Prepositional versus Verbal Causativizers

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(an extended version of the original handout)

1. Introduction
• There are two cases of increased Case requirement: (i) in causatives like (1b) and (2b), a causer argument is added and the external DP argument of the root cannot appear in spec,TP; and (ii) a DP argument appears instead of a TP argument after nontransitive predicates like think and certain in (3b) and (4b).

1 a. Mary went to New York.
   b. John made Mary go to New York.

2 a. Mary-wa New York-e ik-ta.
   \hspace{2cm} TOP \hspace{2cm} TO go-PAST
   'Mary went to New York.'
   b. John-wa Mary-o New York-e ik-(s)ase-ta.
      \hspace{2cm} TOP \hspace{2cm} ACC \hspace{2cm} to go-CAUSE-PAST
      'John caused Mary to go to New York.'

(3) a. I think that John should resign.
   b. I can't think of anything.
(4) a. I'm certain that he will win.
   b. I'm certain of his victory.
• (i) is accommodated by verbal elements (make and -(s)ase); (ii) is accommodated by the semantically null preposition (of).
• –kan in Indonesian can be analyzed as a semantically null affixal P on a par with of.
• If –kan is P unlike make and -(s)ase, it appears lower than the root predicate.
• -kan can license only internal DP arguments due to its configurationally low status. Specifically, it can handle not only a DP in (ii) and a subcase of (i) but also a benefactive DP argument.
• -kan cannot Case-license an external DP argument in the configuration (i).

2. Transitivity restriction on Indonesian causatives and benefactives
(cf., Sneddon (1996), Son and Cole (2008))
• If suffixed by –kan (and prefixed by meN-), unaccusative and adjective roots become causative.

5 a. Cangkirnya pecah.
   \hspace{2cm} cup.his \hspace{2cm} break \hspace{2cm} (Son and Cole (2008: 123))
   'The cup broke/is broken.'
b. Janet memecahkan cangkirnya.
   Janet MEN.break-KAN cup.her
   'Janet broke her cup.'

(6)   a. Wajahnya putih.
   face.his   white
   'His face is white.'
   b. Ia memutihkan wajahnya.
   3sg MEN.white-KAN face.his
   'He whitened his face.'

- If suffixed by –kan, transitive roots become benefactive rather than causative.

(7)   a. Tika memanggang roti itu untuk Erik. (Son&Cole (2008: 124))
   Tika MEN.bake bread the for Erik
   'Tika baked the bread for Erik.'
   b. Tika memanggangkan Erik roti itu
   Tika MEN.bake-KAN Erik bread the
   'Tika baked Erik the bread.' NOT 'Tika caused Erik to bake bread.'

(8)   a. John baked bread for Mary.
   b. John made Mary bake bread. (8a) ≠ (8b)

(9)   a. John-wa Mary-no tame ni pan-o yak-ta.
   John-TOP Mary-GEN sake for bread-ACC bake-PAST
   'John baked bread for Mary.'
   b. John-wa Mary-ni pan-o yak-(s)ase-ta.
   John-TOP Mary-DAT bread-ACC bake-SASE-PAST
   'John caused Mary to bake bread.' (9a) ≠ (9b)

- **Question 1:** Make and –(s)ase constitute causative constructions regardless of the transitivity of the root. On the other hand, –kan produces causative constructions from unaccusative and adjectival roots (but not from unergatives), while it yields benefactive (not causative) constructions from transitives. Why?

- **Answer:** Since –kan is P and appears lower than the root, it can Case-license only an internal argument such as theme and benefactive; it cannot Case-license an external argument of unergative and transitive predicates.

3. Prepositional –kan and of in English

- –kan in (10c) and (11c) functions on a par with of in (3b) and (4b) and the independent Ps in (10b) and (11b); it Case-licenses a DP argument that thematically corresponds to a complement clause. (Sneddon (1996: 61, 72, 98, 268), Son and Cole (2008: 122))

(10)   a. Saya berpikir bahwa dia pencuri.
   I   think     that  he  thief
   'I think that he is a thief.'
b. Saya berpikir **tentang** sukses.
   I **think** of **success**
   'I think of success.'

c. Saya mebikir**kan** sukses.
   I **MEN.think-KAN** success
   'I think of success.'

(11) a. Saya bangga bahwa saya adalah muslim
   I **proud** that I **am** a Muslim.
   'I'm proud that I'm a Muslim.'

b. Pak Hasrun bangga **akan** anaknya.
   Mr. Hasrun proud of **son.his**
   'Mr. Hasrun is proud of his son.'

c. Pak Hasrun membangga**kan** anaknya.
   Mr. Hasrun **MEN.proud-KAN** son.his
   'Mr. Hasrun is proud of his son.'

- *Make* and *sase* contribute to the causative meanings in (1) and (2); they are causative 'predicates.'
- *Of* in (3) and (4) and –*kan* in (10) and (11) do not cause any violation of the UTAH.
- *Of* in (3) and (4) and –*kan* in (10) and (11) are semantically null.
- **Question 2:** If –*kan* in (5)-(7) is the same as the one in (10) and (11), it follows that the causative and benefactive meanings in (5)-(7) should not originate in –*kan.* Then, where do they come from?
- **Answer:** *Of* and –*kan* (and Ps in general) appear lower than **V/A**. –*kan* can Case-license a DP argument within the projection of the V/A, which otherwise could not appear there; it changes the arity of the V/A.

(12) 
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   VP/AP
      \__________________________/
         V/A            PP
            \__________________________/
               P       NP/DP
                         of/-kan
```

- Ps are selected by Vs rather than selecting bare Vs.  (Koopman (1994: 284))

(13) a. I will/can sing this song.
   b. I made/let Mary visit her mother.
   c. *without Mary see Bill
4. Configurational differences between the verbal causativizer –sase and the prepositional affix –kan

(15) a. \( v' \)  
    \[ \begin{array}{c} v \\ \text{vP} \end{array} \]
    \[ \begin{array}{c} (\theta \text{ext}) \\ v' \end{array} \]

    \( -\text{sase} \)
    \[ \begin{array}{c} v' \\ \text{vP} \end{array} \]
    \[ \begin{array}{c} \sqrt{P} \\ \text{v} \end{array} \]

    \[ \begin{array}{c} \sqrt{\ldots} \\ \text{P} \end{array} \]

-\text{sase} selects a vP; it has an external argument (\( \theta \text{ext} \)) in its complement domain. (cf. Shibatani (1976a,b), Svenonius (2005), Miyagawa (1998), Marantz (1997), Kratzer (1996) etc.)

-\text{kan} appears lower than the root (\( \sqrt{} \)); -kan can only Case-license an internal argument.

5. Answers to Questions 1 & 2

5.1 Why unaccusatives/adjectives become causative but unergatives cannot

- Many of the unergative verbs in Indonesian have the form \textit{ber} + N as exemplified in (16). They resist suffixation by –kan, though there are some exceptional cases as given in (17).

(16) a. \textit{bertopi}        'wear a hat'          (Sneddon (1996: 61-65))

\[ \text{BER.-hat} \]

b. \textit{berkuda}       'ride a horse'

\[ \text{BER.-horse} \]

c. \textit{berbohong}     'tell a lie'

\[ \text{BER.-lie} \]

(17) a. \textit{berhenti}             'stop'       (Sneddon (1996: 74), Chonan (2009))

\[ \text{BER.-stop} \]

b. \textit{menberhentikan}      'dismiss

\[ \text{MEN.BER.-stop-KAN} \]

c. \textit{menghentikan}        'stop'

\[ \text{MEN.stop-KAN} \]
Hale and Keyser's (1993, 2002) analysis can naturally apply to N-based ber-verbs as in (18b), with ber- as the light verb \( \nu \) (projections of category-deciding heads are removed for ease of illustration).

(18) a. Unaccusative/Adjective
(5a) Cangkirnya pecah.
\( \text{'The cup broke/is broken.'} \)

\[ \begin{array}{c}
\sqrt{P} \\
\sqrt{\text{break}} & \theta_{\text{int}} \\
\text{the cup}
\end{array} \]

b. Unergative
(5b) Erik bertopi.
\( \text{'Erik wears a hat.'} \)

\[ \begin{array}{c}
v' \\
\theta_{\text{ext}} \\
v \sqrt{\text{hat}} \text{ Erik}
\end{array} \]

ber-

The internal argument of \( \sqrt{\text{break}} \) in (18a) moves to spec-TP for Case/EPP reasons.

So does the external argument of ber-\( \sqrt{\text{hat}} \) in (18b).

If the internal argument of \( \sqrt{\text{break}} \) (NP*) first merges with –kan as in (19a), it is Case-checked by –kan within the \( \sqrt{P} \), and the spec-TP position is available for an external argument; hence, the whole construction is causative. Since –kan is affixal, it needs to incorporate into the root as in (19b) (P incorporation in Baker's (1988) sense).

(19) a. \( \sqrt{P} \)
(5b) Janet memecahkan cangkirnya.
\( \text{'Janet broke her cup.'} \)

\[ \begin{array}{c}
\sqrt{\text{break}} \quad \text{PP} \\
\sqrt{\text{break-kan}} \quad (\text{PP})
\end{array} \]

\[ \begin{array}{c}
P \quad \text{NP*} \\
(P) \quad \text{NP*}
\end{array} \]

-kan her cup (-kan) her cup
Suppose that –kan appears with the unergative predicate in (18b). We should consider (20a,b), but neither is legitimate. Specifically, -kan in (20a), which is an affix, cannot incorporate into the root \( \sqrt{\text{hat}} \). -kan in (20b) can incorporate into the root, but it has no chance to Case-license NP*.

\[
\begin{align*}
(20) \quad &a. \quad vP & b. \quad vP \\
& v' & v' & \text{NP}^* \\
& PP & NP^* & Eri\text{k} \\
& v & \sqrt{\text{hat}} & P & NP^* & v & \sqrt{P} & Eri\text{k} \\
& \text{-ber} & \text{-kan} & Eri\text{k} & \text{-ber} & \sqrt{\text{hat}} & P \\
& \text{-kan}
\end{align*}
\]

5.2 Why transitives become benefactive rather than causative

\[
\begin{align*}
(21) \quad &vP \\
& \text{NP} & v' \\
& \text{Tika} & v & \sqrt{P} \\
& \text{meN-} & \sqrt{\text{bake}} & \text{NP}^* \\
& \text{the bread}
\end{align*}
\]

The standard analysis of the prefix meN- is that it is a verbalizing as well as accusative Case-checking head (cf. Cole and Harmon (2005), Son and Cole (2008)). But meN- quite productively attaches to adjectival roots and forms inchoative verbs as in (22) (cf., Sneddon (1996: 66)).

\[
(22) \quad \text{Wajahnya menutih.} \\
\text{face.3SG} \quad \text{meN.white} \\
\text{'His face became white.'} \quad \text{(cf. (7a, b))}
\]
Hence, I assume that (i) \textit{meN-} is a verbalizing functional head without a Case-checking ability; (ii) \textit{meN-} introduces an external argument, and (iii) transitive roots like \textit{panggang} (bake) have a potential to check accusative Case.

The Case-checking potential is activated only when it becomes verbal owing to \textit{meN-}, just as the root \textit{destr-} in English can check accusative Case only if it becomes verbal as shown in (23).

\textit{Depend-}, on the other hand, does not have a potential to check accusative Case; hence (24b) is ill-formed even if it becomes verbal.

\begin{itemize}
  \item (23) a. The enemy destroyed the city.
  \hspace{1em} b. *The enemy destroyed of the city
  \hspace{1em} c. the enemy's destruction of the city
  \item (24) a. John depends on his father.
  \hspace{1em} b. *John depends his father.
  \hspace{1em} c. John's dependence on his father
\end{itemize}

I thus assume that NP* in (21) is Case-checked by \(\sqrt{\text{bake}}\) and the external argument \textit{Tika} moves to spec-TP.

If NP* in (21) first merges with –\textit{kan} as in (25), the Case-checking feature of the verb \textit{meN-}\(\sqrt{\text{bake}}\) remains unchecked; hence, (25) does not converge, just as 'Tika baked of the bread.' is ungrammatical.

\begin{itemize}
  \item (25) \[
    \begin{array}{c}
      \text{Tika} \quad \sqrt{P} \\
      \text{NP} \quad \sqrt{\text{bake}} \quad \text{PP} \\
      \text{P} \quad \text{NP*}
    \end{array}
  \end{itemize}

\item PP benefactives like (7a) can be analyzed on a par with (21), as in (26). NP* is Case-checked by \(\sqrt{\text{bake}}\); the beneficiary \textit{Erik} is Case-checked by the P; and \textit{Tika} moves to spec-TP for Case/EPP reasons.
As for double object benefactives, we should consider (27) and (28). In (27), two DPs appear within $\sqrt{P}$, and the beneficiary $Erik$ fails to be Case-checked.

If NP* first merges with $-kan$ as in (28), the root takes the resultant PP by its first merge, just as the root merges directly with DP* by its first merge in (21) and (26). There is no essential difference as to the UTAH.

Since $-kan$ Case-checks NP* in (28), the root (plus $-kan$) can Case-check the other DP $Erik$. This results in the well-formed construction (7b).

The thematic role of $Erik$ cannot be a causer if an agent/causer should be an external argument.
outside the root projection. Since a PP beneficiary argument can optionally appear as in (7a)=(26), the most natural (and presumably the only) interpretation of *Erik* is a beneficiary argument. Sneddon (1996: 82) observes that verbs like *eat*, which express actions that are not typically done for someone else resist suffixation by -*kan*.

\[(28)\]

\[
\begin{array}{c}
\text{vP} \\
\leftarrow \text{NP} \\
\text{Tika} \\
\text{meN-} \\
\text{\sqrt{bake}} \\
\text{PP} \\
\text{Erik} \\
\end{array}
\]

\>() (7b) *Tika memanggangkan Erik roti itu.*

'Tika baked Erik the bread.'

- The linear order and the passivizability show that the primary object is the beneficiary argument of the double object construction in (29) and the theme argument of the PP benefactive construction in (30).

- These facts can be explained if we assume that the primary object is the one that is Case-checked by the root.

\[(29)\]

\[
\begin{array}{c}
\text{he} \\
\text{MEN.buy-KAN brother.his book} \\
\text{'He bought his brother a book.'} \\
\end{array}
\]

\[
\begin{array}{c}
\text{Adiknya} \\
\text{be-bought.him book} \\
\text{'His brother was bought a book by him.'} \\
\end{array}
\]

\[(30)\]

\[
\begin{array}{c}
\text{he} \\
\text{MEN.buy book that for brother.his} \\
\text{'He bought that book for his brother.'} \\
\end{array}
\]

\[
\begin{array}{c}
\text{book that be-bought.him for brother.his} \\
\text{'That book was bought by him for his brother.'} \\
\end{array}
\]
6. Exceptions to the transitivity restriction

- There are several cases where no additional DP argument appears despite the presence of –kan.
- Case 1: Meriksa in (31a) appears to be a transitive root. Suffixed by –kan and prefixed by meN-, it becomes causative rather than benefactive in (31b), against the transitivity restriction.

(31) a. Dokter memeriksa mata saya.  
    doctor MEN.check my eyes  
    'The doctor checked my eyes.'

b. Saya memeriksakan mata ke dokter/*oleh dokter  
    I MEN.check-KAN eyes by doctor  
    'I had my eyes checked by the doctor.'

- A transitive root without meN- is homophonous with what Guilfoyle et al. (1992) call a subjective passive like (32b).

(32) a. Kami menjemput dia  
    we MEN.meet him  
    'We met him.'

b. Dia kami jemput  
    He us met  
    'He was met by us.'

- If meriksa in (31b) is a subjective passive as described in (33a), the appearance of –kan is expected; it Case-licenses the theme argument. In fact, the English translation of (31b) suggests that it has a passive connotation.

(33) \[
\begin{array}{c}
\text{vP} \\
\text{NP} \\
\text{v'} \\
\text{the doctor v} \\
\text{meN-} \\
\text{\check{\text{check}}_{\text{PASS}}} \\
\text{PP} \\
\text{P NP} \\
\text{by the doctor} \\
\text{-kan} \\
\text{my eyes}
\end{array}
\]

- A verbal root like \text{\check{\text{destr}}} in English is ambiguous between active and passive, as shown in (34). (31b)=(33) is on a par with (34b), where the theme argument is Case-checked by of and the agent argument optionally appears with by.
(34) a. the enemy's destruction of the city  
    b. the destruction of the city (by the enemy)  
    c. *It was destroyed of the city by the enemy

• A remaining question is why (34c) is ill-formed; adjectives and intransitive verbs in English allow of but passive forms of transitive verbs do not allow of (cf. Chomsky (1981)).

• Case 2: A beneficiary argument can be phonetically empty, as shown in (35b). If -kan is absent, the absence of a beneficiary PP results in no benefactive meaning as in (35a), while if -kan is present, the beneficiary argument either overtly appears as a DP as in (7b) or is obligatorily implied as in (35b). If Indonesian is NOT a pro-drop language contrary to Son&Cole's (2008: 125) assumption, the benefactive interpretation of (35b) remains inexplicable.

    waiter \(\text{MEN.fetch}\) glass water (for guest)  
    'The waiter fetched a glass of water (for the guest).'
    b. Pelayan mengambilkan segelas air.  
    waiter \(\text{MEN.fetch- KAN}\) glass water  
    'The waiter fetched someone a glass of water.'

• Case 3: So-called instrumental or goal-PP constructions with -kan like (37b) do not appear to introduce a new DP argument. (Sneddon (1996: 78-80), Son&Cole (2008: 130-135). (35a,b) show that the transitive verb mengikat (tie) can take either a theme or an instrumental as its object. Mengikat in the construction (36a) can optionally take an instrumental PP as in (37a). If it is suffixed with -kan, the instrumental argument becomes its primary object, and the theme argument becomes a PP, as in (37b). In contrast to benefactive -kan in (35), -kan in (37b) can be omitted without causing change in meaning.

(36) a. Dia mengikat anjing itu.  
    3SG \(\text{MEN.tie}\) dog the  
    'He tied the dog.'
    b. Dia mengikat tali itu  
    3SG \(\text{MEN.tie}\) rope the  
    'He tied the rope.'
(37) a. Dia mengikat anjing itu dengan tali.  
    3SG \(\text{MEN.tie}\) dog the with rope  
    b. Dia mengikat-(kan) tali itu ke anjing.  
    3SG \(\text{MEN.tie- KAN}\) rope the to dog  
    'He tied the rope to the dog.'

• I will leave Cases 2 and 3 for future research.

• The claim that –kan is P and it appears lower than the root is quite different from Pylkkänen's (2008) High/Low distinction of Applicatives.

• In Pylkkänen's theory, all causatives are high; so Indonesian causatives like (5) and (6) should be high.

• Lexical and syntactic causatives are distinguished by the size of their complement: root phrase, (VP) or vP.

• Distinct meanings are associated with morphologically distinct high applicative morphemes in examples like (38).

\[
(38) \begin{align*}
\text{a. } & \text{ Mukasa o-se-is-a} & \text{Katonga} \\
& \text{Mukasa 3SG.PAST-laugh-CAUSE-FV Katonga} \\
& \text{’Musuka made Katonga laugh.’} \\
\text{b. } & \text{ Mukasa o-amb-el-a} & \text{Katonga} \\
& \text{Mukasa 3SG.PAST-speak-BENEF-FV Katonga} \\
& \text{’Mukasa spoke for Katonga.’}
\end{align*}
\]

• Pylkkänen observes that English lexical causatives and benefactives are subject to the transitivity restriction of the kind found in Indonesian examples (5)-(7).

• But in Pylkkänen's theory, all causatives are high, and the contrast between (39) and (40) is attributed to the claim that English lexical causatives select for a root phrase, which does not have an external argument in its projection.

• The contrast between (41) and (42) is explained under the assumption that English benefactives are low. In brief, (39)-(42) are not given a unified analysis in Pylkkänen's theory.

(39) \begin{align*}
\text{a. } & \text{ The ice melted.} \\
& \text{b. } \text{ John melted the ice.} & \text{(unaccusative --> causative)}
\end{align*}

(40) \begin{align*}
\text{a. } & \text{ Sue laughs.} \\
& \text{b. } \text{*Mary laughs Sue.} & \text{(unergative -->*causative)}
\end{align*}

(41) \begin{align*}
\text{a. } & \text{ I baked a cake for him.} \\
& \text{b. } \text{ I baked him a cake.} & \text{(transitive --> benefactive)}
\end{align*}

(42) \begin{align*}
\text{a. } & \text{ Mary spoke for Sue.} \\
& \text{b. } \text{*Mary spoke Sue.} & \text{(unergative --> *benefactive)}
\end{align*}

• Son and Cole (2000: 145): Both causative and benefactive -kan are low applicatives, but they are given distinct semantic characterizations.

• Their claim that -kan is a result head is alleged to be based on the generalization that the beneficiary DP argument is a prospective possessor of the theme argument, as has been observed for English double object constructions like (43) (cf. Oerhle (1976), Pesetsky (1995), Beck and Johnson (2004) etc.).

(43) \begin{align*}
\text{a. } & \text{ Sally knitted Peter a sweater.} & \text{(only possession reading)} \\
& \text{b. } \text{ Sally knitted a sweater for Peter.} & \text{(possession and non-possession readings possible)}
\end{align*}
Son&Cole's claim does not accord with Sneddon (1996: 81): Indonesian allows a wider range of benefactive verbs with -kan than English double object verbs, and they typically express a purely benefactive (non-possessive) meaning. In particular, (44) does not imply change of the possessor of the cases; its English translation calls for a beneficiary PP. See also Chonan (2009).

(44) Sopir membawakan saya koper yang berat.
the driver MEN.carry-KAN me bag heavy.
'The driver carried the heavy cases for me.'  'The driver carried me the heavy cases.'

8. Some implications

- Lexical causatives and benefactives in English can be analyzed as involving the same phonetically null morpheme. If it is a kind of P on a par with -kan, my account of the transitivity restriction in Indonesian causatives and benefactives can be extended to (39)-(42).

- Indonesian verbal roots cannot be suffixed doubly with –kan, and English derived nominals cannot take two instances of of, as shown in (45).

- Then, lexical causatives like melt in (46b), if analyzed as being suffixed by an empty affixal P, should not take a benefactive argument; (46c-e) should all be ill-formed.

(45) a. *meN. ∨ -kan-kan
b. *John's cracking of me of the nut (cf., Kayne (2008))
(46) a. The ice melted.
b. John melted the ice.
c. ?John melted me some ice.  (grammatical in Pylkkänen (2008))
d. ?John broke me a block of ice.
e. *John cracked me the nut.

References

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