moya, 1995), an aspect that decades of intercultural education policies have not contemplated in Kichwa-Spanish speaking environments. However, the fact that Ecuador is a highly diglossic country demands the use of written records for preserving the legacy of our ancestral languages, especially considering that indigenous populations that identify themselves as speakers of an ancestral language are gradually decreasing (Chisaguano, 2006). Therefore, meaningful reading becomes a necessity in both languages.

In this sense, intercultural bilingual classrooms in Ecuador require the incorporation of a curriculum encompassing what is essential to indigenous communities considering their Andean cosmovision, linguistic features and opportunities for social development. Then, an intercultural reading curriculum must provoke learners' interest in its content accompanied by deep reflections on the social and cultural meanings embedded in both Spanish and Kichwa texts. Reading practices in intercultural settings in the Southern Andes of Ecuador can no longer place greater emphasis on decoding words, depriving students from the beauty of reading as a social practice. It becomes essential to encourage teachers to break through traditional practices and expand students' potentials by means of meaningful reading, thoughtful dialogues in Kichwa and Spanish, retrospective analysis of miscues, reading strategies and retellings, because what Kichwa-Spanish readers understand after transacting with a text becomes a powerful pedagogical resource that must be analyzed to expand their zones of proximal development (Vygotsky, 1998).

6.2. Self-Reported Reading Strategies and L2 Miscue Production.

There was a close relationship between Kichwa-Spanish bilinguals' self-reported strategy of word decoding and the miscues they produced during their L2 oral reading. Most miscues were word substitutions that shared graphophonic similarities, and most of them were produced with no attempt of self-correction, suggesting that oral reading was considered a task that had to be done fast. As discussed in chapter V, the influence of self-reported strategies on L2 miscue production showed a correlation between graphophonic alignment and word substitutions—the higher the similarities between graphemes and sounds in a substitution, the higher the tendency to maintain that substitution. In sum, word decoding as a self-reported strategy that may have been

reinforced in the classroom played a significant role in miscue production at the graphophonic level, but is not a determinant of meaning construction itself.

At this point, a couple of reflections become essential. First, the fact that intercultural classrooms may be reinforcing the idea that reading involves the decoding of words at fast speed may cause readers not to self-correct miscues as they sound and look similar to the original word in the text; and second, readers seem to be consciously aware that fast decoding is what teachers expect during oral reading, then they do not consider uncorrected miscues a major concern. However, this does not necessarily imply that meaning construction during retellings rely upon miscues exclusively, but as discussed in the following sections, meaning construction involves sensing the text from a different syntactic and semantic perspective, still meaningful to the reader.

6.3. Syntactic and Semantic Patterns in Kichwa and Spanish Retellings

The syntactic and semantic patterns found in Kichwa and Spanish retellings foregrounded that bilingual readers' self-reported strategy of word decoding has been developed and internalized in their classroom, but it highly differed from what readers actually did to sense the text and construct its meaning—indeed it was a complex process highly marked by sociolinguistic factors and the functions of language.

Concerning the syntactic sphere, Kichwa and Spanish retellings showed a reciprocal influence on grammar. As vastly discussed in chapter V, due to the geographical proximity of both languages and the condition of being bilingual in the Southern Andes of Ecuador, bilinguals' retellings were highly marked by instances of cross-linguistic transfer. It was evidenced that the canonical SVO word order of the Spanish language was, in some cases, replaced by the SOV word order of the Kichwa language. The highly agglutinative nature of the Kichwa language, in addition, may have influenced readers' unique construction of the Spanish grammar, as readers omitted

reflexive pronouns and prepositions between Spanish verbs, morphemes that do not exist in the Kichwa language. On the other hand, the influence of Spanish on Kichwa has emphasized the linguistic dominance of Spanish through the incorporation of Spanish nouns and verbs into Kichwa retellings. These lexical incorporations into Kichwa retellings resonate with language shift—a phenomenon mainly connected to indigenous languages in which a gradual incorporation of the lexicon of the dominant language in society may lead minority languages to their extinction. Generally, the analysis of syntactic elements in both Kichwa and Spanish retellings has allowed a deeper understanding of the linguistic complexity of bilingual communities in which cross linguistic transfers appear to be commonly produced.

Regarding the semantic sphere, language as a powerful psychological tool that mediated between text genre and the construction of a parallel text showed that the condition of being bilingual in the Southern Andes of Ecuador implied a special approach to the interpretation of the written signs in an L2 narrative text and its reconstruction in two languages. The use of Kichwa led readers to incorporate cultural elements that were commonly mentioned in their communities and that represented every day concepts. For example, traditional skirts, large plains or *pampas* and guinea pigs appeared in Kichwa retellings and revealed that every day concepts spontaneously emerged as they retold the stories. From a Vygotskian perspective, every day concepts are unconsciously developed as they are the result of natural social and cultural encounters with family and friends, and thus they become the basis for the development of academic concepts in formal instruction settings.

Consequently, the fact that Spanish retellings were more likely to reflect the sense of the intentions in the original text is not surprising and has to do with two main factors. First, Kichwa-Spanish bilinguals are part of a pedagogical environment in which the use

of Spanish exceeds the use of Kichwa as a means of communication within and across the reading curriculum. Second, the use of Spanish as a means of communication in the classroom leads readers to use their voluntary attention and logical memory through Spanish—the dominant language in the classroom—and thus bilingual readers’ retellings of narratives are more accurate in their L2 (Lucero, 2018).

Another important aspect to discuss is that readers’ less precise reconstruction of the original text has to do with higher levels of inferential thinking in their L1. Indeed, in Kichwa retellings or parallel texts, readers used the main idea of the original stories and incorporated more inferences to their construction of the meaning of both narratives. This is congruent with Friesen and Frid’s (2021) proposition that when using their first language, bilinguals show higher levels of inferential thinking, relying upon their prior experience and knowledge.

Spanish retellings, on the other hand, were less likely to incorporate cultural elements from Kichwa readers’ communities. It did not mean, however, that Spanish retellings replicated the author’s original story. Rather, they emphasized intertextual and intercontextual connections among readers’ personal experiences and the narratives they have heard or read with more information from the original text. This demonstrated the complexity of meaning making for readers in this study and their ability to flow between these two worlds with ease, grace, curiosity, and a desire to learn, especially as RMA revealed their strengths to them.

6.4. Readers’ Perception of their Own L2 Reading Strategies and Miscues

Retrospective dialogues with Kichwa-Spanish bilinguals revalued themselves as readers of two languages in a diglossic society. As readers developed metalanguage about their reading strategies—predicting, inferring, sampling, correcting and rejecting—, they also internalized a new discourse about reading and miscues. Such discourse underscored

the relevance of the pedagogical environment to either weaken or expand readers' potentials, showing that teachers as mediators in the classroom play a significant role on learners' own perceptions of reading and their role as bilingual readers.

Furthermore, these dialogues allowed to corroborate that the creation of a parallel text during retellings was the result of the social statuses of both languages, readers' experiences as members of a culture, readers' knowledge of both languages and the characteristics of the text itself. All these reflections led readers to positive perceptions about their reading strategies and miscue production. By engaging readers in retrospective miscue analysis, two interrelated processes were identified as essential for shaping their discourses: mediation and metacognition. Mediation encouraged meaningful thinking about the social and cultural meanings embedded in the text, allowing readers to expand their zones of proximal development—the distance between their actual knowledge and their future knowledge. That is, mediation allowed a thoughtful analysis of reading strategies and modes of thinking during oral reading and retelling, and raised awareness about how readers sensed the text and how they constructed meaning. According to Gombert (1993), metacognitive experiences can be either unsatisfying or rewarding depending on how the reader perceives her cognitive process. In retrospective dialogues, the teacher or researcher becomes a mediator capable of revaluing readers' perceptions through thoughtful reflections about what learners actually do when they read. By doing this, readers change their negative discourses about their “mistakes” and start talking about miscues, which can be graphophonically, syntactically and semantically acceptable.

Consequently, revaluing reading as a transactional, constructive language and meaning making process is essential to create confident and motivated readers. An intercultural classroom in which teachers avoid the decoding of words as the ultimate goal of reading and allow learners to delve into the richness of texts as sources of

linguistic, social and cultural elements should be mandatory. Reading in any classroom, and specially in an intercultural bilingual setting, must consider readers' social situation of development as a determinant of the relationship between the reader and the text. Teachers, and consequently curricular planning, must regard L1 and L2 reading and the construction of meaning that comes with it as a complex process highly marked by readers' knowledge and expectations. This is what Vygotsky calls "perezhivanie"—the way readers emotionally perceive, understand and internalize social interactions (Mahn, 2012). After all, reading is a social transaction in which all readers bring their feelings, thoughts and emotions to the process.

In this study, retrospective miscue analysis has led me to important reflections about the ideal for an intercultural reading curriculum in the Southern Andes of Ecuador. There is a need to give a voice to readers; they have a lot of interesting things to say about their miscues and reading strategies. Therefore, retrospective miscue analysis becomes an alternative for curricular planning, since it is "a joyful path to understanding how reading works, assessing what readers do and what they understand about how reading work, and recognizing the types of mediation (instruction) that will best move them forward in their learning" (Meyer & Whitmore, 2011, p. 284).

Miscue analysis, in addition, can help teachers understand learners' levels of concept formation at different ages. Then, teachers can assess if the concepts readers use in their retellings are potential concepts—abstracted similarities among concrete experiences— or higher levels of generalization closer to abstract thinking. Knowing this type of information is pivotal in intercultural bilingual classrooms to select appropriate texts for expanding learners' zones of proximal development. In fact, "when teachers use culturally relevant bilingual books, they help their students reclaim their first language and culture as they develop high levels of bilingualism and biliteracy" (Freeman,

Freeman & Ebe, 2011, p. 225). In sum, retrospective miscue analysis with Kichwa-Spanish bilinguals in the Southern Andes of Ecuador has unveiled the need to become reflective advocates for thoughtful and contextualized reading instruction.

6.5. Conclusions

Meaning construction of L2 narratives is a complex process in which the condition of being bilingual in a diglossic environment plays a significant part. In this sense, the following conclusions can be drawn.

Traditional views about the purpose of reading must be considered detrimental, as they lead learners to assume that reading implies the decoding of words at fast speed. Consequently, self-reported decoding strategies are very likely to influence oral reading as readers try to decode words with the only purpose of fulfilling traditional teachers' expectations and demands. Then, word decoding leads readers to produce miscues that share high graphic and sound similarities. These miscues influence meaning construction but cannot be regarded as the determinant of readers' construction of a parallel text.

Indeed, the construction of a parallel text is highly influenced by readers' linguistic repertoires, previous knowledge and experiences, knowledge of text genre, social functions of language, intertextuality and intercontextuality. According to Flurkey and Goodman (2014), text genre plays a significant role in meaning construction due to the highly descriptive nature of narrative texts that allows readers to create fictional scenarios and situations that encompass their previous knowledge and social experiences. This triggers intertextual and intercontextual elements that arise in the reader's mind as meaning is constructed.

Kichwa-Spanish bilinguals can easily combine their knowledge of the grammars of both languages to construct morphosyntactic structures that combine two linguistic repertoires for meaningful communication in diglossic territories like Ecuador. For

example, bilinguals have a tendency to incorporate nouns and verbs from the dominant language (Spanish) into their first language (Kichwa), as the low status of “minority” languages in society has reduced their lexical expansion and growth. In addition, Kichwa-Spanish bilinguals have a great ability to combine the morphological and syntactic elements of their L1 and L2 to retell narrative texts, in which the canonical word order of the Kichwa language is highly marked. At this point, transitivity—the condition of verbs to be followed by direct objects—deserves close attention. According to Halliday (1993), transitivity develops at age 7 and highly depends on the linguistic environment of the child. Then, the SOV canonical word order (a direct object followed by a transitive verb) of the Kichwa language that appears in Spanish constructions, in which an SVO (a verb followed by a direct object) word order is expected, has to be regarded as the influence of a solid development of their first language through meaningful social interactions since early childhood.

Regarding retrospective dialogues, they should be incorporated in reading curricular planning as they are meaningful ways to unveil readers’ actual strategies and revalue themselves as readers of two languages. It is through the combination of mediation and metacognition that teachers or researchers can expand readers’ potentials by first understanding the cognitive processes that readers undergo as they read and retell a text. Bearing this in mind, it becomes imperative to transform the pedagogical culture embedded in intercultural bilingual classrooms in Ecuador through reflective advocates capable of giving a voice to their students to construct a reading curriculum in which “low” and “high” labels are taken away from languages.

Finally, further research on miscue analysis involving the reading of narrative and factual texts written in Kichwa must be conducted. This will provide meaningful

information for reading and learning in Kichwa, allowing researchers to contribute to the preservation of an ancestral language at risk of extinction.

APPENDICES

Appendix A. The Burke Reading Interview

Pseudonym _____ Age _____ Date _____ Sex _____

Occupation _____ Education Level _____ Interview Setting _____

1. When you're reading and you come to something you don't know, what do you do?

Do you ever do anything else?

2. Who is a good reader that you know?

3. What makes _____ a good reader?

4. Do you think _____ ever comes to something they don't know?

5. "Yes" When _____ does come to something she/he doesn't know, what do you think he/she does?

"No" Suppose _____ comes to something she/he doesn't know when reading. What would she/he do?

6. How would you help someone having difficulty reading?

7. What would a / your teacher do to help that person?

8. How did you learn to read?

9. What would you like to do better as a reader?

Do you think you are a good reader? Why?

Source: Goodman, Y., Watson, D., & Burke, C. (2005). *Reading miscue inventory: From evaluation to instruction* (pp. 273-274). New York: Richard C. Owen.

The Burke Reading Interview (Spanish Version)

Seudónimo _____ Edad _____ Fecha _____ Género _____

Ocupación _____ Nivel educativo _____ Escenario de la entrevista _____

1. Cuando usted está leyendo y hay algo que no sabe, ¿qué hace?
¿Alguna vez ha hecho algo diferente?
2. ¿Quién es un(a) buen(a) lector(a) que usted conoce?
3. ¿Qué es lo que hace a _____ un(a) buen(a) lector(a)?
4. ¿Cree usted que _____ alguna vez se ha encontrado con algo que no conoce?
5. Si es “sí,” cuando _____ encuentra algo que no sabe, ¿Qué cree usted que él/ella hace?
Si es “no,” supongamos que _____ encuentra algo que no sabe, ¿Qué cree usted que él/ella haría?
6. ¿Cómo ayudaría usted a alguien que tiene problemas para leer?
7. ¿Qué haría un profesor para ayudarle a esa persona?
8. ¿Cómo aprendió usted a leer?
9. ¿Qué le gustaría mejorar como lector(a)?
¿Cree que usted es un(a) buen(a) lector(a)? ¿Por qué?

Translated from: Goodman, Y., Watson, D., & Burke, C. (2005). *Reading miscue inventory: From evaluation to instruction* (pp. 273-274). New York: Richard C. Owen.
Translator: Sandra Cabrera-Moreno

Appendix B. Goodman's Taxonomy for Miscue Analysis: Miscue Marking as Done on the Typescript of a Text

1. Substitutions

A substitution refers to a word that replaces an expected response during oral reading. To indicate that a miscue belongs to this category, we write the observed response above the actual word in the text. Substitutions can be of four types: word substitutions, complex substitutions, reversals and bound-morpheme substitutions (Goodman, Watson & Burke, 2005; Moore & Gilles, 2005).

1.1. Word substitution

A word substitution occurs when a reader says one word for another. Consider the following example (Moore & Gilles, 2005, p. 21):

gentle
This was the start of a grand voyage.

1.2. Complex substitution

An observed response in which a reader replaces more than one word is known as a complex substitution. To indicate a miscue belongs to this category, we place a bracket above the words replaced. Consider the following example (Goodman, Watson & Burke, 2005, p. 65).

another thing
Kitten Jones would not have changed her white fur coat for anything.

1.3. Reversals

Reversals involve phonographic or lexical transpositions. The following marking is required to indicate this kind of miscue (Goodman, Watson and Burke, 2005, p. 65).

best two ways
... but the ^{best two ways} two best ones are the easiest to do.

1.4. Bound-morpheme substitution

A bound-morpheme substitution refers to the omission or insertion of a word element like a prefix or a suffix. We indicate a bound-morpheme insertion with a caret and a bound-morpheme omission with a circle (Goodman, Watson & Burke, 2005, p. 65).

ing
... and keep house
^
... heart beat(ing)

2. Omissions

An omission is a word, phrase or sentence that readers do not include as they read the text. We indicate an omission with a circle as seen in the example below (Moore & Gilles, 2005, p. 21).

These sounds are too high-
(pitched) for our ears.

3. Insertions

An insertion refers to an additional word or phrase that the reader includes in the text (Moore & Gilles, 2005, p. 21).

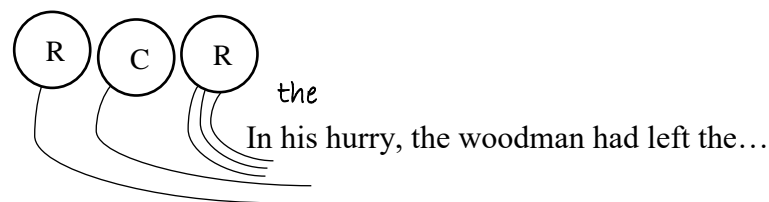
and
Bats make high beeping sounds
^

4. Repetitions

A repetition is the reading of a portion of the text that occurs more than once. A repetition is not a miscue in itself. Rather, it reflects the cognitive strategy the reader uses

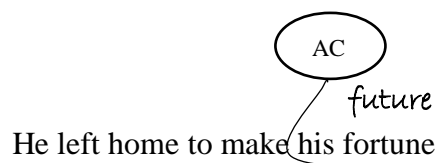
to reconstruct the meaning of the text. Goodman, Watson and Burke (2005) suggest four reading situations involving repetitions.

4.1. Repeating and correcting the miscue



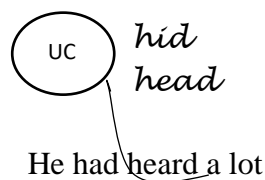
In this example, the reader repeats the word *in* three times, substitutes *the* for *his*, corrects the miscue and continues reading (p. 68).

4.2. Reading the correct word, abandoning the response and producing a miscue



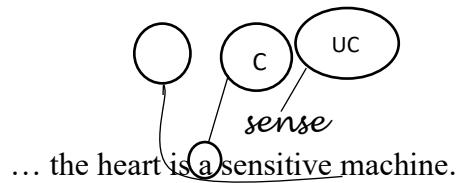
The example shows that the reader first says the correct word and then abandons it. The reader substitutes *his future* for *his fortune* (p. 68).

4.3. Repeating and attempting to correct the miscue without success



As seen in the example (p. 69), the reader first substitutes *head* for *heard*. Then, he rereads the text but his attempt to correct the miscue is unsuccessful. He produces another miscue.

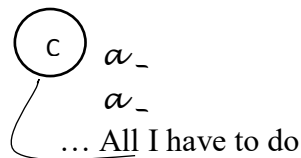
4.4. Repeating and triggering a series of miscues



In this example (p. 69), the reader first says *the heart is sense*. Then, he rereads the phrase *the heart is a sense machine* in which he corrects *a* without correcting his second miscue.

5. Partial attempts

A partial attempt refers to the unsuccessful completion of a word in oral reading, being this word only identified by means of rising intonation. To indicate this kind of miscue, we write the partial attempt followed by a dash (Goodman, Watson & Burke, 2005, p. 70).



6. Non-word substitutions

We indicate a non-word substitution with a dollar sign. The sign allows registering the reader's pronunciation of the non-existing word. Consider the following example (Goodman, Watson & Burke, 2005, p. 70).

\$liver
to your liver... (*Rhymes with diver*)

7. Dialect

We indicate the particular phonological, lexical or syntactic variations of a reader's dialect with a circled *d* above the word as seen in the following example (Goodman, Watson & Burke, 2005, p. 71).

headlights ^d

I switched off the headlamps of the car...

8. Misarticulations

To indicate a misarticulation, we write the reader's pronunciation above the word, followed by a circled *a* as seen below (Goodman, Watson & Burke, 2005, p. 71).

Spasghetti ^a

The spaghetti was delicious

9. Split syllables

Split syllables are not miscues but they reflect readers' pronunciation strategies (Goodman, Watson & Burke, 2005, p. 72).

You should try cut/ting wood!

10. Pauses

To indicate any pause for more than 5 seconds, an elongated letter "p" is used and the length of the pause is typically placed with the letter's closed loop as seen in the following example (Goodman, Watson & Burke, 2005, p. 72).


23 sec

As he put the cream into the churn ...

11. Complex miscues

A complex miscue refers to an observed response (i.e., phrase, clause or sentence) that differs from the expected response, and which word-to-word relations are not

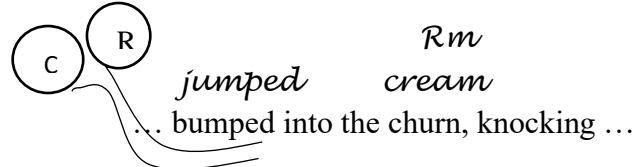
determined easily. Consider the following example (Goodman, Watson & Burke, 2005, p. 73).

and
... make some butter  As he put ...

12. Repeated miscues


Repeated miscues refer to the constant substitution or omission of a word in the text (Goodman, Watson & Burke, 2005, p. 75).

cream
... nose in the churn ... "Get ...


jumped *Rm*
... bumped into the churn, knocking ...
cream

13. Multiple miscues

Multiple miscues refer to the production of two or more miscues for a single word (Goodman, Watson & Burke, 2005, p. 75).

 *shadow*
shout
... The cream splashed all over the room.

Appendix C. In-Depth Procedure Coding Forms

PSEUDONYM: Tamia AGE: 12			1 SYNTACTIC ACCEPTABILITY	2 SEMANTIC ACCEPTABILITY	3 MEANING CHANGE	4 CORRECTION	See 2, 3, 4			See 1, 2, 4			5			6				
RESEARCHER: Sandra Cabrera-Moreno							MEANING CONSTRUCTION			GRAMMATICAL RELATIONS			GRAPHIC SIMILARITY			SOUND SIMILARITY				
BOOK: Verde Fue mi Selva by Edna Iturralde SECTION: Felicidad (pp. 35-41)			LINE No.	NO LOSS	LOSS	PARTIAL LOSS	WEAKNESS	OVERCORRECTION	PARTIAL STRENGTH	STRENGTH	H	S	N	H	S	N				
Line N°	READER	TEXT																		
006	---	.	Y	P	--	N				✓		X			==	==	==	==	==	==
006	.	,	Y	Y	P	N		✓			X				==	==	==	==	==	==
008	cuchillos knives	chillidos screeches	Y	N	==	N				✓		X			X					X

021	ahora now	abajo down	Y	N	---	N			✓		X				X				X
032	quedarse (sentados) stay	caer (sentados) sit down	Y	Y	N	N	✓			X						X			X
036	en in	--- ---	Y	N	---	N			✓		X			--	--	--	--	--	--
038	Makistán	Maskián	Y	N	---	N			✓		X			X				X	
051	el the	--- ---	Y	P	---	N		✓			X			--	--	--	--	--	--
052	grios non-word	grillos crickets	Y	N	---	N			✓		X			X				X	
054	cadena bound with chains	cadencioso rhythmic	Y	N	---	N			✓		X			X				X	
077	llamada called	llama flame	Y	N	---	N			✓		X			X				X	
104	duro hard (masculine)	dura hard (feminine)	Y	P	---	N		✓			X			X				X	
112	aprovechó took advantage (self- correction)	aseguró assured	Y	N	---	Y	✓			X						X			X
a. TOTAL MISCUES <u>13</u> b. TOTAL WORDS <u>837</u> $a \div b \times 100 = \text{MPHW}$ <u>1.55</u>			COLUMN TOTAL				2	3	8	3	10	0	0	6	1	2	5	2	2
			PATTERN TOTAL				13			13			9			9			

	PERCENTAGE	15%	23%	62%	23%	77%	0%	0%	67%	11%	22%	56%	22%	22%
--	-------------------	-----	-----	-----	-----	-----	----	----	-----	-----	-----	-----	-----	-----

Appendix C. In-Depth Procedure Coding Form

PSEUDONYM: Tamia AGE: 12			1	2	3	4	See 2, 3, 4			See 1, 2, 4			5			6			
RESEARCHER: Sandra Cabrera-Moreno			SYNTACTIC ACCEPTABILITY	SEMANTIC ACCEPTABILITY	MEANING CHANGE	CORRECTION	MEANING CONSTRUCTION			GRAMMATICAL RELATIONS			GRAPHIC SIMILARITY			SOUND SIMILARITY			
BOOK: Verde Fue mi Selva by Edna Iturralde SECTION: El Río (pp. 91-97)							NO LOSS			LOSS PARTIAL LOSS			WEAKNESS OVERCORRECTION PARTIAL STRENGTH STRENGTH			H	S	N	H
Line N°	READER	TEXT																	
001	un a	su their	Y	Y	N	N	✓				X				X				X
009	Tranquila quiet	Tanguila last name	Y	N	--	N			✓		X			X				X	
009	estar	Ester	N	N	--	Y	✓			X				X				X	

	to be	a name (self- correction)																	
035	querían wanted (plural)	quería wanted (singular)	Y	P	---	N		✓		X			X			X			
037	odidas non-word	odiadas hated	Y	N	---	N		✓				X	X					X	
041	debido due to	debió it should've been (self- correction)	N	N	---	Y	✓		X				X					X	
042	---	la	Y	P	---	N		✓		X			--	--	--	--	--	--	--
046	Luciana / Lucianata female name	Lucianta	Y	N	---	N		✓		X			X			X			
047	ese that	este this	Y	P	---	N		✓		X				X				X	
059	les to them (either feminine or masculine pronouns)	las to them (feminine pronouns)	Y	Y	N	N	✓		X				X					X	
060	y and	que that	N	N	---	N		✓			X				X				X
066	contestadas answered	consternadas (self- correction) in dismay	Y	N	---	Y	✓		X				X			X			

075	un a	el the (masculine article)	P	P	---	N		✓					X			X			X
076	---	más more	Y	Y	P	N		✓		X				--	--	--	--	--	--
092	ensordenededor non word	ensordecedor deafening	N	N	---	N			✓				X	X				X	
103	estaban they were (giving)	se estaban were being (given)	Y	Y	N	N	✓			X				--	--	--	--	--	--
106	una a (feminine article)	en in	Y	P	---	N			✓		X								
108	y and	se reflexive pronoun	P	N	---	N			✓				X	--	--	--	--	--	--
a. TOTAL MISCUES <u>18</u> b. TOTAL WORDS <u>902</u> $a \div b \times 100 = \text{MPHW } 1.99$			COLUMN TOTAL PATTERN TOTAL PERCENTAGE				6	3	9	6	7	1	4	9	2	2	6	4	3
							18			18			13			13			
							33%	17%	50%	33%	39%	6%	22%	70%	15%	15%	46%	31%	23%

Appendix C. In-Depth Procedure Coding Form

PSEUDONYM: Sisa AGE: 13			1	2	3	4	See 2, 3, 4			See 1, 2, 4			5			6			
RESEARCHER: Sandra Cabrera-Moreno			SYNTACTIC ACCEPTABILITY	SEMANTIC ACCEPTABILITY	MEANING CHANGE	CORRECTION	MEANING CONSTRUCTION			GRAMMATICAL RELATIONS			GRAPHIC SIMILARITY			SOUND SIMILARITY			
BOOK: Verde Fue mi Selva by Edna Iturralde SECTION: Felicidad (pp. 35-41)							LOSS PARTIAL LOSS NO LOSS			WEAKNESS OVERCORRECTION PARTIAL STRENGTH STRENGTH			H S N			H S N			
Line N°	READER	TEXT																	
002	la the (feminine article)	el the (masculine article)	N	N	---	N				✓				X			X		X
003	achur non-word	achuar	N	N	---	N				✓				X	X			X	

		Achuar (a member of the Achuar nationality in the Ecuadorian Amazon Region)																	
003	color color	calor heat	Y	P	---	N		✓		X			X			X			
004	su its	sus their	P	P	---	N		✓				X	X			X			
004	cuerpo body	cuerpos bodies	P	P	---	N		✓				X	X			X			
009	contentaban pleased	contaban told	P	N	---	N		✓				X		X			X		
011	manos hands	monos monkeys	N	N	---	N		✓				X	X				X		
018	el the (masculine article)	la (feminine article)	N	N	---	Y	✓		X					X					X
022	mandaron sent	nadaron swam	Y	N	---	N		✓		X			X			X			
020	Rum a name created by the reader	Ramu a name	Y	N	---	N		✓		X				X			X		
024	sería would be	reía laughed	Y	N	---	Y	✓		X					X		X			
025	trago / trajo swallow/ brought	tragó swallowed	Y	N	---	N		✓		X			X			X			

030	brazos arms	cabezas heads	Y	P	---	N		✓		X					X			X
032	y and	que that	Y	Y	N	N	✓		X				--	--	--	--	--	--
033	seguido to be followed or chased	sugerido suggested	N	N	---	N		✓				X	X				X	
034	expediciando non-word	expedición expedition	N	N	---	N		✓				X		X			X	
042	caurioso non-word	curioso curious	N	N	---	N		✓				X	X				X	
045	contestó answered	canasta basket	P	N	---	N		✓				X		X				X
045	que that	se reflexive pronoun	P	N	---	N		✓				X			X			X
047	otra another (feminine)	otro another (masculine)	N	N	---	N		✓				X	X				X	
048	volvía turning	volvió turning	Y	Y	N	N	✓		X					X			X	
055	aunque although	Antún a boy's name	P	P	---	N		✓				X		X			X	
059	Ruth a girl's name	Ramu a boy's name	Y	P	---	N		✓		X					X			X
060	un a	su his	Y	Y	P	N		✓	X					X				X
062	ramo bouquet	remo paddle	Y	N	---	N		✓		X			X				X	
067	caminaba	caminaban	Y	P	---	N		✓		X			X				X	

	walked (third person singular)	walked (third person plural)																	
068	utilizaba used (third person singular)	utilizaban used (third person plural)	Y	P	---	N			✓		X			X			X		
069	líneas lines	lianas a type of climbing vine in the Amazon forest of Ecuador	Y	N	---	N			✓		X			X				X	
073	zapatos shoes	sapatar a type of seed	N	N	--	Y	✓			X				X				X	
084	---	.	Y	P	---	N			✓		X			--	--	--	--	--	--
085	a través through	a ver to see	Y	P	---	N			✓		X			X				X	
095	relamentándose regretting	relamiéndose licking	Y	N	---	N			✓				X	X				X	
106	contaban were telling	cantaban were singing	Y	P	---	N			✓		X			X				X	
113	achur non-word	achuar Achuar (a member of the Achuar nationality in the Ecuadorian Amazon Region)	Y	N	---	N			✓				X	X				X	
116	melencólico non-word	melancólico nostalgic	Y	N	---	N			✓				X	X				X	

117	siguieron continued (past tense of a verb for the third person plural)	siguió continued (past tense of a verb for the third person singular)	P	P	---	N			✓				X		X			X	
a. TOTAL MISCUES <u>36</u> b. TOTAL WORDS <u>837</u> a ÷ b X 100 = MPHW <u>4.30</u>			COLUMN TOTAL				5	3	28	7	12	0	17	16	14	4	15	12	7
							36			36			34			34			
							14%	8%	78%	20%	33%	0%	47%	47%	41%	12%	44%	35%	21%
			PATTERN TOTAL				PERCENTAGE												

Appendix C. In-Depth Procedure Coding Form

PSEUDONYM: Sisa AGE: 13			1	2	3	4	See 2, 3, 4			See 1, 2, 4			5			6		
RESEARCHER: Sandra Cabrera-Moreno			SYNTACTIC ACCEPTABILITY	SEMANTIC ACCEPTABILITY	MEANING CHANGE	CORRECTION	MEANING CONSTRUCTION			GRAMMATICAL RELATIONS			GRAPHIC SIMILARITY			SOUND SIMILARITY		
BOOK: Verde Fue mi Selva by Edna Iturralde SECTION: El Río (pp. 91-97)							LOSS PARTIAL LOSS NO LOSS			WEAKNESS OVERCORRECTION PARTIAL STRENGTH STRENGTH			H	S	N	H	S	N
Line N°	READER	TEXT																
001	en in	es is	P	P	---	N			✓				X		X			X
003	plena full	pelea fight	N	N	--	N			✓				X		X			X
004	regatos	regatas	N	N	---	N			✓				X	X			X	

	non-word	competitions																	
006	regresar to come back	reglas rules	N	N	---	N			✓				X		X				X
007	sobre la above the	saber be able to	P	N	---	N			✓				X		X				X
009	tángüila non-word	Tanguila last name	Y	N	---	N			✓		X			X			X		
010	Amozania non-word	Amazonía Amazon Region	N	N	---	N			✓				X	X				X	
013	cerca nearby	cercano closest	P	P	---	N		✓					X						
013	comunidad community	comuna commune	Y	Y	N	N	✓			X					X			X	
020	ganárselas to defeat them (female indirect object)	ganarles to defeat them (either female or male indirect object)	Y	P	---	N			✓		X				X			X	
021	personas people	pesadas heavy	Y	N	---	N			✓		X				X			X	
027	---	de of	Y	N	---	N			✓		X			--	--	--	--	--	--
027	---	las the (feminine article)	Y	N	---	N			✓		X			--	--	--	--	--	--
027	regresa come back (third person singular)	regatas competition	Y	N	---	N			✓		X				X			X	

029	---	se reflexive pronoun	Y	P	---	N			✓		X			--	--	--	--	--	--
037	contrientas non-word	contrincantes rivals	N	N	---	N			✓			X		X			X		
042	---	de of	N	N	---	N			✓			X	--	--	--	--	--	--	--
046	la the (singular feminine article)	las the (plural feminine article)	P	P	---	N			✓			X	X			X			
046	comunidad community	comuna community	P	P	---	N			✓			X		X			X		
048	prepararon prepared	separaron separated	P	N	---	N			✓			X	X			X			
050	platón Plato	pantalón pants	N	N	---	N			✓			X		X			X		
053	llevando putting	llevándose putting	Y	Y	N	N	✓			X			X			X			
060	de of	que that	Y	N	---	N			✓		X				X				X
061	igualmente similarly	igual same	Y	Y	N	N	✓			X				X			X		
061	---	manera way	Y	Y	N	N	✓			X				--	--	--	--	--	--
063	rematando doing an effort at the end	remando paddling	Y	N	---	N			✓		X			X			X		
065	convieron non-word	movieron shook	N	N	---	N			✓			X		X			X		

078	podieron could do something	podieran would do something	Y	P	---	N			✓		X			X			X		
086	hubieron there was	subieron got on	P	N	---	N			✓				X		X			X	
087	habían were	había was	N	N	---	N			✓				X	X			X		
089	agarrándose holding (themselves)	agárrense hold on!	Y	P	---	N			✓		X				X			X	
089	en in	a to	Y	P	---	N			✓		X					X			X
095	su their	---	Y	Y	N	N	✓			X				--	--	--	--	--	--
097	gritaban used to shout	gritaron shouted	Y	P	---	Y	✓			X					X			X	
101	tubos tubes	(dando) tumbos tumbling	N	N	---	N			✓				X	X				X	
116	decalos/ decalzos non-word / non-word	descalzos barefoot	N	N	---	N			✓				X	X				X	
a. TOTAL MISCUES <u>36</u> b. TOTAL WORDS <u>902</u> a ÷ b X 100 = MPH <u>3.99</u>			COLUMN TOTAL				6	1	29	6	12	0	18	10	17	2	7	18	4
			PATTERN TOTAL				36			36			29			29			
			PERCENTAGE				17%	3%	80%	17%	33%	0%	50%	34%	59%	7%	24%	62%	14%

Appendix C. In-Depth Procedure Coding Form

PSEUDONYM: Ana AGE: 14			1	2	3	4	See 2, 3, 4			See 1, 2, 4			5			6		
RESEARCHER: Sandra Cabrera-Moreno			SYNTACTIC ACCEPTABILITY	SEMANTIC ACCEPTABILITY	MEANING CHANGE	CORRECTION	MEANING CONSTRUCTION			GRAMMATICAL RELATIONS			GRAPHIC SIMILARITY			SOUND SIMILARITY		
BOOK: Verde Fue mi Selva by Edna Iturralde SECTION: Felicidad (pp. 35-41)							LOSS PARTIAL LOSS NO LOSS			WEAKNESS OVERCORRECTION PARTIAL STRENGTH STRENGTH			H S N			H S N		
Line N°	READER	TEXT																
002	en in	con with	Y	Y	N	N	✓			X						X		X
002	tierra soil	tarde evening	P	P	--	N			✓			X			X			X
008	las	los	P	P	--	Y	✓			X				X		X		

	the (plural feminine article)	the (plural masculine article)																	
012	de of	la the	N	N	---	N			✓				X			X			X
014	nieve snow	nivel level	P	P	---	N			✓				X	X					X
020	subán get on	suban get on	Y	Y	N	N	✓				X			X				X	
022	---	otros other	P	P	---	N			✓		X			--	--	--	--	--	--
023	prendió lit	pretendió tried	Y	N	---	N			✓				X		X				X
029	embargación embargo	embarcación ship	Y	N	---	N			✓		X			X					X
040	sonaramente non-word	sonoramente sonorously	N	N	---	Y	✓			X				X					X
050	luciérnagos non-word	luciérnagas fireflies	N	N	---	N			✓				X	X					X
052	cigarros cigarettes	cigarras cicadas	Y	N	---	N			✓				X	X					X
054	cadecioso /cade non-word	cadencioso rhythmic	Y	N	---	Y	✓			X				X					X
056	.	---	P	P	---	N			✓				X	--	--	--	--	--	--
057	---	.	N	N	---	N			✓				X	--	--	--	--	--	--
057	remó. paddled.	---	P	P	---	N			✓				X	--	--	--	--	--	--

060	alternas alternate	alertas alertly	N	N	---	N			✓				X		X			X	
064	embarga embarcación ship	embarcación ship	N	N	---	Y	✓			X				X				X	
067	la the (feminine article)	---	P	P	---	N			✓				X	--	--	--	--	--	--
071	fósforo match	fósforos matches	P	P	---	N			✓				X	X			X		
075	irre-irre-gu-la- ri-da-des irre-gu-la-ri- ties	irregularidades irregularities	Y	Y	N	N	✓			X				--	--	--	--	--	--
096	cercano nearby	cerca near	Y	P	---	N			✓		X				X			X	
097	estás is/are	éstas these	Y	P	---	N			✓		X			X				X	
097	empezando starting	empezaron started	Y	P	---	N			✓		X				X			X	
100	llevarse take something	llevarse take something (for a feminine object)	P	P	---	N			✓				X		X			X	
101	deleite delighted (past tense for the first person singular)	deleite delight (noun)	N	N	---	N			✓				X	X				X	

104	durante during	dura hard	N	N	---	N			✓				X		X			X	
106	estaban they were	cantaban they were singing	P	N	---	N			✓				X						
117	con with	---	P	P	---	N			✓				X	--	--	--	--	--	--
a. TOTAL MISCUES <u>29</u> b. TOTAL WORDS <u>837</u> $a \div b \times 100 = \text{MPHW}$ <u>3.46</u>			COLUMN TOTAL PATTERN TOTAL PERCENTAGE				7	0	22	6	6	0	17	12	6	3	9	9	3
							29			29			21			21			
							24%	0%	76%	21%	21%	0%	58%	57%	29%	14%	43%	43%	14%

Appendix C. In-Depth Procedure Coding Form

PSEUDONYM: Ana AGE: 14			1	2	3	4	See 2, 3, 4			See 1, 2, 4			5			6		
RESEARCHER: Sandra Cabrera-Moreno			SYNTACTIC ACCEPTABILITY	SEMANTIC ACCEPTABILITY	MEANING CHANGE	CORRECTION	MEANING CONSTRUCTION			GRAMMATICAL RELATIONS			GRAPHIC SIMILARITY			SOUND SIMILARITY		
BOOK: Verde Fue mi Selva by Edna Iturralde SECTION: El Río (pp. 91-97)							LOSS PARTIAL LOSS NO LOSS			WEAKNESS OVERCORRECTION PARTIAL STRENGTH STRENGTH			H S N			H S N		
Line N°	READER	TEXT																
001	un a	su their	Y	P	--	N			✓		X				X			X
007	un a (masculine article)	una a (feminine article)	N	N	--	N			✓				X		X			X

007	ruedo arena (masculine noun in Spanish)	rueda wheel (feminine article in Spanish)	N	N	---	N			✓				X	X			X		
009	Tayla non-word	Tanguila a last name	Y	N	---	N			✓				X		X			X	
012	llevan they are doing something	llevaban they were doing something for a while	P	P	---	N			✓				X		X			X	
019	quedar�a will be	quedar�a would be	Y	P	---	N			✓		X			X			X		
020	esa that (singular feminine article)	esas those (plural feminine article)	P	P	---	N			✓				X	X			X		
021	pesada unfriendly (singular feminine adjective)	pesadas unfriendly (plural feminine adjective)	P	P	---	N			✓				X	X			X		
021	---	las the (plural feminine article)	N	N	---	N			✓				X	--	--	--	--	--	--
028	llegaba used to arrive	lleg�o arrived	Y	P	---	N			✓		X				X			X	

030	parecía seemed	pareció seemed	Y	Y	N	N	✓			X				X			X		
035	querían wanted (third person plural)	quería wanted (third person singular)	P	P	---	N			✓				X	X			X		
035	las the (plural feminine article)	---	N	N	---	N			✓				X	--	--	--	--	--	--
035	clases kinds	clase kind	N	N	---	N			✓				X	X			X		
041	debido due to	debió it should	N	N	---	N			✓				X		X			X	
044	llamado named	llamó called	P	P	---	N			✓				X		X			X	
051	en in	con with	P	P	---	N			✓				X			X			X
056	para to (do something); for (doing something)	por for (doing something)	Y	Y	N	N	✓			X					X			X	
064	una a (feminine article)	uno a (masculine article)	N	N	---	N			✓				X	X			X		
064	las the (plural feminine article)	los the (plural masculine article)	N	N	---	N			✓				X	X				X	

064	partes parts	parches patches	P	N	---	N			✓						X			X		
069	---	se (personal pronoun that refers to a previous direct or indirect object mentioned in the sentence)	N	N	---	N			✓				X	--	--	--	--	--	--	
082	para towards	por by	P	P	---	N			✓				X		X			X		
087	---	se (personal pronoun referring to the subject in the sentence)	N	N	---	N			✓				X	--	--	--	--	--	--	
087	habían they had (done something)	había it had (done something)	N	N	---	N			✓				X	X			X			
101	para towards	por through	P	P	---	N			✓				X		X			X		
111	nosotros we (masculine)	nosotras we (feminine)	Y	Y	---	N	✓			X				X			X			
a. TOTAL MISCUES <u>27</u>			COLUMN				4	0	24	5	3	0	20	11	12	0	10	11	2	
b. TOTAL WORDS <u>902</u>			TOTAL																	

$a \div b \times 100 = \text{MPHW } \underline{2.99}$	PATTERN TOTAL	28			28				23			23		
		14%	0%	86%	18%	11%	0%	71%	48%	52%	0%	44%	48%	8%
	PERCENTAGE													

Appendix C. In-Depth Procedure Coding Form

PSEUDONYM: José AGE: 12			1	2	3	4	See 2, 3, 4			See 1, 2, 4			5			6		
RESEARCHER: Sandra Cabrera-Moreno			SYNTACTIC ACCEPTABILITY	SEMANTIC ACCEPTABILITY	MEANING CHANGE	CORRECTION	MEANING CONSTRUCTION			GRAMMATICAL RELATIONS			GRAPHIC SIMILARITY			SOUND SIMILARITY		
BOOK: Verde Fue mi Selva by Edna Iturralde SECTION: El Río (pp. 91-97)							LOSS PARTIAL LOSS NO LOSS			WEAKNESS OVERCORRECTION PARTIAL STRENGTH STRENGTH			H S N			H S N		
Line N°	READER	TEXT																
001	un a	su their	Y	Y	N	N	✓				X				X			X
013	cerca near	cercano closest	P	P	--	N		✓				X	X			X		
013	comunidad	comuna	Y	Y	N	N	✓			X				X			X	

	community	commune																	
027	---	de of	Y	N	---	N			✓		X			--	--	--	--	--	--
027	---	las the (plural feminine article)	Y	N	---	N			✓		X			--	--	--	--	--	--
035	querían wanted (third person plural)	quería wanted (third person singular)	Y	P	---	N			✓		X		X			X			
037	contrarias contrary	contrincantes rivals	Y	P	---	N			✓		X			X		X			
048	prepararon they prepared	separaron they separated from	Y	N	---	N			✓			X	X			X			
061	igualmente similarly	igual same	Y	Y	N	N	✓			X				X			X		
063	rematando doing a last effort	remando paddling	Y	N	---	N			✓		X			X			X		
069	---	se (personal pronoun referring to the subject in the sentence)	N	N	---	N			✓			X	--	--	--	--	--	--	--
073	torpe clumsy	golpe blow	Y	N	---	Y	✓			X				X			X		
087	---	se	N	N	---	N			✓			X	--	--	--	--	--	--	--

		(personal pronoun referring to the subject in the sentence)																	
092	río river	ruido sound	Y	N	---	Y	✓			X					X			X	
103	primeros first	premios rewards	N	N	---	Y	✓			X					X			X	
111	nosotros we (masculine)	nosotras we (feminine)	Y	Y	N	Y	✓					X		X			X		
a. TOTAL MISCUES <u>16</u>			COLUMN TOTAL				7	3	6	5	6	1	4	4	8	0	5	6	1
b. TOTAL WORDS <u>902</u>			PATTERN TOTAL				16			16				12			12		
a ÷ b X 100 = MPHW <u>1.77</u>			PERCENTAGE				44%	19%	37%	31%	38%	6%	25%	33%	67%	0%	42%	50%	8%

009	constaban included	contaban told	P	N	---	N			X				X		X			X	
018	el the (masculine article)	la the (feminine article)	N	N	---	Y	X			X					X				X
021	ahora	abajo	Y	N	---	N			X		X				X				X
020	Rumi A Kichwa word meaning stone	Ramu A name	Y	N	---	N			X		X				X				X
029	embargación embargo	embarcación ship	Y	N	---	N			X		X			X				X	
040	sonamente non-word	sonoramente sonorously	Y	N	---	Y	X			X				X				X	
052	cigarros cigarettes	cigarras cicadas	P	N	---	N			X				X	X				X	
055	por through	pero but	N	N	---	Y	X			X					X				X
065	lleva carries	llevaba was carrying	Y	P	---	N			X		X				X				X
067	que that	---	N	N	---	Y	X			X				--	--	--	--	--	--
067	caminaba walked (third person singular)	caminaban walked (third person plural)	Y	P	---	N			X		X			X				X	
073	zapatear to stamp	sapatar a type of seed	N	N	---	Y	X			X					X				X
082	---	un a	Y	Y	N	N	X			X				--	--	--	--	--	--
085	a través through	veamos Let's see	Y	P	---	N			X		X				X				X

086	impacientemente impatiently	impaciente impatient	Y	Y	N	N	X				X				X			X	
092	¿Hormigas? Ants?	¡Hormigas! Ants!	P	P	---	N				X				X	X			X	
096	cercano nearly	cerca near	Y	P	---	N				X		X				X			X
097	estás is/are	éstas these	Y	P	---	N				X		X			X			X	
097	empezando starting	empezaron started	Y	P	---	N				X		X				X			X
104	durante during	dura hard	N	N	...	N				X				X		X			X
106	es/tre/pi/to/samente loudly and noisely	estrepitosamente loudly and noisely	Y	Y	N	N	X				X				--	--	--	--	--
112	atesoró treasured	aseguró assured	Y	N	---	Y	X				X					X			X
113	achir Non-word	achuar Achuar (a member of the Achuar nationality in the Ecuadorian Amazon Region).	Y	N	---	N				X				X	X			X	
117	siguieron continued (third person plural)	siguiò continued (third person singular)	P	P	---	N				X				X		X			X

a. TOTAL MISCUES <u>26</u> b. TOTAL WORDS <u>902</u> $a \div b \times 100 = \text{MPHW}$ <u>2.88</u>	COLUMN TOTAL	9	1	16	9	10	0	7	9	13	1	8	12	3
	TOTAL	26			26				23			23		
	PATTERN PERCENTAGE	35%	4%	61%	35%	38%	0%	27%	39%	57%	4%	35%	52%	13%

Appendix C. In-Depth Procedure Coding Form

PSEUDONYM: Raúl AGE: 13			1	2	3	4	See 2, 3, 4			See 1, 2, 4			5			6			
RESEARCHER: Sandra Cabrera-Moreno			SYNTACTIC ACCEPTABILITY	SEMANTIC ACCEPTABILITY	MEANING CHANGE	CORRECTION	MEANING CONSTRUCTION			GRAMMATICAL RELATIONS			GRAPHIC SIMILARITY			SOUND SIMILARITY			
BOOK: Verde Fue mi Selva by Edna Iturralde SECTION: Felicidad (pp. 35-41)							LOSS PARTIAL LOSS NO LOSS			WEAKNESS OVERCORRECTION PARTIAL STRENGTH STRENGTH			H S N			H S N			
Line N°	READER	TEXT																	
003	matagi non-word	mitigar mitigate	N	N	--	N			✓				X		X				X
003	color color	calor heat	N	N	--	N			✓				X	X				X	
008	el	---	N	N	--	N			✓				X	--	--	--	--	--	--

	the (singular masculine article)																		
008	tulcanes Tulcán (a name of city in Ecuador)	tucanes toucans	N	N	---	N			✓				X	X			X		
009	desestemplados non-word	destemplados sharp and noisy	N	N	---	N			✓				X	X			X		
012	hacer to do	haber to have (done something)	N	N	---	Y	✓			X				--	--	--	--	--	--
014	tres three	te- te-	N	N	---	Y	✓			X					X			X	
020	---	vamos let's go	P	P	---	N			✓				X	--	--	--	--	--	--
020	arriba up (the river)	abajo down (the river)	P	N	---	Y	✓			X					X				X
021	---	a to	P	P	---	N			✓				X	--	--	--	--	--	--
021	su his (possessive adjective for a singular noun)	sus his (possessive adjective for a plural noun)	P	P	---	Y	✓			X				X			X		
021	amigo friend	amigos friends	P	P	---	N	✓			X				X			X		
024	Samu	Ramu	N	N	---	N			✓				X	X			X		

	a name	a name																	
024	se showing a reflexive action	---	Y	Y	N	N	✓			X				--	--	--	--	--	--
025	eso that	no he didn't	N	N	---	Y	✓		X					--	--	--	--	--	--
026	reír smile	reírse smiling	Y	Y	N	Y	✓				X		X			X			
033	Atún Tuna fish	Antún A name	N	N	---	N		✓				X	X			X			
040	sonora sonorous	sonoramente sonorously	N	N	---	Y	✓		X					X			X		
043	descubriría would discover	descubrí discovered	P	P	---	N		✓				X	X			X			
055	---	,	N	N	---	N		✓				X	--	--	--	--	--	--	--
055	por through	pero but	N	N	---	Y	✓		X					X			X		
055	el the	al at	N	N	---	Y	✓		X					X			X		
057	---	en in	N	N	---	N		✓				X	--	--	--	--	--	--	--
059	donde where	dándose (cuenta) realizing	N	N	---	Y	✓		X					X					X
061	a to	---	P	P	---	N		✓				X	--	--	--	--	--	--	--
065	lleva carries	llevaba was carrying	Y	P	---	N		✓		X				X			X		
073	piedra stone	pepita little seed	Y	N	---	Y	✓		X					X					X

074	alumbraba lit	alumbra lights	P	P	---	N			✓				X	X			X		
076	las the (plural feminine article)	la the (singular feminine article)	N	N	---	Y	✓			X				X			X		
092	¿Hormigas? Ants?	¡Hormigas! Ants!	P	P	---	N			✓				X	X			X		
a. TOTAL MISCUES <u>30</u> b. TOTAL WORDS <u>837</u> $a \div b \times 100 = \text{MPHW}$ <u>3.58</u>			COLUMN TOTAL PATTERN TOTAL PERCENTAGE				14	0	16	12	2	1	15	12	9	0	12	5	4
							30			30			21			21			
							47%	0%	53%	40%	7%	3%	50%	57%	43%	0%	57%	24%	19%

Appendix C. In-Depth Procedure Coding Form

PSEUDONYM: Raúl AGE: 13			1	2	3	4	See 2, 3, 4			See 1, 2, 4			5			6		
RESEARCHER: Sandra Cabrera-Moreno							MEANING CONSTRUCTION			LOSS PARTIAL LOSS NO LOSS			GRAMMATICAL RELATIONS			GRAPHIC SIMILARITY		
BOOK: Verde Fue mi Selva by Edna Iturralde SECTION: El Río (pp. 91-97)			SYNTACTIC ACCEPTABILITY	SEMANTIC ACCEPTABILITY	MEANING CHANGE	CORRECTION				WEAKNESS OVERCORRECTION PARTIAL STRENGTH STRENGTH			H S N			H S N		
LINE No.																		
Line N°	READER	TEXT																
005	quiere wish/can (present tense)	quiera wish/can (used as a conditional)	P	P	---	Y	✓			X				X			X	

009	3-second pause	Tanguila	Y	Y	N	Y	✓			X				--	--	--	--	--	--
011	creían they thought	carecían they didn't have	P	P	---	N			✓				X		X			X	
011	que that	de of	P	P	---	N			✓				X			X			X
011	era was	---	P	P	---	N			✓				X	--	--	--	--	--	--
020	ganar to win; to defeat	ganarles to defeat	P	P	---	N			✓				X		X			X	
021	del from	de of	P	N	---	N			✓				X	X				X	
021	---	las the (plural feminine article)	P	N	---	N			✓				X	--	--	--	--	--	--
027	río river	tío uncle	N	N	---	Y	✓			X				X				X	
030	---	a to (use to indicate a subject in the sentence)	P	P	---	N			✓				X	--	--	--	--	--	--
034	éste this	Ester a feminine name	N	N	---	Y	✓			X				X				X	
035	la	---	P	P	---	Y	✓			X				--	--	--	--	--	--

	the (singular feminine article)																		
040	curiosamente curiously	curiosa curious	Y	Y	N	N	✓			X				X			X		
041	Debido de ser due to being due to	debió should have been	N	N	---	Y	✓			X				X			X		
043	el the	ese that	N	N	---	N			✓				X		X				X
043	llamado named	llamó called (verb in the past)	N	N	---	Y	✓			X				X			X		
047	ir go	venir come	Y	P	---	Y	✓			X					X				X
049	mucho a lot	muchacho young man	N	N	---	Y	✓			X				X			X		
056	de taco cue ball	le tocó (she) got	N	N	---	N			✓				X		X			X	
060	de a preposition showing possession	que that	N	N	---	N			✓				X		X			X	
064	desapoyó was released from	despegó came off	Y	Y	N	Y	✓					X			X			X	
067	detuvieron stopped at	subieron climbed	P	P	---	Y	✓			X					X			X	

070	de la belonging to	la de the one belonging to	Y	Y	---	N	✓			X				X			X		
075	un a	el the	N	N	---	Y	✓			X					X				X
080	ok	¡oye! Hey!	Y	Y	N	N	✓			X				X			X		
082	llegando arriving	llena full	N	N	---	Y	✓			X				X			X		
088	?	.	P	P	---	Y	✓			X				--	--	--	--	--	--
090	todas all	toda all	Y	Y	N	N	✓			X				X			X		
090	las the (feminine plural article)	la the (feminine singular article)	Y	Y	N	N	✓			X				X			X		
090	fuerzas forces	fuerza force	Y	Y	N	N	✓			X				X			X		
092	río river	ruido noise	N	N	---	Y	✓			X				X				X	
095	dijo said	dio gave	N	N	---	Y	✓			X				X				X	
097	---	se used to refer to the subject previously mentioned in the sentence	P	P	---	Y	✓			X				--	--	--	--	--	--
100	el	la	N	N	---	Y	✓			X				X				X	

	the (masculine article)	the (feminine article)																		
101	cada every	la cascada the waterfall	N	N	---	Y	✓			X					X				X	
103	primeros first	premios prices	N	N	---	Y	✓			X					X			X		
106	---	en in	N	N	---	N			✓				X	--	--	--	--	--	--	
106	nadar swim	ganar win	N	N	---	N			✓				X	X				X		
110	estaban you were	están you are	P	P	---	Y	✓			X					X			X		
112	nosotros we (masculine)	nosotras we (feminine)	Y	Y	N	Y	✓					X		X				X		
116	desde, decalzados from, non-word	descalzos barefoot	N	N	---	N			✓				X	X				X		
a. TOTAL MISCUES <u>41</u> b. TOTAL WORDS <u>902</u> $a \div b \times 100 = \text{MPHW } 4.54$			COLUMN TOTAL				28	0	13	26	0	2	13	12	18	3	14	14	5	
			PATTERN TOTAL				41				41				33			33		
			PERCENTAGE				68%	0%	32%	63%	0%	5%	32%	36%	55%	9%	42%	42%	15%	

Appendix C. In-Depth Procedure Coding Form

PSEUDONYM: Manuel AGE: 14			1	2	3	4	See 2, 3, 4			See 1, 2, 4			5			6		
RESEARCHER: Sandra Cabrera-Moreno			SYNTACTIC ACCEPTABILITY	SEMANTIC ACCEPTABILITY	MEANING CHANGE	CORRECTION	MEANING CONSTRUCTION			GRAMMATICAL RELATIONS			GRAPHIC SIMILARITY			SOUND SIMILARITY		
BOOK: Verde Fue mi Selva by Edna Iturralde SECTION: Felicidad (pp. 35-41)							LOSS PARTIAL LOSS NO LOSS			WEAKNESS OVERCORRECTION PARTIAL STRENGTH STRENGTH			H S N			H S N		
Line N°	READER	TEXT																
005	piernas legs	piedras stones	N	N	--	Y	✓			X				X				X
007	brillar shine	bailar dance	P	N	--	N			✓			X		X				X
016	---	se	N	N	--	N			✓			X	--	--	--	--	--	--

		reflexive pronoun referring to the subject of the sentence																	
016	bañando taking a shower	bañaban used to take a shower	N	N	---	Y	✓			X					X			X	
020	vengán come	vengan come	Y	Y	N	Y	✓					X		X				X	
020	subán get on (the canoe)	suban get on (the canoe)	Y	Y	N	Y	✓					X		X				X	
025	mucho a lot of (masculine noun)	mucha a lot of (feminine noun)	P	P	---	N			✓				X	X				X	
025	dejó stopped	---	N	N	---	Y	✓			X				--	--	--	--	--	--
036	a towards	---	N	N	---	N			✓				X	--	--	--	--	--	--
040	sonor non-word	sonoramente sonorously	N	N	---	Y	✓			X					X			X	
057	curiosidad curiosity	oscuridad darkness	P	N	---	N			✓				X		X			X	
061	¡Ayúdenme! Help me!	ayúdenme help me to	P	P	---	N			✓				X	--	--	--	--	--	--
067	que that	---	N	N	---	Y	✓			X				--	--	--	--	--	--
072	se	---	N	N	--	N			✓				X	--	--	--	--	--	--

	reflexive pronoun referring to the subject of the sentence																		
082	---	un a	Y	Y	N	N	✓			X				--	--	--	--	--	--
086	impacientemente impatiently	impaciente impatient	Y	Y	N	N	✓			X				X				X	
100	llevarse take	llevarse take something (a feminine noun)	P	P	---	N			✓				X	X			X		
103	trataba it was about	hartaron they were fed up with	P	N	---	N			✓				X		X			X	
106	es/tre/pitosamente loudly and noisely	estrepitosamente loudly and noisely	Y	Y	N	N	✓			X				--	--	--	--	--	--
115	escucha listen to	escuchaba was listening to	P	P	---	N			✓				X	X			X		
117	en in	---	Y	P	---	N			✓				X						
a. TOTAL MISCUES <u>21</u> b. TOTAL WORDS <u>837</u> $a \div b \times 100 = \text{MPHW}$ <u>2.50</u>			COLUMN TOTAL				10	0	11	8	0	2	11	6	6	0	5	7	0
			PATTERN TOTAL				21			21			12			12			
			PERCENTAGE				48%	0%	52%	38%	0%	10%	52%	50%	50%	0%	42%	58%	0%

Appendix C. In-Depth Procedure Coding Form

PSEUDONYM: Manuel AGE: 14			1 SYNTACTIC ACCEPTABILITY	2 SEMANTIC ACCEPTABILITY	3 MEANING CHANGE	4 CORRECTION	See 2, 3, 4			See 1, 2, 4			5			6		
RESEARCHER: Sandra Cabrera-Moreno							MEANING CONSTRUCTION			LOSS PARTIAL LOSS NO LOSS			GRAMMATICAL RELATIONS			GRAPHIC SIMILARITY		
BOOK: Verde Fue mi Selva by Edna Iturralde SECTION: El Río (pp. 91-97)												H S N			H S N			
LINE No.																		
Line N°	READER	TEXT																
001	un a	su their	Y	P	--	N			✓		X				X			X
009	tran non-word	Tanguila a last name	N	N	--	Y	✓			X					X			X
015	---	la	N	N	--	Y	✓			X				--	--	--	--	--

		the (feminine article)																	
015	regatar non-word	regata competition	N	N	---	Y	✓			X				X			X		
017	en in	---	P	P	---	N			✓				X	--	--	--	--	--	--
026	quienes who (plural)	quién who (singular)	P	P	---	N			✓				X	X			X		
026	le (pronoun referring to an indirect object in the third person singular)	les (pronoun referring to an indirect object in the third person plural)	P	P	---	N			✓				X	X			X		
034	este this one	Ester a name	P	P	---	N			✓				X	X			X		
041	debido due	debió should	P	N	---	N			✓				X	X			X		
041	a to	de have (auxiliary verb)	P	N	---	N			✓				X			X			X
069	---	una a (feminine article)	N	N	---	N			✓				X	--	--	--	--	--	--
075	un a (masculine)	el the (masculine)	P	P	---	N			✓				X			X			X
078	todo all	todos all	P	P	---	N			✓				X	X			X		
078	estaba	estaban	P	P	---	N			✓				X	X			X		

	was	were																	
082	llenada filled with	llena full	P	P	---	N			✓				X		X			X	
089	de (hold on) to	a (hold on) to	Y	Y	N	Y		✓				X				X			X
091	por through	porque because	P	P	---	N			✓				X		X			X	
100	el the (masculine article)	la the (feminine article)	N	N	---	N			✓				X		X			X	
102	---	la the (feminine article)	P	P	---	N			✓				X	--	--	--	--	--	--
106	---	en in	N	N	---	N			✓				X	--	--	--	--	--	--
110	estaban they were	están they are	P	P	---	Y			✓				X		X			X	
113	---	de preposition showing possessive	N	N	---	N			✓				X	--	--	--	--	--	--
a. TOTAL MISCUES 22 b. TOTAL WORDS 902 $a \div b \times 100 = \text{MPHW}$ 2.43			COLUMN TOTAL				4	0	18	3	1	1	17	7	6	3	7	6	3
							22			22			16			16			

	PATTERN TOTAL PERCENTAGE	18%	0%	82%	13%	5%	5%	77%	44%	38%	18%	44%	38%	18%
--	---	-----	----	-----	-----	----	----	-----	-----	-----	-----	-----	-----	-----

Appendix D: Informed Consent

Reading as a Social Practice: Using Retrospective Miscue Analysis to Understand Kichwa-Spanish Bilinguals' Meaning Construction Consent to Participate in Research 10/23/2020

Purpose of the research: You are being asked to allow your son or daughter to participate in a research project that is being done by Dr. Holbrook Mahn, professor at the University of New Mexico and Sandra Cabrera-Moreno, a doctoral student from the Department of Language, Literacy and Sociocultural Studies. The purpose of this research is to analyze Kichwa-Spanish bilingual readers' meaning construction of narrative texts in Spanish. You are being asked to allow your son/daughter to join because he/she is a Kichwa-Spanish speaker between 12 and 14 years old whose parents or caregivers speak Kichwa as their first language.

This consent form contains important information about this project and what to expect if you allow your son/daughter to participate. Please consider the information carefully. Feel free to ask questions before making your decision whether or not to allow your son/daughter to participate. Your son/daughter's participation in this research is voluntary.

Key information for you to consider:

- The purpose of this research is to analyze Kichwa-Spanish bilingual readers' meaning construction of narrative texts in Spanish, with a focus on the influence of Kichwa on reading and meaning construction in Spanish.
- Major requirements of the research are one interview, oral reading and retelling sessions, and a dialogue with the reader.
- There is minimal risk for your son/daughter.
- Your son/daughter will revalue himself/herself as a reader of two languages due to the richness of his/her language and culture. The results of this study may have pedagogical incidence in intercultural education.
- Your son's/daughter's participation in this project will take a total of 3 hours over a period of two months. Your son/daughter will be involved in four sessions: Interview (30 to 45 minutes); oral reading (30 to 45 minutes); retellings (30 to 45 minutes); and a metacognitive dialogue (30 to 45 minutes).
- Your son/daughter will receive a cash award of \$15 and \$5 in school supplies.

What your son/daughter will do in the project:

Phone Interviews: your son/daughter will be asked some questions about what he/she does when he/she reads a text written in Kichwa and Spanish and what he/she thinks other people do when they read. The language used for the interview will be Spanish and

I will audio record this interview. Your son/daughter will spend 30 to 45 minutes in this activity.

Oral reading through the Zoom Platform: Your son/daughter will choose two stories in Spanish from a variety of narrative texts. I will record your son's/daughter's oral reading while taking notes on what he/she does as he/she reads. Your son/daughter will keep his/her camera off during all our sessions. The text will be new. Your son/daughter will spend 30 to 45 minutes in this activity.

Individual unaided and aided retellings through Zoom: After oral reading, your son/daughter will tell me what he/she has understood from the story. Your son/daughter will first do this in Kichwa and then in Spanish. After that, I will ask him/her some questions based on what he/she has said. We will use Spanish for our conversation. I will transcribe the audio recordings and analyze them later. Your son/daughter will spend 30 to 45 minutes in this activity.

Conversations through the Zoom Platform: We will meet another time and I will select some words and phrases from your son's/daughter's oral reading. Your son/daughter will have the chance to listen to his/her own reading and we will talk about the words and phrases selected. As we talk about his/her reading, I will use some questions to know his/her opinion (1) Does the word make sense? (2) Did you correct the word? (3) Was the correction necessary? (4) Why do you think you said that? and (5) Do you think that word / phrase affected your understanding of the text? Other questions can emerge during our conversation. We will spend 30 to 45 minutes in this activity.

Risks: There is minimal risk for your son/daughter. Your son/daughter might feel to some extent uncomfortable analyzing his/her own reading during metacognitive dialogues.

Benefits: Your son/daughter will revalue himself/herself as a reader of two languages due to the richness of his/her language and culture. The results of this study may lead to pedagogical incidence in intercultural education since they will add to the literature discussing the complexity of the reading process in the bilingual mind, within the boundaries of a specific linguistic, social and cultural context. This investigation will contribute to a deeper understanding of the complexity of the processes of meaning making and reading as a social practice.

Confidentiality of the information:

To render data entirely anonymous, direct identifiers will be removed even though this study does not imply collecting sensitive data. Interviews, unaided and aided retellings and dialogues will be transcribed and both audio recordings and transcriptions will be securely stored on a password protected computer. All digital documents will be deleted once the project has been completed. If required for revision, data will be transferred without identifiers to the principal researcher through emails.

In sum, considerations for securely storing data include:

- Electronic records will be stored on a password protected computer and locked in my personal library.

- Digital documents will not include any identifiers. A pseudonym based on gender and age will be assigned to your son/daughter.
- All digital records will be deleted once the project is completed.

I will take measures to protect the security of all personal information, but I cannot guarantee confidentiality of all research data. The University of New Mexico Institutional Review Board (IRB) that oversees human research may be permitted to access your son's/daughter's records. His/her name will NOT be used in any published reports about this.

Use of information for future research: The information collected for this project will NOT be used or shared for future research, even if I remove the identifiable information like your son's/daughter's name or date of birth. All digital records will be deleted once the research project has been completed.

Payment: Your son/daughter will receive a cash award of \$15 and \$5 in school supplies. This means that he/she will get \$ 5 after the interview, \$5 after oral reading sessions, \$5 after retellings and \$5 in school supplies after our dialogue. After each phase, monetary and non-monetary incentives will be delivered in closed envelopes.

Right to withdraw from the research: Your son's/daughter's participation in this research is completely voluntary. He/she has the right to choose not to participate or to withdraw participation at any time without penalty. If you have any questions, concerns, or complaints about the research, please contact me at sandra.cabreram@gmail.com

If you have questions regarding your son's/daughter's rights as a research participant, or about what he/she should do in case of any research-related harm, or if you want to obtain information or offer input, please contact the IRB. The IRB is a group of people from UNM and the community who provide independent oversight of safety and ethical issues related to research involving people: UNM Office of the IRB, (505) 277-2644, irbmaincampus@unm.edu Website: <http://irb.unm.edu/>

CONSENT

Written agreement will indicate that you have read this form and that all questions have been answered to your satisfaction. Through written consent, you are not waiving any of your son's/daughter's legal rights as a research participant. A copy of this consent form will be provided to you.

(I agree to allow my son/daughter to participate in this research project).

Researcher Signature (to be completed at time of informed consent)

I have explained the research to the participant's parent or legal guardian and answered all of his/her questions. I believe that the parent/legal guardian understands the information described in this consent form and he/she freely consents to allow the student to participate.

Name of Research Team Member	Signature of Research Team Member	Date
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Informed Consent (Spanish Version)

Lectura como práctica social: El Uso de Análisis Retrospectivo de Miscues para Entender la Construcción del Significado en Kichwa-Castellano Hablantes **01/09/2020**

Objetivo de la investigación: Su representado está siendo invitado a participar en un proyecto de investigación conducido por el Dr. Holbrook Mahn, profesor de la Universidad de Nuevo México y Sandra Cabrera-Moreno, estudiante de doctorado del Departamento de Lenguaje, Literacidad y Estudios Socioculturales de la Universidad de Nuevo México. El propósito de esta investigación es analizar la construcción del significado de textos narrativos en español, de lectores kichwa-castellano hablantes, con un enfoque en la influencia del kichwa en esta construcción. Su representado está siendo invitado a unirse porque es kichwa-castellano hablante entre 12 y 14 años cuya lengua materna de sus padres o representantes es el kichwa.

Este consentimiento contiene información importante acerca del proyecto y lo que se espera si usted decide autorizar la participación de su representado. Por favor revise detenidamente la siguiente información. Siéntase libre de realizar cualquier pregunta antes de tomar una decisión. La participación de su hijo/hija en este proyecto es voluntaria.

Información clave a considerar:

- El objetivo de esta investigación es analizar la influencia del kichwa en la lectura y construcción del significado de textos narrativos en español.
- Los principales requisitos en este proyecto son una entrevista, lectura oral, narración de textos y un diálogo con el lector.
- Este proyecto implica riesgos mínimos para su hijo/a.
- La intención es revalorizarse como lector de dos lenguas dada la riqueza de su lenguaje y cultura. Los resultados de este estudio podrían tener una incidencia pedagógica en educación intercultural.
- La participación de su hijo/a en este proyecto tomará un total de 3 horas durante un período de dos meses. Su hijo/a será parte de cuatro sesiones: una entrevista (30 a 45 minutos); lectura de textos (30 a 45 minutos); narración de textos (30 a 45 minutos); y un dialogo meta-cognitivo (30 a 45 minutos).
- Recibirá un incentivo económico de \$15 y \$5 en materiales escolares.

Cómo será la participación de su hijo/a en este proyecto:

Entrevista telefónica: se le realizarán algunas preguntas sobre lo que su hijo/a hace cuando lee y lo que él/ella piensa otras personas hacen al leer textos escritos en kichwa y castellano. El lenguaje que utilizaremos será el castellano. Esta entrevista será grabada y requerirá de 30 a 45 minutos para esta actividad.

Lectura oral a través de Zoom o WebEx: Su hijo/a escogerá dos historias en castellano de entre una variedad de textos narrativos. Grabaré la lectura mientras realizo apuntes sobre

qué hace su hijo/a mientras lee. Su cámara estará apagada. El texto será nuevo para su hijo/a. Requerirá de 30 a 45 minutos para esta actividad.

Narraciones individuales espontáneas y guiadas a través de Zoom o WebEx: Después de la lectura de los textos, su hijo/a me dirá qué ha comprendido de la historia. Primero lo hará en kichwa y luego en castellano. Después, le haré algunas preguntas basadas en lo que ha narrado. Utilizaremos el castellano para nuestra conversación. Transcribiré el audio y lo analizaré posteriormente. Su hijo/a requerirá de 30 a 45 minutos para esta actividad.

Diálogos a través de Zoom o WebEx: Nos reuniremos en una nueva ocasión y seleccionaré algunas palabras y frases de la lectura. Su hijo/a tendrá la oportunidad de escuchar su lectura y conversaremos sobre las frases y palabras escogidas para este propósito. Algunas de las preguntas que se utilizarán para conocer su opinión son: (1) ¿Tiene sentido esta palabra en el contexto? (2) ¿Corrigió usted la palabra? (3) ¿Fue necesaria esta corrección? (4) ¿Por qué cree que dijo eso? (5) ¿Cree que la palabra o frase afectó su comprensión del texto? Otras preguntas podrían hacerse durante nuestra conversación. Su hijo/a requerirá de 30 a 45 minutos para esta actividad.

Riesgos: El riesgo de participación es mínimo. Su hijo/a podría sentirse un poco incómodo analizando su lectura durante nuestro diálogo meta-cognitivo.

Beneficios: Su hijo/a se revalorizará como lector de dos idiomas dada la riqueza de su lengua y cultura. Los resultados de este estudio podrían tener implicaciones pedagógicas para la educación intercultural ya que ampliarán la discusión literaria sobre la complejidad del proceso de lectura de la mente bilingüe dentro de los límites de un contexto lingüístico, social y cultural específico. Esta investigación contribuirá a la comprensión de los procesos de construcción del significado y la lectura como práctica social.

Confidencialidad de la información: Para mantener los datos completamente anónimos, la identificación directa será removida a pesar de que este estudio no implica la recolección de datos sensibles. Las entrevistas, narraciones espontáneas y guiadas, así como los diálogos serán transcritos y tanto el audio como las transcripciones estarán guardadas en una computadora con clave para su acceso. Todos los documentos digitales serán borrados una vez que el proyecto haya terminado. Si se requieren para revisión, los datos serán transferidos sin identificación alguna al investigador principal vía correo electrónico.

En resumen, las consideraciones para un almacenamiento seguro de los datos incluyen:

- Los documentos electrónicos serán almacenados en una computadora con clave de acceso y ésta permanecerá en mi biblioteca personal.
- Los documentos digitales no incluirán identificación alguna. En su lugar se utilizará un seudónimo basado en el género y edad de los participantes.
- Todos los registros digitales serán eliminados una vez concluido el proyecto.

Protegeré la seguridad de toda la información personal, pero no puedo garantizar confidencialidad de todos los datos. La Universidad de Nuevo México a través de su Comité de Revisión Institucional (IRB), el cual vigila la investigación que involucra la

participación de personas, podría acceder a los documentos. Su nombre no será utilizado en ningún reporte.

Uso de la información para futuras investigaciones: La información en este proyecto NO será utilizada ni compartida para investigaciones futuras, ni siquiera si las identificaciones de los participantes son eliminadas. Todos los documentos digitales serán eliminados una vez que el proyecto haya sido completado.

Pago: La compensación será de \$15 en efectivo (entrevista \$5, lectura de textos \$5 y narraciones \$5) y un incentivo de \$5 en materiales escolares (reflexiones meta-cognitivas). Los incentivos serán entregados a los participantes en sobres sellados después de cada fase de recolección de datos.

Derecho de abandonar el proyecto: La participación de su hijo/a en esta investigación es completamente voluntaria. Su hijo/a tiene el derecho de escoger no participar o abandonar su participación en cualquier momento sin penalidad alguna. Si usted tiene preguntas, inquietudes o quejas acerca de esta investigación, por favor comuníquese conmigo al correo sandra.cabreram@gmail.com

Si usted tiene preguntas acerca de sus derechos como participante o acerca de lo que debería hacer en caso de cualquier daño hacia usted a causa de esta investigación, o si usted desea obtener información o proveer sugerencias, por favor comuníquese con IRB. IRB es un grupo de personas de la UNM, comunidad independiente encargada de vigilar la seguridad y principios éticos relacionados con la participación de personas. La Oficina de IRB de UNM, (505) 277-2644, irbmaincampus@unm.edu Página web: <http://irb.unm.edu>

CONSENTIMIENTO

El consentimiento escrito indicará que usted ha leído este documento y que todas sus preguntas han sido respondidas a su satisfacción. El consentimiento escrito no implica bajo ninguna circunstancia que su hijo/a renuncie a sus derechos legales como participante. Se le entregará una copia de este documento para su respaldo.

(Estoy de acuerdo con permitir la participación de mi representado en esta investigación).

Firma del investigador (debe ser incluida en el momento del consentimiento informado)

He procedido a explicar el proyecto de investigación a los representantes de los participantes y respondido todas sus preguntas. Considero que ellos han entendido la información descrita en este consentimiento informado y que su consentimiento es libre y voluntario.

Nombre del Investigador Miembro del Equipo Firma del Investigador Miembro del Equipo

Fecha

Appendix E. Student Assent

Reading as a Social Practice: Using Retrospective Miscue Analysis to Understand Kichwa-Spanish Bilinguals' Meaning Construction Assent to Participate in Research

You are being asked to join a research study by Dr. Holbrook Mahn, from the Department of Language, Literacy and Sociocultural Studies at the University of New Mexico and Sandra Cabrera Moreno, a doctoral student. This project is to analyze the influence of your first language (Kichwa) on reading and meaning construction of written narrative texts in Spanish.

If you join the project, you will be asked to answer some questions about the way you and other readers you know read in Kichwa and Spanish. This will be a phone interview conducted in Spanish. In a different session, you will be asked to read two short stories in Spanish. After reading each story, you will tell me, first in Kichwa and then in Spanish, what you have understood from the story. Then, I will ask you some questions based on your retellings. We will use Spanish for this purpose. We will meet through Zoom or WebEx and I will audio record your reading and retellings. A couple of days later, we will have a conversation about your oral reading and your interpretation of the text. This will be a friendly dialogue. We will meet through Zoom or WebEx and I will audio record our dialogue. During all sessions, I will ask you to keep your camera off.

If you join, there may be minimal risks. You might feel a little bit uncomfortable analyzing your own reading. There may also be some benefits, or good things that happen. You will be aware of the richness of your cognitive processes and you will notice the remarkable things you do as you read.

Any information about you will be kept secure by the researchers by removing direct identifiers such as names and any other information that could be used for deducing your identity. You will be assigned a numerical code and I will store the data into a password protected laptop. The discussion of findings will include the use of pseudonyms.

If you join the study, you will get a cash award of \$15 and \$5 in school supplies. This means that you will receive \$5 after the interview, \$5 after oral reading sessions, \$5 after retellings and \$5 in school supplies after our reflective dialogue.

We would like you to talk with your parents about this before you decide to join or not join this study. We will also ask your parents if they want you to be in this study.

If you have any questions at any time, please call me at 0958982681 or email me at sandra.cabreram@gmail.com. If you would like to talk to someone else, you can call the Office of the IRB at (505) 277-2644 or email at IRBMainCampus@unm.edu

You do not have to be in this study. If you do choose to be in the study, you can change your mind at any time. We won't care if you change your mind or if you don't want to join this study.

Verbal agreement means that you have read this form and all of your questions have been answered. You and your parents will be given a copy of this form.

(I agree to join this study)

Researcher Signature (to be completed at time of informed consent)

I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this form and freely consents to participate.

Student Assent (Spanish Version)

Lectura como Práctica Social: El Uso de Análisis Retrospectivo de Miscues para Entender la Construcción del Significado en Kichwa-Castellano Hablantes

Asentamiento para Participar en la Investigación

Usted está siendo invitado a participar en una investigación dirigida por el Dr. Holbrook Mahn del Departamento de Lenguaje, Literacidad y Estudios Socioculturales de la Universidad de Nuevo México y Sandra Cabrera Moreno, estudiante de doctorado. Este proyecto busca analizar la influencia de la primera lengua en la lectura y construcción del significado de textos narrativos escritos en castellano.

Si usted se une al proyecto, le haré algunas preguntas sobre la forma en que usted y otros lectores que usted conoce leen en kichwa y en castellano. Esto se realizará a través de entrevistas vía zoom en castellano. En una sesión diferente, le solicitaré que lea dos historias cortas en castellano. Luego de cada historia, usted narrará lo que ha comprendido del texto, primero en kichwa y luego en español. Después, le haré algunas preguntas sobre su narración. Usaremos el castellano para esta actividad. Nos reuniremos vía Zoom y grabaré su lectura y sus narraciones.

Unos días después, tendremos una conversación acerca de su lectura e interpretación de los textos. Será un dialogo amigable. Nos reuniremos a través de Zoom o WebEx y grabaré esta conversación. Durante todas las sesiones, le pediré que mantenga su cámara apagada.

Su participación involucra riesgos mínimos. Usted podría sentirse un poco incómodo analizando su propia lectura. Sin embargo, podría haber algunos beneficios, cosas buenas que pueden suceder. Usted será consciente de la riqueza de sus procesos cognitivos y notará las cosas maravillosas que hace cuando lee.

Cualquier información acerca de usted se mantendrá en estricta reserva y no se incluirán datos de identificación tales como nombres o cualquier otra información que pueda ser usada para deducir su identidad. Se le asignará un código numérico y esta información se guardará en una laptop con clave de acceso. La discusión de los resultados de esta investigación incluirá el uso de seudónimos.

Si usted participa, recibirá un incentivo económico de \$15 y \$5 en materiales escolares. Es decir, usted recibirá \$5 después de la entrevista, \$5 por la lectura de los textos, \$5 por las narraciones y \$5 en materiales escolares después de nuestro diálogo.

Me gustaría hablar con sus padres acerca de esto antes que usted decida participar o no en esta investigación. Consultaré con sus padres o representantes si ellos están de acuerdo con su participación.

Si usted tiene preguntas, por favor comuníquese conmigo al 095 898 2681 o al correo electrónico sandra.cabreram@gmail.com Si usted desea hablar con alguien más, puede comunicarse con la Oficina de IRB al (505) 277-2644 o al correo IRBMainCampus@unm.edu

Usted no tiene la obligación de participar en este proyecto. Si usted escoge participar, puede cambiar de opinión en cualquier momento. No habrá ningún inconveniente con el investigador si usted decide no ser parte de este proyecto.

Su consentimiento verbal quiere decir que usted ha leído este documento y que he respondido todas sus preguntas. Usted y sus padres recibirán una copia de este documento para su respaldo.

(Estoy de acuerdo en participar)

Firma del investigador (se completará al momento del consentimiento informado)

He procedido a explicar la investigación al participante y he respondido todas sus preguntas. Considero que el/la participante ha entendido la información descrita en este consentimiento y ha decidido participar libre y voluntariamente.

Nombre del Investigador Miembro del Equipo

Firma del Investigador Miembro del

Equipo

Fecha

Appendix F. Retelling Forms

Tamia's Retelling of "The River": Information from her Kichwa Retelling

Text Features	Text Information	Inferences; *additional comments
Characters	Ruth, Ester and Ana	*Katy is not mentioned.
Development of characters	Children wearing special clothes	*The reader talks about traditional skirts, but the story mentions short pants and t-shirts.
Story line	Ruth and Ester took her by the hand so that she could cross.	*The reader doesn't mention whose girl she refers to.
	Ana was laughing after the incident.	*"Other children took other kids by their hands in the river" is not part of the story; intertextuality. *All of them were happy.
Underlying plot	Ruth and Ester saved Ana in the river.	*The reader doesn't mention the competition.
Major inferences	Crossing the river was dangerous	This is inferred from the information about the waterfall mentioned in the story.

Tamia's Retelling of "The River": Information from her Spanish Retelling

Text Features	Text Information	Inferences; additional comments
Characters	A group of girls	*Only at the end of her retelling, the names of Ester, Ruth and Katy are mentioned.
Development of characters	Best friends and cousins	
Story line	There was a floating rubber ring competition in the river.	
	The girls wanted to compete against other girls who were their rivals.	*The other girls had a big floating rubber ring. The reader also mentions that boys and girls were wearing short pants.
	At first, they couldn't find a floating rubber ring, then they found one (a rubber wheel).	
	A boy with a megaphone tells everyone that the competition is about to start.	
	They did their best but their rivals were ahead.	
	The girls realized that their rivals were going in the wrong	

direction; it was dangerous
because there was a waterfall.

They found a balsa and paddled
as fast as they could to help the
girls.

The competition was over. The
girls looked at each other and said
“we won.”

Underlying plot

The girls realized that their rivals
were going in the wrong
direction; the girls helped their
rivals and they all felt winners.

Major inferences

Tamia's Retelling of "Happiness": Information from her Kichwa Retelling

Text Features	Text Information	Inferences; *additional comments
Characters	Three kids	*Only one of their names is mentioned.
Development of characters	happy kids; always laughing	
Story line	<p>The kids are happy with their families.</p> <p>They are walking through the forest.</p> <p>A boy was drinking water in the long river.</p> <p>The three boys were happy in the river.</p>	*Specific details not included.
Underlying plot	They are all happy as they are in the river.	*the ants are not mentioned.
Major inferences		

Tamia's Retelling of "Happiness": Information from her Spanish Retelling

Text Features	Text Information	Inferences; *additional comments
Characters	Three boys	*The reader doesn't remember their names.
Development of characters	always laughing having fun	
Story line	Three boys were swimming in a river located in the rainforest.	*The reader mentions it is a camping day.
	They were laughing while playing in the water.	
	One kid got into a boat and asked his friends to join him.	
	The kid paddled in one direction while the other two kids kept asking where they were going.	
	When the night came and everything was dark, one kid took out a basket and put it on his back.	The text mentions that there was an orange sun.
Underlying plot	They were having fun. Three happy kids had an adventure in the river.	*The ants are not mentioned.
Major Inferences		

Sisa's Retelling of "The River": Information from her Kichwa Retelling

Text Features	Text Information	Inferences; *additional comments
Characters	A group of girls (Ana and Katy).	*The reader mentions a classmate, a girl named Elsa and a teacher.
Development of characters	Girls playing	
Story line	<p>The girls went to play with a classmate in the water.</p> <p>The teacher took the girls to the water so that they could play.</p> <p>There, Katy and Ana fell into the water. Ana got out of the water and helped Katy.</p> <p>The girls won.</p>	<p>*This story line is a combination of events from the story and the reader's imagination.</p>
Underlying plot	<p>One girl fell into the water and her friend saved her.</p> <p>They felt winners.</p>	
Major inferences		

Sisa's Retelling of "The River": Information from her Spanish Retelling

Text Features	Text Information	Inferences; *additional comments
Characters	Katy & Ana	* The reader mentions a teacher and a girl named Shinin.
Development of characters	Girls in danger are finally rescued.	
Story line	The girls were competing using a wheel.	*One day they all went with their physical education teacher to the seashore.
	Katy and Ana were in danger.	*Katy and Ana fell into the sea.
	They were finally safe.	*The girls thought they would die.
Underlying plot	Girls were first competing and then they become friends after being in danger.	
Major inferences	The girls thought they would die.	This is inferred from the information about the girls falling into the sea; the text, however, mentions the girls approaching a waterfall.

Katy and Ana wanted to win the competition, but they couldn't.

Inferred from the information in the text that mentions that Ruth and Ester paddled as fast as they could, but Katy and Ana were ahead.

Sisa's Retelling of "Happiness": Information from her Kichwa Retelling

Features	Key Information	Inferences; *additional comments
Characters	Boys	Names are not mentioned. The reader says that there were some girls in the story.
Development of characters	After collecting turtle eggs, a boy falls off the boat and his friends struggle to help him.	
Story line	<p>The boys collected turtle eggs.</p> <p>One boy was swimming in the river and got far away from the boat.</p> <p>The other boys rescued him.</p> <p>Then another boy fell off the boat.</p> <p>The other boys asked him to swim.</p> <p>They decided to disembark the boat. It was late.</p>	* The reader describes the weather and the landscape as she retells the story.
Underlying plot	The boys helped one of their friends who was in danger while swimming in the river.	

Major inferences	The boy almost drowns.	Inferred from the situation the boy experienced in the river.
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Sisa's Retelling of "Happiness": Information from her Spanish Retelling

Features	Key Information	Inferences; *additional comments
Characters	Three boys	
Development of characters	Three boys experience different emotions as they sail in a canoe.	
Story line	Three boys used to go to the seashore to see the turtles and collect their eggs.	*The boy ate a turtle eggs and this is why the fell into the water.
	One boy fell into the sea. The other two boys took a canoe with them. They helped the boy to get into the canoe, but he jumped into the water again.	*Antún told his friends he was the owner of the place and caused the river to become mightier.
	Finally, they all got into the canoe and left.	
Underlying plot	Three boys go to the sea to collect turtle eggs. One boy fell into the sea and is then rescued.	

Major inferences

The reader explains the reason why the boy fell into the water.

Ana's Retelling of "The River": Information from her Kichwa Retelling

Features	Key Information	Inferences; *additional comments
Characters	Ruth, Ester, Katy and Ana	
Development of characters	Competing and strengthening friendship.	
Story line	<p>The girls chose the Amazon region to play, to compete.</p> <p>They were looking for a wheel in a community known as Ruku Llakta.</p> <p>Their uncle arrived at the community and gave the girls some patches.</p> <p>They started the competition and once they were in the river, their floating rubber ring exploded.</p> <p>They started to swim but Ester realized it was not possible to win that way.</p>	<p>*There, they won a camera; they wanted to make a film.</p> <p>*A boy counted to three and all the competitors jumped into the river.</p>

	<p>They saw Katy and Ana on the wrong side of the river and decided to help them.</p> <p>Then they saw a canoe and used it to rescue the girls.</p> <p>The girls felt all winners.</p>	
		<p>*Some boys received their prizes.</p>
Underlying plot	<p>A group of girls entered a competition and at the end they all felt winners because they were safe.</p>	
Major inferences		<p>The girls held their hands and raised them as a symbol of their triumph.</p>

Ana's Retelling of "The River": Information from her Spanish Retelling

Text Features	Text Information	Inferences; additional comments
Characters	Ruth, Ester, Katy and Ana	They were Kichwa children
Development of characters	A group of girls who were rivals became friends.	
Story line	<p>There were two girls who could swim well.</p> <p>They were looking for a wheel to compete that year.</p> <p>That morning, their uncle arrived and gave them a camera full of patches.</p> <p>The girls went to the bridge where all the competitors were.</p> <p>They wanted to see the type of floating rubber ring the Chiguano sisters had.</p> <p>Ruth and Ester's floating rubber ring exploded.</p>	<p>*They had two of the biggest wheels they had seen in their lives.</p>

They started to swim.

From a tree's branch,
they saw that Katy and
Ana were in a dangerous
path, so the two girls
went to help them using a
canoe.

*The winners were receiving
their prizes.

All the girls felt winners.

Underlying plot

During a competition,
two girls in danger are
rescued.

Major inferences

Ana's Retelling of "Happiness": Information from her Kichwa Retelling

Features	Key Information	Inferences; *additional comments
Characters	<p>Shuar kids</p> <p>Antún, Ramu and Matías</p>	
Development of characters	<p>The kids became friends; they had an adventure and were grateful for that.</p>	
Story line	<p>At the time that the turtle eggs had to hatch, the kids were swimming.</p> <p>They saw a canoe and one kid got onto it.</p> <p>He asked the others to do the same.</p> <p>Then, they jumped into the water. Ramu was laughing a lot and drank a lot of water.</p> <p>A girl fell into the water. She said, "the three of us won."</p> <p>They were very tired and got into the canoe.</p>	<p>*In a big mountain, the day was not so rainy. There were three dogs. Animals like frogs and monkeys were happy.</p>

	Antun said, “we’re going to see what is out there in the plain”	*Their hair was wet. The drops were falling and the kids were laughing.
	Another boy said, “there are lots of ants underneath that stone.”	*As it was getting dark, one kid wanted to go hunting.
	They ate the ants and lay down on the plain.	There were guinea pigs, crickets and frogs singing happily near the long river.
Underlying plot	A group of kids had an adventure in the river as they were looking for ants to eat.	We are so lucky to live here. We are the owners of this hill.
Major inferences		The kids were lucky to live in a place like the Amazon region.

Ana's Retelling of "Happiness": Information from her Spanish Retelling

Features	Key Information	Inferences; *additional comments
Characters	Ramu and Maskián	
Development of characters	They feel the luckiest boys in the world.	
Story line	There was a canoe near the lake.	
	Ramu and Maskian got into the canoe.	
	One boy jumped into the lake, swallowed a lot of water and started to cough.	
	The boys were struggling in the water and then got into a small boat.	
	The boys carried a basket on their backs.	
	There were lots of ants under the stones.	*They placed a little stone on the ground near the ants.
They ate some ants and lay down on the ground.		

Underlying plot

Ramu and Maskián had
an adventure in the river
as they were looking for
ants to eat.

Major inferences

José's Retelling of "The River": Information from his Kichwa Retelling

Features	Key Information	Inferences; *additional comments
Characters	Two girls who were cousins.	
Development of characters	Competing girls feeling happy to help each other.	
Story line	This is the story of two young cousins. The girls wanted to compete, but they didn't have a wheel. They walked around the town trying to find one. Their uncle brought a wheel full of patches that the cousins used to compete. The patches came off when they were in the middle of the river. Suddenly, they saw their rivals going the wrong direction. They helped their rivals by holding their hands.	

On their way home, they enjoyed the animals and landscapes and became friends.

Underlying plot

A group of girls who were rivals became friends as they helped each other.

Major inferences

José's Retelling of "The River": Information from his Spanish Retelling

Features	Key Information	Inferences; *additional comments
Characters	Two cousins	
Development of characters	Girls competing and then feeling happy to help each other.	
Story line	The cousins had to paddle until they reached the final line.	
	As they didn't have anything, they looked for a wheel in the whole town.	
	Their uncle brought a wheel full of patches.	
	They saw their rivals had a huge canoe.	
	As they were paddling, a patch came off and soon the wheel sank.	
	Then, they climbed a tree to see the competition.	

	They saw their rivals approaching a waterfall.	
	They helped the girls not to fall down the waterfall by holding them with a branch.	
	They felt winners. They became friends.	
Underlying plot	A group of girls who were rivals during a competition helped each other and became friends.	
Major inferences	They were kind of sad and disappointed.	Inferred from the fact that they would probably have to wait one year to compete.

José's Retelling of "Happiness": Information from his Kichwa Retelling

Features	Key Information	Inferences; *additional comments
Characters	Three boys	Names are not mentioned.
Development of characters	After collecting turtle eggs, a boy falls off the boat and his friends help him.	
Story line	<p>The boys collected turtle eggs.</p> <p>One boy was swimming in the river and got far away from the boat.</p> <p>The other boys rescued him.</p> <p>Then another boy fell off the boat.</p> <p>The other boys asked him to swim.</p>	*The reader includes the description of a beautiful landscape.
Underlying plot	The boys helped one of their friends who was in danger while swimming in the river.	
Major inferences	The boy almost drowns.	Inferred from the situation the boy experienced in the river.

José's Retelling of "Happiness": Information from his Spanish Retelling

Features	Key Information	Inferences; *additional comments
Characters	Three boys	
Development of characters	Three boys enjoyed a river adventure.	
Story line	Three boys used to go to the river to see the turtles and collect their eggs. One boy fell into the river. The other two boys took a canoe with them. They helped the boy to get into the canoe. Finally, they all got into the canoe and left.	
Underlying plot	The boys went to the river to collect turtle eggs. One boy fell into the river and was then rescued.	
Major inferences		

Raul's Retelling of "The River": Information from his Kichwa Retelling

Features	Key Information	Inferences; *additional comments
Characters	Two sisters (one was Katy)	
Development of characters	Girls competing and feeling happy to help each other.	
Story line	<p>There was a competition in which they had to swim in a pool using a rubber wheel.</p> <p>The two sisters were looking for a big rubber wheel.</p> <p>A man gave them a rubber wheel.</p> <p>The girls fixed it and went to the competition.</p> <p>As they were swimming the floating rubber ring exploded.</p> <p>As they were returning in a tree log, they realized</p>	

there was a waterfall at a
certain point in the river.

Those sisters screamed
and the other girls
decided to help.

The girls sitting on the
log held the sisters'
hands.

They all felt winners.

Underlying plot

A group of girls who
were in danger during a
competition helped each
other.

Major inferences

They realized the rubber
wheel was useless.

Inferred from the text
mentioning the wheel was
full of patches.

Raul's Retelling of "The River": Information from his Spanish Retelling

Features	Key Information	Inferences; *additional comments
Characters	Ana, Katy, Ester & Ruth	
Development of characters	Rivals competing and then becoming friends.	
Story line	There was a competition in the Amazon Region in which they had to get a rubber wheel to swim in the river until they reach the final line.	
	Ruth and Ester looked for a wheel everywhere, but they couldn't find one.	
	A man gave them a rubber wheel which was broken and useless.	
	The girls found some patches and fixed the wheel. Then they went to the competition.	
	Their rivals, Ana and Katy, had a huge rubber wheel from a tractor or a bulldozer.	

A man with a megaphone told
the competitors to start when
he blew the whistle.

Everyone started swimming
as fast as they could.
Suddenly, their wheel
exploded and as they couldn't
swim anymore, they went
back to the river bank.

Ruth laughed at the sisters
who were going the wrong
way. One of the sisters said,
“Look at the waterfall.”

The girls who were on a tree
decided to help the sisters.
Ester stretched out her hand
to help Ana.

When they were all safe on
the river bank, they felt happy
and went walking barefoot.

Underlying plot

A group of girls who were
rivals helped each other.

Major inferences

Raul's Retelling of "Happiness": Information from his Kichwa Retelling

Features	Key Information	Inferences; *additional comments
Characters	Three Achuar boys	
Development of characters	Achuar boys had a river adventure.	
Story line	<p>A long time ago, there were three Achuar boys. One night they went to the river. Antún saw a canoe and swam toward it.</p>	
	<p>When he was on the canoe, he asked his friends to join him and go downstream.</p>	
	<p>Antún told them that they were going to a place that he had discovered yesterday.</p>	
	<p>Antún found a match in a basket and lit a glowing seed.</p>	
	<p>They boys found an anthill; they placed the glowing seed next to it</p>	

and suddenly the ants
came out.

After eating the ants, they
fell asleep with the sound
of croaking frogs.

Underlying plot

Three Achuar boys find a
canoe and use it to arrive
at a place where there
was an anthill.

Major inferences

Raul's Retelling of "Happiness": Information from his Spanish Retelling

Features	Key Information	Inferences; *additional comments
Characters	Achuar boys; Antún	
Development of characters	Curious boys had a river adventure.	
Story line	<p>Three Achuar boys were in a river in the Amazon Region.</p> <p>They looked everywhere and found a canoe in the distance.</p> <p>Antún went there and when he arrived there, he asked the other boys to come.</p> <p>When they were halfway, one of the boys found a basket at the bottom of the canoe.</p> <p>When they reached the river bank, they got off the canoe and started to run.</p> <p>One more time Antún said that they were going to a place that he discovered yesterday.</p> <p>One of the boys found an anthill.</p>	<p>Their naked bodies shone with the sunlight.</p>

As it was getting dark, they found a glowing seed that they lit with a match.

When the ants started to come out, a boy said some words and then he ate the ants. Then another boy said some words and ate the ants, too.

The boys fell asleep with the noise of insects, frogs and other animals singing around there.

Underlying plot Three Achuar boys got on a canoe to find a place full of delicious ants.

Major inferences

Manuel's Retelling of "The River": Information from his Kichwa Retelling

Features	Key Information	Inferences; *additional comments
Characters	Ruth, Ana	
Development of characters	Girls feeling happy to help each other.	
Story line	<p>This is the story of two young boys and two girls, Ruth and Ana.</p> <p>The girls could swim; they wanted to compete, but they didn't have a rubber wheel.</p> <p>They walked around the town trying to find one.</p> <p>Their uncle brought a canoe full of patches that Ruth and Ana used to compete.</p> <p>The patches came off the canoe when they were in the middle of the lake.</p> <p>After climbing a tree, they saw their rivals going the wrong direction and straightforward a waterfall.</p>	

They helped their rivals by holding their hands so they wouldn't die.

On their way home, they saw the winners with their prizes, but the girls felt all winners.

Underlying plot

A group of girls who were rivals became friends as they helped each other.

Major inferences

Manuel's Retelling of "The River": Information from his Spanish Retelling

Features	Key Information	Inferences; *additional comments
Characters	Katy, Ruth and Ana	
Development of characters	Girls competing and then feeling happy to help each other.	
Story line	<p>Katy and Ana wanted to compete. They had to paddle a canoe until they reached the final line.</p> <p>As they didn't have anything, they looked for a boat in the whole town.</p> <p>Their uncle brought a canoe full of patches.</p> <p>They saw their rivals had a huge canoe.</p> <p>As they were paddling, a patch came off and soon the boat was full of water.</p> <p>Then, they climbed a tree to see who would win the competition.</p>	

	They saw their rivals approaching a waterfall.	
	They helped the girls not to fall down the waterfall by holding them with a branch.	
	They felt winners. They didn't die.	
Underlying plot	A group of girls who were in danger during a competition helped each other.	
Major inferences	They were disappointed.	Inferred from the fact that they would probably have to wait one year to compete.

Manuel's Retelling of "Happiness": Information from his Kichwa Retelling

Features	Key Information	Inferences; *additional comments
Characters	A group of boys	
Development of characters	Playful, adventurous boys	
Story line	Three boys were walking by the river and saw a canoe. The sunlight illuminated the river and the water turned yellowish. As the boys played in the river, they got on the canoe. One boy said, "come with me". The boys jumped into the river, played with the water, laughed and saw a lot of animals, birds and frogs. As it was getting dark, they delved into the rainforest and found the ants. They lit a match to attract the ants. After eating the ants, the boys said, "we are the	

Achuar, the owners of this
rainforest”

Then the rainforest stood
still.

Underlying plot

Major inferences

The rainforest stood still.

Inferred from the reader’s
own retelling.

Manuel's Retelling of "Happiness": Information from his Spanish Retelling

Features	Key Information	Inferences; *additional comments
Characters	Ramu and the other boys	
Development of characters	Adventurous boys	
Story line	<p>This is a story about the Achuar, their rainforest and a river.</p> <p>One day, while the boys were playing near the river bank, they saw a beautiful canoe floating on the river.</p> <p>The boys swam in the river and laughed. Then they got on the canoe.</p> <p>One boy took a basket and then told the others he would take them to a place. They all paddle.</p> <p>As the boys were laughing out loud, the frogs croaked and the crickets chirped.</p> <p>The boys got off the canoe, walked for a while and removed leaves and branches.</p>	<p>The canoe was shining.</p> <p>The river acquired a yellowish color with the sunlight.</p> <p>Because of the rivers, the anacondas have a place to hide.</p>

As it was getting dark, they took out a match and lit it.

A boy asked if they were going hunting; they didn't have any weapon.

Then they saw the ants that were attracted by the light.

The boys ate the ants; they thought it was the most delicious food.

The boys said, "We the Achuar are the owners of the rainforest"

Underlying plot

A group of boys used a canoe to arrive at a place where there were delicious ants.

Major inferences

The rivers stopped floating when the boys said that because nobody is the owner of the rainforest.

Inferred from the reader's own retelling.

Appendix G: Retelling Guides and Scores

Appendix: In-Depth Procedure Retelling Guide

Reader: *Tamia* (Kichwa retelling)

Age: 12

Text: *El Río* (The River) by Edna Iturralde

Character Analysis: (40 points)

Recall (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (5)

5 – Ester (5)

5 – Katy (0)

5 – Ana (5)

Development: (20 points)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta but they didn't have a floating rubber wheel. (0)

2 – got a floating rubber wheel full of patches. (0)

3 – started the competition but one of the patches came off. (0)

3 – were observing the competition when they realized Katy and Ana were in danger. (1.5)

3 – saved Katy and Ana. (1.5)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta. (0)

2 – were going directly towards the waterfall. (0)

2 – were saved. (2)

Events:

(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 0

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 0

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points) 0

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen. (5 points) 0

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 0

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 5

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 8

The girls became friends and they all felt winners. (5 points) 1

Character analysis: 20

Events: 14

Total points: 34

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: *Tamía* (Spanish retelling)

Age: 12

Text: *El Río* (The River) by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (5)

5 – Ester (5)

5 – Katy (5)

5 – Ana (0)

Development: (20 points)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta but they didn't have a floating rubber wheel. (3)

2 – got a floating rubber wheel full of patches. (1)

3 – started the competition but one of the patches came off. (0)

3 – were observing the competition when they realized Katy and Ana were in danger. (3)

3 – saved Katy and Ana. (3)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta. (2)

2 – were going directly towards the waterfall. (2)

2 – were saved. (2)

Events:

(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 5

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 5

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points) 8

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen. (5 points) 0

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 0

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 5

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 0

The girls became friends and they all felt winners. (5 points) 5

Character analysis: 31

Events: 28

Total points: 59

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: *Tamía* (Kichwa retelling)

Age: 12

Text: *Felicidad (Happiness)* by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Development: (20 points)

Three Achuar boys:

8 – Antún (8)

6 – Ramu (0)

6 – Maskián (0)

Three Achuar boys

4 – gathered by the river in a sunny day. (4)

4 – started a river expedition in a canoe. (0)

4 – lit a *sapatar* little seed to see through the darkness. (0)

4 – found a giant ant nest and ate as many ants as they could. (0)

4 – felt so lucky to be the owners of the rainforest (4)

Events:

(60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 2

They saw a little canoe on the river and got onto it. (5 points) 0

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 0

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 0

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 0

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 0

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 5

Character analysis: 16

Events: 7

Total points: 23

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: *Tamía* (Spanish retelling)

Age: 12

Text: *Felicidad (Happiness)* by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Development: (20 points)

Three Achuar boys:

8 – Antún (0)

6 – Ramu (0)

6 – Maskián (0)

Three Achuar boys

4 – gathered by the river in a sunny day. (4)

4 – started a river expedition in a canoe. (4)

4 – lit a *sapatar* little seed to see through the darkness. (0)

4 – found a giant ant nest and ate as many ants as they could. (0)

4 – felt so lucky to be the owners of the rainforest. (4)

Events:

(60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 5

They saw a little canoe on the river and got onto it. (5 points) 5

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 5

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 7

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 3

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 0

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 0

Character analysis: 12

Events: 25

Total points: 37

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: *Sisa* (Kichwa retelling)

Age: 13

Text: *El Río* (The River) by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (0)

5 – Ester (0)

5 – Katy (5)

5 – Ana (5)

Development: (20 points)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta but they didn't have a floating rubber wheel. (0)

2 – got a floating rubber wheel full of patches. (0)

3 – started the competition but one of the patches came off. (0)

3 – were observing the competition when they realized Katy and Ana were in danger. (0)

3 – saved Katy and Ana. (0)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta. (0)

2 – were going directly towards the waterfall. (1)

2 – were saved. (2)

Events:

(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 0

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 0

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points) 0

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen. (5 points) 0

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 0

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 2

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 0

The girls became friends and they all felt winners. (5 points) 5

Character analysis: 13

Events: 7

Total points: 20

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: *Sisa* (Spanish retelling)

Age: 13

Text: *El Río* (The River) by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Development: (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (0)

5 – Ester (0)

5 – Katy (5)

5 – Ana (5)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta, but they didn't have a floating rubber wheel. (1.5)

2 – got a floating rubber wheel full of patches. (0)

3 – started the competition but one of the patches came off. (0)

3 – were observing the competition when they realized Katy and Ana were in danger. (1.5)

3 – saved Katy and Ana. (1.5)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta. (2)

2 – were going directly towards the waterfall. (1)

2 – were saved. (2)

Events:

(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 0

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 0

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points) 5

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen. (5 points) 0

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 0

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 5

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 0

The girls became friends and they all felt winners. (5 points) 2.5

Character analysis: 19.5

Events: 12.5

Total points: 32

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: *Sisa* (Kichwa retelling)

Age: 13

Text: *Felicidad* (Happiness) by Edna Iturralde

Character Analysis: (40 points)

Recall (20 points)

Three Achuar boys:

8 – Antún (0)

6 – Ramu (0)

6 – Maskián (0)

Development: (20 points)

Three Achuar boys

4 – gathered by the river in a sunny day. (4)

4 – started a river expedition in a canoe. (0)

4 – lit a *sapatar* little seed to see through the darkness. (0)

4 – found a giant ant nest and ate as many ants as they could. (0)

4 – felt so lucky to be the owners of the rainforest. (0)

Events: (60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 5

They saw a little canoe on the river and got onto it. (5 points) 2.5

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 0

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 0

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 0

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 0

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 0

Character analysis: 4

Events: 7.5

Total points: 11.5

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: *Sisa* (Spanish retelling)

Age: 13

Text: *Felicidad (Happiness)* by Edna Iturralde

Character Analysis: (40 points)

Recall (20 points)

Development: (20 points)

Three Achuar boys:

8 – Antún (8)

6 – Ramu (0)

6 – Maskián (0)

Three Achuar boys

4 – gathered by the river in a sunny day. (4)

4 – started a river expedition in a canoe. (4)

4 – lit a *sapatar* little seed to see through the darkness. (0)

4 – found a giant ant nest and ate as many ants as they could. (0)

4 – felt so lucky to be the owners of the rainforest. (4)

Events: (60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 5

They saw a little canoe on the river and got onto it. (5 points) 2.5

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 0

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 0

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 0

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 0

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 0

Character analysis: 20

Events: 7.5

Total points: 27.5

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: Ana (Kichwa retelling)

Age: 14

Text: *El Río (The River)* by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Development: (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (5)

5 – Ester (5)

5 – Katy (5)

5 – Ana (5)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta but they didn't have a floating rubber wheel. (3)

2 – got a floating rubber wheel full of patches. (2)

3 – started the competition but one of the patches came off. (3)

3 – were observing the competition when they realized Katy and Ana were in danger. (3)

3 – saved Katy and Ana. (3)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta. (2)

2 – were going directly towards the waterfall. (1)

2 – were saved. (2)

Events:

(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 0

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 0

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points) 10

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen. (5 points) 0

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 7

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 5

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 7.5

The girls became friends and they all felt winners. (5 points) 2.5

Character analysis: 39

Events: 32

Total points: 71

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: Ana (Spanish retelling)

Age: 14

Text: *El Río (The River)* by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Development: (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (5)

5 – Ester (5)

5 – Katy (5)

5 – Ana (5)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta but they didn't have a floating rubber wheel. (3)

2 – got a floating rubber wheel full of patches. (2)

3 – started the competition but one of the patches came off. (3)

3 – were observing the competition when they realized Katy and Ana were in danger. (3)

3 – saved Katy and Ana. (3)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta.

(2)

2 – were going directly towards the waterfall. (1)

2 – were saved. (2)

Events:

(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 0

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 0

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points)

10

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen.

(5 points) 5

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 5

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 5

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 7.5

The girls became friends and they all felt winners. (5 points) 2.5

Character analysis: 39

Events: 35

Total points: 74

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: Ana (Kichwa retelling)

Age: 14

Text: *Felicidad (Happiness)* by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Three Achuar boys:

8 – Antún (8)

6 – Ramu (6)

6 – Maskián (0)

Development: (20 points)

Three Achuar boys

4 – gathered by the river in a sunny day. (0)

4 – started a river expedition in a canoe. (4)

4 – lit a *sapatar* little seed to see through the darkness. (0)

4 – found a giant ant nest and ate as many ants as they could. (4)

4 – felt so lucky to be the owners of the rainforest. (4)

Events:

(60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 2.5

They saw a little canoe on the river and got onto it. (5 points) 5

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 7.5

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 5

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 5

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 7.5

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 7.5

Character analysis: 26

Events: 40

Total points: 66

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: Ana (Spanish retelling)

Age: 14

Text: *Felicidad (Happiness)* by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Three Achuar boys:

8 – Antún (0)

6 – Ramu (6)

6 – Maskián (6)

Development: (20 points)

Three Achuar boys

4 – gathered by the river in a sunny day. (0)

4 – started a river expedition in a canoe. (4)

4 – lit a *sapatar* little seed to see through the darkness. (2)

4 – found a giant ant nest and ate as many ants as they could. (3)

4 – felt so lucky to be the owners of the rainforest. (4)

Events:

(60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 0

They saw a little canoe on the river and got onto it. (5 points) 5

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 5

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 5

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 5

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 7.5

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 7.5

Character analysis: 25

Events: 35

Total points: 60

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: José (Kichwa retelling)

Age: 12

Text: *El Río (The River)* by Edna Iturralde

Character Analysis:
(40 points)

Recall (20 points)

Development: (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (0)

5 – Ester (0)

5 – Katy (0)

5 – Ana (0)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta but they didn't have a floating rubber wheel. (3)

2 – got a floating rubber wheel full of patches. (2)

3 – started the competition but one of the patches came off. (3)

3 – were observing the competition when they realized Katy and Ana were in danger. (1.5)

3 – saved Katy and Ana. (1.5)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta. (2)

2 – were going directly towards the waterfall. (1)

2 – were saved. (1)

Events:

(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 2.5

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 1.5

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points) 7.5

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen. (5 points) 0

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 7.5

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 5

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 5

The girls became friends and they all felt winners. (5 points) 2.5

Character analysis: 15

Events: 31.5

Total points: 46.5

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: José (Spanish retelling)

Age: 12

Text: *El Río (The River)* by Edna Iturralde

Character Analysis:
(40 points)

Recall (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (0)

5 – Ester (0)

5 – Katy (0)

5 – Ana (0)

Development: (20 points)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta but they didn't have a floating rubber wheel. (3)

2 – got a floating rubber wheel full of patches. (2)

3 – started the competition but one of the patches came off. (3)

3 – were observing the competition when they realized Katy and Ana were in danger. (1.5)

3 – saved Katy and Ana. (1.5)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta. (2)

2 – were going directly towards the waterfall. (2)

2 – were saved. (2)

Events:
(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 1

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 2

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points) 7.5

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen. (5 points) 0

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 7.5

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 7.5

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 5

The girls became friends and they all felt winners. (5 points) 5

Character analysis: 17

Events: 35.5

Total points: 52.5

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: José (Kichwa retelling)

Age: 12

Text: *Felicidad (Happiness)* by Edna Iturralde

Character Analysis:
(40 points)

Recall (20 points)

Development: (20 points)

Three Achuar boys:

8 – Antún (0)

6 – Ramu (0)

6 – Maskián (0)

Three Achuar boys

4 – gathered by the river in a sunny day. (2)

4 – started a river expedition in a canoe. (0)

4 – lit a *sapatar* little seed to see through the darkness. (0)

4 – found a giant ant nest and ate as many ants as they could. (0)

4 – felt so lucky to be the owners of the rainforest (0)

Events:
(60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 2.5

They saw a little canoe on the river and got onto it. (5 points) 2.5

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 0

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 0

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 0

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 0

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 0

Character analysis: 2

Events: 5

Total points: 7

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: José (Spanish retelling)

Age: 12

Text: *Felicidad (Happiness)* by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Development: (20 points)

Three Achuar boys:

8 – Antún (0)

6 – Ramu (0)

6 – Maskián (0)

Three Achuar boys

4 – gathered by the river in a sunny day. (0)

4 – started a river expedition in a canoe. (4)

4 – lit a *sapatar* little seed to see through the darkness. (0)

4 – found a giant ant nest and ate as many ants as they could. (0)

4 – felt so lucky to be the owners of the rainforest. (0)

Events:

(60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 1

They saw a little canoe on the river and got onto it. (5 points) 5

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 5

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 0

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 0

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 0

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 0

Character analysis: 4

Events: 11

Total points: 15

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: Raúl (Kichwa retelling)

Age: 13

Text: *El Río (The River)* by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Development: (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (0)

5 – Ester (0)

5 – Katy (5)

5 – Ana (0)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta but they didn't have a floating rubber wheel. (3)

2 – got a floating rubber wheel full of patches. (2)

3 – started the competition but one of the patches came off. (2)

3 – were observing the competition when they realized Katy and Ana were in danger. (1.5)

3 – saved Katy and Ana. (1.5)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta. (2)

2 – were going directly towards the waterfall. (1)

2 – were saved. (1)

Events:

(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 1

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 0

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points) 7.5

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen. (5 points) 0

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 2.5

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 5

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 2.5

The girls became friends and they all felt winners. (5 points) 5

Character analysis: 19

Events: 23.5

Total points: 42.5

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: Raúl (Spanish retelling)

Age: 13

Text: *El Río (The River)* by Edna Iturralde

Character Analysis:
(40 points)

Recall (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (5)

5 – Ester (5)

5 – Katy (5)

5 – Ana (5)

Development: (20 points)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta, but they didn't have a floating rubber wheel. (3)

2 – got a floating rubber wheel full of patches. (2)

3 – started the competition but one of the patches came off. (3)

3 – were observing the competition when they realized Katy and Ana were in danger. (3)

3 – saved Katy and Ana. (3)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta. (2)

2 – were going directly towards the waterfall. (2)

2 – were saved. (2)

Events:
(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 2.5

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 0

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points) 10

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen. (5 points) 5

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 7.5

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 7.5

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 2.5

The girls became friends and they all felt winners. (5 points) 5

Character analysis: 40

Events: 40

Total points: 80

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: Raúl (Kichwa retelling)

Age: 13

Text: *Felicidad (Happiness)* by Edna Iturralde

Character Analysis: (40 points)

Recall (20 points)

Development: (20 points)

Three Achuar boys:

8 – Antún (8)

6 – Ramu (0)

6 – Maskián (0)

Three Achuar boys

4 – gathered by the river in a sunny day. (0)

4 – started a river expedition in a canoe. (4)

4 – lit a *sapatar* little seed to see through the darkness. (4)

4 – found a giant ant nest and ate as many ants as they could. (4)

4 – felt so lucky to be the owners of the rainforest. (0)

Events:

(60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 0

They saw a little canoe on the river and got onto it. (5 points) 5

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 7.5

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 0

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 5

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 10

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 7.5

Character analysis: 20

Events: 35

Total points: 55

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: Raúl (Spanish retelling)

Age: 13

Text: *Felicidad (Happiness)* by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Development: (20 points)

Three Achuar boys:

8 – Antún (8)

6 – Ramu (0)

6 – Maskián (0)

Three Achuar boys

4 – gathered by the river in a sunny day. (4)

4 – started a river expedition in a canoe. (4)

4 – lit a *sapatar* little seed to see through the darkness. (4)

4 – found a giant ant nest and ate as many ants as they could. (4)

4 – felt so lucky to be the owners of the rainforest. (0)

Events:

(60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 2.5

They saw a little canoe on the river and got onto it. (5 points) 5

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 5

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 5

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 5

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 7.5

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 5

Character analysis: 24

Events: 35

Total points: 59

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: *Manuel* (Kichwa retelling)

Age: 14

Text: *El Río* (The River) by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Development: (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (5)

5 – Ester (0)

5 – Katy (0)

5 – Ana (5)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta but they didn't have a floating rubber wheel. (3)

2 – got a floating rubber wheel full of patches. (2)

3 – started the competition but one of the patches came off. (2)

3 – were observing the competition when they realized Katy and Ana were in danger. (2)

3 – saved Katy and Ana. (2)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta. (2)

2 – were going directly towards the waterfall. (2)

2 – were saved. (2)

Events:

(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 2.5

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 2.5

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points) 5

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen. (5 points) 0

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 5

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 7.5

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 5

The girls became friends and they all felt winners. (5 points) 5

Character analysis: 27

Events: 32.5

Total points: 59.5

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: Manuel (Spanish retelling)

Age: 14

Text: *El Río (The River)* by Edna Iturralde

Character Analysis:

(40 points)

Recall (20 points)

Development: (20 points)

Kichwa girls in the Amazon Region:

5 – Ruth (5)

5 – Ester (0)

5 – Katy (5)

5 – Ana (5)

Ruth and Ester

3 – wanted to compete in the annual floating rubber wheel regatta but they didn't have a floating rubber wheel. (0)

2 – got a floating rubber wheel full of patches. (1)

3 – started the competition but one of the patches came off. (2)

3 – were observing the competition when they realized Katy and Ana were in danger. (2)

3 – saved Katy and Ana. (1)

Katy and Ana

2 – also competed in the annual floating rubber wheel regatta. (2)

2 – were going directly towards the waterfall. (1)

2 – were saved. (1)

Events:

(60 points)

Ruth and Ester were cousins and longtime rivals of the sisters Katy and Ana. (5 points) 0

Ruth and Ester were eager to compete in the annual floating rubber wheel regatta in an attempt to finally defeat their longtime rivals. (5 points) 0

After several days looking for a floating rubber wheel, Ruth and Ester got one full of patches. (10 points) 2.5

The day of the competition, Katy and Ana had the biggest floating wheel Ruth and Ester had ever seen. (5 points) 1

Ruth and Ester paddled as fast as they could, but unfortunately one of the patches came off, and the floater completely deflated, leaving them out of the competition. (10 points) 5

Ruth and Ester were observing the competitors when they realized Katy and Ana were going down the river in an opposite direction and straight to the waterfall. (10 points) 7.5

Ruth and Ester got into a canoe to rescue Katy and Ana from falling down the waterfall. (10 points) 5

The girls became friends and they all felt winners. (5 points) 5

Character analysis: 25

Events: 26

Total points: 51

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: Manuel (Kichwa retelling)

Age: 14

Text: *Felicidad (Happiness)* by Edna Iturralde

Character Analysis: (40 points)

Recall (20 points)

Three Achuar boys:

8 – Antún (0)

6 – Ramu (0)

6 – Maskián (0)

Development: (20 points)

Three Achuar boys

4 – gathered by the river in a sunny day. (2)

4 – started a river expedition in a canoe. (4)

4 – lit a *sapatar* little seed to see through the darkness. (4)

4 – found a giant ant nest and ate as many ants as they could. (3)

4 – felt so lucky to be the owners of the rainforest. (4)

Events: (60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 2

They saw a little canoe on the river and got onto it. (5 points) 5

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 5

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 5

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 5

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 7.5

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 7.5

Character analysis: 17

Events: 37

Total points: 54

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

Appendix: In-Depth Procedure Retelling Guide

Reader: Manuel (Spanish retelling)

Age: 14

Text: *Felicidad (Happiness)* by Edna Iturralde

Character Analysis: (40 points)

Recall (20 points)

Development: (20 points)

Three Achuar boys:

8 – Antún (0)

6 – Ramu (6)

6 – Maskián (0)

Three Achuar boys

4 – gathered by the river in a sunny day. (2)

4 – started a river expedition in a canoe. (4)

4 – lit a *sapatar* little seed to see through the darkness. (3)

4 – found a giant ant nest and ate as many ants as they could. (3)

4 – felt so lucky to be the owners of the rainforest. (4)

Events: (60 points)

Antún, Ramu and Maskián gathered by the river to mitigate the heat of the day. (5 points) 2

They saw a little canoe on the river and got onto it. (5 points) 5

They decided to go down the river to explore while listening to the sounds of nature. (10 points) 7.5

The three boys rowed a long way down the river until it got dark and the fireflies were the only lights visible. (10 points) 7.5

The boys tied up the canoe, got off the canoe and went to explore. Antún, who was carrying a basket on his back, lit a *sapatar* little seed to light the place. (10 points) 7.5

Suddenly, they found a giant ant nest; the ants, attracted by the light, got out of the nest. (10 points) 7.5

The Achuar boys ate as many ants as they could while making noises of absolute delight. (10 points) 10

Character analysis: 22

Events: 47

Total points: 69

Adapted from Goodman, Y. M., Watson, D., & Burke, C. (2005). *Reading Miscue Inventory. From evaluation to instruction* (2nd ed.). Katonah, NY: Richard C. Owen Publishers, Inc.

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