"Weak" Projection, Conflation and the Lexical Transitivity Alternations

This paper argues that the language faculty (FL) could reconfigure a structure that contains a "weak" projection, i.e., a projection that lacks a specifier and does not license an argument. A weak projection most typically appears with unergative and unaccusative roots, and the reconfiguration of their structures enables language to optimize derivations for semantically related event alternations like the ones between inchoative and causative.

1. Decomposition of *(s)ase* and Causative

In the recent literature, it has become increasing clear that the causative morpheme *(s)ase* in Japanese needs to be decomposed into atomic parts. For instance, Nishiyama (2000) argues that *(s)ase* should be analyzed as *s+ae*. Following his lead, Nakajima (2011) argues that *(s)ase* is composed of four independent heads; *a, ø, s* and *e* in which *a* is an allomorph of the copula that works as 'little' v (Marantz 2001), *ø* is the phonetically null 'small' *v* that transitivizes the root (Chomsky 2001), *s* is the root of the verb *s-uru* 'do' and *e* is the root of the verb *e-ru* 'get'. Thus, a simple transitive verb in (1a) is causativized as (1b).

(1)   a. Hanako ga Taro ni   tegami   o   kak- ase-   ta.
              NOM   DAT   letter ACC write-CAUS. PAST
         (Hanako made Taro write a letter.)]

     b. ^{GetP}\{ Hanako$_i$ ga ^{fP}\{ χ_i ^{vP}[Taro ni ^{vP}[tegami o √**kak- a**] **ø**] **s-**\}   **e** \} ta
   BENEFACTIVE   INITIATOR AGENT   THEME   ROOT v   v   *f*   GET PAST

In (1b), the AGENT *Taro* and the THEME *tegami* 'letter' are licensed in the specifier positions of v and *v*, respectively. They together constitute Inner Event [ ].

     s 'do' and *e* 'get' constitute Outer Event { } that brings about the caused Inner Event. *s* is a functional head *f* that takes *vP* as a complement and licenses an implicit argument χ. Due to the semantics of *s* 'do', χ is sentient and functions as INITIATOR towards the Inner Event of *vP*. *e* 'get' introduces BENEFACTIVE argument *Hanako* which is coindexed with the implicit INITIATOR χ. The coindexization makes *Hanako* a benefactive initiator, the CAUSER. The subject *Taro* in *vP* remains as AGENT and is interpreted as the GOAL of initiation, i.e., CAUSEE. This explains the DAT *-ni* marking on *Taro*.

2. Two Puzzles in Lexical Transitivity Alternations

The analysis laid out above could shed new light on how the "lexical" transitivity alternations are done. I take up two puzzles: the unaccusative puzzle and the unergative puzzle.
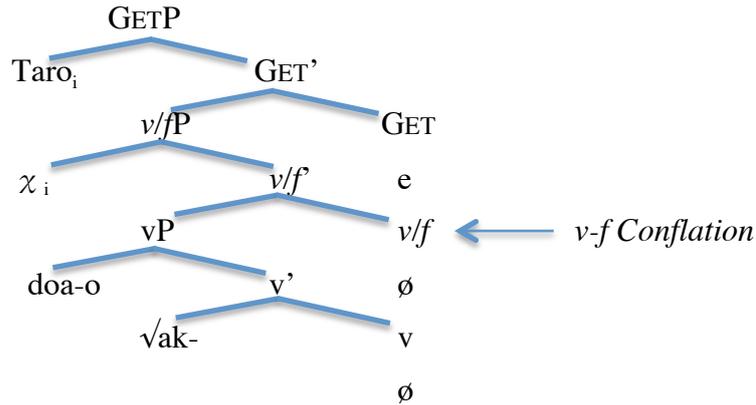
     The unaccusative puzzle is the following. The causativization of unaccusative roots such as √*ak-* 'open$^{intr.}$' requires AGENT who brings change of state on THEME in the Inner Event. This is, however, problematic since unaccusative roots only have weak *v* that lacks a specifier. In other words, they cannot license AGENT. Observe the unaccusative structure of the root √*ak-* 'open$^{intr.}$' with the THEME *doa* 'door' in *Doa ga aku* 'The door opens.' and the causativization of it below.
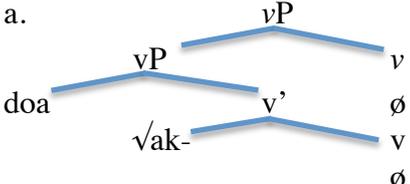
(2)   a.   *v*P   b. Taro ga   doa   o   ak- e   ta.
              *v*P _____ *v*   NOM door DAT open-GET PAST
         doa _____ *v*'   ø   (Taro opened the door.)
                  √ak- _____ v
                              ø

Thus, what we have here is a situation in which the causativization requires transitive *v*, but the root cannot supply it by definition, an apparent contradiction.

     To solve this problem, I propose that *v* and *f* conflate, and the implicit INITIATOR argument of *f* becomes the argument of *v*.
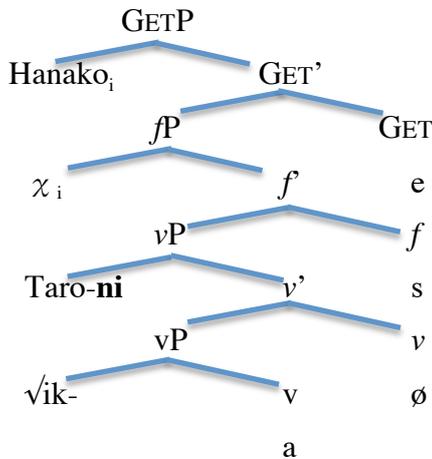
(3)
```
                    GETP
          ┌──────────┴──────────┐
        Taroᵢ                 GET'
                      ┌─────────┴─────────┐
                    v/fP                 GET
               ┌──────┴──────┐            e
             χᵢ            v/f'
                      ┌──────┴──────┐
                    vP            v/f  ⟵  v-f Conflation
                ┌────┴────┐        ø
             doa-o       v'
                    ┌─────┴─────┐
                  √ak-          v
                                ø
```

With the conflation, the implicit INITIATOR is the one who brings the change of state on the THEME and is also the BENEFACTIVE who has potency over *vf*P. This conflation effectively makes the *v/f*P and *v*P a functional equivalent of a transitive *v*P.

   A similar puzzle exists with unergative roots as well. It has been pointed out that they allow AGENT to be case marked either with DAT *-ni* or ACC *-o*.
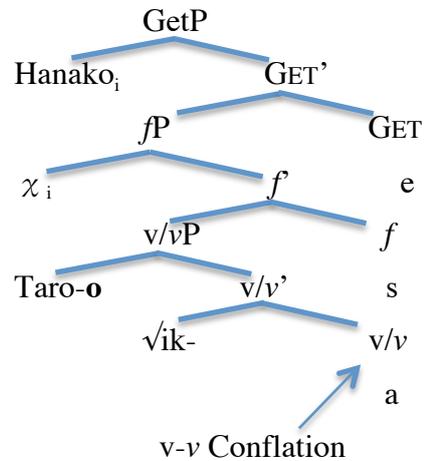
(4)   Hanako ga Taro **ni/o**   ik- ase   ta
              NOM   DAT/ACC go-CAUS. PAST.
         (Hanako let/made Taro go.)

When the CAUSEE *Taro* is *-ni* marked, it is assumed to be in spec, *v*P just like it is in (1b). When it is *-o* marked; however, a puzzle arises because unergative roots lack spec *v*P where THEME generally appears. The decompositional approach gives a straightforward answer to the puzzle. (5a) shows the *-ni* causative and (5b) the *-o* causative, respectively.

(5)   a.
```
                GETP
        ┌─────────┴─────────┐
     Hanakoᵢ              GET'
                   ┌────────┴────────┐
                  fP               GET
             ┌─────┴─────┐          e
           χᵢ           f
                  ┌──────┴──────┐
                vP              f
           ┌─────┴─────┐        s
        Taro-ni       v'
                 ┌─────┴─────┐
                vP           v
           ┌─────┴─────┐     ø
         √ik-          v
                       a
```

b.
```
                GetP
        ┌─────────┴─────────┐
     Hanakoᵢ              GET'
                   ┌────────┴────────┐
                  fP               GET
             ┌─────┴─────┐          e
           χᵢ           f
                  ┌──────┴──────┐
                v/vP            f
           ┌─────┴─────┐        s
        Taro-o       v/v'
                 ┌─────┴─────┐
               √ik-         v/v
                             a
                    v-v Conflation
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In (5a), *v*P is weak and lacks a specifier. The basic unergative structure of the Inner Event is kept intact, and *Taro* is *-ni* maked. In (5b), the v and *v* heads conflate. Again, the conflation effectively makes v/*v*P and *f*P a functional equivalent of a transitive *v*P. As a consequence, *Taro* is interpreted as THEME while keeping its original agent role. Semantics reflects the differences: while (5a) generally has less coercive 'let' interpretation, (5b) has strong coercive 'make' interpretation.

3. Conclusion

   A head is an atomic set of features that corresponds to an atomic subpart of the semantic representation of an event. FL could manipulate syntax to change event descriptions with alternating head-argument relations. If true, it could be argued that event cognition is an indispensible and fundamental reason for the emergence of language.

References

Chomsky, N. 2007. *Approaching UG from Below*., Marantz, A. (2007). *Phases and Words*., Nakajima, T. (2011). *On the Morphosyntactic Transparency of (S)ase and GETP*., Nishiyama, K. (2000). *Zita Kotai to Keitairon*.