Sluicing in Korean

Jong-Bok Kim & Peter Sells

jongbok@khu.ac.kr & peter.sells@york.ac.uk

Kyung Hee University & University of York

Structure and Evidence in Linguistics
28-30 April 2013
Stanford University

Sluicing

In this talk we look at sluicing in Korean, adapting the perspective on this construction proposed in Ginzburg and Sag (2000; GS00).

(1) a. He looked like someone I know, but I can't think **who**.

   b. We always knew he would succeed at something, but we didn't know **what**.

   c. Unfortunately, the supply seems to have dried up. I don't know **why**.

   d. They know it is coming, but they don't know **when**.

Derivation

(2) a. ... [[he looked like <who>]]

    b. ... [who [he looked like <who>]]

The assumed transformational derivation is *wh*-movement and
deletion, or base-generation of *wh* in SpecCP with accommodation of
a clause (Ross 1969, Chung, Ladusaw and McCloskey 1995, 2011,
Merchant 2010), deriving (2)b from (2)a, or base-generating something
equivalent.

Korean

Korean is SOV and is a *wh*-in-situ language, but seems to have sluicing. Without the **red parts**, examples are ungrammatical.

(3) a. pi-ka   onta-ko   hay-ss-nuntey, **encey-i-nci**
        rain-NOM come-COMP say-PAST-but   when-COP-QCOMP
        molukeyssta
        not.know
        'They say that it will rain, but I do not know when.'

   b. ku-nun nwukwunka-lul talm-ass-nuntey,
       he-TOP someone-ACC resemble-PAST-but
       nwukwu-i-nci   molukeyssta
       who-COP-QCOMP not.know
       'He resembled someone, but I do not know who.'

(See e.g., Kim 1997, Park 2001, Jo 2005, Choi 2012.)

Island insensivity

Sluicing in English is not sensitive to islands. The correlate of the *wh*-expression in Korean can be also within an island (Sohn 2000, Park 2001, Ok and Kim 2012).

(4) a. Seoul-uy   han tayhak-ey   tani-nun   haksayng-ul
       Seoul-GEN one college-DAT attend-MOD student-ACC
       chotayhay-ss-nuntey, **etten tayhak**-i-nci
       invite-PAST-but   which college-COP-QCOMP
       molukeyssta
       not.know
       'I invited the student who attends a university in Seoul, but I don't know which university.'
       (*I don't know which university I invited a student who attends.)

Island insensivity

(4) b.   Mimi-ka   khu-n   cha-lul   sa-ss-nuntey, **elmana**
          Mimi-NOM big-MOD car-ACC buy-PAST-but how
          khu-nci   molukeyssta
          big-QCOMP not.know
          'Mimi bought a big car, but I don't know how big.'
          (*I don't know how big Mimi bought a car.)

Korean sluicing shows familiar facts of case-matching as well (GS00, Sag and Nykiel 2011).

How to analyze Korean sluicing?

- Korean appears to have sluicing.

- As there is no *wh*-movement, an analysis just like English movement and deletion may not be motivated.

- As there is usually a copula present, after the *wh*-fragment, a derivation involving deletion from a pseudocleft has been argued for (for Japanese and Korean), as this is a type of copular clause.

How to analyze Korean sluicing?

- However, this makes incorrect predictions, and so a "pseudo-sluicing" account has been proposed. Pseudo-sluicing (e.g., Craenenbroeck 2010, Choi 2012) involves a copular clause and a pronominal subject:

  (5)   Mimi bought something but I don't know [**what** [~~it was~~]].

Not from pseudocleft

A postposition must be present in the focus of a pseudocleft, but not in a fragment sluice expressing the same sort of content:

(6)   a.   Mimi-ka   senmwul-ul pat-un   kes-un
                Mimi-NOM present-ACC receive-MOD NMLZ-TOP
                haksayng-*(ulopwuthe)-i-ta
                student-*(from)-COP-DECL
                '["The one" Mimi received a present] is *(from) a student.'

Not from pseudocleft

(6) b. Mimi-ka   etten haksayng-ulopwuthe senmwul-ul
        Mimi-NOM some person-from   present-ACC
        pat-ass-nuntey,   na-nun **etten**
        receive-PAST-but I-TOP   which
        haksayng-**(ulopwuthe)**-i-nci molukeyssta
        student-(from)-COP-QCOMP   not.know
        'Mimi received a present from a student, but I do not know
        which student.'

Multiple fragments

Multiple fragments are relatively acceptable in sluicing, while they are less acceptable as the foci of a single pseudocleft.

(7) a. **encey nwukwu**-i-nci   al   swu-ka   epsta
          when who-COP-QCOMP know possibility-NOM not.exist
          'It is not possible to know when and who.' (corpus)

     b. ?nwukwunka-ka cip-eyse mwuesinka-lul
          someone-NOM home-at something-ACC
          hwumchiekass-nuntey, **nwu-ka   mwues**-i-nci
          steal.go-but   who-NOM what-COP-QCOMP
          molukeyssta
          not.know
          'Someone stole something from my home, but I don't still
          who and what.'

Pseudo-sluicing

Pseudo-sluicing is compatible with the optionality of the adposition:

(8)   Mimi received a present from someone, but I don't know
        {**from whom**/**who**} **it** was.

As the subject in Korean can be a null subject (*pro*), Korean sluices
might be exactly like English "Was it *wh*-phrase?", with a silent *it*.

One future research topic is whether we can distinguish this from a
proposal that Korean embeds true fragments (i.e., utterances that are
not syntactically full clauses, even if they have a declarative or
interrogative interpretation).

Adopting the GS00 account of sluicing, we can just analyze the
fragments directly.

Korean sluicing

What is embedded as a sluice in Korean must always be a predicate and an interrogative clause-type marker. A bare *wh*-word or phrase by itself does not satisfy the selectional requirements of the embedding predicate (such as "not know").

In the absence of any other predicate, Korean uses the copula to introduce the fragment phrase(s); but a copula is not obligatory.

Korean sluicing

(4) b.   Mimi-ka   khu-n   cha-lul   sa-ss-nuntey, **elmana**
         Mimi-NOM big-MOD car-ACC buy-PAST-but how
         khu-nci   molukeyssta
         big-QCOMP not.know
         'Mimi bought a big car, but I don't know how big.'

khu-ta is the Korean predicate 'to be big'.

Predicate and non-predicate fragments

Korean has fragment utterances. In some cases, they are predicates:

(9) a.   Kim-i yeki-ey iss-ni?   'Is Kim here?'

    b.   iss-e; eps-e. ('(He) is.'; '(He) isn't.') (Yes; No.)

Predicate and non-predicate fragments

Or arguments or adjuncts:

(10)   a.   Kim-i nwukwu-lul manna-ss-ni?
                'Who did Kim meet?'

       b.   chelswu. chelswu-lul. *chelswu-ka.

(10)b shows case matching with the contextually-given utterance; bare or accusative is OK, nominative is not.

Interrogative fragments

(11) a. Kim-i yeki-ey o-keyss-e.
          'Kim will come here.'

  b. way? way-yo? ettehkey?
      why? why-LEVEL? how?

      nwukwu-wa? encey? encey-yo?
      who-with? when? when-LEVEL?

Interrogative fragments

Either the fragment (which must not conflict in case), or a predicate
which is a fragment plus copula plus an interrogative marker:

(12) a.   I think that Kim met someone.
   b.   nwukwu? nwukwu-lul? nwukwu-**i-ni**?
         who?   who-ACC?   who-COP-Q?
   c.   *nwukwa-ka?
          who-NOM

Embedded fragments and selection

Only the predicate-type, such as the one with the copula in the last example, can be embedded in Korean sluicing. The first two utterances in (12)b are acceptable at the matrix level, expressing an interrogative content, but they cannot be embedded in that bare form.

Embedded fragments and selection

We propose to augment the account in GS00 with selection for a
syntactic feature as well:

(13) a.   Declarative complement: semantic type of *proposition*, but
           also some syntactic feature of Declarative marking.

      b.   Interrogative complement: semantic type of *question*, but
           also some syntactic feature of Interrogative marking.

There must be embedded clause typing

In fact, *etteh-key* ('how') in Korean is also a (non-finite) predicate (lit. 'to be how'), but it cannot be directly embedded in sluicing:

(14)   a.   **ettehkey-i-nci** molukeyssta   'I don't know how.'

     b.   ***ettehkey** molukeyssta ⤳ '?How don't I know.'

Constructing sluiced meanings

- In GS00, a *question* meaning is built from a *proposition* meaning by abstracting out one or more *parameter*s from the *proposition*.
- In the 'merger' type of sluicing, the meaning of one *wh*-phrase substitutes for the meaning of a quantificational phrase in the contextually given utterance. ("Kim met someone but I don't know [who].")

Constructing sluiced meanings

- In GS00, a *question* meaning is built from a *proposition* meaning by abstracting out one or more *parameter*s from the *proposition*.
- In the 'sprouting' type of sluicing, the extra parameter is abstracted out of the proposition. ("Kim went to Reno but I don't know [for how long].")

Simplified representation, Sag and Nykiel (2011)

$$
\begin{bmatrix}
\text{SYN} & \text{S} \\
\text{SEM} & \lambda\Sigma\Phi \\
\text{CNTXT} & \begin{bmatrix}
\text{SAL-UTT} & \left\{ \begin{bmatrix} \text{SYN} & [\text{CAT} & \text{X}] \\ \text{SEM} & [\text{IND} & i] \end{bmatrix} \right\} \\
\text{MAX-QUD} & \lambda\{\ \}\Phi
\end{bmatrix}
\end{bmatrix}
\rightarrow
\begin{bmatrix}
\text{SYN} & [\text{CAT} & \text{X}] \\
\text{SEM} & [\text{IND} & i] \\
\text{STORE} & \Sigma
\end{bmatrix}
$$

where Σ is non-empty.

GS00: *hd-frag-ph*

hd-frag-ph

$$\begin{bmatrix} \text{HEAD} & \text{S} \\[6pt] \text{CTXT} \mid \text{SAL-UTT} \left\{ \begin{bmatrix} \text{CAT} \; \boxed{1} \\ \text{CONT} \mid \text{INDEX} \; \boxed{2} \end{bmatrix} \right\} \end{bmatrix} \rightarrow \mathbf{H} \begin{bmatrix} \text{CAT} \; \boxed{1} \begin{bmatrix} \text{HEAD} & \textit{nominal} \end{bmatrix} \\ \text{CONT} \mid \text{INDEX} \; \boxed{2} \end{bmatrix}$$

The basic form of a fragment phrase, it has a category and a content in the context of a Salient Utterance (which essentially defines the form that the fragment has to be compatible with).

Korean sluicing – *pred-frag-ph*

- In Korean, if the **H**ead is nominal, this can be a fragment utterance but it can not be embedded. Korean also allows a fragment with a *verbal* **H**ead, which can be embedded.

- So what we need to define for Korean is a *pred-frag-ph*, which will parallel *hd-frag-ph* but be headed by a (finite) predicate, which can also be marked for clause type.

Korean sluicing – *pred-frag-ph*

- If the predicate itself provides a parameter, this can license the question meaning directly. If the predicate is the copula, which we assume has no (relevant) semantics, the phrase(s) it combines with can provide the parameter(s).
- We might need to do something a bit special for multiple fragment examples.
- So Korean sluicing is quite like what we see in other languages, with the clear need for selection of the embedded clause type; the fact that the "sluice" must be a predicate follows from this.

Selected References I

Choi, Young-Sik. 2012. Sluicing is NOT in Korean. *Journal of Studies in Language*, 28.2: 329–351.

Chung, Sandra, William Ladusaw, and James McCloskey. 1995. Sluicing and Logical Form. *Natural Language Semantics* 3: 239–282.

Chung, Sandra, William Ladusaw, and James McCloskey. 2011. Sluicing(:) Between structure and inference. In L. Mikkelsen, E. Potsdam, and R. Gutierrez-Bravo (eds.) *Representing language: Essays in honor of Judith Aissen*. Santa Cruz, LRC.

Craenenbroeck van, Jeroen. 2010. Invisible last resort: A note on clefts as the underlying source for sluicing. *Lingua* 120: 1714–1726.

Ginzburg, Jonathan and Ivan Sag. 2000. *Interrogative Investigations. The form, meaning and use of English interrogatives*. Stanford, CA: CSLI Publications.

Jo, Jung-Min. 2005. Sluicing? It's just one of copular constructions. *The Linguistic Association of Korean Journal*. 13.2: 143-167.

Kim, Jeong-Seok. 1997. *Syntactic focus movement and ellipsis: A minimalist approach*. Ph.D. dissertation, University of Connecticut.

Kim, Jieun. 2012. What Sluicing Comes from in Korean is Pseudo-cleft. *Korean Journal of Linguistics*, 37.1: 69–106.

Selected References II

Merchant, Jason. 2001. *The Syntax of Silence: Sluicing, Islands, and the Theory of Ellipsis*. Oxford: Oxford University Press.

Ok, Sung-Soo and Kim, Soo-Yeon. 2012. An analysis of sluicing-like constructions in Korean: a non-movement approach. *Journal of Language Sciences* 19.1: 155–180.

Park, Myung-Kwan. 2001. Subject-less clefts in Korean: Towards a deletion analysis. *Language Research* 37(4): 715–739.

Roberts, Craige. 1996. Information structure: Towards an integrated formal theory of pragmatics. In J.H. Yoon and A. Kathol (eds.) *OSU Working Papers in Linguistics, Volume 49: Papers in Semantics*. Columbus, OH: The Ohio State University, Department of Linguistics, 91–136.

Ross, John. 1969. Guess Who? Robert Binnick, Alica Davison, Georgia Green, and J. Morgan (eds.) *Proceedings of the Fifth regional Meeting of the Chicago Linguistic Society*, 252–286.

Sag, Ivan A., and Joanna Nykiel. 2011. Remarks on Sluicing. *Proceedings of the HPSG11 Conference*. Stanford, CSLI Publications.

Sohn, Keun-Won. 2000. A non-sluicing, non-clefting approach to copular constructions (in Korean). *Studies in Generative Grammar* 10: 267–294.