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The Metaphorical/Metonymic Values of ‘Hand’
in Texts of 1400-1600s. A Corpus-driven Investigation
of French, Spanish and Italian

Abstract

This contribution proposes a corpus-driven description of the metaphorical/metonymic values of the lexeme ‘hand’ in Spanish, French and Italian in 15th-17th centuries texts. Metaphorical and metonymic reinterpretation of the lexeme is described in terms of embodiment of sensorial experience, namely a shift from concrete to abstract meaning, as several grammaticalisation and typological studies have claimed. Considering data gathered from diachronic corpora and dictionaries, the investigation aims at identifying the extended uses of ‘hand’ in the earlier phases of the languages. On one hand, a qualitative analysis of the semantic mapping, syntactic pattern, lexicalisation degree, and functional value is provided to identify cross-linguistic commonalities. On the other, the quantitative dimension is taken into account to verify the degree of productivity/conventionalisation of each semantic shift and of the cognitive process involved.

1. *Introduction*

This article discusses the extended meanings of body part nouns, and in particular of the lexeme ‘hand’, and the cognitive processes involved in the development of this kind of contextual polysemy in French, Spanish and Italian texts dating back to 1400s-1600s. Together with Vittorio Ganfi and Lunella Mereu, I have recently addressed this topic (Ganfi et al. 2023), providing a synchronic analysis of contemporary uses of body part nouns in geographically (and, in some cases, genetically) related languages. I come back to this theme by focusing my attention on the word ‘hand’ and the values realised by it in some Romance languages, in the period 1400s-1600s, when the languages considered had already fully begun to develop their own written and literary form,

although as vernaculars. The analysis provided in this article aims to i) identify the different values covered by the lexeme ‘hand’ in the selected period and their degree of conventionalisation, and ii) show the level of entrenchment and productivity of the use of cognitive mechanisms of embodiment (i.e., metaphor, metonymy) for the expression of abstract concepts.

The semantic class of body part nouns is frequently employed as a source of extended values, as several grammaticalisation and typological studies have demonstrated.¹ Ever since Lakoff and Johnson’s seminal study (1980), there has been much questioning of the way in which body part nouns are used by the different languages of the world to express bodily experiences and abstract notions. Scholars have proved that our understanding of abstract concepts reflects the embodied nature of cognition and language (cf. Lakoff and Johnson 1980; 1999; Evans 2010). Being lexically expressed by all languages, as concrete parts of the human individual, body part nouns play a fundamental role in our conceptual system (Kovecses 2000; Casadei 2003; Ruthrof 2000). The conceptualisation of human experiences by means of body part terms is mainly realised by two distinct cognitive mechanisms, i.e., metaphor and metonymy (Ibid.). Thus, metaphor and metonymy are not simply rhetorical functions, but “fundamental linguistic mechanisms which regulate the variation in the meaning of units” (Robert 2008, 61). On the one hand, metaphor allows the speaker to describe an entity, which is usually abstract, in terms of another domain which is usually concrete. On the other hand, metonymic transfers concern a shift based on a relation of logical contiguity. In both cases, it is possible to identify a common semantic pattern for all the values of a lexeme (Robert 2008), which “is present throughout all of the uses and which founds the semantic unity of the term” (Ibid.: 62). The pattern is a sort of regular semantic schema (‘semantic super-structure’ in the terms of Michaelis 1993; 1996), by means of which new senses/forms can be generated.

From a synchronic viewpoint, scholars have recently devoted their analyses to better understand how metaphor and metonymy can combine “in the polysemous network” of a word (Robert 2008, 69; Balbachan 2006; Lipka 1990). Thus, even though they can be considered as distinct cognitive processes, they

1 Cf. Lehmann 1995 [1982]; Heine and Kuteva 2002; Hopper and Traugott 2003; Goddard 2002; Koptjevskaja-Tamm et al. 2007; Wierzbicka 2007; Evans 2010. On this topic, cf. Ganfi et al. 2023.

may be strictly connected to each other. Metaphor has been described as a ‘radial’ shift,² while metonymy as a ‘chained’ one. In the case of metaphor, a core meaning from which all other meanings are directly derived can be identified (Lipka 1990, 127). Figure 1A represents some of the senses of the polysemous word ‘head’; those senses directly derive from the central meaning of ‘body part placed on top of the neck’, in a radial way, as Figure 1 shows. Figure 1B shows the metonymic chaining shift of the different senses: sense iii) (metaphorically) derives from sense ii), which in turn metonymically derives from i), i.e., the concrete meaning of the lexeme:

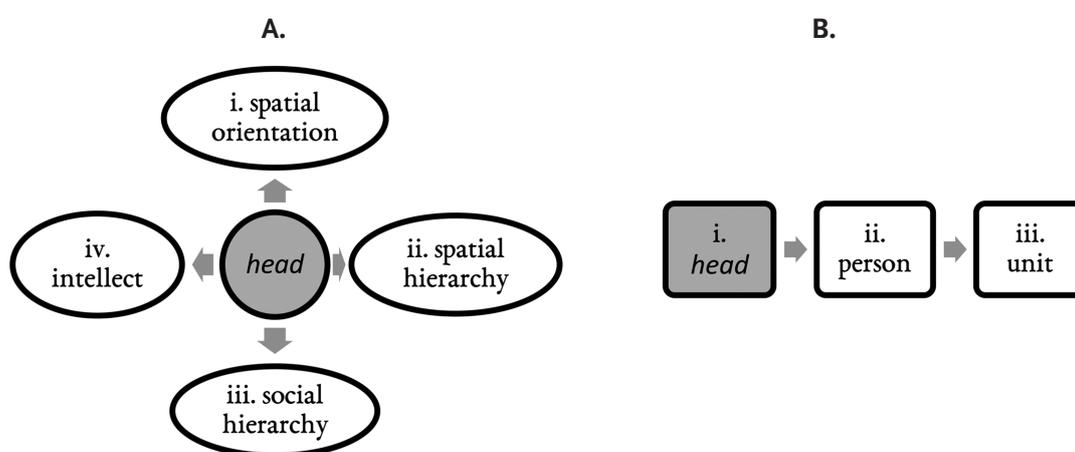


Fig. 1. Metaphorical (radial) and metonymic (chained) shift.

The diagrams, and in particular the different senses of the word in Figure 1B, can be read both synchronically and diachronically. Thus, both mechanisms are involved in the consolidation of the different senses of this polysemous word.³

From a diachronic perspective, the multitude of meanings that can be associated with a lexeme is correlated to semantic change: “where a lexeme instantiates a synchronic polysemy network, the structure of the network reflects the sequence of diachronic trajectories from which the modern array of senses arose” (Michaelis 1993, 180; cf. also Traugott 1986).

2 This term is due to Lipka (1990), who translates and reinterprets the categories of “mutation par rayonnement” and “mutation par enchaînement” proposed by Tournier (1985: 200).

3 On this topic, cf. also Bazzanella 2014; Panther and Thornburg 2007.

This paper investigates the relation between metaphor/metonymy mappings and the body part noun ‘hand’, and explores the interconnections between the two cognitive mechanisms, in a unified representation of the semantic shift evolution.

The article is organised as follows. Section 2 describes the method of data extraction and analysis of the different meanings related to the lexeme *hand* in the corpora considered. Section 3 provides the quantitative and qualitative analysis of the senses identified in French (§ 3.1), Spanish (§ 3.2) and Italian (§ 3.3) texts. Section 4 compares the data and discusses the major findings. Section 5 is devoted to the conclusive remarks.

2. Method of Analysis

This investigation is based on a corpus-driven method of analysis, namely an inductive procedure that aims to produce theoretical generalisations starting from the evidence provided by the corpus (Tognini Bonelli 2001, 66). Data have been extracted by means of different diachronic corpora. When available, dictionaries have been consulted as well to verify occurrences and related meanings.

French data were extracted from i) the *Base textuelle Old FRANTEXT*, which contains written texts from the 9th to the 21st century. The *Dictionnaire du Moyen Français* (DMF), and the online *Dictionnaire de la langue française – Le Littré (XMLittré v2)*⁴ were consulted to verify the values and etymologies. The French corpus allows the selection of a specific time span. However, in this case, only two texts were available in the corpus for the period 1400s-1600s. This means that the representativity of French data is biased, and results might not be fully generalisable. Nevertheless, the total frequency of occurrence of the word *main* in the corpus is high enough to ensure a comparison of data with the other languages considered. Thus, 94 occurrences have been classified.

Spanish examples were extracted from the *CORDE* corpus (*Corpus diacrónico del español*), which contains texts from the origins to 1974. The corpus allows the selection of a particular period of time, thus only 15th-17th centuries

⁴ *Base textuelle Old FRANTEXT*'s website: <http://oldfrantext.atilf.fr>. *DMF*'s website: <http://www.atilf.fr/dmf>. *Le Littré (XMLittré v2)*'s website: <https://www.littre.org>.

texts have been considered. To get a better sample of data, only a selection of the corpus was taken into account: for this reason, data were extracted from the subcorpus *CDH Nuclear* of the *Nuevo diccionario histórico del español*.⁵ This corpus also includes diatopic differentiations; this made it possible to select only texts that were produced in the Spanish peninsula. Since the number of examples was too large for the qualitative manual analysis, one example per text was extracted, and the first 100 results representing the time span selected were considered for classification.

Italian data come from the *MIDIA* corpus (*Morfologia dell'Italiano in DI-Acronia*), a collection of Italian written texts; the *Dizionario della lingua italiana di Tommaseo* was consulted as well to check particular uses/values.⁶ The *MIDIA* corpus allows the user to select a specific period among five,⁷ but the specification of temporal ranges different from those provided is not possible. Thus, only texts dating back to the time span from 1376 to 1532 were selected for the purpose of this analysis. Since the extracted sample was too big for a manual qualitative analysis and would not have been comparable to the corpora of the other languages in terms of frequency, data were further filtered by choosing randomly only one example per text. A total amount of 100 occurrences has been randomly selected and classified.

The computational tools used for the investigation allow the quantitative and qualitative analysis of the frequency and of the collocational properties of a word. Corpora were used to extract samples of concordances including the word *hand* in the different languages. Each occurrence was first classified according to semantic features (i.e., source and target meaning, type of cognitive process involved), morpho-syntactic features (i.e., type of combinatorial sequence including the body part term) and lexical properties (i.e., the most significant collexemes⁸ were identified and correlated to each specific value).

The analysis provides both qualitative and quantitative considerations.

5 *CORDE*'s website: <http://corpus.rae.es/cordenet.html>. *Nuevo diccionario histórico del español*'s website: <https://apps.rae.es/CNDHE/>.

6 *MIDIA*'s website: <https://www.corpusmidia.unito.it/index.php>. *Dizionario della lingua italiana di Tommaseo*'s website: <https://www.tommaseobellini.it/>.

7 Periods are subdivided as follows: i) from early 1200 to 1375; ii) from 1376 to 1532; iii) from 1533 to 1691; iv) from 1692 to 1840; v) from 1841 to 1947.

8 I borrow this term from the constructionist study by Stefanowitsch and Gries (2003), in which collexemes are different lexemes allowed by the variable portions of a construction.

The former are devoted to the identification of the pathways leading to the development of a particular type of semantic extension, the latter concern the frequency of occurrence of each semantic shift in the selected corpora.

3. Data Analysis

This investigation aims to provide a usage-based analysis of the semantic mappings related to the occurrences of the word ‘hand’ in French, Spanish and Italian texts, in the period 1400s-1600s. To this purpose, the source and target meanings were considered, and the different cognitive processes involved in the shift were described. Table 1 shows the first results of the corpus-driven analysis:

SOURCE MEANING	TARGET MEANING
<i>hand</i> >	i. control
	ii. activity
	iii. possession
	iv. temporal
	v. instrumental
	vi. direction
	vii. proximity
	viii. evidentiality
	ix. container/beneficiary
	x. individual
	xi. personality

Table 1. Target meanings of *hand*.

Table 1 is organised as follows: the left-hand column specifies the kind of source meaning, that in this case is only represented by the body part ‘hand’; the right-hand column provides the different target meanings that were identified in the corpora.

From the qualitative point of view, the contextual examples gathered by means of the corpus extraction shed light on the conventionalised uses and explain the different polysemies of the word ‘hand’ (e.g., hand is the possessor, hand is the pole of orientation, hand is the pole of activity, etc.). To this purpose, the correlations between the different values were also taken into ac-

count, and possible grammaticalisation pathways were traced. This approach highlights the presence of effects of ‘layering’⁹ (Hopper 1991) and coexisting values and contributes to the identification of several paths of grammaticalization for the period of time considered. Furthermore, the qualitative analysis also considered the type of word combination in which ‘hand’ expresses the metaphorical value. On the one hand, this approach highlights the distributional properties specifically connected to each value. On the other hand, it reveals the different lexicalisation degrees of a combination and its functional values in context. The identification of collexemes provides evidence of potential lexical cross-linguistic commonalities (e.g., the correspondence between contemporary EN ‘second hand’ and contemporary IT *di seconda mano*, SP *de segunda mano*, FR *de deuxième main*; on this cf. Ganfi et al. 2023).

The quantitative dimension was taken into account to verify the degree of productivity and of conventionalisation of each semantic shift in the different languages considered. Due to the kind of sample considered, the quantitative datum cannot be fully representative of the language spoken in the 15th-17th centuries, but some intralinguistic and crosslinguistic generalisations are still possible.

Next paragraphs are devoted to the analysis of the values of the word ‘hand’ in the French (§ 3.1), Spanish (§ 3.2) and Italian (§ 3.3) corpora.

3.1. *Results: The Word Main in the French Corpus*

Even though the French corpus contains a low number of texts and for this reason its representativity of the language used in the 15th-16th centuries is rather restricted, the occurrences of the word ‘hand’ can be associated to different extended values. This gives a fair picture of the uses of this word in the texts that have been considered. The absence of other potential uses does not indicate that these values were not present at the time the texts were produced, but that they were simply not found in the sample of data considered. This also means that quantitative data cannot be generalised as a whole, and should always be

⁹ This notion refers to “the persistence of older forms and meanings alongside newer forms and meanings” (Hopper and Traugott 2003, 124): it highlights a semantic overlap between two different meanings of the same form, which in some contexts are not easily distinguishable from one another.

considered as relative frequencies, which have to be associated with the type of sample considered. Although quantitatively low, French data are nevertheless interesting, since they are evidence of the semantic variability of the word ‘main’ in the period under consideration.

Table 2 represents the frequency of occurrence of the word *main* in the corpus. Data have been ordered according to the number of instances: the first frequency is related to concrete uses, while the others concern metaphorical/metonymic values, from the most to the least frequent.

TARGET MEANING	MEANING	FQ
Concrete value	<i>main</i> is a body part	27
Control	<i>main</i> is the controller	34
Activity	<i>main</i> is the agent	12
Possession	<i>main</i> is the possessor	6
Temporal	<i>main</i> is a temporal unit	4
Individual	<i>main</i> is the individual	4
Instrumental	<i>main</i> is the (animated) instrument	5
Direction	<i>main</i> is the pole of orientation	2
TOTAL		94

Table 2. Values of the word *main* in the French corpus.

Firstly, it should be noted that *main* is used in its concrete values only in 27 examples (28,72% of its occurrences). These values are associated with recurrent word combinations, such as collocations (e.g., *toucher de la main*, *prendre en la main*, *mettre la main*, *main droite*) or semi-fixed combinations, such as partially lexically specified patterns X_{NOUN} *en la main* ‘ X_{NOUN} in the hands’ (3):

- (1) Et quand le barbier y vouloit *toucher de la main*...
(Bonaventure Des Périers, *Nouvelles récréations et joyeux devis*, 1, 1558)
‘And when the barber wanted to touch it with his’
- (2) luy *met la main* sus le ventre et par tout
(Bonaventure Des Périers, *Nouvelles récréations et joyeux devis*, 1, 1558)
‘(he) put his hand over her belly and all over’
- (3) une bote *en la main*
(Bonaventure Des Périers, *Nouvelles récréations et joyeux devis*, 1, 1558)
‘a box in his hand’

Metaphorical uses are more frequent, even though most of the occurrences mainly concern the value of “control”, which covers alone the 36,17% of cases. In such uses, the *main* is the one who controls the initiation and the progress of an event, which may be concretely realised or managed by it:

- (4) Si quelcun tombe *en la main des brigans...*
 (Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)
 ‘if anyone falls into the hands of bandits’
- (5) Ainsi ce mot s’estend tant à *sa main* qu’à ses yeux, c’est à dire que non seulement il voit, mais aussi ordonne ce qu’il veut estre fait
 (Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)
 ‘So this word applies to both his hand and his eyes, meaning that not only does he see, but also orders what he wants to be done’
- (6) tout ce peuple fust conduit *sous la main d’un seul Roy*
 (Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)
 ‘all this people was led under the hand of only one King’
- (7) ils ont conspiré ce que la *main de Dieu* et son conseil avoit décrété
 (Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)
 ‘they conspired what the hand of God and his council had decreed’

Such metaphorical uses are typically conveyed by fixed expressions or collocational patterns. Among fixed units, complex prepositions are worth noting, i.e., phrases such as *en la main de*, *par la main de*, *sous la main de* having the role of a preposition, and introducing the noun of the person who has control (cf. Piunno and Ganfi 2019). Collocational patterns mainly concern verbal units, such as *demeiner de la main*, *avoir en la main*, *tomber en la main de*, *méner par la main*. Metaphorical uses related to control often invoke the presence of a leader, someone who has the function of guiding/assisting someone else, as in the following example:

- (8) des hommes, lesquels, sans avoir regard à Dieu comme s’ils n’estoyent pas *conduis de sa main*
 (Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)
 ‘men, who, without looking to God as if they were not led by his hand’
- (9) l’église de Christ a vescu et vivra tant que Christ régnera à la dextre de son Père, *de la main duquel* elle est soustenue

(Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)
'the Church of Christ has lived and will live as long as Christ will reign next to his Father, from whose hand it is held'

Non-literal uses also denote the 'activity' which is performed by the hand (almost 13% of French occurrences):

- (10) La terre apportoit toutes sortes de fruitz *sans main mettre*
(Bonaventure Des Périers, *Nouvelles récréations et joyeux devis*, I, 1558)
'The earth brought all kinds of fruit without doing anything'
- (11) ce ne fut pas sans faire la meilleure *derniere main* qu'il peust
(Bonaventure Des Périers, *Nouvelles récréations et joyeux devis*, I, 1558)
'it was not without making the best activity he could'
- (12) Mais à la fin ilz ne furent pas les maistres, quoy qu'ilz *missent la main aux armes* pour luy saulver la vie
(Bonaventure Des Périers, *Nouvelles récréations et joyeux devis*, I, 1558)
'but in the end they were not the masters the ones who they took up arms to save his life'

The cognitive strategy employing this body part to denote the agent is based on a double process: it is "the result of a metonymic transfer, whereby the human hand is used to refer to the person as a whole" (Heine and Kuteva 2002, 166), as well as a metaphorical shift by which the physical individual denotes activity. It is already attested also in the earliest stages of other Romance languages (Piunno and Ganfi 2019), and it is still very common in the world's languages, even though "[m]ore research is required on the exact nature and the genetic and areal distribution of this process" (Heine and Kuteva 2002, 166). Such uses are conveyed by multiword expressions of different nature, i.e., nominal (*main d'homme*), verbal (*toucher à la main*, *avoir la main à l'ouvre*, *prester la main*), prepositional (*de la main de*). This type is closely related to the 'instrumental' subtype (5% of French occurrences), that we have kept separated because of some semantic peculiarities. In this case, *main* denotes the means by which an action is executed, such as in the following example:

- (13) lequel a ordonné la Loy *par la main de Moïse*
(Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)
'which ordered the law by the hand of Moses'

- (14) la Loy a esté donnée *par la main des Anges*
 (Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)
 ‘the law was given by the hand of the Angels’
- (15) la parole qu’il avoit prononcée *par la main d’Ahiba son serviteur*
 (Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)
 ‘the word he had pronounced by the hand of Ahiba his servant’

Such uses are conveyed only by the complex preposition *par la main de*, where *main* is an ‘animated instrumental’ which “metaphorically recalls the domain of ‘manual activities’” (Piunno and Ganfi 2019, 151). The distributional features of this grammaticalised unit are worth noting: as examples (14)-(15) show, something can be ‘commanded’ or ‘pronounced by the hand of’ someone. This context of use highlights the semantic extension of the word *main* and its semantic bleaching in the specific construction.

One of the most frequent metaphorical values associated to the word ‘hand’ in the languages is ‘possession’. This value is also attested in earlier stages of French, even though it only covers about 6% of cases of our corpus:

- (16) un sergent [...] mit la charrette et les beufz de ce povre homme *en la main du Roy*
 (Bonaventure Des Périers, *Nouvelles récréations et joyeux devis*, I, 1558)
 ‘a sergeant [...] placed the cart and the oxen of this poor man in the hands of the King’

Such uses are typically expressed by the prepositional multiword *en la main de* ‘in the hands of’, where the locative meaning expresses possession, as in the formula *Y is at X’s place* > *Y is in X’s possession* (Heine 1997, 28).

The meaning of *main* as an individual develops from a metonymic use of the word.¹⁰ In such cases, the human part of the body is used to refer to the whole body, i.e., the individual:

- (17) sont parvenus de pères à fils, ceux qui les avoyent ouy parler en ont rendu tesmoignage de vive voix, et que *de main en main* cela a esté si bien testifié qu’il n’y avoit que douter
 (Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)
 ‘(they) have been handed down from father to son, and those who have heard them spoken have testified to them in person, and that little by little this has been so well attested that there was no room for doubt’

10 On the metonymical use of body part terms to refer to the individual, cf. also Mol 2004.

In the example (17) *main* stands for person (4% of occurrences). This meaning is typically conveyed by the prepositional multiword unit with the adverbial function *de main en main* ('from one person to another', lit. from hand to hand). The value of this unit may be ambiguous, as happens in (18), where a new layer, in terms of Hopper (1991, 22), emerge:

(18) ...il ait ordonné des hommes ministres, lesquels enseignassent les successeurs *de main en main*

(Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)

'...he ordained some men as ministers, who taught their successors from one person/generation to another'

In this case, the value of individuality of *de main en main* interacts with two more abstract meanings, i.e., the 'distributional' and 'aspectual' values: indeed, in (18) the sequence may be also read as 'progressively, from one generation to another', with the value of temporal progression.

Metaphorical uses referring to *main* as an explicit 'temporal' unit are worth noting, even if their occurrence is rather low in the corpus (4% of French instances). In the French texts, they are mainly based on the prepositional multiword unit *de longue main*, which has an adverbial function in context:

(19) depuis deux ou trois jours en ça j'en ay trouvé une que je congnois *de longue main*

(Bonaventure Des Périers, *Nouvelles récréations et joyeux devis*, I, 1558)

'after two or three days I have found one that I have known for a long time'

(20) il avoit apprins ce langage *de plus longue main*

(Bonaventure Des Périers, *Nouvelles récréations et joyeux devis*, I, 1558)

'he had learnt this language long time before'

(21) on rejette le remède, non pour autre raison, sinon que nous sommes déjà *de longue main* accoustumez aux calamitez

(Jean Calvin, *Institution de la religion chrestienne: livre premier*, 1560)

'we reject the remedy, for no other reason than that we are already accustomed to calamities'

As the examples show, even if it is syntactically and semantically fixed, the unit admits internal intensifiers/mitigators as *plus*, *assez*. In such cases, the sequence underwent a process of grammaticalisation, losing in morphosyntactic

and semantic substance: indeed, *main* cannot be inflected and its meaning is bleached. This means that this body part lexeme can be associated with the temporal value when used in the specific phrasal co-text which includes the preposition *de* ‘of’ and the adjective *longue* ‘long’. As far as some scholars have noted (cf. Heine and Kuteva 2002), temporal values may develop from locative ones. In particular, body parts may be used to “express deictic location and then develop further into temporal markers” (Ibid.: 49). Here, we may hypothesise that the particular temporal meaning referred to this unit employing *main* derives from the locative value, as the possessive one:

(22) LOCATIVE > TEMPORAL
> POSSESSION

The schema in (22) represents the grammaticalisation path of *main* and assumes that with a certain degree of probability both temporal and possessive values are derived from the same locative meaning (see Heine 1997, 207).

The last metaphorical shift that can be considered for French is related to the ‘locative’ semantics. In this case, *main* is used to express a direction (2% of occurrences), as in the following example:

(23) tourne à la bonne main, et peu allez tout dret
(Bonaventure Des Périers, *Nouvelles récréations et joyeux devis*, I, 1558)
‘turn to the right hand, and then go all straight’

In such uses, the hand is the pole of orientation and embodies the position of the individual in the space, thus becoming a grammaticalised directional marker.

3.2. Results: The Word *Mano* in the Spanish Corpus

In the case of the Spanish sample, *mano* is most frequently employed to denote a concrete entity. Indeed, the literal meaning of body part covers the 42% of occurrences:

(24) Señor, el vuestro vasallo Juçab Venalmao, rrey de Granada, vesa vuestras manos
(1431, anónimo, fragment)
‘Sir, your vassal Juçab Venalmao, king of Granada, kisses your hands’

- (25) *en su diestra mano espada tenía*
 (a1435, Páez de Ribera, Ruy, *Poesías*)
 ‘in his right hand he had a sword’
- (26) *Tendió los braços luego, alçó la mano tres vezes*
 (c1567-1597 Herrera, Fernando de, *Fragmentos de poemas perdidos*)
 ‘He stretched out his arms and raised his hand three times’

Table 3 provides some frequency data about the Spanish sample:

TARGET MEANING	MEANING	SPANISH
Concrete value	<i>mano</i> is a body part	42
Instrumental	<i>mano</i> is the (animated) instrument	20
Control	<i>mano</i> is the controller	17
Activity	<i>mano</i> is the agent	14
Proximity	<i>mano</i> is the distance	3
Direction	<i>mano</i> is the pole of orientation	2
Container/beneficiary	<i>mano</i> is the receiver	1
Individual	<i>mano</i> is the individual	1
TOTAL		100

Table 3. Values of the word *mano* in the Spanish corpus.

Firstly, it may be noticed that, differently from the other languages’ samples, the most frequent metaphorical shift concerning *mano* is related to the ‘instrumental’ value (20% of occurrences). In such cases, *mano* is used as the animated instrumental by means of which an action occurs. Even in this case, this meaning is typically conveyed by grammaticalised complex prepositions: it is possible to note a variability of the prepositional elements employed (e.g., *por/de/con mano de*):

- (27) *gastar el dinero por su mano*
 (1498-1501, Anónimo, *Libro de Acuerdos del Concejo Madrileño*)
 ‘spend the money by his hand’
- (28) *De mi mano aquesta carta te faze saber, sennora, que...*
 (c1407-1463 Villegas, Sancho de, *Sin título*)
 ‘From my hand that letter I make known to you, lady, that...’

- (29) (letra) bien *escrita con su mano*
 (11435, Baena, Juan Alfonso, *Poesías*)
 ‘(letter) well written with his hand’

The second most frequent metaphorical value concerns the uses of *mano* as a ‘controller’, which is recorded in the 17% of occurrences. In this case, the meaning is almost always expressed by the complex preposition *en mano de* (or the alternative form *en X_{Possessive} mano*):

- (30) a peligro de morir cada hora *en manos de* sus enemigos
 (11535, Anónimo, *Diálogo de las transformaciones de Pitágoras*)
 ‘at the risk of dying every hour at the hands of their enemies’
- (31) *en nuestra mano* la vida e la muerte fue puesta
 (11407, Álvarez de Alarcón, García, *Poesías*)
 ‘in our hand life and death were placed’
- (32) *en su mano* está su salud e su salvamiento
 (11435, Sánchez Calavero, Ferán, *Poesías*)
 ‘in his hand is your health and your salvation’

The metonymic/metaphorical shift of ‘activity’ covers the 14% of occurrences and is often conveyed by the light verb construction *poner la mano en (algo)*:

- (33) qualquiera otro rehusara *poner la mano en* cosa de tanta admiración
 (11540, Villalón, Cristóbal de, *El Scholástico*)
 ‘anyone else should refuse to put their hand to something of such a value’

However, other combinatorial sequences are also possible, e.g., multiword nominal units (e.g., *oficio de mano*) and prepositional phrase with an adverbial (e.g., *con dura mano armada*) or an adjectival function (e.g., *de mano de*):

- (34) buscádesed tenprano algunt *oficio de mano* para la postremería’
 (11455-11482, Manrique, Gómez, *Consejo a Juan Poeta*)
 ‘you should seek out early some handcraft for the dessert trade’
- (35) edictos trabajosos *con dura mano armada* introdujeron
 (11569, Ercilla, Alonso de, *La Araucana*)
 ‘they introduced edicts with a strong-armed hand’

- (36) *Éstas son de mano de mi hija Aldonza!*
(1528, Delicado, Francisco, *La Lozana Andaluza*)
‘These are done by my daughter Aldonza!’

Finally, among the group of the least frequent metaphorical shift, also in this case it is possible to identify ‘direction’ (3%, example (37), where the hand represents the pole of orientation), and ‘individual’ (example (38), where the hand metonymically recalls the person):

- (37) *otros tantos por la mano derecha, cerca de un otero que estaua pegado con nosotros*
(1435 [s. 16th] Anónimo, fragment)
‘The same number of others on the right hand side, near a hill that was close to us’
- (38) *ya no ay mano que lo escriba*
(c1460-1479 Manrique, Jorge, *Comienzan las obras*)
‘there is no longer a hand who writes it’

Next to the ones above, there are two other values among the least represented, which have not been identified in the examples considered for French. They both express a locative value. The first is used as a sort of deictic element and conveys the meaning of spatial proximity (39), while in the second *mano* is a container (40):

- (39) *no pocas vezes he desseado que me veniesse a las manos esse hombre*
(1529, Valdés, Alfonso de, *Diálogo de Mercurio y Carón*)
‘more than a few times I have wished that this man would come into my hands’
- (40) *Alto Rey [...] resçibit en vuestra mano este escrito*
(1435, Baena, Juan Alfonso de, *Poesías*)
‘High King [...] receive in your hand this writing’

The first is based on a metonymic and a metaphorical shift, by means of which *mano* is in turn i) the whole body (part-whole relation) and ii) the, a deictic distance expression (it conveys the meaning of ‘at a short distance’ since the hands may move away from the rest of the body, albeit to a limited extent, while maintaining a minimum distance from it). In the second value, which is also based on a metonymic shift, *mano* is a place where something is contained.¹¹

11 As the anonymous reviewer has noticed, the use of the term *hand* in this example may be ambiguous, since it might also refer to the concrete body part.

Finally, it may be important to notice that the meaning of possession, as well as those of temporal unit, evidentiality and personality are not represented in the Spanish corpus used.

3.3. Results: The Word *Mano* in the Italian Corpus

All the metaphorical/metonymic shifts that have been identified for French and Spanish are attested in the Italian corpus as well, as Table 4 shows. Furthermore, the examples of Italian also illustrate cases of alternative values, different from those seen so far, e.g., evidentiality and personality, which are described below.

TARGET MEANING		ITALIAN
Concrete value	<i>mano</i> is a body part	36
Control	<i>mano</i> is the controller	17
Instrumental	<i>mano</i> is the (animated) instrument	15
Activity	<i>mano</i> is the agent	11
Container/beneficiary	<i>mano</i> is the receiver	8
Direction	<i>mano</i> is the pole of orientation	7
Proximity	<i>mano</i> is the distance	1
Individual	<i>mano</i> is the individual	1
Possession	<i>mano</i> is the possessor	1
Temporal	<i>mano</i> is a temporal unit	1
Evidentiality	<i>mano</i> is direct evidentiality	1
Personality	<i>mano</i> is personality	1
TOTAL		100

Table 4. Values of the word *mano* in the Italian corpus.

As far as frequency results are concerned, the first significant datum is related to the concrete value, which is the most frequent (36% of occurrences), as for Spanish. Also in the case of Italian, the value is mainly identifiable in collocations (e.g., *legare le mani*, *alzare/muovere/toccare la mano*, *mano bianca*) or semi-fixed patterns as X_{NOUN} *in mano* (e.g., *remi/chiave in mano*):

- (41) *avendoli legate le mane*, lo istracinavano per le piazze
 (1475, Manerbi Niccolò, *Volgarizzamento della Legenda Aurea*)
 ‘having tied his hands, they dragged him through the squares’

- (42) quelli che *la mano mossono* [...] *la mano alzorono*
(1497, Collenuccio Pandolfo, *Filotimo*)
‘Those who moved their hand [...] the hand they raised’
- (43) co’ *remi in mano*, la nave arsa in nel porto saltò
(beginning of the 15th century, Sercambi Giovanni, *Croniche*)
‘with oars in hand, the burning ship leapt in the harbour’
- (44) s’io ti toccassi le *bianche mani* e ‘l tuo bel viso
(second half of 15th century, Lorenzo de’ Medici, *Poemetti in terza rima*)
‘If I would touch the white hands and your lovely face’

The second most frequent value is the one of ‘control’,¹² which covers the 17% of occurrences (this trend is in line with Spanish, but is much lower than French, where it is the most frequent one):

- (45) per esser il governo *in mano di donna*
(1525, Capra Galeazzo Flavio, *Della eccellenza e dignità delle donne*)
‘to be the management in the hands of a woman’
- (46) et tale inquisito se lo *havaranno in le mani*, consegnarli in le *mani de’ signori*¹³
(1513, Anonimi, *L’Arte della seta nei secoli XV-XVI. Statuti e documenti*)
‘and this suspect if they have him in their hands, they will deliver him into the hands of the lords’
- (47) lassono nove in pregione *nelle mani de’ Franciosi*
(1494-1502, Portoveneri Giovanni, *Memoriale*)
‘they leave nine (persons) in prison in the hands of the French people’

The metaphorical shift reinterpreting ‘hand as the controller’ is realised by the complex prepositions *nelle mani di/in le mani di*, which are typically preceded

12 As the anonymous reviewer has noticed, it is important to highlight that some of the examples that have been classified as ‘control’ may be associated with other values (e.g., ‘possession’). However, in the analysis all the values have been assigned considering the general meaning of the sentence and of the text.

13 Here, the disambiguation between the two meanings, i.e., ‘control’ and ‘possession’, depends on the semantic properties of the entity that is possessed/controlled. When the entity is a concrete object, hand is interpreted as a possessor; when the entity is abstract, hand is a controller.

by a verb of transfer (e.g., *dare*, *lassare*, *depositare*, *condurre*, *consegnare*) or, less frequently, by a stative verb (e.g., *rimanere*).

The lexeme *mano* conveys the meaning of ‘animated instrumental’ in the 15% of cases:

- (48) gl’istromenti pubblici, fatti *per mano di* pubblico notaio
(1515, Anonimo, *Statuti di Frascati*)
‘the public instruments made by public notaries’
- (49) spargeran *di sue man* divini odori
(end of 15th – beginning of 16th century, Sannazzaro Iacopo, *Sonetti e Canzoni*)
‘(they) will scatter divine odours by their hands’
- (50) lettera *di mano de* tuo padre
[about 1495, Sabadino degli Arienti, *Porretane*]
‘letter from your father’s hand’

The animated instrumental refers to the origin or the executor of an action (cf. Piunno and Ganfi 2019). Also in the case of Italian, these uses are conveyed only by a complex preposition. Nevertheless, Italian shows a greater variability in terms of form (e.g., *per/di/con mano di*).

The metonymic/metaphorical shift representing the ‘hand’ as the pole of ‘activity’ covers the 11% of the occurrences. In this case, there are no particular preferences for a specific combinatorial pattern or collexeme, but some collocations emerge, such as *porre mano*, *mettere mano*, *operazione di mano*:

- (51) se Dio non li avessi *posto la mano*, si saria sparso di molto sangue
(end of 15th century, Savonarola Girolamo, *Trattato sul governo di Firenze*)
‘if God had not set his hand to it, it would have been sprinkled with much blood’
- (52) E ‘l padre non gli rispuose, ma *misse mano alla* spada
(second half of 15th century, Andrea da Barberino, *Reali di Francia*)
‘And the father did not answer him, but put his hand to the sword’

The lexeme *mano* denotes the activity or the person who executes it. The cognitive strategy employed is based on both metonymy (the hand is a person) and metaphor (the individual is the activity). In such uses, the metaphorical shift follows the metonymic one, as is represented in Figure 2:

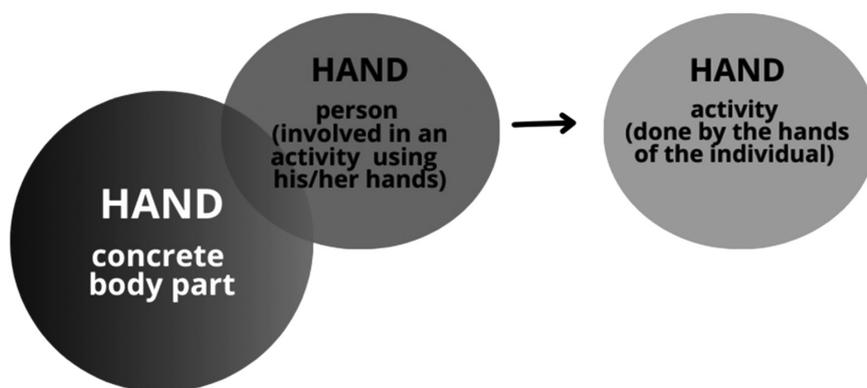


Fig. 2: Chaining shift for hand=activity.

Even if it is not high, the 8% of occurrences of *mano* as a (beneficiary) ‘container’ may be surprising.¹⁴ Here are some examples:

- (53) da essere paghate *nelle mani del Camerlengho*
 (1496, Anonimo, *Statuto inedito dell’Arte degli Speziali di Pisa nel secolo XV*)
 ‘to be paid into the hands of the Camerlengho’
- (54) administratione della pecunia che *alle mani gli perverrà*
 (1428, Anonimo, *Statuto del Comune di Empoli*)
 ‘administration of the monies that will reach his hands’

This semantic shift is based on three different cognitive mechanisms. Firstly, ‘hand’ does not simply denote a body part but stands for the whole person: thus, the part is metonymically employed with the value of ‘individual’. Secondly, it is metaphorically used as a container, i.e., the person who ‘holds in his/her hands’ something. Finally, the hand is the one who receives something, i.e., the beneficiary or destination of a process of transfer: the last

14 However, this is a common feature in the world languages, where the lexeme denoting the hand is not only metonymically employed with the value of ‘container’, but also metaphorically, as a quantitative unit. This value is also present in the period considered, in some of the languages, even though it is not attested in the selected corpus. See the following examples from French and Italian:

- i. *a plaine main* ‘abundantly’ (Marcadé, *Myst.Pass.Arras R.*, 1440)
- ii. *il gran con piena mano* ha sparso ‘the great with full hand scattered’ (1545, Giraldo Cinzio, Giambattista, *Egle*)

value is attributed to the lexeme by the context, and in particular by verbal collexemes, which denote a movements towards something (e.g., *pervenire* ‘arrive’, *venire* ‘come’).

The metaphorical shift concerning ‘locative’ meanings also appears in the Italian texts. 7% of instances concern ‘direction’ (55-56), while ‘proximity’ (57) is extremely rare:

(55) Se tu navichi *ala mano dextra* arivarai alla villa de cavalli [...]. Et se tu navicarai *alla man sinistra* arivarai alla villa de Conselice

(1412, Anonimo, *Cronaca di Ferrara*)

‘If you sail to your right hand, you will arrive at the villa of horses [...]. And if you sail to the left hand, you will arrive at the villa of Conselice’

(56) circondato da selve *a ogni mano*, ombrose e folte...

(15th century, Malecarni Francesco, *Rime*)

‘surrounded by forests on each side, shady and thick...’

(57) La botte dello vino ch’era *a mano*...

(1384-1393, Datini Francesco, *Lettere*)

‘The wine cask that was at hand...’

In the first two cases, *mano* stands for ‘side’; such uses are realised by a very restricted range of word combinations, always employing the same collexemes, such as: *a mano dextra/ritta*, *a mano sinistra/manca*, *a ogni mano*, *da man destra a sinistra*. In the third case, the meaning of proximity is expressed by the combinatorial unit *a mano*.¹⁵

The rest of the values that have been identified only record one occurrence. Among these, some metaphorical transfers related to the expression of possession (58), aspectual value (59), personality (60) and evidentiality (61) are worth noting.

(58) Camarlengho a la fine del suo offitio *avesse nelle mani* della pecunia

(1412, Bonaccorso Pitti, *Ricordi*)

‘Camarlengho at the end of his office had in his hands some money’

15 From an in-depth analysis of the corpus, a biunivocal relation between value and combinatorial unit seems to emerge. This could be an index of low productivity of the extended signifier; however, further investigation is still needed to confirm this hypothesis.

- (59) prima li cavalli [...], poi li squadroni [...] da poi veniva le fanterie et *di man in man* le altre squadre
(beginning of 16th century, Sanuto Marin, *La spedizione di Carlo VIII in Italia*)
'first the horses [...], then the cavalry [...] then came the infantry and step by step the other troops'
- (60) Costui, oltre che è uomo di assai buone lettere e persona di qualche giudizio, molto *alla mano*
(1525-1530, Firenzuola A., *Dialogo delle bellezze delle donne intitolato Celso*)
'He, besides being a well-educated and a person of some judgement, very easy-going'
- (61) *toccar con mano* la verità
(first half of XV century, Pisana Camilla, *Lettere*)
'to touch the truth by hand'

The last two metaphorical values are particularly interesting, since are not attested in the corpora of the other languages and deserve further comments. On the one hand, the metaphorical *mano* denotes a positive character or disposition of a person. This value may be connected (and may derive from) to the one of proximity, with which it also shares the form, since a common semantic substratum is present in both cases. The only difference is related to the productivity and to the distributional and functional features: in the case of the 'personality' meaning, there is a biunivocal relationship between the value and the combinatorial unit. Furthermore, the unit *alla mano* plays the role of an adjectival, and modifies nouns. The biunivocal relationship between value and form may also concern the metaphorical value of 'evidentiality', where the word *hand* only appears in the sequence *toccare con mano* 'touch by hands'. In this case, the *hand*, as the site of touch, acquires the meaning of 'direct evidence'.¹⁶

16 This metaphorical value has been investigated in terms of grammaticalisation patterns (Heine et al. 1991). "It appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location" (Heine and Kuteva 2002, 141).

4. Data Comparison and Findings

The corpus-driven investigation of the Romance data considered has shown a great variety of extended uses in 1400s-1600s texts.¹⁷ The qualitative analysis has highlighted a strict correlation between metonymy and metaphor in the development of the polysemy of the lexeme denoting the ‘hand’ and has also shown that it is also possible to trace chains of derivation between the core meanings and the other extended values of the lexeme. As far as the former point is concerned, Table 5 shows the cognitive processes involved in each extended meaning:

SOURCE MEANING	TARGET MEANING	TYPE OF SHIFT
<i>hand</i> >	i. control	metaphor
	ii. activity	metonymy + metaphor
	iii. possession	metaphor
	iv. temporal	metaphor
	v. instrumental	metaphor
	vi. direction	metaphor
	vii. proximity	metonymy + metaphor
	viii. evidentiality	metaphor
	ix. container/beneficiary	metonymy + metaphor
	x. individual	metonymy
	xi. personality	metaphor

Table 5. Cognitive processes involved in the extended meanings.

It is possible to represent graphically the different connections between the values. Figure 3 summarises the main relations hypothesised for the core values of ‘hand’, on the basis of the corpus analysis.

17 It is important to notice that this analysis doesn’t presuppose any diachronic work. Further evidence of the diachronic evolution of the different meanings considered is needed to prove the derivational links between them.

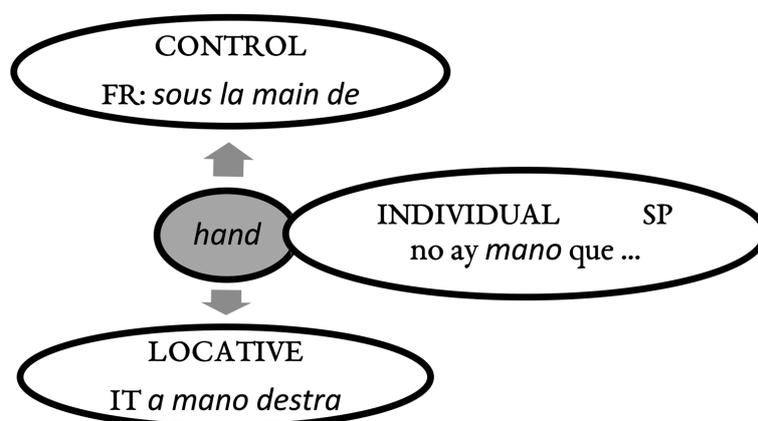


Fig. 3. Core metaphorical and metonymic values of 'hand'.

Figure 3 has to be read synchronically: from the core meaning of the concrete value of the lexeme *hand*, three main meanings develop, i.e., 'control' and 'locative' values (which develop by means of a metaphorical shift), as well as 'individual' (which comes from a metonymic shift, thus it is represented as a contiguous value).¹⁸ From the semantic viewpoint, these values can be considered as the most central ones, to which all the others semantically are related. To these main extended meanings, other additional values may be associated in turn. Figure 4 shows the hypothesised relations between the 'individual' meaning and other extended values. It is important to notice that this diagram has to be read synchronically, since the analysis driven in this paper does not prove a proper diachronic drift.¹⁹

18 Although it could be hypothesised that the synchronic pattern can be associated with a diachronic drift, diachrony is not considered here at all. Therefore, it cannot be stated that the diagram also represents the diachronic drift that led to the entrenchments of the different meanings.

19 This could only be hypothesised in this work. This point represents a very important issue from a diachronic viewpoint, and still deserves an in-depth analysis.

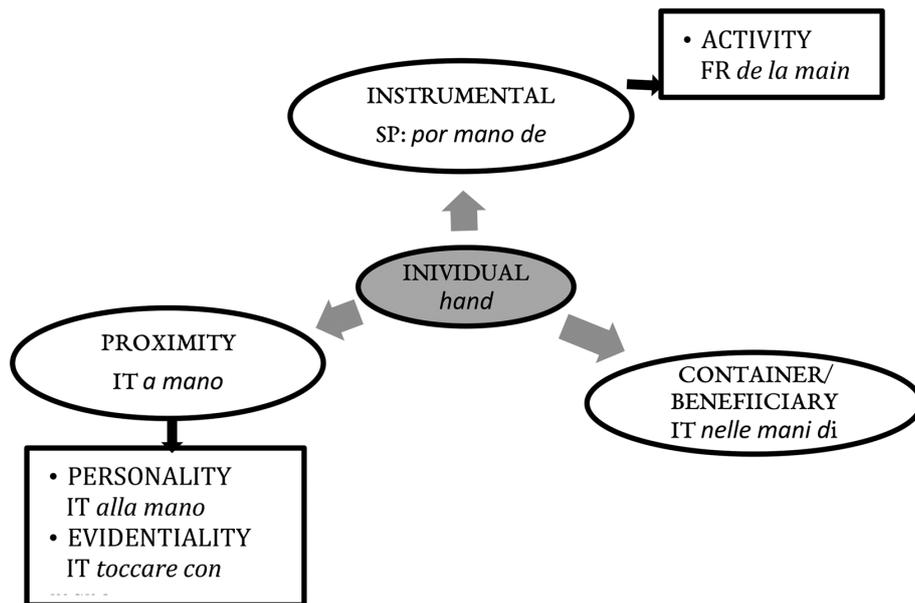


Fig. 4. Interaction between the different values of individual ‘hand’.

For instance, we may hypothesise that the value of ‘individual’ relates to other metaphorical meanings such as i) ‘instrumental’ (to which the meaning of activity is connected), ii) ‘container/beneficiary’, and iii) ‘proximity’, to which the ones of ‘personality’ and ‘evidentiality’ are linked. In the same way, it could be possible to hypothesise that the ‘locative’ value is linked to ‘possession’, which, in turn, is related to the ‘distributional’ and less productive ‘aspectual’ meanings (Figure 5).

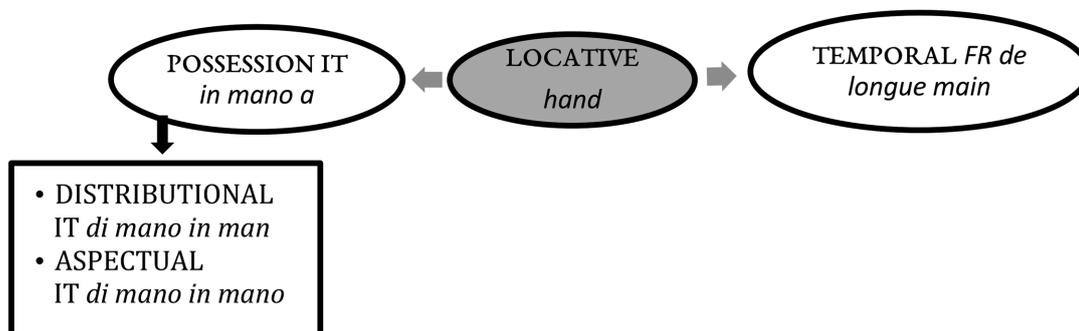


Fig. 5. Interaction between the different values of locative ‘hand’.

As far as the quantitative dimension is concerned, one may wonder which are the most represented values in the languages and texts considered and, therefore, which are the most productive meaning shifts. To answer this question, data have been normalised according to the total of occurrences and the sum of the percentages of use of each value was calculated. Table 6 shows the individual percentages of occurrence of each target meaning for the languages considered, as well as the total amount of occurrences:

TARGET MEANING	FRENCH	ITALIAN	SPANISH	TOTAL
Concrete value	9,18%	12,24%	14,29%	35,71%
Control	11,56%	5,78%	5,78%	23,13%
Instrumental	1,70%	5,10%	6,80%	13,61%
Activity	4,08%	3,74%	4,76%	12,59%
Direction	0,68%	2,38%	0,68%	3,74%
Container	-	2,72%	0,34%	3,06%
Possession	2,04%	0,34%	-	2,38%
Individual	1,36%	0,34%	0,34%	2,04%
Temporal	1,36%	0,34%	-	1,70%
Proximity	-	0,34%	1,02%	1,36%
Evidentiality	-	0,34%	-	0,34%
Personality	-	0,34%	-	0,34%

Table 6. Normalised frequency of occurrence of hand in the three corpora considered.

From an interlinguistic point of view, it is very interesting to note a significant correspondence, in terms of frequency of use, between the different meanings. This means that, despite a slight difference in the sample and the fact that the selected samples are only partially representative of the language period considered, there is a crosslinguistic regularity in the use of the word 'hand' for the expression of abstract meanings. As it has already been illustrated in the analysis of each corpus, the most frequent value is the concrete one in Italian and Spanish. Among the group of extended meanings, however, the value of control has a very high frequency of use, which stands out with respect to the other meanings: it is, therefore, the most productive value amongst the extended meanings, and the most frequent one in the French corpus. This value is

followed, in terms of frequency, by those of instrumental and activity, which are common to all languages. All the other extended values are less significant from a quantitative perspective, even though, from the qualitative point of view they may play a major role in deriving, in turn, other extended meanings.

5. *Conclusive Remarks*

Body part nouns are frequently used to codify extended meanings by means of metaphorical or metonymic shifts. They are semantic schemas that can convey abstract meanings by means of highly referential lexemes.

This corpus-driven analysis has shown the kinds of extended values that is possible to associate with the word ‘hand’ in 1400-1600s texts of French, Spanish and Italian.

The qualitative perspective has highlighted the possible links between the different values and some hypotheses of derivational relationships have been proposed. The regular use of these kinds of cognitive mechanisms has some consequences on the languages’ lexicon, which increases its potential by exploiting available resources: “human language users have a natural propensity for making metaphorical extensions that lead to the increased use of certain items” (Bybee and Pagliuca 1985, 75). This is true for lexical items (cf. the examples of combinatorial units and patterns, such as collocations or multiword expressions), as well as for the grammatical ones. The latter point, in particular, is well illustrated by the different instances of complex prepositions, i.e., highly cohesive and lexicalised word units that have undergone a process of grammaticalisation, and “grammaticalization is also strongly motivated by metaphoric processes” (Hopper and Traugott 2003, 95). From this point of view, it might be useful to better investigate the evolution of the different meanings from a diachronic point of view, in order to highlight instances of meaning retention or entrenchment, as well as possible variations. Finally, the investigation of the cases of biunivocal metaphor *vs* multiword expression correspondence that have been identified in the corpora would deserve special attention. It might be interesting to examine the possible variations in the degree of productivity of the extended meanings, especially from a diachronic perspective.

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