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Participant roles in linguistic mediation activities in a digital storytelling project

Abstract This chapter will examine the collaborative, multimodal and plurilingual construction of the mediation activity between Catalan youth and a Chinese adult in the context of an out-of-school digital storytelling project. Following Goffman's (1981) approach to participation frameworks and Wadensjö's (1995) insights into interpreting activities, we analyse the participant roles deployed dynamically and multimodally in interaction in order to, on the one hand, facilitate communication and the progressivity of the interaction and, on the other hand, to focus on the linguistic form. The results shed light on how participation status is constructed and roles and responsibilities are distributed in a specific multilingual and multicultural context. Moreover, the analysis shows how an inanimate participant – a laptop computer with the Google Translate tool – is afforded the role of animator and reporter in the interaction and functions as an active participant in the encounter. We contribute to understandings of the complexity of linguistic mediation, its connection with digital technologies and its possible role in plurilingual education and the development of competences for the 21st century.

Keywords: linguistic mediation, computer-mediated communication, machine translation, plurilingualism, participation framework

1. Introduction

Globalisation and technological advancements in recent decades have brought about profound sociodemographic and sociolinguistic changes. Among these, the ways people live and communicate with each other, both locally and translocally (Appadurai, 1996), have been diversified, including through the use of Internet and other digital technologies. These major changes have necessarily promoted reflection on the conception of language education for children and youth, and official documents and educational curricula and programmes in Europe have incorporated new competences to be developed, including plurilingual and pluricultural competence in general, linguistic mediation in particular, and digital competence.

Regarding the first of these, European framework documents and recommendations for language teaching, learning and assessment include plurilingual and pluricultural competence as a general requirement for all

language learners (see the *Common European framework of reference for languages* or CEFR, Council of Europe, 2001; Council of the European Union, 2019). In our local context, the CEFR has been incorporated into primary and secondary education curricula that include plurilingual and intercultural competence (Generalitat de Catalunya, 2019, for the compulsory secondary education curriculum). Being and becoming a competent plurilingual, according to the CEFR, implies developing mediation competence (see Council of Europe, 2018) for managing contact with other languages and cultures. Mediation in the CEFR includes cross-linguistic mediation (e.g. translating information in one language into another language), as well as other processes of communication and learning involving an intermediary. It emphasises the “co-construction of meaning in interaction” and the “constant movement between the individual and social level in language learning” (Council of Europe, 2018, p. 33). Finally, accompanying educational consensus about the need to promote contact with other cultures and language learning, importance has been given to the development of digital competence. In our local context, this competence should be developed in schools as a transversal aspect of curricula, with a focus on digital tools and their applications, the treatment of information and the organisation of work and learning environments, interpersonal communication and collaboration, and civic skills and digital ID (Departament d’Ensenyament, 2015).

Despite the presence of these three aspects – plurilingual and pluricultural competence, mediation and digital competence – in official recommendations and school curricula, previous research suggests that formal education is often bound by monolingual and monocultural approaches (Llompарт & Nussbaum, 2018), does not contemplate mediation in the terms set out by the CEFR (Alcaraz-Mármol, 2019) and does not fully take into account students’ real-life skills, practices and realities regarding digital technologies (European Commission, 2019). In responding to these gaps, in this chapter, we analyse the mediation activities – and their connection with plurilingual, pluricultural and digital competences – that emerged in the Global StoryBridges (GSB) after-school digital storytelling activity, one of the initiatives set up as part of the IEP! project (see Moore, this volume; Moore & Hawkins, this volume).

The data that we analyse in this chapter was collected in 2019 when a Chinese facilitator of the GSB activity, Miaomiao (one of the authors of this chapter), had recently arrived in Catalonia and in the project. Specifically, we analyse an interaction that emerged during one of the first sessions in which Miaomiao participated. In the interaction, the youth instigate the use of a machine-translation tool (i.e. Google Translate) in interacting with Miaomiao. The objectives of this chapter are to: 1) describe the resulting interaction in detail in order to

understand its complexity; and 2) analyse the cross-linguistic mediation activities carried out – especially by one of the youth – and their relationship with plurilingualism and language teaching and learning. In Sections 2 and 3 of the chapter, we present the theoretical framework used for understanding these mediation activities and the participation frameworks from which they emerge. In Section 4, we introduce the data and some methodological considerations for the analysis. In Section 5, we proceed to analyse the data and, finally, we offer a closing discussion in Section 6.

2. Linguistic mediation within a digitally-enhanced learning context

Linguistic mediation is a prominent activity in many facets of social life (e.g. in healthcare, in the legal system), although our focus here are multilingual and multicultural contexts. In such scenarios, people who have more linguistic or cultural know-how often take on the role of interpreters or translators across languages, also functioning as interpersonal and cultural mediators during the interpreting or translation process (Virkkula-Räisänen, 2010). More specifically, we are interested in cross-linguistic mediation in interactions involving youth. Research on youths' cross-linguistic mediation has mainly focused on language brokering (Tse, 1996): the translation and interpreting activities that children and youth from migrant-origin families undertake mainly for their families, teachers, neighbors and other adults. Less attention has been paid to the mediation activities carried out among youth (see however, Orellana, 2003) and their connection with language learning.

As mentioned in the introduction to this chapter, the plurilingual turn in language education represented in the first version of the CEFR (Council of Europe, 2001) led to attention being paid to mediation as part of plurilingual and pluricultural competence. Mediating activities and strategies – in their oral and written forms – are briefly described in the first framework document as necessary for acquiring language proficiency. However, mediation is developed more fully in the more recent *CEFR companion volume* (Council of Europe, 2018). In this latter document, mediation is described as a communicative language activity, together with reception, production and interaction. More specifically, mediation occurs when “the user/learner acts as a social agent who creates bridges and helps to construct or convey meaning, sometimes within the same language, sometimes from one language to another” (Council of Europe, 2018, p. 103); mediation is thus not limited to cross-linguistic activities. In the *CEFR companion volume*, the focus is on the processes of creating space and

conditions for communication and/or learning, collaborating to construct new meaning, encouraging others to construct or understand new meaning, and passing on new information in an appropriate form (Council of Europe, 2018, p. 103). Mediation is divided into three main activities: mediating a text, mediating concepts and mediating communication. Although mediation activities are increasingly considered in language teaching and learning, there are still significant gaps in understandings of this complex activity. It is further important to mention that online interaction is also emphasised in the *CEFR companion volume*, in which relying on online translation tools to facilitate conversation and discussion is described as a means for basic level language learners to develop their language competences.

From an interactional point of view, a number of scholars have researched the intricacies of interlinguistic mediation (Wadensjö, 1995, 1998; Merlino & Mondada, 2013; Merlini & Favaron, 2003; Pöchhacker, 2012; among others) as a polyfunctional activity aimed at two main objectives. According to Wadensjö (1995), the first of these objectives is the maintenance of mutual comprehension and intersubjectivity – that is, facilitating the progression of interaction (Heritage, 2007; Schegloff, 2006). More specifically, the term intersubjectivity could refer to participants' joint actions for solving communication difficulties or misunderstandings emerging in the interaction (Heritage, 2007). The second objective of interlinguistic mediation is the translation of content. According to Merlino and Mondada (2013), interlinguistic mediation can imply multiple activities and multiple identities and categories – such as 'translator', 'moderator' or 'animator' – which are constructed in a dynamic way in interaction. In this sense, interlinguistic mediation activity is integrated in the ongoing interaction, configures a specific participation framework and is organised by interlocutors (Merlino & Mondada, 2013). Also from an interactionist perspective, Wadensjö (1995) defines interlinguistic mediation as a dialogical and bidirectional activity among speaker(s) and hearer(s) in interaction, which also entails coordination and different ways of participating.

Most of the research cited in this section considers animate participants as speaker(s) and hearer(s) in interaction, but the digital revolution has had a significant impact on communication. Computer mediated communication (CMC) is nowadays an important part of daily life and "encompasses various forms of human communication through networked computers" (Lee & Oh, 2015). CMC also frequently happens in face-to-face interaction alongside other communicative modes, such as spoken language, gesture, posture, etc. Research has zoomed in on how individuals orient to technological artefacts around them, showing how these artefacts are afforded some of the interactional properties of

human participants. For instance, as Molina-Markham et al. (2016) indicated, when observing the interaction between a driver and an in-car speech-enabled system, the driver humanised the machine by saying “you can do it baby!” when trying to encourage the system to display its functions well. Similar phenomena are observed in our data, as shall be seen in the analytical section of the chapter.

As one prominent form of CMC, machine translation (MT) is a powerful tool for multilingual groups and offers affordances for overcoming cultural and linguistic barriers in interactive collaboration. Indeed, MT is increasingly used, together with other resources such as gesture, for enabling plurilingual communication (Pituxcoosuvarn et al., 2018). Although nowadays there are various online MT resources available, Google Translate is one of the most common online resources used for translation, with over 200 million daily users (Shankland, 2013). It is also the MT tool that is used by the youth in the interaction studied in this chapter. There are three types of technology included in Google Translate: translation, text-to-speech (TTS) and automatic-speech-recognition (ASR). In this chapter, we consider the role of the Google Translate tool, and of the translation and TTS functions in particular, in mediation activities.

3. Participation in linguistic mediation

Interlinguistic mediation – including that involving digital tools – implies the emergence of a particular participation framework which modifies the traditional speaker-hearer model. Goffman’s (1981) distinction between the participation framework – that is, all people present in the interaction – and the production and reception formats have been useful to analyse the data presented in this chapter. Regarding the production format, Goffman identified three roles: animator, who performs the utterance or gives voice to it; author, who composes the utterance; and principal, who is responsible or accountable for the utterance (Watson & Goffman, 1984). Goffman’s work on production formats mainly focuses on the speaker, who can fulfil one or a combination of these three roles in order to achieve certain goals (see also Virkkula-Räisänen, 2010).

Participation is co-constructed by multiple parties, none of whom should be overlooked in interaction. Building on Goffman’s framework, Goodwin and Goodwin (2004) demonstrate that in interaction “different kinds of parties build action together by participating in structured ways in the events” (p. 225). Their notion of participation grants the hearer the cognitive capacity to contribute to the ongoing talk. Speaker and hearer co-build the complex and changing context through utterances and actions. Both the talk of the speaker and the visible embodied behaviours displayed by the hearer contribute to the construction of

an utterance. All in all, this framework investigates “how multiple parties build action together while both attending to, and helping to construct, relevant action and context” (Goodwin & Goodwin, 2004, p. 240).

Within interpreting studies, Wadensjö’s work has also built on Goffman’s notion of production format. Wadensjö (2014) identified the dynamic role(s) of the interpreter in interpreting activities. These are: reporter, recapitulator, and responder. When acting as a reporter, an interpreter takes on the role of the animator of another’s utterance. When acting as a recapitulator and responder, the interpreter takes on the role of author of another’s utterance (Wadensjö, 2017). In order to offer a deeper understanding of the interpreter’s role, Wadensjö (2017) adopted an “interactionistic, non-normative, dialogical” (p. 111) approach where the building of and the responsibility for the interpreting activity is shared – that is, there is mutual feedback. Indeed, primary participants (i.e. those whose words are being interpreted) can achieve some mutual understanding through gaze and backchannel responses even though they do not have access to each other’s language (Vranjes et al., 2018).

In this study, we analyse participation in linguistic mediation activities of animate actors, but we also focus on the role of the Google Translate tool, as a non-human interpreter that shares similarities and differences with human interpreters. Studies using the notion of participation framework to analyse such a non-human interpreter’s role are quite rare. A recent study conducted by İközöglü (2019) illustrates that a voice-based mobile phone translation application functions as a participant in interaction to some extent, taking on roles similar to those of animator and principal.

4. Methodology and data

The data selected for this chapter are four interactional extracts transcribed following a simplified version of Jeffersonian conventions (Jefferson, 2004) and including multimodal features for a holistic understanding of the interaction. The extracts are from the second weekly session of the GSB after-school digital storytelling activity in which one of the authors, Miaomiao, took part. Similar to other sites within the IEP! project, the research was guided by collaborative forms of ethnography (Lassiter, 2005) and reflective practice (e.g. Schön, 1983; Eraut, 1995), as the researchers were also the facilitators of the after-school activity (see Moore, this volume).

The session examined in this chapter included seven people: three adult facilitators – two experienced researchers (Emilee, EMI; Claudia, CLA) and one PhD student (Miaomiao, MIA) – and four youth participants, who were

approximately 14 years-old at the time (Nanyamka, NAM; Naiara, NAI; Sara, SAR; Julián, JUL). (Note that while adult names have been maintained, with their permission, youth names have been anonymised.) This is a linguistically and culturally diverse group, since Emilee is originally from Australia, Claudia from Chile, Miaomiao from China, Nanyamka from Ghana and the other three students from Catalonia. Nanyamka was born and schooled in an English-medium school in Ghana as a young child, before migrating to Catalonia, and she can speak English quite fluently. In many cases, since the other young participants' English level is lower than Nanyamka's, they draw on her for help to translate between Spanish – the main language used by the youth when communicating with each other – and English. Miaomiao had only recently arrived in Catalonia and had limited proficiency in Spanish and high proficiency in English at the time of the research. Her presence generated interest and curiosity among the young participants about what they consider to be 'Chinese' or 'Asian' culture. They engaged with Miaomiao often on this topic, drawing on their knowledge and interests. The young participants access Chinese and Asian culture through digital technologies and global social networks, such as YouTube, Instagram, Facebook, etc., and take an interest in language, food, music, movies, and fashion. Nanyamka is an expert in Chinese and Asian culture (as well as what is referred to by the youth as 'African' culture, thanks to her roots in Ghana), and she is willing to transmit her cultural knowledge to her peers. In this sense, she often takes on the role of linguistic and/or cultural mediator to facilitate communication between the young people and Miaomiao. In the extracts that we analyse in this chapter, Nanyamka takes on this mediator role, but also uses a laptop computer used for the after-school activity in the interaction. Specifically, the extracts involve the Google Translate tool to communicate with Miaomiao.

The GSB after-school activity involves the production and sharing via a web-based platform of digital stories with youth at other global sites. While engaging in this process, the youth participants also regularly deviated from the main task to focus on other interests. Prior to the interactional extracts that we analyse in the next section, the adult facilitators were guiding the youth to brainstorm and type into a word-processing programme on the laptop computer a list of places or events in their town that might be filmed for their digital stories. While doing so, their keen interest in China and Asia emerged and they started to ask Miaomiao about her family, schooling, life experience, interests, language, and so on. In doing so, rather than communicate with Miaomiao directly in English, the youth engage the Google Translate tool on the laptop computer to communicate with her in Chinese. In this sense, they rely on two main functions offered by this tool for Mandarin Chinese to communicate with Miaomiao: pinyin, the

Romanised system or ‘spell sound’ that automatically appears below the Chinese characters when using the translation function; and the text-to-speech (TTS) function that reads the translation in the target language (i.e. Chinese) out loud when clicking on the sound box.

The analysis in the next section draws on the study of participation from an interactional and multimodal perspective (Goffman, 1981; Goodwin & Goodwin, 2004) – and on the specific contributions on interpreting interactions put forward by Wadensjö (2014, 2017) – to describe the emergence, development and characteristics of computer-mediated linguistic mediation activity.

5. Data analysis

In the first extract, the two students facing the computer – Nanyamka and Naiara – have opened Google Translate and type a first sentence to be presented to Miaomiao who cannot see the screen, and who is paying attention to what Sara is trying to tell her.

Extract 1

- 01 NAN ((typing)) *queremos grabar en la costa de (name of town)*
we want to record in the coast of (name of town)
- 02 (..)
- 03 NAI **women xiang: jilu [(name of town) ((looking at the screen))**
we want to record in the coast of (name of town)
- 04 NAN [dónde está:
where is
- 05 NAI ((moving hand towards screen)) **aquí está:**
here it is
- 06 NAN **sí pero dónde es (.) para que se escuche**
yes but where is (.) so that it can be heard
- 07 NAI ((points at computer screen, looks for button, presses play))
- 08 COM **women xiang [jilu (name of town) de haian**
we want to record on the coast of (name of town)
- 09 NAN NAI [((look at MIA))
- 10 NAI ((pointing her finger at MIA))

- 11 JUL ((looks at MIA))
- 12 NAI ((laughs, looks at computer))
- 13 NAN ((looks at computer)) a ver qué dice ella ((presses play))
let's see what she says
- 14 COM [women xiang [jilu (name of town) de haian
we want to record on the coast of (name of town)
- 15 NAN [((looks at MIA))
- 16 MIA [((leans in and approaches computer))
- 17 MIA ah: [((leaning back))
- 18 NAI SAR [((look at MIA))
- 19 (..)
- 20 NAN ((two thumbs up looking at MIA))
- 21 MIA that it's not correct
- 22 NAN ah
- 23 NAI SAR
JUL CLA [((laugh))
- 24 NAN [((pretending to hit computer)) ME HAS FALLADO ((presses play))
you let me down
- 25 COM women xiang jilu (name of town) de haian
we want to record on the coast of (name of town)
- 26 NAN NAI
SAR ((looking at computer))
- 27 MIA (name of town) ((laughs)) (name of town)
- 28 NAN NAI
SAR ((look at MIA))
- 29 EMI ((laughs))
- 30 NAN ((putting two thumbs up, see Image 1)) understand?
- 31 MIA yeah
- 32 EMI what did it say?
- 33 NAI queremos grabar en la costa de (name of town) ((laughs))
we want to record on the coast of (name of town)
- 34 NAN ((laughs))
- 35 EMI en la costa de (name of town) ((laughs))
in the coast of (name of town)

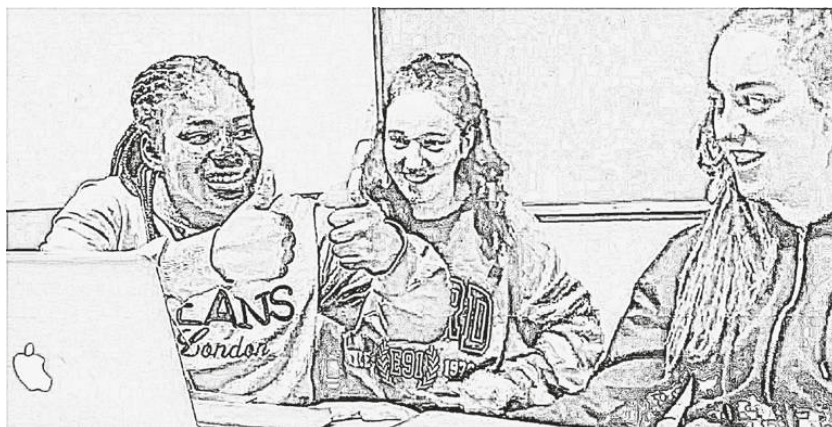


Image 1. Screenshot taken at line 30, Extract 1

The extract begins with Nanyamka typing a statement into the Google Translate application and with Naiara, in line 3, trying to read the translation offered by the tool. In overlap, Nanyamka is looking for the button allowing the tool to read the Chinese sentence aloud and Naiara responds to her demand by indicating where it is, in line 5. Nanyamka continues the search for the specific button, that finally is multimodally indicated by Naiara, in line 7, when she points to it on the screen and presses the play button. The computer begins to say the sentence in Chinese (in line 8) while Naiara, in overlap, multimodally indicates who the sentence is directed to: Miaomiao. This is reinforced by the gaze of all the youth directed to Miaomiao, in lines 9 and 11, right after Naiara has pressed the play button. After the TTS function plays the translation, there is silence and no answer from Miaomiao, which Naiara and Nanyamka (who look at the computer – COM – in lines 12 and 13) interpret as a need to play the Chinese sentence again. Nanyamka states, in line 13, her aim clearly in Spanish – to receive a reaction from Miaomiao, “a ver qué dice ella” (“let’s see what she says”) – and then presses play. The sentence is reproduced again by the computer and, right after that, Nanyamka looks at Miaomiao, awaiting an answer. Miaomiao partly responds to this demand, in line 17, by briefly responding (“ah”), indicating that she has heard the sentence. After a pause, Nanyamka multimodally – with two thumbs up and looking at Miaomiao – seeks Miaomiao’s reaction to the Chinese sentence, which comes in line 21, when Miaomiao gives a negative evaluation of the machine’s translation. On the one hand, it seems she has not heard it correctly

and, on the other, the word “haian” (meaning “coast”) is quite rare in Chinese. Thus, Miaomiao focuses on the linguistic form of the computer’s utterance, responding “that it’s not correct” in line 21. Nanyamka, in line 22, seems to align with Miaomiao’s focus on the form offered by the Google Translate tool. This is clearer when, while Naiara, Sara, Julián and Claudia are laughing, Nanyamka, in line 24, displays a disappointed expression and yells at the computer in Spanish for its mistake saying “me has fallado” (“you let me down”), pretending to hit it. Nevertheless, she gives it another chance by again pressing play (in line 24). After the tool voices the sentence again in line 25, Miaomiao responds by repeating the name of the town and laughing, which might show her understanding of the sentence. Nanyamka, Naiara and Sara look at Miaomiao, in line 28, and Nanyamka produces a request for confirmation from Miaomiao about her understanding of the sentence, both verbally (“understand?”) and non-verbally, raising two thumbs (see Image 1). Miaomiao confirms her understanding in line 31 (“yeah”). Since Emilee cannot see the screen and does not understand Chinese, she asks for the meaning of the sentence (“what did it say?”, line 32), which is given by Naiara in Spanish “queremos grabar en la costa de [name of town]” (“we want to record on the coast of [name of town]”).

In this extract we have observed a collaboratively constructed multimodal and plurilingual interaction among the youth, Miaomiao (the Chinese facilitator), and the other adult facilitators, in which linguistic mediation activity is crucial. During the interaction the participation framework and roles are flexible and co-constructed. The youth multimodally construct, first, the production format, by adding the Google Translate tool and Nanyamka and Naiara’s collaborative writing of the utterance to be translated into it. Nanyamka and Naiara are the authors, as well as the principals, and the computer is the animator, since it mainly works as a ‘sounding-box’. Second, the youth initiate the construction of the reception format, by directing their gaze to Miaomiao and pointing at her. Miaomiao accepts this reception format by leaning into the computer. Meanwhile, the computer is also ratified as hearer by hearing through the written text, thus functioning as a reporter. In this sense, the computer acts as linguistic mediator, but it depends on the youths’ mediational activity, in a more general sense, in the social construction of the participation framework, as well as their agency in deciding when to allow the translation tool to reproduce utterances, in order to fulfil this role.

Furthermore, a dual focus of the human participants’ attention can be observed in the extract: the intended content of the message and the correction of the linguistic form. Although it is not clear if Nanyamka, with two thumbs up, prioritises one or the other focus – or both – in line 20, Miaomiao’s focus

is on the form. By negatively assessing the computer's performance, Miaomiao does not ratify it as a valid participant and linguistic mediator, which leads to Nanyamka's disappointment with the tool, which she humanises when saying "me has fallado" ("you let me down"). Similar phenomena have been observed in Molina-Markham et al. (2016), whose study on the interaction between a driver and in-car speech-enabled system showed that the driver talked to the machine in a humanised way. Despite this, Nanyamka insists on positioning the computer as a linguistic mediator and looks for Miaomiao's ratification (see Image 1) of this, thereby collaboratively ratifying the computer as a participant.

Thus, in this first extract, the schema of the participation framework is established. In Extract 2, the youth continue with the project of trying to communicate with Miaomiao through the computer-based translation tool. They focus here on simple greetings.

Extract 2

- 36 NAN **hi (.) pone hi**
 hi (.) it says hi
- 37 NAI **hi**
- 38 NAN **no seria ni hao? ((looking at MIA))**
 wouldn't it be ni hao
- 39 MIA **ni hao**
 hello
- 40 NAI **pero que es español ((leaning to computer, touching keyboard))**
 but this is spanish
- 41 NAN **ai (.) hello (.) hola**
 oh (.) hello (.) hi
- 42 MIA **hola**
 hello
- 43 NAN **ni hao**
 hello
- 44 NAI **ni hao**
 hello
- 45 MIA **yeah**
- 46 **(.)**
- 47 NAI **y adiós?**
 and goodbye

- 48 SAR ((presses play))
- 49 COM ni hao
hello
- 50 NAN ((hand in greeting position, Image 2))
- 51 NAN ((typing)) es la única forma que nos podemos comunicar ((looking at EMI))
this is the only way we can communicate
- 52 NAI ((approches computer)) (zai ian)
goodbye
- 53 NAN no ((presses play))
- 54 COM zaijian
goodbye
- 55 NAN ((looks at MIA)) ((looks at JUL)) madre mía la diferencia eh
oh my goodness the difference eh
- 56 JUL le has dicho adiós?
you told her goodbye?
- 57 NAI [zaijian (.) zai- zai-
goodbye (.) good- good-
- 58 (.)
- 59 JUL [qué mala gente NAN
you are a bad person NAN
- 60 NAI [zaijian (.) zai- (.) zaijian
goodbye (.) good- (.) goodbye
- 61 NAN [yo no lo sabía
i didn't know that
- 62 MIA zaijian ((approaching the computer))
goodbye
- 63 NAI zaijian
goodbye
- 64 NAN ahí tienes ahora ((pointing at MIA))
there you have now
- 65 CLA zaijian
goodbye
- 66 NAN [la pronunciación
the pronunciation
- 67 NAI [zaijian
goodbye

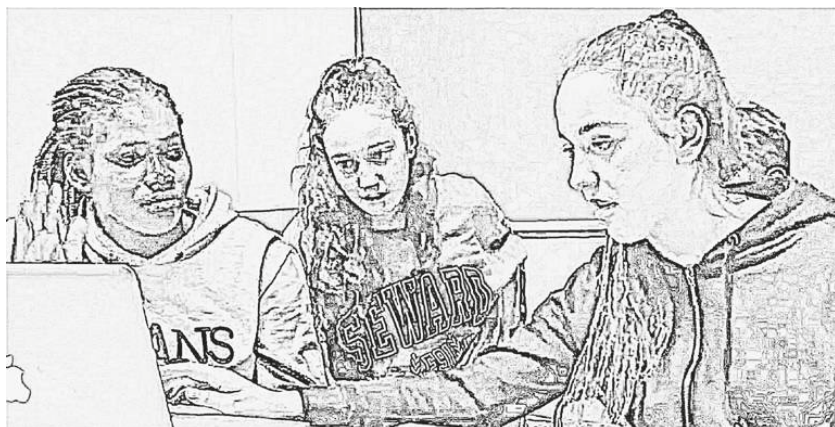


Image 2. Screenshot taken at line 50, Extract 2

The extract begins with Nanyamka and Naiara collaboratively trying to make the computer to say “ni hao” (“hello”) in Chinese, a greeting they already seem to be familiar with (see line 38). However, there is a problem with the language settings in Google Translate, and rather than “ni hao”, the computer provides them a translation in English (“hi”), which is read by Nanyamka in line 36 and repeated by Naiara in line 37. Nanyamka’s previous basic knowledge of Chinese makes her doubt what the translation tool is offering by proposing the correct answer (“ni hao”), although she directs her turn as a question to Miaomiao (line 38). Miaomiao responds to the greeting, in this case focusing on the content (in line 39), but this is not followed by the youth, since they are focusing on ensuring the correct translation. Naiara identifies and solves the problem with the translation settings in line 40, and Nanyamka pronounces the word she wants to add into the translation tool both in English (“hello”) and in Spanish (“hola”) in the following line. Again, Miaomiao focuses on the content, in line 42, and responds to the greeting, this time in Spanish, taking up one of the options offered by Nanyamka. Still focusing on the correct translation in Chinese, when the tool gives it to them, both Nanyamka and Naiara read the greeting (“ni hao”) in line 43 and 44. Miaomiao orients towards their focus and confirms the correctness of the greeting in Chinese (“yeah”) in line 45.

After a short pause, Naiara proposes to continue by translating “adiós” (“goodbye”) into Chinese. Sara then presses play (in line 48) to make the computer say the first greeting again (“ni hao”, line 49). Nanyamka multimodally

accompanies this greeting by waving her hand at Miaomiao (see Image 2). Nanyamka then makes a comment about the interactional dynamic that has been established, telling Emilee that “es la única forma que nos podemos comunicar” (“this is the only way we can communicate”), as she types something else into the translation tool. Once the new translation is given by the computer, Naiara tries to read it aloud (“zai ian”, line 52) and thus to act as the animator of the utterance she had previously suggested translating. This is not accepted by Nanyamka, who validates the computer as the animator by pressing play in line 53. The computer says the greeting in Chinese (“zaijian”) and Nanyamka looks at Miaomiao, to whom the greeting is directed (line 55). Immediately, Nanyamka turns her focus again to the form by presenting a metalinguistic reflection about the difference in the written and oral forms of the language (“madre mía la diferencia eh”, translated as “oh my goodness the difference eh”, line 55). Right after that, Julián focuses back on the content by questioning the fact that Nanyamka has said goodbye to Miaomiao – “le has dicho adiós?” (“you told her goodbye?”), line 56, and “qué mala gente Nanyamka” (“you are a bad person Nanyamka”), in line 59. In overlap, Naiara tries to pronounce the greeting several times (57 and 60), indicating her orientation now towards learning the Chinese word. Nanyamka shows a similar orientation towards learning in line 61, commenting that she did not know how to say “zaijian” before, “yo no lo sabía” (“I didn’t know that”). In line 62, Miaomiao aligns with this disposition for learning and offers the correct pronunciation of “zaijian”, which is immediately repeated by Naiara. Nanyamka indicates the Chinese language expertise of Miaomiao by telling Naiara that Miaomiao’s pronunciation is the correct one (line 64 and 66), and in doing so she claims linguistic expertise for herself. Both Claudia (in line 65) and Naiara (in line 67) orient towards the learning activity and ratify Miaomiao as an expert by repeating the oral form she has offered.

At the beginning of this second extract we can observe how the ratification of the tool as a valid participant continues to be negotiated, possibly due, in part, to a mistake in the language choice in the translation tool’s settings. Despite this mistake, we can see that Nanyamka’s previous basic knowledge of Chinese contributes to identifying and solving the problem, and thus to the progressivity of the activity. Once the problem is solved and the correct greeting is given, a dual focus remains throughout the whole extract 1) the message being communicated between the youth and the Chinese facilitator; and 2) the linguistic form of that message, by focusing on the correctness of the written and oral forms of the words in Chinese, as well as on learning these forms.

Moreover, in this second extract, the role of Nanyamka as main mediator between the youth, the translation tool, the Chinese language and the Chinese

facilitator begins to be established. In Extract 3, her mediating role is developed further.

Extract 3

- 68 NAN ehm (...) qué le podemos escribir? ((putting four fingers together; looking at SAR))
ehm (...) what can we write to her?
- 69 NAI [caca culo pedo pis ((leaning to computer))
shit ass fart pee
- 70 NAN ((laughs))
- 71 SAR [((typing))
- 72 NAI [echas
do
- 73 NAN de:: de ((laughs)) de
you:: you you
- 74 NAI ((laughs)) de menos
miss
- 75 SAR ((typing))
- 76 NAN en china es eh (.) (zao) ((draws z in the air with a finger, then fingers on forehead))
in china it is eh (.) (zao)
- 77 NAI (chona) ((laughs))
- 78 NAN no ((laughs)) eh no sé:
no i don't know:
- 79 SAR ((looking for button)) ui
- 80 NAN no eso en chino es así
no that in chinese is like this
- 81 SAR ((presses play, NAN, NAI and SAR look to MIA, see Image 3))
- 82 COM ni xiangnian zhongguo
you miss china
- 83 NAN NAI
 SAR ((turn gaze to MIA))
- 84 MIA ah:: yes
- 85 NAN ((looks to computer)) me encanta esto
i love this
- 86 SAR ((laughs))
- 87 JUL gracias eh
thank you
- 88 NAN eh:: (...) [((typing))
- 89 NAI [me quieres?
do you love me?

90 NAI NAN
 SAR ((laugh at what is on the screen))
 91 NAN ((presses play)) [((looks at MIA))
 92 NAI SAR [look at MIA
 93 COM wo xihuan ni de yifu
i like your clothes
 94 MIA oh: really? ((laughs))
 95 NAN yes
 96 MIA all of these sentences are correct

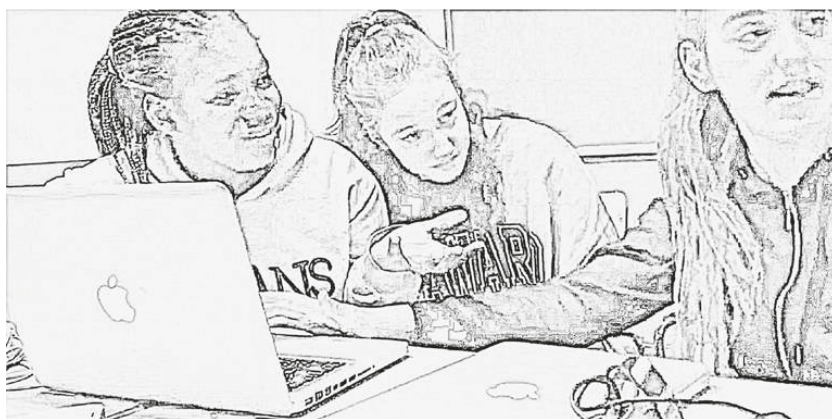


Image 3. Screenshot taken at line 81, Extract 3

Nanyamka wants to begin a new sequence to communicate with Miaomiao, but she asks for some ideas from her peers on what to write to be translated for her: “qué le podemos escribir” (“what can we write to her?”, line 68). Naiara responds with a childish joke which makes Nanyamka laugh, but Sara multimodally responds to her demand by typing a question for Miaomiao into the computer, thus becoming the principal and the author in the production format (line 71). Naiara and Nanyamka read little by little what Sara is writing for Miaomiao (“echas de menos China”, translated as “do you miss China”, lines 72–74). While Sara is still writing the sentence, Nanyamka draws again on her knowledge of Chinese by trying to give the translation of China in Chinese, in line 76: “en China es eh” (“in China it is eh”). She multimodally continues her word-search by drawing a

'z' in the air with her fingers, before pronouncing a first attempt at the word ("zao"). Naiara responds to Nanyamka's attempt jokingly with a made-up word ("chona"), which Nanyamka reacts to in the following line, in which she also voices her trouble recalling the word she is seeking. When the word appears translated on the screen – after Sara has finished typing her sentence in Spanish and pressed the button to translate to Chinese (in line 79) – Nanyamka confirms it in line 80: "no eso en chino es así" ("no that in Chinese is like this"). Sara then presses play and the computer voices the sentence.

Meanwhile, Nanyamka, Naiara and Sara turn their gaze to Miaomiao, indicating their request for a response, which is reinforced by the hand gesture deployed by Nanyamka (see Image 3). Miaomiao responds to Sara's question ("ah yes"), orienting towards the content (i.e. missing China) and thus the progressivity of the interaction. After Miaomiao's response, in line 85 Nanyamka produces a positive evaluation of using the computer translation tool to communicate with Miaomiao: "me encanta esto" ("I love this"). After some laughter and a comment from Julián that does not seem to be directly related to the flow of talk, Nanyamka starts typing a new sentence (line 88), that makes the youth laugh. In overlap, Naiara seems to suggest another possible question to be typed and translated – "me quieres?" ("do you love me?") – which is not taken up. In line 91, Nanyamka presses play and she, Naiara and Sara look at Miaomiao for a reaction to Nanyamka's translated comment. After 'hearing' the written text from Nanyamka, the computer reports the sentence for Miaomiao, who responds in line 94 ("oh really?"), focusing on the content and the progressivity of the interaction. In line 96, Miaomiao switches her focus to the form of the computer's utterances, by indicating to the youth that all the computer's translations in Chinese are correct.

In this extract although Sara begins as the principal and author in the interaction, the mediating role of Nanyamka continues to be relevant, since she puts forward her knowledge of Chinese – which she tries to check using Miaomiao's expertise – and confirms that the sentence proposed by the translation tool is correct. Moreover, after another successful question and response, Nanyamka presents a positive evaluation of the tool and proposes a new sentence, in this case as principal and author. Although at the end of the extract Miaomiao returns to the focus on the correctness of the sentences, a full sequence has been completely accomplished, through a computer-mediated interaction in which Nanyamka has been the principal and author, the computer the animator and reporter, and Miaomiao the ratified hearer and evaluator.

6. Discussion

In the data studied in this chapter, in order to talk with the Chinese facilitator, youth participants afford the Google Translate tool the role of interpreter to assist communication, based on its translation and TTS functions. In the interactional process, all the participants present, including the laptop computer, take on certain roles and responsibilities, which have been analysed in depth.

Generally speaking, there are two main parties to the interaction: one is Miaomio, the other is made up by some of the youth participants; mainly Nanyamka, Naiara and Sara. Emilee, Claudia and Julián also join in the conversation as bystanders, who also help to facilitate communication. Moreover, the laptop computer with access to Google Translate, a non-human participant handled by the youth, fulfilled the role of animator, speaking on behalf of the youth, as well as the role of reporter, ‘hearing’ the youths’ written text and then voicing the translated sentences. This one-way translation model suggests that the computer is included in the youth party to the interaction. The Google Translate tool translates the source language – usually Spanish – into the target language – Chinese – and speaks the young people’s words. The principal and author of the machine speech is the youth participant who formulates an idea and utterance in the source language and types it into the computer. Furthermore, following Merlino and Mondada (2014), by gazing at Miaomio during the machine translator’s turn, the student(s) present(s) themselves as authoring and being responsible for its talk. Miaomio herself takes on a combination of the three speaker roles (animator, author, principal) when she responds to the youths’ enquiries. The youth participants shift their gaze towards Miaomio not only to indicate their expectation of what will happen next in the interaction, but also to select her as next speaker (Goodwin, 1981).

Creatively, the youth participants collaboratively initiate a new communicative dynamic within the plurilingual encounter. Regarding language choice, the youth participants are also English learners who to some extent can understand English speech. Aware of this, Miaomio chooses to respond to the youths’ enquires in English directly. Consequently, Miaomio’s choice bypasses using the Google Translate tool to render her own utterance into Spanish for the youth participants, which might be expected if we compare to typical interpreter-mediated contexts. As a result, a cyclical, triangular communication pattern emerges: the youth input Spanish into the machine translator, after which the machine translator speaks Chinese for Miaomio, then Miaomio responds to the youth participants in English. Indeed, the languages within the conversation

switch from Spanish to Chinese to English, a process which leads to meaningful and dynamic communication.

In the analysis of the data, we note that Nanyamka leads a great deal of the dialogue and also acts as a linguistic mediator, in the sense that she facilitates cross-linguistic exchanges and interactional progressivity. Moreover, Nanyamka's mediation activities also facilitates interaction with her peers through contributing to progressivity and by establishing a positive atmosphere for communication among them. Her embodied language helps her become a competent mediator and communicator.

Moreover, the analysis suggests that this type of plurilingual and multimodal exchange connects with the 21st century educational competences presented in the introduction to this chapter: plurilingual and intercultural competence, mediation competence and digital competence. As has been observed in the interactions, the youth participants exploit their skills (linguistic repertoire, cultural knowledge, curiosity and digital skills) to facilitate communication. As we have observed, cross-linguistic mediation unavoidably involves social and cultural competence as well as plurilingual competence (Council of Europe, 2018, p. 106). In addition, computer translation technology is integrated by young people in their plurilingual and pluricultural social encounter and for learning. The youth participants in the interaction collaboratively and actively draw on the digital resource at hand to solve communicative problems, which reflects on their digital awareness and skills. All in all, the analysis of these data suggests that plurilingual, digitally-enhanced interactions can provide an opportunity for developing 21st century competences.

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