Argument Struture and Ditransitive Verbs in Japanese

1. Introduction

(1) Double object construction (DOC)
   John sent Mary a package.

(2) *to*-dative construction
   John sent a package to Mary.

Argument-structure differences
DOC, but not the *to*-dative, may be associated with a causative meaning (Oehrle 1976)
(3) a.   The article gave me a headache.
   b. * The article gave a headache to me.

The goal in the DOC must be interpretable as a possessor (usually animate) (Mazurkewich and White 1984 ; cf. Bresnan 1978)
(4) a. I sent the boarder/*the border a package.
   b.I sent a package to the boarder/the border.

(5) France sent some African countries humanitarian aid.

Hierarchical structure: in the DOC the goal phrase (*Mary*) asymmetrically c-commands the theme (*a package*) (Barss and Lasnik 1986)
(6) a. John showed Mary herself.
   b. *John showed herself Mary.

We can also see this with licensing of NPI.
(7) a.   John sent no one anything.
   b. * John sent anyone nothing.

(8) VP-shell (Larson 1988)

(9) Marantz's (1993) DOC structure

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                         vP
             ┌───────────┴───────────┐
           John                      v
                           ┌─────────┴─────────┐
                           v                  VP₁
                                     ┌─────────┴─────────┐
                                   Mary                 V₁
                                            ┌────────────┴────────────┐
                         applicative⟶    V₁                        VP₂
                                                           ┌─────────┴─────────┐
                                                          V₂                a package
                                                           │
                                                          send
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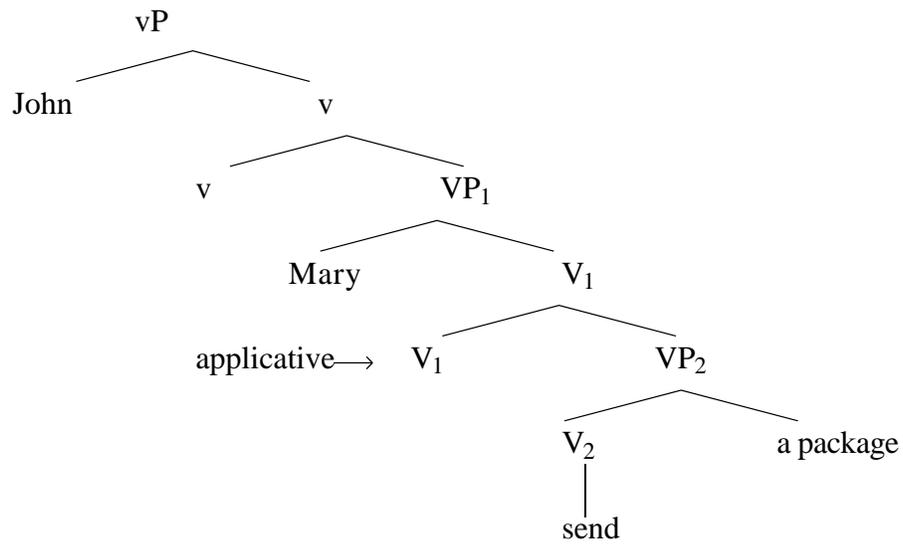
(10)   *to*-dative (Marantz 1993)

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                       vP
            ┌──────────┴──────────┐
          John                    v
                        ┌─────────┴─────────┐
                        v                  VP
                                  ┌─────────┴─────────┐
                             a package               V'
                                           ┌──────────┴──────────┐
                                           V                    PP
                                           │             ┌───────┴───────┐
                                          send           P             Mary
                                                         │
                                                         to
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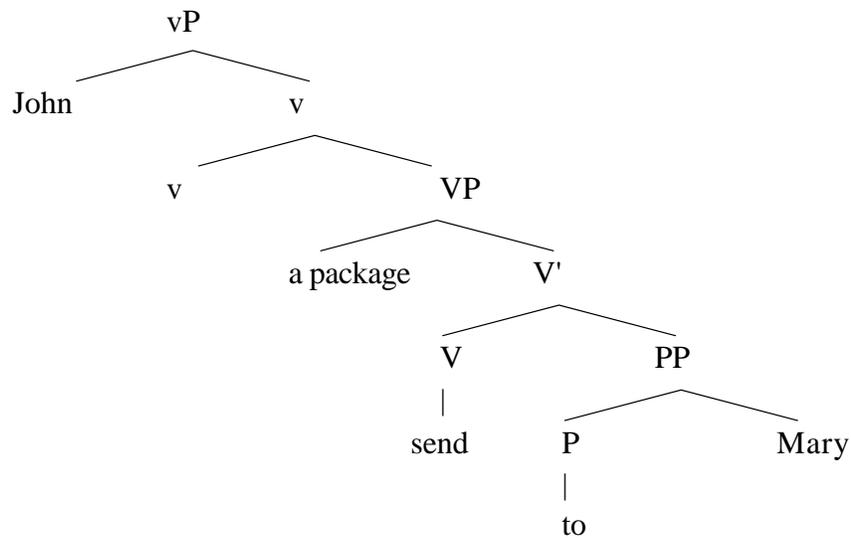
2. Ditransitive construction in Japanese

(11)   a.   Taroo-ga   Hanako-ni   nimotu-o   okutta
            Taro-Nom   Hanako-Dat   package-Acc   sent
            'Taro sent Hanako a package.'

       b.   Taroo-ga   nimotu-o   Hanako-ni   okutta
            Taro-Nom   package-Acc   Hanako-Dat   sent

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(12)   "Standard" analysis (Hoji 1985; cf. also Fukui 1993, Saito 1992, Tada 1993, Takano
        1998, and Yatsushiro 1998, 2003, among others)

Basic order: goal-theme	theme-goal order is derived by **optional scrambling**

Quantifiers in the order "goal-theme" only has surface scope
(13)   Taroo-ga   dareka-ni   dono-nimotu-mo   okutta.
        Taro-Nom   someone-Dat   every-package   sent
        'Taro sent someone every package.'   some > every, *every > some

In contrast, in the theme-goal order, the scope is ambiguous.
(14)   Taroo-ga   dono-nimotu-mo$_i$ dareka-ni t_i okutta.
        Taro-Nom   every-package$_i$ someone-Dat t_i sent
        some > every, every > some

This standard analysis predicts that, unlike English, we should not find any argument-structure differences.

(15)   **inanimate goal**
        Taroo-ga   dokoka-ni   dono-nimotu-mo   okutta.
        Taro-Nom   some place-Dat   every-package   sent
        'Taro sent every package to some place.'   some > every, every > some

(16)   Bresnan (1978): inanimate goal that can't be interpreted as possessor only possible in the
        to-dative construction.

Aoun and Li (1989) pointed out that there is a scope difference between the two constructions,
DOC and *to*-dative.
(17) a.   John sent some student every article. *every > some
     b.   John sent some article to every student. every > some

(18)   *Distinct underlying structure analysis* (Harley 1995, Kitagawa 1994, Miyagawa 1995,
        1997, Watanabe 1996).

DP vs. PP
Q-float cannot take place from within a PP (Miyagawa 1989).
(19) * Taroo-ga   <u>resutoran-kara</u>   <u>ni-ken</u>   tabemono-o   tanonda.
        Taro-Nom   restaurants-from   2-CL   food-Acc   ordered
        'Taro ordered food from two restaurants.'

Same observation with inanimate goal.

(20) a.　Taroo-ga　　　<u>tomodati-ni</u>　<u>futa-ri</u>　　　nimotu-o　　　okutta.
　　　　　Taro-Nom　　friends-Dat　2-CL　　　　package-Acc　sent
　　　　　'Taro sent two friends a package.'

　　　b. * Daitooryoo-ga　　　<u>kokkyoo-ni</u>　<u>futa-tu</u>　　　heitai-o　　　　okutta.
　　　　　President-Nom　　borders-to　　2-CL　　　　soldiers-Acc　sent
　　　　　'The President sent two borders soldiers.'

(21)　　Daitooryoo-ga　　<u>futa-tu-no-kokkyoo-ni</u>　heitai-o　　　　okutta.
　　　　President-Nom　　2-CL-borders-to　　　　　soldiers-Acc　sent
　　　　'The President sent soldiers to two borders.'

(22)　　Taroo-ga　<u>kokkyoo-o</u>　　　　<u>futa-tu</u>　otozureta.
　　　　Taro-Nom　countries-Acc　　2-CL　　　visited
　　　　'Taro visited two borders.'

(23)　　goal-theme: DOC if goal is animate; *to*-dative if it is inanimate.

3. Two goal positions: high and low

(24) a. high goal (possessive) ….low goal (locative) … theme
　　　b. high goal (possessive) …theme. ….low goal (locative)

Two-goal sentences (okuru 'send', todokeru 'deliver', kaesu 'return', kakeru 'ring', ataeru
'give', dasu 'send', azukeru 'entrust') (cf. also Cuervo, in press)

(25)　　Taroo-ga　Hanako-ni　　Tokyo-ni　nimotu-o　　　okutta
　　　　Taro-Nom　Hanako-Dat　Tokyo-to　package-Acc　sent
　　　　 'Taro sent Hanako a package to Tokyo.'

(26)　　John sent Mary a package to her office in Boston.

Word-order rigidity
(27)　　*Low goal - high goal
　　　 * Taroo-ga　Tokyo-ni　Hanako-ni　　nimotu-o　　　okutta.
　　　　Taro-Nom　Tokyo-to　HanakoDat　package-Acc　sent
　　　　'Taro sent Hanako a package to Tokyo.'

(28)   */?Theme - high goal
       */?Taroo-ga nimotu-o Hanako-ni   Tokyo-ni   okutta.
       Taro-Nom package-Acc HanakoDat   Tokyo-to   sent
       'Taro sent Hanako a package to Tokyo.'

(29)   Theme - low goal
       Taroo-ga Hanako-ni   nimotu-o   Tokyo-ni   okutta.
       Taro-Nom HanakoDat   package-Acc Tokyo-to   sent
   'Taro sent a package to Hanako to Tokyo.'

(30)   **Word-order permutation: only possible with low goal**

No way to tell if goal is high or low if it is animate, and it precedes the theme
(31)   Taroo-ga   gakusei-ni   ronbun-o   okutta.
       Taro-Nom   student-NI   article-Acc sent
       'Taro sent his students an article.'

If the goal follows the theme, it must be a low goal
(32)   Taroo-ga   ronbun-o   gakusei-ni   okutta.
       Taro-Nom   article-Acc   student-NI   sent

(33)   vP   The structure of high and low goals

               Taroo   v

                      VP_1 v

               Hanako-Dat V_1

                           VP_2 V_1 (applicative)

                     PP V'_2

               Tokyo   to   a package V_2
                                                |
                                              send

5
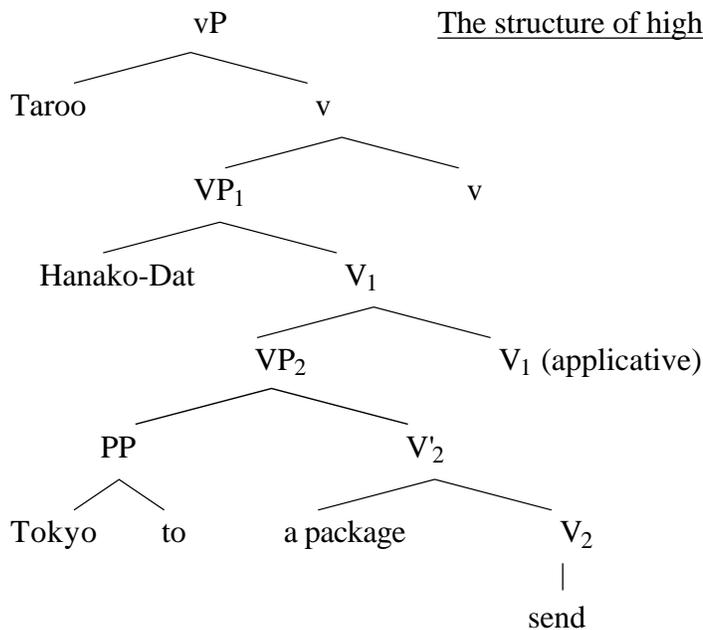
4. Evidence for high and low goals

4.1. Quantifier scope in the two-goal construction

(34) Taroo-ga   <u>dareka-ni</u>   <u>subete-no-basho-ni</u>   nimotu-o   okutta
     Taro-Nom   someone-Dat all -Gen-place-to   package-Acc   sent
      'Taro sent someone a package to every place.'
     some > every, *every> some

(35) Taroo-ga   <u>dareka-ni</u>   Tokyo-ni <u>subete-no-nimotu-o</u>   okutta.
     Taro-Nom   someone-Dat Tokyo-to all-Gen-package-Acc   sent
      'Taro sent someone every package to Tokyo.'
     some > every, *every> some

In contrast, the locative goal allows inverse scope with the theme.
(36) Taroo-ga   Hanako-ni   <u>dokoka-no basho- ni</u>   <u>subete-no-nimotu-o</u> okutta.
     Taro-Nom   Hanako-Dat   some-Gen-place-to   all -Gen-package-Acc sent
     'Taro sent Hanako every package to some place.'
     some > every, every> some

4.2. Categorical status of the high and low goals and the passive: DP (HG), PP (LG)

(37) a. Taroo-ga   nimotu-o   okur-are-ta.
       Taro-Nom package-Acc send-PASS-PAST
       'Taro was sent a package.'

   b.* Tokyo-ga   nimotu-o   oku-rare-ta
       Tokyo-Nom package-Acc send-PASS-PAST
       'Tokyo was sent a package.'

(38)   Two-goal construction
     a. Taroo-ga Tokyo-ni   nimotu-o   okur-are-ta
       Taro-Nom Tokyo-to   package-Acc send-PASS-PAST
       'Taro was sent a package to Tokyo.'

     b. * Tokyo-ga   Taroo-ni   nimotu-o   okur-are-ta
       Tokyo-Nom Taroo-Dat package-Acc send-PASS-PAST
       'Tokyo was sent a package to Taro.'

(39) a. Gakusei$_i$-ga   Taroo-ni   **t$_i$** san-nin nimotu-o   okur-are-ta.
      students$_i$-Nom Taro-by   **t$_i$** 3-CL   package-Acc send-PASS-PAST
      'Three students were sent a package by Taro.'   (cf. Kubo 1992, Miyagawa 1996)

    b. * Gakusei$_i$-ga   Taroo-ni   nimotu-o   **t$_i$**   san-nin okur-are-ta.
        students$_i$-Nom Taro-by   package-Acc **t$_i$**   3-CL send-PASS-PAST
        'Three students were sent a package by Taro.'   (Miyagawa 1996)

4.3. Postposition -*e*

The postposition -*e* 'to'.
(40)   Taroo-ga   Hanako-ni/*-e Tokyo-ni/-e   nimotu-o   okutta.
        Taro-Nom Hanako-Dat/-to Tokyo-to/-to   package-Acc sent

(41) a. Taroo-ga   Hanako-*e*   nimotu-o   okutta.
      Taro-Nom Hanako-to   package-Acc sent
      'Taro sent a package to Hanako.'

    b. Taroo-ga   nimotu-o   Hanako-*e* okutta.
      Taro-Nom package-Acc Hanako-to sent

(42)   **inanimate goal**
    Taroo-ga dokoka-ni   dono-nimotu-mo   okutta.
    Taro-Nom some place-NI every-package   sent
    'Taro sent every package to some place.'   some > every, every > some

(43)   Taroo-ga dareka-*e*   dono-nimotu-mo   okutta.
    Taro-Nom someone-to every-package   sent
    'Taro sent every package to someone.'   some > every, every > some

4.4. Locality and passivization

(44) a.   The package was sent to Mary.
    b.   *The package was sent Mary.

(45)   Mary was sent a package.

(46) Nimotu-ga   Taroo-ni (yotte)   Hanako-ni   okur-are-ta.
    package-Nom Taro-by   Hanako-NI   send-Pass-Past
    'The package was sent (to) Hanako by Taro.'

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This *ni* is a postposition (cf. Miyagawa 1996).

(47) * Nimotu-ga   Taroo-ni (yotte)   <u>gakusei-ni</u>   <u>futa-ri</u>   okur-are-ta.
        package-Nom Taro-by   students-NI   2-CL   send-Pass-Past
        'A package was sent two students by Taro.'

5. Word order permutation: derived or base generated?

Low goal - theme "permutation": movement or base generated?
(48) a. Taroo-ga   Hanako-ni   Tokyo-ni   nimotu-o   okutta
        Taro-Nom Hanako-Dat Tokyo-to   package-Acc   sent
        'Taro sent a package to Hanako to Tokyo.'

    b. Taroo-ga   Hanako-ni   nimotu-o   Tokyo-ni   okutta
        Taro-Nom Hanako-Dat   package-Acc Tokyo-to   sent

5.1. Idioms: both *goal V* and *theme V*

(49)   *kakeru* 'hang'
    a.   goal-V idiom
          Taroo-wa sainoo-o **hana-ni   kaketeiru**.
          Taro-Top talent-Acc nose-to   hanging
          'Taro always boasts of his talent.'
          *....**hana-ni**   sainoo-o   **kaketeiru**.

    b.   theme-V idiom
          Taroo-wa   sono giron-ni   **hakusya-o   kaketa**.
          Taro-Top   that controversy-to   spur-Acc   hang
          'Taro added fresh fuel to the controversy.'
          *... **hakusya-o**   sono giron-ni **kaketa**.

(50) *dasu* 'let out, send'

    a. goal-V idiom

        Taroo-wa   omotta koto-o   **kuti-ni**   **dasu**.
        Taro-Top   thought thing-Acc   mouth-to   let.out
        'Taro says what's on his mind.'
        ???...**kuti-ni** omotta koto-o **dasu**.

    b. theme-V idiom

        Taroo-wa   hito-no   koto-ni **kuti-o**   **dasu**.
        Taro-Top   person-Gen business mouth-Acc let.out
        'Taro cuts in on someone else's business.'
        *...**kuti-o** hito-no koto-ni **dasu**.

(51) *ireru* 'put in'

    a. goal-V idiom

        Taroo-wa   kuruma-o **te-ni**   **ireta**.
        Taro-Top   car-Acc   hand-in   put in
        'Taro acquired a car.'
        *...**te-ni** kuruma-o **ireta**.

    b. theme-V idiom

        Taroo-wa genkoo-ni **te-o**   **ireta**.
        Taro-Top draft-to   hand-Acc put in
        'Taro revised the draft.'
        *...**te-o** genkoo-ni **ireta**.

(52) *ageru* 'raise'

    a. goal-V idiom

        Taroo-wa itumo   zibun-no   sippai-o   **tana-ni** **ageru**.
        Taro-Top always   self-Gen   mistake-Acc shelf-to   raise
        'Taro always shuts his eyes to his own mistakes.'
        *...**tana-ni** zibun-no sippai-o **ageru**.

    b. theme-V idiom

        Taroo-wa maajan-ni   **timiti-o**   **ageta**.
        Taro-Top mah-jongg-to   blood vessel-Acc raise
        'Taro was obsessed with mah-jongg.'
        *...**timiti-o** maajan-ni **ageta**.

5.2. Chain Condition

Rizzi (1986)
(53) * Gianni$_i$ si$_i$ èstato affidato   t$_i$
       Gianni   to-himself was   entrusted   t

(54) Chain Condition (Rizzi 1986)
     Chains: C = (x$_i$, ..., x$_n$) is a chain iff, for 1<i<n, x$_i$ locally binds x$_i$+1
   (x locally binds x' iff it binds x' and there is no closer potential binder y for x')

(55) XP$_i$ .... anaphoric element$_i$ .... t$_i$

Yatsushiro (1998, 2003): *kare-zisin* 'he-self'
(56) * Taroo-o$_i$ kare-zisin$_i$-ga   t$_i$ hometa.
       Taro-Acc$_i$ he-self$_i$-Nom   t$_i$ praised
       'Taro, himself praised.'

(57) a. ? Hanako-ga   (kagami-o   tukatte) Taroo-ni$_i$ kare-zisin$_i$-o   miseta.
          Hanako-Nom (mirror-Acc   using) Taro-NI$_i$ he-self$_i$-Acc   showed
       'Hanako showed Taro himself (in the mirror).'

     b. (*)Hanako-ga   (kagami-o   tukatte) Taroo-o$_i$ kare-zisin$_i$-ni   miseta.
          Hanako-Nom (mirror-Acc   using) Taro-Acc$_i$ he-self$_i$-NI   showed
          'Hanako showed Taro to himself.'

     c.   Hanako-ga   (kagami-o   tukatte) Taroo-o$_i$ [kare-zisin$_i$-no   hahaoya]-ni   miseta.
          Hanako-Nom (mirror-Acc   using)   Taro-Acc$_i$ [himself$_i$-Gen mother]-NI   showed
          'Hanako showed Taro to himself's mother.'

(58) Taroo$_i$-ga/*Dareka$_i$-ga   kare$_i$-no   kodomo-o   sikatta.
     Taro-Nom/someone$_i$-Nom   he$_i$-Gen   child-Acc   scolded
     'Taro/*someone scolded his child.'

(59) ? Taroo$_i$-ga/*Dareka$_i$-ga   kare-zisin$_i$-o   hometa.
       Taro$_i$-Nom/*someone$_i$-Nom   he-self$_i$-Acc   praised
       'Taro/*someone praised himself.'

6. High goal and word order restriction

(60) */?Taroo-ga   nimotu-o   Hanako-ni   Tokyo-ni   okutta.
      Taro-Nom package-Acc HanakoDat   Tokyo-to   sent
      'Taro sent a package to Hanako to Tokyo.'

> (61) a. Why can't the theme move to vP? -- Locality
>   b. Why can't the theme adjoin to the applicative phrase?

(62)   */?   VP$_1$

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(62)   */?        VP1
              /         \
      a package_i      VP1
                    /        \
              Hanako-ni       V1
                          /         \
                       VP2           V1  (applicative head)
                     /      \
                   t_i       V2
                              |
                            send
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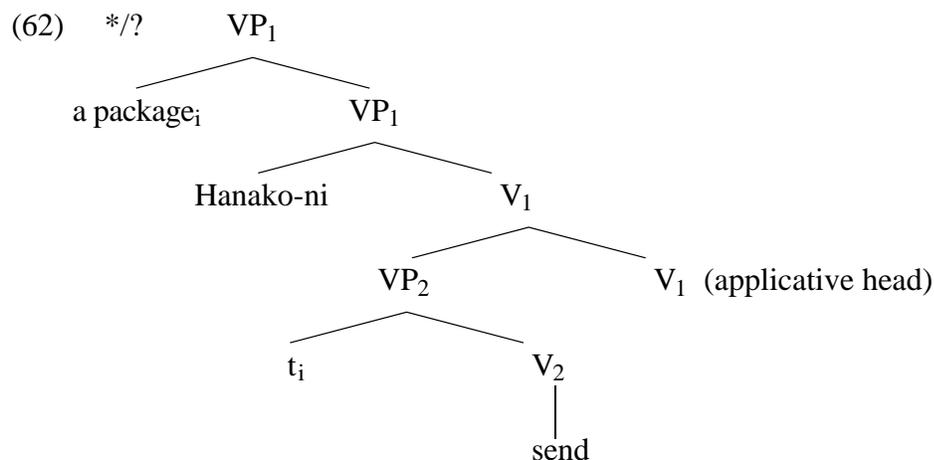
(63) Applicative phrase in some languages are not a phrase (McGinnis 2002)
    The applicative phrase in Japanese is not a phase (Miyagawa 2003)

6.1. Greek

Like English, Greek has different markings for high and low goals.
(64) a.   Estila   tis Marias   to vivlio
          Sent-Isg the Maria-Gen   the book-Acc
          'I sent Maria the book.

    b.   Estila   to vivlio   s-tin   Maria
          Sent-Isg the book-Acc   to-the Maria
          'I sent a book to Maria.'

(65) a. * Estila   tis Gallias   to vivlio
          Sent-Isg the France-Gen   the book-Acc
          'I sent France the book.'

   b.   Estila   to vivlio   s-tin   Gallia.
        Sent-Isg the book-Acc   to-the France
        'I sent a book to France.'

Anagnostopoulo (in press).

(66) a. Fanerosa   tis Marias   tin alithia
       Revealed-1sg the Maria-Gen   the truth-Acc
       'I revealed the Mary the truth'

    b. ?Fanerosa   tin alithia   tis Marias

This movement in Greek is clearly A'-movement.

(67) a. ?Edhosa   tu   kathe fititi$_i$ tin ergasia   tu$_i$
       Gave-1sg   the every student-Gen the paper-Acc   his-Gen
       'I gave every student his term paper'

    b. *?Edosa   to kathe tsek$_i$ tu katochu   tu$_i$
        Gave-1sg   the every check-Acc the owner-Gen its-Gen
        'I gave every check (to) its owner'

(68) Mahajan 1990, Miyagawa 1997

(69) */? Taroo-ga   dono nimotu-mo$_i$ dareka-ni   Tokyo-ni t$_i$ okutta.
        Taro-Nom   every package$_i$ someone-Dat Tokyo-to t$_i$ sent
        'Taro sent someone from Tokyo .' *every > some, some > every

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