

## Smelling and Perception: A Cross-Linguistic Study\*

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### ABSTRACT

*Perception verbs have supplied a rich field of research in linguistics: grammaticalisation (Heine, B. & al. 1991), complementation (Horie, K. 1993) and semantic change (Sweetser E. 1990). Sweetser in From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure (1990) states that inside the semantic field of perception, there are metaphorical mappings from concrete or physical meanings onto abstract meanings and regards vision and hearing as the most salient senses, whereas the sense of smell has fewer and less deep metaphorical connections with the mental domain. The aim of this paper is to show that the verbs of smelling extend semantically into the cognitive domain in more than the ways cited by Sweetser, and that as predicted by her, these connections between the physical and mental domain are not language specific but cross-linguistic. These statements will be supported with data drawn from Basque, Spanish and English.*

KEY WORDS: semantic change, perception verbs, smell, cross-linguistic

### RESUMEN

*Los verbos de percepción han proporcionado un amplio campo de investigación dentro de la Lingüística: gramaticalización (Heine, B. & al. 1991), complementación (Horie, K. 1993) y cambio semántico (Sweetser, E. 1990). Sweetser en From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure (1990) afirma que dentro del cambio semántico de la percepción se producen conexiones metafóricas entre los significados concretos o físicos y los significados abstractos; y presenta la vista y el oído como los sentidos más relevantes, mientras que relega el olfato a un segundo plano, ya que lo considera con menos conexiones y no tan profundas con el dominio mental. El objetivo de este artículo es demostrar que los verbos relacionados con el olfato se extienden semánticamente hacia el dominio cognitivo en más formas de las que Sweetser cita y que, como ella misma predice, estas conexiones entre el dominio físico y mental no son específicas de un idioma sino cross-lingüísticas. Estas ideas se apoyarán con ejemplos del euskera, español e inglés.*

PALABRAS CLAVE: cambio semántico, verbos de percepción, olfato, cross-lingüístico

## I. INTRODUCTION: SWEETSER'S ANALYSIS OF PERCEPTION VERBS

Eve Sweetser (1990) states that our experience and knowledge of the world model how we understand language and thought, how we express ourselves. Our linguistic expressions can be modelled in three ways, which lead to three different domains and these domains are linked metaphorically by our cognitive system.

- |  |                      |
|--|----------------------|
| a. As a description (model of the world)   | a. Real world domain |
| b. As an action (an act in the world being described)                                  | b. Speech-act domain |
| c. As an epistemic or logical entity (premise or conclusion in our world of reasoning) | c. Epistemic domain  |

Making use of this systematic metaphorical **structuring** of one domain in terms of another, Sweetser claims that the paths of semantic change are unidirectional : from concrete **source** domain to an abstract target domain; from the **external** (sociophysical) domain to our internal (emotional, psychological) domain.

In the field of perception, these metaphorical mappings link our vocabulary of physical perception (external **source** domain) and our vocabulary of internal self and sensations. As a result, she establishes the following connections:

VISION	→→	KNOWLEDGE	
HEARING	→→	HEED	→→ OBEY
TASTE	→→	LIKES / DISLIKES	
TOUCH	→→	FEELINGS	
SMELL	→→	DISLIKEABLE FEELINGS	

These metaphorical mappings seem not to be language **specific**.

In the explanation of the **structure** of these metaphors of perception, Sweetser distributes these senses into two groups: the former comprises vision and hearing and the latter touch and taste. **The** focusing ability of vision and hearing, i.e., their ability to pick up one stimulus more or less consciously is what makes them be **connected** to objectivity and intellect; whereas **subjectivity**, intimacy and emotion are linked to touch and taste, due to their necessity of actual real contact with the thing sensed.

**Taking** English as a basis, Sweetser establishes the following relations within the sense of smell:

- Bad smell to **indicate** bad character or dislikeable mental **characteristics**. (e.g. *slink*)
- Detection of such characteristics (e.g. the active verb *smell*)

With **only** these two abstract **meanings**, it is **understandable** that she concludes that smelling is not as salient as the rest of the senses. However, in this **paper**, it **will** be argued that the sense of smell has more meanings than those cited above and that these meanings are shared by different languages, to conclude that smell is a very salient sense **in** terms of the development of cognitive meanings of verbs of perception.

## II. THE VERBS OF SMELL IN BASQUE

Basque seems to be very rich in respect to the terms used for the sense of smell. In the *Diccionario Retana de Autoridades del Euskera* (1976) more than twenty-one verbs related to smelling can be found. Many of these verbs are dialectal variations and some of them have very specific meanings such as *usainoneztatu* 'to scent, to perfume' or *ufeztu* 'to stink'.

The most common and central verbs in the field of smell, together with their meanings are shown in Table 1.

Verbs	'smell, sniff'	'suspect'	'guess'	'investigate'	others
<i>usaindu</i>	+	+	+		'stink', 'scent'
<i>usain egin</i>	+	+	+		
<i>usain hartu</i>	+	+	+		'guess right'
<i>usainkatu</i>	+				
<i>usnatu</i>	+	+	+	+	'interfere, meddle'
<i>usmatu</i>	+	+	+		
<i>sumatu</i>	+	+	+		'perceive, notice'
<i>susmatu</i>		+			
<i>susmo hartu</i>		+			

Table 1: Verbs of smell in Basque

The central verb of smell is *usaindu* (*usaitu*, *usendu*, *usandu*). This verb expresses both the perception and the emission of a smell and abstract meanings such as 'suspect, guess'. It is used to express a mental meaning as well as a bad smell. *Usnatu*, *usmatu* and *sumatu* can be used in both senses too, concrete or abstractly. It is worth noticing that in the case of *usnatu* and *sumatu*, the nouns they come from *usna* 'sense of smell' and *suma* 'sense of smell', respectively, do not have this abstract meaning of 'suspicion', which indicates that a semantic shift has taken place from the 'perception of smell' to 'suspect, guess'. A further evidence that corroborates this statement is the verb *susmatu*. In Table 1, *susmatu* means 'suspect' but it does not share any of the other physical meanings. However, if we go back to its etymology, it appears that this verb is also directly connected to the sense of smell. According to Michelena (1990:292) and Mujika (1982:209), *susmatu* has an expressive *s-*, which has been added to the verb *usmatu*. This verb ultimately seems to be related to the Spanish word *husmear* 'sniff (at)'. Thus, *susmatu* is related to smelling in two ways: through *usmatu* and through its Spanish cognate *husmear*.

To sum up, the physical meanings that these Basque verbs lexicalise are both the emission and the perception of smells, either good or bad. As Sweetser claims, bad smells, when interpreted metaphorically, indicate bad characteristics:

- (1) Urrun            adi    ni ganik,            usaindua (Retana:1976)  
go away        IMP   1.SG:ABL        smell:ABS

'Go away from me **stinker!**'

However, contrary to her predictions, Basque verbs seem to establish more **connections** with the cognitive domain than those expected. Basque verbs do not **only** link the physical domain with the mental domain when they are used for the detection of bad characteristics, but **also** the following categorisations seem to take place:

Physical smell → 'suspect'1

- (2) **Poliziak** Mikelen **hitzetan** gemrra usaindu men  
 police.ERG **Mike.POSS** words.ABL lie smell 3.SG:PAST  
 'The police smelt something fishy in Mike's words'

Physical smell → 'guess'2

- (3) **Arriskua** usaindu men  
 danger **smell** 3.SG:PAST  
 'He smelt the danger'

Physical smell → 'investigate'

- (4) **Mikel** nere **gauzen** artean usnatzen harrapatu nuen  
 Mike my **things.POSS** between.ABL smell catch  
 1.SG:PAST  
 'I caught Mike **nosing** into my things'

From the above discussion, it can be concluded that Sweetser's **assertion** that the verbs of smell are associated with only two types of perceptual development is false. The question remains whether the Basque data **indicate** a parochial or a cross-linguistic property.

### III. THE VERBS OF SMELL IN SPANISH

The most **common** verbs of smell and **their meanings** can be **seen** in Table 2.

Verbs	emit odours	perceive odours	'suspect'	'guess'	'investigate'
<i>oler</i>	+	+	+	+	
<i>olfatear</i>		+			+
<i>husmear</i>		+			+

Table 2: Verbs of smell in Spanish

The central verb of smell in Spanish is *oler*. This verb can be used transitive or **intransitively**, although its Latin cognate *olère* was only used with the **subject** of the thing that emits odour, and *olfacere* was **left** for transitive use.

According to Corominas, J. & J.A. Pascual (1983), *olêre* was used for both transitive and intransitive instances already in Berceo (13<sup>th</sup> century), where the nominalisation of the verb *oler* as 'the sense of smell' can be found and therefore, it indicates that the verb *oler* was used in the sense of perception of odours. The explanation of this could be found in the loss of the verb *heder* 'to stink, stench' in the vocabulary of the educated people and also in the disappearance of Latin *putêre* 'to decompose; to have a bad smell'; as a consequence, *oler* is used for either good or bad smells. Other Romance languages use different verbs, so that they distinguish between bad and good smell. For instance, French *sentire* 'smell' and the verb for 'stink' *empester* (cf. Spanish *apestar*), *puir*, *puer* (< Latin *putêre*) verb and noun for 'stink'; Italian *sentire*, *odorare* 'smell' and *puzzare* (< Latin *putêre*) 'stink'; Portuguese seems to have only one verb too: *cheirar* 'smell, stink'; it also has *empestar* for 'to smell out' (cf. French *empester*, Spanish *apestar*).

An interesting point here is the fact that some Romance languages have adopted the Latin word *sentire*, in the place of *olêre-olfacere*. *Sentire* 'perceive, feel' is usually the verb used for describing general perception and it can also mean 'perception by the ear', as it is the case of Italian *sentire* and Catalan *sentir*.

The verb *olfatear* and its noun *olfato* 'sense of smell, intuition, instinct' in Spanish can be applied to animals, usually dogs, and to humans. If it is used with dogs, which are known for having an excellent sense of smell, its meaning is not abstract or figurative, but physical; for instance:

- (5) El perro olfatea el rastro  
 the dog smells the trail  
 'the dog smells the trail'

However, if this verb is used with people, the meaning is both physical and abstract. It means 'to nose into, to pry into' or 'to have instinct for something'. An example with the noun is more illustrative in this case; compare:

- (6) Ese perro tiene buen olfato  
 that dog has good sense of smell  
 'that dog has a good sense of smell'
- (7) Ese hombre tiene buen olfato  
 that man has good sense of smell  
 'that man has a good sense of smell/instinct'

Here it can be seen how in (6) the meaning is physical and in (7), the same words can have a physical meaning as well as metaphorical one, when used with human beings; (7) can mean that this man has a good/accurate sense of smell, but also that he has a natural instinct to see things, or that he has an instinct for business, for example.

In conclusion, it seems that both *oler* and *olfatear* have concrete and non-concrete meanings. The concrete meanings 'to perceive and to emit a smell' are already present in their Latin cognates: *olêre* 'to give off a smell, to smell sweet, to stink' and *olfacere* 'to detect the odour of, to smell at'. However, their figurative meanings seem to be particular to the Spanish verbs, as the Latin ones do not share them. This supports the idea that the

semantic change is from concrete to abstract meanings. (Sweetser 1990:30)

Finally, *husmear*, which as **seen** before, seems to be related to Basque *usmatu*, offers another abstract **meaning** 'investigate, nose into', also shared by its Basque cognate. The verb *husmear*, whose primitive form is *usmar*, *osmar*, shares the **same etymological** origin as French *humér* 'smell, inhale', Italian *ormare* 'follow a trace' and Rumanian *urmă* 'follow'. According to Corominas, J. & J.A. Pascual (1983), these verbs could derive from Greek *osmasthanai* > *osmé* 'odour'.

Spanish verbs then seem to support what has **been** said about Basque in the previous section. Sweetser's abstract categorisations do **take** place as in the case of *apestar* 'stink' or in (8), where the sentence can be interpreted both as a physical bad smell or as the detection of something wrong.

- (8) Eso huele mal  
that smells badly  
'That smells bad'

However, once again, other cognitive meanings are possible too:

Physical smell → 'suspect'

- (9) La policía se olió que algo era mentira  
en las palabras de Miguel  
the police REFL smelt that something. was lie  
in the words of Mike  
'The police smelt something fishy in Mike's words'

Physical smell → 'guess'

- (10) Olió el peligro  
smelt the danger  
'He smelt the danger'

Physical smell → 'investigate'

- (11) Pillé a Miguel husmeando entre mis cosas  
caught to Mike nosing between my things  
'I caught Mike nosing into my things'

It seems that the cognitive meanings proposed for Basque do work for the Spanish verbs too, and therefore, we **have evidence** for the general **falsity** of Sweetser's statement.

## IV. THE VERBS OF SMELL IN ENGLISH

So far it has **been seen** that Basque and Spanish seem to follow the **same** metaphorical mappings into the mental domain, and hence, this **supports** our claim that the sense of smell is not as weak sense in respect to cognitive meanings, as suggested by Sweetser.

As Sweetser based most of her **study** on perception verbs on English, it will be instructive to review the verbs of smell in English in order to see whether these cognitive meanings can be **also** applied to this language.

Table 3 summarises the most common verbs of smelling in English and their meanings.

Verbs	emit odours	perceive odours	'suspect'	'guess'	'investigate'
<i>smell</i>	+	+	+	+	
<i>sniff</i>		+			+

Table 3: Verbs of smell in English

*Stink* and *stench* have not **been** included in Table 3, **because** of the specific meaning they **have** nowadays, i.e. 'bad smell'. However, it is **worth** noting that Old English *stinc* was **first** used for neutral smell and then, when *smellen* was introduced it **came** to mean 'bad smell'. The development of *srench* is somehow similar, as Old English *stenc* meant 'bad smell' but nowadays it is stronger than *stink* itself. *Stink*, as its cognates in Spanish *apestar* and Basque *ufeztu*, *usaindu*, can be **also** used in the abstract sense to **indicate** dislikeable mental characteristics as in (12):

(12) That idea **stinks** (Sweetser, 1990:37)

Therefore, the cognitive meanings that English verbs develop are:

Physical **smell**            →    'suspect'

(13) The police smelt something fishy in **Mike's** words

Physical smell            →    'guess'

(14) He smelt **the** danger

Basque and **Spanish** share **another** meaning, i.e. 'investigate'. This meaning can be expressed with the verb *sniff* as in (15), and **also** with the verb to *nose* (cf. Sp. *meter las narices en algo*). Although, to *nose* is not a verb of perception **itself**, but a verbalisation of the noun *nose*, the **nose** is the organ of smell and **hereby**, it is related to this group.

(15) The police **have been sniffing** around **here** again

From the data in Table 3, it can be concluded that English verbs of smell seem to

follow the same **patterns observed** in the other two languages, both **physical**<sup>3</sup> and abstract. This **further** supports our **claim** that the verbs of smell do **have** more metaphorical meanings than those established in Sweetser's analysis and **also** that these mappings are not language specific.

## V. CONCLUSIONS

In this paper, we demonstrate that in the sense of smell there are more metaphorical connections than the ones identified by Sweetser. From the data supplied, the following connections could be established:

- bad smell → dislikeable characteristics
- smell → detection of these characteristics → suspect (always in a negative context)
- smell → guess, conjecture, **surmise**
- smell → investigate

These cognitive extensions are present in the three languages of the sample. **Languages** with very different backgrounds: Basque (non-IE) and **Spanish** and English (both IE, but Romance and **Germanic** respectively). This fact seems to **indicate** that these mappings are indeed cross-linguistic, and not particular of a specific language.

For other senses such as vision and hearing, Sweetser offers a detailed analysis of their metaphorical connections with their mental domains. Sight is **linked** both with knowledge, intellection and mental vision; and hearing is connected to heeding and to **internal** receptivity. Sweetser considers the sense of smell **less** salient than the rest of the senses. However, throughout this paper, smell has **been proved** to **have** various cognitive meanings. Therefore, we cannot conclude with Sweetser that the sense of smell is weaker than the other senses, but that it should be placed at the same **level** as sight and hearing as far as cognitive **meanings** is concerned.

## NOTES

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1 The etymological origin of *usmatu* is unclear.

2. *Guess* vs. *suspect*. These **two** verbs could be considered synonyms in **some** cases. However, **based** on the examples, we prefer to regard them as different verbs. *Suspect* always **carries** a negative meaning and **seems** to be a **process** type verb, whereas *guess* has a more **neutral** meaning and seems to be an achievement verb type.

3 In the **Northern dialect** of Labourdii, **some** verbs such as *usnatu* (*üsnatü*) can also be interpreted as "prophesy".

4 In previous subjects, it has **been** mentioned that these verbs could denote either good or bad smells. This is also the case of English. However, it seems that the bad or good quality of the smell is not dependable upon the verb of smell **itself**, but upon the other elements of the **sentence**, as well as the context. For **instance**:

(15) The shoes smell

(16) My perfume smells

In (15), *smell* is immediately identified with a "bad smell", whereas (16) is the opposite: it is a very nice smell; the different meaning depends on **the** subject, on the agent that **emits** the odour. The **nature** of subjects, as **well** as other **issues**, such as complementation, are not analysed in depth in this **article** but they **remain** as a **potential field** for **further** research.



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