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FROM MULTUM TO BEAUCOUPE
BETWEEN ADVERB AND NOMINAL DETERMINER

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Abstract

The morphosyntactic status of the French quantifying expression beaucoup ‘a lot / much, many’ has been extensively discussed in the literature. Three hypotheses have been put forward: beaucoup has been categorized as an adverb, as having a double categorial status, both a determiner and an adverb, or as an expression which is underspecified as to its categorial status. This paper reconsiders the question from a diachronic viewpoint. It highlights two parallelisms between multum in Classical Latin and beaucoup when it becomes a quantifying expression in Middle French: (i) both quantifying expressions can combine with a noun or a verb, but never with an adjective or an adverb; (ii) they occur in direct object position (expressed in Latin by an accusative NP not headed by a preposition) or in subject position in combination with unaccusative verbal predicates, but they are unattested in other syntactic positions. These similarities can be explained on the basis of the nominal origin of multum and beau-coup ‘beautiful knock’. Being nominal expressions, multum and beaucoup are used for quantification of the direct internal argument of the verb and may occur with a genitive complement or a prepositional complement introduced by de. Since they quantify the direct internal argument of the verb, they also quantify the verbal process as such and become in this way full adverbs without saturating an argument position. It is only in a later stage that they can quantify a NP external to the VP and that they become fully-fledged nominal determiners. They keep however their hybrid status, between adverb and nominal determiner, when they quantify the direct internal argument of the verb.

The diachronic perspective of this study offers a better understanding of the use of beaucoup in Modern French: (i) from a distributional viewpoint, it explains why beaucoup used as an adverb can modify a verb but not an adjective or an adverb; (ii) it offers a fine-grained account of the morphosyntactic categorization of beaucoup in its different uses in Modern French and clarifies its syntactic differences with respect to quantifying determiners like plusieurs ‘several’; (iii) from a semantic viewpoint, it explains in which contexts beaucoup behaves as an ordinary quantifier, having normal scope relations.

Although substantial research effort has been devoted to the question, the morphosyntactic status of beaucoup in its uses exemplified by (1a) and (1b) is still under debate.

(1) a. Il mange beaucoup de pain.
He eat-P RST.3SG a lot of bread.

b. Il lit beaucoup de livres.
He read-P RST.3SG a lot of books

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1 This research on quantification has been initially conducted in collaboration with L. Melis (cf. Carlier & Melis 2005, Carlier & Melis 2006). Earlier versions of this paper have been presented in Paris, Lyon, Strasbourg, Valenciennes and Antwerp. Thanks to my audience at this different occasions for their suggestions and critical comments. The paper has also benefited from the insightful comments of Lucia Tovena, Christiane Marchello-Nizia and of two anonymous referees.
The present study intends to shed new light on this topic by introducing the diachronic perspective.

*Beaucoup* belongs, together with *peu* ‘little, few’, *assez* ‘enough’, *trop* ‘too much/many, tant / tellement ‘so much/many’, *plus* ‘more’, *moins* ‘less’, ... to the paradigm of expressions quantifying both extension (1) and degree or ‘intension’ (2) (Doetjes 1997, Abeillé & Godard 2003, Abeillé *et al.* 2004).

1. **The morphosyntactic categorization of *beaucoup* in Modern French: three hypotheses**

In order to account for the categorial flexibility of *beaucoup, peu, trop, assez, tant, ...*, several hypotheses have been explored. Firstly, these quantifying expressions have been described as underspecified with respect to their morphosyntactic categorization (§ 1.1). Secondly, they have been analyzed as adverbs in all their uses (§ 1.2). According to the third hypothesis,
these quantifying expressions are ambivalent as to their morphosyntactic status: they can be either adverb or nominal determiner (§ 1.3).

1.1 Hypothesis 1: *Beaucoup* is categorially underspecified

The hypothesis of the categorial underspecification has been defended by Doetjes (1997: 1-2), on the basis of the following observation: contrary to *souvent* ‘often’ (4) and *plusieurs* ‘several’ (5), *beaucoup* does not impose categorial restrictions and can be used with both NPs and VPs.

(4) a. Les linguistes ont *beaucoup* dansé la salsa.
The linguists have a-lot danced the salsa.

b. *Beaucoup* de linguistes ont dansé la salsa.
A lot of linguists have danced the salsa

(5) a. Les linguistes ont *souvent* dansé la salsa.
The linguists have often danced the salsa.

b. *Souvent* (de) linguistes ont dansé la salsa.
Often of linguists have danced the salsa.

(6) a. *Les linguistes ont *plusieurs* dansé la salsa.
The linguists have several danced the salsa.

b. *Plusieurs* linguistes ont dansé la salsa.
Several linguists have danced the salsa (Doetjes 1997: 1-2)

Therefore, *beaucoup* is analyzed by Doetjes as having the syntactic status of an adjunct. The only distributional constraint characteristic of *beaucoup*, as well as of the other similar quantifiers like *peu* ‘little, not much/many’, *assez* ‘enough’, *trop* ‘too much/many’, *(au)tant* ‘as much’ etc., is of a semantic nature: they are only compatible with open-scale predicates, and do not accept non gradable (7) or closed-scale (8) predicates (Doetjes 1997^{2}; Kennedy & McNally 2005):

(7) a. *Elle est *peu* enceinte / morte.
She is not-much pregnant / dead.

b. *Une carte trop / assez géologique.
A map too/enough geological.

(8) a. La bouteille est *à moitié / complètement / peu* vide.
The bottle is half- / completely / not-much empty

b. Cette image est *partiellement / complètement / peu* invisible.
This picture is partially / completely / not-much invisible

The hypothesis of categorial underspecification accounts for the flexible distribution of *beaucoup* and the similar quantifying expressions, i.e. their ability to combine with different categories. But it fails to explain the limits of this flexibility. For instance, if it is true that all quantifiers belonging to the paradigm of *beaucoup* lack in the same way categorial selection, why is the adnominal position more natural for *beaucoup* than for *assez* in example (9)?

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2 A more fine-grained analysis of the specific distributional constraints of the different quantifiers or degree-markers is offered by Doetjes (2008): on the basis of their compatibility with different morphosyntactic categories, she establishes a typology of the English, Dutch and French quantifiers or degree markers.
A second problem relates to the presence of *de* when the quantifier is in an adnominal position. The explanation offered by Doetjes (1997: 157) is based on a comparison with the English quantifying expression *a lot of*:

(10) a. Jean a lu beaucoup / peu de livres.
    John has read a-lot / few of books.

Doetjes argues that *a lot of* is a classifier construction. In the framework of generative grammar, where every NP has to receive case, it is assumed that case is assigned to the nominal classifier, leaving the NP *books* without case. The insertion of the genitive case marker *of* allows complying with the requirement to assign case to the NP *books* (Chomsky 1981). According to Doetjes (1997: 158) and Battye (1991: 32), the presence of *de* when *beaucoup, peu, trop, assez, ...* are used in adnominal position has to be explained along the same lines: given that the quantifier absorbs the case assigned by the verb, the use of *de* is necessary in order to assign case to the NP *livres*.

It should however be noted that this analysis of *beaucoup, peu, ...* as nominal classifiers absorbing the case assigned by the verb is incompatible with their syntactic status of adjuncts, since adjuncts do never receive case from the verb. Hence, the hypothesis of the categorical underspecification leaves unexplained the presence of *de* when the quantifier *beaucoup* is adnominal.

### 1.2 Hypothesis 2: *Beaucoup* is an adverb

The morphosyntactic category of the adverb is heterogeneous, in part because it served as ragbag throughout the history of grammar. In this perspective, it is not sure that the addition of the quantifying expressions like *beaucoup* to the category is judicious, because their adverbial status is far from unquestionable in all their uses.

Let’s focus on two particular cases.

- Quantifying expressions like *beaucoup* can hold on their own the position of preverbal subject, which is a typically nominal position:

(11) **Beaucoup** ont participé à la manifestation.
    A-lot have-PRST.3PL participated in the demonstration.

- They can serve as a NP governed by a preposition:

(12) **Pour beaucoup**, le vocabulaire et la syntaxe qu’ils utilisent en famille
    For a-lot, the vocabulary and the syntax that they use.3PL.PRST in family
    n’ont rien à voir avec le vocabulaire en usage à l’école.
    not have-PRST.3PL anything to do with the vocabulary in usage at the school.
    ‘For a lot of people, the vocabulary and the syntax they use in their family have
    nothing to do with the vocabulary used at school.’ (F. Dolto, *La cause des enfants*)

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3 This acceptability judgment was empirically assessed by a small corpus study on the basis of Frantext: in comparison with the number of preverbal subjects introduced by *beaucoup*, the frequency of *assez* in this same syntactic context amounts to only 1 %.
These pronominal uses are difficult to explain if we accept that *beaucoup* is an adverb, but they naturally follow from its categorization as a nominal determiner, since it is not exceptional that a nominal determiner has a parallel use as a pronoun.

1.3 **Hypothesis 3: Beaucoup is both an adverb and a nominal determiner**

The hypothesis of a double morphosyntactic categorization, as an adverb and as a nominal determiner, has been defended, among others, by Gross (1977), by Milner (1978a) and by several descriptive grammars. The distinction between the adverbial use and the determiner use is however complicated by the existence of an intermediate structure, illustrated by (13b), which has been labelled ‘remote quantification’ (‘quantification à distance').

(13) a. Il a lu *beaucoup* de livres.
    He has read a-lot of books.

This structure has been identified by Milner (1978a-b) and has been analyzed as the result of a derivation:

(14) V [SN Q de N’] → Qi V [SN Øi de N’]

According to this analysis, remote quantification would be the result of an extraction of the quantifier from its adnominal position and a movement towards the typically adverbial position between the auxiliary and the participle. In support of this analysis, Milner (1978b) observes that the only adverbs compatible with remote quantification are those that can be used in adnominal position, as is illustrated by (15).

(15) a. J’ai *énormément / abondamment* lu.
    I have enormously / abundantly read.

b. J’ai *énormément / abondamment* lu de livres.
    I have enormously / abundantly read of books.

c. J’ai lu *énormément / abondamment* de livres (Milner 1978b)
    I have read enormously / abundantly of books.

In this perspective, remote quantification is basically a nominal quantification bearing on the NP « de N’ ».

Milner’s hypothesis has been re-examined by Obenauer (1983) and by Doetjes (1997). Both convincingly show that the scope of quantifier in adverbal position in (13b) is not restricted to the NP « de N’ », but includes the verb. They argue that the so-called remote nominal quantification is in fact a quantification of the VP, including the nominal direct object. Since this quantifying structure is related both to the verb and to the nominal object, it could be the missing link between the adverbial use of *beaucoup, trop, assez, …* and its use as a nominal determiner, allowing us to understand why these expressions can express nominal and verbal quantification.

The quantifying structure « Q V de N’ » is rather uncommon in Modern French, but had a high vitality in older stages of the French language (Buridant 2000, Marchello-Nizia 2000, 2006, Carlier & Melis 2005)⁴. This suggests that the determiner use and the adverbial use of expressions like *moult / beaucoup, peu, assez, trop, …* separated progressively throughout

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⁴ The positional constraints and interpretation of the structure « Q V de N’ » in Modern French will be detailed in § 5.
history. Hence, the diachronic viewpoint can shed a new light on the problem of the morpho-
syntactic categorization of these quantifying expressions. It is in this perspective that we will
examine beaucoup and its antecedents multus / multum in Latin and m(o)ult in medieval
French.

2 Multus / multum in Classical Latin

In Classical Latin, the quantifier multus is an inflected form and agrees in gender and number
with the noun. Latin does not have a clear distinction between determiner and adjective. As
is illustrated by the following examples, quoted from Menge (2000: § 263), multus can be
coordinated to an adjective (16) or can occur without coordinating conjunction, in the way of
a determiner (17).

(16) Multi ac summī viri (Cicero, Catil. 1: 10)
   'numerous and important men'

(17) Multi docti homines (Cicero, Fam. 9, 6, 5)
   'numerous learned men'

Moreover, multus is used in a very flexible way as pronoun.

(18) Occident nonnullos, vulnerant multos (Cicero, Pro Sextio 75, 8)
   kill−PRST.3PL several−ACC.M.PL kill−PRST.3PL many−ACC.M.PL
   'They kill some of them, they injure many of them'

One of these pronominal uses is precisely the nominative or accusative singular neutral form
multum, also labelled adverbial. This form can be complemented by a genitive (19-20-21) or
by a prepositional phrase introduced by ex ‘out of’ or de ‘from, of’, taking the ablative case
(22). This last case is the ancestor of Modern French pattern beaucoup de N’.

(19) Multum operae dabam Quinto Scaeuolae Publii filio
   a-lot-ACC.SG.N work-GEN.SG give−IMPF.1sg Quintus-DAT.SG Scaevola-DAT.SG Publius-GEN.SG son.dat.sg
   'I worked a lot with Quintus Scaevola, son of Publius’ (Cicero, Brutus, 89, LXXXIX, 304)

(20) ne multum operae impendas
   in-order-to-NEG a-lot-ACC.SG.N work-GEN.SG devote−CONJ.PRST.2SG
   'in order to avoid that you devote much work to …’ (Seneca, Letters to Lucilius, V, 1:6)

(21) Tu uero multum sanguinis fusum est.
   Then however a-lot-NOM.SG.N blood-GEN.SG shed.PST.TCP be.PRST.3SG
   'Then a lot of blood has been shed’ (Quintus Curtius Rufus, History of Alexander the Great, I, 3, 11)

(22) Proximo bello si aliquid de summa grauitate Pompeius,
    multum de cupiditate Caesar remisisset,
    a-lot-ACC.SG.N of cupidity-ABL.SG Caesar-NOM give up−CONJ.PQPF.3SG
    et pacem stabilem et aliquum rem publicam nobis habere licuisset.
    'During the last war, if Pompeius had given up a little bit of his noble gravity and Cesar a lot of
    his cupidity, we could have kept a stable peace and a shadow of the Republic’. (Cicero,
    Philippics, 13 (2).

This adverbial use of multum obeys to strict syntactic constraints: it can occur in syntactic
positions that correspond to the nominative case (21) and to the accusative case not governed
by a preposition (19/20/22). In the other syntactic functions, it is replaced by the inflected
form. The examples (23a-b) illustrate this same distribution of the inflected form and the
uninflected form for *tantus*: *tantum* combined to a complement in the genitive case can be used as the object of *dare*, but the inflected form is required for an accusative governed by a preposition.

(23) a. *Tantum* opera mihi ad audiendum datis  
   \[\text{So-much.ACC.SG.N work-GEN.SG me-DAT to listen-GERUND.ACC give.PRT.2PL}\]  
   You give me so much work to listen’ (Cicero, *De oratore*, 2: 122)

   b. *Propter tantam operam.*  
   \[\text{because-of so-much.ACC.SG.F work-ACC.SG}\]  
   ‘because of so much work’

It has been argued that the distributional constraints imposed upon *multum* are due to the fact that *multum*, although analyzed as an adverb, is originally a nominalized neuter adjective in the nominative or accusative case and has to respect the constraints of its case marking (Maurel 1985: 126). However, this hypothesis does not explain why *multum* can be used for direct objects but not if the accusative case is governed by a preposition.

The hypothesis that will be put forward in this paper in order to account for these distributional constraints of *multum* relies on a structured representation of the arguments of the verb. I will adopt the distinction, established by Williams (1981), between the external argument, outside the VP and which takes the syntactic function of subject, and the internal arguments, included in the VP. I will further distinguish between the direct internal argument and the indirect internal arguments (Marantz 1984): the direct internal argument is directly governed by the verb, whereas the indirect internal arguments are governed by a preposition or, in case inflected languages, have a case marker which is not the nominative or the accusative. This structured representation of the verbal arguments allows us to establish a typology of the major verbal predicates: the direct transitive verbs have both an external argument and a direct internal argument, the intransitive verbs split into the inergative verbs, having only an external argument, and the unaccusative verbs, whose unique argument is a direct internal argument. (Perlmutter 1978, Levin & Rappaport 1995).

The argument structure has been correlated to the aspectual properties of the verbal predicate (Dowty 1979, 1991, Tenny 1994, Grimshaw 1994, Van Valin 1990). Relevant for this study is the fact that only the direct internal argument, whether it is the direct object of the transitive verb (24a) or the subject of the unaccusative verb (24b), plays a crucial role in aspectual structure: only the direct internal argument can ‘measure out the event’ to which the verb refers (Tenny 1994: 10). The delineation of the external argument, be it the subject of a

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5 Argument structure is also put into service by Kratzer (1995) in order to distinguish between two types of verbal predicates: **stage-level predicates** such as *standing on a chair, available* would have an extra argument position for an event argument or for spatio-temporal location, whereas **individual-level predicates** such as *altruistic, having long arms* lack this argument position. This locative argument is conceived of as an external argument in the sense of Williams (1981). The hypothesis of an argument of spatio-temporal location occupying the external argument position contributes to define the correlation between aspect, information structure and the referential interpretation of indefinite NPs. However, as has been observed by Grimshaw (1994: 64) and by Fernald (2000: 44 ff), it is unclear how to articulate this hypothesis with the theory of argument structure. Williams assumes that only one argument can be external to the VP. According to Kratzer, all stage-level predicate have an argument for spatio-temporal location and this argument will be necessarily the external argument. From this hypothesis, it follows that all ‘stage-level’ predicates are unaccusative insofar as their subject is an internal argument (Fernald 2000: 44-45). In this perspective are considered as unaccusative not only the verbs that have been identified as such (*come, leave, …*), but also those that are commonly recognized as unergative (*cry, dance, work …*) and even agentive transitive verbs (*hit, kill, …*). In order to accommodate the hypothesis of the locative argument to the theory of argument structure, it would be necessary to clarify the exact status of the locative argument, a debate which is beyond the scope of this study.
transitive verb (24c) or the subject of an intransitive verb of the unergative type (24d), does not have this effect. This can be shown by the test of compatibility with telic and atelic aspectual complements introduced respectively by the prepositions en ‘in’ and pendant ‘during’.

(24) a. Marie a bu trois verres en une heure / *pendant une heure.
   Mary drink-PST.3SG three glasses in one hour / during one hour.
   ‘Mary drank three glasses in one hour / during one hour’

b. *Trois hommes sont arrivés en une heure /* pendant une heure.
   Three men arrive-PST.3PL in one hour / during one hour.
   ‘Three men arrived in one hour / during one hour’.  

c. *Trois hommes ont apporté des caisses en une heure / pendant une heure.
   Three men bring-PST.3PL of-the boxes in one hour / during one hour.
   ‘Three men brought boxes in one hour / during one hour’.  

d. *Trois hommes ont travaillé en une heure / pendant une heure.
   Three men work-PST.3PL in one hour / during one hour.
   ‘Three men were working in one hour / during one hour’.

This ‘measuring-out’ of the verbal process by means of a quantified internal argument is not characteristic of all verb classes. As has been noted by Verkuyl (1972), for static verbs, the boundedness of its direct object does not have any incidence on aspect (25a). Moreover, even in combination with certain dynamic verbs, the boundedness of the direct object does not yield telicity (25b).

   Peter know-PST.3SG like-PST.3SG the neighbours.

b. Pierre caresse le lapin.
   Peter stroke-PST.3SG the rabbit.

The quantification of the direct internal argument is relevant for the aspect calculus only if there is a homomorphism between the spatial properties of the internal argument and the temporal structure of the verbal process, in such a way that the referential properties of the internal argument carry over to the temporal constitution of the verbal process. This homomorphism has been analyzed in detail by Krifka (1992) and by Jackendoff (1993) for verbs that describe the coming into being and disappearing of their internal argument (26), a change of the properties of the internal argument (27), or that conceive the internal argument as a path (28).

(26) a. Pierre construit une maison.
   Peter build-PST.3SG a house

b. Pierre mange une pomme.
   Peter eat-PST.3SG an apple.

(27) a. Le cuisinier caramélise le sucre.
   The cook caramelize-PST.3SG the sugar.

b. Le sucre caramélise.
   The sugar caramelize-PST.3SG

(28) a. Pierre joue un concerto
   Peter play-PST.3SG a concerto

b. Pierre monte l’échelle.
   Peter climb-PST.3SG the ladder

I argue that the argument structure is the relevant factor to explain the distribution of multum in Latin. An expression like multum, having the form of a singular neutral nominative or accusative can quantify the direct internal argument, be it the direct object of a transitive verb...
(19/20/22), the subject of an intransitive verb of the unaccusative type or the subject of a passive predicate (21). On the contrary, it is not used for indirect internal arguments, neither for adjuncts (23b). Upon this quantification can be grafted a genitive complement (19-21) or a prepositional complement (22).

This syntactic constraint is crucial for understanding how the nominal form multum could evolve into an adverb. According to the hypothesis of a correlation between argument structure and aspect, the quantification of direct internal argument can amount to a quantification of the verbal process as such. Hence the quantification by multum in structures like multum operaee dabam (19) or multum sanguinis fusum est (21) offers evidence for the double nature of the quantification. On the one hand, this quantification is nominal, because multum fills an argument position whose nature is specified by the genitive or the prepositional complement. On the other hand, this quantification is also verbal, insofar as the quantification of the internal argument yields a quantification of the verbal process6.

In this way, multum tightens its relationship with the verb. It becomes a full-fledged adverb when it occupies no longer a syntactic position corresponding to a NP (28). Witness the fact that it can be coordinated in this use with forms endowed with the adverbial suffix (29).

(29) Multum te amamus (Cicero, Epistulae ad Atticum, 1,1,5)
    Much you ACC love PRST 1PL
    ‘We love you very much’

(30) longe multunque superamur a bestiis (Cicero, Fin. 2,11)
    longe ADV much and surpass PASS PRST 1PL by animal ABL PL
    ‘Animals are by far and in many respects ahead of us’

However, it is not attested in all the contexts of use of the adverb. It only sporadically occurs with an adjective (31/32) (Menge 2000: § 360). Moreover, the consulted corpora did not contain any occurrence in combination with an adverb.

(31) Hac in re scilicet una multum dissimiles
    This ABL FEM SG in thing ABL SG of course one ABL FEM SG much different NOM PL
    ‘In this respect only, they are very different.’ (Horatius, Epist., 1,10)

(32) medicus multum celer atque fidelis (Horatius, Satira, II: 3, 145)
    doctor NOM SG much swift NOM SG and faithful NOM SG
    ‘a very swift and faithful doctor’

As a matter of fact, in Latin, high degree quantification in relationship with an adjective or an adverb is expressed by a synthetic superlative (e.g. the adjective celer, celerrimus ‘swift’ / ‘very swift’ or ‘the swiftest’; the adverb celeriter / celerrimē ‘swiftly / very swiftly’ or ‘the most swiftly’). The form multo, analyzed as an ablative of measure, is however used to reinforce the comparative or the superlative of adjectives and adverbs (multo crudelior ‘much more barbaric’, Cicero, Pro Roscio Amerino, 53 (153); multo/longe optimus ‘the very best / by far the best’ cf. Ernout & Thomas 1951: §§ 117 & 190).

These data show how multum, the (pro)nominal use of the adjective-determiner multus, enters into the verbal sphere and acquires the status of an adverb. As we will see in sections §§3-4, in the shift from Latin to Old French, the categorial status of the adverb mult strengthens; on the contrary, the inflected form of mult moves towards its decay.

6 Le Goffic (1993: § 17), observes « an important contact area […] between the adverb and the preposition-less NP in the domain of the quantificational expressions » (my translation). The hypothesis defended in this paper ties up with this observation.
3 Mult in very Old French

Mult in very Old French retains some morphological and syntactic features of multus in Latin even if there is evolution on some points. Firstly, in the oldest French texts, predominantly Anglo-Norman, mult is still inflected according to case, gender, and number: the examples (33) and (34/35) contain respectively a masculine and feminine plural.

(33) Mulz malades guari de sun relief demaine.
Many-REG.M.PL sick-REG.PL cure-PST.3SG
La fille a un riche humme en devint tute saine,
Qui out esté fievrose mainte lunge semaine
‘He cured a lot of sick persons of his domain obtained by relief. The daughter of rich man, who had been feverish during several long weeks, fully recovered’ (Guernes de Pont-Saint Maxence, Life of Saint Thomas Becket [1173], v. 3671)

(34) Pantere est de multes culurs: neire, ruge, verte, pale, purpre, …
Panther is of many-FEM.PL colors
‘The panther has a lot of colours: black, red, green, pale, purple.’ (Lapidary in prose, middle 12th C.)

(35) Par multes terres fait querre sun amfant
throughout many-FEM.PL country-PL make-PRST.3SG search-INF his child.
‘he made look for his child throughout many countries’ (Life of Saint Alexis [1050], v. 112)

The singular form, however, has lost its gender agreement: the feminine form is not attested. As will be shown below, this at first sight enigmatic asymmetry between singular and plural, inexistent in Latin, can be explained by the specific conditions of use of the inflected form at this language stage.

Contrary to its Latin homologue, the inflected quantifier cannot be coordinated with an adjective and behaves in this respect as a determiner:

(36) Tanz riches reis
So-many-REG.PL.M rich-REG.PL.M king-REG.PL.M
‘so many rich kings’ (Song of Roland [1100], v. 527)

Like multus in Latin, the inflected form mult is used not only as a determiner, but also as a pronoun.

(37) A molz l’ai veü avenir
to many-REG.M.PL this have-PRST.1SG seen happen’
‘I have seen happen this to many’ (Thomas [end 12th C.], Tristan & Iseult, v. 397)

7 This study is based on the corpus Corptef (http://w7.ens-lsh.fr/corptef/). All the inflected forms of mult have been taken into account. Outside the Anglo-Norman area, the inflected form of mult also occurs in the Passion de Clermont (end 10th C. or beginning 11th C.). The much debated question of the language of this poem will not be dwelt upon in this paper.

8 It has however to be noted that the feminine singular form multe is attested in one single text, namely the Psalter of Oxford, with no less than seven occurrences. On the basis of the other linguistic features of the text, it can be reasonably assumed that the use of this form is due to an interference with the translated Latin source.
Alongside this use as a pronoun or a determiner, *mult* in its uninflected form fulfils also the role of an adverb and, unlike *multum* in Latin, it occurs in the whole range of contexts characteristic of the adverb: it can modify not only a verb (38), but also an adjective (39) or an adverb (40). Finally, it is used to reinforce the analytical comparative or superlative, in a similar way as *mulo* in Latin (41).

(38) Jo vos *aim mult* (*Song of Roland* [1100], v. 634)
I you-*2PL* love-*PRST1SG* much
‘I love you a lot’

(39) Si fut *Jonas mult correctious* (*Sermon on Jonas* [940], cf. Marchello-Nizia 2006)
be-*PST.3SG* Jonas *much angry*
‘Jonas was very angry’

(40) *Mult dulcement a regreter le prist* (*Song of Roland* [1100], v. 2036)
Much *slowly to regret-INF him-ACC.SG* take-*PST.3SG*
‘very slowly, he began to regret it’

(41) Car *mult plus grief martyr sufri*
because *much more serious martyr suffer-*PST.3SG*
‘because he suffered a much more serious martyr.’ (Guernes de Pont-Saint Maxence, *Life of Saint Thomas Becket* [1173], v. 5811)

Though more properly adverbial than its Latin predecessor, the uninflected form *mult* can also serve as a quantifier in the nominal domain. *Mult* can be contiguous to the noun it quantifies (42/43/44), but it is often separated from this noun (45/46).

(42) E *mult ennois ad a traire*
And much *difficulties has to endure*
‘and he has to endure a lot of troubles’ (Benedeit, *saint Brendan* [1120], 614)

(43) *Mult gemmes et mult or esméré i posa*
Much gems-*PL* and *much gold there put-*PST.3SG*
‘he put there a lot of gems and pure gold’ (Guernes de Pont-Saint Maxence, *Life of Saint Thomas Becket* [1173])

(44) Par *la mer mult de morz en gist* (Wace, *Brut* [1155], v. 13093)
Throughout the see *much of dead lay-*PST.3SG*
‘in the see were laying a lot of corpses’

(45) *Mult unt oûd e peines e ahans.* (*Song of Roland* [1100], v. 267)
Much *have-*PST.3PL *had and sorrows and torments.*
‘They had a lot of sorrows and torments’

(46) *Mult sunt de malvais estres* (Philippe de Thaon, *Bestiary* [around 1130])
Much *be-*PRST.3PL *of bad creatures*
‘There are a lot of bad creatures’

This existence of an uninflected form for nominal determination raises two questions.
- Which is its categorial status in the examples (42) to (46)?
- How to account for the respective distribution of the inflected and the uninflected forms of *mult*?
A first principle which determines the distribution of the inflected and the uninflected forms is of a syntactic nature: in the oldest French texts, only the inflected form is used in the case of a NP headed by a preposition.

(47) Escuz unt genz, de mult-e-s cunoisances (Song of Roland [1100], 3090)
Shields have-PRST.3PL nice, of many-FEM.PL armorials
‘They have nice shields, adorned with many armorial bearings’

(48) De multes choses unt entr’els dous desputé
Of many-FEM.PL things have-PRST.3PL between them two discussed.
‘Ils ont discutés entre eux de beaucoup de choses’ (Guernes de Pont-Saint Maxence, Life of Saint Thomas Becket [1173], v. 4391)

(49) li pains est fait de mulz greins (Elucidaire, 3th translation [ca. 1200])
the bread-SG.NOM is made of many grains
‘Bread is made of a lot of grains’

In the very same way as multum in Latin, the uninflected form mult does not occur in this context: be it in adverbal position (45/46) or in adnominal position (42/43/44), the uninflected form mult can quantify a nominal constituent when this NP is the direct object of a transitive verb (42/43/45), or the subject of an unaccusative verbal predicate (44). This constraint shows that even in adnominal position, mult is not a full-fledged nominal determiner, but still behaves as an adverb: the uninflected quantifier applies to the VP and can in this way quantify the internal argument of the verb. Hence, the syntactic structure of the examples (42) à (46) corresponds to (50a) rather than (50b).

(50) a. Q [V N’]
    b. Q_{i} [V] [N’]_{i}

A second principle accounting for the distribution of the inflected and uninflected quantifiers is of a semantic nature: the use of the inflected form tends to evoke a distributive plural, whereas the uninflected form expresses a collective plural. For instance, (33), containing an inflected form, suggests that the sick are cured one by one, whereas the verbal process in the examples (42) and (43) affects the troubles and the gems as a collection without individuating them.

(33) Mulz malades guari de sun relief demaine.
Many-REG.M.PL sick-REG.PL cure-PST.3SG
La fille a un riche humme en devint tute saine,
Qui out esté fievrose mainte lunge semaine
‘He cured a lot of sick persons of his domain obtained by relief. The daughter of rich man, who had been feverish during several long weeks, fully recovered’ (Guernes de Pont-Saint Maxence, Life of Saint Thomas Becket [1173], v. 3671)

(42) E mult ennois ad a traire (Benedeit, Saint Brendan [1120], 614)
And much difficulties has to endure
‘and he has to endure a lot of troubles’

---

9 This semantic opposition between inflected and uninflected forms meaning ‘a lot’ also exists in other languages. In Dutch, the inflected form expresses an individuated plural, whereas the uninflected form allows a collective apprehension of the quantified set.

(i) Ik heb vele[T-inflected] mensen gegroet op de receptie. ‘I greeted a lot of people at the reception’ (one by one)
(ii) Ik heb veel[T-uninflected] mensen gezien op de receptie. ‘I saw a lot of people at the reception’
This correlation between the inflection of the quantifier and the concept of distributive plural in very Old French accounts for the fact that the inflected forms exist only for the plural and are not attested for the singular, since inflection does have no ‘raison d’être’ in the singular.

The following table shows the frequency of mult in the different uses listed above in a corpus composed of the six following texts: The Passion of Clermont [980], The Life of Saint Léger [975], The Life of Saint Alexis [1050], The Song of Roland [1100], The Comput, written by Philippe de Thaon [1113], The alphabetic Lapidary [1st third of the 12th C.]. It should be mentioned that the frequency of the inflected form is unequal in the different texts. For instance, there are few occurrences in the Song of Roland.

**TABLE 1:**
Absolute frequency of mult as a determiner / pronoun and as an adverb in a very Old French corpus (980-1130)

<table>
<thead>
<tr>
<th>TOTAL NUMBER OF OCCURRENCES OF MULT</th>
<th>292</th>
</tr>
</thead>
<tbody>
<tr>
<td>DETERMINER / PRONOUN</td>
<td>22</td>
</tr>
<tr>
<td>Inflected form in a PP</td>
<td>8</td>
</tr>
<tr>
<td>Uninflected form in a PP</td>
<td>0</td>
</tr>
<tr>
<td>Inflected form in a NP, which is a direct object or a subject of an unaccusative predicate</td>
<td>3 (+3)10</td>
</tr>
<tr>
<td>Uninflected form in a NP, which is a direct object or a subject of an unaccusative predicate</td>
<td>8</td>
</tr>
<tr>
<td>ADVERB</td>
<td>270</td>
</tr>
<tr>
<td>Adverb modifying a verb</td>
<td>38</td>
</tr>
<tr>
<td>Adverb modifying an adjective</td>
<td>174</td>
</tr>
<tr>
<td>Adverb modifying a PP (often a genitive of quality)</td>
<td>7</td>
</tr>
<tr>
<td>Adverb modifying an adverb</td>
<td>51</td>
</tr>
</tbody>
</table>

### 4 Moult in Old French

From the 13th century on, the inflected form of moult, already infrequent in very Old French, disappears. The example (52) corresponds to the last occurrence in the corpus.

(52) Sire, fet li rois, de vostre venue avions nos mout grant mestier por moltes choses

‘Lord, said the King, we needed very urgently your arrival for many things. (Quest for the Holy Grail [1220])

---

10 These three occurrences are undecidable, since the inflected form appropriate in the context corresponds to mult, which is also the uninflected form.
Only subsists the invariable form *moult*, which extends its use to NPs headed by a
preposition.

(53) Vraiment a Moysi fut offert ke ilh seroit sires
Really to Moses be-PST.3SG offer-PST.PTPC COMP he be-COND.3SG lord-NOM.SG
*de* *mult* *de* *genz*
of a-lot of people
‘really, Moses has been proposed to be lord of a lot of people’ (Saint Bernard, *Sermones in Cantica*, last quarter of the 12th C.)

This evolution shows that within the category of quantifying determiners, a new categorial
borderline emerges: only nominal determiners like *maints* ‘many’, *plusieurs* ‘several’ that
exclusively apply to count nouns endowed with a plural form remain inflected, whereas
determiners that are not specified according to this feature become invariable.

In parallel to the disappearance of the inflected form, there is a rise of the pattern *mult de N*. It
has been argued that this rise of *de* before the quantified noun phrase is a sign of reanalysis:
the quantifier which primitively applies to the entire VP (54a) would have its scope limited to
the object NP (54b) and would become in this way a remote nominal quantifier:

(54) a. Q [V N’]
   b. Q, [V] [de N’];

In Carlier & Melis (2005), this hypothesis was rejected on the basis of the following
arguments.

- Firstly, the empirical data offer no evidence for the fact that the presence or absence of *de*
corresponds to a difference in scope. For instance, it seems unlikely that in the two following
examples, quoted from the same text, the quantifier has a different scope according to the
presence or absence of *de*.

(55) Cil Ewruins *molt li vol* *miel*
That Ebroïn much him-DAT want-PST.3SG harm
‘That Ebroïn intends to harm him a lot.’ (*Life of Saint Léger* [975], v. 101)

(56) Por quant il pot, *tan* *fai* *de* *miel*
For as-much he can-PST.3SG, as-much do-PST.3SG of harm.
‘He does as much harm as he can’ (*Life of Saint Léger* [975], v. 135)

- Secondly, in Old French, the presence of *de* is more systematic when the quantifier is in
adnominal position than when it is separated from the nominal object by the verb. Yet, in
adnominal position, the marking of the scope of the quantifier is superfluous because there is
no risk of ambiguity.

(57) mostreir *mult de signes* (*Li Dialoge Gregoire lo Pape*, end 12th C.)
‘show-INF a-lot of signs’

- Finally, if *de* has the role of a scope marker, why does it never appear when the quantifier
modifies an element which does not have the morphosyntactic status of noun, such as an
adjective, for instance?

(58) Entre les dous oilz *mult* out *large* le front (*Roland*, [1100], v. 1217)
Between the two eyes much/very had large the brow’
Since the presence of *de* is conditioned by the morphosyntactic category to which *moult* applies, the reason for its emergence seems to be a gradual shift of the categorial status in the evolution from *multus* in Latin to *moult* in Old French.

As pointed out before, *multus* in Latin is endowed with a great categorial flexibility. It appears not only in its inflected form, but has also developed the pronominal form *multum* as a pronoun quantifies the verbal process by quantifying its internal argument (e.g. *multum operae dabam* (ex. 19) or *multum sanguinis fusum est* (ex. 21)). It has however shifted towards the category of the adverb when it quantifies the verbal process as such, without saturating an argument position (cf. *multum te amamus* (ex. 29)). In the evolution from Latin to Old French, the inflected form is lost and the uninflected form has strengthened its adverbial status: it extends its distribution to adjectives and adverbs. Given that *moult* is an adverb, it looses its capacity to appear freely in combination with a noun, in the way of a nominal determiner, unless *de* is inserted. Hence, *de* fulfils a syntactic role: it enables an adverbial quantifier to combine with a noun, whether it is contiguous to the noun or separated from it by a verb. This explains why *de* does not occur when the quantifier applies to an adjective (cf. example (58)). The syntactic role of *de* also accounts for the fact that *de*, in the stage where it is still optional, occurs more readily when the quantifier is in adnominal position (59) than when it is in adverbal position and quantifies the nominal object at a distance (60).

(59) Avec assez *de* pain (Gaston Phébus, *Le livre de chasse* [=The book of hunting] [1387])

with enough of bread

(60) Car assez *ont* pain et pittance (F. Villon, *The Testament* [1461], p. 38)

Since enough have-PRST.3PL bread and food

`Since they have enough bread and food`

Eventually, the use of *de* will become obligatory, at the time when the partitive article is no longer optional. It thus appears that *de* has a double role: it is not only a relator but it also partakes in determination (Carlier & Melis 2006).

In conclusion, *moult* in Old French has two distinct uses. On the one hand, it quantifies the VP and can take into its scope the NP corresponding to the direct internal argument of the verb. On the other hand, after the disappearance of the inflected form, the invariable form *moult* acquires a role in nominal determination: it becomes part of a complex nominal determiner and can also quantify an NP external to the VP.

5 *Moult / beaucoup* in Middle French and in Modern French

Besides the ‘obligatorification’ of *de*, two major evolutions occur in the period of Middle French.

- The form *moult* is gradually replaced by *très* ‘very’ and *beaucoup* ‘a lot’. The rise of *beaucoup* is dramatic: although its frequency becomes significant only from the 15th century on, it has, along with *très*, already spread by the end of the 16th century to all contexts of use of *moult*, which in turn becomes obsolete (Marchello-Nizia 2000; 2006: 140-141) (§ 5.1).

- The pattern Q V N’ becomes rare and is replaced by V Q N’ (§ 5.2).

5.1. The disappearance of *moult* and its replacement by *beaucoup* and *très* have been investigated in detail by Marchello-Nizia (2000; 2006, chapter 4). In the context of this paper, only some elements of this evolution, relevant for the analysis, will be mentioned. Marchello-Nizia’s analysis offers evidence for the fact that the loss of *moult* is due to the
tendency towards higher morphosyntactic specialization. Très (< Latin trans ‘through’) is primitively a prefix or preposition with the spatial meaning ‘through’, but it can also express high degree (tres-tot ‘absolutely everything’, tres-fremir ‘tremble entirely’). Furthermore, as a degree marker, it can also be used as an adverb modifying adjectives or adverbs. In this use, it enters in competition with moutl from the 12th century on. Beaucoup develops in complementary distribution with respect to très: whereas très is restricted to adjectives and adverbs, beaucoup combines with nouns and verbs. According to Marchello-Nizia (2006:250), the replacement of moutl by très and beaucoup introduces in this way a new marking of a grammatical distinction: nouns and verbs are first level units, since they are head of an immediate constituent of the sentence, whereas adjectives and adverbs are units of an inferior level.

On the basis of the empirical data of Marchello-Nizia’s study (2006: 147) and in accordance with the observation of Le Goffic (1993: § 166), I will argue that the nominal origin of beaucoup (< ‘beautiful knock’) can contribute to account for its specific distribution in Middle French. In the same way as for multum in Latin, the (pro)nominial form of the adjective-determiner multus, the first uses of beaucoup are those where it fills the direct argument position of the verbal predicate, i.e. the direct object of a transitive verb (61) or the subject of an inaccusative verbal predicate, most often in inverted position, behind the verb (62/63). It may occur with a complement of the form « de N’ ».12

(61) Et leur pel est moutl bonne pour fere biau coup de choses quant elle est bien conreie et prise en bonne sayson.

‘Their skin is very good to do plenty of things when it is well finished and taken in the good season.’ (Gaston Phébus, Le livre de chasse ['the Book of Hunting'] [1387])

(62) Et cest livre j’ay comencié a ceste fin que je vueil que chascuns saichen que cest livre verront ou orront que de chasce je ose bien dire qu’il peut venir biau coup de bien.

‘I wrote this book because I want that everyone who sees or hears this book knows that from the hunting – I dare say it – there can come a lot of good things.’ (Gaston Phébus, Le livre de chasse ['the Book of Hunting'] [1387])

(63) En la ville de Malignes vinrent beaucoup de signeurs

In the town of Malines come-PST.3PL a-lot of lords

‘In the town of Malines, there came a lot of lords’ (Froissart, Chronicle [1400])

Next, beaucoup develops its use as a degree marker of the VP without saturating an argument position.

(64) Et pour ce, chieres amies, veu que ce ne vous puet riens valoir et beaucoup nuire, ne vous vueilliez en tieulx fanfelues moult delicter. (Chr. De Pisan [1405])

‘and therefore, dear friends, given that this can offer you nothing and harm you a lot, please do not delight in such banalities.’

(65) Vous m’avez beaucoup celé les amours d’une telle et de vous.

‘you have much hidden the amorous adventures of Mrs so-and-so and of yourself’ (Cent nouvelles nouvelles, p. 229, quoted from Marchello-Nizia, 2006: 147)

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11 Marchello-Nizia (2006: 186) spots one early occurrence of beaucoup in an indirect or prepositional object:

Et pararent ensamble de beaucoup de choses (Froissart, Chronique [1400])

‘And speak-PST.3PL together of a lot of things’

12 On the basis of the similarity with beaucoup […] de N’, Muller (1995: 266-267) offers an analysis along these lines of the negation pas … de N’.
Beaucoup appears only later on as a quantifier of a NP headed by a preposition.

(66) et en beaucoup de lieux en France, et mesnement en la viconté de Paris, femmes en ligne collateral ne succedent point en fiefs nobles (Jean Juvénal des Ursins, Audite celi [1435])
‘in many regions of France and even in the viscount of Paris, women in collateral lineage do not inherit noble fiefs.’

Hence, the same evolutionary stages are observed as in the case of multum > m(o)ult : nominal form > adverb > nominal determiner. Moreover, beaucoup as a nominal determiner gives rise to a pronominal use:

(67) Beaucoup furent esbahiz de ceste fantaisie
‘Many were surprised by this fantasy’. (Ph. De Commynes, Mémoires [1489], quoted by Marchello-Nizia 2006)

Besides, like multo in Latin and mout in Old French, beaucoup appears early to strengthen the degree morphemes ‘more’ ‘less’. (Marchello-Nizia 2000: 5).

(68) beaucoup plus de signeurs de France
much more (of) lords of France (Froissart, Chroniques [1400])

(69) L’autre chemin, a dextre, par ou je montay, est assez plus longs,
mais il est beaucoup plus aysié (A. de la Sale [1442])
but it is much more easy
‘the other path, on the right, by which I went up, is longer, but it is much easier.

5.2. A second evolution occurs in Middle French : the pattern Q V de N’ (70a) declines and is replaced by the pattern V Q de N’ (70b)13.

(70) a. En celle assemblee mout en y ot de mors et de navrez
de chascune partie
in that melee, a-lot of-them there have-PST.3SG of dead and of wounded at each side
‘In that melee, there were a lot of dead and wounded at each side.’ (Bérinus [1350], p. 128)

b. en y ot mout de mors de chascune partie
of-them there have-PST.3SG a-lot of dead at each side.
‘There were a lot of dead at each side’ (Bérinus [1350], p. 123)

13 According to Hopper’s principle of layering, the emergence of a new grammatical pattern does not yield the elimination of the older one (Hopper 1991). In the case of the shift from Q V de N’ to V Q de N’, the old pattern continues to occur sporadically during a very long period, especially with the quantifier tant. Witness the following example from the 19th century, where the quantifier tant applies to the whole VP, composed by an inaccusative verb and its inverted subject in the internal argument position.

On eût dit sous le chêne un essaim de frelons,
tant arrivaient d’esprits, d’ombres et d’âmes folles pour recueillir le miel des savantes paroles.
so-much arrive-IMPF.3PL of spirits, of shadows, and of foolish souls … (A. Brizeux, Marie (1840))
‘There arrived so much spirits, shadows, foolish souls to gather the honey of the wise words, you would have said a swarm of hornets under the oak’
In the new pattern, the quantifier is next to the NP de N'. This positional shift has been analyzed as a sign of reanalysis: the quantifier would no longer apply to the entire VP, but would be restricted to the NP de N'. In this way, moult would have reached the status of a nominal determiner.

(71) a  Q [V [de N']]
b.  V [Q de N']

(72) a.  moult  a  de dolour
    a-lot  has of sorrow
    ‘He suffers a lot’ (Eustache Deschamps, Miroir de mariage [‘Mirror of marriage’] [1385])
b.  il  eut beaucoup  de chagrin
    he  had  a-lot of sorrow
    ‘he felt very upset’ (Antoine Galland, Les mille et une nuits [‘Thousand and one nights’][1715])

It is important to note that this positional shift of the quantifier is linked to a more general change of word order. On the basis of the description offered by Marchello-Nizia (1999; 2006: chapter 3), this evolution can be summarized as follows. From Latin to French, the order of the constituents radically changes. In Latin, word order was relatively free, even though there is a tendency towards SOV (subject – verb – object) (Adams 1976, Bauer 1995, Pinkster 1991). Old French is dominantly V2: the verb is in second position and the theme is before the verb, i.e. TVX (T=theme). From the 13th century on, the nominal object is fixed in the postverbal position (Combettes 1988), which results in the order TVO. The preverbal position is nevertheless not only available to the subject, but is also open to other thematic constituents, often anaphoric elements (Marchello-Nizia 2006: 48).

(73) Lors appella un chevalier chipprien qui bien savoit toute la contree, et lui dist :
    Then call-PST.3SG  a knight Cyprian  who well know-IMPF.3Sg whole the region and
    him.DAT say-PST.3SG
    ‘Then he called a Cyprian knight who knew well the whole region and he said to him : …’
    (Jean d’Arras, Mélusine [1392])

It is in this position that we can also find an adverbial quantifier linked to the nominal object behind the verb.

(72a) moult a  de dolour
    A-lot  have-PRST.3SG of pain
    ‘He suffers a lot’ (Eustache Deschamps, Miroir de mariage [‘Mirror of marriage’] [1385])

During the period of Middle French, word order shifts from TVO to SVO. The subject tends to be systematically expressed and to occupy the preverbal position. As a result, whereas Middle French still allows Q V (de) N’, with Q in front position, this pattern is gradually replaced by V Q (de) N’, with the subject in front of the verb.

(72b) il  eut beaucoup  de chagrin
    he  have-PST.3SG a-lot of sorrow
    ‘he felt very upset’ (Antoine Galland, Les mille et une nuits [‘Thousand and one nights’][1715])

If it is true that the positional shift of the quantifier has to be understood in the light of a more general change of word order, the tightening of the link with the NP de N’ can not be invoked as the determining factor. Moreover, this shift does not necessarily place the quantifier immediately before the nominal object. In the case of complex verbal predicates where the finite verb form, inflected for person and for tense, is followed by a non finite verb form, i.e.
an infinitive or a participle, this non finite verb form can be inserted between the quantifier and the nominal object de N’.

(74) se vous me voulez tant faire de courtoisie
if you-PL me want-PRST-2PL so-much do-INF of courtesy
‘si vous voulez me faire tant de courtoisie’ (Bérinus [1350])

(75) depuis monpartement, ilz auront beaucoup appris de nouvelles
since my-departure, they have-FUT.3PL a-lot learn-PST.PRTC of news-PL
‘since I left, they will have got a lot of news. (Jean de Bueil, Le Jouvencel [1461])

(76) Et vous en avez beaucoup ouÿ dire d’exemples
and you-PL of-it have-PRST.2PL a-lot hear-PST.PRTC say-INF of examples
‘and you heard mention a lot of examples’ (Jehan Bagnyon, L’Histoire de Charlemagne [1465])

This pattern is still possible in Modern French (cf. § 1.3), although it is less frequent.

(77) On doit beaucoup gagner d’argent ici.
One must-prst.3sg a-lot earn of money here.
‘You probably earn a lot of money here’ (M. Barrès, Mes Cahiers [1902])

(78) On a beaucoup écrit de poèmes en prose depuis trente ou quarante ans
One has a-lot written of poems in prose since thirty or forty years. (M. Jacob, Le cornet à dés [1923])

It appears even possible to insert another constituent between the quantifier in postverbal position and the nominal object de N’.

(79) Ils ont assez pour lui de respect dans le cœur
They have-PRST.3PL enough for him of respect in the heart. (Georges de Brébeuf [1655])

These data lead to the conclusion that the positional shift of the quantifier – although it decreases the number of occurrences where the quantifier is separated from the nominal object de N’ in the linear surface order – is not necessarily correlated to a categorial change of this quantifier: if the quantifier is analyzed as an adverb applying to the entire VP in (72a), it lends itself to the same analysis in (72b).

(72) a. moult a de dolour (Eustache Deschamps, Miroir de mariage [1385])
   a-lot has of sorrow
b. il eut beaucoup de chagrin (Antoine Galland, Les mille et une nuits [1715])
   he had a-lot of sorrow

It seems at least necessary to consider two possible analyses

(72a) Q [V] [de N’]

(72b) [V] Q [de N’] OR V [Q de N’]

and to explore if there are independent arguments in favour of one or the other analysis.

Several studies, conducted on the basis of Modern French data, have been devoted to the relationship between the so-called remote quantification, where the quantifier is separated from the object NP de N’ by a non-finite verb form (cf. 80a) and the adnominal quantification illustrated by (80b).
(80) a. Pierre a lu beaucoup de journaux.
Peter has read a-lot of newspapers
b. Pierre a beaucoup lu de journaux.
Peter has a-lot read of newspapers

As shown in § 1.2, Milner (1978) argues that (80b) is derived from (80a), without any semantic difference. Disputing the validity of this hypothesis, the studies of Obenauer (1983), Haïk (1982), Doetjes (1997), and Carlier & Melis (2005) offer evidence for the fact that the position of the quantifier in surface structure is significant: the so-called remote quantification and the adnominal quantification are different with respect to the syntactic constraints and from a semantic point of view. The quantification is nominal in (80a), whereas it applies to the VP and in this way on the direct object NP of the verb in (80b). The following arguments corroborate this opposition:

- In order to account for the fact that the quantifier in adverbal position can take scope over a nominal object of a coordinated VP, we have to postulate the analysis $Q[SVV(de\ N') \& V de N']$ (Carlier & Melis 2005: 373).

(81) Nous avions énormément mangé ou pris d'alcool.
We have-IMPF.1PL enormously eaten or taken of alcohol.
*We have eaten enormously and we have drunk an enormous quantity of alcohol (oral example quoted by Damourette & Pichon, § 2761)

(82) Ils ont trop lu de BD et regardé de feuilletons.
They have-PRST.3PL too-much read of cartoons and watched of serials
‘They have read too many cartoons and watched too many serials’

- As has been observed by Haïk (1982: 79), contrary to the adnominal quantifier (83-84a), the quantifier beaucoup in adverbal position (83-84b) does not allow that the referent is conceived as a set of individuals.

Peter has smoked a-lot of cigarettes one after another
Peter has a-lot smoked of cigarettes one after another

(84) a. Amélie avait raconté beaucoup d’histoires dont la première était incompréhensible.
Amelia had told a-lot of stories of which the first was incomprehensible
b. *Amélie avait beaucoup raconté d’histoires dont la première était incompréhensible
Amelia had a-lot told of stories of which the first was incomprehensible

Therefore, beaucoup in adverbal position cannot have wide scope. (85a), where the quantifier is in adnominal position, has a double interpretation: either beaucoup does not take scope over the plural subject, with the meaning ‘Peter and Mary have found together a lot of proofs’, either beaucoup takes in its scope the plural subject, which results in the meaning ‘Peter has found a lot of proofs and Mary has found a lot of proofs without these proofs being identical’. This second interpretation is not available in (85b), where beaucoup is in adverbal position (Azoulay-Vicente 1989: 93; Carlier & Melis 2005).

(85) a. Pierre et Marie ont trouvé beaucoup de preuves.
Peter and Mary have found a-lot of proofs.

14 For the quantifiers tout ‘every’ and chaque ‘each’, the necessity of an interpretation in situ has also been invoked. A first version of this hypothesis has been formulated by Haïk (1982) for the analysis of tout. It has been further developed by Junker (1995) for chaque and tout and by Zimmermann (2002) for each in English and jeweils in German.
b. Pierre et Marie ont beaucoup trouvé de preuves.
Peter and Mary have a-lot found of proofs.

(85') [Peter & Mary], [[a lot of proofs], [x has found y]] - (86a/b)
[a lot of proofs], [[Peter & Mary], [x has found y]] - (86a)

- In comparison with beaucoup in adnominal position, beaucoup in adverbal position brings about aspectual restrictions, which have been analyzed by Obenauer (1983) and Doetjes (1997). Obenauer (1983: 78) observes that, in the example (86), beaucoup in adverbal position is only acceptable in the interpretation beaucoup de fois ‘a lot of times/often’. Witness the example (86b), where the gerund construction en soulevant le couvercle blocks this multiple event-reading and makes the sentence unacceptable. This requirement of a multiple event-reading shows that the quantifier applies to the entire VP.

(86) a. En soulevant le couvercle, il a trouvé beaucoup de pièces d’or.
When lifting the lid, he has found a-lot of coins of gold.

b. *En soulevant le couvercle, il a beaucoup trouvé de pièces d’or.
When lifting the lid, he has a-lot found of coins of gold.

c. En cherchant partout, il a beaucoup trouvé de pièces d’or.
While looking everywhere, he has a-lot found of coins of gold

In line with this observation, we can understand why the existential predicate does not accept the quantifier beaucoup in adverbal position15.

(87) *Il y a beaucoup eu de personnes chez nous hier.
3SG.PRON LOC have-PRST.3SG a-lot have-PST.PTC of persons with us yesterday

These constraints did not exist in the older stages of French. Witness the following example from the 16th century:

(88) Beaucoup y a de païs en nostre Europe.
A-lot LOC have-PRST.3SG of countries in our Europe
(Charles Estienne, L’agriculture et maison rustique [1564]

Taking up the investigation initiated by Obenauer (1983), Doetjes (1997: 261 ff) notes that an example like (89) does not necessarily express the meaning of different events of oil-streaming through the pipeline, this is the beaucoup de fois ‘a lot of times’ reading.

(89) Cet oléoduc a beaucoup transporté de pétrole.
This pipeline has a-lot transported of oil

So she adjusts the constraint formulated by Obenauer (1983). In accordance with Obenauer, she argues that the quantification applies to the VP, but she pertinently shows that the interpretation of the quantifier depends upon the referential properties of the nominal object or the internal argument de N’. When the nominal object contains a count noun, a ‘multiple event’-interpretation is obtained (86b-c). In the case of a mass noun, the quantified verbal predicate can be interpreted as one continuous event (89). There is however a constraint specific to adverbal quantification and ineffective in the case of adnominal quantification: adverbal quantification is only possible if there is a homomorphism between the spatial properties of the internal argument and the temporal structure of the verbal process, in such a

15 I owe this observation as well as the examples (89) and (90) to one of my anonymous reviewers.
way that the referential properties of the internal argument carry over to the temporal constitution of the verbal process. This is the case in example (90a-b), but not in (90c).

(90)

| (90) | a. Il a **beaucoup** regardé *de films*. | b. Il a **beaucoup** perdu *de sang*. |
|      | He has a-lot watched of movies         | He has lost a-lot of blood          |
|      | **Il a regardé beaucoup de films.**    | **Il a perdu beaucoup de sang.**    |
|      | He has watched a-lot of movies        | He has lost a-lot of blood          |
|      | c. ??Il a **beaucoup** montré *de patience*. | He has a-lot shown of patience |
|      | He has shown a-lot of patience        | **Il a montré beaucoup de patience.** |

If it is true that in (80b) *beaucoup* applies to the entire VP and only indirectly to the object NP *de N’*, whereas in (80a) it expresses a properly nominal quantification, this means the situation of contiguity of the quantifier with respect to the object NP *de N’* resulted in a weakening of its relationship with the verb or the VP. Hence, there has been reanalysis in the sense of a ‘rebracketting’ (Langacker 1975, Haspelmath 1998):

(72b) \[ V \quad Q \quad [de N’] \rightarrow V \quad [Q \quad de N’] \]

Why does this reanalysis take place? This reanalysis has to be situated in the context of a general typological shift affecting the NP during the evolution from Latin to Modern French (Lehmann 1990, Combettes 2001, Carlier 2004, 2006, 2007).

The hierarchical structure of the nominal phrase in Latin is rather loose, the categorial distinction between adjective and noun (cf. also Ernout & Thomas 1951: § 190), between pronoun and determiner, between adjective and determiner (cf. examples (16)-(17)) is unclear, and the internal cohesion within the NP is low (Lehmann 1990).

From Latin to French, the NP undergoes a gradual evolution towards the tripartite structure: D–N–XP (with XP being a complement or an adjunct). This evolution towards a tripartite structure of the NP goes along with the emergence of a distinct category of nominal determination. Nominal determiners acquire a specific distribution and develop specific forms (hence, the formal differentiation between demonstrative and possessive pronouns and determiners cf. Marchello-Nizia and Combettes 2001). Moreover, the presence of a determiner becomes obligatory. The obligatory presence of a determiner contributes to the dramatic rise of the partitive article in the 15th century, which renders exceptional zero determination in combination with common nouns (Carlier 2007).

I put forward the hypothesis that, in this context of the emergence of independent category of nominal determination, the presence of an adverbial quantifier contiguous to the nominal object *de N’* has led to a reanalysis of the pattern *V Q de N’* and to a recategorization of the quantifier as a nominal determiner.

And yet, as shown in Carlier & Melis (2005), this reanalysis is not entirely accomplished. This can be shown by the restrictions on the cleft structure. Whereas a nominal object determined by an inflected quantifier (e.g. *plusieurs*) can occur in the focus position of a cleft structure, the cleftage of *beaucoup de N’* is not natural.

(91)

| (91) | a. Pierre a écrit *ce roman*. | C’est *ce roman* que Pierre a écrit. |
|      | Peter has written this novel. | It is this novel that Peter has written. |
|      | b. Pierre a écrit *plusieurs romans*. | C’est *plusieurs romans* que Pierre a écrits. |
|      | Peter has written several novels | It is several novels that Peter has written. |
|      | c. Pierre a écrit *beaucoup de romans*.*??C’est *beaucoup de romans* que Pierre a écrits. |
|      | Peter has written a lot of novels | It is a lot of novels that Peter has written. |
The cleftage of the quantified NP of the type beaucoup de N’ is blocked only when it is a direct object. In the examples (92) and (93), where the quantified NP in focus is not a direct object, the cleft structure is acceptable.

(92) Pierre est venu peu de fois. C’est peu de fois que Pierre est venu. 
Peter came few of times It is few of times that Peter came 
(93) Cet appareil coûte beaucoup d’argent. C’est beaucoup d’argent que cet appareil coûte. 
This machine costs a-lot of money. It is a-lot of money that this machine costs. 

This means that the adverbial quantifier, when it quantifies the direct object, even if it is contiguous to this object NP, has still not completely broken its bonds with the verb.

6 Conclusion and perspectives for further research

6.1. This study showed that the diachronic evolution of beaucoup from Middle French to Modern French exhibits salient similarities with the pathway from multum in Latin to moul in Middle French. The following stages can be distinguished:
Stage I: Multum and beaucoup are originally nominal forms.
Stage II: This nominal form becomes an adverb: used for quantification of the direct internal argument of the verb, it can quantify the verbal process as such and it acquires in this way the ability to quantify the process without saturating an argument position.
Stage III: Whereas in stage II the quantifier can only apply to an NP in the direct internal argument position, it extends subsequently its context of use to NPs outside the VP and to NPs headed by a preposition. It becomes in this way a full-fledged nominal determiner, with the same properties as ordinary quantifying determiners, such as scope ambiguities (cf. ex. (85)).

The diachronic approach leads to a more accurate synchronic account of beaucoup as it functions in Modern French. It explains the specific distribution of beaucoup, which, like multum in Latin, is a nominal or verbal quantifier, but does not apply to adjectives or adverbs. Moreover, it offers a fine-grained account of the morphosyntactic categorization of beaucoup and defines the contexts of use where beaucoup is used as an adverb (stage II), as a nominal determiner (stage III), or has a hybrid status, between adverb and nominal determiner. Finally, it accounts for the presence of de in its determiner use and clarifies the relationship with respect to quantifying determiners such as plusieurs.

6.2. Several issues require further investigation. Firstly, it would be interesting to compare multum / beaucoup with other quantifying adverbs such as peu ‘little/few’, trop (peu) ‘too much (too little)’, assez ‘enough’, tant, tellement ‘so much’, énormément ‘enormously’: these have been included in the same paradigm as beaucoup because they share the property of quantifying not only nouns but also verbs and some of them even adjectives or adverbs. A comparative analysis of these different quantifiers would reveal that this class is less homogeneous than generally admitted. For instance, whereas beaucoup is well-established as a nominal quantifier and has a high frequency in its use as a nominal determiner or even as a pronoun, assez remains more anchored in the verbal sphere and is still used in a more flexible way in the so-called remote quantification pattern.

Peter has a-lot worked Peter has enough worked 
Peter has a-lot shown of patience Peter has enough shown of patience
This more adverbial status of assez could be assessed by a diachronic study. More generally speaking, the present analysis dealing with multum / m(o)ult / beaucoup should be undertaken for the other quantifying expressions entering into the paradigm of verbo-nominal quantification, in order to identify the peculiar categorial features of each expression of this paradigm.

A second research question that deserves further investigation relates to the tendency towards a categorial specialization, which has been invoked at different stages of the evolution from multum in Latin to beaucoup in Modern French. In the context of Romance, it is clear that this tendency is in a more advanced stage in French than in the other Romance languages. It would be interesting to consider this evolution in the context of the different typological changes that characterize the evolution from Latin to Modern French.

Electronic Corpora

Classical Latin: *Itinera Electronica* (Université catholique de Louvain)

Very Old French: « Corptef » (ENS-LSH Lyon, CNRS UMR 5191 ICAR)

Old French: *Base du français médiéval* (ENS-LSH Lyon, CNRS UMR 5191 ICAR)

Middle French: *Dictionnaire du moyen français* (CNRS UMR Atilf, Nancy)

Classical and Modern French: *Frantext* (CNRS UMR Atilf, Nancy)

References


De multum à beaucoup


