

THE SCRIBE AND THE ABACUS.  
VARIANTS AND ERRORS IN THE COPYING OF  
NUMERALS (MEDIEVAL ROMANCE TEXTS)\*

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*o. Introduction*

In chapter iv of the first part of *Don Quixote*, the eponymous hero comes across a young labourer (Andrés) tied to a tree and whipped by his master, Juan Haldudo. The master explains that, being a carelees sheepherder, Andrés loses a sheep everyday. The boy accuses Juan of withholding his salary. But the boy lies (*miente*), says the master:<sup>1</sup>

—¿«Miente» delante de mí, ruin villano? – dijo don Quijote –. Por el sol que nos alumbra, que estoy por pasaros de parte a parte con esta lanza. Pagadle luego sin más réplica; si no, por el Dios que nos rige, que os concluya y aniquile en este punto.  
—Desatadlo luego.

El labrador bajó la cabeza y, sin responder palabra, desató a su criado, al cual preguntó don Quijote que cuánto le debía su amo. Él dijo que *nueve meses, a siete reales cada mes*. Hizo la cuenta don Quijote y halló que montaban *sesenta y tres* reales, y díjole al labrador que al momento los desembolsase, si no quería morir por ello.

In the *editio princeps*, the amount is not *sesenta y tres* but *setenta y tres*. Even if the calculation is quite simple, the ancient editions do not correct the error, that is very likely to be an authorial one.<sup>2</sup>

\* This is the written and extended version of an oral Italian contribution presented at a seminar held in Florence, Fondazione Ezio Franceschini, on 13<sup>th</sup> January 2015. I wish to thank the seminar participants, who have provided me with interesting suggestions and observations. Special thanks go to Maria Careri, with whom I have discussed some theoretical aspects of this research, and who has provided me with useful bibliographical materials. Finally I express my gratitude to Blake Gutt for the revision of my English text.

<sup>1</sup> *Don Quijote de la Mancha*, edición dirigida por F. Rico, con la colaboración de J. Forradellas, G. Pontón y el Centro para la Edición de los Clásicos Españoles, Madrid, Real Academia Española, 2015, vol. 1, p. 69 (italics mine).

<sup>2</sup> See *ivi*, n. 24, as well as the philological commentary at p. 808 of vol. II.

This is just one of the many cases of slips, inconsistencies and errors concerning numbers in literary texts.<sup>3</sup> When it comes to Ancient, Classical and Medieval works, whose originals we do not possess, it is often impossible to decide whether the anomalous reading that we find in a given passage is due to a scribal error or to an authorial (i.e. original) incongruity. Let us consider, for instance, the following biblical passages:

(2 Kings, 8, 25)

Ochoziah, son of Jehoram, king of Judah, became king in the *twelfth* year of Joram, son of Ahab, king of Israel.

[*Vulgate*: Anno duodecimo Ioram ... regnavit Ochozias ... ].

(2 Kings, 9, 29)

Ochoziah had become king of Judah in the *eleventh* year of Joram, son of Ahab.

[*Vulgate*: Anno undecimo Ioram ... regnavit Ochozias ... ].

It would be arduous work to conclude whether a problem occurred in textual transmission, or whether the biblical chronicler himself falls into contradiction. In trying to interpret such a textual inconsistency, some commentators have shown a very typical resistance – one that also affects the scholars and readers of secular texts – when confronted with a (possible) authorial mistake. They have tried to justify the apparent inconsistency by explaining the one year variance as an implicit reference to the period of coregency of Ochozia and his father Jehoram (in the eleventh year they reign together, in the twelfth Ochozia begins to reign alone), or by arguing that two different systems for dating Jehoram's accession to the throne are used by the same author.<sup>4</sup>

In the following pages I will discuss a representative set of numerical errors and variant readings in Medieval vernacular literature, concentrating on the Old French prose romances that I have studied most closely, and which can provide a critical mass of data. The research will be partially

<sup>3</sup> For instance, another error concerning a calculation can be found in chapter xiv of Fyodor Dostoevsky's *The Gambler*: see F. Dostoevsky, *The Gambler and Other Stories*, in *The Novels of Fyodor Dostoevsky*, transl. by C. Garnett, Kingswood, The Windmill Press, 1957 [1914<sup>1</sup>], vol. 9, p. 102.

<sup>4</sup> Cf. L. McFall, «A Translation Guide to the Chronological Data in Kings and Chronicles», *Bibliotheca Sacra*, 148 (1991), pp. 3-45, and E.R. Thiele, «Coregencies and Overlapping Reigns among the Hebrew Kings», *Journal of Biblical Literature*, 93 / 2 (1974), pp. 174-200 (p. 183); E.R. Thiele, *The Mysterious Numbers of the Hebrew Kings*, New York, Macmillan, 1951, p. 58.

extended to other languages and literary genres. As I have demonstrated in the examples above, analogous observations could involve non-Romance areas, other ages and even non-manuscript traditions (i.e. texts transmitted in print or over the internet). Of course romances and other narrative works, in a broader acceptation that also includes epic and non-literary production (historiography, hagiography, etc.), are richer in occurrences of numbers within a verbal context. The study of texts witnessed by a number of consistent copies presents the possibility of comparing variants, an operation that is not possible for limited textual traditions. From this point of view, narrative works can provide us with a good number of occurrences witnessed by many manuscripts, which is not at all the case for other texts full of numbers, such as record books, which usually survive in a single manuscript directly compiled by a bookkeeper.

The particular phenomenon of the ‘corruption’ of numbers by scribes was already known to ancient and medieval scholars, such as Bede and Roger Bacon.<sup>5</sup> Modern textual criticism has obviously focused its investigations on the categorization of ‘verbal’ errors and variants, offering persuasive explanations and aetiologies which work for both ancient and modern traditions.<sup>6</sup> As for numbers, a few categories (for instance so-called ‘palaeographical errors’) can be borrowed from that model, but a complete and analytic inspection remains to be done.<sup>7</sup> Before trying to

<sup>5</sup> Bede remarks that, when a scribe meets a number within a text that he finds difficult to follow, series of figures are negligently copied and more negligently corrected: «et negligenter describuntur et negligentius emendantur» (cited by L. Havet, *Manuel de critique verbale appliquée aux textes latins*, Paris, Hachette, 1911, §792, p. 186). An early philological discussion of number inconsistencies within the so-called ‘Paris text’ of the Bible was offered by Roger Bacon in his *Opus Majus*, pt. iv (see *The ‘Opus Majus’ of Roger Bacon*, ed. by J.H. Bridges, London, Williams & Norgate, 1900, 3 vols., vol. 1, pp. 221-22): I thank Pietro G. Beltrami for signalling this latter passage to me.

<sup>6</sup> See for instance L.D. Reynolds-N.G. Wilson, *Scribes and Scholars*, Oxford, Clarendon Press, 1968, chapter vi.8. For general aspects of the meaning of numbers in Medieval texts, with special consideration of symbology, see the monographical issue *Les nombres*, in *PRIS-MA*, VIII (1992-1993). For some palaeographical aspects of the problem, with particular attention to the resistance of *mercantesca* to the introduction of Hindu-Arabic numbers, see P. Cherubini, «Il numero come elemento di disturbo: ipotesi sull’evoluzione della mercantesca», in *Lo scaffale della biblioteca scientifica in volgare (secoli XIII-XVI)*, Atti del Convegno (Matera, 14-15 ott. 2004), ed. by R. Librandi and R. Piro, Firenze, SISMEL-Ed. del Galluzzo, 2006, pp. 313-39.

<sup>7</sup> An outline for classification has been proposed by Havet, *Manuel*, (see especially §§792-96, pp. 186-87), who indicates a few major categories of errors concerning numbers in Latin texts: addition or omission of figures; numerals read as words; words read as numerals; errors in abbreviation.

supply an approximate classification and a few observations about factors at play in the scribal copying of numbers, I will present some case studies that offer an overview of the particular dynamics of textual transmission affecting numerals.

### 1. *The corpus*

When two or more copies of a given text are preserved, their comparison often reveals that numerical variants are frequent and, in some cases, pervasive. In collecting these kinds of variants during my personal experience both as an editor and as a reader of Medieval texts, I have decided to exclude from the following *corpus* insignificant – but very common – variants clearly dealing with rhetorical enunciations, such as hyperboles, e.g.: «Lancelot was as strong as 10 (variants: 1000, 45, etc.) knights». I believe that, in such a sentence, investigating the reason why a scribe read 10 in his exemplar and wrote 45 (or vice versa) would correspond to wondering why, in everyday spoken language, subject A says he is very worried because he has «800 things to do», while subject B says he has «2000 things to do». These verbal tics are simply irrational (motivated by personal or social factors) and their categorization would introduce background noise into the analysis of other instances of numerical variation that I find to be more significant. The following paragraphs are dedicated to the presentation and discussion of cases belonging to the latter set.<sup>8</sup> For the moment, in establishing the *corpus*, I make no distinction between numbers expressed in figures (e.g. .vii.) and numbers expressed in words (e.g. *sept*, *set*, *sette*, etc.).<sup>9</sup>

#### 1.1. *Guiron le Courtois*: the lady of Malohaut's bodyguard

At the beginning of the *Roman de Guiron*, the second branch of the *Guiron le Courtois* cycle (c. 1235-1240),<sup>10</sup> Danain le Roux – the lord of Malohaut – and his companion Guiron are planning to take part to a tournament which is about to begin at the Castle of the Two Sisters. Danain's wife, the lady of Malohaut, is in love with Guiron, but, in

<sup>8</sup> I enumerate each example of the *corpus* with the abbreviation «c.» followed by a progressive number.

<sup>9</sup> See further, §2.1.

<sup>10</sup> R. Lathuillère, '*Guiron le courtois*'. *Étude de la tradition manuscrite et analyse critique*, Genève, Droz, 1966; see also N. Morato, *Il ciclo di 'Guiron le Courtois'. Strutture e testi nella tradizione manoscritta*, Firenze, Edizioni del Galluzzo per la Fondazione Ezio Franceschini, 2010.

respect of his friend, Guiron has already rejected her twice. Nonetheless, the lady of Malohaut (whose name is later revealed to be Bloie), wants to go to the tournament. Guiron and Danain leave secretly, so as not to be identified by other knights, and Bloie leaves alone, with a bodyguard of Malohaut knights chosen by her husband. The manuscripts do not agree about the number of guards:<sup>11</sup>

[c.1] (Lath. 58)

(1) Après ce que Danayn le Rous ot ainsi parlé a la dame de Malohalt, si fist querre jusqu'a .xxvi. chevaliers de la contree, proudons et vaillans, qui conduiront la dame au tournoiement moult honnourement comme si haute dame comme ele estoit. (2) Et moult tost furent trouvés les .xxvi. chevaliers.

—  
(Pr Mar *lacking*) *rubr.*: Comment Guyron fist querre .xxv. chevaliers de la contree 356 1. .xxvi. 338 360 C 355 Vér] .xx. 350, .xxv. 356 A2 2. .xxvi. 338 A2 361 C 355 Vér] .xx. 350, .xxv. 356

In the first half of the romance, on the basis of several conjunctive (verbal) errors, the textual tradition is divided into two major families, called  $\beta^x$  (Mar 350) and  $\beta^y$  (Pr 338 356 A2 360 C 355 Vér).<sup>12</sup> In the absence of the original text, and lacking external evidence, it is impossible to establish the exact number of Malohaut guards. At this point, one might wonder why a scribe should have decided to modify a round number like 20 into 26, while the opposite normalization would be more predictable. However, let us follow the evolution of the story and observe whether one group or another falls into evident contradiction.

[c.2] (Lath. 59)

(1) Or saciés qu'ele vint bien noblement et si ricement com il apartient a si haute dame com el'est, car ele amena largement en sa compaignie dusc'a .xxvi. cevaliers...

<sup>11</sup> The *Guiron le Courtois* cycle is still unedited. The following citations are taken from my critical edition of the first part of the *Roman de Guiron*, a work in progress which is part of the collaborative research of the 'Guiron Group'. For an overview of this project see L. Leonardi and R. Trachsler, «L'édition critique des romans en prose: le cas de *Guiron le Courtois*», in *Editionsphilologie*, dir. D. Trotter, Berlin-New York, De Gruyter, 2015, pp. 44-80. The abbreviation 'Lath.' refers to the critical summary of Lathuillère, *Guiron le Courtois*.

<sup>12</sup> C. Lagomarsini, «Pour l'édition du *Roman de Guiron*. Classement des manuscrits», in *Le cycle de Guiron le Courtois. Prolégomènes à l'édition intégrale du corpus*, éd. par L. Cadioli et S. Lecomte, Paris, Classiques Garnier, [forthcoming].

- (2) ...se il fust de haute bonté, bien peust les .xxvi. chevaliers metre a desconfiture et gaignier la dame.
- (3) ...et ele n'eüst en sa compaignie que .xxvi. cevaliers qui le conduisissent, se li cevalier n'estoient cevalier errant et je sour les .xxvi. cevaliers ne le pooie conquerre par force d'armes, je vaudroie que on ne me tenist puis pour cevalier.
- (4) ...en cele forest ou conduit des .xxvi. cevaliers.
- (5) ...si m'aït Dieux, .xxvi. cevalier ne le porroient deffendre encontre moi.
- (6) Pour ce est il orendroit courciés auques vers mesure Lac, et pour la grant parole qu'il avoit dit des .xxvi. cevaliers le connistroit il trop volentiers.
- (7) ...cuiderieés vous, si legierement desconfire .xxvi. chevaliers pour ceste dame de Maloaut que vous alés disant?».
- (8) Sire, fait Guron, vous deistes encore n'a gaires, que vous vaudrieés estre en l'espreuve de .xxvi. cevaliers.
- (9) ...se vous fuissiés uns des .xxvi. cevaliers qui la dame deussent deffendre encontre moi.
- (10) ...Et vous en volés outrer .xxvi. !
- (11) ...se je me sentisse a si preudomme que je cuidasse par mon cors desconfire .xxvi. cevalier.

— 1-6, 8, 10-11. .xxvi.  $\beta^y$ ] .xx.  $\beta^x$

7. (*In the last sentence 350 omits the numeral*) 9. .xxvi.  $\beta$ ] .xx. Pr+ $\beta^x$

In the sentences above, the opposition between the numbers twenty ( $\beta^x$ ) and twenty-six ( $\beta^y$ ) seems to be quite consistent, the only exception being the occurrence of sentence 9, where Pr (the oldest and most reliable witness of group  $\beta^y$ ) agrees with group  $\beta^x$  against the subgroup  $\beta$  (which belongs to  $\beta^y$  together with Pr). I believe that this first anomaly can be explained as a polygenetic innovation of Pr, which could also confirm the tendency of scribes to simplify – either knowingly or unconsciously – complex numbers into simple ones (26 to 20).

In the following passage, the context is a little more complicated: the narrator describes the parade of guards and damsels marching with the lady of Malohaut. Some guards precede the lady, whilst others follow

her. Our number is thus split into two fractions, which require a simple calculation:

[c.3] (Lath. 60)

(1) Quant mesire Lac ot et entent que madame de Maloaut vient, il drece la teste esramment et regarde cele part et voit venir premierement dames et damoiseles, dont il y avoit beles assés. (2) Après cele compaignie vindrent jusqu'a .xiiii. chevaliers armé mout bien et mout ricement, et menoient grant joie. (3) Après ce venoit la dame de Maloaut en la compaignie de .vi. dames, dont cascune estoit bele assés, mais cele par estoit tant bele estrangement que nus nel regarde gramment qu'il n'en deviegne tous esbahis de sa savoureuse, desmesuree, byauté; (4) après li venoient .xii. Autre chevalier apparillié de toutes armes, si ricement et si noblement comme je vous cont.

—  
2. .xiiii.  $\beta^y$  (- $\delta^1$ )] .x. Mar; .xx. 350; .xxiiii.  $\delta^1$  4. .xii.  $\beta^y$ ] .x.  $\beta^x$

Group  $\beta^y$  divides the bodyguard of 26 knights into two uneven halves (14+12). According to  $\beta^x$ , whose reference number is twenty, the second grouping includes ten knights; as for the first set of knights, the manuscripts disagree: it is likely that the reading of  $\beta^x$  has been preserved by Mar only, while 350, by a sort of principle of inertia, continues to use the number twenty.

Up to this point in the story, everything is quite regular: two major groups disagree. Then we observe the first significant anomaly:

[c.4] (Lath. 61)

(1) ...orendroit li souvient del chevalier qui avoit dit que ja pour doutance de .xx. cevaliers ne remanroit, s'il trouvoit la dame de Malohaut fors du castel, qu'i ne se meist en aventure de gaaignier la.

(2) ...Et s'il avenoit adonc par aventure que li cevaliers fust si fols que il se meist en ceste espreuve et il peust les .xx. cevaliers desconfire qui le conduient, il vaudroit puis sauver sa dame et conquerer le sour celui par force d'armes.

—  
*rubr.*: Comment Guiron le Courtois dist a soy mesmes que il yroit après la dame de Maloaut pour la doubte du chevalier qui dist qui la conquerroit encontre .xxvi. chevaliers se il oncques pouoit C 1. .xx.  $\beta^y$  (- $\delta^1$ ) +  $\beta^x$ ] .xxvi.  $\delta^1$  3. .xx.  $\beta^y$  (- $\delta^1$ ) +  $\beta^x$ ] .xxvi.  $\delta^1$

The stemmatic majority of the manuscripts of  $\beta^y$  (Pr 338 357 361) agree about the number twenty. Is this proof that  $\beta^x$  (reading 'twenty')

was always right? Only a subgroup of  $\beta^y$ , called  $\delta^1$  (C L3 355 Vér), displays the reading ‘twenty-six’. The isolation of this subgroup versus the agreement of other independent groups (Pr and  $\gamma$ , belonging to  $\beta^y$ , and  $\beta^x$ ) indicates that this is probably a standardizing intervention of  $\delta^1$ . Before reaching a conclusion, it is necessary to check all references to the Malohaut guards.

Some paragraphs further on in the text, all the manuscripts, with no exceptions, agree on the number twenty-six, being thus at odds with the last occurrence on which we have commented.

[c.5] (Lath. 63)

(1) Sire, or saciés tout certainement que madame vient a compaignie si noble de dames et de damoiseles et de cevaliers com il appartient a si haute dame com ele est, (2) car tout premierement ele ne mainne dame ne damoisele en sa compaignie qui ne soit gentieus feme et de haut lignage, (3) et de celes mainne ele bien jusqu’a .XL., et de chevaliers de lignage assés preudommes et de haut afaire mainne ele bien .xxvi. (4) Ensi com je vous ai conté vient orendroit madame par chi

—  
3. .XL.] .LX. C  $\diamond$  .xxvi.  $\beta^y + \beta^x$

Later, among the last mentions of the bodyguard, other anomalies arise:

[c.6] (Lath. 73)

Maintenant li commence a conter tout mot a mot comment mesire Lac avoit desconfi tous les cevalier de Maloaut qui estoient adonc .xxiiii. et plus.

—  
.xxiiii.  $\beta^y$  ( $-\delta^1$ )  $\beta^x$ ]  $\delta^1$ : .xxxiiii. 355 C, .xxvi. Vér; .xxx. 360

The stemmatic majority of manuscripts report that there were «more than twenty-four» guards, which would oppose the preceding reading of «twenty» and possibly confirm «twenty-six». Some manuscripts of the  $\beta^x$  family modify the figure («more than twenty-three» or «twenty-six» or «thirty»).

Finally, in the very last mentions, this new number, twenty-four, seems to have taken hold of the entire manuscript tradition, apart from Vér, which retains the number twenty-six:



[c.7] (Lath. 78)

(1) En non Dieu, sire, fait li vallés, or saciés tout vraiment que nouvelles sont orendroit aportees en cest castel que, la ou ele cevauchoit hui son cemin vers Maloalt et bien la conduisoient adont .xxiiii. cevalier de Maloaut, uns cevaliers sans nule compaignie sailli avant de l'autre part et courut sus a ciaux qui la conduisoient et tous .xxiiii. les desconfist par sa proeche. Ensi furent tourné a desconfiture li .xxiiii. cevalier qui lour dame voloient deffendre

(2) ...un seul cevalier qui par son cors tant seulement peüst metre a desconfiture teus .xx. et .iiii. cevaliers com estoient cil de Maloaut

—  
2. .xx. et .iv.] .xxvi. Vér

It is worth noting that, in the last two sentences, the number is not reported by the usual omniscient narrator, but by a valet who tells Meliadus and Heryan the latest news from the kingdom of Malohaut. Should we believe that this is a deliberate mistake that, for some reason, the author attributes to a secondary, misinformed character? This would probably be as controversial as justifying Don Quixote's calculation mistake.

In the following paragraphs I will proceed to other errors concerning numbers, postponing general discussion until my conclusion (§3). Before so doing, it is worth a brief digression to point out that the anomalies in the number of Malohaut guards raise questions relating to different major problems: *a)* the stability of the *stemma codicum*; *b)* the aetiology of variants and errors concerning numbers; *c)* the reactions of scribes when confronted with numerical inconsistencies in their exemplars; *d)* editorial policy when dealing with these kinds of errors.

Regarding point *a*, it is not a case of invoking theories of “*mouvance*”<sup>13</sup> and speculating about insoluble disturbances which affect the transmission of Medieval texts. After evaluating one hundred or so ‘verbal’ errors and variants, I have not found significant cases which contradict the structure of the *stemma codicum* briefly presented above. A reasonable hypothesis is that, firstly, contradictions relating to numbers

<sup>13</sup> See P. Zumthor, *Essai de poétique médiévale*, Paris, Éditions du Seuil, 1972; B. Cerquiglini, *Éloge de la variante. Histoire critique de la philologie*, Paris, Éditions du Seuil, 1989. For a rebuttal of the New Philology theories, see A. Varvaro, «The “New Philology” from an Italian Perspective», in Id., *Identità linguistiche e letterarie nell'Europa Romanza*, Roma, Salerno Ed., 2004, pp. 613–22.

could already affect the original or the archetype and that, secondly, most variants and errors of this kind can be polygenetic, that is to say that two or more scribes, independently from one another, could have modified one or more numbers. It would be bizarre if a scribe contaminated his text only for numerical and not for verbal readings. Understanding or partially rationalising the reasons why a scribe modified – unconsciously and polygenetically or not – a figure that he found in his exemplar (point *b*) is the principal aim of this essay (see below). Moving straight to point *c*, we have seen above that some scribes are more reactive than others when it comes to inconsistencies in their exemplars. A similar attitude can be ascertained in copying ‘verbal’ readings and probably also depends on individual and incidental factors (concentration, tiredness, individual sensitivity). Some scribes – like, for instance, modern editors or proofreaders – are just more attentive than others.

Point *d* is a thorny one. In the particular case we have discussed, it seems impossible to come to any definite conclusion as to the original reading. At first «twenty-six» appeared to be a sort of *lectio difficilior*, but further elements have shown that this number is contradicted by passages where the majority of manuscripts agree on the numbers twenty and twenty-four. The most cautious solution is likely to be the retention of contradictions – rejecting of course isolated readings of singular manuscripts or subgroups –, to be accompanied by explanatory annotations.

Richard Trachsler, among other scholars, has recently pointed out that these massive romances, often characterized by convoluted plots, were difficult to supervise and to keep in mind for authors as well as for scribes.<sup>14</sup> It would not be surprising if a romance, for lack of a last meticulous review, retained some authorial contradictions over a minor detail, such as the number of Malohaut guards. During the transmission of the text, some scribes could have noticed some contradictions, and thus tried to make everything conform. In copying several hundred pages, some passages may have been corrected whilst others may have been missed.

<sup>14</sup> R. Trachsler, «Fatalement “mouvantes”: quelques observations sur les œuvres dites “cycliques”», in M. Mikhaïlova (ed.), *Mouvances et Jointures. Du manuscrit au texte médiéval*. Actes du Colloque international de Limoges, 21-22 novembre 2002, Orléans, Paradigme, 2005, pp. 135-49.

### 1.2. Further numerical variants within the *Guiron le Courtois* cycle and other Old French texts

All the branches of the *Guiron le Courtois* cycle contain many numbers.<sup>15</sup> In most cases manuscripts disagree, producing both divergent (but unverifiable) readings, and evident errors.<sup>16</sup>

In another episode of the *Roman de Guiron*, Henor de la Selve, a notoriously cowardly knight from Northumberland, is defeated by an old lady (*vieille dame*). From the author's perspective, this episode is likely to be a sort of hyperbolic confirmation of Henor's knightly ineptitude. In the following passage, the only one which indicates the lady's age, the two families of manuscripts that we already know disagree:

[c.8]

[β<sup>y</sup>]

Mais ne place Dieu qu'ele eüst en sa compaignie fors un escuiier et un nain, la plus petite creature de son aage que je onques veïsse, et une dame vielle mervilleusement, bien de l'aage de .c. ans, et ce estoit la plus laide (vielle 356 A2) dame que je onques veïsse en toute ma vie

[β<sup>x</sup>]

Mais [ne place Dieu que] (*om.* Mar) ele n'ot en sa compaignie fors un seul escuier et un nain, la plus petite creature de son aage que jou onques veïsce, et une vielle dame de .L. ans (et une dame vielle durement bien de .L. ans 350), qui estoit sans doute la plus laide (la p. vielle dame laide 350) que je onques veïsce en toute ma vie

<sup>15</sup> Of course this is not an exclusive feature of this cycle. See for instance R.L. Curtis, *Le Roman de Tristan en prose*, Leiden, Brill, 1976, vol. II, pp. 18 and 49, where numerical variants are listed.

<sup>16</sup> Just consulting the footnotes of the summary of Lathuillère, *Guiron le Courtois*, I have collected the following examples (variants are given in square brackets; the abbreviation '*om.*' indicates that one or more manuscripts omit the numerical detail): §1: 300 [400, 3 hundred] years after Jesus Christ's Passion, the Roman Empire encompasses the whole world as far as India; §2: Esclabor is less than 30 [25] years old; §39: King Arthur's army has more than 5000 [40,000] knights; §40 n. 1: Palamedes is less than 3 [13, *om.*] years old; §40 n. 2: the first three battalions of Meliadus' army have 500 [4000, *om.*] soldiers, while the fourth has 1000 [4000, *om.*] men; §55: Lac cannot fight for 2 [3] months; §74: a knight says he has not fought for 14 [4] years; §75: Guiron has been a knight for 14 [2, *om.*] months; §77: a siege occurred 3 [2] years before the present time; §82: regarding a young knight: he is 14 [22, *om.*] years old; §89: a troop of 30 soldiers and 36 [35] knights parades; §110: Febus has inflicted 150 [150,000, 100, 500

Even if in such a context an ultimate resolution is impossible, it is likely that the reading «one hundred» reflects the author's intention: the two groups agree that the lady is old, very old (*merveilleusement/durement vieille*), so the reading «fifty» does not seem satisfactory. Of course perception of age was different for a Medieval person. But let us remember that, in the *Mort le roi Arthur*, Queen Guinevere is said to be one of the most beautiful ladies in the world, 'even if' she is fifty. This makes her a mature beauty (her looks are said to be extraordinary for her age), but she would probably not be considered a *vieille*:<sup>17</sup>

[c.9]

Et la roïne fu si bele que toz li monz s'en mervelloit, car a celui tens meïsmes qu'ele estoit bien de l'aage de .l. anz, estoit ele si bele dame que en tot le monde ne trovast l'en mie sa pareil...

This passage also allows us to consider another interesting error relating to the presence of a number within text. In the italicized phrase above, a group of manuscripts of the *Mort le roi Arthur* gives the following variant: «...qu'ele estoit bien de Lancelot». Jean Frappier explains this innovation as a misreading of .l. anz, which a scribe has interpreted as an abbreviation of *Lancelot/Lanselot* (*Lans.*).<sup>18</sup>

In the *Aventures des Bruns*, a late thirteenth-century compilation of *Guiron le Courtois* by Rustichello of Pisa that I have recently edited,<sup>19</sup> there is a passage where the *Suite Guiron*, the direct source of the episode, gives information concerning the age and number of the young male and female captives (*damoisiaux/vallez* and *damoiseles*) taken by two savage giants:

plus 100] blows; §113: the army of Orcanie has more than 10,000 [1000, 11,000] units; §115: Guiron's ancestor relates an adventure from his youth, when he was 18 [20, 22] years old; §118: Galehaut smites 40 [10, 40,000] enemies; §128: on a bridge, more than 7 [8, 100] knight have already been defeated; §194: Guiron unhorses 12 [15] knights; §201: the lady of Malohaut is less than 18 [16] years old; §203: Uterpendragon's table accommodates the 49 [37] bravest knights in the world. Another 400 [200, 1000] sit at other tables.

<sup>17</sup> Cf. *La Mort du roi Arthur*, éd. et trad. par D. Hult, Paris, Librairie générale française, 2009, §4, 12-16.

<sup>18</sup> Cf. *La Mort le roi Artu. Roman du XIII<sup>e</sup> siècle*, éd. par J. Frappier, Genève, Droz, 1964, p. xxxv, n. 1. For further discussion about this passage, see the Hult edition cited above, p. 125.

<sup>19</sup> *Les aventures des Bruns. Compilazione guironiana attribuibile a Rustichello da Pisa*, ed. critica a cura di C. Lagomarsini, Firenze, Edizioni del Galluzzo per la Fondazione Ezio Franceschini, 2014.

[c.10]

(Suite Guiron)

...Chasqun an le premier jor de mai il venoient en cest chastel e couvenoit que touz les damoisiaux e toutes les damoiseles lor fussent amenees qi estoient entre vint anz e .xiiii. Il prenoient des damoiseles .lx. de celes qi mieuz lor entalentoient e des vallez .xl. e les enmenoient en lor chastel que vos enqore poez veoir sus en cele montaigne la devant.

(Aventures des Bruns, §173.3-4)

(3) Beaux seigneurs, fait le sire du chasteau, se sont deux freres geans les plus puissans hommes du monde, qui demeurent en la grant montaigne qui est a l'issue de Soroloys, lesquelz viennent chascun an le premier jour de may et font assembler les damoiseaulx et les damoysselles du chasteau qui entre vingt ans et quatorze estoient. (4) Ilz prennent [des damoiseles] .lx., de celles qui mieulx leur plaisent, [et des vallez .xl.], et les maynent avecques eulx en leur terre.

—  
4. prennent des damoiseles .lx.] en prennent N; ne preinent jusque a .xx. Fi; en prenoient .xl. 340; et il prenoient .lx. Be C ◇ et des vallez .xl.] *all manuscripts omit these words*

No witnesses of the compilation preserve a complete text corresponding to the source. Furthermore, several scribes have modified the numbers used by the source. In this passage, the most significant error (or innovation) of the *Aventures des Bruns* – or of their archetype, if we do not want to suppose an authorial mistake – consists in the fusion of the different numbers of *damoisiaux* and *damoiseles*, both of which are reduced to the first number mentioned (.lx.).

Another quite common numerical error concerns lists of elements. Consider the following excerpt taken once again from the *Aventures des Bruns*:

[c.11] (*Aventures des Bruns*, §160.1)

En ceste partie dit le compte que le roy Artus s'estoit allé esbatre dehors la ville de Kamaloth en la forest entre lui et .x. chevaliers de son hostel, lesquelz vous nommeray cy après par leurs noms...

—  
.x. chevaliers Be] les neuff ch. N; .ix. ch. 340

The narrator keeps his promise and enumerates ten knights. What is relevant is the fact that two manuscripts belonging to different families (N and 340) share the erroneous reading «nine», which suggests at least two possibilities: 1) an authorial error corrected by Be on the basis of the list or 2) a polygenetic mistake of N and 340.

Errors in lists are not infrequent. In the *Chanson de Guillaume*, an epic poem from the first half of the twelfth century, we are told that fifteen (*quinze*) Saracen knights charge Guillaume, but, when the narrator recounts their names, only fourteen knights are mentioned:<sup>20</sup>

[c.12] (*Chanson de Guillaume*, lines 2056-65)

Sur li corent Sarazin e Escler,  
Tels quinze reis qui ben vus sai nomer;  
Reis Mathamar e uns reis d'Aver,  
E Bassumet e li reis Defamé,  
Soldan d'Alfrike e li forz Eaduel,  
E Aelran e sun fiz Aelred,  
Li reis Sacealme, Alfamé e Desturbed,  
E Golias e Andafle e Wanibled.  
Tuz quinze le ferent en sun escu boclé.  
Pur un petit ne l'unt acraventé.

Andrea Fassò argues that it is probable that the author is knowingly omitting the name of a Saracen knight, Esmeré.<sup>21</sup> But this is not the only case of a contradictory list within the *Guillaume*: in lines 1708-15 the narrator mentions fifteen knights, who are then revealed to be sixteen in number. «Fifteen» is often used as a sort of *passe-partout* number, standing for 'a remarkable number of' (see lines 705, 1993, 2014, 2089, 2289, 2347, 2548, 2662, 2918, 3162, 3266).<sup>22</sup>

As a variant, the number fifteen also occurs in another epic poem, *Aliscans*, from the second half of the thirteenth century:<sup>23</sup>

<sup>20</sup> *La Chanson de Guillaume*, ed. by F. Suard, Paris, Librairie générale française, 2008. I thank Giovanni Zagni for bringing this, and the following passage, to my attention.

<sup>21</sup> «Che sia stato soppresso proprio Esmeré, il solo figlio sopravvissuto all'eccidio, con la sua imbarazzante accusa?» (*La Canzone di Guglielmo*, a cura di A. Fassò, Parma, Pratiche, 1995, p. 46, n. 28).

<sup>22</sup> I once again thank Giovanni Zagni for his kind assistance.

<sup>23</sup> *Aliscans*, éd. par C. Régnier, présentation et notes de J. Subrenat, Paris, Champion, 2007.

[c.13] (*Aliscans*, lines 2670-71)

.xxx. chaitis sont avec remasu  
que je rescous a un roi mescreüs

—  
2670 .xxx. S] .xv. A<sup>1</sup> A<sup>2</sup> A<sup>3</sup> A<sup>4</sup>

(*Aliscans*, lines 3635)

[c.14] Jeunes estoit, n'avoit pas .xx. anz passé

—  
xx. S] .xv. A<sup>2</sup> A<sup>3</sup> A<sup>4</sup>

In both contexts, the number fifteen is a verifiable error: in the first case, some hundred lines above, all manuscripts agree that there are thirty slaves:

(*Aliscans*, lines 2088-89)

Par ex fesoit Desramé presenter  
.xxx. chaitis qui tuit sont bachelier

In the second case, further on in the *chanson*, Rainouart's age is said to be twenty, with all manuscripts in agreement («guernons li poignant, n'ot pas .xx. anz passez», line 4322).

Remarkably, incorrect numbers are often found within the same group of manuscripts, which show that awareness is frequently lacking when it comes to copying numbers. Here is another example:

[c.15] (*Aliscans*, lines 3372-75)

Por la roine a mout tost envoie  
.ii. chevaliers qui sont de sa mesnie,  
et s'i ala li dus de Normandie  
ensemble o lui Garins de la Gastie

—  
3373. .ii. S] .v. A<sup>1</sup> A<sup>3</sup> A<sup>4</sup>

The second pair of lines reveals that there are two knights, but it does not prevent three manuscripts from copying “five”, which was probably an innovative reading of their common exemplar.

Another interesting case concerning Old French epics can be found in the Franco-Venetian version of the *Chanson d'Aspremont*:<sup>24</sup>

[c.16] (Fr.-Ven. *Chanson d'Aspremont*, lines 704-5)

Devien sis home, nen poi far autrement,  
Por la corone ùnça diner li rent

In line 705 of ms. V6, *ùnça* is likely to be a Franco-Venetian form of *onze*, 'eleven'. In other manuscripts, where this same verse is present, one can find the variant readings *quarante* (L3) / *.XL.* (P3) and *quatre* (Ch). The editor of this version concludes that *quarante* is «la leçon la plus logique et probablement l'originale»<sup>25</sup> and that *ùnça* hints at a misreading of *.XL.* as *.XI.*<sup>26</sup>

Moving on to another literary genre, I would like to briefly discuss a numerical error in the Anglo-Norman *Voyage of Saint Brendan* by Benedeit, a hagiographic poem in octosyllabic verse dating from the beginning of the twelfth century. In the manuscript tradition of the *St. Brendan*, two main families are in opposition, A B vs. D E.<sup>27</sup> The first family preserves a particular metre, an archaic *octosyllabe* in which both masculine and feminine lines have eight syllables (the feminine ones being stressed on the seventh), according to the principle of Latin *paritas syllabarum*. On the other hand, the second family adjusts this particular versification to the standard of later 'classical' *octosyllabe* (feminine lines of eight syllables, the last stress falling on the eighth). The only strong conjunctive error of A and B, among several minor variants and polygenetic slips listed by Edwin G.R. Waters, seems to occur in the following lines:

<sup>24</sup> A. Constantinidis, *La 'Chanson d'Aspremont' entre France et Italie. Étude et édition critique partielle des versions franco-italiennes*, PhD Diss., Université de Namur, 2015. I thank Anna Constantinidis for pointing out this passage and for allowing me to consult her work.

<sup>25</sup> *Ivi*, note to line 705.

<sup>26</sup> In her commentary (*ibid.*), A. Constantinidis points out that a similar Franco-Venetian form for *onze* can be found in the *Pharsale* (*unçe*, line 1097); in that passage too – which the author has borrowed from the *Faits des Romains* – the numeral is the result of a misunderstanding (the source reads *.IX.*).

<sup>27</sup> Cf. *The Anglo-Norman Voyage of St. Brendan by Benedeit. A Poem of the Early Twelfth Century*, ed. by E.G.R. Waters, Oxford, Clarendon Press, 1928, pp. LVIII-LXXX. The excerpt below is taken from the same edition. I have dedicated some notes to Waters' classification: see C. Lagomarsini, «Appunti sul testo del *Voyage de Saint Brendan* di Benedeit», *Studi mediolatini e volgari*, 55 (2009), pp. 65-95 (especially pp. 91-94).



[c.17] (*Voyage of St. Brendan*, lines 863-70)

Dist lur: 'Ci streiz del tens un poi.  
A voz cungez jo m'en revoi.  
Ici mandrez, e sanz custe,  
Desque uitaves Pentecuste.  
Ne dutez rien, ne demurai;  
Quant mesters ert, vus succurai'.  
Ferment lur nef od chaeines,  
E sunt iloc uit semaines.

—  
870. uit D E F (oet D; .viii. E; oit F)<sup>28</sup>] set A B

The passage takes place on Easter Day (*Le di paschur*, line 845). And «from Easter Day to the octave of Pentecost is eight weeks»,<sup>29</sup> not seven, that is to say exactly two months, as the author remarks elsewhere (*dous meis*, lines 590 and 1630).

### 1.3. A few examples from other Romance traditions

Of course, numerical variation does not only affect Old French manuscript traditions, and similar cases of errors and variants can be observed in other languages and other ages. As for the Romance domain, Medieval French literature is richer in narrative texts, especially epic poems and romances, witnessed by a large number of manuscripts, and thus represents a notable source of data for our purpose.

It is less common to chance upon numbers, for instance, in lyric poetry, which makes up the majority of Old Occitan literature. It is sufficient to consult the COM2 database<sup>30</sup> to verify that numbers are quite rare in the Old Occitan lyrical tradition, and that most cases occur in narrative verse texts, which are often witnessed by only one manuscript, or a handful at most, so that it is often impossible to collect significant variants. I will present just one example from this area, from *Farai un*

<sup>28</sup> F is a fragment (Cologne-Genève, Fondation M. Bodmer, 17) later edited by F. Vieliard, *Bibliotheca Bodmeriana. Manuscrits français du Moyen Âge*, Cologne-Genève, Fondation Martin Bodmer, 1975, pp. 167-70. The fragment is now digitized, see [www.e-codices.unifr.ch](http://www.e-codices.unifr.ch).

<sup>29</sup> Waters, in *The Anglo-Norman Voyage*, p. LIX.

<sup>30</sup> *Concordance de l'Occitan Médiéval - The Concordance of Medieval Occitan (COM2): Les Troubadours. Les Textes Narratifs en vers - The Troubadours. Narrative Verse*, dir. P.T. Ricketts, CD-ROM, Turnhout, Brepols, 2005.

*vers pos mi sonelh* (BdT 183,12), by the troubadour William IX of Aquitaine. In the thirteenth *cobla* (lines 77-78), the fictional autobiographical voice says:<sup>31</sup>

[c.18]

[N N<sup>2</sup>]

[V]

.VIII. jorn ez ancar men estei  
en aquel sotorn

.XLI. jorn estei  
az aqel torn

Niccolò Pasero follows the text of N, just emending its adverb («Ueit jorn ez ancar *mais* estei»).<sup>32</sup> For our purposes it is interesting to remark that his editorial choice probably depends on a misreading of ms. V («*eli* iorn estei» instead of «*xli*. iorn estei»), that would produce an hypometrical line. Other editors have preferred the numeral copied by the scribe of V. Among others, Alfonso D'Agostino prefers N's reading<sup>33</sup> and explains that the number 41 is equal to 40 days – recalling, for instance, the duration of the Biblical Flood, Moses' stay on Mount Sinai or the time spent by Jesus in the desert) – plus one, a number constructed similarly to the *One Thousand and One Nights*; but D'Agostino, who does not comment on the numerical variant of N, also points out as an oddity the fact that two married ladies (those with whom the pilgrim stays) are left alone by their husbands for so many days.<sup>34</sup>

When it comes to numbers involving a complex calculation, problems in manuscript transmission are very commonly discovered. It is well known that the dating of the Spanish *Libro de Alexandre* depends on the interpretation of *copla* 1799, involving a complex calculation about which scribes (and modern scholars) disagree:<sup>35</sup>

<sup>31</sup> Parallel editions of the witnesses are given by A. D'Agostino, «Farai un vèrs pòs mi sonelh». *Materiali per un'edizione plurima*, *La parola del testo*, 9 / 1 (2005), pp. 29-78: 63. Manuscript C, which gives a different redaction of the text, does not give a number in the corresponding *cobla*.

<sup>32</sup> Guglielmo IX, *Poesie*, ed. critica a cura di N. Pasero, Modena, Mucchi, 1973 (n. V).

<sup>33</sup> Cfr. D'Agostino, «Farai un vèrs pòs mi sonelh», p. 73.

<sup>34</sup> «No so quanti si siano chiesti che fine abbiano fatto messer Guarino e messer Bernardo, che lasciano le consorti in libera uscita per tanto tempo; comunque i quarantuno di rappresentano uno in più dei biblici giorni del diluvio...» (*ivi*, p. 43 and note 38).

<sup>35</sup> Quotations are from the *Libro de Alexandre*, ed. by J. Casas Rigall, Madrid, Real Academia Española, 2014, pp. 566-569 and 958.

[c.19]

[ms. O = Madrid, BNE, Vit. 5-10]

[ms. P = Paris, BnF, esp. 488]

Escrevio la cuenta ca de cor la sabia	Allj escriuio la cuenta que de coraçon
El mundo quando fue fecho e quantos	[la sabie
[annos avia	el mundo quando fue fecho quantos
de tres mil e nuevecientos doze les tollia	[años avie
agora .iiii <sup>o</sup> . mil e trezientos e quinze	de tres mjll e nuevecientos e dose non
[prendia.	[tolljé
	agora quatrocientos e seys mjll
	[emprendié.

The direct source of this *copla* is to be found in Gautier of Châtillon's *Alexandreis*, in a passage where the author describes Apelles building Darius' sepulchre and noting the date of his death on it (VII 429-30):

In summa annorum bis milia bina leguntur  
Bisque quadringenti decies sex bisque quaterni

According to Gautier, Darius's death occurred in year 4868 ( $2 \times 2000 + 2 \times 400 + 10 \times 6 + 2 \times 4$ ) after the Creation (5198 B.C. in Isidore's *Etymologiae*), corresponding to 330 B.C. Here I will not dwell on the long-standing problem of the date of the *Libro de Alexandre*, but there are two interesting observations to be made: 1) in the third line of *copla* 1799, manuscripts O and P agree about the numbers involved (the date of Darius' death), but not about the syntax. In any case, the number 3912 does not seem to make any sense here; 2) in the last line O and P disagree, showing that at least one scribe has tried to manipulate the numbers.

Among other scholars,<sup>36</sup> Arthur Dana Nelson has proposed the following emendation:<sup>37</sup>

de [quatro] mill nue[f] cientos [treinta e dos] tollié

<sup>36</sup> For a summary of interpretations of this passage, see the *Libro de Alexandre*, ed. by J. Casas Rigall, pp. 28-30.

<sup>37</sup> Gonzalo de Berceo, *El Libro de Alixandre. Reconstrucción crítica*, by A. Dana Nelson, Madrid, Gredos, 1978.

The calculation should involve the subtraction  $4900 - 32$  (giving 4868, that is, the year of Darius' death in *Alexandreis*)<sup>38</sup> and suggests that 6400 should be considered as the present date: that is, 1202 A.D. But it is not clear how the manuscript tradition has passed from the original reading to the number 3912.<sup>39</sup> Francisco Marcos Marín, supposing an inversion of figures in the first hemistichs, has proposed to take the reading of manuscript O and restore the supposedly original order:<sup>40</sup>

de [quatro] mill nueue cientos e doze les tollia  
 agora [tres] mill e trezientos e quinze prendia

This emendation involves the following calculation:  $4000 - 912$  (first verse) + 3315 (second verse) = 6403, corresponding to 1205 A.D., but this does not concern Darius' year of death.

Whilst it is clear why such a complex passage has triggered the manipulations of scribes (and the discussion of scholars),<sup>41</sup> similar problems may also occur for simple calculations. The short Catalan version of the *Navigatio sancti Brendani* (fifteenth century) contains a series of numerical inconsistencies. Consider for instance the following passage:<sup>42</sup>

[c.20] (*Vida de sent Brenda*, p. 252)

E [lo abat] tria amb ell .xiiii. frares. ... E vengueren a ells .iii. frares qui estaven en aquella illa e digueren que ells volien anar ab ells en lo pelerinatge. E sent Brenda reeb els e foren ab aquests be .xviii. frares.

<sup>38</sup> See also N.J. Ware, «The Date of Composition of the *Libro de Alexandre*: A Re-examination of Stanza 1799», *Bulletin of Hispanic Studies*, 42 / 4 (1965), pp. 251-55.

<sup>39</sup> In the second hemistich of the third verse, the reading *e doze le(s) tollia* (= *xii le tollia*) could be the result of a misreading (*xxx ii* > *xii le*).

<sup>40</sup> See the *Libro de Alexandre. Estudio y edición*, by F. Marcos Marín, Madrid, Alianza Editorial, 1987, especially pp. 24-26. On the same passage see also F. Marcos Marín, «La fecha del *Libro de Alexandre* y la confusión de los nombres del número», *Incipit*, 12 (1992), pp. 171-80; Id., «Etimologías engañosas y sus consecuencias: los numerales y el *Libro de Alexandre*», *La Corónica*, 26 / 1 (1997), pp. 87-103.

<sup>41</sup> A further hypothesis for the date of composition of the *Alexandre* (year 1223) has been proposed by L. Lazzerini, «El *Libro de Alexandre* y sus (presuntos) enigmas: nuevas propuestas», *Cultura Neolatina*, 65 (2005), pp. 99-152.

<sup>42</sup> See *The Voyage of St. Brendan. Representative Versions of the Legend in English Translation*, ed. by W.R.J. Barron and G.S. Burgess, Exeter, University of Exeter Press, 2002, pp. 249-63 (the edition of this version is by M. Burrell).

...E sent Brenda dix als seus frares: «Guardats-vos que Satanas no us engan, car veig que dels .IIII. frares qui apres nos vengueren ja la hu ha mengat hun fruyt mala als seus ops».

As the last editor of the text has remarked,<sup>43</sup> the first passage of the Catalan version of the legend (of which there is one extant manuscript) is erroneous. Firstly, the calculation seems to be wrong ( $14+3\neq 18$ ), because abbot Brendan should not be counted as a friar, and, secondly, four intruding monks (not three) are mentioned in the second passage. We can add that in the Latin *Navigatio* only three intruding monks are received on Brendan's ship.

Let us move on to another linguistic area. In the Old Italian *Novellino* we find a very interesting example of the fictional representation of a scribal mistake in copying numbers:<sup>44</sup>

[c.21] (*Novellino*, xxv)

Saladino fu soldano, nobilissimo signore, prode e largo. Un giorno donava a uno dugento marchi, che li avea presentato uno paniere di rose di verno a una stufa. E 'l tesoriere suo dinanzi da lui li scrivea ad uscita: scorseli la penna, e scrisse .ccc. Disse il Saladino: — Che fai? — Disse il tesoriere: — Messere, errava —; e volle dannare il sopra più. Allora il Saladino parlò: — Non dannare; scrivi .cccc. Per mala ventura se una tua penna sarà più larga di me.

«Woe betide your pen, if it is more generous than me», says Saladin in the final line. Since his treasurer has written «.ccc.» marks instead of «.cc.», then realizing his mistake and starting to emend («dannare») the register, Saladin stops him and orders him to add another hundred to the gift.

Finally, a considerable series of numerical errors and innovations can be found in the *Lancillotto*, a Tuscan translation of the French prose *Lancelot* surviving in a single manuscript.<sup>45</sup> Here are some examples, compared with the French text:

<sup>43</sup> See *ivi*, p. 355.

<sup>44</sup> See *Il Novellino*, ed. a cura di A. Conte, Roma, Salerno Ed., 2001, pp. 49-50. This passage is discussed by A. D'Agostino, *Capitoli di filologia testuale. Testi italiani e romanzi*, Seconda edizione corretta e accresciuta, Milano, CUEM, 2006, p. 114, who explains this error as «an interference of the endophasic discourse» (the translation is mine).

<sup>45</sup> I thank Luca Cadioli, who is currently editing the text, for drawing my attention to a significant series of passages involving numbers. For further information about this unedited version, see L. Cadioli, «A New Arthurian Text: the Tuscan translation of the *Lancelot en prose*», *Journal of the International Arthurian Society*, 2 (2014), pp. 63-69.

[c.22]

(1) Allora se ne va l'uno delli scudieri nel chastello (*Fr.*: Lors s'en vont .iiii. escuier el chastel)

(2) E sì ce n'à elli onite più di sessanta (*Fr.* .xl.)

(3) Sì furono stimati da .lx. chr [=cavalieri] (*Fr.*: si furent esmé de .xl. chevaliers)

(4) ...sì vo' dirò chome i' vidi già fare una festa per liui, ov'egli ebbe insino a quindici chr [=cavalieri] (*Fr.*: je vi ja faire .i. queste por lui ou il ot deci a .lxv. chevaliers)

All these variants and errors (where 'error' here means a likely misreading of the original French text) can be ascribed: (a) to the (lost) French exemplar used by the Italian translator; (b) to the translator himself; or (c) to the scribe who copied the translation in the extant manuscript in the mid-fourteenth century. Regarding the first type of error (confusion of .iiii. And *un*), I can provide another example, taken from the *Roman de Guiron*:

[c.23] (*Roman de Guiron*, Lath. 160)

Il regardent avant e voient adonc venir tout le chemin qu'i estoient venuz davant un chevalier armez de toutes armes qui menoit en sa compaignie un escuier...

—  
un chevalier ... compaignie L2 L4 V1] .iiii. chevaliers armés d. t. A., qui menoient en leur c. 355 Vér C 357\* A2\*

As for the second and the third sentences of [c.22], they show the very common confusion between .lx. And .xl.<sup>46</sup> In the last example, the number from the French text (.lxv.) has been translated as *quindici* (that is, .xv., with the loss of the first figure).

<sup>46</sup> Another example of this kind can be seen in the apparatus of [c.10]. The same inversion in epic manuscript traditions (with a list of other number variants) is recorded by M. Careri-P. Rinoldi, «Copisti e varianti: codici gemelli nella tradizione manoscritta della "Geste de Guillaume d'Orange" e della "Geste des Loherains"», *Critica del Testo*, 7 / 1 (2004), pp. 41-104.

## 2. Factors at play in the copying of numerals

### 2.1. Cognitive and linguistic factors

The branch of cognitive science that studies the perception of numbers by the human brain, referred to as ‘numerical cognition’, involves above all the question of ‘numerosity’, the ability to perceive – and competence in perceiving – discrete quantities.<sup>47</sup> Cognitive psychologists mainly study children or adults affected by dyscalculia, dyslexia and similar dysfunctions. Both the scientific approach and its expected output are obviously focused on understanding and taking care of patients. It is natural that this perspective, when compared to the questions that affect philology, is rather different from ours. But some of the theoretical findings of cognitive science are also important for studying numerical variation in textual transmission. For instance, Heike Wiese observes that numerical words «do not refer to numbers, they serve as numbers»,<sup>48</sup> a remark that is particularly important for negotiating one of the obstacles that we met when approaching the *corpus* (see §1).

Another observation concerns the fact that Medieval Romance texts (including, *grosso modo*, the whole of the fourteenth and part of the fifteenth century) used Roman figures (i.e. Latin characters with numerical value) to represent numbers. In the process of writing, reading and copying, authors, readers and scribes were of course perfectly aware that some letters formed words, with their particular phonetic performance, while other letters (marked by punctuation) represented numbers, with a conventional and arbitrary phonetic output. Sometimes this feature – the intrinsic ambiguity between Roman numerals and letters – was exploited by Medieval authors in an expressive way. Recall, for instance, the famous lines of the *Divine Comedy* (*Purgatorio* xxxiii, 43-44), where Dante refers to a nameless character, enigmatically called «un cinquecento diece e cinque, / messo di Dio» (“a five hundred, ten and five, messenger of God”). Most critics agree that this line is to be

<sup>47</sup> See for instance R.S. Siegler-J.E. Opfer, «The development of numerical estimation: Evidence for multiple representations of numerical quantity», *Psychological Science*, 14 (2003), pp. 237-43; M. Zorzi-I. Stoianov-C. Umiltà, «Computational modeling of numerical cognition», *Handbook of mathematical cognition*, ed. by J. Campbell, New York, Psychology Press, 2004, pp. 67-83.

<sup>48</sup> H. Wiese, *Numbers, Language, and the Human Mind*, Cambridge, Cambridge University Press, 2003, p. 5; see also pp. 79-84.

explained as a numerical/alphabetical anagram: number 515, written «DXV» in Roman numerals, should be read as «DVX», Latin for ‘leader’.

The interference between these two systems (alphabetical and numerical) can be observed in striking cases of mistakes that affect both ancient scribes and modern readers. For instance, in a manuscript of Bernat Metge’s *Lo somni*, we find a mysterious “Ylix”, the son of Danaus: «Ipòlit, Agamenon e Ylix, fill de Danaus». In this passage the original reading is supposed to be «e .XLIX. fills de Danaus».<sup>49</sup>

In September 2014, the international press widely reported the case of an Indian newsreader who was sacked after mistaking the Chinese president’s name, Xi Jinping, for the Roman numeral XI, referring to him as «Eleven Jinping» live on air.<sup>50</sup>

In most languages with a written form, the sub-system dedicated to numerals is minimally ‘transparent’ (that is, it is mostly conventional), when numerals are expressed by symbols. The equivalence between a sign (symbol) and its spoken performance is totally arbitrary and does not depend on the value of the single sign but on its position in relation to other adjacent signs, both in positional systems of numeration (Hindu-Arabic numbers) and in additive ones (Roman numerals).

Experiments with school-age children have shown that longer series of symbols cause an increase in the frequency of errors in dictation, in reading aloud, and in silent transcription of numbers, as well as an increase in the frequency of glances towards the sheet (i.e. the exemplar) containing the written numbers to be transcribed or read aloud.<sup>51</sup> Unfamiliar series of figures consistently result in a high ‘cognitive cost’ for self-repetition and self-dictation.<sup>52</sup>

Given these premises, we can argue that Medieval scribes would also have experienced ‘performance breakdowns’ in normal cognition, especially when copying complex numbers within a verbal context.<sup>53</sup>

<sup>49</sup> See F. Rico, *Primera cuarentena y tratado general de literatura*, Barcelona, El Festín de Esopo, 1982, p. 111.

<sup>50</sup> See <http://www.bbc.com/news/world-asia-india-29274792>.

<sup>51</sup> F. Bagard-R. Charlot, *La copie de nombres comme méthode d’évaluation des difficultés de transcodage. Observations auprès d’enfants tout-venant et d’enfants dyslexiques en début de CE2, en cours d’apprentissage de la numérotation écrite*, Mémoire de maîtrise, Université Claude Bernard Lyon-1, 2006.

<sup>52</sup> *Ivi*, p. 18.

<sup>53</sup> Cognitive experiments about typos have recently been performed by Ç. Kalfaoğlu-T. Stafford, «Performance breakdown effects dissociate from error detection effects in typing», *The Quarterly Journal of Experimental Psychology*, 67 / 3 (2014), pp. 508-24.



## 2.2. Psychoanalytic factors

In his renowned *Psychopathology of Everyday Life*, Sigmund Freud discusses a slip in reading that involves the dating of a text.<sup>54</sup> In the nineteenth-century copy of the main manuscript of a Middle High German *Book of Martyrs* (known as ms. C), one can read a *colophon* signed by «Hartmanu[s] de Krasna», which dates the modern manuscript to 1850 («Anno Domini MDCCCL»). Joseph Haupt, a scholar who studied the *Book of Martyrs*, believed this date to be a mistake by the modern scribe, thus dating ms. C back to 1350. A later scholar, M. Eibenschütz, verified that no colophon was written in ms. C by the medieval scribe. The addition in the modern copy was to be attributed to Hartman Zeibig (born in Krasna), choirmaster and treasurer of Klosterneuburg (where ms. C was conserved) during the nineteenth century. Presumably, Haupt's wish to date the medieval model precisely – a difficult operation, when no *colophon* is given – introduced a numerical innovation into the scholarly tradition. The presumption of correcting a reading that seems to be erroneous, bizarre, illogical or inconsistent can be the reason for many variants – and for many philological misinterpretations – concerning numbers, and words as well.

## 2.3. Pragmatic factors

We have seen above that, in Medieval texts (and especially in epics), the number fifteen is rather frequent both as a common variant and as an ostensible error (cfr. c.12, c.13 and c.14). But when it comes to lists (for instance when fifteen knights are announced, and then turn out to number fourteen or sixteen), is fifteen to be considered an effective scribal mistake? Or is fifteen to be interpreted as 'a certain number of'? Pragmatics teaches us that numbers can be used both as cardinal and as vague quantities.<sup>55</sup> If someone says that he has already told us *one thousand* times not to do a certain thing, this person does not, of course, mean to invoke the cardinal/discrete quantity '1000'. Such idiomatic expressions concerning numbers are often untranslatable: Italian does

<sup>54</sup> S. Freud, *Zur Psychopathologie des Alltagslebens. Über Vergessen, Versprechen, Vergreifen, Aberglaube und Irrtum*, Berlin, S. Karger Verlag, 1917<sup>5</sup> [1904], pp. 90-91.

<sup>55</sup> This feature of language is also evident in nouns such as 'dozen' (set of about twelve), that are more or less rich in different languages (English does not have a noun for the French *quinzaine*, *dizaine*, *trentaine*, etc.).

not have an expression for ‘to have forty winks’, whilst English cannot directly translate the Italian expression ‘fare quattro chiacchiere’ (literally ‘to have four chats’, i.e. to shoot the breeze). As for the number fifteen in Medieval French, we can observe that it appears in several literary titles involving lists: *Les quinze joies de mariage*, *Les quinze signes du Jugement dernier*, *Les quinze joies Nostre Dame*.<sup>56</sup> Of course, these idiomatic acceptations are subject to diachronical changes and losses, so that, for instance, the number fifteen is not used as a vague quantity in modern French (which is the case, on the contrary, with the number twelve, and its corresponding noun *douzaine*, ‘dozen’); the same phenomenon can be observed with the number thirty, which modern Italian generally uses as a discrete quantity, while an acceptation of indeterminateness could perhaps be assigned to it during the Middle Ages.<sup>57</sup>

#### 2.4. Palaeographical and philological factors

Most of the numerical variants, innovations and errors that we have observed in our *corpus* seem to fall into the large and familiar category of palaeographical errors, which also corrupt common ‘verbal’ readings. For instance, [c.8] could be explained as a pedestrian ‘visual’ misunderstanding of the number .c., which a family of manuscripts has misread as an .L., without realizing that such a numeral would be unsatisfactory in that particular context; another case of confusion between roman numerals and alphabetical letters (involving an abbreviation) has been pointed out for [c.9]. Similarly, in the case of [c.22] (the first sentence) and [c.23], the graphic string .IIII. has been misread as the pronoun or indefinite article *un*, the written form of which, in *littera textualis*, is very near to a sequence of four vertical bars. Passing to [c.15], the error .v. for .II. probably depends on the fact that the last vertical bar in the numbers .II., .III. and .IIII. was usually written as a .j. by Medieval scribes, so that the curve of .II. probably caused a later scribe to misread that sequence as the number .v. Other phenomena observed in our corpus can be classified according to categories commonly used to

<sup>56</sup> W.W. Heist, «Four Old French versions of the “Fifteen Signs Before the Judgement”», *Mediaeval Studies*, 15 (1953), pp. 187–93; A. de la Sale, *Les quinze joyes de mariage*, éd. par F. Tulou, Paris, Classiques Garnier, 2010; Christine de Pizan, *Les xv joyes nostre Dame rimees*, éd. par J.-F. Kosta-Théfaine, Clermont-Ferrand, Paleo, 2010.

<sup>57</sup> Concerning this aspect, see R. Manetti, «Dall’edizione di Francesco di Vannozzo (con una postilla su trenta come numero indeterminato)», *Studi di filologia italiana*, 54 (2006), pp. 51–64.

describe verbal errors:<sup>58</sup> this is the case with inversions of figures ([c.10], variant reading of Be C; [c.22], second sentence), omissions or haplographies (c.17), and reduplications or dittographies (c.21).

Why are numerical inconsistencies so frequent? From a philological perspective, we could answer that they appear more frequent because they are less evident in the context, and thus less amendable by scribes themselves. If a first scribe wrote a sentence such as the following: «The lady of Malohaut had a *boly* guard of 27 knights», it would have been easy for a later scribe, copying that erroneous exemplar, to correct the senseless word *boly* into *body*. As for the number 27 (assuming that it was not the original reading), it does not represent an error in itself (only a minority of numbers are manifestly wrong)<sup>59</sup> and only an evident contradiction could show its contingent wrongness. On the other hand, many sequences of alphabetical characters are clearly ungrammatical and senseless in themselves or in a close-range context (one or two sentences). That seems to be the reason why a major and systematic change that implies further inconsistencies, such as the variation of 26 vs. 20 observed above (cfr. [c.1-c.7]), has been ‘corrected’ or ‘normalised’ only by a few attentive later scribes who detected a contradiction in the wider context. Perhaps, in most copies, numerical inconsistencies were maintained just because scribes were not able to detect and amend them.

### 3. Conclusions

In the paragraphs above we have analysed a representative set of variants and errors concerning the transmission of numbers in Medieval Romance manuscript traditions. Some general and provisional conclusions can be made here.

Numbers seem to represent a dynamic factor, that is, an element of disturbance, during the process of reading and copying texts. In some cases it is reasonable to suppose that they represented a problem for authors themselves, who could fall into contradictions when a number referred to an element of the story that occurred in distant sections of their texts and narratives. Confronted with manifest inconsistencies,

<sup>58</sup> See note 6 above.

<sup>59</sup> This applies above all to additive numerical systems. For instance, the sequence .vx. would be wrong in the standard Roman numerical system, and in such a case a later scribe could argue that it was an inversion of .xv.

some scribes might react by trying to normalise the contradictions, but these corrective operations could also generate further inconsistencies. From a strictly philological perspective, most cases of number errors should be treated as polygenetic variants, not to be used as significant elements to structure (or to destabilize) genetic hypothesis about manuscript transmission.

Some phenomena related to the scribal copying of numbers can be classified according to the categories already established by philological tradition: slips of the pen such as haplographies, dittographies, inversions of adjacent signs. Other phenomena are specific to numbers and in most cases seem to involve the fact that, in Medieval manuscripts, numbers were written as letters, that is using the additive system of Roman numerals. With regard to these latter phenomena, there seems to be a significant factor in play in the cognitive sphere: the ambiguity between sequences of letters to be read, self-dictated, copied and interpreted as words, and sequences of other letters, to be read, self-dictated, copied and interpreted as numbers, is likely to be at the origin of most disturbances in the copying process.

Other factors could be in play simultaneously; their influence would contribute to the 'performance breakdown' of cognition just discussed. Some cases observed in our corpus are likely to have to do with a major pragmatic aspect of language: the ambiguity between numbers used to represent cardinal versus vague quantities. Other scribal (or philological) interventions on original readings can be explained as conscious or unconscious attempts to normalise an apparent numerical inconsistency (or an ostensible calculation error), thus leading to the emendation of the reading transmitted by the exemplar.

As in the case of 'verbal' variants and errors, it does not seem reasonable to offer a unique general reason for the multifaceted set of phenomena that we have just started to analyse. It is probable that a deeper interaction between philology and cognitive science<sup>60</sup> will disclose more sophisticated explanations for this specific problem of the transmission of texts through time.

<sup>60</sup> With regard to this interdisciplinary approach, I would like draw attention to the existence of the open-access journal *Cognitive Philology* (<http://ojs.uniroma1.it/index.php/cogphil>), directed by Professor Paolo Canettieri (Università "La Sapienza", Rome).