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ScienceDirect

Procedia - Social and Behavioral Sciences 97 (2013) 414 – 421

Procedia
 Social and Behavioral Sciences

The 9th International Conference on Cognitive Science

Psych-predicates: 1st person and evidentiality

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Abstract

This paper characterizes psych-predicates in Korean and possibly in Japanese, as opposed to English. We focus on the the status of the Experiencer (or ‘judge’ in the relativists’ term) in relation to other arguments (and higher attitude verbs) and examine the first-person subjectivity constraint, attempting to explain why a third-person subject is infelicitous with a psych-predicate in PRESENT in Korean and Japanese as opposed to English. An evidence acquisition event before speech time is claimed to be accommodated in English. Interaction between psych-predicates and direct evidential marker *-te* in Korean is also examined. Relevant cause and effect relations and consequent coerced event functions are also postulated for coherent interpretation.

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Selection and/or peer-review under responsibility of the Universiti Malaysia Sarawak.

Keywords: Psych-predicates; experiencer; first-person (subjectivity) data; evidence acquisition event; direct evidential; causation

1. Issues

Why is (1b) “She is dizzy” with the third person subject in PRESENT (tense) fine, whereas its counterpart in Japanese (J) and Korean (K) is odd unlike the first person subject utterance, as in (3)? It is because you have no way of knowing if others’ internal psych state is such at speech time. Few attempts have been made to explain this. We aim to show that evidence acquisition (or learning) event is crucially involved in such a 1st person subjectivity phenomenon. It requires the 1st person’s (Experiencer’s) direct sensory or perceptual experience of one’s own psych state or of the relevant type of individual object as in predicates of personal taste (PPT). The 1st person is the starting point of all relevant and even exocentric expressions, with evidentiality factored in. (2b) even in English, French and Chinese is bad if some denial or blocking of evidentiality such as (2a) (temporally) precedes it. An evidence acquisition event (e_{ev-acq}) such as (1a), temporally preceding the psych proposition, must be accommodated for explanation.

- (1) a. I just heard from Mary. *Or* I just saw Mary.
 b. She is dizzy.
 (2) a. I haven’t heard from Mary lately. *Or*
 I haven’t seen Mary lately.
 b. ?? She is dizzy.
 (3) a. na-nun /?*kunye-nun/?*ne -nun ecirep-ta (K)

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- I-TOP she-TOP you -TOP dizzy-DEC
 ‘I am/?*she is/?*you are dizzy.’
- b. watashi-wa/?*kare-wa/?*anata-wa sabishi desu (J)
 I-TOP he-TOP you-TOP lonely (Kuno 1973)
 ‘I am/?*he is/?*you are lonely.’

The PRESENT realization "she's dizzy" after past tense "I just saw Mary" is more like a consequence of "double access" sequence of tense interpretation in English (a la Ezra Keshet's intuition p.c), *i.e.* Mary was dizzy *and* still is dizzy (see 'Sue said that Mary is dizzy/pregnant.'). First-person interoceptive psych judgments have the property of "immunity to error through misidentification (IEM, [19])." 'I am dizzy' or 'I am in pain' exhibits IEM: one cannot commit an error in identifying the Experiencer of the dizziness or pain as other than oneself. In contrast, *de se* thoughts are different because they involve representing oneself as an object and in the course cannot be entirely free from an error.

The PPT is treated with a judge parameter added to the evaluation index (of w, t) in a relativist position [8][21], as in $[[\text{fun}]]^c; w, t, j = [\lambda x_e. x \text{ is fun for } j \text{ in } w \text{ at } t]$, or with explicit/implicit argument or an operator thereof [5][22][14][17] largely in contextualism. The *dizzy* type requires an **Experiencer** as an argument (typically Topic) and the PPT type also implicitly (if not explicitly) requires one with its **individual object (Stimulus)** prominent on surface. The judge parameter as an additional evaluation index must be costly and the denotational meaning of the predicate type of *dizzy, tasty* etc. must also be taken into account. Some Experiencer operator (as in Pearson) can bind a variable x , starting with 'I' the 1st person, within a psych proposition, replaced by other persons but, unlike Pearson, in view of a chain of evidentiality, with the source as the first person speaker. A 'simulation' approach sounds attractive but its overuse in its inexplicit stage may endanger grammar and semantics.

An alternative contextualist approach with no parameters argues that the context-dependence enters in passing from "character" in the sense of Kaplan [4] to the actual proposition expressed ("content"): what proposition is expressed may vary from context to context, but once the proposition is fixed, its truth-conditions are not "relative", and no extra parameters need to be added to indices of evaluation [2][13][20]. Positing implicit content, this commonly employed linguistic strategy leads to contextualism (e.g. for Kratzer's appeal to implicit "in view of" clauses providing the implicit domains of various modals, as Partee [16] points out). The posited implicit content becomes part of the proposition expressed (or of the semantic content). This is relevant for propositional attitude ascriptions and for sentential anaphora, etc. Stojanovic [22] inherits some aspect of the Kaplanian view (1989) but departs from him in dealing with the above example of (A) [Mary says: "I am dizzy." (B) Bruce, pointing at her, after hearing her (=e_{e.a.}), says (1b) "She is dizzy." Stojanovic's view of Psych Predicates as properties rather than propositions leans to contextualism. Mary is asserting the content of dizziness of **herself** by saying "I am dizzy," as in (A). On this **evidence**, (1b) by Bruce (B) is possible in English. The content associated with (1b) is the very same function, and Bruce is asserting this content about Mary. But Stojanovic's view must be complemented by the licensing condition of an *e_{e.a.}*. The contents now become the same and the function corresponds to the property of being dizzy initially needing the first person. By having an operator that binds the variable for the first-person oriented interpretation of the sentence, the property claim makes it 'judge-free' (Pearson, forthcoming). However, there is a language-specific evidential constraint that blocks the shift from (A) ('I' expression) to (B) ('she' expression) in the PRESENT tense, namely, in Korean and Japanese. "She was dizzy" in the PAST in J, K is relatively acceptable. This constraint must be represented.

The 1st-person orientation is generally kept; an implicit Experiencer argument shifts to attitude holder co-referentially in attitude report sentences such as (4). In (5), however, the Experiencer 'cat' cannot generally be the attitude holder Mary in English. The counterpart of (5) in Korean, on the contrary, tends to have the attitude holder Mary as Experiencer in the embedded S. Consider (6). Sentence (7) can be uttered only when the speaker as Experiencer has tasted the cat food directly because of the first-person constraint based on epistemic privilege. This kind of "exocentric" cases (as opposed to 'autocentric') does not occur in Korean, particularly with subjective attitude predicates such as 'consider' and 'think.' An evidential auxiliary verb is added to describe the situation where the speaker sees the cat eating a lot of the cat food, as in (7b, c) in Korean unlike in English, as in (5).

- (4) Mary thinks this cake is tasty. (Experiencer Mary)
 (5) Mary thinks this cat food is tasty. (Experiencer the ca

- (6) Na-nun/Mary-nun [i koyangi-pap-i mas -iss-ta-ko] sayngkak-hay ((Experiencer I/Mary)
I –TOP/M-TOP this cat-food -NOM taste have-DEC think-do
'I/Mary think(s) that cat food is tasty.'
- (7) a. i koyangi-pap-i mas -iss-e (Experiencer I in K)
this cat-food -NOM tasty
'This cat-food is tasty.' (Experiencer the cat in English)
- b. Ce koyangi-pap-i mas -iss-na po-ta (Experiencer the cat in K)
that cat-food-NOM taste-have-seem-DEC
'It seems that that cat food is tasty.'
- c. ?Koyangi-ka ce koyangi-pap-ul mas-iss-e han-ta
cat-NOM that cat-food-ACC taste-have do-DEC
'The cat shows the signs of that cat-food being tasty.'

Interactions of psych predicates with the direct evidential marker *-te* and other evidentials in Korean also pose issues. Their close association with *de se* is also touched on. This line of research is hoped to shed light on the distinction between the 1st person data vs. the 3rd person data [1], with the *third-person data* about behavior and brain processes, and *first-person data* about “subjective experience” in the study of self and consciousness in cognitive science and philosophy of mind. My claim is that *first-person data* ultimately requires *first-person* subjective expressions at utterance time and that it must be thoroughly explained.

2. Evidence Acquisition Accommodated

The type of psych predicates requiring the Experiencer but not the Stimulus such as *dizzy* cannot form a generic statement, as in ?*‘Chinese are dizzy’ at least in J and K, whereas the *tasty/fun* type can, as in *Walnuts are tasty*, in J and K, too. The expression of Experiencers in a generic still has a 3rd person as its Topic (assuming it comes from the subject) and cannot be acceptable, although the 1st person plural Topic is slightly better because it includes the speaker, as in ??*Wuri-nun ecirew-e* [We-TOP dizzy-DEC] ‘We are dizzy.’ In contrast, a taste/fun predicate has a Stimulus as its Topic (coming from the subject). Therefore, even in these generic utterances, the starting point must be the 1st person singular. The 1st person singular Experiencer’s (*to me* in English for PPT) domain seems to expand to the 1st person plural and then some *we*-like community. In particular, if Experiencers are backgrounded, the Stimulus Topic becomes prominent and the quantum properties of the Stimulus matter and we can think of some special physico-chemical properties of walnuts in general (or some sensori-motor physical aspects of riding a rollercoaster) **causing** some good taste (or fun) in my brain state via my sense organs reacting to stimuli. That should be why the Experiencer underlyingly takes a first-person dative (*to me*) in various languages in general, as in *na-nun/na-eykey-nun hotwu-ka mas -iss-e* [eykey- DATIVE ‘to’] [I-TOP/I-DATIVE-TOP walnut-NOM tasty -DEC] ‘To me/I am, walnuts are tasty.’

Some psych predicates such as *dizzy* and *boring* tend to be stage-level-predicates but others such as *tasty* and *fun* tend to be individual-level predicates. Many psych predicates are dual in this respect. In **causation** structure, as in *The book bored me -> The book was boring <- [Reading] The book was boring*, with the purpose quale coerced as an event function a la Generative Lexicon Theory [18], it is a stage-level-predicate. But, if **conditionally** conceived (with genericity as a quasi-universal included), it tends to be individual-level. The PPTs *tasty* and *fun* can be extended to people in general, starting from the 1st person, with the second person includable. The Stimulus argument *walnuts* in general must be considered, too, for a generic; with the Experiencer backgrounded, it becomes a Topic and the associated PPT, tending to be individual-level, denotes its property. There arises a seesaw game between the Experiencer and the Stimulus. Generic sentences are Topic constructions and Topic has a conditional meaning with individual-level interpretation (also see Pearson [17]).

Even in J and K, an Experiencer psych predicate is relatively all right in PAST with the 3rd/2nd person subject, as in (8):

- (8) (?) Kunye-nun/ne-nun ecirew-ess-e (K)
she-TOP/you-TOP dizzy-PAST-DEC
'She was dizzy/You were.'

It is because some evidence acquisition (learning) event is assumed to have occurred before the speech time. Such evidentiality accommodation is universal but varies in different languages, depending on the source, type, and temporal relations factored in. In all languages the question “What **was** your name?” (with appropriate intonation or markers) is possible in the interpretation of “I had the *e_{e.a}* of hearing your name,” without the implication that the hearer changed his/her name. The past acquisition is encoded into the PAST marker. †

In PRESENT, however, some reportative (*-tay* in K; *-soda* in J)/visual (*-e ha-y* in K; *garu* in J) evidential marker is required to make the 3rd/2nd person subject psych predicate felicitous, as in (9). The visual evidentials *-e ha-* in K and *-garu* in J can co-occur with **all and only** subjective psych adjectives, whereas the reportative evidentials *-soda* in J and *-tay* in K can co-occur with all eventualities. In English, an immediately preceding evidence acquisition event for a third person subject psych adjective can be accommodated without any visual or hearing evidence explicitly marked unlike in J, K. All indicate that psych predicates require evidence acquisition event factored in for a non-first-person Experiencer psych predicates possible. In (9), the speaker heard Mary/someone saying that she/Mary is dizzy and reports it. At the deepest level, “I am dizzy” resides with “I” referring to the speaker in the context, hence *de se*, as in (6’). Its immediately higher S may be: [Mary says [“I am dizzy”]] and someone who heard it first-hand from Mary, who is the ultimate Experiencer, may say (9) as the speaker of (9), as in (9a), where ϕ_i =PRO*de.se*=*caki* reflexive **de se**, *de se* is conscious. Alternatively, someone who heard about Mary’s dizziness from a second-hand source may also utter (9), in a grammaticalized interpretation of the reportative *-tay*, like *soda* in J (Yasunari Harada, p.c.), as in (9b). In uttering (10), we see the evidence of signs or any behavioral appearance of Mary’s direct sensory/perceptual experience, which I assume can be represented mentally, “I am dizzy.”

- (9) Mary-ka ecirep-tay (K)
M –SUBJ dizzy-REP (=REPORTATIVE)
a. ‘Mary says she is dizzy.’
b. ‘Mary is said to be dizzy.’ (second or third hand)
- (9a) [_s Mary_i [_s ϕ_i dizzy] say] (ϕ_i =PRO*de.se* = *caki* reflexive **de se**) (*de se* conscious)
- (9b) [_s Mary_i is said [_s ϕ_i dizzy]] (second or third hand)
- (10) Mary-ka ecirew-e ha-y (K)
M –SUBJ dizzy- VIS (=VISUAL)
‘Mary shows signs of dizziness.’

In J and K, psych predicates in PRESENT with the 1st person Experiencer denote her psych state at utterance time only and do not allow for future or past reference (or topic) time expressed, as in (11). The topic time must continue (from past) to the utterance time, as in (12).

- (11) *Na-nun nayil/ecey/cokum cen ey ecirep-/sulphu-ta
I-TOP tomorrow/yesterday/a while ago am-dizzy/sad
‘I am dizzy/sad *tomorrow/*yesterday/*a while ago.’
- (12) Na-nun onul oncongil /yocum/ilcwuil cen-puthe/ kyeysoK/naynay ecirep-/sulphu-ta
I-TOP today whole day/lately/from a week ago/ continuously/all the time dizzy/sad
‘I am dizzy/sad all day long/ lately/from a week ago/ continuously/all the time.’ [Intended]

3. Interaction with Direct Evidential

A quarter of the world languages including Korean have evidential affixes rather than words as in English. The nature of the direct evidential marker *-te* in Korean also requires the first person speaker’s direct perceptual

† It is interesting to note that this way of asking a name is sometimes used to address a total stranger diplomatically and apologetically, as if the speaker should be in a position to know the addressee’s name.

perspective and a shift of perspective to the speaker-to-be in interrogative sentences, unlike indexicals. The most direct perceptual evidence is implicated if *-te* co-occurs with its preadjacent without tense marking to denote the first speaker’s witnessing the event in the proposition at-issue occurring at the same time as the $e_{e.a}$ of witnessing before speech. The Korean direct evidential marker *-te*, implying the speaker’s witnessing its scope proposition **prior to** speech time, cannot license a 3rd/2nd person subject psych predicate, unlike the PAST-marked (8). This interesting interaction between psych predicates and the direct evidential (and their close association with *de se*, realized as PRO or the reflexive *caki*, conscious or not) is examined.

- (13) a. Ivan-i Maria-wa kiss-ha-te-ra
 I-NOM M-with kiss-do-TE-DEC
 ‘Ivan kissed Maria, as I learned at that time’ = *e* marker.

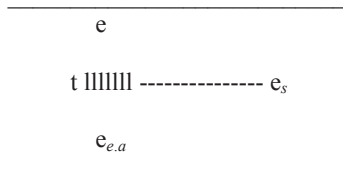


Fig. 1

- b. Pi-ka o-ass-te-ra
 rain-NOM come-PAST-TE-DEC
 ‘It had rained, as I learned later, [seeing the wet ground].’

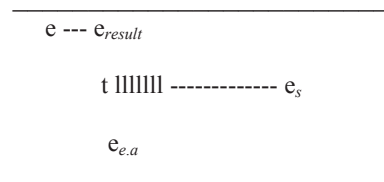


Fig. 2

The occurrence of *-te* with no tense marking can also denote the future event, as in (14). The evidence can be reading or watching the scheduled visit, as a signal event temporally connected to the future event, as in Fig 3.

- (14) Obama-ka naycwu-ey o-te-ra
 O-NOM next week -at come-TE-DEC
 ‘Obama comes next week, as I perceived.’

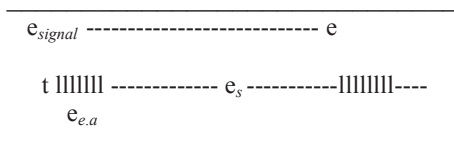


Fig. 3

However, a psych predicate + *te* with the first person without tense marking cannot denote the speaker’s future state of being dizzy; simply because dizziness cannot sensibly be scheduled or objectively foreseen. Hence, (15) is infelicitous.

- (15) ?*Nay-ka naycwu-ey ecirep-te-ra
 I-NOM next week-at dizzy-TE-DEC
 ‘I am dizzy next week, as I perceived.’

Otherwise, all occurrences of psych predicates with the direct evidential marker *-te* in the explicit/implicit first person Experiencer in the null tense marking can denote the speaker's past internal psychological state perceived prior to speech time. Psych predicates involve direct sensory/perceptual experience by the 1st-person at the core and the direct sensory/perceptual evidential marker *-te* in Korean, which Japanese lacks, also involves the 1st-person at the core and they co-occur, as in (16). Psych predicates have overt or covert Experiencer but the direct sensory/perceptual evidential marker *-te* cannot have a realized Experiencer. Therefore, (16a,b,c) can have an optional Experiencer Topic (*Na -nun* 'I-TOP') at the beginning of each sentence.

- (16) a. *Ku namwu-ka po-i-te-ra* [visual]
The tree-NOM see-PASSIVE-TE-DEC
'The tree was visible (to me).'
- b. *Kangdang-i shikkurep-te-ra* [hearing]
auditorium-NOM noisy-TE-DEC
'The auditorium was noisy.'
- c. *Pipimpap-i mas-iss-te-ra* [taste]
pipimpap-NOM tasty-TE-DEC
'[I tasted] the pipimpap was tasty.'
- d. *ney mal-i mac-te-ra* [no psych involved (recognition of a proposition)]
your-words-NOM right-TE-DEC
'You were right, as I recognized,' etc.

All the data here are first person data. The third person cannot be the Experiencer of these expressions, as in (17) and unlike (8).

- (17) ?**Mary-ka ecirep-te-ra*
'Mary was dizzy at the time I perceived.'

We have one finer distinction between outer-directed and inner-directed in evidentials and psych-predicates in Korean, which we need, even though they may be considered in the same wider subjective experience category. My volitional act, unlike psych predicates, cannot co-occur with the direct evidential maker *-te*. A psych sentence cannot take a non-1st-person subject if it co-occurs with the evidential maker *-te*. With *-te*, introspection is possible, as in (17), but outer-directed direct observation is odd, as in (18). A volitional act (18) with *-te* shows exact asymmetry in possible subject persons.

- (18) ???*Nay-ka pap-ul mek-te-ra*
I-NOM rice-ACC eat-TE-DEC
'[I observed] I was eating rice.'

On the other hand, there occurs a very interesting contrast between (19a) and (19b). By the direct evidential marker *-te* (19a) asserts at-issue that 'he was dizzy' and implicates that I, the speaker, acquired the evidence by observing it directly at that time, which after all turn out to be odd. Rather, the past tense marking of the same psych proposition at-issue is felicitous in (19b). Because of the past tense, there could have been a time interval in which the speaker could learn about 'his being dizzy' or hear/see his saying/showing signs of or mentally simulating (Bergen ms) 'I am dizzy.'

- (19) a. **Ku-nun ecirep-te-ra*
he-TOP dizzy-TE-DEC
'[I directly perceived] he was dizzy.'
- b. (?)*Ku-nun ecirep-ess-ta*
he-TOP dizzy-PAST-DEC
'He was dizzy.'

In interrogative utterances, the perspective of the direct evidential *-te* shifts to the hearer the speaker-to-be, unlike in declarative utterances. In this respect, *-te* is different from indexicals. Therefore, with PPTs or other psych predicates plus *-te*, interrogative utterances can take the 2nd person but not 1st or 3rd person, as shown in (20).

- (20) Ne –nun/*na-nun/*ku-nun hotwu –ka **mas-iss-te-nya?**
 you-TOP I-TOP he-TOP walnut-NOM taste-have-EV-Q
 ‘Did you perceive that walnuts are tasty to you/*me/*him?’

4. Concluding Remarks

We started with and examined why ‘She is dizzy’ is bad in Japanese and Korean but not in English. Now we can explain it in terms of accommodated evidence acquisition events. We also attempted to explore Predicates of Personal Tastes as another type of psych predicates and the genericity issue. We tried to see interactions between psych predicates and the direct evidential marker *-te* in Korean.

Brain processes are 3rd person data [1] and even if I am observing Mary’s dizziness in the brain I cannot utter (1b) ‘She is dizzy’ felicitously, at least in Korean and Japanese. First person data are truly internal to our consciousness and mind with the IEM immunity. Evidence acquisition events accommodated must support acceptable expressions with non-first person Experiencer examples in various languages and tenses.

Acknowledgements

This research was supported by the National Research Foundation grant 100-20090049 via Korean Government.

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