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Beyond elocution: Multimodal narrative discourse analysis of L2 storytelling

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Abstract

Drawing upon research on narrative and speech styles and on digital and multimodal communication, the author proposes multimodal narrative discourse analysis (MNDA) with associated pedagogical and analytical procedures to teach and study storytelling. The second language (L2) students first participated in multimodal narrative simulations in the virtual world of Second Life. The university students then presented, evaluated, and revised stories in both face-to-face and digital contexts through multiple modalities and technologies. MNDA further provided tools and methods for analyzing the students' discursive processes and agentive experiences of L2 storytelling. The results of MNDA showed that the proper use of narrative elements, discourse structures, and stylistic devices, as well as bodily, visual, and video resources, assisted the students in developing multimodal designs and storytelling styles. This technology-mediated discourse approach to L2 storytelling suggests the importance of teaching and researching broader narrative contexts and activities other than simply elocution in multimodal communicative activities.

Keywords: digital storytelling; multimodality; narrative discourse; Second Life; storytelling style

1. Introduction

Storytelling is a genre of spoken interaction that dominates workplaces and social worlds, but it can be challenging to frame these out-of-school agentive experiences in second language (L2) teaching and learning. Recent technologies link academic discourse to new media and culture outside school (Ware & Warschauer, 2005) and transform resources for research data collection and analysis (Flewitt, Hampel, Hauck & Lancaster, 2014). Beyond elocution, that is, "the art of careful public speaking, using clear pronunciation and good breathing to control the voice" (Cambridge Dictionary Online), storytellers can integrate and transform multimodal resources and digital technologies across contexts to refashion L2 storytelling. Despite a growing body of research investigating multimodal communicative activities in face-to-face (F2F) and digital contexts (e.g. Goulah, 2007; Hull & Katz, 2006; Hull & Nelson 2005; Neville, 2010, 2015), L2 researchers have not fully explored multimodal narrative discourses using a range of methodological procedures. In the sections that follow, the author presents a technology-mediated discourse approach to L2 storytelling by synthesizing research on narrative and speech styles as well as on digital and multimodal communication. The results of multimodal narrative discourse analysis (MNDA) illustrate L2 students' diverse storytelling styles and communicative modalities that go beyond the performance of verbal art.

2. Literature review

Narrative analyses of personal experiences have highlighted temporally ordered storylines, including the abstract, orientation, complicating actions, resolution, and coda, and the narrator's evaluation and elaboration of the events and actions (Labov, 1972; Labov & Waletzky, 1967). To assess L2 storytelling, researchers (e.g. Ko, 2001; Ko, Schallert & Walters, 2003) have adjusted the narrative elements into the plot, elaboration, coherence, evaluation, and resolution. Although narrative structures provide organizational support for storytelling, the structural model may fail to explain the interactional dynamics of storytelling in local contexts of communication (De Fina & Georgakopoulou, 2012). Narrative can be contextualized as discourse to link tellers and audiences in interactions.

L2 narratives are discursively and aesthetically constructed (Duff & Bell, 2002). Research on narratives often involves complex analyses of storytelling styles and social contexts to investigate storytellers' language learning trajectories and relations with the audience (Pavlenko, 2002). In such a context of narrating knowledge, participants perform and manage situational identities (Barkhuizen, 2011). For example, narrators tell, retell and reflect on stories, and researchers interpret, revisit, and shift their understanding of storyteller experiences. Experience-based narratives can be crafted and styled collaboratively in classroom spaces as a rhetorical construction for engaging communities of learners, teachers, and researchers and as a performative mode of inquiry that fosters embodied knowledge and multiple perspectives (Nelson, 2011). In this sense, agentive experiences of telling and interpreting stories are conceived as our sense or awareness of ourselves as social actors rather than as willing individuals in creating speech styles and changing L2 storytelling.

From the discourse perspectives of ethnolinguistics and sociolinguistics, speech styles are alternative ways of speaking (Hymes, 1972) and are creative, design-oriented processes (Coupland, 2007). Crystal and Davy (1969) identified several stylistic devices in English, including (a) vocalizations (i.e. non-phonetic sounds); (b) silence and voiced pauses; (c) prosodic variations in pitch, loudness, and speed; and (d) paralinguistic and physiological mechanisms (e.g. nasalization, velarization, labialization, huskiness, and whisper). Social actors use particular styles of English and other embodied styling practices to index social and cultural positioning within interactive situations (Pennycook, 2007; Rampton, 2006).

Discovering ways of storytelling is a matter of style, genre, and stance expressions (Pennycook, 2007). To communicate emotions or stances, narrators can use expressive prosodic and phonological features such as exaggerated pitch and volume, lengthened sounds, pauses, breaths, hesitations, and laughter to complicate actions (Wennerstrom, 2001) and make points (Mischler, 2008). Moreover, storytellers can use their bodies to enact character movements and actions (i.e. character viewpoints) or their hands to emphasize certain narrative segments (i.e. observer viewpoints), which also create a discourse context that makes narrative intelligible to audiences (Debreslioska, Özyürek, Gullberg & Perniss, 2013). Multimodal contextual styling – that is, genre making and breaking for creating and responding to context (cf. Coupland, 2007) – enables dynamic and interactive storytelling.

Recent multimodal environments for digital storytelling allow participants to adjust stories to meet the expectations of different contexts and tasks. A digital story featuring still and moving images can be constructed to engage the public (Godwin-Jones, 2012). Applying Labov's narrative structure to analyze a digital story, Hull and Nelson (2005) argued that youths often relocate stories within specific multimodal contexts for aesthetic expression. Building upon the dialogism and ventriloquism concepts of Bakhtin (1981), Hull and Katz (2006) also determined that youths developed agentive senses of self and became adept at engaging the audience by composing, sharing, and responding to digital products. Multimodal meaning makers as agents can use and combine various semiotic modes to design products or events (Kress & van Leeuwen, 2001), to adjust their voices (van Leeuwen, 2014), and to reshape contextual resources

(Hampel & Hauck, 2006). By interfacing with technologies, making digital videos, and using gestures, L2 students could develop multimodal expressions and critical reflections (Goulah, 2007).

Storytelling through the multimodality of virtual reality differs from digital storytelling using resources from a library of images or other digital tools in that storytellers can control their characters' actions and interact with environmental resources to create stories. Neville (2010, 2015) has reported that students' navigation and immersion in narrative simulations helped them construct story maps. In Second Life, although L2 students mainly interact with others through verbal communication (Deutschmann, Panichi & Molka-Danielsen, 2009; Liang, 2012a, 2012b, 2013; Liou, 2012; Peterson, 2012), players can also communicate through the nonverbal modes of avatar appearance, movement, and gestures (Wigham & Chanier, 2013). By moving around in the multimodal landscapes of Second Life, L2 storytellers could interact with multi-sensory resources and enact particular narrative viewpoints and identities to construct narratives (Liang, 2015). The author extended this work to investigate L2 students' discursive processes and agentive experiences of engaging in multimodal storytelling practices using MNDA. The following method sections present a technology-mediated approach to multimodal narrative discourses with associated pedagogical and analytical procedures in order to highlight styles and modalities of L2 storytelling.

3. Methodology

3.1 Participants

The author was the instructor and researcher who conducted this study within an elective professional communication class at a major university in Taiwan. Seventeen third- and fourth-year English majors or minors between the ages of 20 and 21 were enrolled in this class. Their English competence varied, but all had achieved an upper-intermediate level. At the end of the semester, 12 students (S1–S12) voluntarily provided their story productions and 14 students (S1–S14) responded to questionnaires for this study. Of the 14 participants, three were male (S6, S11, S13) and the others were female. The instructor inserted particular interactional procedures (see section 3.2) into classroom storytelling practice to foster reflective teaching and learning (cf. Nassaji, 2012). The author also served as a participant and observer in this particular context of constructing and analyzing participants' storytelling.

3.2 Pedagogical procedures

The pedagogy included the following interactional procedures: (a) teacher demonstrations and instructions on transcriptions and analyses of storytelling; (b) students' narrative simulations and story compositions in Second Life; (c) students' PowerPoint presentations of the stories to classmates, and peer evaluations and class discussions; (d) students' transcriptions of the video recordings of the narrative presentations; (e) participant self-evaluations; and (f) students' digital video productions.

First, the instructor introduced the students to the affordances of Second Life and demonstrated the work of previous students. Second, individual students created avatars to interact with contextual resources (scenes, simulations, objects, other players, etc.) in Second Life and then composed stories through PowerPoint presentations based on snapshots or still images taken in Second Life. Third, in each 150-minute classroom storytelling session, the class was divided into two groups. Half of the students told stories in real-time PowerPoint presentations without reading scripts, and the other half provided feedback based on peer-evaluation questions (see Appendix A). Each storyteller was assigned five minutes to present the story to the whole class sequentially and received 15 minutes of feedback. Fourth, the storytellers transcribed storytelling after class based on transcription notations (see Appendix B). Fifth, individual students answered self-evaluation questions (see Appendix C). Sixth, after receiving F2F and written feedback,

participants edited their PowerPoint presentations using resources from Second Life and other online materials. Participants then used their revised PowerPoint slides to record their digital stories through iMovie, Movie Maker, or other software without any direction from the instructor. This task was not part of the graded activities; however, the participants could get help from peers.

MNDA related storytelling practices to various pedagogical contexts. L2 students presented stories to a physically present audience acting as reviewers by using multimodal features and transcribed, edited, revised, recorded, and shared stories as more careful digital productions. Such storytelling practices provided L2 students with activity settings, social interactions, and digital environments, which afforded multiple modes of expression and layers of reflection. In particular, multimodal transcription and analysis transform a partial view of the ethnography of speaking into the situated and dynamic complexity of different communicative resources in sociocultural contexts (Flewitt *et al.*, 2014). The affordances of various contexts and activities also helped them develop awareness of multimodal narrative designs and storytelling styles supported with MNDA.

3.3 Data and analytical procedures

The technology-mediated discourse approach to L2 storytelling includes multiple data and analytical procedures. Major sources of data included (a) video recordings and transcripts of the F2F narration, (b) the revised digital storytelling videos and transcripts, (c) presented PowerPoint slides, (d) recordings and transcripts of peer feedback, and (e) written self-evaluation forms. Two research assistants (a) recorded students' F2F storytelling and sent the video files to students; (b) collected students' PowerPoint slides, digital storytelling videos, transcripts, and self-evaluation forms; and (c) edited students' transcripts.

MNDA shares many of qualitative and interpretive methods with ethnolinguistics, sociolinguistics, multimodal discourse analysis, and narrative analysis, including close-participant observation and using video recordings with transcription and analysis of storytelling and narrative discourse to allow adequate presentations of discourse contexts influencing L2 storytelling. MNDA extends different forms of multimodal transcription and narrative analysis into a series of procedures using tools and technologies in the research process with respect to (a) narrative elements, (b) discourse structures, and (c) stylistic devices.

First, narrative elements as outlined in Ko (2001) and Hull and Nelson (2005) were analyzed (Liang, 2012c) and rephrased in the peer-evaluation questions (see Appendix A), including (a) the plot (characters, actions, or story structures), (b) elaboration (interesting dialogues or details), (c) coherence (connected details or actions), (d) evaluation (viewpoints and perspectives towards events), and (e) resolution (the ending of the story).

Second, the participants' discourse structures of storytelling in terms of elocution, lexical and grammatical use (i.e. speech rates, accuracy, lexical variety, recycle rate, lexical sophistication), and the use of pictures were analyzed (Liang, 2016). Trimmed speech rate excluded the times spent on long pauses, false starts, repeated syllables and words, and hesitations, which were measured by running Praat (http://www.fon.hum.uva.nl/praat/). Lexical diversity referred to the number of word types. Lexical sophistication referred to the presence of difficult words beyond the 2,000 most frequent words of English. The levels of lexical diversity and sophistication were all measured by running the trimmed speech transcripts through Lexical Tutor (http://www.lextutor.ca), and accuracy was determined by the ratio of error-free clauses per total number of clauses (cf. Thai & Boer, 2016).

Third, analyses of stylistic devices were based on an array of prosodic, paralinguistic, and physiological features (cf. Crystal & Davy, 1969; van Leeuwen, 2014) and visual and bodily resources (cf. Debreslioska *et al.*, 2013; Liang, 2015) in F2F narration, as well as audio and video

resources in digital storytelling. Further investigations of the participants' contextual styling (cf. Coupland, 2007) help contextualize changes in L2 storytelling.

The analytic method of MNDA has afforded priority to the L2 storytellers' dialogical process of narrative inquiry. The interactive process of MNDA empowers social actors, which not only avoids inappropriate transfer of narrative methods across contexts (cf. De Fina & Georgakopoulou, 2012) but also differs from other forms of multimodal discourse analysis that focus on the systemic grammars rather than the sign-makers (cf. Jewitt, 2014). In addition to the researcher's ethnographic observations and analyses of how multimodal and narrative resources were used across different technology-mediated contexts, analyses of participants' responses to the peer- and self-evaluation questions further provided agentive storytellers' narrative discourses and experiences circulated among learners to explore the possibilities and problems with MNDA and to assess the areas in which L2 storytelling may be refashioned.

The examples of MNDA are shown in the following sections, including the use of verbal, visual, and bodily resources of F2F presentations for rehearsals (section 4.1); the use of visual, digital, and video resources for enhancing L2 storytelling specific to the digital productions (section 4.2); and multimodal narrative designs and storytelling styles in social interactions (section 4.3).

4. Results and discussions

Participants' discourse structures of storytelling are presented in Appendix D. Although the change of contexts from F2F to digital storytelling evoked comparable shifts, the author focused on qualitative analyses of participants' L2 storytelling across contexts. The author first selected narrative segments, which were associated with PowerPoint slide sequences and time spent in storytelling. The author then analyzed more precisely how the stories were creatively styled and modified between the F2F presentations and the revised digital versions of the stories, and explored the affordances and constraints of digital resources for L2 storytelling. The author finally examined the L2 storytellers' multimodal construction of narrative discourse.

4.1 Participants' L2 storytelling styles

Six storytellers tended to maintain relatively constant L2 storytelling styles with respect to narrative structures, discourse structures, and stylistic mechanisms across contexts. In the following excerpts, the author analyzed their F2F storytelling using MNDA.

The male student S11 demonstrated relatively fast speech while generating speech repetitions and errors (e.g. *something, been, set me up* in Figure 1) in both F2F and digital storytelling contexts. His slightly exaggerated elocution and gesture animated the story *A Scifi-Action Hotchpotch* (Figure 1). To narrate a professional life as a secret agent, he used the present tense of

Pic#6 (02:22–03:00)
And WAIT (0.8) WAIT and *till the T-Rex* ((shaking hands)) is (0.6) *HEAVILY WALKING* ((making cycles with both hands to imitate T-Rex's walking)) in front of me and I (1.0) *lose my breath* ((shaking hands)) *till the last moment* ((right hand moving to the right)) *that I CAN'T even hear his footstep* ((shaking hands)) (0.3) and I say *<WHAT IS GOING ON>* ((shaking hands)) *this is something (0.5) something strange* ((audience laughs)) I haven't been been met before even when I was an FBI agent (0.3) I found out who has set me up to (0.4) set me up (0.4) set me up and if *he* ((right hand up)) (0.7) and or everything *touch my daughter* ((right hand shaking)) I will *break his neck* ((right hand shaking)) and *feed him to my dogs* ((right hand shaking)) (0.4)

Figure 1. S11F2F. A Scifi-Action Hotchpotch

the verb to position the audience as participants in here-and-now events. His hand gestures were synchronized with stressed expressions and actions (e.g. *HEAVILY WALKING, WHAT IS GOING ON, lose my breath, hear his footstep, touch my daughter, break his neck, feed him to my dogs*). The verbal and bodily performance also worked synergistically with the visual image (e.g. a T-Rex's walking) to present the observer's viewpoint (cf. Debreslioska *et al.*, 2013).

S8 also spoke quickly, although the within-clause pauses, hesitations, repetitions, and false starts give an impression of poor elocution. In contrast to S11's observer viewpoint, in her story, *A Hammock Dream,* S8 used onomatopoeia and simpler sentences through a character's point of view (cf. Debreslioska *et al.*, 2013) to imitate actions (*hopped*) and moving sounds (*SHU::*) as in Figure 2a and Figure 2c. The scenes of transformation in Second Life were materialized in gestures and movements. S8 expressed emotions and viewpoints and connected actions through a series of humorous graphic designs (e.g. emoticons in pic#8) and user-controlled camera movements and animations in Second Life (e.g. the avatar's facial expressions and actions in pic#4, 8, 13, and 14).

In contrast, S12 spoke more slowly with simpler and more accurate sentences. By drawing on the character of a personified Autobot in the style of *Toy Story*, she created a cartoon-like speech and plot through higher pitch, exaggerated stress (e.g. ↑*WHAT I* can't *even kill* ↑*myself*), and hand gestures (Figure 3a), along with an unexpected sound act (e.g. *bomb* in Figure 3b).

S2 also spoke slowly. In her story, *Dream by Dream*, S2 cast herself in the role of a pianist learning about her past lives through a semiotic resource eohippus in Second Life as in Figure 4.

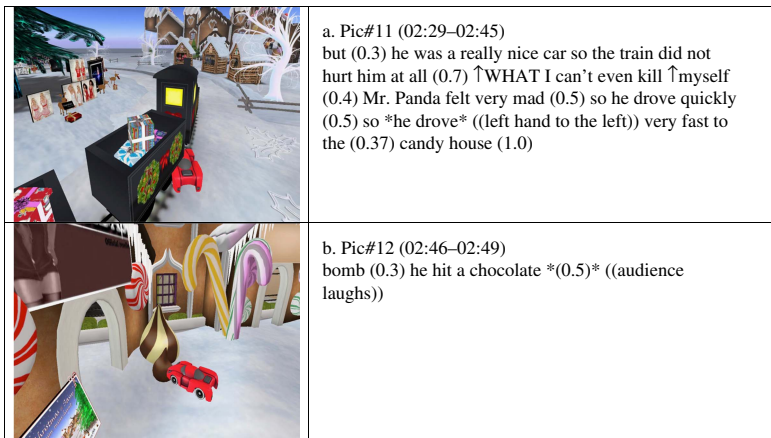|	
	a. Pic#4 (01:14–01:27) when he give me (0.5) eh: his rabbit (0.6) the rabbit just *HOPPED* and *HOPPED*(0.3) and *HOPPED* ((jumps)) far away (0.5) so I: in order to *catch it* ((left hand up)) so I (0.8) quickly ran after it (1.6)
	b. Pic#8 (02:38–02:39) <something miraculous (0.3) REALLY HAPPENED> (2.1)
	c. Pic#13 (02:45–02:46) *SHU:: shu shu shu shu SHU::* ((describing the velocity of her rotation)) *(1.2)* ((laughing with her hands covering her nose and then her face while moving her body back and forth))
	d. Pic#14 (02:47–02:52) *>Something's< SPARKLING (0.3) uh: WOW: the sheep becomes a human* ((smiling voice)) (1.0)

Figure 2. S8F2F. A Hammock Dream

a. Pic#11 (02:29–02:45)
but (0.3) he was a really nice car so the train did not hurt him at all (0.7) ↑WHAT I can't even kill ↑myself (0.4) Mr. Panda felt very mad (0.5) so he drove quickly (0.5) so *he drove* ((left hand to the left)) very fast to the (0.37) candy house (1.0)

b. Pic#12 (02:46–02:49)
bomb (0.3) he hit a chocolate *(0.5)* ((audience laughs))

Figure 3. S12F2F. Mr. Panda's Bizarre Christmas

Pic#10 (04:03–04:34)
then (1.0) an (1.6) *eohippus* ((left hand shaking)) (0.4) *pops up* ((left hand shaking)) (0.4) in front of me (0.8) you had been a creature like this *(1.6)* ((smiling)) uh you flew in the you flew in the *sky* ((left hand shaking)) (1.2) with much *freedom* ((left hand shaking)) (0.9) but (0.43) in the *course of evolution* ((left hand shaking)) (0.4) you *lost* ((left palm backward)) the power of uh uh the *flight* ((left hand shaking)) (0.5) you lost >the power of *flight*< ((left hand shaking)) (0.6) so you died soon (3.2)
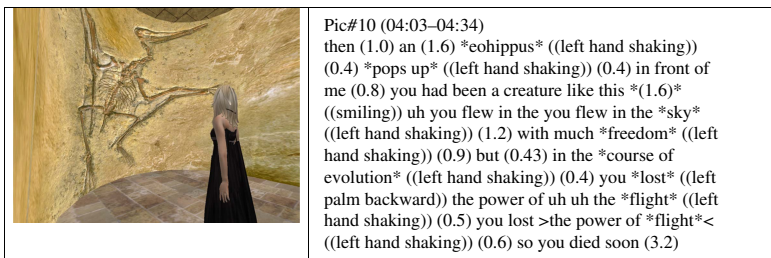
Figure 4. S2F2F. Dream by Dream

Her frequent pauses seemed to indicate elocutional shortcomings but actually showed aspirations of philosophical thinking about the long history of life. Her hand gestures went along with diverse lexical expressions (e.g. *eohippus, sky, freedom, flight*) to create natural rhythms of pausing and breathing for more accurate grammatical constructions.

S5's speaking speed was the slowest in F2F storytelling. In her story, *Little Mermaid Growing Up*, she used relatively more diverse words to set up a dramatic scene. She mimicked the character's voice in direct speech and laughing (i.e. *HA HA my sweetie*), created a character by interfacing with phantom technology in Second Life, and wrote the word *Poseidon* (Figure 5a) and *drink me* (Figure 5b) on the picture to make the painting information graphic. In addition to a charming speech style, her hand gestures (i.e. curving her index finger inward) added suspense and mystery to the plot.

In Figure 6, S7 expressed the subjective feelings of the red mushroom with increased volume and high pitch accents, which seemed to be linked to the peer group's exciting experiences of playing the video game Super Mario as children. Although S7 displayed a relatively higher level of accuracy and lexical diversity, she also used self-regulatory gestures (e.g. pushing her chin up to think) for retrieving dialogues and descriptions about the other scene. The involuntary gestures (e.g. touching hair and combing hair) revealed her nervousness.

The results of MNDA illustrated the significance of teaching and studying L2 storytelling using narrative simulations in Second Life and PowerPoint presentations in class. In Second Life, participants must intentionally use avatars' gestures, facial expressions, and body motions (cf. Wigham & Chanier, 2013). Using semiotic resources (e.g. T-Rex, Autobot, eohippus) or material objects (e.g. rabbit and mushroom) in the virtual world for story maps (cf. Neville, 2010, 2015) and narrative discourse (cf. Nelson, 2011), these L2 students could perform various figures of

	a. Pic#3 (01:10–02:14) it's the day before my 18th birthday (2.2) as I:: pla::n my next: adventure (0.6) on my boat (0.8) my father (0.5) pops out from the sea (1.2) *HA HA* ((low voice)) my sweetie *(1.5)* ((laughs with the audience)) ha HA my ↑sweetie (0.4) do I just give you a big ↑shock (0.5) ↑RELAX (0.6) as you know (0.6) you'll be eighteen tomorrow (1.8)
	b. Pic#9 (04:02–04:22) in the building I find a bottle of wine (0.8) uh: (1.1) which seems to be so alluring on a corner (0.8) and the girl in the poster (0.3) even says to me (0.7) *<drink me>(4.2)* ((alluring tone with index finger curving inwardly twice))

Figure 5. S5F2F. Little Mermaid Growing Up

	Pic#6 (02:08–02:45) but however the fairies said (0.4) *OH: RED MUSHROOM SO LOVELY* ((high pitch)) (0.3) I can use it to decorate our home the Christ- (0.4) Christmas party is coming (0.9) and to to my surprise they seem to like my present and use it to *decorate their home (0.9) and one fairy said* ((touching hair)) (0.4) kind-hearted ↑girl (0.4) your your bags and all their gifts are falling down in: *the other the o-* ((palm to the left)) *the other island the on island called* ((combing hair)) *(1.4)* ((chin up)) the island of memory (0.5) and close your eyes I'll send you to the island of memory (2.0)

Figure 6. S7F2F. The Island of Memory

speech (e.g. metaphor, hyperbole, onomatopoeia, and personification) in different ways (e.g. swift, philosophical, humorous, or comedic). To develop the plot, add details and viewpoints, or connect actions, cultural scenes (Figures 1, 3, 4, and 6), gestural images (Figure 2), and information graphics (Figure 5) worked synergistically with contextual styling (cf. Pennycook, 2007; Rampton, 2006). However, a few still images of characters' embodied actions in the virtual world contained inadequate contextual clues, which caused low levels of elocution or narration in some students (e.g. Figures 2 and 6). Although the multimodality in Second Life may afford or constrain F2F storytelling, L2 students could potentially refashion storytelling during digital productions, as shown in section 4.2.

4.2 Participants' refashioning of L2 storytelling

Compared to the six students mentioned in section 4.1, the following six students changed narrative elements, discourse structures, or stylistic mechanisms, and even incorporated visual and video resources specific to the digital productions. Although this section compares F2F and digital contexts, as participants only recorded their voices in the digital stories, these versions lacked the body language of the participants and a live audience. Therefore, some of the changes could be due to these differences in the multimodal landscape of each context.

S6 spoke slowly. His story was adapted from several science-fiction films, such as *The Matrix*, *Inception*, and *In Time*, but the wide shot of the scene made it hard to understand the multilayer plot. In digital storytelling (Figure 7b), S6 further reduced his speaking speed to enhance accuracy. He also made significant revisions to narrative elements, especially the ending of the story, for clear elocution. The changes made included deleting confusing expressions (e.g. *living*

	a. F2F Pic#13 (04:04–04:13) and after that (0.4) I finally I wake up in my living table (0.7) actually I'm (0.4) the patient of (0.3) a sleep walk (0.7) and this is the end of my story	b. DigPic#13 (03:08–03:17) Actually I'm a sleep walker (0.6) everything was listening to me (0.6) we were all fake (0.8) thank you

Figure 7. S6. Alcoholic Fantasy

	a. F2F Pic#6 (01:43–01:56) so:: would you would this lovely painter like would like to have a lovely dating with ↑me (0.4) *not a chance* ((high pitch)) *go away* ((frowning)) (1.3) so:: you see I miss a good opportunity again (1.3)	b. DigPic#5 (00:57–01:22) <OH what a lovely painting> (0.4) thanks (1.2) <OH what a lovely painter> (1.2) thanks (1.1) <so would this lovely painter like to have a lovely dating with ↑me> (1.2) not a chance go away (1.2) see (0.7) I lose a great opportunity agai::n (1.9)

Figure 8. S4. A Painter's Story

table and patient) and adding details (e.g. *everything was listening to me*), which led to a shocking discovery (i.e. that *we were all fake*).

S4's *A Painter's Story* (Figure 8) included comic dialogue in speech bubbles between two avatars. Although she used high pitch and facial expressions in complicating actions (cf. Wennerstrom, 2001) during F2F storytelling (Figure 8a), her digital version (Figure 8b) included expressive prosodic features (e.g. volume, speed, breaths, lengthened sounds).

S10 was one of the two participants (S9 and S10) who had neither gestures nor eye contact with the audience during F2F storytelling. When S10 told the story, *Memory Seeking*, she spoke fluently while performing various character roles in a soft and clear voice within the context of the dialogue, as in Figure 9a. For digital storytelling (Figure 9b), she retained three fourths of the original text, while adding nine pictures and shortened sentences, as well as dialogues for pictures. She also reduced her speaking speed.

S9 recycled about three fourths of the original text and added five pictures in the revised, digital stories. In the original version of *Never Stop Learning*, she included a lengthy pictorial description of a woman making a vase on the ground (Figure 10); in the digital version, this narrative sequence was presented in three pictures with the same scene shot at night (Figure 10b) and during the day (Figure 10c) through the media editing of pictorial brightness. She also made full use of voice as, for example, in voiced alveolar trills *rrr* and nasalization (Figure 10a).

S1 retained approximately 80% of her original words in digital storytelling. She used few words but was one of the participants (S1, S2, S3, S5, S7, S9, and S10) who showed agency and interest in incorporating multimedia effects in digital videos. In her F2F version, false starts, errors, and pauses weakened the introduction of the story. In the digital version (Figure 11b), background drumbeats were added, the graphic was modified with a sepia tone, and the film age was set to the oldest in order to establish the plot.

S3 substantially revised a drama cliché, which involved restyling or genre breaking (cf. Coupland, 2007). In digital storytelling, she reduced speaking speed. Her original short story featured the narrator's voice with wide shots and a flat tone. By inserting environmental sounds (e.g. the murmuring stream and blowing wind in Figures 12b and 12c) and changing graphic frames (e.g. cropping to emphasize feet in Figure 12c), S3 highlighted a particular time and space

	a. F2F Pic#4 (00:36–01:26)	b. Dig Pic#8
	hello hello ((soft voice)) (0.8) I say (0.5) um well hello (4.0) >why do you call my name< (1.4) she says (0.9) do you want to she says do you want to know who you are (0.6) I say *of ↑course* ((soft voice)) (1.0) then (0.5) suddenly she says (0.5) >do you know who's my favorite ↑writer< (1.1) I say (0.4) *how do I know it (1.0) she says <it's Shakespeare> * ((smiling)) (1.4) and she says (0.5) I've always wanted (0.3) to read (0.3) his Hamlet (1.2) but as you see (0.4) I'm just a painting (0.8)	(00:31–00:48) hi lady (0.8) why do you call my ↑name (1.3) <poor girl (1.3) I know your lost memory (0.9) I can help you (0.7) now (0.6) you just go along the street (0.5) and you will find a green lady in a painting> (2.3)

Figure 9. S10. Memory Seeking

	a. Pic#9 (02:42–03:20) you need to make a very beautiful vase (0.4) to please the master so that he will show you the book (0.6) *I will be here to watch you and tell you which vase you make is good enough *((nasal voice)) (0.6) I say (1.0) o::k>I:: am pretty good at< it I can make you one ve::ry quickly (0.3) *rrr* ((voiced alveolar trills)) (0.6) here (1.0) WHAT A RUBBISH IT IS (0.4) Go MAKE ANOTHER ONE (0.9) ↑WHAT HOW DA:RE YOU SAY SO you know nothing about it (0.5) fi::ne (0.4) I will make you a per::fect one (0.5) and to surprise ↑you:: and your master (1.0)
	b. S9DigPic#10 (03:20–03:27) no:: no:: no:: no:: not good enough (0.5) after making hu::ndreds of vases (0.4) the bird finally says (0.8)
	c. Pic#11 (03:27–03:45) ok: (0.4) I: think this one is kind of (0.6) okay (0.5) I can lead you to the master now (0.9) though:: I was exhausted I still follow the bird (0.3) and hope the master was the guy who made that awesome teapot (1.0)

Figure 10. S9Dig. Never Stop Learning

of the events. The digital storytelling allowed her to play character roles by contrasting two stereotypical voices: the low and husky voice of Tomoe (the mother-in-law) versus the high and squeaky voice of Momoko (the daughter-in-law), which were delivered together with a change of pace (Figure 12a). Although the pronunciation was not fully clear because of the use of a high-pitched, anime-style shrill tone (e.g. Figure 12b), S3 experimented with distinct genres and prosodic features to add black humor to the Asian-style soap-opera trope.
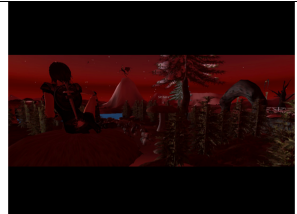
	a. F2FPic#2 (00:30–00:42) I was a wo- I was a warrior (0.4) for (1.0) ten-fifteen years ago (1.0) I was born in this extremely bloody village (3.1)	b. DigPic#3 (00:23–00:32) ((drumbeats)) ((a sepia tone film age, oldest)) I was born in an extremely bloody village (0.9) it was fifteen years ago (1.1)

Figure 11. S1. Do You Believe Second Life?

	a. S3DigPic#4 (00:53–1:01) ((blur)) *Tomoe go finishing those needle works after finishing washing the clothes * ((squeaky voice)) (0.8) *<Momoko why do you treat me in such way>*((husky voice))(0.4)
	b. S3DigPic#5 (01:01–01:10) ((blur)) *well your son was dead and we have no location (0.4) you should be glad that I willing to make you live with me now*((squeaky voice)) *(4.2)* ((background sound: murmuring stream)) ((fade out, to black))
	c. S3DigPic#6 (01:10–01:18) ((blur)) ((fade in, from black)) ((background sound: blowing wind)) *she treated me so: bad that she even didn't let me wear my slippers walking on the snow* ((husky voice) (1.7)

Figure 12. S3Dig. The Wife and the Mother-in-Law

During digital productions, multimodal resources were contextualized in three significant ways. First, narrative elements and discourse structures were modified, and English stylistic devices (cf. Crystal & Davy, 1969; Pennycook, 2007) were localized in digital productions for more accurate expression and clear elocution. Second, prosodic and vocal variations of human voice, background sounds, and music (Figures 9–12) were used for developing dramatic plots or adding interesting details (e.g. times, places, people, and objects) to digital productions. Third, video and visual techniques, such as adding speech bubbles (e.g. Figure 8), using contrast in color and lighting (e.g. Figure 10–11), and cropping and changing camera angles (e.g. Figure 12) helped connect and highlight details or points in digital productions. Although a combination of media and modalities (verbal, vocal, visual, and musical) enabled multimodal contextual styling, it could also disrupt enunciation (e.g. Figure 12). One could speculate that the participants have had broader multimodal and interactional experiences than verbal practices. In what follows, the author discusses how L2 students' agentive uses of multiple modes and media in supportive social interactions could help reshape L2 storytelling.

4.3 Participants' narrative discourse and transformative reflections

Let us now examine the participants' responses to the self- and peer-evaluation questions (see Appendices A and C) with respect to different perspectives on multimodal narrative designs and storytelling styles.

4.3.1 Multimodal narrative designs

The participants showed alternative ways of using certain narrative elements in telling the stories.

- The plot. S12 commented on the effects of her narrative structure and design:

(13) *There're some plots for humorous conversations but my story's lack of turning points can prevent the audience from knowing the end of the story while they were listening to the middle of it.* (cf. S12 in Figure 3)

- Elaboration. The participants added contextual details by improving visual and sound effects to engage the audience (e.g. S1 in Figure 11; S9 in Figure 10). For instance, by envisioning how the storytelling performance might have been, S9 produced delightful characters:

(14) *The speed is kind of ok but there's no much variation of voice in my storytelling. I think I can use my voice to make it more interesting because there're many cute animals in my story but I didn't make them sound different.* (cf. S9 in Figure 10)

- Coherence. The participants omitted unimportant details and rearranged graphics to better construct a coherent entity (e.g. S3 in Figure 12, S6 in Figure 7, S9 in Figure 10, and S10 in Figure 9 and 15). For instance, the following excerpt (15) of a peer session indicates that S10 deleted many words (as in Figure 9), particularly character dialogues during the digital deliveries:

(15)

1. S8: I like to ask is there any coherence between those paintings and pigs and snow man?
2. S10: um
3. S8: I mean is there any connection between them?
4. S10: I make it the magic connection, just like eh in the story they don't: talk. … But they know they have some some mysterious connection that they can go together and help Kana Rosa to find who she is.
5. S14: eh I think your your tone is very fluent and your story is also creative but there are too many elements and missions in the story that it's hard for me to link them together and remember them. Well, so maybe you can de-delete some some eh some little character…

- Evaluation. Most of the students favored humorous narratives, whereas others emphasized moral meaning. Students' different ways of judging the objective of the story showed evidence of a critical stance, with S2 noting:

(16) *This is not a story about humor but it has much deep meaning. It's mystery as dream is. Thus I think people will feel touched by its moral perspective.* (S2 in Figure 4)

- Resolution. S6's last slide did not provide a clear context that listeners could use to identify the word *patient*. The student's peers had to address his unclear pronunciation in order to experience the intrigue of the resolution:

(17) 1. S1: so she he drink too much?
2. S6: uh maybe you can say that because uh at the end of of my story actually he found he he is eh he is stand on the table. And he is a sleep walk. He is a *patient* of sleep walk. And whenever his lives, he will to work. And after he wake up, he will find he at uh very weird or

different place at last. So he is he's an alcoholic when he sleep or is the patient cause him cause him like it.

3. S1: [`peʃən] ?
4. S6: yes, he is a *patient*.
5. S1: *[`peʃən]* ((turning her head to ask S11))
6. S11: he what?
7. S6: uh *bìng rén* ((providing Chinese translation for the word *patient*))
8. S1: oh *patient*.

4.3.2 Multimodal storytelling styles

The following critics of and reflections on narrative discourses showed participants' awareness of social meanings built up around stylistic differences.

As shown in (18), S3 seemed to sacrifice enunciation for dramatic effects, which extended beyond the dominant elocution confines to recontextualize the storytelling performances in the broader context of pop culture:

(18)   *I tried hard to build up a very Japanese and semi-cliché scene, but some of the audience couldn't catch. I'm not pretty satisfied with my ending part. It should be more … dramatic.* (S3 in Figure 12)

S3 noted that the use of stereotypical images might not lead to a satisfying ending for the audience, which is a common problem with using popular cultural elements to over-accommodate the audience (cf. Nelson, 2006).

Excerpt (19) shows how S13, a music lover, championed a vibrant style of storytelling and criticized S2's plain style:

(19)   1. S13: I think your story is very surreal and it's good but your voice doesn't help you tell to tell the story, always lifeless like ((waving his finger to imitate S2's monotone)) yeah
2. Ss: ((laugh))
3. Instructor: so what would you do if you were S2?
4. S13: uh I will use some intonation and different.
5. Instructor: for example?
6. S13: I don't know like more uh live lively sound.
7. Ss: ((laugh))
8. Instructor: animated sounds?
9. S13: yeah or you can yeah sing along with your violin. uh I mean there's lots of ways. Yeah.

Although S2 added background music, she focused on the position of expressing a pianist's sorrow in verbal modalities of pitch, timbre, and tempo, as in (16) and (19). She recycled 90% of the original text, and maintained a relatively slow and gloomy tone.

The storytellers' expressions of diverse perspectives intensified their feelings of agency in representing experiences and identities within contexts of media and interaction. On the one hand, certain students' (e.g. S2) resistance to alternative storytelling styles appeared to agree with Ko *et al.* (2003) in that learner willingness plays a critical role despite scaffolding. On the other hand, most of the students as social actors reshaped L2 storytelling by jointly managing situational identities with others in interactions (cf. Barkhuizen, 2011; De Fina & Georgako-poulou, 2012; Nelson, 2011) and adding multiple media and modes in digital productions (cf. Hull & Katz, 2006). In this sense, their agentive experiences could be modulated depending on contexts to afford greater flexibility for developing L2 storytelling styles, which were also reflectively transformed in social interactions.

5. Conclusions and implications

The author proposed MNDA to teach and study L2 storytelling. The discursive process of MNDA, including narrative simulations, observing and transcribing storytelling, making and sharing digital stories, as well as self- and peer-evaluations, helped L2 students construct the agentive experiences of storytelling. Although the results showed that the proper use of narrative elements, discourse structures, and stylistic devices, as well as bodily, visual, and video resources, assisted the students in developing multimodal designs and storytelling styles, MNDA also posed challenges for teaching and analyzing L2 storytelling. Therefore, attention should be devoted to three areas. First, although narrative simulations in the virtual world could assist students in formulating ideas and structuring stories (cf. Neville, 2015), instructions on embodied and digital practices might be required to help certain L2 students fully explore the affordances of Second Life. Second, although digital storytelling could engage the communities of adults and youth (cf. Hull & Katz, 2006), future projects can draw on constructs of discourse and agency to explore L2 storytellers' learning trajectories in various interactional contexts and activities. Third, MNDA and other forms of multimodal analysis and transcription (e.g. Flewitt *et al.*, 2014; Jewitt, 2014) can be further applied in different pedagogical contexts to inform the design and evaluation of multimodal narrative activities. In summary, this technology-mediated discourse approach to L2 storytelling suggests the importance of teaching and researching broader narrative contexts and activities other than simply elocution in multimodal communicative activities.

Ethical statement. The author has been personally involved in the research study and is held responsible for its content. The participants in this study have been informed of the funder and purposes of the research. The data collected are kept confidential and used for teaching and research purposes only.

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Appendix A

Peer evaluation questions

1. Plot
   a. What are some of the interesting episodes?
   b. Which episode(s), character(s), or action(s) can be further developed?

2. Elaboration
   a. What interesting dialogue or unique information helps you understand the story?
   b. What contextual details can be added to the story?

3. Coherence
   a. What are some of the irrelevant situations or redundant ideas that confuse you?
   b. What transitional expressions or connecting devices can be added?

4. Evaluation
   a. What are the speaker's attitudes, emotions, or moral perspectives towards events?
   b. What should the speaker focus on to stimulate your interest in the story?

5. Resolution
   a. What resolved tensions or brought new lights to the story?
   b. What information can be added to improve your satisfaction with the resolution?

6. Other comments (e.g. pronunciation, volume, speed, vocal variety, word choice, grammar, eye contact, gesture, visual aid, etc.)

Appendix B

Transcription notations

(.) the length of a pause in seconds
↑ ↓ pitch rise or fall
: or :: lengthened sound
WORD louder in value
> word < pacing faster
< word > pacing slower
* * (( )) author's comments

Appendix C

Self-evaluation questions

1. What was the most interesting point of storytelling?
2. What was the most difficult part of storytelling?
3. How much planning did you do?
4. How satisfied are you with your storytelling?
5. How well do you think the audience understood your story?
6. Please describe your speech performance.

Appendix D

Participants' discourse structure of storytelling

Table A1. Story pictures, elocution, lexical and grammatical use

Student	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	*M*	*SD*
Picture #														
F2F stories	14	15	13	21	14	13	11	18	10	22	12	13	14.67	3.77
Dig stories	16	17	23	21	14	13	12	18	15	31	9	13	16.83	5.91
(Raw)word #														
F2F stories	377	539	341	508	632	562	812	421	589	862	1077	401	593.42	222.35
Dig stories	333	475	497	436	552	380	696	371	587	499	1156	397	531.58	221.84
(Trimmed) word #														
F2F stories	344	509	302	488	569	488	782	374	570	835	980	384	552.08	211.60
Dig stories	333	475	497	436	552	370	692	371	587	499	1147	397	529.67	219.91
(Raw) time spent (seconds)														
F2F stories	212	340	154	239	450	254	353	216	271	356	405	188	286.53	92.48
Dig stories	175	253	232	201	235	196	328	165	259	241	592	176	254.51	115.64
(Trimmed) time spent (seconds)														
F2F stories	112	193	100	177	255	187	268	110	193	235	318	144	190.83	68.48
Dig stories	108	169	173	145	181	143	256	98	203	139	380	147	178.54	76.10
(Raw) speech rate (wpm)														

Dig stories	114	113	129	130	141	116	127	135	136	124	117	117	125	9.51
(Trimmed) speech rate (wpm)														
F2F stories	184	158	182	166	134	157	175	204	177	214	185	160	175	21.69
Dig stories	186	169	172	180	183	155	162	227	174	215	181	162	181	21.28
Lexical sophistication														
F2F stories	8.39	10.31	11.43	12.34	9.17	9.94	10.93	14.62	12.75	13.76	14.19	14.20	11.84	2.12
Dig stories	8.00	9.82	15.26	12.42	9.63	11.80	10.57	13.82	11.06	9.15	14.24	15.82	11.80	2.54
Lexical diversity														
F2F stories	159	261	156	186	247	186	281	150	234	224	338	195	218.08	57.11
Dig stories	167	262	217	195	247	180	276	179	234	177	367	206	225.58	57.07
Recycle rate	79.64	93.51	30.41	75.90	89.07	57.22	92.03	53.63	76.07	75.71	57.22	81.07	71.79	18.70
Accuracy														
F2F stories	0.80	0.90	0.78	0.67	0.48	0.46	0.87	0.76	0.72	0.63	0.69	0.85	0.72	0.14
Dig stories	0.84	0.90	0.81	0.67	0.52	0.55	0.89	0.81	0.92	0.75	0.74	0.91	0.78	0.14

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