

How reportatives become emotive expressives

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1 Introduction

- Cross-linguistically, many elements with evidential semantics attest formally (near-)identical counterparts that express evaluative/emotive attitudes

- In particular: **reportative-like elements**:

- reportative (including narrative) evidentials and reportative-like elements “doubling” as markers of counterexpectation (1a), (1b), incredulity/derision (1c), noteworthiness (1d), etc.

- (1) a. É-x-hoo’kòhó-**neho**!

3-REM.PST-rain-NAR.SG.INAN

‘It’s raining (**it was told**) / (**I just found out, and didn’t expect that**).’

(Rett and Murray, 2013:exs. 11a-b)

- b. Shanghai Wu mirative *yikaon*, cf. speech report parenthetical *yi kaon* ‘3SG.SAY’

lahlah loh yu **yikaon**!

辣辣 落 雨 渠講!

PROG fall rain **MIR**

‘Gosh, it’s raining (**I didn’t expect that**)!’

- c. Turkish derisive “outer -*mİş*”, cf. third-hand reportative “outer -*mİş*”

Okul Pazartesi günü aç-ıl-acak-mış-mış.

school Monday day open-PASS-PRSP-REP-**rep2/deris**

‘The school is going to reopen on Monday (**I heard it from someone, who heard it from someone else**) / (**I heard it from someone, but I think it’s ridiculous**).’

(Zhuang and Ótrott-Kovács, 2022:ex.13)

- d. Cantonese *wo3* 喎 ‘intersubjective noteworthiness’, cf. *wo5* 喎 ‘REP’ < *waa5* 話 ‘say’

gam1jat6 tin1hei3 hou2 hou2 **wo3**.

今日 天氣 好 好 喎

today weather very good **NOTEWORTHY**

‘The weather is very good today (**[I find it/I assume you would find it] noteworthy**).’

(Leung, 2011:ex. 8, adapted)

- “indirect” evidentials \approx inferential + reportative although more heterogeneous; see Zhuang (2023:§6.2.3)

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- To date, the **reportative-attitudinal affinity** is well-documented, but its mechanism is not well understood.
 - Many language-specific datapoints
 - Grammaticalization pathways described mostly in association with MIRATIVITY and its pathways:

From *The World Lexicon of Grammaticalization* (Kuteva et al., 2019):

 - * EVIDENTIAL, INFERRED > MIRATIVE
 - * ADVERSATIVE > MIRATIVE
 - * PERFECT > MIRATIVE
 - No satisfactory **explanatory** account: why are there particular affinities? (& how do they develop?)

Main proposals

The **reportative-emotive expressive affinity** at least many instances of it is the result of a principled **diachronic** process of reanalysis. Specifically:

- A discourse-general PRINCIPLE OF EPISTEMIC TRANSPARENCY a special case of the Maxim of Quality governs the heightened generation of Conversational Implicatures about SPKR attitude (SPKR-attitude CIs) especially in reportative-grounded utterances
- A specific pragmatic constraint on “ALLEVIATING SOURCE RESOLUTION” a special case of Avoid Pragmatic Overload (Eckardt, 2006, 2009), especially strongly at play in naturalistic, perspectively-rich discourse, constitutes a key pressure towards reanalyzing SPKR-ATTITUDE CIs as the lexical meaning of the erstwhile reportative-like element
- Syntactic/semantic extensions, and sometimes formal changes, drive the reportative-to-emotive-expressive reanalysis towards completion.

2 Case study: Shanghai Wu mirative *yikaon* & speech report parenthetical *yi kaon*

2.1 Language background

- Shanghai Wu (Shanghainese, Shanghai Chinese) = vernacular Sinitic language spoken in urban Shanghai; a variety of the Wú macrogroup > Northern Wú (“Lake Tai”) subgroup
- Tonal; SVO (with some SOV); morphologically analytic
- marks a variety of sentential mood/force flavors with sentence-final particles, which are lexically toneless
- Five lexical (monosyllabic-morphemic) tones, which tone-sandhi to just three pitch-accents (H, M and L) within prosodic word boundaries in connected speech (Chen, 2008)
 - In romanization: spaces indicate prosodic word & tone sandhi boundaries; L pitch accent only occurs with voiced onset consonants; H pitch accent is distinguished from M with a macron over the vowel letter (e.g. *khāusy* = [Hk^hʰɔsɿ] vs. *khausy* = [Mk^hʰɔsɿ]). Prosodic words that are toneless are indicated with a ⁰ where necessary (e.g. *yi kaon* = [L⁰fi⁰ikā] vs. *⁰yikaon* = [L⁰fi⁰ikā]).

- Native writing system (Chinese) represent co-etymological morphemes; does not indicate tonal or prosodic-word features
 - In focus today: *p*-textit⁰yikaon ‘counterexpectational mirative’ & *p*-yi kaon ‘speech report parenthetical’ (lit. ‘3SG say’)
- (2) a. Speech report parenthetical *yi kaon*
 [Working in a windowless library cubicle, I take a phone call from Mary, who tells me that it is raining outside. After the phone call, you next to me ask what we talked about. Among other things, I say:]
- lahlah loh yu, **yi kaon**.
 辣辣 落 雨 , 渠 講。
 PROG fall rain **3SG say**
 ‘It’s raining, **s/he said**.’
- b. Mirative *yikaon*
 [I went into my windowless cubicle in the library when it was beautiful outside, and had expected it to remain so. Walking outside the library for the first time after 3 hours, I see that it is pouring. Surprised, I say:]
- lahlah loh yu **yikaon**!
 辣辣 落 雨 渠講!
 PROG fall rain **MIR**
 ‘Gosh, it’s raining (**I didn’t expect that**)!’

2.2 Empirical generalization: *yikaon* and *yi kaon* are synchronically distinct elements

- Main conclusion:
 Mirative *yikaon* and parenthetical *yi kaon* are synchronically distinct elements with different phonological, morphosyntactic, and semantic properties that are not obviously explained by any synchronic mechanism.

- (3) Summary: empirical differences between mirative *yikaon* and parenthetical *yi kaon*

	mirative <i>yikaon</i>	parenthetical <i>yi kaon</i>
Semantic properties:		
Reportative evidence type restriction	×	✓
Discourse commitment to prejacent	✓	×
Direct-speech prejacent	×	✓
Obligatory eventive anaphoricity	×	✓
Embedded interrogative force (=reported-question)	×	✓
Matrix interrogative force (=counter-expectation-over-alternatives)	✓	×
Formal features:		
Tonal profile	toneless	phrasal tone <small>can be toneless in fast speech</small>
Morphosyntactic status	single morpheme	phrasal
Prosodic boundary before	×	✓

- **Reportative evidence type restriction:** unlike parenthetical *yi kaon*, mirative *yikaon* does **not** require SPKR to have reportative evidence for the prejacent. ... ✓(2b)

- **Discourse commitment to prejacent:** mirative *yikaon* requires SPKR to commit to the prejacent; parenthetical *yi kaon* does not.

- (4) Denial of parenthetical prejacent is felicitous (i); denial of mirative prejacent displays Moore's paradox (ii).

Shiautsan soeyah khausy vehjihkah [yikaon/yi kaon]. Jizeh Shiautsan mmeh vehjihkah.

小張 算學 考試 弗及格 渠講。 其實 小張 嘸沒 弗及格。

Xiaozhang math exam fail [MIR/3SG say] in.fact Xiaozhang NEG fail

(i) **Speech report parenthetical:** 'Xiaozhang failed the math exam, he said. ✓ In fact, Xiaozhang did not fail.'

(ii) **Mirative:** 'Xiaozhang failed the math exam, it turns out; I did not expect it. # In fact, Xiaozhang did not fail.'

- **Licensing of direct speech:** parenthetical *yi kaon* can license direct speech; mirative *YIKAON* cannot.

- (5) **DIRECT SPEECH context:** [When Xiaozhang got his paper, I glimpsed that he scored a 75. This was in line with my expectation of him, but he talked with me and told me he was completely surprised. Later, I tell my friend about this exchange: "Xiaozhang and I were talking about the exam grades...]

a. ✓ "ngo_{XIAOZHANG} khau-lah 75 fēn," **yi kaon**.

“我_{小張} 考-了 75 分,” 渠 講。

1SG score-PFV point, 3SG say

“I_{XIAOZHANG} got 75,” he_{Xiaozhang} said.'

b. #ngo_{XIAOZHANG} khau-lah 75 fēn **yikaon**.

我_{小張} 考-了 75 分 渠講。

1SG score-PFV point, MIR

Intended: 'I_{XIAOZHANG} got 75 (I_{Xiaozhang} didn't expect that).'

- **Non-declarative prejacent:** parenthetical *yi kaon* embeds the interrogative force of an interrogative prejacent (=relayed question reading); mirative *yikaon* with an interrogative prejacent gives a matrix question reading with an emotive attitude-modified force.

- (6) SETTING: [Xiaozhang's father came to school to speak with his math teacher about his recent performance.]

a. EMBEDDED INTERROGATIVE CONTEXT:

[I am Xiaozhang's math teacher, and I have just stepped out of my office to speak with Xiaozhang's father about his records. After I come back in, a curious colleague asks me what was going on. I tell him, "I was speaking with Xiaozhang's father. He wanted to know how his son was doing and had some questions ..."]

"Shiaotsan geh-thaon khau-lah tūsau.fen l- a?" yi kaon.

小張 稱-趟 考-了 多少.分 了 啊〈啦〉? 渠 講。

Xiaozhang this-time score-PFV how.many.point PF Q 3SG say

'How many points did Xiaozhang score?' he said (=Xiaozhang's father asked) / # I did not expect that.'

b. MIRATIVE MATRIX INTERROGATIVE CONTEXT:

[I am Xiaozhang's father, and I am there on Xiaozhang's mother's request to ask about Xiaozhang's score on the recent exam. Both she and I know that Xiaozhang usually struggles a lot with math, and thus both she and I expect to hear that he has, as usual, done poorly on this exam. The math teacher comes out and tells me that Xiaozhang has in fact come within the top 15 of the class this time. Taken aback, I say:]

Shiaotsan geh-thaon khau-lah tūsau.fen l- a yikaon?

小張 稱-趟 考-了 多少.分 了 啊〈啦〉 渠講?

Xiaozhang this-time score-PFV how.many.point PF Q MIR

'How many points did Xiaozhang score (and I (=Xiaozhang's father) would not have expected him to have received any of the scores that you are about tell me / # she said (=Xiaozhang's mother asked))?'

- **Differences in morphosyntax:** parenthetical *yi kaon* contains a true 3SG pronoun *yi*, and a true VP/vP *kaon*. Mirative *yikaon* contains neither.

- Parenthetical *yi kaon* (7a) contains **discourse-anaphoric** elements: it requires an antecedent speech event with a 3SG speaker (q.v. Bary and Maier, 2021); mirative *yikaon* (7b) does not.

- (7) [I am taking a walk on campus, and I randomly run into Xiaozhang, an acquaintance whom I have not run across for a few weeks. Being a good chap, I engage in catch-up small talk with him, beginning by asking:]

non nanen l- a, gehtahchian? / gehtahchian fahsen nge sa l- a?

儂 哪能 了 啊〈啦〉, 稱噠腔? / 稱噠腔 發生 眼 啥 了 啊〈啦〉?

2SG how PF Q these.days these.days happen some what PF Q

'What's been up these days on your end? / What's been happening these days?'

a. # ngo soeyah khausy vehjihkah, yi kaon.

我 算學 考試 弗及格, 渠 講。

I math exam fail 3SG say

'I failed my math exam, he says.'

b. ✓ ngo soeyiah khausy vehjihkah yikaon.
 我 算學 考試 弗及格 渠講。
 I math exam fail MIR

‘I failed my math exam, it turns out; I didn’t expect it.’

- As a **verb**, *kaon* in parenthetical *yi kaon* can inflect for aspect & be adverbially modified; not true with mirative *yikaon* (8).

- (8) Only parenthetical *yi kaon* and not mirative *yikaon* allows aspectual inflection & modification:

soeyah khausy lau ne gheh, yi kāonkaon lahlah ngadeu tah ngo
 算學 考試 老 難 箇, 渠 剛剛 辣辣 外頭 搭 我
 math exam very difficult VERUM 3SG just.now at outside to 1SG
 thēnthenthuthu.gheh kaon lah.
 吞吞吐吐. 箇 講 了。
 mumbling.ADV say PF

‘The math exam was very difficult, **he said** to me outside just now in a mumbling voice # (and I didn’t expect that).’

- **Tonal profile** (in slow, careful speech): parenthetical $[yi^{14}]_{pw1} [kaon^{34}]_{pw2}$ manifest a internal prosodic boundary & thus the two lexical tones, patterning with the tonal profile of subject-verb sequences in the language. Mirative 0yikaon is always toneless, patterning with all other sentence-final mood particles in the language.
- Takeaway: No obvious synchronic mechanism can account at once for all these differences—in particular, their distinct scope-taking behavior with respect to illocutionary force.
- What then explains the connection between the speech report parenthetical and the mirative?
- **Diachrony!** Formal (near-)identity does not necessarily indicate synchronic semantic identity, but rather the co-existence of two co-etymological, but semantically distinct, lexical items.

3 The account: how reportative-like elements become emotive expressives

- Two questions to answer:
 - Mechanism of meaning enrichment? ... §3.1-§3.2
 - Pivotal context & motivation towards semantic shift (reanalysis)? ... §3.3

3.1 The EPISTEMIC TRANSPARENCY principle & SPKR attitude CIs

- In what way is the following discourse defective?

A: Hey, what's the homework for today?
 B: Read ch. 6 and do a pre-lecture exercise, the professor said.
 A: Got it. How is ch. 6?
 B: It's hard, they say.
 A: ... Okay; is it long?
 B: It's reportedly also very long.
 A: ... Hey, what is question 1 on the pre-lecture exercise asking for?
 B: It's a question about grammaticalization, allegedly.
 A: ... Where in the reading is this?
 B: Rumour has it that it's on page 62.
 A: **(But where do YOU think it is????!!!)**

- Claim: an integral part of **cooperative, informative** discourse is for each discourse participant to **make their own epistemic attitude towards each at-issue p public and transparent**.

The EPISTEMIC TRANSPARENCY PRINCIPLE In cooperative discourse, make, and assume others make, at-issue updates that are transparently grounded in publicized epistemic commitments and attitudes of one's own.

- Explication in terms of a Farkas and Bruce (2010)-style model of discourse contexts:
 - The *QUD* is the organizing element which guides the direction of any discourse towards its general goal of “communal inquiry... i.e. to share (factual or discourse-purposive) information about our world” (Roberts, 2012, parenthesis mine)
 - Canonical view of assertions: SPKR proposes to add the at-issue p to the Common Ground as shared information (presumed in a certain way consistent with the purpose of the conversation), while making public their own attitude—typically *belief*—towards p .
 - ADDR decides to accept or reject/dispute the at-issue p . If not explicitly disputed, then accepted by default as shared “presumed information.”
 - Crucially: (in non-disputatious discourse) the SPKR's own attitude towards p matters for the ADDR's decision regarding how to accept p :
 - * Discourse context is by default, but not necessarily, construed as based on a “belief”-like attitude. The Stalnakerian formulation carefully makes space for *CG* to consist of information *presumed for the purposes of the conversation*.
 - * Suggestion: depending precisely on “the purposes of the conversation,” there are potentially many attitudinally-flavoured ways to “presume” shared information, over and on top of “presume to believe”/“presume to be true”
 - * Hearers often will want to attitudinally **resonate** with what the SPKR thinks/feels towards p —whether the discourse-purpose-appropriate attitude be belief **or other, often emotive, attitudes**
 - Hence, the discourse relevance of SPKR's publicized commitments/attitudes.

3.2 Reportative “exceptionalism”: asymmetric update drives heightened SPKR attitude CIs

- Ordinary assertions make “symmetrical” updates to *CG* and *DC_{SPKR}*

- In asserting *it is raining*, the SPKR (i) publicly commits to the belief that it is raining, and (ii) proposes the **same** proposition to be added to *CG*.
- However, certain illocutionary elements make **asymmetrical** updates to *CG* and DC_{SPKR} (see esp. AnderBois, 2014).
 - **Evidentials** (i) propose the at-issue proposition p to be added to *CG*, but (ii) only publicly commit the SPKR to the evidential proposition (“SPKR has x type of evidence for p ”)
 - In particular: **reportatives** manifest this asymmetrical assertion with a particular effect: **attitudinal opacity**
 - * Because the reportative evidential proposition is merely “SPKR heard p from a third-party source,” they themselves may have any level of commitment, or hold **any kind of attitude**, towards p .
 - * Meanwhile, reportatives are exceptional in not being canonically assertive: p is not “proposed to be added to *CG*”
 - * One analytical proposal: reportatives conventionally encode a different kind of speech act altogether (“presents p ” in Faller 2002)
- Thus: a reportative-marked utterance conveys no conventionally-encoded information on SPKR attitude to p for an ADDR (who is nevertheless ready to resonate)
- Thus: by the EPISTEMIC TRANSPARENCY PRINCIPLE, reportative-marked utterances are particularly prone to **Conversational Implicatures** about SPKR attitude.
- These inferences about SPKR attitude are indeed CIs: they are **indeterminate** and **cancellable**
- (9) SPKR belief inferences from reportative assertions are CIs

a. **INDETERMINATE:**

It is reportedly raining in Shanghai.

- (i) [The authoritative weather agency in Shanghai tells me it is raining there.]
 \mapsto SPKR believes that it is raining in Shanghai.
- (ii) [My honest friend, who works the whole day in a windowless cubicle in Shanghai, tells me over the phone that it is currently raining there.]
 \mapsto SPKR doesn’t fully believe or disbelieve that it is raining in Shanghai.
- (iii) [A fake weather app, which regularly mixes up weather data from different cities and which I completely distrust, tells me it’s raining in Shanghai.]
 \mapsto SPKR does not believe that it is raining in Shanghai.

b. **CANCELLABLE:**

It is reportedly raining in Shanghai, ✓ and I believe it is / ✓ but I don’t believe it / ✓ though I’m not sure whether it is raining or not.

3.3 Pivotal drive for reanalysis: ALLEVIATE SOURCE RESOLUTION

- How does a meaning get from being a (statistically-associated) CI to being the (categorical) conventionalized meaning?
- Two broad schools of thought:

- Functional-grammaticalization approaches (e.g. Traugott and Dasher, 2001) tend to attribute meaning-change to internal, cognitive processes operating on the source meaning itself to change it to the target meaning
 - A countervailing approach: meaning change arises at a **discrete, identifiable moment** in the grammar of the hearer, who, faced with a pressure imposed by some general principle/constraint on linguistic communication, reassociates the same linguistic form with a new meaning
 - * **AVOID PRAGMATIC OVERLOAD (APO)**(Eckardt, 2006, 2009): principled constraint that drives hearers to prefer associating an element with the meaning that is pragmatically least burdensome to interpret felicitously in pivotal contexts
 - Reportative-like elements, especially occurring in succession in naturalistic discourse, pose at least two pragmatically-overloading demands on the hearer’s part (if interpreted literally):
 - A general challenge: **epistemic opacity** over how to accept the at-issue *p*’s (←EPISTEMIC TRANSPARENCY PRINCIPLE)
 - A specific challenge: **referential opacity** of the reportative antecedent (whether eventive or individual)
 - Illustration: a naturally-occurring corpus example on SHW *yi kaon/yikaon*
 - Pretext (in English translation): SPKR, who is the mother of two boys, starts to relate why her own mother (the boys’ grandma) “likes the younger one” more, because the elder one really gets on the grandma’s nerves whenever she is in the house with the boys. SPKR relates a mixture of uttered opinions of the grandma and specific incidents, and uses the *yi kaon/yikaon* element throughout. Note that **she says** and *she’d say* both translate this element.
 - Illustrative sentence: an at-issue proposition describing an incident, experienced by the grandma, of the elder boy’s shocking behaviour in a fit of bad-temper—marked with *yi kaon/yikaon*
- (10) a. <Pretext>
 A: ...And then, my mother, she likes the younger one. **She’d say**, (1 sentence).// **I’d say**, (1 sentence). // **She says**, with the elder one—// say if I had gone outside (right?), and (in the house—) leave the two kids—leave the two kids just to her alone, she would get angry. // **She’d say**, it’s way to hot; she says, it’s impossible to keep track (of the kids). As for the elder one, he just does whatever—spilling water all over the floor—
- b. ... yi ’ih viau chih mehzy, zieu (no) ’eu (’eu) lah **yi kaon/yikaon**.
 渠 一 勳 吃 物事 就 (喏) 嘔 (嘔) 了 渠講
 3SG as.soon.as NEG.want eat stuff then PRT throw.up PFV ???
 ‘... as soon as he (the elder son) didn’t want to eat, he threw up (?she said/?I find this utterly shocking).’ (Spoken Shanghai Corpus A.Inter002:l.572, Mao and Newman, 2015)
- c. <Post-text>
 In fact, he was not really throwing up; he just didn’t want to eat, (so) he behaves like this. Because he felt-felt that every time he throws up, he could (be allowed to) not eat, so he throws up every single time. But sometimes he would throw up for real. When he throws up, “plop,” he would throw up the stuff before—stuff that took so much work to put into him—without digesting it...

- Solid underlines indicate at-issue p 's with an unambiguous reportative antecedent (explicit marking by *yi kaon/yikaon*)
 - Dotted underlines indicate at-issue p 's with unclear, hard-to-resolve reportative antecedents.
 - The illustrative sentence is the 3rd “chunk” of at-issue information that is descriptive of the elder boy's outrageous behaviour—**which has become the prominent QUD by this point in the discourse**, especially judging from the post-text.
 - On the other hand, “*What is the content of grandma's reports*” has become much less salient as a discourse-organizing question.
- (11) An impression of hearer-side resolution of pragmatic overload:
- a. “SPKR has raised p (=‘what did the elder child do’) as the *QUD*, but her utterance (10b) only adds p -according-to-SPKR's-mother to *DC*, and proposes the same to be added to *CG*. Under what epistemic attitude should I accept the information in p as addressing the (factual) *QUD*, then?”
 - b. “I don't even remember whether (10b) is still part of a speech report—in any event the SPKR has consistently presented all the previous sentences as if she is committed to them herself. However, it is clear from the pretext that SPKR implicates that she finds such reported information to be rather deviant from expectations.”
 - c. The immediate post-text confirms both that the SPKR-attitude CI (11b) is true *and* that it is the salient information that addresses the current *QUD*.

4 Predictions & implications

4.1 Attitudinals-from-reportatives are multiflavoured but SPKR-oriented

- Reason: attitude CIs of reportatives are (attitudinally) multiflavoured; thus, individual instances of conventionalization of these CIs will be of different attitudinal flavours as well.
 - It is a well-studied fact that reportatives show variable SPKR **commitment** (“belief”)
 - However: it is not necessarily that reportatives should *only* trigger CIs about the particular level of SPKR *belief*
 - Reportative markers are commonly associated with CIs of a variety of attitudes towards p
- (12) Illustration: naturally-occurring examples of *so he says* show a variety of attitudes towards p .
- a. [Someone writes in a post that she has struggled with arguments with her boyfriend about whether and who to move to the same city to keep the relationship going, but that, despite this, the guy has said he wants both parties to be in each other's lives. In response, the SPKR writes:]
 ... I know how hard it is... but this guy obviously wants you in his life forever, **so he says**(\mapsto SPKR **finds it noteworthy**). That's a pretty definite statement, you know, and with that in mind I am sure things can be worked out should you both be so inclined.
 - b. [In a TV documentary about John Dean's decision to cooperate with prosecutors:] (Narrator:) ... While Dean was up there, he had an epiphany, which was that he was in deep trouble, or so

he says (→SPKR has reservations about Dean's manner of testifying to the nature of the moment). (John Dean:) Well, it was clear—it was much clearer after the fact, but I suspected at the time I was being set up... And I just wasn't going to be part of that.¹

- In varieties of Latin American Spanish, *diz que/dizque* (lit. 's/he said that') is documented as having developed into markers of differently-flavoured attitudes:
 - * SPKR finds *p* has connotations of “false beliefs, unachievable goals, and uncontrollability” Colombian Spanish
 - * SPKR finds *p* hard to believe (and/or worth light ridicule) Mexican Spanish
- However: conventionalized attitudinal meanings are predicted to be SPKR-oriented (before any subsequent extensions)
 - The motivating pragmatic principle that generates these attitudinal meanings in the first place (EPISTEMIC TRANSPARENCY) ultimately concerns the effective recognition of the SPKR's attitudinal posture towards *p*
 - Prediction: incidence rate of SPKR-oriented-only attitudinals-from-reportatives > mixed-orientation attitudinals-from-reportatives > ADDR-oriented-only attitudinals-from-reportatives

4.2 Attitudinals-from-reportatives may undergo further syntactic/semantic extensions or changes to form

- Turkish derisive “outer *-mİş*”: no change to form; extension to questions, attitude holder remains SPKR
- (13) **Gökçen told Merve** that the school is going to reopen on Monday. Merve's brother overheard Merve's conversation, but misses the date. **Merve's brother thinks that Gökçen is a liar.** He asks Merve:
 Okul ne zaman aç-ıl-acak-mış-mış?
 school what time open-PASS-PRSP-REP-INCRED
 '(According to your second-hand report) When is the school going to reopen (—and I would find whatever your report says to my question to be ridiculous)?'
- Shanghai Wu mirative *yikaon*: lexicalized tonal reduction; extension to questions, attitude holder remains SPKR
- (14) Repeated from (6b)
 Shiaotsan geh-thaon khau-lah tūsau.fen l- a yikaon?
 小張 辯-趟 考-了 多少.分 了 啊〈啦〉渠講?
 Xiaozhang this-time score-PFV how.many.point PF Q MIR
 'How many points did Xiaozhang score (and I would not have expected him to have received any of the scores that you are about tell me?)'
- Cantonese *wo3* (cf. reportative *wo5*): tonal change; meaning extension to intersubjective/alloperformative attitude
- **Bottomline: formal identity does not entail synchronic semantic identity.**

¹<https://blog.havetherelationshipyouwant.com/after-a-year-and-a-half-now-you-find-out-he-doesnt-want-a-serious->
<http://www.pbs.org/wgbh/americanexperience/features/transcript/nixon-transcript/>

5 Important issues for future work

- More empirical manifestations of the EPISTEMIC TRANSPARENCY PRINCIPLE?
- What is the nature of attitudinal “resonance” in discourse? (nod to Beaver and Stanley, 2023)
- What is the typological landscape (patterns; limits) of attitude flavours arising from the reanalysis of reportative-like elements?

References

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A Appendix: a formal implementation of Shanghai Wu parenthetical *yi kaon* and mirative *yikaon*

(15) Semantics for speech report parenthetical *yi kaon*:

For input context $K_i = \langle DC_{SPKR,i}, DC_{ADDR,i}, T_i, CG_i, ps_i \rangle$, output context $K_o = \langle DC_{SPKR,o}, DC_{ADDR,o}, T_o, CG_o, ps_o \rangle$, assignment function g from indices to individuals, context parameters $\langle SPKR, ADDR, w_u, t_u \rangle$,

$\llbracket yi.kaon \rrbracket(\langle S = \text{is.raining}, K_i \rangle)$:

- a. Is defined iff. $MAX(T_i)$ entails or presupposes $\exists e_1 = E$ s.t. $SAY(e) \wedge \tau(e) < TIME(i) \wedge Ag(e_1) = g(0) \wedge Goal(e_1) = SPKR$

... requires anaphoric resolution to prior speech event & participants
(cf. Bary and Maier 2021:§4)

- b. If defined, $\llbracket yi.kaon \rrbracket(\langle S = \text{is.raining}, K_i \rangle) = K_o$ s.t.

- (i) $DC_{SPKR,o} = DC_{SPKR,i} \cup \{\text{believe}_{g(0)}^{w_u, t_u}(\text{is.raining})\}$

... third-party epistemic commitment only

- (ii) $T_o = \text{push}(\langle S; \{Content(e_1) \models \text{is.raining}\} \rangle, T_i)$

- (iii) $ps_o = ps_i \sqcup \{p, Content(e_1) \models \text{is.raining}\}$

(16) Semantics for mirative *yikaon*:

For input context K_i and output context K_o , context parameters $\langle SPKR, w_u, t_u \rangle$:

$\llbracket yikaon \rrbracket(\langle S = \text{is.raining}, K_i \rangle) = K_o$ s.t.

- (i) $DC_{SPKR,o} = DC_{SPKR,i} \cup \{\neg \text{expect}_{SPKR}^{w_u, t_u}(\text{is.raining} \cap CG_i)\}$

... SPKR-oriented emotive attitude

- (ii) $T_o = \text{push}(\langle S; \{\text{is.raining}, \neg \text{is.raining}\} \rangle, T_i)$

- (iii) $ps_o = ps_i \sqcup \{\text{is.raining}, \neg \text{is.raining}\}$