Linking and juxtaposed pseudopartitives: a diachronic approach

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The syntactic and semantic differences between partitives PC= partitive constructions) as in (1)a and pseudopartitives (PSP) as in (1)b are well known (cf. Jackendoff 1977).

(1)	En. a.	a slice of that cake	(restricted set: partitive)
	b.	a slice of cake	(unrestricted set: pseudopartitive)

Both constructions superficially appear to consist of two nominals, which are usually designated N_1 and N_2 .

In English, both partitive and pseudopartitive constructions are formed with the preposition *of*. However other languages, e.g. Danish, Swedish, Dutch, and German employ different strategies for each, a linking morpheme for the partitive as in (2),and juxtaposition for the pseudopartitive as below: (Hankamer and Mikkelsen 2008:318):

(2)	Da. a.	en	gruppe	af	turisterne	(PC)
		one	group of	touri	sts-DEF	
		'one	group of the t	ourists'		
	b.	en	gruppe	turis	ster	(PsP)
		one	group	touri	sts	
		'a gr	oup of tourists	,		

There is a third strategy, case:

(3)	Fin.a.	ala bit:NOM <i>a bit</i>	tästä this:ELAT of this good cake	hyvästä good:ELAT e	kakusta cake:ELAT	(PC)
	b.	säkki sack:NOM	perunoita potato:PART.	PL		(PsP)
		a sac	n oj polaloci	(Koptjev	vskaja-Tamm 2001:1	l)

In Finnish PCs the substance is in elative case whereas in the PsP the substance takes partitive

Languages have three strategies for expressing PsP.

- What makes a language "choose" between the strategies?
- Can languages change from one strategy to another?

Alexiadou, Haegeman and Stavrou (henceforth AHS) (2007:457) speculate that "a fruitful avenue for future research" is that languages with overt case morphology (Greek, German) use juxtaposition and languages without nominal case morphology (English, Romance) have a linking morpheme.

"The counterpart of the linking *of* in the juxtaposed *PsP* is probably the overt case agreement between N_1 and N_2 . Such a hypothesis would attribute the two sub- types of pseudopartitive to a parametric difference and in particular to a difference in morphology".

 (4) Hypothesis: Languages with overt case morphology use juxtaposition in pseudo partitives, and languages without nominal case morphology (English, Romance) have a linking morpheme

2. Testing the hypothesis synchronically:

The following table summarizes preliminary typological data (Wood: 1998). P indicates a preposition, C indicates case and J juxtaposition.

Language	PC	PsP	PsP
			(alternative)
English	P of	P of	J
Dutch	P van	J	P met
German	P von	J	P von; C genitive
Icelandic	P af	P af	
Swedish	P av	J	P med
Danish	P af	J	P med
French	P de	P de	
Italian	P di	P di	
Spanish	P de	P de	
Russian	C genitive	C partitive	
Macedonian	P od	J	
Greek	P apo	J	
Armenian	C ablative	J	
Finnish	C elative	C partitive	
Hungarian	C ablative	C ?	
Turkish	C ablative	?	
Arabic	P min	J	
Korean	J	J	
Japanese	J	J	

(5) Table 1: Partitive and pseudopartitive constructions:

Languages that use juxtaposition also have a prepositional construction; the "noun complement" or "container" reading:

(6)	Sw.	en låda med vin
	a boi	ttle with wine

(7) Du. een pot met/*van thee (E. van Gelderen p.c.). *a pot with tea*

The problem with the hypothesis in (4) is immediately apparent. As AHS point out, West Flemish and Dutch do not have considerably more case than English.

As well as the problem with West Flemish and Dutch, in the West Germanic languages, we may add Icelandic and Danish as counterexamples in the North Germanic family. Icelandic is a language with rich nominal case morphology and a linking morpheme (Delsing 1993:201):

(8)	Ic.	eitt kiló a/one:N.NOM a/one kilo of a	kilo:nom.sg this butter	af	essu of	this:n.sg.dat	smjöri butter:dat.sg	(PC)
(9)	Ic.	eitt a/one:n.nom a/one kilo of a	kiló kilo:nom.sg butter	af of	smjöri butter:	DAT.SG		(PsP)

As was seen in (2) Danish is a language with impoverished nominal morphology and no linking morpheme ((Hankamer and Mikkelsen 2008:318).

Maybe the hypothesis can be sustained (or maybe not). Lets put the synchronic problem aside (for now) and consider diachronic data.

3 Testing the hypothesis diachronically:

What about comparing diachronically instead of synchronically? Older English used juxtaposition:

I bequethe my <u>peir bedys</u> of calcidenys gaudied with siluer and gilt. . . .
 I bequeath my pair beds of chalcedony decorated with silver and gilt *my pair of beds*

(1482 copy of will of Margaret Paston)

The change to the prepositional strategy would be from a more synthetic strategy to a more analytic one and would support the hypothesis in (4)

However, there is no overt case agreement between *pair* and *beds*.

Earlier English (overt case morphology)	\rightarrow Later English (less case morphology)
juxtapositional pseudopartitives	\rightarrow prepositional pseudopartitives
pair beds	pair of beds

And, I have noticed PDE speakers also using juxtaposition. From observation of PDE colloquial speech it is apparent that English speakers regularly say *couple* and not *couple of* (data from COCA):

(11) Kate, welcome to the program. I have actually a <u>couple questions</u> for you please. (Ray Suarez: NPR Talk of

the Nation 1998)

(12) Well, you know, when you see these kind of studies, you have to ask yourself a <u>couple of questions</u>.

(NPR Talk of the Nation 2009)

This is change in the reverse direction:

prepositional pseudopartitives \rightarrow juxtapositional pseudopartitives couple of minutes couple minutes

How do we interpret this observation?

There are least two possibilities:

1) English changed from a juxtapositional to a prepositional strategy and is starting to change back to a juxtaposition strategy. This would be strong evidence against the hypothesis in (4)

2) couple is a special isolated example that can explained in some other way

4. Distinction between partitives and pseudopartitives (what is changing to what?)

The distinction between partitives and pseudopartitives was made very early on in significant papers by Jackendoff (1977) who formulated the "Partitive Constraint"; the embedded NP in a partitive must be definite, and Selkirk (1977) who is responsible for the term "pseudopartitive".

4.1 Semantic distinction

The basic semantic distinction is that in a partitive part is taken from a definite set; in a pseudopartitive part is taken from an unbounded set:

partitive elements	\rightarrow	make sets accessible for quantification
ordinary partitives	\rightarrow	involves restricted or contextually bound sets
pseudopartitives	\rightarrow	involves unrestricted or unbounded entities

In English, partitive and pseudopartitive constructions use the preposition of.

(13)	En. a. a slice of that cake b. a slice of cake	(restricted set: partitive) (unrestricted set: pseudopartitive)
(14)	En. a. a number of her objections b. a number of objections	(restricted set: partitive) (unrestricted set: pseudopartitive)

(15)	a. three pounds of that stew meat	(restricted set: partitive)
	b. three pounds of stew meat	(unrestricted set: pseudopartitive)

4.2 Syntactic distinction

Selkirk (1977:303) claims that the pseudopartitives are "simple noun phrases".

Movement tests (below) show that, whereas in partitives N_1 and N_2 are two constituents, in pseudopartitives there appears to be only one constituent.

In partitives but not pseudopartitives the of phrase can be extraposed (Selkirk 1977:304):

(16)	a. How many pounds [of those apples] did you buy?b. How many pounds [of apples] did you buy?	(PC) (PsP)
(17)	a. How many pounds did you buy [of those apples]?b. *How many pounds did you buy [of apples]?	(PC) (PsP)

In partitives but not pseudopartitives the *of* phrase can be topicalised:

(18)	a. I bought three pounds of those apples.b. I bought three pounds of apples	(PC) (PsP)
(19)	a. [Of those apples] I bought three pounds b.*[Of apples] I bought three pounds	(PC) (PsP)

Moreover, in partitives but not pseudopartitves, N₂ can be extracted.

(20) a. These are the apples which I have just bought a pound of _____.b. *These are apples which I have just bought a pound of _____.

(17) and (19) show that in the partitive, the string of words that appears to be a PP, *of those apples* is a constituent while in pseudopartitives, *of apples*, appears not to be a separate constituent.

(20) shows that in the partitive, the string of words that appear to be a DP, *those apples*, is a constituent, while in pseudopartitives, *apples* is not. Together these data show that in pseudopartitives there appears to be only one constituent, *a pound of apples*, whereas in partitives each noun heads its own phrase.

Additional evidence cited for N_1 not being a head is that an adjective preceding N_1 can modify N_2 . The first noun is "transparent" to modification.

(21) a. a delicious box of apples b. a box of delicious apples The evidence suggests that in true partitives, N_1 and N_2 are both heads.

(22)



There are two different basic analyses of pseudopartitives. One treats the measure phrase as a semi-functional head and the N_2 as the lexical head.

(23



The structure in (23) is more compatible with juxtaposed pseudo partitives and classifier languages:

Wood 7

(24)	Ch.	san wan tang three Cl-bowl soup three bowls of soup		Cheng & Sybesma (1998:386)
(25)	Ch.	san ben shu three Cl pens <i>three pens</i>		
	Du.	drie glazen three glass-PL three glasses of wine	wijn wine	

The alternate analysis (Corver 1998:223) treats pseudopartitives was predicates similar to expressions like

(26) that idiot of a doctor (that doctor is an idiot)



(28)



The challenge so far:

Possible change: which direction? Unifying the two analyses

5 How robust is the *couple* data?

Possibly the examples of juxtaposed *couple* in PDE and juxtaposed *pair* in ME are not robust:

5.1 *couple* in PDE

Couple can form a partitive and a pseudopartitive with *of*:

(29)	a. A couple of her questions were a bit off the mark.b. Let me ask a couple of questions.			(PC) (PsP)
(30)	a. [Of her questions]	a couple	were a bit off the mark.	(PC)
	b. *[Of questions]	a couple	were a bit of the mark.	(PsP)

Couple in BNC: 100 million words, 10 million spoken (UK, 1980s-1993)

 couple of
 1916

 couple
 21
 (1.09%)

- (31) Yes. Mhm. and that if we want to borrow it in a <u>couple weeks</u> time (Teachers' conference: creative arts group (Edu/inf). Rec. on 3 Sep 1992)
- (32) and we've heard them mentioned a <u>couple times</u> already this week.
 (Trade Union Annual Congress (Busn). Rec. on 8 Jun 1993)

weeks (2), times (2), examples (2), years (1)

COCA: over 400 million words, 20 million words each year from 1990-2009 (equally divided among spoken, fiction, popular magazines, newspapers, and academic texts).

"It includes 20 million words each year from 1990-2009 and the corpus is also updated every six to nine months (the most recent texts are from Summer 2009). Because of its design, it is perhaps the only corpus of English that is suitable for looking at current, ongoing changes in the language".

COCA: *couple* in spoken texts only:

 'couple of'
 15,158

 'couple'
 2,244 (14.8%)

(33) It didn't work, Chris. Everybody got screwed except for a <u>couple people</u> who make more than \$2.8 million a year.

(The Chris Matthews Show Various Times NBC)

(34) Table 2: 10 most frequent constructions in COCA (all texts)

	1990-1994	1995-1999	2000-2004	2005-2009
couple years	94	171	236	246
couple weeks	72	117	132	185
couple days	90	128	157	130
couple hundred	69	94	133	149
couple times	58	94	88	111
couple hours	38	70	100	99
couple months	37	72	86	101
couple things	26	45	51	56
couple minutes	28	47	43	55
couple dozen	18	47	53	52

The PDE data are robust. So we have both loss of the juxtaposed partitive earlier English and possible development of juxtaposed pseudopartitives in PDE.

5.2 *couple* in ME

Etymology is Old French:

- Of animals: A pair of opposite sexes.
- (35) ME. Alle schulen dye for his dedes..Out-taken Eihte soules, and <u>of vche beest a</u> <u>couple.</u> Everyone should die for his deeds. . .taken out eight souls and a couple of each beast

(**1362** <u>LANGL.</u> *P. Pl.* A. x. 169)

- A brace of dogs used for hunting, *esp.* harriers or spaniels; also, a brace of conies or rabbits.
- (36) A noyse as hit hadde ben <u>a thyrtty couple</u> of houndes.*a noise as if it had been thirty couple of hounds*

(1470-85 MALORY Arthur X. xiii. 434)

- \circ without *of* (US colloquial)
- (37) A couple months in Italy (**1925** <u>S. LEWIS</u> *Martin Arrowsmith* xvi. 188)

Couple was not used without of until the 20th century.

5.3 pair in ME

The etymology is Anglo-Norman, though it is in Middle Dutch (Dutch *paar*), Middle Low German (Icelandic *pár*, Swedish *par*, Danish *par*), Middle High German (German *Paar*) apparently directly from Latin.

A search in the Paston letters for 'pair' (*payer*, *payre*, *peyre*, *peyr*, *peyr*, *paire*, *peir*, *peire*) reveals:

- 41 juxtaposed pseudopartives
- 5 prepositional pseudopartitives where N_2 is premodified
- 3 prepositional pseudopartitives where N2 is postmodified
 - o juxtaposed pseudopartives:
- I bequethe to Marie Tendall, my goddoughter, <u>my peir bedys</u> of calcidenys gaudied with siluer and gilt. ...
 (1482: copy of will of Margaret Paston)
 - \circ prepositional pseudopartitives where N₂ is premodified
- (39) and <u>iij payer of newe shetys</u> of iij levis of iij ellys and an half long and three pair of new sheets (1487: will of Elizabeth Poynings or Browne, née Paston)
 - \circ prepositional pseudopartitives where N₂ is postmodified
- (40) Item, on peyre of sensers of siluer and gilt with scripture one pair of sensors of silver and gilt (1464 Inventory of John Paston)

A postmodifier does not necessarily demand a preposition as (38) above shows. All the examples are singular.

According to the OED (sv. *pair*): earlier English did not always use a preposition and the use of *pair* in the plural seems to be fairly modern development:

Pair is now followed by *of*, as in 'a pair of gloves'; but *of* was often omitted in Middle English and early modern English, as 'a pair gloves'.... and German *ein Paar Handschuhe*. After a numeral *pair* was until recently frequently used in the singular form; 'three pair shoes' (compare German *drei Paar Schuhe*). This is now chiefly non-standard.

The unmarked plural without *of* is obsolete:

(41) *two pair wheels*

The unmarked plural with of now regional and nonstandard as in (42):

(42) BMB Iron Horse, in perfect working order, with two pair of wheels (1977 Grimsby *Evening Tel.* 5 May 3/6 (*advt.*))

6. The features of N_1 and N_2

Pair and couple are behaving differently.

couple no longer refers just to two as *pair* still does so it would seem to be more semantically "bleached" than *pair* i.e. further along the path towards becoming functional

6.1 Restrictions on N₂

If N_2 is a count noun, it can never be both singular and +count. It has to be a bare plural. N_1 counts N_2 into sets:

(43)	A pile of stones
	Six piles of stones

If N₂ is a non-count noun, N₁ portions the substance:

(44)	a slice of chicken three slices of chicken	
(45)	a drop of water	

three drops of water

6.2 Restrictions on N₁

The nouns that can form N_1 in pseudopartitives designate a certain quantity, amount or number and always take complements (AHS 402).

A number of researchers have attempted to classify the various N₁s

Delsing (1993: 203), Van Riemsdjk (1998:17), Koptjevskaja-Tamm (2001: 530) (AHS 2007:402) (Grimshaw, 2007:202).

(46)	Table 3 classification of possible N ₁ s				
		En	Du	Da	Sw
	Quantity	pair, number	aantal	antal	antal,
	Measure	pint, pound	liter	liter, kilo	liter, kilo
	Cardinal	dozen, million		dusin	dussin
	Partitive	slice, piece	snee		
	Container	bottle, box	krat	kasse	flaska, låda
	Collective (for count nouns)	swarm, herd	kudde		
	Quantums (for mass nouns)	lump, drop		dråbe	
	Forms (for mass and count nouns)	pile, bunch		bunke	bunt
	Kinds	type	soort	slags	

A number of researchers have pointed out that all N₁s do not behave alike syntactically.

Delsing (1993: 203),

N₁ may be classified into two groups, "**genuine quantifiers**" prototypically used as quantifiers: *antal, dussin, kilo, liter* [number, dozen, kilo, litre] and

"ordinary nouns that are temporarily used as quantifiers": *flaska, låda, bunt, hop*) [bottle, box, bunch, crowd].

Hankamer and Mikkelsen (2008) report something similar for Danish.

While juxtaposition is possible with all categories, N₁s that can never occur in the prepositional construction include *liter*, *kilo*, *paar*.

The genuine quantifiers can never be used with the preposition *med*, 'with' do not take a plural and are hard to compound with the noun.

(4	7)	
`			/	

a.	A pound of apples / *an apple pound	(more quantificational)
b.	A slice of bread /?a bread slice	(partitive)
c.	A lump of sugar / a sugar lump	(quantum)
d.	A pile of sand / a sand pile	(form)

Grimshaw, (2007:202)

distinguishes between 'quantity nominals": *pound, a lot* and **containers** and **portions**: *box, scoop* and *wad (of paper), bunch.*

Van Riemsdjk (1998:17)

quantifier nouns are closed class items and functional. (most) measure nouns, partitive nouns, container nouns, collective nouns are semi-lexical heads.

couple would seem to be part of the closed class along with *pair* and *number* But *couple* was not used without *of* in earlier English whereas *pair* was (as far as I have looked)

What about other possible functional nouns, e.g. pound

6.3 Pound as an N₁

Etymology: very early borrowing from Latin with cognates in West Frisian *pûn*, Dutch *pond*, Low German, *pund*, German *Pfund*, Swedish *pund*, Danish *pund*.

The unchanged plural was long retained following a cardinal number, a common feature of words denoting units of measurement (e.g. *foot, mark*) and still common in colloquial and regional English (OED sv. *pound*)

- Partitive genitive:
- (48) lc wifmon hæfde ane yndsan goldes & an <u>pund</u> seolfres.(Alfred Orosius 800)
 Each woman had one once (of) gold and one pound (of) silver
 - without *of*:
- (49) & who so is absent at bilk masses wib-oute verry cause schal paie to be brotherede<u>a</u> **pound wex** (1389 GILDA CARPENTAR LONDON)
- (50) To pay.. foir ilk merk land ilk yeir <u>ane leische pund</u> butter at Alhallomes. for each mark (of) land each year one Livonian pound (of) butter at Hallowmas (1575 Orkney)
- (51) <u>Six pund musk almonds</u> at 12s. per pund. (1675)
 - with of:
- (52) He dousend <u>pound</u> of sterlynges (1297)
- (53) & he be warned, he schal paie <u>a pound of wex</u> to be li3t foreseid, (1389 THE GILD OF THE ANNUNCIATION AND ASSUMPTION, ST. PAUL'S)
- (54) I will that prestes of my parisch kirk have a quarte of wyne and a <u>pund</u> of wax candill to syng wyth on the day of my buryng, and at the obet also. (1393)
 - Present-day English cookery register
- (55) 3 pounds tomatoes, peeled, seeded and chopped 1 bay leaf 1 **pound spaghetti** Salt and pepper

Conclusion/further directions

Couple is different: it was borrowed from OF later than the other nouns that enter into the juxtaposition construction

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