Epistemics and Recipient Design in Other-Initiated Repair Sequences: A Closer Look at Repeats and Paraphrases

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Lee, Haneul. 2024. Epistemics and Recipient Design in Other-Initiated Repair Sequences: A Closer Look at Repeats and Paraphrases. SNU Working Papers in English Language and Linguistics 20, 17-41. This paper investigates the role of repetitions and paraphrases as repair initiations in conversation, emphasizing the importance of epistemics in shaping discourse sequences. Focusing on repeats and paraphrases that offer candidate repair solutions, the study asserts that speakers strategically manage their epistemic domains through these mechanisms, contributing to 'recipient design' for clear interpretations. The data suggests that epistemic tension arises from both the given knowledge status and turn-by-turn-shaped epistemic stance, influencing the direction of repair sequences towards a gradient outcome. The findings highlight the cooperative efforts of participants in achieving intersubjectivity, actively referencing common ground to construct and interpret utterances in conversation. (Seoul National University)

Keywords: epistemics, recipient design, other-initiated repair, intersubjectivity, conversation analysis

1. Introduction

When one identifies problems in understanding the talk of another, they initiate a repair, temporarily halting the current course of action. The conversation resumes upon resolving the trouble. In this sense, the organization of repair is prioritized over, or supersedes, the broader turn-taking organization (Schegloff et al., 1977). The process of repair serves as a key mechanism through which people maintain intersubjectivity in conversation (Schegloff, 1992), ensuring that the discourse participants build mutual knowledge of the world.

The sequence involving these repair actions is a locus of active epistemic negotiation among the discourse participants, and the participants need to orient to the relative epistemic status to achieve shared understanding. While previous literature has highlighted the import of epistemics in understanding the action an utterance performs (Heritage, 2012a), sequence organization (Raymond, 2018), third-party intervention to other-initiated repair (Bolden, 2018), or even driving the conversational sequence (Heritage, 2012b), there has been limited exploration into epistemics in other-initiated repair sequences, particularly in addressing the nuances displayed by different types, such as repeats and paraphrases. This paper aims to fill this gap by shedding light on the dynamics of epistemics within various types of other-initiated repair. These types are systematically categorized based on their alignment with preceding utterances, providing a more comprehensive picture of recipient design and epistemics in other-initiated repair sequences.

The specific types of repair initiations chosen for the investigation are those that proffer candidate repair solutions: repeats and paraphrases stemming from the prior turn of the interlocutor. This choice allows for the analysis of comparable instances of putative hearing/understanding checks, demonstrating some degree of recognition of the preceding segment and seeking confirmation. Other formats of other-initiated repairs such as open questions (e.g., What? Huh?), category-specific interrogatives (e.g. The what? Where?), copular interrogatives, or other questions (e.g. What do you mean?) are therefore outside the scope of the current study.

This paper asserts that repetition and the use of inference markers in repair questions are the means by which speakers carefully manage their epistemic domains when designing their turns. It is part of 'recipient design,' facilitating clear interpretations by recipients in the specific discourse context. Moreover, echoing Raymond's (2018) perspective that the preferred resolution to the epistemic contest is where the K- speaker accepts the claims of the K+ speaker, this paper further argues that epistemic tension shapes the precise direction of the unfolding repair sequence. While the overall direction of the sequences may be governed by the hierarchy of knowledge types owned by the speakers, a more subtle influence emerges through epistemic tension, resulting in a nuanced and gradient outcome.

2. Background

2.1. Epistemics in discourse

Epistemics refers to "differential access to, and rights regarding knowledge and information" (Raymond & Sidnell, 2019, p.177) and is inextricably embedded in the discourse actions where people maintain intersubjectivity. In the course of a conversation, each turn, building upon the previous speaker's turn, either displays understanding or indicates trouble (Schegloff, 1992). These responses shape the direction of further sequences. Successful conversation relies on the establishment of mutual understanding, achieved through the articulation of each utterance grounded in shared knowledge, with epistemics serving as a fundamental element.

Heritage (2012a) argues that the way interlocutors interpret an utterance as an action is influenced by their relative epistemic status within a discourse context. The same utterance can be construed as either an assertion or a question depending on whose epistemic domain it falls within. Recipients, as noted by Heritage (2012a; 2018), are expected to utilize relevant background knowledge, including epistemic status, to accurately comprehend social actions conveyed through utterances. Participants must vigilantly monitor their relative epistemics to accurately grasp the social actions performed by the utterances (Heritage, 2012a, 2018; Raymond, 2018). Hence, mutual understanding regarding each other's knowledge states is the stepping stone for ongoing conversation and intersubjectivity.

In this respect, "interactants hold each other accountable for asserting epistemic rights" (Drake, 2015, p.114) to facilitate cooperative meaning-making. The default epistemic context appears to be systematically determined by the nature of the knowledge (see Labov & Fanshel, 1977 on A-events and B-events; and see Pomerantz, 1980 on type 1 and type 2 knowables), which plays a significant role in sequence organization (Raymond, 2018). When participants express differential knowledge (knowing or not knowing), it can drive the conversational sequence, allowing a more knowledgeable individual to inform a less knowledgeable one (Heritage, 2012b).

Contrastingly, epistemic stance, the speaker's observable position in terms of their knowledge, is not fixed throughout the discourse. Participants express it moment-by-moment through the design of turns at talk (Heritage, 2012a). Every turn progressively defines its own context in a 'reflexive' manner, as

described by Barnes & Bloch (2019, p.225). Discourse participants are sensitive to the evolving epistemic framework, which is modified turn-by-turn. For instance, Heritage (2012b) has detailed the negotiation of epistemic status when formulating FPP (first pair part), and Drew (2018) has illustrated how speakers carefully adjust their epistemic stance through self-repair, claiming or ceding epistemic high ground, accurately reflecting their current knowledge and knowledge source.

2.2. Overview of other-initiations of repair

Repair' refers to "practices for dealing with problems or troubles in speaking, hearing, and understanding the talk in conversation" (Schegloff, 1997, p.503). When the repair is initiated by anyone other than the speaker, it is other-initiation and indicates that there has been some trouble understanding the preceding utterance. Schegloff et al. (1977) suggested that repair is usually initiated in the turn following the trouble-source turn (i.e., next turn) and, in this respect, other-initiated repair has been often referred to as 'next turn repair initiations' or 'NTRI's. However, depending on the units of sequence organization, they can occur in delayed positions, while still pertaining to the adjacency to the trouble source (Schegloff, 1992; 2000).

Repair initiations can target a word, phrase, or an entire turn as the trouble source, and they can be classified based on either their format or the type of problem they address. The spectrum of specificity involves their ability to identify the trouble source. For instance, Schegloff (2007) proposes a scale ranging from the least specific, like open questions such as "Huh?" or "What?" to more category-specific ones like "Who?" and "Where?", including repetitions. The most specific repairs involve providing a formulation for confirmation based on what was heard or understood. Similarly, Svennevig (2008) categorizes sources of trouble into 1. unspecific problem indicators, 2. category-specific indicators, and 3. candidate solutions. The last category encompasses full and partial repeats and paraphrases/corrections followed by the phrase "you mean," which differs from Schegloff's (2007) categorization of repetition.

The types of trouble addressed can also range from simple hearing difficulties to more complex issues, such as failure to understand or connect to relevant references (Raymond & Sidnell, 2019). They can also serve as preliminaries to dispreferred responses, such as challenges and disagreements (Schegloff et al., 1997). The systematic description of the level at which trouble occurs can be

Level	Speaker A's actions	Addressee B's actions
4	A is <i>proposing</i> joint project w to B	B is <i>considering</i> A's proposal of w
3	A is <i>signaling</i> that <i>p</i> for B	B is <i>recognizing</i> that <i>p</i> from A
2	A is <i>presenting</i> signal s to B	B is identifying signal s from A
1	A is <i>executing</i> behavior <i>t</i> for B	B is <i>attending</i> to behavior <i>t</i> from A

Table 1. Ladder of joint actions (Svennevig, 2004, adapted from Clark, 1996, p.152)

framed by the ladder of joint actions proposed by Clark (1996) (see Table 1). To achieve joint action through communication, successful execution of actions at each level, from both the speaker and the addressee's side, is necessary. Performing a higher-level action entails the accomplishment of actions at lower levels. The lowest level where trouble can occur may be a failure of hearing due to not attending, while the highest level may involve disagreement. Likewise, a hierarchy of other-initiated repair in terms of hearing, understanding, and disagreement has been suggested by scholars such as Pomerantz (1984), Schegloff (2007), and Svennevig (2008).

It has been claimed that there is a preference for treating the problem as less serious, for instance, that of hearing over understanding or acceptability (Pomerantz, 1984; Svennevig, 2008). Instead of immediately tackling the acceptability problem by indicating or specifying errors or providing correction, open repairs (e.g., Huh?), category-specific interrogatives (e.g., The what?) hearing checks like partial/full repeats, or understanding checks are preferred. Lower-level repairs place responsibility on the repair initiator for hearing or understanding, thus being less face-threatening for the addressee.

Conversely, the recipient of repair initiations may occasionally treat them as implicating more serious trouble. Upon inspecting their previous talk, they might proactively address potential problems by providing explanations or modifications to preempt a subsequent repair initiation (see Schegloff et al., 1977, for the preference for self-repair). Repair initiation of a lower level, seemingly signaling a 'hearing' problem, can be followed by another round of repair initiation indexing problems in a higher-level domain, but not vice versa (see Schegloff, 2000, for multiple other-initiations of repair).

2.3 Repeats and paraphrases

Repeats (either partial or full) and paraphrases, the main focus of this study, represent types of other-initiated repairs proffering candidate solutions. Classified as 'hearing check' or 'understanding check' by Svennevig (2008), these repair initiations provide a possible hearing or understanding, making relevant a confirmation as their second pair part. As the most specific category on the specificity spectrum, they explicitly identify the trouble source from the preceding turn. Their formats are distinguished from open questions or category-specific questions as they display stronger access to the preceding talk. This characteristic provides a unique opportunity to explore the boundary between mere hearing or understanding and more complex implications involving agreement or acceptance issues.

Repetition involving both falling and rising intonation has been extensively discussed in previous literature concerning its role in discourse. Schegloff (1997) elucidates the ambiguity associated with repeats with falling intonation, that they may be either heard as marking receipt or initiating repair. The former functions as a sequence-closing action while the latter advances the sequence, projecting a confirmation at the very least. Svennevig (2004) contends that falling repeats (and sometimes even rising ones) display hearing and registration of information but not necessarily the identification of the referent or acceptance of the claim.

Rising repeats systemically occur after the presentation of supposedly new information to the addressee, signaling the speaker's perceived knowledge gap (Svennevig, 2004). Maynard and Zimmerman (1984) categorized them as 'topicalizers' akin to expressions like 'Really?', which convey interest and promote the topical talk related to the response. Rising repeats may also indicate a hearing or recognition problem, in which case simple confirmation or additional time to grasp the meaning could resolve the issue. On other occasions, the use of repeats can project non-preferred actions such as rejections, corrections, and misalignments (Schegloff, 1997).

Similar to repetition, paraphrasing a preceding turn requires – and consequently displays – a certain level of comprehension and interpretation, and the line between paraphrases and repetition can often be blurry (Svennevig, 2004). In this paper, repeats are categorized, and their distinction from paraphrases is made based on the level of lexical and syntactic similarity between the original and repeated utterance. If a speaker duplicates a part or the entire turn previously

uttered by an interlocutor in terms of lexical items and syntactic structure, it is categorized as (other-) repeats. In contrast, paraphrases involve the speaker's own words and syntactic structure, reflecting their own version of the construal of the previous talk. Unlike repetition, the dissimilarity from the preceding utterances in paraphrases makes it less apparent to locate the exact targeted source.

3. The present study

This study investigates how participants employ 'recipient design' (Sacks et al., 1974, p. 727) to reference unique background information in conversations. Each utterance is carefully tailored for the audience, with an expectation that recipients will draw upon relevant common ground, including epistemic status (Heritage, 2012a; 2018). For instance, repair initiations often fall under the category of declarative questions, characterized by declarative syntax and rising intonation. Ambiguity may arise from their mismatching syntax and intonation, but Heritage (2012a; 2013) contends that the participants' relative knowledge stance determines whether actions manifest as assertions or questions. Recipients resolve potential ambiguity by utilizing the epistemic context, as anticipated by the speaker during utterance design.

Aligning with Heritage's (2018, p.39) assertion that sequences and other background information clarify actions, ensuring a lack of "ambiguity," this paper extends its focus to how the context, progressively created by the utterances, also disambiguates the source of utterance. It acts as shared knowledge that participants are expected to reference, guided by relevant cues in the recipient design of turns. In this regard, the categorization of repeats and paraphrases in this paper is based on the degree of recoverability from previous utterances. Repeats are distinguished from paraphrases as they make the reference easily recoverable from the context, creating an 'echo' of previous utterances. Repeats are further classified as 'partial' and 'full' repeats of turn construction units (TCU), alongside 'pro-repeats'. A 'full' repeat mirrors the entire syntactic structure, while a 'partial' repeat reproduces only a targeted constituent, roughly corresponding to the 'ellipsis' from Svennevig (2004).

Repeats may or may not use pro-forms, such as pronouns (e.g. 'one' instead of 'a rose') or pro-verbs (e.g., 'It does?' instead of 'It goes right into Mississippi?'). While Heritage (1984) broadly uses the term 'partial repeats' to index both syntactically query-formed and non-query-formed repeats using pro-verbs such as 'Did you?' and 'You did?', this paper reserves the term 'partial repeats' for those targeting part of the preceding utterance through incomplete syntactic duplication. It employs the term 'pro-repeats' (following Svennevig 2004) for repeats using pro-verbs, limiting its usage to those preserving the target utterance's declarative or interrogative format. Changing the syntactic format of the interlocutor's utterance from declarative to interrogative or from interrogative to declarative is not considered as 'repetition.' Therefore, although Heritage (1984) suggests that only pro-repeats maintaining declarative syntax (of the target) project the possibility of upcoming disagreement while the query-formed ones do not, this paper does not pursue this topic further.

3.1 Data and methodology

The present study adopts conversation analysis methodology to analyze recorded conversation data from TG and the CallFreind corpora collected by the Linguistic Data Consortium of the University of Pennsylvania (available at www.TalkBank.org). A total of over 180 minutes of recorded telephone dialogues capturing natural interactions between friends were examined for instances of repair initiations proposing potential hearing or understanding. Instances of repeats and paraphrases with rising intonation, acknowledged by the recipient with confirmation or disconfirmation, were collected and analyzed.

The study will first address repair sequences involving repeats of prior utterances, whether partial or full. Subsequently, pro-repeats, utilizing proverbs to replace a full repetition of the utterance, will be explored. Additionally, the discussion will encompass paraphrases emerging with connection markers such as 'so.' Due to space constraints, only exemplary instances will be highlighted. Through a systematic classification and analysis of these instances, the paper aims to provide insights into the nature of recipient design employed in repair sequences and its broader implications for the role of epistemics established through prior talk.

4. Analysis and discussion

4.1. Partial repeats with rising intonation

Partial repeats locate the trouble source to a specific part of the prior TCU. The following excerpts $(1) \sim (3)$ show repeats of part of the interlocutor's previous turn. All of the repair initiations were treated as indicating problems of 'hearing,' as can be seen from the confirmation or repetition of the original utterance in the immediate next turn. While the troubles in excerpts (1) and (2) are resolved by such repair outcomes, additional repair initiation after confirmation can be observed in excerpt (3).

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Excerpt (1): CallFriend6193 (17:26)

01 A: ¡bu:t >ya know that's almost (0.8) cause like to get on

02 the dea:n's, like, president's list or whatever they

03 call dean's list?

04 B: yeah.=

05 A: =ye hafta to get a three eight.

06 B: three eight?

07 A: †Yeah.

08 B: °o:khay:.h

09 A: like honor, I mean? (0.2)

10 m(.) like, a lota other schools have three fi:ves, (0.9)

11 like, from what I heard, yeknow,

12 B: yeah. (0.7)
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In excerpt (1), A asserts the challenge of making it onto the dean's list, highlighting the grade 'three eight' in line 5. B repeats this significant detail with a rising intonation, "three eight?" in the immediately following turn (line 6). A simple confirmation from A in line 7 suffices for B to register the information (in line 8). A then advances the sequence by providing further elaboration on how high the grade is, possibly intending to evoke a more pronounced reaction or assessment from B than mere neutral acceptance.

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05 (0.4) mhhhh=
06 M1: =you have no [ti:me?]
07 M2: [m] to get into trouble=
08 M1: =haha. hh [hhhh]
09 M2: [mhhhhhh]
```

In excerpt (2), the trouble source turn is M2's line 4. Although the repair initiation "You have no time?" in line 6 forms a grammatically complete sentence, it is a partial repetition of the entire syntactic form of the prior TCU. This incomplete repetition, following a pause of 0.4 seconds, is treated as signaling trouble hearing. In turn, M2 completes the repetition by M1 with the rest of the original sentence, "to get into trouble" (line 7). The repeated form fails to adequately reflect the semantic content of the prior TCU, necessitating a collaborative completion by the original speaker—not a mere confirmation—to resolve the trouble. M1's ensuing laughter displays recognition and understanding of the utterance that humorously highlighted the positive side of having a heavy workload.

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Excerpt (3): CallFriend6899 (8:00)
01 F1: >.hh do you get?=do you get the Saint Patrick's Day
02
       parade televi:sed (.)in Atlanta?
03 F2: I don't (.) kno:w
04 F1: okay >cause I- I wa-< you know the ba:nd is marching
05
       today.=but I didn't know if- [if-]
06 F2:
                                     [oh,] toda:y?
07 F1: ↑yeah, uh-↑huh
08 F2: wh:y (.) I was. (0.2) "tomorrow."=
09 F1: =>ye wewe (.) d-. Saint Patrick's Day is tomorrow but,
       they do no:t (.) u:m: (0.3) >march on Sunday.<
10
11 F2: ↑o:h. (1.5)
12 F1: tch they don't (.) have the parade on Sunday. so: (1.0)
13
       it's either. (0.5)
14
       if Saint Patrick's Day fa:lls (0.3) °o:n a Sunday°,
15
       >they either do it on a Monday, or the or the
16
       Saturday. < =
17 F2: =m↑hm=
18 F1: =preceding.
19
       .hhh and this year I guess, for whatever reason they
20
      cho:se, "Saturday."
21
       (0.3) tsch (0.2) so,
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22 >I don't know if you get it<
23 but they'll be on: (0.3)
24 .hhh >you might not recognize (.) °the men in their
25 uniforms.°< (0.6)
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Rising repeats may turn out to be an issue of 'understanding' or 'accepting' targeting a part of the prior turn as illustrated in excerpt (3). F1 asks if the Saint Patrick's Day parade gets televised in Atlanta - presumably where F2 currently lives - and reminds her in lines 4-5 that the band is marching today, prefacing it with "you know." The use of 'you know' treats this information as 'given' from the recipient's perspective (Schiffrin, 1987), or appeals to shared experience or background (Overstreet & Yule, 2021), displaying F1's presumed epistemic status of F2 regarding this information. However, F2 treats part of this information as new or previously unknown. F2's partial repetition in line 6 is prefaced by "oh," a change-of-state token following new information (Heritage, 1984).

The design of the turn using the discourse marker 'oh,' together with partial repetition, reveals the speaker's precise epistemic stance toward the knowledge at issue. 'Oh' has been analyzed to index the epistemic independence of the speaker in the context of second assessments (Heritage, 2002; Heritage and Raymond, 2005) and as "a systematic way of claiming that a speaker has independent access to, and already holds a position regarding the referent" (Heritage & Raymond, 2005, p.26). Consequently, oh-prefaced repetitions are a harbinger of possible disagreements (Heritage, 2002) arising from the speaker's previous experience and judgment. When the repair initiation is met with a strong confirmation of "yeah" and "uh-huh" in line 7, F2 pursues further repair through the inquisition of "why" and takes her epistemic stance as K+ by presenting a contradictory version of the knowledge, asserting that the marching is tomorrow, not today.

The multiple-repair sequence observed in excerpt (3) establishes the common ground regarding the interlocutors' relative epistemic status. In the trouble-source turn, F1 incorrectly assumes that F2 would know both that the band is marching and the marching is today, and the latter is targeted by F2's rising repeat. F2's display of her epistemic stance, claiming competing knowledge through a series of repair initiations updates F1's knowledge of what F2 knows and does not know. The repair outcome formulated by F1 is in accordance with the newly updated common ground in terms of the participants' epistemic

status. F1 confirms F2's existing knowledge that Saint Patrick's Day is tomorrow, and the following sequence is organized such that F1 provides additional information to fill the gap in F2's current knowledge, which is treated as new information as can be seen by another change-of-state token "oh" with a high tone in line 11 and "mhm" in line 17.

To summarize section 4.1, the analysis of partial repeats with rising intonation in repair sequences shows that confirmation comes as a second pair part when it successfully reflects the prior utterances. Excerpts (1) and (3) show confirmation following rising partial repeats. Conversely, collaborative completion was observed in excerpt (2), where the partial repeat fails to accurately represent the meaning of the preceding turn. While the repair initiations in excepts (1) and (2) lead to successful resolution through confirmation and collaborative completion respectively, excerpt (3) introduces a multiple-repair sequence. In this case, the source of trouble in excerpt (3) is not just hearing-related, but a more serious issue of disagreement. The repair outcomes establish and update the common ground regarding the participants' relative epistemic status, demonstrating how repair sequences contribute to achieving intersubjectivity in conversation.

4.2. Full repeats with rising intonation

Full repeats, similar to partial repeats, serve as a hearing check, necessitating confirmation as the second pair part. Unlike partial repeats, however, the trouble-source targeted in full repeats is not localized to a specific part of the prior TCU; instead, it signals difficulties in hearing or comprehending the entire utterance. In excerpts (4) and (5), participants hold a default asymmetric epistemic position regarding the domain of knowledge. The primary direction of sequence organization appears to be dictated by the inherent hierarchy or type of knowledge. However, a more fine-grained influence from turn-by-turn epistemic competition can also be observed.

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Excerpt (4): TG

01 Bee: whhat'sa mattuh with y-Yih sou[nd HA:PPY,] hh

02 Ava: [ Nothing.]

03 u- I sound ha:p[py?]

04 Bee: [Yee]uh.

05 (0.3)

06 Ava: No:,
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07 Bee: Nno:?
08 Ava: "No."
09 (0.7)
10 Bee: .hh You [sound sorta] cheer[ful?]
11 Ava: ["(Any way).] [.hh]How'v you bee:n.
```

In excerpt (4), epistemic tension unfolds as both parties assert their own epistemic rights. Bee, in line 1, offers a first assessment that Ava sounds happy. Despite the inherent claim to primary rights in 'first position assessments' (Heritage & Raymond, 2005), Bee's epistemic stance is mitigated by the use of evidential, "sound happy" (see Heritage, 2018, for downward adjustments in assertiveness by first speakers). In this context, where the referent, 'Ava's voice,' is mutually accessible to both, Bee establishes her rights of assessment. However, Ava responds with a repair initiation, fully repeating the preceding turn (with a change in deixis and intonation) in line 3. While Ava may hold more authority over her emotional status, the question still necessitates confirmation from the recipient, who has epistemic rights to her own talk. The speaker 'owns' what they say (Heritage, 2008), and a 'less serious' form of repair initiation allows the original speaker an opportunity to self-repair potentially more serious issues in advance (Svennevig, 2008).

Bee's confirmation immediately follows in line 3, overlapping with Ava's full-repeat. However, after a 0.3-second pause, Ava rejects the assessment with a "no" (line 6). This turn reverses the participants' relative epistemic positions, as Ava adjusts her stance to be the one with the authority to confirm or reject Bee's proposition. In the subsequent sequence, the underlying epistemic framework driving the outcome appears to be the differential knowledge types of the participants. Bee backs down, repositioning herself to provide a full repeat of Ava's turn seeking confirmation in line 7. Upon Ava's confirmation, Bee provides a repair of her original assessment in line 10, downgrading her assertiveness with a hedging marker "sorta" and replacing "happy" with "cheerful." Ava aborts the sequence with a sequence closing "anyway" and opens another sequence with a first pair part, "How've you been." For Ava, her emotional status is a type 1(first-hand) knowable, which she has the right and obligation to know. It is a type 2(second-hand) knowable from Bee's perspective (see Pomerantz 1980 for more on type 1 and type 2 knowables), and the one with the absolute authority can confirm, disconfirm, or even ignore the claims of the one with lesser rights.

```
Excerpt (5): CallFriend 5000 (14:28)
01 F1: butthe concert was: really good.=
       =like [rea:lly], really good (.) enjoyed it.
            [°o::h°]
04 F1: caught a ro:se, [they threw] two roses out,
05 F2:
               [\frac{1}{2}.hhhh (surprised inhale)]
06 F1: .hh[h actually-]
07 F2: [wo- they threw] two only?
08 F1: they threw tw:o ou:t, [and then-]
09 F2:
                             [and you] go:t one?=
10 F1: =we::11, ki:nd of.=
      =the gir:l a[head of me] kind of caught it=
12 F2:
                  [u- hhh]
13 F1: =and I ripped it o(hh)ut o(hh)f [h(hh)er h(h)a:nd]
14 F2:
                                        [hhhhhh] ↑Ma↓y↑a .hh
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In excerpt (5), F1 tells her own experience at a concert to F2. This event is familiar to F1 but not to F2, thus constituting an A-event for F1 and a B-event for F2 (see Labov & Fanshel, 1977 for A-events and B-events). F1 describes her catching a rose in line 4, prompting an immediate, surprised exclamation from F2 in line 5, which partially overlaps with the additional information that two roses were thrown. F2's confirmation questions in lines 7 and 9 are ordered to initially target the more adjacent TCU (the latter part of line 4). These repetitions employ pro-forms and clarify the meaning by adding "only," signaling disbelief rather than a recognition problem. F1, instead of a simple 'yes,' opts to repeat her original statement in line 8, aiming to provide a complete description from the beginning. However, F2 interprets this as confirmation, interrupting the latter part of F1's turn to address another TCU preceding the just-repaired one.

It is apparent to both parties that F2's repair initiation does not arise from her separate epistemic access to the specific event but rather from her general knowledge about the world. Her declarative questions fall within the domain of B-events, of which storyteller F1 holds absolute epistemic authority. The anticipated course of the following sequence typically involves the party with lower epistemic authority accepting the claims of the one with higher epistemic rights. Although F2 does accept F1's claims, the strong emotive response of disbelief, even from a position of significantly lower authority, creates epistemic tension. This tension leads to the reformulation of the original explication,

downgrading its assertiveness. In response to the second repair initiation in line 9, F1 prefaces her answer with "well" and "kind of," presenting an alternative explanation – actually, she ripped the rose out of another girl's hand. It could be inferred that F1, as the storyteller, strategically orchestrated her overall narrative, anticipating a response of disbelief (as seen in line 5) and planning her next turn as the slot for self-repair for dramatic effect.

```
Excerpt (6): CallFriend5000 (6:01)
01 F1: do you like it? =
      =do you (but) liking [where you li:ve]?
03 F2:
                            [o:h, sh::i:t!]
04
       (0.6)
       um::. (0.8) Do I like where I live,=
06
       =[like the] apa:rtment?=
07 F1: [yes.]
08
       =yes.
09 F2: fit's not too bad.=I think I told you a little bit about
       it.=[didn't I]?
11 F1:
           [yea:h] but (.) people have moved in: though? An'=
12 F2: =.hh ↑O:h u- ↑we:ll ↑ye:ah. some people- this guy that
       live do:wnstai:rs is really nice,
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While repair initiations in excerpts (4) and (5) suggest possible disagreement or disbelief toward the proposition offered by the interlocutor, the issue of acceptability regarding a *question* arises in excerpt (6). The discrepancy in presumed relative epistemic status on each side leads to inaccuracies in referencing the utterance. F1's question, whether F2 likes where she lives in lines 1-2, prompts F2 to initiate a repair by repeating the question "Do I like where I live?" along with her possible understanding of "like the apartment?" in lines 5 and 6. This action is instantly treated as a hearing and understanding check, as can be seen from the overlapping "yes" (line 7) and latching "yes" (line 8) from F1. F2's "oh, shit!" in line 3 partly overlapping the question, also suggests that F2 might have had difficulty recognizing the question. Upon confirmation, F2 provides an answer, stating "It's not too bad" as the second pair part to the question.

However, this answer appears to be only tentative, as F2 makes the source of trouble more explicit in the immediately following question within the same prosody unit (lines 9-10). F2 asserts having already told F1 about it, but

expresses downgraded certainty with "I think," "a little," and a tag question "Didn't I?" By referencing their common ground, this turn suggests an acceptability issue with F1's question within the local context, as F1 should have epistemic access to the domain, making the question redundant. The sequence unfolds to re-establish their relative epistemic status, a pre-requisite for the progress of the information-sharing sequence. F2 confirms F1's question but further indicates her knowledge of people moving in, with her limited access from that point on, signaled by the concluding conjunction "and-." The discourse participants' epistemic negotiation resolves the imbalance arising from differing presumptions of their epistemic status. Consequently, the meaning of the trouble-source becomes clear, as indexed by the change-of-state token "oh" in line 12, allowing the conversation to progress to F2's reformulated second pair part addressing the knowledge unknown to F1.

Full repeats signal challenges in grasping the entire utterance rather than specific parts, acting as 'hearing checks,' eliciting confirmation. However, as exemplified in excerpt (4), a full repeat can serve as a precursor to disagreement or be an expression of disbelief as observed in excerpt (5). The inherent knowledge hierarchy among participants determines the direction of the sequence, yet the turn-by-turn epistemic competition, stemming even from significant disparities in epistemic authority, also shapes the sequence. Not just the truth value of the proposition but also the acceptability issue may arise in full-repeats as can be seen in excerpt (6), caused by differential evaluations of relative epistemic status. To accurately reference common ground, epistemic negotiation becomes essential, explicitly addressing what each other knows and does not know. This emphasizes the importance of understanding 'what the interlocutor believes I know' in addition to 'what I know' for the accurate interpretation of utterances designed by another.

4.3. Pro-repeats

Repair questions can take the form of pro-verbs, referred to as 'pro-repeats', as illustrated by instances like "It does?" in excerpt (7) and "You were?" in excerpt (8). Heritage (1984) categorizes pro-repeats as "newsmarks" (following Jefferson 1981) or "assertions of ritualized disbelief". The use of pro-repeats implies that the new information has been newsworthy, breaching expectations (Selting, 1996), and is likely to be surprising and interesting. While pro-repeats share similarities with full repeats, the ability to identify and transform segments into

pro-forms suggests that the repair is less associated with problem hearing but more with understanding or acceptance. Svennevig (2004) has noted that prorepeats primarily display understanding and emotional stance, carrying evaluative weight.

In excerpt (7), F1 describes how garbage goes right into the Mississippi River, and this is an A-event for which the speaker holds absolute epistemic authority. F2 responds with strong emotive evaluation, expressing disgust with "eeugh" and the pro-repeat "It does?" in line 4. Upon F1's minimal confirmation, "mhm," in line 5, F2 adds another assessment involving her strong emotion towards the information, indexed by the prosody of the utterance. It is worth noting that even when there is an absolute asymmetry in epistemic positions regarding the event, repair questions displaying extreme emotion may soften or downgrade the assertiveness of the knowledgeable (K+) speaker. It may be perceived as disbelief and epistemic tension arising from the less knowledgeable (K-) speaker's general knowledge of the world, as seen in the previously discussed excerpt (5). While the sequence organization aligns with the principle of the K- speaker accepting the claims of the K+ speaker, F1 (the K+ speaker) also diminishes the strength of her claim by using the disjunctive general extender "or something" in line 7 (see Overstreet & Yule, 2021 for the functions of general extenders).

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Excerpt (8) CallFriend6062(13:46)

O1 C: ·hhh like (.) I look up and directly across: from me,

O2 like he's right [the:re].

O3 L: [.hhh]

O4 C: =I'm all like, †ya::y

O5 all like smi:ling, winkin' across [each other at the ba:r],

O6 L: [u:h h(h)u:†h]

O7 c: or whatever: like,
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```
80
      .hhh I'm like si'in' the:re, talking to Melissa.
09
      .hhh and um: (.) hh
10 L: were you really focusing on her though? (0.3)
11 C: yea:h. =
12 L: = oh you were? =
      =°oh [↑that's°-]
13
14 C:
           [yea:h. hh]
15 L: = o(hh):k(hh)ay? [hhh]
                       [hhh↑hu:h] n(h)o? I'm not that nuts yet.
16 C:
17 [.hh]
18 L: [.↑hhh]
```

In excerpt (8), C recounts her experience at a club with a guy she likes to L. While describing the scene where she was talking to her friend, Melisa, and smiling and winking across the bar with the guy, L questions whether C was really focusing on her friend. C's confirmation in line 11 was unexpected on L's part, as indicated by the subsequent repair question in line 12. L's separate, independent judgment is signaled by "oh" and a pro-repeat "You were?" seeking re-confirmation. It is, in fact, a repetition of her own question and carries a more emotive load than a mere hearing check. L attempts to offer her assessment of the proposition but fails to finish it in line 13 with C's overlapping re-confirmation.

Epistemic competition is continuously generated by subsequent turns. C reaffirms the proposition with laughter in line 14 and encounters resistance from L, the one with lower epistemic authority. In line 15, although C's assertion is accepted, there is reluctance to do so and disbelief marked by a prolonged "okay" with rising intonation and laughter. The epistemic tension between the first-hand and second-hand experiences leads L to yield (at least at the surface level) to the higher epistemic authority of C. Finally, with laughter, C reverses her position, confirming that L's doubt has been correct. She also adds that she's not that nuts yet, implying that L posed a yes-no question suggesting an absurd alternative. This excerpt illustrates that the default epistemic framework created by the type of knowledge broadly determines the sequence organization, but the results can be more nuanced by the design of the epistemic contest.

As demonstrated in excerpts (7) and (8), pro-repeats assume the recognition of the utterances and serve to convey emotions like surprise or disbelief. Interestingly, the initial speaker lowers the assertiveness level or even reverses

the proposition in reaction to pro-repeats, particularly when they are accompanied by strong emotive expressions in prosody. The competition between K+ and K- speakers in excerpt (8) illustrates the influence that the K+ speaker has in determining which versions of the proposition the K- speaker has to accept, whether it contradicts or is adjusted to align with her claim.

4.4. Paraphrases

The recipient can initiate a repair by providing their own interpretation of the interlocutor's speech, using their own words and sentence structure. Termed broadly as 'paraphrase' in this paper, this process may not only target the specific utterance but also extend to the proposition it presupposes or a logical inference derived from it, essentially seeking confirmation for their understanding (not just hearing). Paraphrases, by their nature, present a greater difficulty than repetitions to pinpoint the trouble source from the preceding turn, making it challenging for the recipient to precisely identify the origin of the proposition – whether it stems from the shared context, such as prior conversation, or from the individual's private knowledge. Connection markers like 'so' may be employed to disambiguate the source of the paraphrased content.

```
Excerpt (9): CallFriend6193 (3:15)
01 B: I:'m looking forward to it. so,=
02 A: = Wait is next semester your la:st o:ne?
03 B: (tch) No. I got- (0.2) this (.) 's my second to last. (0.8)
      well last- (.) twe:ll, third to last if you count the
05
      summer. (0.6)
06 A: ↑So:. [↑summer's your last-]
            [Got a year left.] No:, I got the fa:ll.
08 A: Oh, you have (the) [fall]?
                         [Next] fall's my last so I got a year
09 B:
10
     left.
11 A: Ho:ly cra:p!
12 B: A year left of school. .hhhh
```

Unlike other repair questions, such as those prefaced by 'oh' as discussed earlier, paraphrases prefaced by 'so' do not appear to carry the same implications of dispreference or disbelief. In excerpt (9), line 2, A asks whether the upcoming semester is B's last one at college. B's long-winded response in lines 3-5 is a

trouble source for A, prompting a repair initiation in line 6. A offers his candidate understanding of B's preceding turn, using 'so' as a preface. The inference marker 'so' might have been initially interpreted by B as an invitation to provide a concluding statement, but A's own paraphrase of B's preceding talk follows, creating a subsequent overlap of the utterances. This 'so'-prefaced repair initiation, which resembles A's original question more than B's actual response, is abruptly halted with a disconfirmation in line 7, indicating that B perceives it right away as a request for confirmation, despite its declarative syntax.

Paraphrases do not arise from potential disagreement or disbelief; rather, they are more likely to align with the repair initiator's pre-existing knowledge or best guess, as a candidate understanding formulated in the speaker's own language. For example, after B asserts that he has the fall, A responds with "oh," treating this as new or unexpected information. His following repair initiation with a rising repeat "You have the fall?" in line 8 and an exclamation "holy crap" in line 11 express his surprise. In this regard, it could be argued that 'so'-prefaced paraphrases are concerned with the interpretation of the previous talk rather than conflicting background knowledge and epistemic tension. While the choice of words and sentence structure in paraphrases may also provide some cues about their sources (e.g. the word 'summer' in line 5 repeated in the paraphrase in line 6), the use of the connecting marker 'so' clarifies that the paraphrase is derived from the prior conversation.

```
Excerpt (10): CallFriend 5220 (1:58)
01 M1: It sta:rts, (0.3) like I have to go do::wn Fri::da::y
02
        (1.0) cause I'm helping to set up with the
03
        registra::tion::en' everything?
04 RHO: m↑hm.
05
        (0.7)
06 M1: but it doesn't really start til the w- (.) ne:xt week.
07
        (0.4)
08 RHO: >next week during the week or do=
09 M1: = [yeah.]
10 RHO: [on] the weekend, <
11 M1: Well I †dunno=
        =it might start like Su::nday I don't kno(h)w.
12
13
14
        I'm not gonna go do::wn pro::bably 'til Monday.=
       =Monday'll be the first day I g(h)o.
16 RHO: So I won't see you, this weekend (.) probably?=
```

As a "marker of connection," 'so' necessitates the addressee to activate a wide array of references, extending beyond the immediately preceding turn to even previously unmentioned topics (Howe, 1991; Raymond, 2004). While Bolden (2009) argues that when 'so' is not used as an inference marker, it indicates that "the current utterance is occasioned by something other than the immediately preceding talk (p.996)," I propose an alternative explanation rooted in recipient design. The speaker employs the connection marker 'so,' taking into account the available reference from the addressee's perspective. Repetition, due to the saliency of the reference in the preceding talk, does not require an inference marker. However, when understanding a paraphrase or inference lacking this saliency, the addressee is expected to actively identify the relevant reference from the context, and the use of 'so' facilitates this process. Its use implies an expectation for the recipient to initially interpret the utterance as originating from the immediately preceding turn. Only when the addressee is anticipated 'not to find' any pertinent reference from the prior talk does the next source of reference become the common ground regarding the general purpose of the ongoing discourse. In this context, the use of 'so' effectively constrains its potential connections to the interpretation of the prior talk.

Paraphrases, unlike rising repeats that foretell a dispreferred response (Schegloff, 2007) and epistemic tension, primarily display the recipient's attempt to understand the previous talk and confirm the accuracy of their interpretation. The speaker relies on the addressee to utilize the context in understanding the meaning of their utterance, and repetition simplifies this task of locating references from prior spoken words. However, identifying references in paraphrases can be challenging, as they are phrased in the speaker's words and sentence structure, deviating from the source. Paraphrases may address the meaning, presuppositions, or inferences of the utterances, sometimes inaccurately representing the interlocutor's intended message, thereby making them even more difficult to reference. As part of recipient design, the discourse marker 'so' invites the addressee to find a suitable anchor for its source or connection, typically within the immediate utterance. Thus, 'so' functions as an

inference marker, similar to 'then' proposed by Heritage (2012a), indexing that the current utterance is precisely occasioned by the immediately preceding talk

5. Conclusion

This paper investigates the use of repetitions and paraphrases as repair initiations, exploring how epistemics forms the foundation for intersubjectivity. Interlocutors are expected to consider not only their presumed relative epistemic status but also the status they anticipate their addressee to presume. A TCU formulated based on discrepant presumed epistemic status, namely over- or under-estimation of another's knowledge state, is identified as a trouble source by its recipient in the next or adjacent turn. The act of providing or requesting information requires the establishment of coherent common ground in advance, addressing what each participant knows and does not know. An imbalance in epistemic status propels the sequence (Schegloff, 2012b), with the sequence driven by the imbalance in the different presumptions of epistemic status taking precedence (for example, refer to excerpts (3) and (6)).

Using examples of repair questions that display some level of access to the previous turn, this paper argues that discourse participants exhibit 'recipient design' in terms of epistemics. Interlocutors share a reciprocal responsibility to consider relevant discourse context, including their common ground and relative epistemics, to formulate and understand utterances. The data suggests that the epistemic framework embedded in the discourse is shaped by the combination of two levels: the inherent epistemic hierarchy created by the nature of knowledge type and the relative epistemic status established and modified through each turn.

Instances of repeats and pro-repeats seeking confirmation lead the sequence to the K- speaker accepting the claims of the K+ speaker who has more absolute, privileged rights. While Labov and Fanshel (1977) suggest that "declarative questions" pertaining to matters within the recipient's epistemic domain invite confirmation, this study expands this notion to encompass rising repeats in both declarative and interrogative form (e.g. "Do I like where I live, like the apartment?" in excerpt (6)) and pro-repeats. It illustrates that the epistemic domain within which the question falls may not only pertain to the truth value of the proposition but also metalinguistic matters, functioning as hearing checks. Partial and full repeats, but not pro-repeats, seem to project this

possibility. In terms of this local context, the original speaker holds epistemic higher ground regardless of the knowledge status, as the owner of the utterance.

Another aspect of recipient design can be observed from repair initiations. Repeated words and phrases serve as primary clues to trace the source of the utterance back to the preceding dialogue, while the connecting marker 'so' complements the absence of repetition in paraphrases or inferences from the interlocutor's talk. The discourse marker 'oh' prefacing repair initiations is also utilized as an epistemic resource, displaying the initiator's stance regarding the knowledge domain of the trouble source. This represents another dimension of recipient design, specifically tailoring the turn with consideration for possible references from the addressee's point of view.

Partial and full repeats are initially treated as hearing checks, but they can serve as a prelude to follow-up repair initiations arising from more serious problems, such as disagreement. Along with pro-repeats expressing "ritualized disbelief" (Heritage, 1984), they create epistemic competition, even from the position of relatively lower knowledge status. This tension results in more gradient resolution of subsequent sequences. The participant with limited access to the event may persist in their assertion, or even when they have taken an accepting position, display unresolved disbelief (excerpt (8)). The epistemic tension, which can be created just by an extreme emotive response from a Kparticipant, could also lead to downgrading, reformulation, or complete reversal of the assertion (excerpts (5), (7), and (8), respectively) from the speaker in a position of absolute epistemic authority. The sequences of repair initiation and reformulation of the original utterances in excerpts (5) and (8) appear to be deliberately elicited from a stance of unquestionable knowledge authority, serving as essential components within the broader narrative design.

To conclude, this study has explored the dynamics of repair initiations, emphasizing the pivotal role of epistemics in shaping discourse sequences. Participants reveal a pattern of recipient design, carefully navigating common ground, including knowledge types, progressively displayed epistemic stances, and references to previous conversations. This underscores the shared responsibility and cooperative efforts of discourse participants in achieving intersubjectivity. In addition to the knowledge hierarchy of the participants, epistemic tension introduced through repair initiation leads to gradient outcomes in the discourse sequence. These findings enhance our understanding of how discourse participants manage meaning and construct narrative design in communication.

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