# Interactional Practices to Manage Epistemic Stances in Online Searches During a Computer-Mediated Conversation-for-Learning

#### Ann Tai Choe

Department of Second Language Studies, University of Hawai'i at Mãnoa

### Hanh thi Nguyen

Department of English and Applied Linguistics, Hawaii Pacific University, Honolulu, USA

#### Cristiane Vicentini

Department of Teaching and Learning, University of Miami, Miami, USA

Abstract: Despite rising interests in the manifestations of second language (L2) interactional competence (IC) in online language learning activities (e.g., Balaman & Sert, 2017a, 2017b), participants' interactional practices for managing epistemic stances in online searches remains largely unexplored. This paper examines how an intermediatelevel learner of English jointly managed epistemics with a tutor in a text-and-voice teleconference session designed as a conversation-forlearning. The analysis focuses on web search sequences occasioned by emergent epistemic asymmetries in the ongoing talk, and how the participants leveraged resources to negotiate knowledge positions and display affiliation during online searches. Findings reveal that epistemic stance management is a prominent aspect of the IC involved in online search sequences. For example, during an online search, the tutee demonstrates his IC by citing and attributing responsibility to the source in response to epistemic primacy challenges. In the process, he also utilised affiliative resources such as laughter and a term of endearment to delicately manage disaffiliation. By focusing on the management of epistemic stances during online searches, this study informs the use of online searches in L2 learning activities to foster opportunities to perform stancetaking practices as part of the learner's IC.

Key words: conversation analysis, online searches, second language interaction, stance management

#### Introduction

Online searches-the activity of finding information on the Internet-have become ubiquitous in everyday conversations and language learning in many settings. Online searches often emerge when participants look up words, images, or songs online in order to achieve intersubjectivity (e.g., Colak & Balaman, 2022; Greer, 2016; Musk, 2022; Nguyen, 2017; Nguyen et al., 2022). Since the search activity is essentially a socially shared quest for knowledge in an accountable and mutually understandable way, online searches are a prime site for the observation of epistemic stance management. Further, online searches could be integrated into technology-mediated, task-oriented activities that promote opportunities for language learning (e.g., Balaman & Pekarek Doehler, 2021; Balaman & Sert, 2017a, 2017b; Pekarek Doehler & Balaman, 2021). From a second language learning perspective, a relevant question is, what interactional practices do learners mobilise in online searches? Our paper addresses this question by examining occasioned online search sequences in a text-and-voice teleconference tutoring session designed as a conversation-forlearning. Drawing on conversation analysis (CA), we endeavour to examine how stancetaking-ways in which an interactant positions themselves vis-à-vis their interlocutors in evaluating some state of affairs—contributes to the learner's participation and coordination with an interlocutor in web searches as a social activity. Our overarching goal is to understand the learner's manifestation of interactional competence as he navigates through the technological and conversational affordances and constraints of online search sequences in text-and-voice teleconference interaction. Ultimately, this is to inform pedagogical decisions about the use of Internet searches in fostering opportunities for stance management as part of second language (L2) users' interactional competence in the online space.

#### **Background**

## L2 interactional competence

Interactional competence (IC) refers broadly to "the ability to achieve actions locally, contingently and collaboratively with others in contextualised social interaction" (Nguyen, 2019a, p. 60; following Hall, 2018; Hall & Pekarek Doehler, 2011; Nguyen, 2012a; Pekarek Doehler & Petitjean, 2017). Being situation-specific and co-constructed with others in interaction, IC involves the capabilities to employ verbal, embodied, and other semiotic resources to perform a number of interactional practices—notably, turn-taking practices, turn design and action formation practices, sequence organisation practices, repair practices, and boundary management (opening, closing, and transitioning) practices (Kasper, 2006, p. 86; see also Hall, 2018; Hall & Pekarek Doehler, 2011).

Of relevance to this paper is Kasper's (2006) point that semiotic resources in turn design and action formation are employed to construct epistemic and affective stances. In studies on young L2 learners' IC, Cekaite (2012, 2016, 2017) effectively tracked young Swedish-as-a-second language learners' changes over time in stancetaking practices such as non-compliant responses via lexico-grammatical and embodied features. For adult L2 learners, while much IC research has focused on turntaking practices (e.g., Pekarek Doehler & Pochon-Berger, 2015; Watanabe, 2017), turn-design practices (e.g., Kim, 2019; Nguyen 2019a, 2019b), boundary management practices (e.g., Nguyen, 2012b), repair practices (e.g., Hellermann, 2011; Pekarek Doehler & Berger, 2019), sequence organisation (e.g., Pekarek Doehler & Pochon-Berger, 2015), and topic management (Kim, 2017; Nguyen, 2011), the management of stancetaking as an aspect of IC among adult L2 users has only recently been analysed. For instance, Burch and Kley (2020) demonstrated that during speaking assessment activities, L2 learners achieved intersubjectivity with peer co-participants by publicly displaying their epistemic and affective stances toward prior talk and the assessment activity itself. Their study demonstrates that a part of being a competent participant entails the ability to understand ongoing turns at talk in order to build the next turns with appropriate stances.

Expanding research on L2 learners' IC, in this paper we focus on an adult L2 learner's stancetaking practices as part of his

IC in online searches, where epistemic stance management is a foregrounded concern for the participants. We will next review concepts related to epistemic stance management and online search practices.

#### Stance management

Stance refers to a positioning achieved through conduct, which is publicly available, interactionally organised, and socially consequential (Sorjonen & Peräkylä, 2012). In social interaction, participants constantly engage in stancetaking to communicate, understand, and relate to each other, mutually attending to what is being made relevant at a given moment and organising their courses of actions to achieve a shared goal (Goodwin, 2007). By taking a stance, participants invoke an evaluation toward the stance object, which in turn implicates their knowledge at the sociocultural, personal, and local levels-together, these layers of knowledge both form stancetakers' momentary relationship and are consequential for their actions (Stevanovic & Peräkylä, 2014). In simple terms, stance is not a mental or stable property but rather something that is hearably and recognisably displayed in public, leading to certain uptakes or interactional effects. Stance management, then, concerns the interactive process whereby participants reciprocally orient to indexing and negotiating stances in interaction. In this paper, we mainly focus on epistemic stances.

Epistemic stance refers to participants' knowledge claims toward some stance object with respect to the co-participants from one moment to the next. Participants employ verbal, vocal, and nonvocal conduct in their turn design situated in particular sequential contexts to assert, contest, defend, and account for their claims of access (knowing/not knowing, direct/indirect knowledge, degrees of knowing/not knowing), primacy (relative rights to make judgements based on quality of knowledge), and responsibilities (accountability for knowing/not knowing) vis-à-vis the recipient (Heritage, 2013; Stivers et al., 2011). In conversations, participants generally orient to reaching an agreement over who has more rights to tell or judge some object relative to each other's displayed knowledge status (epistemic congruence). Epistemic congruence is realised when two parties adopt reciprocal positions throughout turns and sequences; for instance, a speaker expresses a more knowledgeable stance, to which another speaker reciprocates by taking a less knowledgeable stance (Heritage, 2012). By contrast, a lack of agreement over who has superior

access or rights to a knowledge domain (*epistemic incongruence*) can threaten the progression of talk (Mondada, 2011). In this case, negotiations of knowledge positioning take place, sometimes involving the need to cite or search for alternative sources of knowledge (Mondada, 2011; Pomerantz, 1984).

That epistemic stance management is part of action accomplishment and consequential for L2 learning has been shown by a number of studies. In online intercultural exchange conversations, L2 learner's epistemic stance displays in the form of short surprise tokens can prompt further telling of a photograph shown on camera (Pouromid, 2020). In L1-L2 conversations for learning, occasioned and prospective knowledge checks by the L1 speaker and repair initiated by the L2 speaker-both orienting to possible asymmetries in knowledge status—can generate definition sequences to achieve intersubjectivity, which can lead to learning opportunities (Kim, 2019). Furthermore, language learners' changes in epistemic management in task-oriented activities are indicative of their IC development (Balaman & Sert, 2017a, 2017b). Balaman and Sert (2017a) showed how L2 users initially mobilised limited resources to enact congruent epistemic positioning, some of which led to disruptions of task progressivity (e.g., irrelevant requests, failures to display listenership and understanding, epistemic primacy challenges); yet over time, the participants' use of resources to index congruent epistemic positioning diversified, and the disruptions to task progressivity also disappeared. Altogether, these studies foregrounded conversational and pedagogical activities as a stimulating environment for epistemic management, whereby opportunities for language learning and IC development are occasioned by participants' displays and negotiations of knowledge stances.

# $Learners'\ interactional\ practices\ in\ online\ searches$

In this study, we focus on participants' interactional practices during collaborative online searches in text-and-voice computer-mediated communication (CMC) (e.g., Nguyen, 2017; Nguyen et al., 2022). Collaborative online searches—web searches that involve two or more parties (versus independent searches by only one party)—can be occasioned by questions that invoke a 'searchable object' (e.g., songs, videos, webpages) or by a 'state of confusion' in which participants express divergent understandings and self-doubt (Brown et al., 2015; Çolak & Balaman, 2022). Generally, collaborative searches are initiated by one party's request for suspending the ongoing conversation (e.g., "just wait a moment,"

Greer, 2016, p. 203), sometimes followed by verbalising (the aim of) their current action (e.g., "I will find the correct word," Greer, 2016, p. 203; "I'm trying to find X," Nielsen, 2019, p. 208; "I will search it," Colak & Balaman, 2022, p. 6) or spelling aloud the words in the search query to account for device use and to involve co-participants in the search (Porcheron et al., 2016). In online searches, participants may engage in searching information while enacting epistemic positioning (Balaman & Sert, 2017a, 2017b), referencing what they see on the screen ("there is a tweet," Balaman & Sert, 2017b, p. 122) to engage the co-participants, and using the verbal expression "let me X" to coordinate searches not mutually accessible to them (Balaman & Pekarek Dohler, 2021). In collaborative searches, one party may be the 'driver' who performs the search actions on the device and other parties the 'passengers' who do not manipulate the device but co-participate in the search by providing suggestions, directives, questioning, confirming, or commenting on search results (Brown et al., 2015; Porcheron et al., 2016). In these cases, the 'driver' manages the participation of the 'passengers' by asking questions and narrating what they see on the screen, especially when participants lack mutual visual access to the referent (Yu & Tadic, 2020).

Extending prior research on collaborative online activities, this study focuses on how the management of epistemic stances contributes to action accomplishment in online search sequences during a computer-mediated conversation-for-learning. By examining participants' stance management as they invoke references from the Internet, we aim to understand the role of knowledge displays and negotiations in coordinating online searches while shaping the momentary relationship, and what these in turn tell us about the learner's IC.

#### Methods

Data for this single-case study were obtained from one naturally-occurring video-recorded Skype session between two participants from Brazil: Clara (pseudonym), a tutor located in the United States, and João (pseudonym), a tutee located in Brazil (see also Nguyen et al., 2022). We were interested in understanding

<sup>&</sup>lt;sup>(1)</sup> The tutor was assessed at C2 level (Common European Framework of Reference). The tutee's four language skills were assessed by the tutor to be at the intermediate level.

computer-mediated language learning and teaching taking place naturally; therefore, we did not attempt to make any alterations as to the manner the lessons were structured or how technology was utilised.

The recorded session was part of João and Clara's ongoing series of long-distance conversations-for-learning (Kasper, 2004), which regularly took place over Skype. In this session, João and Clara were focusing on developing João's speaking fluency. They talked about a variety of topics, mainly his recent work and life activities and whenever appropriate, Clara interjected to provide João with new lexical items or idiomatic expressions. Skype was utilised for practical reasons since it was at no cost to both participants; however, due to low bandwidth issues at João's location, during the lessons they used only voice and text chat without video or screen sharing. Throughout every session, Clara frequently used the text chat function for corrections or to provide examples, and João was used to this interaction format. While Clara was typing a message (marked by the symbol 🛎 🛎 in the transcripts), João only saw three dots (...) appearing in his chat window. The entire message became visible to him as soon as she hit the return key (marked by the symbol  $\leftarrow$  in the transcripts). A camera on Clara's side captured the participants' voices as well as Clara's screen and typing motion. Due to logistical constraints, no video data was collected on João's side.

After repeated viewings of the recorded session, we identified three extended online search sequences and transcribed them following Jefferson's (2004) CA transcription conventions. Since Clara's non-vocal actions were not available to João, they are transcribed in grey shading. CA was then carried out to understand the participants' actions, with attention to micro-details of talk from the participants' perspectives (Have, 2007; Schegloff, 2007). CA has been shown to be a fruitful approach to analyse text-andvoice interaction (e.g., Balaman & Pekarek Dohler, 2021; Balaman & Sert, 2017a, 2017b; Nguyen, 2017; Nguyen et al., 2022; Pekarek Dohler & Balaman, 2021) as it enables the examination of sequential organisation of talk in integrated modes. Our 'unmotivated looking' (Sacks, 1984) of the online search sequences revealed that knowledge stances seemed to be a relevant matter for the participants throughout the development of the searches. Our analysis thus focused on the participants' interactional practices for epistemic management as they jointly oriented to initiating, sustaining, and terminating the online searches. The

excerpts presented below illustrate these three online search stages.

#### **Findings**

In this section, we show the participants' interactional practices for managing stances throughout different stages of online searches (initiation, maintenance, and closing) and how the learner's practices may inform us about his IC in text-and-voice CMC. Specifically, we present two episodes, one in which a web search was occasioned by talk about the origin of Skype (Excerpts 1 & 2) and another in which a web search was occasioned by talk about a wine opener João had purchased (Excerpts 3 & 4).

Interactional practices to achieve epistemic congruence in search initiation

We first focus on the participants' practices for achieving epistemic congruence, which led to the initiation of an online search sequence. The learner's IC can be seen in how he responds to challenges to his claim of epistemic primacy. In Excerpt 1, the search sequence starts in line 44 but to understand its emergence, we need to look back at João's claim of epistemic access and primacy when he declares that Skype is "from the United States" (line 1).

```
Excerpt 1: "Skype I" [23:12-24:20]
                       ↑ah yes. it's from united states.
       1
              João:
      2
                       (0.2)
      3
             Clara:
                       ↑hih hih hih hih
      4
                       (0.2)
      5
             Clara:
                       OH! i didn't know.
      6
                       (0.8)
      7
             Clara:
                       really? i thought sky[pe wa::s,
      8
                                            [>huh<u>huh</u>- huh<u>huh</u>-<
              João:
      9
             Clara:
                       i thought skype wa::s: (0.3)
                       whatever it's a weird name? =
       10
       11
                       >so i thought it was like< orkut. "you know,"
       12
                       (0.3)
       13
             Clara:
                       i thought it was u:h uh from another country.
       14
                       (0.3)
                       ↑do you know if it's american? °i don't th-° (.)
       15
             Clara:
       16
                       >°i don't know,°<
       17 → João:
                       ((reading)) skype and associated trademarks with the
```

```
18
                 logo with the ess (('s')) logo are trademarks of
19 →
                 skype limited.
20
                 (0.3)
21
       Clara:
                 a::nd?
22
                 (0.4)
23
       Clara:
                 <what does that mean.>
24
                 (1.0)
25
    → João:
                just tha:t (.) they say:
26
       Clara:
                 [†ha
27
       João:
                 [because when i >op-< pressed help?
28
       Clara:
                 a:h okay. right. > right. = right. = right. <
29
    → João:
                 [there is <u>help?</u>
30
                 [yeah but they don't know.
       Clara:
31
                 in the end there is about [skype.
    → João:
32
       Clara:
                                            [>aBOUT skype.<
33
                 °a:h.=okay. I see.°
34
                 (0.2)
35
   → João:
                 [°and they didn't say that.°
36
       Clara:
                 [((reading)) copyri::gh<u>t</u>.
37
    → João:
                 .hh ↑huh m- (i may-) that's not am- a
38
                 >american company<=
39
                 [because amer- it's got to sa::y,
40
       Clara:
                 [yeah. its'- it's- i-
41
       João:
                 it's amer- american <co:mpany.>
42
       Clara:
                 ↑really? [I've never- (.)
43
       João:
                         [°yeah.°
                 wait. <u>n</u>ow i'm ↓<u>cu</u>rious. = wait. °°wait. °°
44
       Clara:
45
                 (0.2)
46
       Clara:
                 °<let's see where skype is from.>°
47
                 (.)
48
       Clara:
                 .h 'cause this name is too weird to be:: (0.2)
49
                 <an English name.>
50
       Clara:
                 s- [skyp[e.
51
                   [ === "(skype)"
52
                   [like.=skype. °type?°
    → João:
53
       Clara:
                 [origin.
54
                 search results appear
```

In response to João's knowledge claim, Clara displays her evolving state from not-knowing to knowing with a change-of-state token ("OH!," line 5) (Heritage, 1984), followed by claiming no prior knowledge of Skype's origin (Mondada, 2011; Sert & Walsh,

2013). Before João produces a relevant next action, Clara begins questioning João's claim, starting with giving accounts (lines 7–13) and checking his epistemic status ("1do you know if it's american?," line 15) (Sert, 2013). Given that these series of actions occur after João's assertion, Clara is challenging his authority in this matter. Despite her challenge, however, Clara positions herself as more or less unknowing by prefacing her accounts with "I thought" (lines 7-13) to index an epistemic downgrade (Kärkkäinen, 2003) and by claiming no knowledge of the referent (">"I don't know,"<," line 16). João's reassertion of his epistemic primacy can be seen in lines 17-19. Specifically, rather than responding to Clara's epistemic check, João verbalises a statement about Skype, using it as a source to strengthen his assertion (Pomerantz, 1984). At this juncture, the emergence of epistemic incongruence is evidenced by Clara's nonacceptance and challenge of João's claim and João's subsequent reassertion of epistemic primacy.

Whenever a speaker cites sources to bolster assertions, the co-participants can evaluate the sources' credibility before accepting or rejecting the assertions (Pomerantz, 1984). When Clara treats the source João provided as insufficient by questioning its upshot (lines 21-23), João passes responsibility to the source (line 25), and instead of providing the upshot, he directs Clara's attention to where the source is located (lines 29-33), thereby inviting her to verify the source herself. Following both participants' unsuccessful attempts to identify the answer from the "About Skype" tab, João revises his earlier assertion (that Skype is "from the United States"), now treating this source as invalid (lines 37-39 & 41). The resolution remains inconclusive: neither participant has greater epistemic authority to the reference. At this point, Clara resorts to alternative sources of knowledge by initiating an online search (line 44): After requesting to suspend the ongoing talk, she produces a turn-holding and collaborative activity-preface expression ("let's see," line 46) to announce an incipient search activity on her private screen while engaging João in it (Balaman & Pekarek Doehler, 2021).

It is important to note how the participants manage the search activity as a dispreferred action. Clara gives accounts both before and after the search initiation (lines 48–49). Since the search activity not only threatens the progressivity of the ongoing talk but also suggests her reluctance to accept João's claim and his displayed epistemic stance as a knowing party, Clara's orientation to it as a dispreferred action exhibits her efforts to establish

alignment and affiliation with João. On his end, João also seems to treat Clara's response package as dispreferred: His alignment with her search activity to progress it forward is quite delayed (line 52).

In short, an online search was initiated due to participants' joint orientation to achieve epistemic congruence. Notably, the learner's IC is seen in referencing a source to support one's claims (lines 17–19), attributing responsibility to the source in response to epistemic primacy challenge (line 25), and directing the recipient to verify the source (lines 29–33). The search initiation was managed delicately, with delays, accounts, and a shared orientation to realignment; its preference organisation is coloured by the participants' orientation to manage interpersonal relationship in achieving congruent understanding.

Interactional practices to negotiate epistemic stances during the search Excerpts 2 and 3 show how the participants sustain the online search for negotiating epistemic stances, during which João employs additional practices such as verbalising his ongoing action (Nielsen, 2019) and naming a recognisable source to involve Clara in the search while defending his epistemic stances. Further, João mobilises acknowledgement tokens and a term of endearment as interactional resources to build affiliation with Clara while performing the sensitive action of doing correction.

During the online search about Skype, Clara verbalised a result that shows Skype to be an eBay company with headquarters in Luxembourg (not shown). Treating this information as support of her understanding that Skype is a non-American company, in Excerpt 2, Clara transitions to close the search by teasing João about his personal preference for eBay (lines 1-2). However, João opposes this conclusion (line 3)-thereby renewing epistemic incongruence—and reopens the search.

```
Excerpt 2: "Skype II" [26:56-27:37]
             Clara:
                      .hh hhhhhh. see? = "but-" you're- you're
      2
                      happy it's an ebay company:.
      3
          → João:
                      n↑o BUT. I- I'M- I'M reading here.
                      h- you were wrong darling.
      4
      5
                      because he was found in sweden.
      6
                      (0.3)
      7
             Clara:
                      ↑<<u>lux</u>embourg.> °that's what it <u>sa</u>[id.°
      8
                                                        [ www.luxemb[ourg"]
```

```
→ João:
                                                    [ye::s.
10 → João:
                 but ↑a:fter tha:t
11
                 [the skype <was bought "from"> for ebay=
   → João:
12
                 [← "luxembourg"
       Clara:
13
        João:
                 =\underline{\mathbf{ye}}s?
14
       Clara:
                 <u>I</u> ↑don't know. I just read <u>one site</u>.
                 [a::h °because°
15 → João:
16
       Clara:
                 [°i just read what ↑i told ya.°
17
       João:
                 (°a::h°)
18
       Clara:
                 °well?°
19
                 (1.2)
20 → João:
                 ye:s because here I':m reading wikipedia- (0.3)
21
                 dot org.
22
                 (0.3)
23
       Clara:
                 [right.
24 → João:
                 [and they say that.
25
       Clara:
                 o:h=okay. >i see.<
```

Without responding to Clara's tease, João reopens the search activity about Skype's origin by first disagreeing with Clara's assumption, followed by a prosodically emphatic "but" to resume the prior topic (Schiffrin, 1987). Next, João verbalises his local action ("I- I'M- I'M reading here," line 3) (Nielsen, 2019) to involve Clara in the search while projecting an upcoming correction. Mitigating the correction with an intimate address term ("you were wrong darling," line 4), João identifies Sweden as Skype's origin (line 5). Of note, by attaching the term of endearment in his correction, João orients to correcting Clara as a dispreferred action which requires interactional work to maintain social solidarity with her. In any case, there is now a mismatch in the participants' understanding about Skype's origin, and their epistemic stances in the matter once again become open for negotiations.

After a delay (line 6), Clara reasserts her understanding and rejects João's assertion. She references the source from her prior search to defend her contestation (""that's what it said."," line 7), thus passing responsibility to the source (Pomerantz, 1984). In lines 8 and 12, she types the word "Luxembourg" in the chat to add visibility in emphasising her point (Nguyen, 2017). While João acknowledges Clara's contribution ("ye::s.," line 9), he uses a stressed contrastive "but" followed by a temporal transition ("after that") to emphasise that Skype was originally from Sweden but

was subsequently bought by eBay (lines 10–11), thereby asserting his greater epistemic access to a more full-fledged version of Skype's origin based on his search.

In response to João's solicitation for agreement ("ves?," line 13), Clara denies epistemic responsibility by first claiming no knowledge (Keevallik, 2011) then accounting for it by downgrading her claim of access to only "one site" (line 14). João begins initiating an account ("because"," line 15), which he momentarily abandons to respond to Clara's further attribution of responsibility to the source ("°i just read what 1i told ya."," line 16). After a gap of silence, in lines 20–21, João acknowledges Clara's account then reinitiates his own account: He involves Clara in the search by narrating his ongoing action ("here I':m reading") (Nielsen, 2019) and specifies the source's URL: "wikipedia- (0.3) dot org." Naming a recognisable source proves to be effective in persuading Clara: She acknowledges the source and displays a shift in epistemic alignment (Goodwin, 2007) by agreeing with João's account (lines 23–25). At this moment, the participants finally establish epistemic congruence in which they mutually agree that João has superior knowledge on the matter.

Excerpt 3 (see also Nguyen et al., 2022) illustrates how the participants manage epistemic stances while sustaining the search for a wine opener João had recently purchased. According to João's description, the wine opener is manual but can remove the cork automatically (not shown). Clara challenged the logical congruence of João's description (that something can be "manual" and "automatic" at the same time); meanwhile, she launched a web search to look for references. In Excerpt 3, the participants work toward establishing intersubjectivity about João's wine opener. As shown in Nguyen et al. (2022), the participants' orientation to negotiate epistemic stances contributes to the maintenance of the online search. In addition to a demonstrated ability to manage stancetaking while maintaining the search, João's IC is also evident in his use of laughter to neutralise the disaffiliative impact of Clara's display of non-understanding and doubting (lines 172-174) and the intimate address term in countering Clara's epistemic primacy challenge (line 187).

Excerpt 3: "Corkscrew I" [37:49–38:42]

- 162 Clara: = cuz. (0.5) the corkscrews  $\uparrow \underline{I}$  know, you have to (.)
- 163 Clara: use your hands to remove the cork (.) afterwards.
- João: <u>no</u>. I have to >use< ↑my hands as <u>w[ell</u>.

```
165
                         Clara:
                                                                                                                                                                     [1so but-but
                                                                                                                                                                     [ (cork)"
166
167
                          Clara:
                                                      you are saying: you're saying:
168
                          Clara:
                                                      (screw)"
169
                           João:
                                                      but [it's [au↑tomatic.
170
                          Clara:
                                                                  [← \ \ "corkscrew"
171
                                                                                new results page appears
172
                          Clara:
                                                      but- (.) ↑<u>ho</u>:w.
173
                                                      (0.5)
174 → João:
                                                     hih [hih .hhh hih hih hih
175
                          Clara:
                                                                  [O::H okay.=wait. I'm looking at stuff.
176
                         Clara:
                                                      >°let's see°<
                                                     let- let- let me see:, <if °I find here. °>
177
                           João:
178
                          Clara:
                                                      cuz it's like [HEre.
179
                                                                                          clicks on link
180
                          Clara:
                                                     here's sh:: showing > two different ↓things.<
181
                                                      <corkscrews a::nd wine openers.>
182
                          Clara:
                                                      so they're two (.) different things
183
                          Clara:
                                                      .hh and NO:W I see something pretty
184
                                                      cool> here >that< maybe >that's what
185
                                                      you're talking about.< .HH but it's <<electric.>>=
                         Clara:
                                                      =\rightarrowser: \rightarrowser: \rightarrowse
186
                          Clara:
187 → João:
                                                                                                                              [no.(.) au↑tomatic.(.)°darling°
188
                                                      mi:ne's manual.
189
                          Clara:
                                                     mm:.
190
                                                      (0.3)
191
                           João:
                                                      °let's see [(here I:.°
192
                          Clara:
                                                                                   [((reading)) <u>per</u>fect shape.
193
                                                      <screw pull corkscrews.>
```

João reasserts his claim by disconfirming Clara's reasoning, his assertion expressed through the recycling of her expression "use (one's) hands" (line 164). Clara continues to challenge João's description with a displayed attempt to formulate his positioning ("↑so but- but you are saying:," line 165–167) (Drew, 2003) and simultaneously reopens the web search by typing the keyword "corkscrew" (lines 166–168), but before Clara could complete her turn, João re-introduces the key feature of the wine opener ("but it's au↑tomatic.," line 169). This prompts Clara to produce an emphatic "↑ho:w" (line 172) to index strong opposition to João's statement (Kangasharju, 2009). Instead of reformulating his description, which may not contribute to resolving their failure to

achieve intersubjectivity and affiliation in the matter (as evidenced by Clara's repeated use of but-prefaced turn constructional units to signal disaffiliation, lines 165–172), João produces a series of laughter tokens (line 174) to mark his recognition of Clara's contestation without escalating the mutual displays of divergent understanding.

It is also during this time that Clara makes public her engagement with the web search (lines 175-176), showing her orientation to new sources that could resolve their lack of mutual understanding. On his side, João also announces that he is launching a web search to defend his claim (line 177). However, only Clara verbalises what she orients to among the search results, as typical of co-present search and consistent with what Clara has been doing in this conversation (lines 180-183). This may be due to the fact that the search results support her argument that the wine opener described by João is electric (line 185), thus contradicting his claim. Facing Clara's citation of the search results as a source, João counters with a simple repetition that the wine opener is "automatic" (line 187), which renews the need to achieve epistemic congruence (Nguyen et al., 2022). It is important to note that he softens the disaffiliative effect of countering Clara's displayed understanding with the term of endearment "darling," to which Clara acknowledges by continuing her search rather than concluding it based on her just-searched results (lines 189 & 192-193). The fact that João announces his continued web search (line 191) may indicate that he has not found relevant search results to back his claim (hence the lack of result verbalisation). Both participants show continued orientation to achieving intersubjectivity by sustaining the online search about João's wine opener.

# Interactional practices to forgo epistemic incongruence in search termination

Having examined participants' interactional practices in search initiation and maintenance, with the final excerpt, we will show how Clara and João work toward terminating the search in pursuit of a new topic (Excerpt 4). We will suggest that the learner's IC is evident in closing the search by convincing the other without supporting evidence, producing an emphatic assessment to invoke "ownership" (Raymond & Heritage, 2006), and aligning with other-initiated stepwise topic shift.

Prior to Excerpt 4, Clara read aloud different types of corkscrews from her search, none of which was accepted by João (see also Nguyen et al., 2022). This prompted Clara to express her doubt about the wine opener several times, including lines 214–215 in Excerpt 4.

```
Excerpt 4: "Corkscrew II" [38:48–39:03]
      214
               Clara:
                        I:: don't know. >I don't know what you're talking
      215
                        about. < [but it's okay.
      216
                                 scrolls down
      217
                        (.)
      218
               Clara:
                        ((sniffs))
      219
                        (0.3)
      220 → João:
                        [be<u>lie</u>ve me.
      221
               Clara:
                        scrolls up
      999
               Clara:
                        hih hih [hih ↓hih
      223 → João:
                                [it's [rea:::lly °good.°
      224
               Clara:
                                     stops scrolling
      225 → Clara:
                        and how'd you hear about it.
      226 → João:
                        [\text{Twell when just looking I wa:s
      227
                        [I mean you were in england and you saw it
               Clara:
      228
                        and then [you,
      229
                                  closes webpage,
      230
                                   returns to videoconference chat
```

Without arriving at a shared understanding, Clara signals a sequence closure with an optimistic projection (Jefferson, 1988) ("but it's okay," line 215), in effect cancelling the doubt and terminating the search. Rather than insisting on sustaining the web search about his wine opener, João attempts to convince Clara with a plea ("be<u>lie</u>ve me.," line 220), albeit with no conclusive evidence yielded by the prior search sequence. Overlapping with Clara's laughter (line 222), which is perhaps deployed to diffuse the displayed disaffiliation leading up to this point, João produces an emphatic assessment ("it's rea:::lly "good."," line 223). With this, João invokes his ownership of the wine opener and his relative rights to evaluate it (Raymond & Heritage, 2006) while demonstrating his understanding of and alignment with Clara's projection to terminate the search activity (lines 214–215). As seen in lines 224–225, Clara subsequently stops scrolling and produces a stepwise topic shift by asking how João heard about the wine opener, thereby launching a new interactional project.

Continuing his alignment, João responds to Clara's question without any delays, which contributes to the smooth transition out of the search activity. Although matters concerning the participants' epistemic incongruity remain unresolved, their joint orientation to abandon the search in pursuit of the new developing topic seems to forgo the preceding disaffiliative actions about the wine opener. The participants reciprocally orient to one another's pursuit of the new interactional project by jointly reorganising their courses of action toward resuming the activity of talking.

#### Discussion and conclusion

The analysis above has shown several interactional practices for managing epistemic stances during online searches in a text-andvoice teleconference session designed as a conversation-forlearning. In particular, it reveals João's displays of epistemic stances in the sequential organisation of talk. In Excerpt 1, João first made a claim about Skype's origin, but when faced with a challenge to his epistemic primacy, he cited a source to support the claim. When the relevance of this source was questioned, he passed the responsibility to the source. When this is further challenged, he shared his method of accessing the knowledge, thus inviting Clara to verify the source herself, then eventually revised his claim to indicate uncertainty. His stance displays were recalibrated moment-to-moment in response to Clara's ongoing actions. When João challenged Clara's assertion that Skype is from Luxembourg (Excerpt 2), at first he rejected her assertion and accounted for his opposition by verbalising his local action and referring to the source via a deictic pronoun ("n\odot o BUT. I-I'M- I'M reading here."). But when confronted with further challenge by Clara, João upgraded the account by specifying the source's URL ("Wikipedia- (0.3) dot org."). Similarly, when João opposed Clara's doubt (Excerpt 3), he first started with a rejection ("no.") plus an assertion based on his first-hand experience ("I have to >use< \taum my hand as well."). In the face of Clara's nonacceptance, he produced another assertion ("it's au^tomatic.") then sought the support of an authoritative source by reopening an online search. Finally, when Clara gave up on verifying João's claim with an online search (Excerpt 4), João initially solicited acceptance by convincing without evidence ("believe me."). Then, upon receiving affiliation (via laughter tokens) but not epistemic alignment from Clara, he subsequently upgraded his epistemic status by invoking his ownership of the wine opener via an

emphatic evaluation ("it's rea:::lly "good."), thereby indexing greater epistemic access and primacy relative to Clara. It is important to note that in asserting epistemic primacy, João designed his turns to be sensitive to his recipient's evolving epistemic and affiliative stances. When he used direct rejections such as "no but" and "you were wrong," he immediately coupled them with a reference to an authoritative source, a telling of his first-hand experience, a term of endearment, or laughter, as seen in Excerpts 2 and 3. Participating in online searches thus afforded the learner with opportunities to engage in a wide range of social actions in context, which are both the target and the vehicle for language development.

Importantly, the participants' situated roles of 'driver' and 'passenger' in collaborative searches (Brown et al., 2015; Porcheron et al., 2016) were constantly shifting, as both participants have direct access to operate the device and perform search actions on their own. Without mutual visual access, however, collaborative searches in text-and-voice CMC require the participants to engage in interactional work to alert and involve each other in the search process. João's IC in this particular online environment is observable in his demonstrated ability to (a) align with or initiate an emergent interactional project (i.e., initiating and sustaining online searches) to resolve or negotiate a knowledge gap (Excerpts 1 & 2), (b) perform dispreferred actions (e.g., corrections) while affiliating with the recipient (Excerpts 2 & 3), and (c) forgo a topic even if intersubjectivity is not fully achieved (Excerpt 4). Together with previous research (e.g., Burch & Kley, 2020; Kim, 2017; Sert, 2013; Sert & Walsh, 2013), our analysis reveals a learner's IC at work in online interaction with respect to epistemics management through turn design and action formulation.

Pedagogical activities can be designed with these findings in mind to stimulate and diversify learners' L2 use. First, the type of actions João participated in is quite different from other CMC situations in which participants are able to show each other pictures on their screens. In those situations, the availability of shared visual information has been found to lead to descriptions by one party and short surprise tokens by the other to elicit further telling (Balaman & Sert, 2017a; Pouromid, 2020). In our study, it seems that problems in achieving congruence in epistemic positioning afforded the learner occasions to produce actions such as assertion, reassertion, rejection, claim revision, giving accounts, citing a source, and convincing. The data thus suggest

the values of technological constraints as the trigger for differing social actions (see also Nguyen et al., 2022). In designing online language learning activities, teachers may want to intentionally plant constraints such as restricting learners' access to quick answers to web searches or shared visual information, while monitoring how learners are negotiating epistemic stances in order to provide timely pedagogical intervention to develop learners' IC. Second, the data suggest the value of free-flowing conversations about the learner's own experiences (versus task-based activities) as a fertile soil for the practice of epistemic stance management. For example, class time can be put aside for learners to share recent goings-on in their lives such as new events, purchases, discoveries, and worries. This has the added benefits of putting the learners at the centre of classroom activities, thus integrating the L2 into their life-worlds.

**Transcription notations**Transcription notations follow Jefferson (2004) and in addition:

Italics	non-vocal actions accompanying vocal actions in the line above
<u></u>	typing of text inside quotation marks in Skype text chat
<b>←</b>	the pressing of the 'enter' key to send text chat message inside quotation marks in Skype
<b>€</b> 9	typing of text inside quotation marks in web browser
٠ °	the pressing of the 'enter' key to send search query inside quotation marks in web browser

#### References

Balaman, U., & Pekarek Doehler, S. (2021). Navigating the complex social ecology of screen-based activity in videomediated interaction. *Pragmatics*, *32*(1), 54–79. https://doi.org/10.1075/prag.20023.bal

Balaman, U., & Sert, O. (2017a). Development of L2 interactional resources for online collaborative task accomplishment. *Computer Assisted Language Learning*, 30(7), 601–630.

- Balaman, U., & Sert, O. (2017b). The coordination of online L2 interaction and orientations to task interface for epistemic progression. *Journal of Pragmatics*, 115(2017), 115–129.
- Brown, B., McGregor, M., & McMillan, D. (2015). Searching objects: search in everyday conversation. *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing, Vancouver*. Association for Computing Machinery.
- Burch, A. R., & Kley, K. (2020). Assessing interactional competence: The role of intersubjectivity in a paired-speaking assessment task. *Papers in Language Testing and Assessment*, 9(1), 25–63.
- Cekaite, A. (2012). Affective stances in teacher-novice student interactions: Language, embodiment, and willingness to learn in a Swedish primary classroom. *Language in Society*, 41, 641–670.
- Cekaite, A. (2016). Emotional stances and interactional competence: Learning to calibrate disagreements, objections, and refusals. In M. Prior & G. Kasper (Eds.), *Emotion in multilingual interaction* (pp. 131–152). Benjamins. https://doi.org/10.1075/pbns.266.06cek
- Cekaite, A. (2017). What makes a child a good language learner? Interactional competence, identity, and immersion in a Swedish classroom. *Annual Review of Applied Linguistics*, 37, 45–61. https://doi.org/10.1017/S0267190517000046
- Çolak, F., & Balamanm, U. (2022). The use of online dictionaries in video-mediated L2 interactions for the social accomplishment of Virtual Exchange tasks. *System, 106*(2022), 1–14.
- Drew, P. (2003). Comparative analysis of talk-in-interaction in different institutional settings: A sketch. In P. Glenn, C. LeBaron & J. Mandelbaum (Eds.), *Studies in language and social interaction* (pp. 293–308). Erlbaum.
- Goodwin, C. (2007). Participation, stance and affect in the organization of activities. *Discourse & Society*, 18(1), 53–73.
- Greer, T. (2016). Multiple involvements in interactional repair: Using smartphones in peer culture to augment lingua franca English. In M. Theobald (Ed.), *Friendship and peer culture in multilingual settings* (pp. 197–229). Emerald Publishing.
- Hall, J. K. (2018). From L2 interactional competence to L2 interactional repertoires: Reconceptualizing the objects of L2 learning. *Classroom Discourse*, *9*(1), 25–39.

- Hall, J. K., & Pekarek Doehler, S. (2011). L2 interactional competence and development. In J. K. Hall, J. Hellermann, and S. Pekarek Doehler (Eds.), *L2 interactional competence and development* (pp. 1–15). Multilingual Matters.
- Have, P. t. (2007). Doing conversation analysis, 2nd Ed. Sage.
- Hellermann, J. (2011). Members' methods, members competencies: Looking for evidence of language learning in longitudinal investigation of other-initiated repair. In J. K. Hall, J. Hellermann & S. Pekarek Doehler (Eds.), *L2 interactional competence and development* (pp. 147–172). Multilingual Matters.
- Heritage, J. (1984). A change-of-state token and aspects of its sequential placement. In J. M. Atkinson & J. Heritage (Eds.), *Structures of Social Action: Studies in conversation analysis* (pp. 299–345). Cambridge University Press.
- Heritage, J. (2012). Epistemics in action: Action formation and territories of knowledge. *Research on Language and Social Interaction*, 45(1), 1–29.
- Heritage, J. (2013). Epistemics in conversation. In J. Sidnell & T. Stivers (Eds.), *The handbook of conversation analysis* (1st ed., pp. 370–394). Blackwell.
- Jefferson, G. (1988). On the sequential organization of troublestalk in ordinary conversation. *Social Problems*, 35(4), 418–441.
- Jefferson, G. (2004). Glossary of transcript symbols with an introduction. In G. Lerner (Ed.), *Conversation analysis:* Studies from the first generation (pp. 13–31). Benjamins.
- Kangasharju, H. (2009). Preference for disagreement? A comparison of three disputes. In M. Haakana, M. Laakso & J. Lindström (Eds.), *Talk in interaction. Comparative dimensions* (pp. 231–253). Studia Fennica Linguistica.
- Kärkkäinen, E. (2003). Epistemic stance in English conversation. A description of its interactional functions, with a focus on I think. Benjamins.
- Kasper, G. (2004). Participant orientations in German conversation-for-learning. *The Modern Language Journal*, 88, 551–567.
- Kasper, G. (2006). Beyond repair: Conversation analysis as an approach to SLA. *AILA Review*, 19, 83–99.
- Keevallik, L. (2011). The terms of not knowing. In S. Stivers, L. Mondada & J. Steensig (Eds.), *The morality of knowledge in conversation* (pp. 184–206). Cambridge University Press.

- Kim, S. (2019). "We limit ten under twenty centu charge okay?": Routinization of an idiosyncratic multi-word expression. In J. Hellermann, S. Pekarek-Doehler, S. W. Eskildsen & A. Piirainen-Marsh (Eds.), Conversation analytic research on learning-in-action: The complex ecology of second language interaction 'in the wild' (pp. 25–49). Springer.
- Kim, Y. (2017). Topic initiation in conversation-for-learning: Developmental and pedagogical perspectives. *English Teaching*, 72(1), 73–103.
- Mondada, L. (2011). The management of knowledge discrepancies and of epistemic changes in institutional interactions. In S. Stivers, L. Mondada & J. Steensig (Eds.), *The morality of knowledge in conversation* (pp. 27–57). Cambridge University Press.
- Musk, N. (2022). Using online translation tools in computer-assisted collaborative EFL writing. *Classroom Discourse*, 13(2), 119–144.
- Nguyen, H. t. (2011). A longitudinal microanalysis of a second language learner's participation. In G. Pallotti & J. Wagner (Eds.), *L2 learning as social practice: Conversation-analytic perspectives* (pp. 17–44). National Foreign Language Resource Center, University of Hawai'i at Mãnoa.
- Nguyen, H. t. (2012a). Developing interactional competence: A conversation analytic study of patient consultations in pharmacy. Palgrave Macmillan.
- Nguyen, H. t. (2012b). Social interaction and competence development: Learning the sequential organization of a communicative practice. *Learning, Culture and Social Interaction, 1*(2), 127–142.
- Nguyen, H. t. (2017). The sequential organization of text and speech in multimodal synchronous computer-mediated communication. *Text & Talk*, *37*(1), 93–116.
- Nguyen, H. t. (2019a). Developing interactional competence in a lingua franca at the workplace: An ethnomethodologically endogenous account. In H. t. Nguyen & T. Malabarba (Eds.), Conversation analytic perspectives on English language learning, teaching and testing in global contexts (pp. 59–84). Multilingual Matters.
- Nguyen, H. t. (2019b). Turn design as longitudinal achievement: Learning on the shop floor. In J. Hellermann, S. W.

- Eskildsen, S. Pekarek Doehler & A. Piirainen-Marsh (Eds.), Conversation analytic research on learning-in-action: The complex ecology of second language interaction 'in the wild'. Springer.
- Nguyen, H. t., Choe, A. T., & Vicentini, C. (2022). Opportunities for second language learning in online search sequences during a computer-mediated tutoring session. Classroom Discourse, 13(2),145-163. DOI: 10.1080/ 19463014.2021.2023597
- Nielsen, M. F. (2019). Adjusting or verbalizing visuals in ICTmediated professional encounters.' In D. Day., & J. Wagner (Eds.), Objects, bodies and work practice (pp. 191-215). Multilingual Matters.
- Pekarek Doehler, S., & Balaman, U. (2021). The routinization of grammar as a social action format: A longitudinal study of video-mediated interactions. Research on Language and Social Interaction, 54(2), 183-202.
- Pekarek Doehler, S., & Berger, E. (2019). On the reflexive relation between developing L2 interactional competence and evolving social relationships: A longitudinal study of wordsearches in the 'wild.' In J. Hellermann, S. W. Eskildsen, S. Pekarek Doehler, & A. Piirainen-Marsh (Eds.), Conversation analytic research on learning-in-action: The complex ecology of second language interaction 'in the wild' (pp. 51-75). Springer International Publishing. https://doi.org/ 10.1007/978-3-030-22165-2 3
- Pekarek Doehler, S., & Petitjean, C. (2017). Introduction: Interactional competences in institutional settings-Young people between school and work. In S. Pekarek Doehler, A. Bangerter, G. de Weck, L. Filliettaz, E. González-Martinez, & C. Petitjean (Eds.), Interactional competences in institutional settings: From school to the workplace (pp. 1–26). Palgrave Macmillan.
- Pekarek Doehler, S., & Pochon-Berger, E. (2015). The development of L2 interactional competence: Evidence from turn-taking organization, sequence organization, repair organization and preference organization. In T. Cadierno & S. W. Eskildsen (Eds.), Usage-based perspectives on second language learning (pp. 233-267). Mouton de Gruyter.
- Pomerantz, A. (1984). Giving a source or basis: The practice in conversation of telling 'how I know'. Journal of Pragmatics, 8, 607 - 625.

- Porcheron, M., Fischer, J. E., & Sharples, S. (2016). Using mobile phones in pub talk. In Proceedings of the 19th ACM Conference on Computer Supported Cooperative Work & Social Computing, 1649–1661. Association for Computing Machinery.
- Pouromid, S. (2020). Oiling the epistemic engine in intercultural L2 talk with short tokens of surprise. *The Asian Journal of Applied Linguistics*, 7(1), 130–140.
- Raymond, G., & Heritage, J. (2006). The epistemics of social relations: Owning grandchildren. *Language in Society*, *35*, 677–705.
- Sacks, H. (1984). Notes on methodology. In M. Atkinson & J. Heritage (Eds.), *Structures of social action: Studies in conversation analysis* (pp. 21–27). Cambridge University Press.
- Schegloff, E. A. (2007). Sequence organization in interaction: A primer in conversation analysis (vol. 1). Cambridge University Press.
- Schiffrin, D. (1987). *Discourse markers*. Cambridge University Press.
- Sert, O. (2013). 'Epistemic status check' as an interactional phenomenon in instructed learning settings. *Journal of Pragmatics*, 45(2013), 13–28.
- Sert, O., & Walsh, S. (2013). The interactional management of claims of insufficient knowledge in English language classrooms. *Language and Education*, 27(6), 542–565.
- Sorjonen, M-L., & Peräkylä, A. (2012). Introduction. In A. Peräkylä & M-L. Sorjonen (Eds.), *Emotion in interaction* (pp. 3–15). Oxford University Press.
- Stevanovic, M., & Peräkylä, A. (2014). Three orders in the organization of human action: On the interface between knowledge, power, and emotion in interaction and social relations. *Language in Society*, 43, 185–207.
- Stivers, T., Mondada, L., & Steensig, J. (2011). Knowledge, morality and affiliation in social interaction. In T. Stivers, L. Mondada & J. Steensig (Eds.), *The morality of knowledge in conversation* (pp. 3–24). Cambridge University Press.
- Watanabe, A. (2017). Developing L2 interactional competence: Increasing participation through self-selection in post-expansion sequences." *Classroom Discourse*, 8(3), 271–293.

Yu, D., & Tadic, N. (2020) Narrating the visual in webinar Q&As. In H. Z. Waring & E. Reddington (Eds.), Communicating with the Public: Conversation Analytic Studies (pp. 131–146). Bloomsbury.

Ann Tai Choe is currently working towards her Ph.D. in the Department of Second Language Studies at the University of Hawai'i at Manoa. Her research interests include second language interaction, conversation analysis, membership categorisation analysis, and classroom discourse.

ann28@hawaii.edu

Hanh thi Nguyen is professor of Applied Linguistics in the TESOL Program at Hawaii Pacific University. Her research interests include the development of interactional competence in a second and at the workplace, classroom ethnomethodology, conversation analysis, and Vietnamese applied linguistics.

hnguyen@hpu.edu

Cristiane Vicentini is a Ph.D. candidate at the University of Miami. She earned an M.A. in TESOL from Hawaii Pacific University, and an M.S. in Instructional Design and Technology from the University of Tampa. Her research interests include TESOL, multiliteracies, multimodality, and the use of technology for language teaching and learning.

cxr809@miami.edu