A new type of resultative construction in English

이주원 (Juwon Lee)
happyjuwon@gmail.com
happyjuwon.wix.com/jlee

한국영어학회
2016년 10월 15일 (토) 광운대학교
1. Introduction (1/5)

• **Topic**: a putative resultative construction in English:

   (1) He *drilled* a hole *deep*.

• **Issue**: The *drill-deep* sentence looks similar to resultative constructions. Is it a kind of resultative construction?

• **Purpose**:

   (i) I aim to identify grammatical properties of the *drill-deep* construction.

   (ii) I compare and contrast them with those of other secondary predicate constructions.

   (iii) I argue then that *drill-deep* constructions are a type of resultative construction.
1. Introduction: typical resultative (2/5)

• Typical transitive resultative constructions (see Simpson 1983, Boas 2003, Goldberg & Jackendoff 2004, *inter alia*):

(2) a. Lucy **hammered** the metal **flat**.
   b. Lucy **painted** the door **red**.
   c. Lucy **wiped** the table **clean**.

• The direct objects became to have a result state described by the secondary predicates (which are underlined) through the events described by the verbs.
1. Introduction: pseudo-resultative (3/5)

- A different type of transitive resultative constructions:

(3) a. Emma tied a shoelace tight / loose.
   b. Emma braided her hair tight / loose.
   c. Emma ground the peanut fine / coarse.
   d. Emma piled the books high.

- This is called spurious resultative construction (Washio 1997) or pseudo-resultative construction (Levinson 2010).
Putative transitive resultative construction:

(4) a. James *drilled/dug* a hole deep.
   b. James *built/constructed* the wall strong / tall.
   c. God *made* the dinosaurs big and tall.

These *drill-deep* constructions look similar to the transitive resultative constructions and depictive constructions in (5).

(5) a. Bill *hammered* the metal hot.  \((as \ a \ depictive)\)
   b. Bill *ate* the fish raw.
   c. Bill *ate* the fish naked.
1. Introduction: putative resultative (5/5)

• *Drill-deep* constructions have been rarely discussed in the literature (see a similar Japanese example in Nakazawa 2012: 596-597).

   Taro-NOM ground-ACC deep-KU dig-PAST
   (lit.) ‘Taro dug the ground deep.’

   b. *Taro-ga ana-o huka-ku hot-ta.*
   Taro-NOM hole-ACC deep-KU dig-PAST
   (lit.) ‘Taro dug a hole deep.’

• I explicitly compare and contrast the syntactic and semantic properties of English *drill-deep* constructions to the other secondary predicate constructions.
2. Semantics: result state or entity (1/7)

- Result (state or entity) is involved in a resultative:

(7) a. Lucy **hammered** the metal **flat**.
   Entails: a flat metal was created. *(result state)*

b. Emma **tied** a shoelace **tight**.
   Entails: a tight knot was created. *(result entity/state)*

c. Bill **ate** the fish **raw**.
   Does not entail: a raw fish was created. *(no result entity/state)*

(8) James **drilled** a hole **deep**.
   Entails: a deep hole was created. *(result entity/state)*
2. Semantics: result state or entity (2/7)

- Result (state or entity) is located at the end of the event:

(9) a. Lucy **hammered** the metal **flat** in two minutes.
   **Entails:** the flatness was created in two minutes.

   b. Emma **tied** a shoelace **tight** in two minutes.
   **Entails:** the tightness/knot was created in two minutes.

   c. Bill **ate** the fish **raw** in two minutes.
   **Does not entail:** the rawness/fish was created in two minutes.

(10) James **drilled** a hole **deep** in two minutes.
   **Entails:** the deepness/hole was created in two minutes.
2. Semantics: event-argument homomorphism

(3/7)

• The secondary predicate of a typical resultative construction can add the telicity to the construction (see Wechsler 2005):

(11) a. Lucy *hammered* the metal *for/ in* an hour. \hspace{1cm} (atelic)
    b. Lucy *hammered* the metal *flat in/?for* an hour. \hspace{1cm} (telic)

• Telicity of pseudo-resultative is NOT determined by the secondary predicate:

(12) a. Emma *tied* the shoelace *in/?for* one minute. \hspace{1cm} (telic)
    b. Emma *tied* the shoelace *tight in/?for* one minute. \hspace{1cm} (telic)
2. Semantics: event-argument homomorphism (4/7)

• The secondary predicate of a depictive is NOT involved in (a)telicity of the depictive:

(13) a. Bill \textbf{ate} the fish \textit{in/?for} one minute. \quad (telic)
    b. Bill \textbf{ate} the fish \textit{raw in/?for} one minute. \quad (telic)

• The telicity of pseudo-resultative is NOT determined by the secondary predicate:

(14) a. James \textbf{drilled} a hole \textit{in/?for} one minute. \quad (telic)
    b. James \textbf{drilled} a hole \textit{deep in/?for} one minute. \quad (telic)
2. Semantics: temporal overlap (5/7)

- The complete overlap between the temporal existence of the direct object and the property of the secondary predicate:

(15) 

a. Lucy **hammered** the metal flat.
   
   **Does not entail**: Lucy hammered the [flat metal].

b. Emma **tied** a shoelace tight.
   
   **Does not entail**: Emma tied a [tight shoelace].

c. Bill **ate** the fish raw.
   
   **Entails**: Bill ate the [raw fish].

(16) James **drilled** a hole deep.
   
   **Entails**: James drilled a [deep hole].
2. Semantics: summary (6/7)

- **Table 1.** Semantic properties of *drill-deep* constructions:

<table>
<thead>
<tr>
<th>Semantic properties</th>
<th><em>Hammer-flat</em></th>
<th><em>Tie-tight</em></th>
<th><em>Eat-raw</em></th>
<th><em>Drill-deep</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] Result state</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>[2] Result entity</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>[3] Result at the end of the event</td>
<td>Yes</td>
<td>Yes</td>
<td>NA</td>
<td>Yes</td>
</tr>
<tr>
<td>[4] Adding telicity by secondary predicate</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>[5] Complete overlap between DO and state</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
2. Semantics: summary (7/7)

(17) A Classification of English Resultative Constructions (RCs):

RCs in English

Intransitive RC

Typical RC [4]

Creation RC [2]

Transitive RC [1], [3]

Pseudo-RC

Product RC

drill-deep

build-strong

tie-tight

braid-tight

hammer-flat

wipe-clean

tie-tight

braid-tight
2. Syntax: direct object (1/12)

- The direct object is the result entity only in *drill-deep* construction:

  (18) a. Lucy **hammered** the metal **flat**.
      Does not entail: the metal was created.

    b. Emma **tied** a shoelace **tight**.  \((direct\ object = material)\)
      Does not entail: a shoelace was created.

    c. Bill **ate** the fish **raw**.
      Does not entail: the fish was created.

  (19) James **drilled** a hole **deep**.  \((direct\ object = product)\)
      Entails: a hole was created.
5. Syntax: direct object (2/12)

- Typical material/product alternation:

(20) a. He baked a cake (from the dough).
   b. He baked the dough (into a cake).

- Material/product alternation in pseudo-resultative:

(21) a. He tied the shoelace tight. (material)
   b. He tied the knot tight. (product)
5. Syntax: direct object (3/12)

• Material/product alternation in a drill-deep construction:

(22) a. He drilled / dug the ground deep. (material)
    
    b. He drilled / dug the hole deep. (product)

• However, not every drill-deep construction has a material alternant:

(23) a. *She built / constructed the bricks tall. (material)
    
    b. She built / constructed the wall tall. (product)

(24) a. *She made the bricks tall. (material)
    
    b. She made the house tall. (product)
3. Syntax: adverb vs. adjective (4/12)

- Is *deep* of *drill-deep* adverb or adjective?

- *Deep* can be replaced with *deeply* (see Washio 1997, Kratzer 2005 for an adverbial analysis of resultative predicates).

(25) a. The hole was **deeply dug**.
   b. He **dug** the hole **deep** / **deeply**.

(26) a. The house was **strongly built**.
   b. He **built** the house **strong** / **strongly**.

- However, not every *drill-deep* construction allows an adverb:

(27) She **built** the walls **tall**. (*tally)
3. Syntax: adverb vs. adjective (5/12)

- Coordination with adverb: *deep* cannot be coordinated with a manner adverb:

  (28) a. *He drilled the hole [quickly and deep].
    
  b. *?He drilled the hole [deep and quickly].

  (29) a. *He built the house [slowly and big].
    
  b. *He built the house [big and slowly].

- This indicates that *deep* of *drill-deep* is not adverb.
3. Syntax: adverb vs. adjective (6/12)

• **Coordination with adjective**: the secondary predicates can be coordinated with adjective:

(30) a. He *drilled* a hole *[big and deep]*.
    b. He *built* the wall *[tall and strong]*.

• This suggests that *deep* of *drill-deep* construction is *adjective*.

• Typical resultative and depictive constructions behave in the same way (see e.g. Levinson 2010).
3. Syntax: complement vs. adjunct (7/12)

- The secondary predicates are not syntactically necessary:

  (31) a. She **hammered** the metal (flat).
      b. She **tied** a shoelace (tight).
      c. She **ate** the fish (raw).
      d. She **drilled** a hole (deep).

  (32) a. She **hammered** the metal (yesterday).
      b. She **tied** a shoelace (on the track).
      c. She **ate** the fish (in the restaurant).
      d. She **drilled** a hole (quickly).

- But optionality is not a good test for complemencthood.
3. Syntax: complement vs. adjunct (8/12)

- The *do-so* test:

(33) a. She [hammered the metal] (yesterday) and Tom did so (today).
   b. She [tied a shoelace] (slowly) and Tom did so (slowly).
   c. She [ate a fish] (quickly) and Tom did so (quickly).
   d. She [drilled a hole] (quickly) and Tom did so (slowly).

(34) a. Lucy [hammered the metal flat] and Tom did so (*flat).
   b. Emma [tied a shoelace tight] and Tom did so (*tight).
   c. She [ate the fish raw] and Tom did so (*raw).
   d. James [drilled a hole deep] and Tom did so (*deep).
3. Syntax: complement vs. adjunct (9/12)

• The **pseudo-cleft** of typical RC:

(35) a. What she did was [**wipe** the table **clean**].
   b. *What she did **clean** was [**wipe** the table __ ].
   c. What she did was [**wipe** the table] (in the restaurant).
   d. What she did (in the restaurant) was [**wipe** the table].

• The **pseudo-cleft** of pseudo-resultative:

(36) a. What she did was [**tie** the shoelace **tight**].
   b. *What she did **tight** was [**tie** the shoelace __ ].
   c. What she did was [**tie** the shoelace] (yesterday).
   d. What she did (yesterday) was [**tie** the shoelace].
3. Syntax: complement vs. adjunct (10/12)

• The **pseudo-cleft** of depictive:

(37) a. What she did was [**eat** the fish **raw**].
   b. *What she did **raw** was [**eat** the fish __ ].
   c. What she did was [**eat** the fish] (quickly).
   d. What she did (quickly) was [**eat** the fish].

• The **pseudo-cleft** of *drill-deep* construction:

(38) a. What she did was [**drill** the hole **deep**].
   b. *What she did **deep** was [**drill** the hole __ ].
   c. What she did was [**drill** the hole] (quickly).
   d. What she did (quickly) was [**drill** the hole].

• This suggests that **deep** of *drill-deep* is **complement**.
3. Syntax: summary (11/12)

- **Table 2.** Syntactic properties of *drill-deep* constructions:

<table>
<thead>
<tr>
<th>Syntactic properties</th>
<th><em>Hammer-flat</em></th>
<th><em>Tie-tight</em></th>
<th><em>Eat-raw</em></th>
<th><em>Drill-deep</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>[6] Direct object = Result entity</td>
<td>NA</td>
<td>No</td>
<td>NA</td>
<td>Yes</td>
</tr>
<tr>
<td>[7] Secondary predicate = Adjective</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>[8] Secondary predicate = Complement</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
A Classification of English Resultative Constructions (RCs):

RCs in English

Intransitive RC  Transitive RC [1], [3], [7], [8]


wipe-clean  (Material RC)  drill-deep

tie-tight  build-strong

braid-tight
4. Conclusion: summary (1/3)

• **Semantics**: the *drill-deep* constructions share some important properties (e.g. *creation of results*) with other resultative constructions, but they also share a property (e.g. *complete temporal overlap*) with depictive constructions. In sum, they have a unique set of properties.

• **Syntax**:

1) The secondary predicate of a *drill-deep* construction is an **adjective**, rather than adverb.

2) The secondary predicate of a *drill-deep* construction is a **complement** of the verb.

• It seems plausible to view *drill-deep* constructions as a **kind of resultative construction** in English.
In particular, what is important here is that there are two types of telicity in English resultative constructions:

(i) result state described by the secondary predicate
(ii) result entity involved in a resultative construction (explicitly or implicitly)

Intransitive resultative constructions (RCs):

(40) a. The river froze solid. (Material RC)
    b. The ice froze solid. (Product RC)
4. Conclusion: future work (3/3)

• Future work:

1) More tests for identifications of grammatical properties of the product resultative constructions (i.e. drill-deep constructions).

2) A formal account of the product resultative constructions
Selected references (1/2)


Selected references (2/2)

