

An agent vs instrument case study in English, French and Spanish and its correlation with gender-related semantic biases

In English, the preposition introducing the agent in passive constructs is “by”, but when the agent is perceived as an instrument, the instrumental preposition “with” is generally used instead.

In some cases, the two forms can coexist with statistically equivalent frequencies, reflecting a deep semantic ambiguity regarding the nature of the complement, perceived either as an autonomous agentive entity imposing itself to the patient/subject or as a mere instrument/object.

For example, in (mostly) British English we have:

“paralysed by fear”: **40,000**¹ occurrences;

“paralysed with fear”: **64,000** occurrences.

In (mostly) American English (and also in classical English till the mid-19th century) we have:

“paralyzed by fear”: **206,000** occurrences;

“paralyzed with fear”: **245,000** occurrences.

The “with” variation looks significantly more frequent, but if we add some other simple occurrences including additional determiners, the global rates result quite similar in both dialects:

“paralysed by a fear”: **74,000** occurrences;

“paralysed by the fear”: **38,000** occurrences.

“paralysed with a fear”: **9,000** occurrences;

“paralysed with the fear”: **122,000** occurrences.

“paralyzed by a fear”: **24,000** occurrences;

“paralyzed by the fear”: **110,000** occurrences.

“paralyzed with a fear”: **67,000** occurrences;

“paralyzed with the fear”: **49,000** occurrences.

The total number of BY occurrences is 492,000, while the total number of WITH occurrences is 556,000. In the absence of any rigorous statistical model underpinning the two samples, the 10% difference between them shouldn't be interpreted as signalling a significant preference for “with”.

Now, if we compare some gender-marked occurrences, we obtain the following statistics:

“he was paralys(z)ed by fear”: 2,100² (*/123,000*)

“he was paralys(z)ed with fear”: 5,100 (*/24,900*)

“she was paralys(z)ed by fear”: 1,900 (*/28,600*)

“she was paralys(z)ed with fear”: 4,300 (*/20,200*)

Female subjects are equally likely to be paralysed WITH or BY fear while males are mostly paralysed BY fear, reflecting a vision of the world which requires some very powerful agent to instil fear in males. Interestingly, the instrumental perception of fear does not feature the same gender bias.

We can also remark that– in contrast with long-established wisdom– male subjects in the anglophone world seem much more likely to be paralysed by/with fear than female ones.

¹ All of the frequencies set in bold come from a Google search conducted on October 26, 2014 between 8:20 and 8:40

² All the frequencies set in italics come for a Google search conducted on November 2, 2014 between 15:45 and 16:45

A significant agent/instrument bias exists, which can be confirmed by the following search:

“he was paralysed/paralyzed by his fear”: 8/5970 occurrences

“she was paralysed/paralyzed by her fear”: 650/2770 occurrences

“he was paralysed/paralyzed with his fear”: 0/1 occurrence.

“she was paralysed/paralyzed with her fear”: 0/8 occurrences.

Here we can see that finding an instrumental view of “fear” associated with a possessive pronoun is extremely unlikely, which is coherent with the agentive interpretation of ‘fear’ representing it as a sort of powerful entity taking internal control of the subject against his/her will.

The same duality of agentive and instrumental prepositions exists in French or Spanish (par/de, por/de) but in these languages, we do not find exactly the same statistical balance between the agentive view and the instrumental one as in English. In French we have:

For males:

“paralysé(+s) par la peur”: 52,600 (+264,000) occurrences

“paralysé(+s) par une peur”: 18,000 (+5,240) occurrences

“paralysé(+s) par sa(leur) peur”: 25,500 (+8,130) occurrences

“paralysé(+s) de peur”: 7760 (+21,500) occurrences

For females:

“paralysée(s) par la peur”: 47,400 (+16,900) occurrences

“paralysée(s) par une peur”: 17,600 (+900) occurrences

“paralysée(s) par sa(leur) peur”: 7,540 (+0) occurrences

“paralysée(s) de peur”: 63,400 (+6,780) occurrences

In French, like in English, there is a clear dominance of the agentive view for male subjects, but it is also correlated with an opposite male/female imbalance in respect of the instrumental view, a phenomenon which does not manifest itself in English.

In Spanish we have:

“paralizado(+s) por el miedo”: 69,900 (+26,100) occurrences

“paralizado(+s) por un miedo”: 20,800 (+5,400) occurrences

“paralizado(+s) por su miedo”: 84,600 (+9) occurrences

“paralizado(+s) de miedo”: 14,400 (+12,400) occurrences

“paralizada(+s) por el miedo”: 38,700 (+76,100) occurrences

“paralizada(+s) por un miedo”: 63,700 (+3) occurrences

“paralizada(+s) por su miedo”: 4 (+3) occurrences

“paralizada(+s) de miedo” 115,000 (+5,800) occurrences

Like in French there is a clear preference for the agentive view, and the same kind of gender-related bias appears regarding the agentive/instrumental balance. However, by contrast with both English and French, females also appear more frequently paralysed BY fear than males.