

The instrumental: dative and its double

1. Introduction. We take our bearings from a spate of recent works by Manzini & Savoia (2011), Manzini et al. (2015), Manzini & Franco (2016) – which deal with genitive/dative oblique(s). Their basic idea can be grasped by reference to data like (1). In (1b), the 's genitive ending or the *of* preposition introduces a possession relation between the argument it selects, namely the woman (the possessor), and the head of the DP, namely (the) children (the possessum). The same possession relation holds in (1a) between the dative (John) and the theme of the ditransitive verb (the books).

- (1) a. I gave the books to John
b. the woman's children/the children of the woman

The literature quoted uses the label (\subseteq) for the possession relation instantiated by the Preposition *to* in (1a) or the genitive inflection in (1b). They take the content of (\subseteq) to be part/whole, akin to what Belvin & den Dikken (1997:170) call *zonal inclusion*. Formally, in (1b), (\subseteq) takes as its internal argument its sister DP (the possessor) and as its external argument the sister to its projection (the possessum) – and says that 'the children' is in the domain of inclusion of 'the woman', as in (2). In (1a) the primitive content of the *to* preposition is again the (\subseteq) relation introduced for genitives in (2); $P(\subseteq)$ takes as its internal argument its sister DP 'John' (the possessor) and as its external argument the sister to its projection, i.e. the theme of the verb 'the books' (the possessum), as in (3).

- (2) [DP the children [$_{PP(\subseteq)}$ **of** the woman]]
(3) [$_{VP}$ gave [$_{PredP}$ the books [$_{PP(\subseteq)}$ **to** John]]]

The part-whole (\subseteq) proposal for genitives and datives needs to be further articulated in order to account for the fact that formally identically genitive/dative DPs display different interpretive behaviours – as well as for the fact that cross-linguistically, syntactico-semantic differences may result in different lexicalization pattern. Manzini & Savoia (2011), starting from Albanian data, deal with the widespread dative/genitive syncretism in Indo-European. Manzini & Franco (2016), Manzini et al. (2015) further address these issues with respect to datives with ditransitive verbs, with unergative verbs, as experiencer subjects, as DOM objects and as oblique (ergative) subjects.

2. With obliques: genitive/datives reversed. The data. If what precedes is on the right track, we expect it to have consequences for the other oblique most likely to occur as a case inflection, namely the instrumental; in English the core lexicalization of the instrumental is by the Preposition *with*. Our starting point is the observation by Levinson (2011) that possession relations may be realized also by *with*, as in (4). The relation in (4) is reversed with respect to that in (2)-(3), since the P *with* embeds the possessum, while the possessor is the head of the DP.

- (4) the woman with the children/the books

We precisely aim at showing that instrumental inflections/adpositions denote the reverse relation with respect to genitives or datives, by which the possessum, rather than the possessor is in the oblique case. For instrumentals we will therefore adopt the (\supseteq) content and label here, as indicated in (5). What (5) says is that the complement of *with* is the possessum (a part) of the possessor (the whole) 'the woman'.

- (5) [DP the woman [$_{PP(\supseteq)}$ **with** the children]]

Crucially, also in VPs instrumental (with-like) morphemes express the reverse content of datives. We can support this hypothesis with alternations involving the structures V-XP-*to*YP vs. V-YP-*with*XP in crosslinguistic perspective. Argument alternations involve an apparently triadic verb, which maintains the same association of an argument (the subject), but can express either of its other two arguments as its object, with the third usually expressed as an oblique. Examples in English are the 'spray-load' alternation in (6), the 'image impression' alternation in (7) and the *with/against* alternation in (8) (Fillmore 1970; Jackendoff 1976; Hale & Keyser 1993, among others).

- (6) a. John sprayed the paint on the wall.
b. John sprayed the wall **with** paint.
(7) a. John embroidered peonies on the jacket.
b. John embroidered the jacket **with** peonies.

- (8) a. John hit the fence **with** a stick.
 b. John hit a stick against the fence.

In English, the prepositions that alternate with instrumental *with* to introduce the oblique argument in the constructions presented above are locative prepositions (e.g. *on*, *against*). Nevertheless, there are also instances where the instrumental morpheme alternates with the dative oblique *to*, as in (9), though only with a handful of verbs (*present*, *provide*, *supply*, *entrust*, *credit*, etc., Levin 1993). The alternation is also found in Romance; a possible example is with the Italian verb *riifornire* ‘supply’.

- (9) a. He presented the museum **with** his pictures.
 b. He presented his pictures **to** the museum

Actually, there are many languages in which the alternations illustrated above are rendered by a dative/instrumental interchange. For instance in Persian the dative preposition *be* alternates with instrumental *ba* in a wide range of triadic constructions, as illustrated in (10)-(12).

- (10) a. Pesar sang-ro **be** sag zad
 boy stone-DOM to dog hit.pst.3sg
 ‘The boy hit the dog with the stone’
 b. Pesar sag-ro **ba** sang zad
 boy dog-DOM with stone hit.pst.3sg
 ‘The boy hit the dog with the stone’
- (11) a. Pomad-ro **be** dastash malid
 cream-DOM to her/his.hand spread.pst.3sg
 ‘S/he spread the cream on her/his hand’
 b. Dastash-ro **ba** pomade malid
 her/his.hand-DOM with cream spread.pst.3sg
 ‘S/he spread her/his hand with the cream’
- (12) a. Chakkosh-ra **be** divar koobidam
 nail-DOM to wall stick.pst.1sg
 ‘I stick the nail on the wall’
 b. Divar-ro **ba** chakkosh koobidam
 wall-DOM with nail stick.pst.1sg
 ‘I stick the nail on the wall’

3. With obliques: genitive/datives reversed. An analysis. Beginning with Kayne (1984), ditransitive verbs of the type illustrated in (3) are assumed to take a predication as their complement; the content of this predication is a possession relation between the direct object (the possessum) and the oblique dative (the possessor). We argue that in the Persian alternations in (10b)-(12b), the predication is reversed – so that is the accusative direct object that possesses the instrumental. The alternations in the VP reproduce the basic alternation between ‘of’ and ‘with’ complements within the DP, as illustrated in (2) and (5). Interesting, in many theoretical works (Harley 2002, Beck & Johnson 2004) the head of the predication postulated by Kayne for English double object constructions is an abstract version of the verb ‘HAVE’, whose content is akin to *with* preposition (Svenonius 2007). Thus, we may argue that in (10a), $P(\subseteq)$, instantiated by dative *be* (cf. (3) above) takes as its internal argument its sister DP (*sag* ‘dog’) and as its external argument the sister to its projection (*sang* ‘stone’). The reverse pattern represented in (10b) sees an overt $P(\supseteq)$ elementary predicate, morphologically realized as the instrumental *ba*, taking as its internal argument the possessum (*sang*) and as its subject the possessor (*sag*).

4. Conclusion. We aimed at showing that the fundamental obliques of natural languages are a system of elementary predicates attaching arguments to the verbal spine as possessing/including other constituents (dative/genitive) – or as entertaining the reverse relation with them (instrumental). In other words, building on Manzini & Savoia (2011), Manzini & Franco (2016), we argue that the fundamental oblique system (genitive-dative-instrumental) has a common core consisting of part/whole content, deployed in order to enrich the argumental structure supported by verbal projections (via Chomsky’s Agree, deriving direct cases).