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### Sex-Based Nominal Pairs in the French Lexical Network: It's Not What You Think

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#### **Abstract**

We examine French nominal pairs of the type BERGER 'shepherd' ~ BERGÈRE 'shepherdess' and CHIEN 'dog' ~ CHIENNE 'bitch dog'. These pairs are considered from the viewpoint of their lexicographic modeling in an Explanatory Combinatorial lexical database: the French Lexical Network (fr-FLN). We first present, in section 1, the linguistic problem we are dealing with; we identify two main types of semantic relations involved in these lexical pairs: sex-based quasi-synonymy—that is analyzed in detail in section 2—and sex-based contrastive opposition—dealt with in section 3. As conclusion, section 4, we look at the implications of our modeling of such relations on the graph structure of the fr-FLN.

## **Keywords**

Lexical relation, lexical function, Explanatory Combinatorial Lexicology, grammatical gender, lexical database, French Lexical Network (fr-FLN).

## 1 Statement of the problem

### 1.1 $N_{\text{masc}} \sim N_{\text{fem}}$ lexical pairs based on sex difference

This paper deals with the problem posed to lexicographic description by French nominal pairs that will be referred to as  $N_{\text{masc}} \sim N_{\text{fem}}$  and that are characterized by the following four properties:

- 1. both lexical units  $N_{\text{masc}}$  and  $N_{\text{fem}}$  denote animate beings of the same kind, except for a difference of sex;
- 2.  $N_{\text{masc}}$  carries the masculine grammatical gender and denotes an animate being whose sex is, necessarily or by default, male;

- 3.  $N_{\text{fem}}$  carries the feminine grammatical gender and denotes an animate being whose sex is, necessarily or by default, female;
- 4.  $N_{\text{masc}}$  and  $N_{\text{fem}}$  are generally, but not necessarily, morphologically related.

Here are a few examples of some  $N_{\text{masc}} \sim N_{\text{fem}}$  pairs: BERGER 'shepherd'  $\sim$  BERGÈRE 'shepherdess', HÔTE 'host'  $\sim$  HÔTESSE 'hostess', NAGEUR '(male) swimmer'  $\sim$  NAGEUSE 'female swimmer', CHIEN 'dog'  $\sim$  CHIENNE 'bitch dog', ÉTALON 'stallion'  $\sim$  JUMENT 'mare', FIANCÉ  $\sim$  FIANCÉE. <sup>1</sup>

We examine these lexical pairs in the context of the RELIEF lexicographic project, that targets the building of the French Lexical Network or fr-FLN (Lux-Pogodalla & Polguère, 2011; Gader *et al.*, 2012). The fr-FLN is a model of the French lexicon that is being built according to Explanatory Combinatorial Lexicology's principles (Mel'čuk *et al.*, 1995); its main characteristic is to be formally structured as a multidimensional lexical graph, instead of being a simple "lexicographic text." The bulk of the fr-FLN structuring results from the weaving of Meaning-Text lexical function relations (Mel'čuk, 1996).

Our perspective being lexicographic in essence, it is useful to begin with a brief summary of how "classical" dictionaries handle  $N_{\text{masc}} \sim N_{\text{fem}}$  pairs, focusing on pairs that are morphologically related.

The three main general public dictionaries of French— $Petit\ Robert^2$ ,  $Petit\ Larousse^3$  and  $Trésor\ de\ la\ Langue\ Française^4$ —offer heterogeneous descriptions of morphologically related  $N_{masc} \sim N_{fem}$  pairs. In some cases, there exist individual entries for each pair member—for instance, MARQUIS  $\sim$  MARQUISE or POÈTE 'poet'  $\sim$  POÉTESSE 'poetess'—, and in other cases, both lexical units are grouped under a unique entry—for instance, COIFFEUR  $\sim$  COIFFEUSE, that are being described under a common entry named "coiffeur, -euse." The above-mentioned dictionaries seem to converge in their descriptive choices, for which it is normally possible to find a logical explanation. Thus, for the few cases that we have cited:

- the choice of a separate entry for MARQUISE is almost imposed to dictionary makers by the polysemy that developed around the feminine noun—marquise (d'une gare) 'canopy (of a railway station)', marquise (au chocolat) 'chocolate cake'—, with no corresponding sense within the masculine vocable;
- the derivational suffix *-esse* possesses a special status in French morphology that makes POÉTESSE appear as morphologically more "remote" from POÈTE than COIFFEUSE appears to be from COIFFEUR.<sup>5</sup>

It is obvious that the lexicographic treatment of sex-based semantic derivations will depend on the grammatical characteristics of each language. Because there is no gender inflection in English, the morphological nature of the relation holding between the source and target of such derivation poses no problem. Furthermore, there are relatively few derivations of that kind—based on the use of the suffix *-ess* (borrowed from French). For these reasons, English dictionaries always create two separate entries, one for the noun that denotes a male animate being and one for the noun that denotes the corresponding female being—see, for instance,

We do not provide glosses for French lexical units that exist with identical meaning in English as borrowings. The pairs listed above form a rather heterogeneous set from a semantic and morphological viewpoint. However, we believe that they have to be considered and dealt with together, as will be shown shortly.

<sup>&</sup>lt;sup>2</sup> CD-ROM edition, 2011.

Online consultation: http://www.larousse.com/fr/dictionnaires/francais-monolingue.

<sup>4</sup> Online consultation: http://atilf.atilf.fr.

The suffix -esse is archaic and rather rare in modern French; it is almost no longer used to produce neologisms. See the etymological notice of the *Trésor de la Langue Française*, in its entry -ESSE<sup>2</sup>. In comparison, the derivation based on -eur → -euse is extremely productive.

LION ~ LIONESS in the American Heritage, 6 Longman Dictionary of Contemporary English 7 or Cobuild.8

Spanish is a more interesting case here, as Spanish nouns possess a grammatical gender, and Spanish grammar contains gender inflection for adjectives, participials and articles. As a side effect, we find many  $N_{\text{masc}} \sim N_{\text{fem}}$  pairs in Spanish, as in French. Similarly to French dictionaries, the *Diccionario de la lengua español* (Real Academia Española)<sup>9</sup> and the *Diccionario de uso del español* (Moliner, 2000) propose a heterogeneous treatment of  $N_{\text{masc}} \sim N_{\text{fem}}$  pairs: two separate entries for MODISTO 'couturier, (male) fashion designer'  $\sim$  MODISTA 'couturière, female fashion designer', but one single entry for PASTOR 'shepherd' and PASTORA 'shepherdess' named "**pastor, ra**" in the first dictionary and "**pastor, -a**" in the second. The case of Spanish is however very different from French because Spanish common nouns, in standard cases, possess a suffix that carries grammatical gender—cf. Mel'čuk (to appear) for an analysis of the morphological status of Spanish gender nominal suffixes.

In the fr-FLN, we treat morphologically related  $N_{\text{masc}} \sim N_{\text{fem}}$  pairs in a systematic fashion, based on the **derivational** (and not inflectional) nature of the morphological link that unites them. Let us examine this point briefly.

#### 1.2 Derivation and not inflection

It is obvious that, from a strictly formal viewpoint, pairs of wordforms such as *berger* 'shepherd' ~ *bergère* 'shepherdess' display inflection-like characteristics: the signifier *bergère* looks like a "feminine of" *berger*. However, as shown by Mel'čuk (2000), there are at least five reasons why one should consider that no inflectional mechanism is involved here.

- 1. A description based on inflection would force us to postulate an inflectional category of nominal gender in French, that would apply only to nouns denoting sexed animate beings, whereas typical inflection applies globally to all lexical units of given parts of speech (see grammatical gender for French adjectives).
- 2. This hypothetical inflection would be very irregular—cf. professeur '(male) teacher' ~ professeure 'female teacher', but coiffeur ~ coiffeuse—and non-systematic—cf. [un] poisson<sub>masc</sub> '[a] fish', sex-neutral masculine noun that does not have a feminine counterpart such as \*[une] poisson<sub>fém</sub> or \*poissonne.
- 3. For these reasons, it is not uncommon that even native speakers hesitate on the proper choice of term, which is rather strange if we were to be in presence of inflection. Additionally, diatopic variations, that are so common for  $N_{\text{masc}} \sim N_{\text{fem}}$  pairs, are clearly perceived as lexical rather than grammatical in essence—cf. *écrivaine* 'female writer', that is almost systematically used in Québec when talking about a woman writer, *vs.* the feminine noun [*une*] *écrivain*<sub>fem</sub>, that is much more commonly used in France.
- 4. As mentioned in section 1.1, each element of a  $N_{masc} \sim N_{fem}$  pair tends to develop its own individual polysemy; there are therefore in French many pairs of vocables that are autonomously structured, which contradicts an inflectional modeling of the phenomenon we are examining.
- 5. Finally, a derivational rather than inflectional description of French  $N_{\text{masc}} \sim N_{\text{fem}}$  pairs can be done in a very simple and direct manner. The only justification one can find for the approach commonly adopted by standard dictionaries, that tend to model these pairs as

<sup>&</sup>lt;sup>6</sup> On-line consultation: http://www.ahdictionary.com.

On-line consultation: http://www.ldoceonline.com.

<sup>8</sup> On-line consultation: http://dictionary.reverso.net/english-cobuild/teach.

<sup>&</sup>lt;sup>9</sup> 20<sup>th</sup> edition, on-line cconsultation: http://www.rae.es/rae.html.

if they were inflectionally related (section 1.1 above), is the significant economy in printed pages it entails for printed versions of the dictionaries.

These observations logically lead us to consider that morphologically related  $N_{\text{masc}} \sim N_{\text{fem}}$  French pairs are cases of pure **derivations**, where a nominal masculine lexical units denoting a male animate being is used as a source from which a feminine lexical units denoting the corresponding female being is derived. Dictionaries and lexical databases, such as the fr-FLN, should explicitly and systematically reflect this fact in their macro- and microstructure.

#### 1.3 Hypothesis: two types of $N_{\text{masc}} \sim N_{\text{fem}}$ pairs

Now that it is clearly established that pairs of nominal lexical units such as BOULANGER '(male) baker'  $\sim$  BOULANGÈRE 'female baker', FILS 'son'  $\sim$  FILLE 'daughter', CHAT '(male) cat'  $\sim$  CHATTE 'female cat', etc., are indeed displaying cases of morphological derivations and that no inflection mechanism is involved, we will identify the different types of such derivations and indicate how each type has to be modeled in the fr-FLN.

Let us recall that we are interested in semantic derivations that are not necessarily expressed by morphological means and that we are considering together morphologically related pairs such as those examined in section 1.2 above as well as pairs such as FRÈRE 'brother' ~ SŒUR 'sister' or ÉTALON 'stallion' ~ JUMENT 'mare'.

We adopt the lexicographic perspective of the construction of the fr-FLN and of the weaving of its graph structure by means of lexical function links. In this context, it is of paramount importance for all  $N_{\text{masc}} \sim N_{\text{fem}}$  lexical pairs to be described in a homogeneous way, whether they display or not a morphological connection.

We believe there exist two relations that can hold between a masculine nominal lexical unit denoting a male animate being and a feminine nominal unit denoting the corresponding female being. These relations are illustrated by means of the following two lexical pairs:

- 1. the pair AVOCAT '(male) lawyer, advocate' ~ AVOCATE 'female lawyer', that displays, according to us, a synonymy-like lexical relation;
- 2. the pair ÉTALON 'stallion' ~ JUMENT 'mare', that displays a lexical relation that is contrastive, rather than quasi-synonymic in essence.

We are now proceeding with the presentation of these two types of relations: sex-based quasi-synonymy in section 2 and sex-based contrastive opposition in section 3.

## 2 Sex-based quasi-synonymy

#### 2.1 Characterization

In lexical pairs of the AVOCAT '(male) lawyer' ~ AVOCATE 'female lawyer' type, one of the two lexical units—the masculine or the feminine noun (section 2.2 below)—functions as generic. Thus, *avocat* in (1a) below necessarily denotes a male individual, while the sex can be unspecified in (1b).

- (1) a. Le jeune avocat s'est avancé résolument vers les journalistes. 'The young lawyer walked resolutely towards the journalists'
  - b. *Il a demandé la présence d'un avocat*. 'He asked for a lawyer'

The plural form *avocats* in (2a) can designate a group of both men and women, and (2b) as well as (2c) can be used by a woman—i.e. she can either use the masculine or feminine noun.

- a. Tous les avocats du barreau parisien ont protesté. 'All the lawyers of the Parisian Bar have protested'
  - b. Je veux devenir avocat.
    - 'I want to become a lawyer'
  - c. Je veux devenir avocate.
    - 'I want to become a female-lawyer'

All this shows that there is some form of semantic unevenness between AVOCAT and AVOCATE:

- a. avocat = '(male) individual whose profession consists in [...] or corresponding profession
  - b. avocate = 'female individual whose profession consists in [...] or corresponding profession'

In other words, these lexical units are both semantically ambivalent<sup>10</sup>, denoting either an individual or a profession, but not in the same fashion. Whether it is used to denote an individual or the profession she exercises, AVOCATE implies the female sex, which is not the case for AVOCAT regarding the male sex. The 'male' semanteme that is embedded in the definition of this latter lexeme must be considered as being a weak semantic component (Mel'čuk et al., 1995: 95); it is this semantically weak nature that is being signaled by the parentheses in gloss (3a) above.

The complex semantic ratio holding between lexical units such as AVOCAT and AVOCATE entails that lexical units that form pairs of this type are not perceived as being in opposition vis-à-vis the denotation of sex. Elements of the pair AVOCATE are not contrasting on the ground that one would denote a "male" and the other the corresponding "female." Because of this, we consider such lexical units as quasi-synonyms and we call this type of relation sexbased quasi-synonymy.

It we take into consideration the semantic unevenness identified above, we need to distinguish the following two cases.

First, a speaker who says (4a) instead of the prototypical sentence (4b) chooses to be more specific with regards to the designation of the sex.

- (4) a. – Je veux une avocate! 'I want a female lawver'
  - b. *Je veux un avocat!* [man or woman]

'I want a lawyer'

Consequently, we encode the semantic derivation link AVOCAT → AVOCATE by means of the Syn<sub>5</sub> sex lexical function, that stands for 'richer synonym with regards to the sex'. 11

Second, a speaker who says (4b), rather that (4a), chooses to be less specific with regards to the designation of the sex. We therefore encode the semantic derivation link AVOCATE → AVOCAT by means of the Syn<sub>c</sub>sex lexical function, that stands for 'potentially less

The exponent sex in Syn, sex is a new standardized element we introduce in the formal language of lexical

functions; therefore, it stands for Lat. sexus and not for Eng. sex.

On semantic ambivalence and its lexicographic treatment, see Milićević & Polguère (2010). Note that because this particular semantic ambivalence is systematic in French—all nouns denoting an individual who exercises a given profession can also denote the profession itself—, Milićević & Polguère (2010) propose to not make the ambivalence explicit in the structure of the definition and to simply formulate the genus of this type of lexical unit using the general pattern 'individual who has a given profession'.

rich synonym with regards to the sex'. We are considering here a synonymy that is **potentially** less rich because the speaker can of course also use *avocat* in order to specifically designate a male individual.

Notice that the two lexical functions that have just been introduced correspond to two reciprocal relations:

$$Syn_{sex}(L_1) = L_2$$
 entails that  $Syn_{csex}(L_2) = L_1$ , and vice versa.

There exists clearly a considerable amount of lexical pairs that are based on these quasi-synonymy relations. Let us mention, among others:

- nouns denoting individuals who hold an official title or function—cf. ROI 'king' ~ REINE 'queen', MARQUIS ~ MARQUISE 'marquess', PRÉSIDENT 'president' ~ PRÉSIDENTE 'female president' or PAPE 'pope' ~ PAPESSE 'female pope';
- nouns denoting individuals who have a given citizenship, philosophy, religion, etc.—cf. Français 'French person' ~ Française 'female French person', Juif 'Jew' ~ Juive 'female Jew' or BOUDDHISTE<sub>(N. masc)</sub> 'Buddhist' ~ BOUDDHISTE<sub>(N. fem)</sub> 'female Buddhist';
- nouns denoting individuals who experience a given emotion or possess a given behavioral characteristic—cf. AMOUREUX<sub>(N)</sub> 'person in love' ~ AMOUREUSE<sub>(N)</sub> 'female person in love' or LÂCHE<sub>(N, masc)</sub> '[a] coward' ~ LÂCHE<sub>(N, fem)</sub> 'female coward';
- nouns denoting animals, such as CHIEN 'dog' ~ CHIENNE 'bitch dog' or ÉLÉPHANT 'elephant' ~ ÉLÉPHANTE 'female elephant'.

We do not mean to imply that all nominal pairs that fit into the above categories are in  $Syn_5^{sex}$  vs.  $Syn_c^{sex}$  relation. In many instances, such as for instance the pair of animal names ÉTALON 'stallion' ~ JUMENT 'mare', we are in presence of another type of relation, contrastive in essence, that will be dealt with in section 3.

### 2.2 Masculine or feminine generic

It is important to stress that the semantic ratio between two lexical units that are linked by sex-based quasi-synonymy as well as the very existence of this type of quasi-synonym for a masculine *vs*. feminine noun are not at all systematic in French, as demonstrated by the following two cases.

- 1. It can be the feminine noun that functions as generic, while denoting primarily a female animate being. For instance, OIE 'goose' denotes a female animal or a species; its **Syn**<sub>s</sub> sex is JARS 'gander', which cannot be used to denote a species.
- 2. A feminine noun denoting an animal can be completely neutral with regards to the denotation of the sex; therefore, it can have no corresponding masculine noun in French. Such is the case of GIRAFE 'giraffe'. To specifically denote a male or female giraffe, one will have to say *girafe mâle* ~ *girafe femelle*.

It is however still possible to make generalizations. For instance, we believe that in French the generic is always the masculine noun for nouns of  $N_{masc} \sim N_{fem}$  pairs denoting human beings. We have not found any exception to this rule. It applies even for a pair such as INFIRMIER '(male) nurse'  $\sim$  INFIRMIÈRE 'female nurse', about which one may easily think that the feminine noun is the generic. Rather than being a potential generic, the feminine noun is rather the default value for extra-linguistic reasons, bearing to the fact that this profession has for a long time been exclusively exercised by women. But *infirmière* denotes specifically a

female individual and cannot be used as generic; (5) below cannot be used in cases where one wants to refer to a mixed group of women and men.

(5) Un groupe d'infirmières se tenait à l'entrée de l'hôpital.'A group of female nurses was standing at the entrance of the hospital'

Contrary to what one may first believe, it is indeed the masculine noun that is used in contemporary French as generic. For instance, *vêtements d'infirmiers* 'nurse cloths' in (6) below (found on the Web) can refer to both men and women cloths.

(6) L'association a ainsi acheminé du matériel médical: 140 lits médicalisés manuels ou électriques, un bloc opératoire, 4 750 paires de lunettes de vue et des vêtements d'infirmiers.

'The association has thus shipped medical equipment: 140 manual or automatic medicalized beds, one operating room, 4,750 spectacles and nurse cloth'

Other generalizations can probably be drawn about sex-based quasi-synonymy, but we do not have yet enough data in the fr-FLN to be able to extract them. We now proceed with the second type of sex-based semantic derivation.

## 3 Sex-based contrastive opposition

As mentioned above, some  $N_{\text{masc}} \sim N_{\text{fem}}$  pairs do not fall in the scope of quasi-synonymy. For instance, it would be odd to state that ÉTALON and JUMENT are quasi-synonyms as they seem to be linked by a semantic opposition: a stallion is a male horse, in contrast with a mare, that is a female horse. Which lexical function should be used to account for the lexical relation connecting lexical elements of such pairs, given that the use of Syn is ruled out?

There exists indeed the **Contr**, "contrastive," lexical function, that can be characterized as follows.

**Contr**( $L_1$ ) =  $L_2$  if there exist phraseological expressions that feature both lexical units  $L_1$  and  $L_2$  in contrastive opposition. For instance, **Contr**(noir 'black') = blanc 'white' because there exist in French expressions such as (photo) en noir et blanc 'black and white (picture)', Tout n'est pas tout blanc ou tout noir 'Everything is not always black and white', etc.

This characterization, which is not based on the identification of an intrinsic semantico-syntactic content of **Contr**, entails that **Contr** is not an "ordinary" lexical function. A lexical unit that is the value of **Contr** for another lexical unit is not, strictly speaking, a semantic derivative of this unit. All this shows that pairs such as ÉTALON ~ JUMENT, that display an obvious semantic contrast, are not in a **Contr** relation. Indeed, elements of these pairs are related through a semantic opposition that directly results from their lexical definition, rather than through the presence in the language of phraseological expressions that put them in contrast with each other.

Though not **Contr**, the semantic relation we consider here is much more related to contrastivity than it is, for instance, to antonymy—cf. the **Anti** lexical function. It is not based on the negation of a definitional semantic component lexical units it connects: compare true antonyms such as PRÉSENT<sub>(Adj)</sub> 'that is here'  $\sim$  ABSENT<sub>(Adj)</sub> 'that is **not** here', with non-antonymic contrastive pairs such as ÉTALON  $\sim$  JUMENT. The non-antonymic nature of the relation holding between ÉTALON and JUMENT clearly appears if we draft the definitions of the two semantemes

that distinguish them—'female [X]' included in the meaning of JUMENT and 'male [X]' included in the meaning of ÉTALON:<sup>12</sup>

- 'female [X]' = '[X] whose sex enables her/it to give birth';
- 'male [X]' = '[X] whose sex enables him/it to participate in the fact that a female individual of the same species gives birth'.

The relation that concerns us being close to, but distinct from **Contr**, it should in theory be lexicographically modeled by means of two non-standard lexical functions:

- 1. Corresponding female animate being  $(\acute{e}talon) = jument;$
- 2. Corresponding male animate being  $(jument) = \acute{e}talon$ .

However, these two non-standard lexical functions seem to meet most of the requirements for standardness (Polguère, 2007): they correspond to very regular relations in French (and probably in all natural languages), they are applicable to a very large and varied set of arguments, the returned values are many and varied, and finally they are often expressed by morphological means. For these reasons, we have decided to standardize those two symmetrical relations and make use of two "normalized" encodings in the fr-FLN: **Fem** for lat. 'feminus' and **Masc** for lat. 'masculus'.

Lexical function **Fem** and **Masc** have already been used in the DiCo project (Mel'čuk & Polguère, 2006), following proposals made by A.-L. Jousse in order to normalize the encoding of some recurrent non-standard lexical functions (Jousse, 2010: 139–140). Technically, however, those were not the exact same **Fem** and **Masc** that are being used in the fr-FLN because the DiCo used them indiscriminately for both families of semantic derivations that we have identified—synonymic and contrastive.

Lexical pairs that are connected by **Fem** *vs.* **Masc** relations can very well interact in the lexicon with a third lexical unit that connects to the first two as quasi-synonym. Such is the case for CHEVAL 'horse', with regards to its relation with the ÉTALON ~ JUMENT pair. The lexical definition of CHEVAL is similar in structure to those of lexical units such as AVOCAT 'lawyer' examined in section 2. The masculine noun CHEVAL denotes a certain type of animal which is, by default but not necessarily, a male. Figure 1 below visualizes the complete system of lexical relations connecting CHEVAL, ÉTALON and JUMENT.

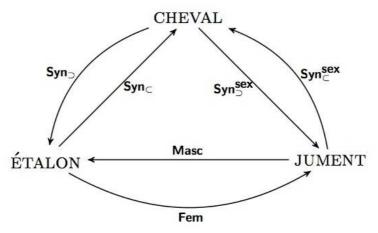


Figure 1: Lexical relations connecting CHEVAL 'horse', ÉTALON 'stallion' and JUMENT 'mare'

For the sake of simplicity, we define two English semantemes though, strictly speaking, the corresponding French semantemes 'femelle' and 'mâle' should be analyzed. The following definitions are loosely based on the semantic treatment of lexical units denoting sexed beings that is proposed by Wierzbicka (1972: 34–56).

To conclude this section, we give below two characteristics of sex-based contrastive oppositions in French that we have induced from the lexicographic work done on the fr-FLN.

- 1. **Fem** and **Masc** relations are much less present in the lexicon than **Syn**<sub>o</sub>sex and **Syn**<sub>o</sub>sex. This is easily explained by the fact that approximate synonymy is precisely the most common relation in the graph of any natural language lexicon.
- 2. Syn<sub>5</sub>sex vs. Syn<sub>c</sub>sex is often realized morphologically, whereas it is hardly the case for Fem vs. Masc. In fact, we are yet to find a clear-cut case of a Fem that would be morphologically built out of its corresponding Masc, or vice versa.

Those are only preliminary observations, that ought to be systematically checked on a larger set of data.

### 4 Implications on the structure of the fr-FLN

Our analysis of sex-based semantic derivatives influences in two ways the development of the the fr-FLN's structure.

Firstly, the fr-FLN, unlike standard French dictionaries, systematically possesses distinct lexicographic entries for  $N_{\text{masc}} \sim N_{\text{fem}}$  pairs. Because polysemy tends to develop independently for both vocables of these pairs, one should never try to unite them under a single entry, even when they make use of the same signifiers—cf. LâCHE<sub>(N, masc)</sub> '[a] coward' ~ LâCHE<sub>(N, fem)</sub> 'female coward'. The saving of printed paper is not a parameter in the context of the fr-FLN and this method allows us to remain closer to what we believe is the actual structuring of the lexicon.

Secondly, paradigmatic links that connect lexical units involved in the system of  $N_{\text{masc}} \sim N_{\text{fem}}$  oppositions are systematically encoded by fr-FLN lexicographers using the appropriate lexical functions:  $\text{Syn}_{\text{s}}^{\text{sex}}$ ,  $\text{Syn}_{\text{c}}^{\text{sex}}$ , Masc or Fem. At the time of writing, the fr-FLN contains 18,470 lexical units (senses) connected by a total of 26,959 lexical links; among those, 1,618 lexical function links encode lexical relations geared to  $N_{\text{masc}} \sim N_{\text{fem}}$  pairs: 1,592 links for  $\text{Syn}_{\text{s}}^{\text{sex}}$  vs.  $\text{Syn}_{\text{c}}^{\text{sex}}$  relations and 116 links only for Fem vs. Masc relations. These statistics confirm what was said earlier: sex-based synonymy is significantly more present in the lexicon than the sex-based contrastive opposition.

Let us mention an interesting problem, that we will not develop for lack of space. There exist degrees in the synonymic vs. contrastive nature of links connecting  $N_{\text{masc}} \sim N_{\text{fem}}$  lexical units. For instance, the FILS 'son'  $\sim$  FILLE 'daughter' pair pertains to sex-based contrastive opposition because none of the two lexical units can be used as generic denoting someone's child without specification of the sex. However, the contrastive nature of the link appears to be weak for at least two reasons:

- 1. what dominates in the meaning of both lexical units is their relational nature '[X is] son/daughter of Y' and not, strictly speaking, the denotation of a certain type of individual:
- 2. the relation, central to the meaning, is identical in both cases.

To conclude, we would like to draw the reader's attention to Steffens (2011), a paper that we happened to come across right when the final version of the present text was being submitted. It takes a non-lexicographic approach to the question of  $N_{\text{masc}} \sim N_{\text{fem}}$  pairs while reaching conclusions that are astonishingly (and reassuringly) similar to ours.

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