On Complements and Adjuncts: Long Version
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I.   Two Types of Dependents.

The distinction between complements and adjuncts has long been recognized in
generative grammar, and given a structural explanation. Thus, the '*do-so* test' is widely
taken to distinguish complements from adjuncts in English (Lakoff and Ross 1966, Baker
1978, Radford 1988).

Do-so test

Time:
(1)   a.   John studies in the morning.
        b.   Mary studies in the evening and John does so in the morning.

Manner:
(2)   a.   Pete worked in a slow manner.
        b.   Sue worked in a quick manner and Pete did so in a slow manner.

Prepositional verbs:
(3)   a.   John laughed at the clown.
        b.   ?Fred laughed at the giraffe, and John did so at the clown.

Recipients:
(4)   a.   Sue gave a book to the teacher.
        b.   ?Frank gave a book to the doctor, and Sue did so to the teacher.

Directionals:
(5)   a.   Mary went to the store.
        b.   *Kim went to the library, and Mary did so to the store.

At least since Baker 1978, *do so* is widely considered to be a pro-form standing in for a
complete VP, so that the behavior in (1b)-(5b) is explained by postulating that adjuncts
are adjoined to VP while complements are sisters to the verb.
        We have found in teaching undergraduate syntax that intuitions are not clear with
regard to this test, in that judgments tend to split with regard to (3b) and (4b), for
example. We propose that an additional test employing the pro-VP *do* leads to sharper
intuitions. We term this test the 'pseudocleft test', and even our beginning students agree
that (3c) and (4c) are ungrammatical or anomalous.

Pseudocleft test.

(1)   c.   What John does in the morning is study.
(2)   c.   What Pete did in a slow manner was work.

(3)   c.   *What John did at the clown was laugh.
(4)   c.   *What Sue did to the teacher was give a book.
(5)   c.   *What Mary did to the store was go.

Another test useful in distinguishing complements from adjuncts is one that we call the 'preposition stranding test'. Thus, Huang 1982 proposes the 'Condition on Extraction Domains', which states that constituents can be extracted from complement phrases but not from adjunct phrases because in the latter case the trace would not be properly governed. It can be seen that this test confirms the classification of the PPs in (1a)-(4a):

<u>Preposition-stranding test.</u>

(1)   d.   *It is the morning that John studies in.
(2)   d.   *It was a slow manner that Pete worked in.

(3)   d.   It was the clown that John laughed at.
(4)   d.   It was the teacher that Sue gave a book to.
(5)   d.   It was the store that Mary went to.

II.   Three Types of Dependents.

What has not been noted before is that the two types of test do not always pattern opposite to each other. Thus instrumental, benefactive, and two types of locative phrases test out as adjuncts according to the *do-so* and pseudocleft tests, but as complements according to the preposition-stranding test. In (8), Mary as well as the eggs are in the kitchen; whereas in (9), the eggs but not Mary are in the pan. Arguably, (9b) and (9c) are grammatical on that intended reading.

Instrumentals:
(6)   a.   Bill opened the door with a key.
        b.   Jack opened the door with a credit card and Bill did so with a key.
        c.   What Bill did with a key was open the door.
        d.   It was a key that Bill opened the door with.

Benefactives:
(7)   a.   Mary wrote a book for John.
        b.   Sue wrote a book for Fred, and Mary did so for John.
        c.   What Mary did for John was write a book.
        d.   It was John that Mary wrote a book for.

Locatives Type 1:

(8)   a.   Mary cooks eggs in the kitchen.

        b.   Sue cooks eggs on the patio, and Mary does so in the kitchen.

        c.   What Mary does in the kitchen is cook eggs.

        d.   It is the kitchen that Mary cooks eggs in.

Locatives Type 2:

(9)   a.   Mary cooks eggs in a pan.

        b.   Sue cooks eggs on a griddle, and Mary does so in a pan.

        c.   What Mary does in a pan is cook eggs.

        d.   It is a pan that Mary cooks eggs in.

We thus propose that three types of verb dependents need to be distinguished: primary complements, secondary complements, and adjuncts. We suggest that this three-way distinction is semantically based. When a complement of either type is added to a phrase, an argument is added to the event structure: valency is thus increased. A complete event is only denoted when all primary complements have been added, although not all primary complements are required for grammaticality. *Do* in the *do so* and pseudocleft construction must denote a complete event. Secondary complements increase valency, but these are not required for there to be complete event denoted. Adjuncts apply to complete events and modify them rather than expanding the valency. Any theory of syntax needs to accommodate these three different dependent types.

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