P-conflation in the English *spray/load* alternation

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The *spray/load* alternation:

(1)  
| a. John sprayed paint onto the wall. (theme-object) |
| b. John sprayed the wall with paint. (goal-object) |

(2)  
| a. John loaded hay onto the truck. |
| b. John loaded the truck with hay. |

What I won’t talk about: holistic effect, acquisition.
What I will talk about, indirectly: linking, relationship between each structure.
Some popular analyses: theme objects and goal objects have the same syntactic status (e.g., Goldberg 1995; Mateu 2000; 2017; Rappaport & Levin 1988).

Me: They don’t!

Big picture: a view of argument structure with fully realized syntax and compositional semantics.
The data: Unaccusatives

Many *spray/load* verbs can occur in unaccusative contexts. For those that can, only themes and never goals can become subjects of unaccusative uses (D’Elia 2016; Levin 1993). In contrast, either kind of object can become the subject of a passive.

(3)  
a. Paint sprayed onto the wall.  
b. * The wall sprayed with paint.  
c. Paint was sprayed onto the wall.  
d. The wall was sprayed with paint.

(4)  
a. Icing drizzled onto the cake.  
b. * The cake drizzled with icing.  
c. Icing was drizzled onto the cake.  
d. The cake was drizzled with icing.
The data: Unaccusatives

(5) a. The audience crowded into the room.
   b. * The room crowded with the audience.

(6) a. The sheets draped onto the bed.
   b. * The bed draped with the sheets.

(7) a. Pictures hung on the wall.
   b. * The wall hung with pictures.

(8) a. Leaves piled onto the ground.
   b. * The ground piled with leaves.

(9) a. Water pumped into the sink.
   b. * The sink pumped with water.

(10) a. Seeds scattered into the field.
     b. * The field scattered with seeds.

(11) a. Dust settled on the counter.
     b. * The counter settled with dust.

(12) a. Ash sprinkled onto the ground.
     b. * The ground sprinkled with ash.

Apparent exceptions that aren’t:

(13) Swarm-class verbs:
    a. Bees swarmed in the garden.
    b. The garden swarmed with bees.

(14) Fill-class verbs:
    a. Water filled * (into) the room.
    b. The room filled with water.

No inchoative semantics for (b) variant!

Limited in number (only clog, fill, flood, ?interlace, ?interleave, stop up), regular wrt nominalizations, do not freely alternate (?* John filled water into the tub).
The data: Nominalizations

Entity-denoting nominalizations of *spray/load* verbs can only refer to themes and never goals (Fraser 1971).

(15)  

a. the spray

b. the load

c. the drizzle

d. the squirt/spritz

e. the crowd

f. the dab/daub/smear/smudge/swab

g. the dusting

h. the drape

i. the heap/mound/pile/stack

j. the spatter

k. the stuffing

(= the paint/≠ the wall)

(= the books/≠ the truck)

(= the icing/≠ the cake)

(= the water/≠ the petunias)

(= the people/≠ the room)

(= the paint/≠ the canvas)

(= the powdered sugar/≠ the cake)

(= of the sheets/≠ of the bed)

(= the stones/≠ the sidewalk)

(= the blood/≠ the wall)

(= the feathers/≠ the pillow)
The contrasts just presented conform to independent generalizations if the goal-object structure involves the conflation of a null preposition with the verb.

(16)    a. Theme-object:*    

    \[
    \begin{array}{c}
    \text{VP} \\
    \text{V} \\
    v \quad \sqrt{\text{spray}} \quad \text{DP} \quad \text{paint}
    \end{array}
    \]

    b. Goal-object:

    \[
    \begin{array}{c}
    \text{VP} \\
    \text{V} \\
    v \quad \sqrt{\text{spray}} \quad \text{P}_{\text{LOC}} \quad \text{the wall}
    \end{array}
    \]

*To be modified slightly
A-movement can strand a preposition in passives, but not in unaccusatives (Keyser & Roeper 1984).

(17)  

a. I broke the car. (active)  
b. The car was broken. (passive)  
c. The car broke. (unaccusative)  
d. I broke into the car. (P-object)  
e. The car was broken into. (pseudo-passive)  
f. * The car broke into. (pseudo-unaccusative)

The impossibility of goal-object unaccusative spray/load verbs fits this pattern under the P-conflation approach.
P-stranding in A-movement: additional examples

(18)  

a. John moved the platform. (act.)  
b. The platform was moved. (pass.)  
c. The platform moved. (unacc.)  
d. John moved into the house. (P-obj.)  
e. The house was moved into. (p-pass.)  
f. * The house moved into. (p-unacc.)

(19)  

a. Sue blew the whistle at five.  
b. The whistle was blown at five.  
c. The whistle blew at five.  
d. Sue blew onto the hot soup.  
e. The hot soup was blown onto.  
f. * The soup blew onto.

(20)  

a. Sam turned the wheel.  
b. The wheel was turned.  
c. The wheel turned.  
d. Sam turned onto the driveway.  
e. ? The driveway was turned onto.  

(21)  

a. Pat hung the picture on the wall.  
b. The picture was hung on the wall.  
c. The picture hung on the wall.  
d. Pat hung onto the trapeze.  
e. ? The trapeze was hung onto.  
f. * The trapeze hung onto.
Nominalizations

Objects of prepositions are never referents of nominalizations derived by productive affixes. Most nominalizations can refer to eventualities, reified eventualities, or internal arguments.

(22)  

a. the sleep  (= event/ ≠ the bed) 

b. the break ( = event/ = reified event/ ≠ the shelf) 

c. the invite  (= reified event) 

d. the change  (= event) 

e. the construction  

( = event/ = internal argument/ ≠ the job site) 

f. the building  

( = event/ = internal argument/ ≠ the job site) 

The nominalizing suffixes -al, -(a)tion, -ment, and -∅ show the same pattern.
Nominalizations

Other affixes can produce more readings (e.g., -er).

(23)  a. door opener (agent/instrument)
      b. broiler (agent/instrument/internal argument)

In at least two cases, -er can refer to the object of a preposition.

(24)  a. diner (agent/location)
      b. thinker (agent/object of about)

However, these uses are not productive.

(25)  a. eater (≠ a restaurant)
      b. buyer (≠ a store)

Other exceptions occur with -ence and -ant.

(26)  a. residence (location)
      b. confidant (one confided in)
In sum, nominalizations are complex!

But nominalizations derived via zero-affixation and -ing can never (or very rarely) refer to prepositional objects (cf. Myers 1984; Pesetsky 1995). Also a general trend in this direction.

Under the P-conflation analysis, spray/load nominalizations fall under this generalization.
I propose that theme arguments of spray/load verbs are introduced syntactically by a functional head, THEME.

(27) \[
[V] = \\
\lambda x.\lambda e.\text{spray}(e) \land \text{THEME}(e, x)
\]

\[
[THEME] = \\
\lambda P.\lambda x.\lambda e.P(e) \land \text{THEME}(e, x)
\]

\[
v \sqrt{\text{spray}}
\]
The zero-nominalizer would have the following semantics.

\[(28) \quad \lambda P\langle e, st \rangle \cdot \lambda x. \exists e[P(e, x)]\]

NB: nominalizations of goal-object verbs are ruled out by syntax, not semantics!
Theme- and goal-objects of *spray/load* verbs differ syntactically. P-conflation could reduce these asymmetries to independent patterns, and provides a new way of thinking about the alternation.

We need to investigate why prepositions behave in these ways.

We also need to understand how the PPs I've ignored (e.g., *onto the wall, with the paint*) fit in (which I do in my dissertation).


References

