

Argument linking in Japanese – some facts and suggestions

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1. Some previous results about argument linking in Japanese

Let me begin with some insights mainly based on Gamerschlag (1996), which seem to be uncontroversial.

- Besides nominative (*ga*) and accusative (*o*), Japanese exhibits a structural dative (*ni*), alongside with a nonstructural locative/goal marker (*ni*).
- There are three classes of canonical verbs: the subject of intransitive verbs is marked by *ga*, transitive verbs show the case pattern $\langle ga, o \rangle$, and ditransitive verbs show the case pattern $\langle ga, ni, o \rangle$.
- Nominative *ga* (unless replaced by the topic marker *wa*) must appear in each clause, so DEFAULT ranks high. Only under very specific contextual circumstances, the argument that usually appears in the nominative can bear semantic case, illustrated by the following examples

- (1) a. Boku-kara sono sake-o nom-u.
I-ABL this sake-ACC drink-PRES
'I am beginning now to drink the sake.'
- b. Ken-kara sono sake-o non-da.
Ken-ABL this sake-ACC drink-PAST
'Ken was the first who started drinking sake.'
(after some sake was brought to a group of people)
- c. Boku-ni soo iw-are temo.
I-DAT so say-PASS even.if
'Even if it is told me so.'
(when I insist in disbelieving some statement)

- In the direct passive of ditransitive verbs both case patterns $\langle ga, ni \rangle$ and $\langle o, ga \rangle$ can appear, that is, either the *o*-argument or the *ni*-argument advances to nominative. It follows that MAX(+hr,+lr) is not crucial.
- The double-*o* constraint holds in general, which can be described by UNIQUENESS(ACC). A double-dative constraint seems to play a role for some speakers but not for all, so UNIQUENESS(DAT) may rank lower (speaker-dependent).
- The *ni*-phrase in the direct passive expressing the demoted agent is non-structural (which can be shown by the *zibun*-test, see Washio 1995:57). Thus, the direct passive is the usual passive, as found in many languages. It is represented by means of existential binding of the highest argument, given that it is the controller of the whole event. There is some preference that the directly affected argument becomes nominative.
- Lexically marked *ga-ni* verbs are mostly passivizable, and then the *ni*-marked argument becomes nominative. Therefore, DEFAULT must rank above MAX(lex).

- (2) a. Takao-ga musume-ni tikayot-ta
 Takao-NOM daughter-DAT approach-PAST
 ‘Takao approached my/his daughter.’
 b. Musume-ga Takao-ni tikayor-are-ta
 daughter-NOM Takao-BY approach-PASS-PAST
 ‘My daughter was approached by Takao.’ (Washio 1995: 35)

- There are some verbs with double-nominative (such as *aru* ‘possess’, *iru* ‘need’, and the potential form with *rare-*). The generalization can be made that all these verbs are static. The fact that double-nominative appears in this case can be captured by the markedness constraint (or accusative filter) in (3a). Such a constraint might be motivated by the assumption that the feature [+hr] correlates with affectedness, but nothing can be affected in a static situation. This constraint can be derived by harmonic alignment of the two scales given in (3b).

- (3) a. $*(+hr)/static$.
 b. $[+hr] > [+lr]$ (the feature [+hr] is morphologically more relevant than the feature [+lr])
 dynamic > static (dynamic expressions are semantically preferred)

In the following, I try to integrate some further observations made by Washio (1995) and Hasegawa (2001), thereby following the line offered by Gamerschlag (1996), and also using the section on possessor extension in Wunderlich (2000).

2. Indirect passive and double-NOM passive

Besides the direct passive, Japanese exhibits also an indirect passive as well as a double-NOM passive, illustrated by the following examples from Washio (1995).

- (4) a. Direct passive
 Tanaka-kyoozyu-ga/wa gakusei-tati-ni kiraw-are-te i-ru.
 Tanaka-prof-NOM/TOP student-PL-BY hate-PASS-CONT be-PRES
 ‘Prof. Tanaka is hated by the students.’
- b. Indirect passive
 Tanaka-kyoozyu-ga/wa gakusei-tati-ni tyosyo-o subete
 Tanaka-prof-NOM/TOP student-pl-DAT book-ACC all
 yom-are-te i-ru.
 read-PASS-CONT be-PRES
 ‘Prof. Tanaka is affected by the students having read all his books.’
- c. Double nominative passive
 Tanaka-kyoozyu-ga/wa gakusei-tati-ni tyosyo-ga yoku
 Tanaka-prof-NOM/TOP student-pl-?? book-NOM well
 yom-are-te i-ru
 read-PASS-CONT be-PRES
 ‘Prof. Tanaka is such that his books have been read well by the students.’

The *zibun*-test shows that the *ni*-phrase of the indirect passive is a structural subject (alongside with the nominative phrase), in contrast to the *ni*-phrase in the direct passive (Washio 1995: 57; his examples illustrate that the indirect passive allows two readings for *zibun*, while the direct passive only allows one reading). Therefore, the analysis proposed by Gamerschlag (1996), which introduces the affectee as an additional argument, is essentially correct. (Note that a similar affectedness extension has been observed for Basque in Joppen & Wunderlich 1995.) Thus, the morpheme *-are* is ambiguous, with the two readings given in (5).

- (5) a. Direct passive
 -are : $\lambda V \lambda y \exists x \lambda s V(x,y)(s)$
 yom-are : $\lambda y \exists x \lambda s \text{READ}(x,y)(s)$
- b. Indirect passive
 -are: $\lambda V \lambda x \lambda u \lambda s [\text{AFF}(u) \& V(x)](s)$
 +lr
 yom-are: $\lambda y \lambda x \lambda u \lambda s [\text{AFF}(u) \& \text{READ}(x,y)](s)$
 +lr

The feature [+lr] is necessary to capture the fact that also intransitive verbs can be indirectly passivized, which results in a nominative-dative pattern. The affected person must somehow be a participant of the event, it can be the possessor of an argument, as in the example above. But this is not a necessary condition.

The indirect passive does not require negative affectedness, see (6a); however, if nothing else is implied, negative affectedness is the default, as shown by Washio. It is even possible to use this construction with an inanimate affectee involved in a highly important situation, as in (6b-d).

- (6) a. Takao-ga sensei-ni musuko-o home-rare-ta
 Takao-NOM teacher-DAT son-ACC admire-PASS-PAST
 ‘Takao was affected by the teacher admiring his son.’ (Washio 1995: 61)
- b. Sono e-ga/wa ooku-no hito-ni na-o
 that painting-NOM/TOP plenty-GEN person-DAT name-ACC
 sir-are-te i-ru
 know-PASS-CONT be-PRES
 ‘That painting is such that many people know its name.’ (Ono 1988)
- c. Sono tatemono-ga/wa ... sono kentikuka-o ...
 that building-nom/top ... that architect-ACC ...
 ‘That building is such that many people know its architect.’
 Sono hone-wa ... hakkensya-o ...
 that bone-TOP ... discoverer-ACC ...
 ‘That bone is such that many people know its discoverer.’
- d. Sono tatemono-wa gakusei-ni sono kentikuka-o
 that building-TOP student-DAT that architect-ACC
 tutae-rare-te i-ru.
 inform-PASS-CONT be-PRES
 ‘That building is such that the students are informed about the architect.’

In (6d), the underlying verb *tutaeru* ‘inform’ is ditransitive, so *gakusei* ‘student’ receives dative already in the basic clause; nevertheless, this is an example of indirect passive by which an inanimate affectee is added. What is special about (6d) is the fact that the informing person is unexpressed; it seems that the suffix *-are* conveys both passive and indirect passive.

A nice minimal pair of examples with causative vs. indirect passive has been presented by Washio (1995:6).

- (7) a. John-ga Mary-ni tokei-o nusum-ase-ta.
 John-NOM Mary-DAT watch-ACC steal-CAUS-PAST
 ‘John had Mary steal a watch.’
 $\lambda y \lambda x \lambda u \lambda s$ [ACT(u) & STEAL(x,y)](s)
- b. John-ga Mary-ni tokei-o nusum-are-ta.
 John-NOM Mary-DAT watch-ACC steal-PASS-PAST
 ‘John had a watch stolen by Mary.’
 $\lambda y \lambda x \lambda u \lambda s$ [AFF(u) & STEAL(x,y)](s)
 +lr

Washio also notes that the English sentence (8a) is ambiguous; it can either mean that John made Mary steal his watch or that he was affected by the circumstance that Mary stole his watch. Thus, the two instances differently expressed in (7) can be captured by just one English construction. This fact is accounted for by the assumption that *have* when it is applied to a passive verb is ambiguous between causative and affectedness reading.

- (8) a. John had his watch stolen by Mary.
 b. $\lambda y \lambda u \lambda s$ [ACT(u)/AFF(u) & $\exists x$ STEAL(x,y)](s)

There is obviously again some connection between passive and affectedness. If an affected object rather than the agent is made prominent, it is possible to introduce another person that is affected by the event.

Turning to the double-NOM passive construction, we see that the first nominative element must be a possessor of one of the arguments of the verb that follows. Washio (1995) deliberates on the question of whether this is a focus construction based on the direct passive, similar to the examples in (9). (If this is correct, the *ni*-phrase in the double-NOM passive should not be able to bind *zibun*.) Note that only the first NP can be understood as focused, not the second one.

- (9) a. Hanako-ga/wa asi-ga naga-i.
 Hanako-NOM/TOP leg-NOM long-PRES
 ‘Hanako, her legs are long.’ (Hasegawa 2001: (36a))
- b. Takao-ga musuko-ga syusseseta.
 Takao-NOM son-NOM succeed (in life)-PAST
 ‘Takao, his son succeeded in life.’ (Washio)

However, insofar as the double-NOM construction also allows the topic marker *wa*, the focus reading is out of place. Since this type of construction always requires that the

first nominative NP is integrated as a possessor into the verb, one might account for it by a representation in which the predicate POSS is added to the verb in highest position, just like AFF in (5b) above. Such a representation has been proposed by Wunderlich (2000) to capture a similar construction of German, illustrated in (10a,b), which is restricted to intransitive verbs with an affected theme. (10c) shows the analysis given by Wunderlich (2000: 262) (which, rephrased in syntactic terms, is a kind of possessor raising): the possessor must be marked by [+hr] to be realized as dative, while the possessum must be identified with the argument of the verb.

(10) Topmost possessor in German

- a. Mir schmerzt der Fuß.
I.DAT hurts the foot
'My foot hurts'
- b. Ihm zerbrach die Brille.
he.DAT broke the glasses
'His glasses broke.'
- c. $\lambda x \lambda u \lambda s$ [POSS(u,z) & HURT(x)](s) with $z=x$
+hr

A similar solution can be found for the double-NOM construction in Japanese. The POSS relation in topmost position captures the intuition that the possessor is somewhat foregrounded, without being focused in the literal sense. Differently from German, the possessor is unmarked, and the construction is possible with either nonagentive intransitives or direct passives.

(11) Topmost possessor in Japanese

- a. Possessor extension: $\lambda V \lambda u \lambda s$ [POSS(u,z) & V](s)
where z must be identified with an argument of V
- b. Example (9b): $\lambda x \lambda u \lambda s$ [POSS(u,z) & SUCCEED(x)](s) with $z=x$
- b. Double-NOM passive (see example (4c)):
 $\lambda y \lambda u \lambda s$ [POSS(u,z) & $\exists x$ READ(x,y)](s) with $z=y$

If the possessor is introduced by the highest predicate of a complex event, such an event is always a static one, hence, double-nominative results from the markedness constraint *(+hr)/static. This is in its essence also the conclusion drawn by Washio (1995:238ff).

Summarizing so far, the indirect passive is regarded as a construction in which a homonym of the passive morpheme contributes an affected entity to the active verb in highest position, while the double-NOM passive is analyzed as a direct passive with the addition of a possessor in highest position. The double-NOM follows from a general restriction on accusatives in Japanese.

In addition, there might be further restrictions. As Washio (1995) shows in the appendix of his book, double-NOM passives in Japanese are possible under the following conditions:

- with relational type nouns such as *osiego* 'one's student', *imooto* 'sister', *syuto* 'capital city' in both the *-te iru* form and in simple tense,

- with body part nouns such as *sippo* ‘tail’, *te* ‘hand’, *kao* ‘face’ only in the *-te iru* form, provided that the resulting state expressed by the verb continues.

Consider the following pair of examples where the resulting state continues only in (12a).

- (12) a. John ga asi-ga koteis-are-te i-ta.
 John-NOM foot-NOM fix-PASS-CONT be-PAST
 ‘John had his foot tied (to something).’
 b. ?? John ga asi-ga hum-are-te i-ta.
 John-NOM foot-NOM stomp-PASS-CONT be-PAST
 ‘John had his foot stomped on.’

By contrast, Korean allows double-NOM passives for all body part terms, irrespective of the verb form and the resulting state. Here, the counterpart to (12b) above is grammatical.

- (13) Ai-ka pal-i palp-hi-ess-ta.
 child-NOM foot-NOM stomp-PASS-PAST-DECL
 ‘The child was stomped on the foot.’

Thus, the conditions under which the markedness constraint $*(+hr)/static$ works slightly differ in the two languages.

3. Causatives with an additional reading

A problem for our analysis arises in the non-agentive causative construction illustrated by the following examples. In (14a,b) a psychological state is caused, and the causing entity can be expressed by either the dative (*ni*) or the instrumental (*de*) – this construction is not very productive –, whereas in (14c) a physical state is caused; here, only the instrumental is possible.

- (14) a. Kyoko-ga/wa sono hitokoto-ni kimoti-o nagom-ase-ta.
 Kyoko-NOM that one=word-DAT feeling-ACC calm-CAUSE-PAST
 ‘Kyoko got her feelings calmed by that word.’ (Hasegawa (18a))
 b. Kyoko-ga/wa sono hanasi-ni kokoro-o kumor-ase-ta.
 K.-NOM/TOP that story-DAT heart-ACC dark-CAUS-PAST
 (??hare-sase-ta)
 ??clear-CAUS-PAST
 ‘Kyoko got her heart spoiled by that story.’ (??cleared)
 c. Kyoko-ga ziko-de kodomo-o sin-ase-ta
 K.-NOM accident-INSTR child-ACC die-CAUS-PAST
 ‘Kyoko got her child killed in/by an accident’

The problem with this construction is this: The nominative argument is not the causer but rather a possessor of the affected entity, however, different from the double-NOM passive, accusative is not blocked here. In the contrary, (14a,b) exhibit the canonical ditransitive case pattern (the *zibun* test is difficult to apply here). One might assume that the causative morphology always excludes a static reading, so that the restriction $*(+hr)/static$ does not apply here. Alternatively, one could suggest that this construc-

tion is at variance with the indirect passive, in that the causative triggers the affectedness extension. Thus, there are two analyses possible here.

- (15) a. $\lambda y \lambda x \lambda u \lambda s$ [POSS(u,z) & [CAUSE(x) & CALM(y)]] (s)
 b. $\lambda y \lambda x \lambda u \lambda s$ [AFF(u) & [CAUSE(x) & CALM(y)]] (s)

Both representations in (15) predict the canonical ditransitive pattern <ga, ni, o>. The occurrence of the instrumental rather than dative is semantically triggered in order to make the deviation from a normal causative visible. In the examples (14a,b), the canonical pattern is possible because the reading that Kyoko herself made a word to calm her, or made a story to spoil her, is rather improbable, whereas in (14c) the canonical pattern could suggest that Kyoko herself caused the accident to kill the child.

Note that there is a paraphrase of (14a) with neither a morphological causative nor possessor raising; here, the *ni*-phrase is a semantic adjunct.

- (16) Kyoko-no kimoti-ga sono hitokoto-ni nagon-da.
 Kyoko-GEN feeling-NOM that one=word-BY calm-PAST
 ‘Kyoko’s feelings calm with that word.’ (Hasegawa 2001: (26a))

4. Double-dative

Washio (1995:36) states that indirect passive is also possible with *ga-ni* verbs, resulting in double-dative:

- (17) Taroo-ga Takao-ni musume-ni tikayor-are-ta.
 Taro-NOM Takao-DAT daughter-DAT approach-PASS-PAST
 ‘Taro was affected by Takao’s approaching his daughter.’

When building up more complex constructions, iteration of lexical marking (permissive *ni*-causative, *ga-ni* verbs, indirect passive) must be expected, so that double-dative should appear. It is judged as grammatical by at least some speakers.

- (18) a. Indirect passive of the *ni*-causative variant
 Mariko ga syuutome-ni kodomo-ni/o osoku made
 Mariko-NOM mother.in.law-DAT child-DAT/ACC late until
 asob-ase-rare-ta
 play-CAUS-PASS-PAST
 ‘Mariko was affected by her mother-in-law letting her child play late.’
 b. $\lambda y \lambda z \lambda u \lambda s$ [AFF(u) & [ACT(z) & PLAY(y)]] (s)
 +lr+lr

In (18a), *o* is much better than *ni*, maybe because the *ni*-alternation is not necessarily inherited to the indirect passive. However, with a transitive base verb, no problem arises with the double-dative.

- (19) Indirect passive of a causativized transitive verb
- a. Mariko ga syuutome-ni kodomo-ni hon-o
 Mariko-NOM mother.in.law-DAT child-DAT book-ACC
 osoku made yom-ase-rare-ta
 late until read-CAUS-PASS-PAST
 ‘Mariko was affected by her mother-in-law letting her child read the book late.’
- b. $\lambda y \quad \lambda x \quad \lambda z \quad \lambda u \quad \lambda s$ [aff(u) & [act(z) & read(x,y)]] (s)
 (+lr) +lr

Here, *kodomo-ni* ‘child-DAT’ realizes structural dative. Obviously, double-dative is preferred to double-accusative, which would be an alternative. There are more combinations showing that double-dative is acceptable.

- (20) Permissive causative of a *ga-ni* verb (*aweru* ‘meet’):
- a. Obasan-ga Noriko-o/ni Yoshiki-ni aw-as(as)e-ta
 aunt-NOM N.-ACC/DAT Y.-DAT meet-CAUS-PAST
 ‘The aunt let Noriko meet Yoshiki.’
- b. $\lambda y \quad \lambda x \quad \lambda z \quad \lambda s$ [act(z) & meet(x,y)] (s)
 +lr (+lr)

- (21) Indirect passive of a causativized *ga-ni* verb:
- a. Noriko-wa ozisan-ni kodomo-o obasan-ni aw-as(as)e-rare-ta
 N.TOP uncle-DAT child-ACC aunt-DAT meet-CAUS-PASS-PAST
 ‘Noriko was affected by the uncle having let her child meet the aunt.’
- b. $\lambda y \quad \lambda x \quad \lambda z \quad \lambda u \quad \lambda s$ [aff(u) & [act(z) & meet(x,y)]] (s)
 +lr +lr
 +lr +lr
 +hr +hr +hr -hr

Here, *kodomo* ‘child’ receives the accusative, though it is also a medial argument. This can be explained along the following lines: (i) A third dative is blocked, which is captured by the ranking UNIQUENESS(DAT) » MAX(+hr,+lr); (ii) It is more important to link the lexical features than the default features, which is captured by the ranking MAX(lex) » MAX(+hr,+lr). The double causative morphology *-asase-* with simple causative meaning is a rather new development in colloquial speech. Example (21a) has another reading in which the double causative is transparently used: ‘Noriko was affected by the uncle having Noriko herself let her child meet the aunt.’

5. Interaction with topic and focus

The interaction with topic must be part of the argument linking system. Consider the object topicalizations in (22).

- (22) a. Mary-ni-wa John-ga sono hon-o age-ta.
 Mary-DAT-TOP John-NOM that book-ACC give-PAST
 ‘As for Mary, John gave her the book.’

- b. Sono hon-wa John-ga Mary-ni age-ta.
 that book-TOP John-NOM Mary-DAT give-PAST
 ‘As for the book, John gave it to Mary.’
- c. John-wa Mary-ga nagut-ta.
 John-TOP Mary-NOM hit-PAST
 ‘As for John, Mary hit him.’

With the topic marker *wa*, the combinations **ga-wa* and **o-wa* are excluded (though Old Japanese allowed *o-wa*), while *ni-wa*, *kara-wa* etc. are possible, and the only way to topicalize dative or ablative arguments. Thus, *wa* only bears the information [+top]. That the accusative particle, but not the dative particle, is dropped can be explained by two assumptions: (i) There is the ranking MAX(+top) » MAX(+hr) (which, apparently, has been introduced between old and modern Japanese); (ii) There is no mutual ranking between MAX(+top) and MAX(+hr,+lr).

Some generative linguists of Japanese, including Saito, claim that, alongside with the topic construction in (22c), also (23a) with double-NOM is possible.

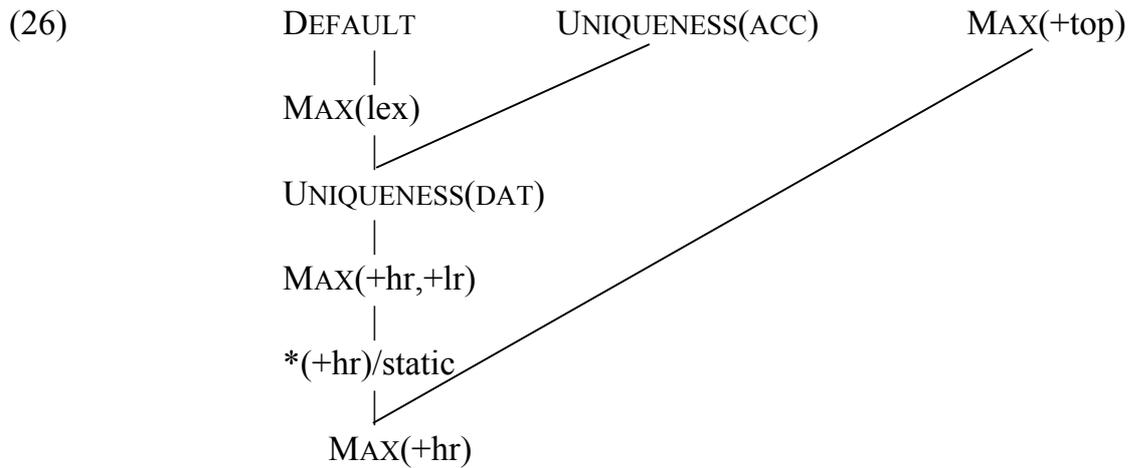
- (23) a. ? John-ga Mary-ga nagut-ta.
 John-NOM Mary-NOM hit-PAST
 ‘John, Mary hit.’
- b. Tokyo-ga jinko-ga oi
 Tokyo-NOM population-NOM be.much
 ‘Tokyo, the population is much.’

However, (23a) would need a very specific context. If it is possible at all, the first NP must be identified with the patient, and the second NP with the agent. At first sight, this construction looks similar to the construction in (23b), however, with an important difference: it is not the possessor of a relational complement (‘population’) that is raised to the first nominative position but rather an argument of the verb itself. Moreover, (23a) would not be an instance that can be captured by the constraint **(+hr)/static*. Further examples such as (24a,b) with a ditransitive verb are highly questionable, while (24c) is simply incomprehensible.

- (24) a. ??John-ga Taro-ga Mary-ni syookai-si-ta.
 John-NOM Taro-NOM Mary-DAT introduction-do-PAST
 ‘John, Taro introduced him to Mary.’
- b. ??Mary-ga Taro-ga John-o syookai-si-ta.
 Mary-NOM Taro-NOM John-ACC introduction-do-PAST
 ‘Mary, Taro introduced John to her.’
- c. *John-ga Mary-ni Taro-ga syookai-si-ta.

It is unclear what the questionable sentences really could mean. The first nominative is neither a topic (which is to be marked by *wa*) nor licensed by a foregrounded POSS-relation. Could it be a focus? This is improbable, too, because there is a focus construction by which the focused element is dislocated to the right rather than to the left, see (25). Therefore, I conclude that the alleged acceptability of (23a) is merely a theoretical artefact.

This leads us to the following constraint ranking for Japanese.



7. Conclusions

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Consider again the German construction with a possessor on top.

- (27) Ihr starb das Kind.
 she.DAT died the child
 ‘Her child died.’

This construction could be captured by the affectedness extension, which in this case could imply the possessor reading as a default for integrating the participant. However, the possessor raising account is more specific, and it allows the inference that the possessor is affected. Therefore, only a more detailed consideration of the possible instances of the construction can decide whether the extension with AFF or POSS has to be assumed. The fact that Japanese makes a crucial formal distinction between the two possibilities, with the indirect passive on one hand and the double-NOM passive on the other, indicates that both extensions are relevant.

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Düsseldorf-wa rokugatsu-ga ichiban ame-ga horu.
 D.-TOP June-NOM most rain-NOM fall.PRES
 'As for Düsseldorf, it rains most in June.'