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How specific wine tasting descriptors are?

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Abstract

Although wine tasting notes are a specialized genre in the field of Oenology, with their own rhetoric and language, some of the elements describing the language of wine are by no means as specialized as that of most other specialized genres such as technical notes, auditor reports or abstracts. In this study, we will explore how wine literature attempts to analyze such adjectives used in wine tasting notes. We will then, based on a comparable corpus of 700 tasting notes per language, study a number of common wine descriptors in English and Spanish in the context of the nouns that they collocate. Our purpose is to determine their specificity or generality in their use and meaning. On the basis of their collocability, we will categorize the descriptors and analyze the meaning components of the descriptors falling in the most general category.

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1. Introduction

Wine tasting notes constitute a specialized genre in the field of Oenology, with their own rhetoric and language. However, the language of wine tasting notes is by no means as specialized as that of most other specialized genres such as abstracts, technical sheets, reports.... Indeed, while there are dozens of terms used to describe and evaluate wines, there are only a limited number of words that are used exclusively or primarily for describing taste.

Based on the wine literature of the 1970s, Lehrer has listed 238 wine descriptors, which are the "commonest words" (2009, 4) that she found attested. Examples are *astringent, fresh, meaty,* and *spicy*. But when one says that a

* Corresponding author. Tel.: +34 983 184270. *E-mail address:* belenl@lia.uva.es wine *fresh*, what aspect of the wine is being referred to: its aroma or its taste? And what dimension of aroma or taste is being alluded to?

In this study, after examining how wine literature attempts to analyze such adjectives used in wine tasting notes, we are going to study a number of common wine descriptors in English and Spanish in the context of the nouns that they collocate with in order to determine how specific or general these descriptors are in their use and meaning.

2. Literature on wine descriptors

Many efforts have been made over the years, both by wine experts and by linguists, to categorize and organize the many adjectives used to describe wines.

In 1972, in their *Essai sur la Dégustation des Vins*, Vedel et al. proposed a red wine structure, the so-called "triangle de Vedel", which represents the balance between the three components to be assessed in tasting a red wine: *acidity, astringency* and *sweetness*. Pertinent adjectival descriptors are provided for each of the three components, allowing for identification of the qualities and weaknesses of a red wine on the basis of supposedly objective criteria.

In the 1980s, Noble developed a system for the description of the smells of wines, which has become widely known as the Aroma Wheel. The Aroma Wheel organizes the descriptors of aroma into three categories based on their specificity. The most general descriptors, which are found in the inner circle, are adjectives like *floral, fruity, woody* and *nutty*. These general descriptors are subdivided and made more specific in the next circle: *fruity*, for example, is subdivided into *citrus, berry, tree fruit, melon, tropical fruit,* and *cooked fruit.* Finally, each of the more specific fields designated by the latter is further subdivided in the outer circle: *citrus,* for example, is divided into *orange, grapefruit, lemon* and *lime*. While the general descriptors are primarily adjectives, many of the more specific ones are nouns.

Another descriptors wheel, this one for mouthfeel perceptions, was developed by Gawel et al. (2000). The mouthfeel wheel terminology was partially intended to be a starting point for sensory panels to allow the rating of the intensity of defined characteristics of a set of samples, to provide a profile of the mouthfeel characteristics. The innermost layer of the wheel divides the *mouthfeel* terms into two categories: *feel* and *astringency*. The second tier presents groups of terms that are subordinate to these categories, such as for instance *weight*, *harsh*, *surface-smoothness*. In the outermost tier, these categories are further subdivided. The terms *viscous*, *full*, *thin*, *watery* are thereby categorized as descriptors of weight, *hard*, *aggressive*, *abrasive* as descriptors of *harsh*, and *furry*, *fine emery*, *velvet*, *suede*, *silk*, *chamois*, *satin* as descriptors of *surface-smoothness*. The descriptors, which are primarily adjectives, are grouped as terms along a scale in the case of *weight*, although other groupings of terms (e.g. those describing *surface-smoothness*) are less relatable to points on a scale. Each of the terms on the wheel are defined, either by written definitions or by use of finger touch standards, so that each taster knows what is meant by the term.

The British organization Wine and Spirit Education Trust has proposed a wine tasting template that provides wine descriptors organized in scales for the following properties of the wine (in Herdenstam 2004, 58):

- Appearance
- Intensity: *pale medium deep opaque*
- Color: *purple ruby garnet* etc.
- Nose
- Condition: *clean unclean*
- Intensity: *weak medium pronounced*
- Development: *youthful grape aromas aged bouquet tired oxidized*
- Fruit character: fruity, floral, vegetal, spicy, woods, smoky, animals etc.
- Palate
- Sweetness: dry off-dry medium dry medium sweet sweet luscious
- Acidity: *flabby low balanced crisp acidic*
- Tannin: *astringent hard balanced soft*
- Body: *thin light medium full heavy*
- Fruit intensity: *weak medium pronounced*

- Fruit character: (same as for nose)
- Alcohol: *light medium high*
- Length: *short medium long*

The classifications of descriptors discussed above have been proposed primarily by wine experts. However, more recently, linguists have also made efforts to categorize wine descriptors.

Coutier (1994, 667), in her discussion of metaphors in the vocabulary of wine tasting, classifies metaphorical descriptors (and other wine tasting terms) according to the thematic fields from which the metaphors are drawn:

- The human being (physical): charnu, musclé
- The human being (mental): aimable, expansif, réservé, sincère
- The human being (social): aristocratique, noble, racé
- Spatial reality (form, volume, dimension): *ample, cônique, rond*
- Physical reality (physical properties, state of matter): dense, solide, souple
- Contact, movement, displacement: fuyant
- Time (age, duration, evolution): court, sénile
- The senses: asséchant, dur, ferme, frais, lisse
- Textile : en dentelles
- Construction : *bien/mal construit*

Amoraritei (2002, 11) pursues essentially the same type of analysis, concentrating particularly on wine tasting descriptors related metaphorically to human beings - both their physical condition (e.g. *charnu, charpenté, maigre, informe*) and their psychological state (e.g. *aimable, franc, généreux*).

A different type of analysis has been undertaken by Normand (1998). Her study of wine descriptors, which is corpus based and uses a variety of computerized tools, first identifies all the adjectives in her corpus, then classifies these adjectives according to the words which they qualify. If the qualifying and qualified words form a unit reflecting a perceptual judgement, the unit is retained and submitted to further analysis. The qualifying words are then organized into lexical classes in terms of the words they qualify, and presented in the form of a classificatory tree. This then allows the researcher to propose a structured representation of the adjectives, based on Rastier's linguistic theory of interpretive semantics. The lexicon is structured on three levels:

- Level I: Wine tasting phase (appearance, aroma, taste)
- Level II: Property that is qualified (e.g. effervescence)
- Level III: Quality/qualities related to the property

Using this structure, Normand presents a representation of the qualities of the property robe du vin in the appearance phase: using the four quality classes of aspect, colour, intensity of colour and reflection, the researcher situates the descriptors limpide, trouble, lumineux, brillant, terne (all placed under aspect); jaune, or, doré, ambré (placed under colour); pâle, clair, soutenu, intense (placed under intensity of colour), and finally doré and vert (placed under reflection).

Table 1. Lehrer's dimensions of wine.									
DIMENSION	TOO	MUCH	OF	RIGHT	AMOUNT	OF	TOO	LITTLE	OF
	DIMENSI	DIMENSION		DIMENSION		DIMENSION			
Acidity	sour	sour		tart		flat			
Sweetness	syrupy	syrupy		sweet		N/A			
Balance	unbalance	unbalanced		balanced		unbalanced			
Astringency (Feel)	harsh	harsh		smooth		N/A			
Age	immature	immature		ripe		withered			
Body	coarse	coarse		full-bodied		weak			
Finish	N/A	N/A		lingering		short			

The three dimensions mentioned by Lehrer have not been covered here. They are nose, activity and quality. That is because we are interested primarily in the Taste phase of the tasting note, while nose is part of the Aroma phase and Activity is part of Appearance. Quality is a dimension applied overall to the wine and is too general to be of interest to us.

Lehrer's study shows that a few adjectives appear on more than one dimension. She cites the example of *sour*, which is used to describe both *acidity* and *balance*, for balance is a function of both sugar and acid (2009, 28). She also discusses the descriptor *flat*, which occasionally means "too old" for wines intended to be drunk young or for sparkling wines that have lost their bubbles (2009, 7), but can also be used to describe a wine that has never had enough acid and therefore is flat from the beginning (2009, 7): "The wine words can be analyzed in terms of various dimensions. (...). A few words refer to complex properties and therefore appear on more than one dimension. Other words are ambiguous and appear more than once. For instance, flat can mean 'lacking of acid' or 'an effervescent wine that has lost its bubbles".

While the distinction that Lehrer seems to be making between descriptors referring to complex properties and ambiguous descriptors remains vague, her reference to descriptors that appear on more than one dimension is of particular interest to this study, since we intend to analyze descriptors that collocate with nouns typical of different dimensions.

3. Methodology

3.1.Corpus

The starting point of our study was an ad-hoc domain-specific (Corpas and Seghiri, 2009: 78) comparable corpus of wine tasting notes in English and Spanish, which we developed in the context of a larger research project. This corpus was compiled using pragmatic text selection criteria: the wine tasting notes were chosen to ensure a representative sample of the language of expert members of the discourse community, in this case of expert wine writers. We also considered availability, which refers to the ease with which the texts constituting the corpus could be obtained.

The wine tasting notes corpus includes 750 wine tasting notes in Spanish and 716 wine tasting notes in English, which amount to 54,545 and 55,339 words respectively. While the corpus is relatively small, it is more than adequate for a specialized corpus and meets Biber's criterion of needing at least 20 samples per register of between 2,000 and 5,000 words for a corpus to be useful for a research project (1993, 254). Moreover, according to Flowerdew (2005, 329), a smaller corpus may be called for when rhetorical tagging, which can only be done semi-automatically, is used. An important feature of our corpus is that its rhetorical structure is tagged.

We annotated the texts using rhetorical labels that help us set up the semantic units (*moves and steps*, according to Swales 1990, 2002) that constitute wine tasting notes in every language. Following Bondarko's (1984) and Krzeszowski's (1990) parameters, our methodology consists in describing the central and peripheral semantic units in each language, and their cross-linguistic juxtaposition and contrast in order to obtain the prototypical structure for wine tasting notes for the target discourse community.

We were able to identify five different moves in the wine tasting notes with various steps. See Table 2 below for the rhetorical structure:

Introductory remarks (IR)		
Appearance (AP)		
Colour hue and depth		
Clarity		
Viscosity		
Effervescence		
Aroma (AR)		
Fragance		
Intensity		
Development		
Taste (TA)		
Flavors		
Finish		
Astringency		
Mouthfeel		
Body		
Balance		
Concluding remarks (CR)		

Table 2. Moves and steps for wine tasting notes.

The rhetorical labelling of the texts allowed us to identify wine words that were typical of the different moves and steps.

3.2. Identifying the key nouns and descriptors in the steps of the taste move

To limit the scope of our study of wine descriptors, we restricted ourselves to one important move found in all wine tasting notes: Taste.

We first identified the key nouns found in each of the steps of this move: flavors, finish, astringency, mouthfeel, body and balance. In most cases, the name of the step was the key noun: this was the case with *flavors, finish, mouthfeel, body,* and *balance*. In the case of astringency, however, the key nouns were different from the name of the step: *tannins* on the one hand, *acidity* on the other. Acidity and astringency are closely related, as Lehrer has shown (2009, 11); they were therefore grouped together in one single step for the rhetorical labelling of our corpus. However, in the context of this study, they are viewed as two distinct steps.

Using the nouns *flavors, finish, mouthfeel, body, balance, tannins* and *acidity* as a starting point, we added synonyms of these nouns to our list: *note* (a synonym of *flavors*), *structure* (a synonym of *body*) and *palate, midpalate, attack, entry and aftertaste* (specific terms related to *mouthfeel*).

We proceeded in the same way in Spanish as we did in English.

Presented below in Table 3 are the lists of nouns used in both English and Spanish as key words designating the steps:

STEPS	KEY NOUNS	KEY NOUNS
Acidity	Acidity	Acidez
Astringency	Tannin/s, Astringency	Taninos, Astringencia
Balance	Balance	Acidez
Body	Body, Structure	Cuerpo, Estructura
Flavors	Flavor/s, Note/s	Notas, Sabor, Gusto
Finish	Finish	Final
Mouthfeel	Palate, Mid-palate, Aftertaste, Attack,	Retrogusto, Posgusto, Entrada,
	entry	Ataque, Boca

Table 3. Steps and key nouns in English and Spanish.

Then, using a browser that presents concordance lines and statistics, we looked for these nouns in our corpus with the aim of identifying the descriptors that collocate with these nouns. A descriptor had to appear at least five times with one or more of these nouns to be retained past the initial stage.

3.3. Classification of the descriptors into categories

Based on the process described above, the descriptors were first classified as applicable to given steps. The descriptors were then further reduced if they did not appear with the key nouns of a given step at least five times. They were then classified more globally according to their generality or specificity.

4. Results: Classification of descriptors according the steps they occur

Presented below in Tables 4 and 5 are the descriptors, the steps in which they occur first in English, then in Spanish.

DESCRIPTORS OCCU	RRING IN THREE STEPS OR				
MORE					
DESCRIPTOR	STEP				
Balanced	Acidity				
	Flavors				
	Mouthfeel				
Full	Body				
	Mouthfeel				
	Flavors				
Juicy	Flavors				
	Acidity				
	Mouthfeel				
	Astringency				
Rich	Mouthfeel				
	Flavors				
	Body				
	Astringency				
	Finish				
Smooth	Astringency				
	Mouthfeel				
	Finish				
Soft	Astringency				
	Mouthfeel				
	Acidity				
	Finish				
Well integrated	Astringency				
-	Acidity				
	Flavors				
DESCRIPTORS OCCUF	RRING IN TWO STEPS				
DESCRIPTOR	STEP				
Bright	Flavors				
c	Acidity				
Crisp	Acidity				
I	Flavors				
Fresh	Flavors				
	Acidity				
Lush	Mouthfeel				
	Flavors				
Silky	Mouthfeel				
Simy	Astringency				
Supple	Astringency				
Suppre	Mouthfeel				
Sweet	Flavors				
5	Acidity				
Toasty	Flavors				
100519	Finish				
Valuatu	Mouthfeel				
Velvety					
DESCRIPTORS	Astringency				
DESCRIPTORS OCCUP	CKING IN ONE STEP				

Table 4. Descriptors, and steps and number in English.

Light	Body
Long	Finish
Medium	Body
Creamy	Mouthfeel
Ripe	Flavors
High	Acidity
Intense	Flavors
Lingering	Finish
Low	Acidity
Mineral	Flavors
Moderate	Acidity
Natural	Acidity
Oak	Flavors
Zesty	Flavors
Round	Mouthfeel
Luscious	Flavors
Spicy	Flavors
Floral	Flavors
Herbal	Flavors
Earthy	Flavors
Berry	Flavors

Table 5. Descriptors and steps in Spanish.

DESCRIPTORSTEPFino/a(s)AstringencyMouthfeelFlavorsFresco/s/a(s)AcidityFresco/s/a(s)MouthfeelFinishFlavorsFrutal(es)FlavorsGranBodyGranBodyAcidityMouthfeelFinishFlavorsAcidityFlavorsGranBodyBodyFlavorsAcidityFlavorsAcidityFlavorsAcidityFlavorsAstringencyFlavorsSabroso(s)MouthfeelSuave(s)MouthfeelFlavorsFlavorsFlavorsFlavorsFlavorsFlavorsFlavorsFlavorsFlavorsFlavorsFlavorsFlavorsSuave(s)MouthfeelFlavorsFl	DESCRIPTORS OCCURRING IN THREE STEPS OR MORE				
Mouthfeel Flavors Fresco/s/a(s) Fresco/s/a(s) Acidity Mouthfeel Finish Flavors Flavors Mouthfeel Finish Body Flavors Acidity Mouthfeel Finish Body Flavors Acidity Mouthfeel Finish Mouthfeel Finish Suave(s) Mouthfeel Finish	DESCRIPTOR	STEP			
Fresco/s/a(s) Fresco/s/a(s) Fresco/s/a(s) Fresco/s/a(s) Frutal(es) Frutal	Fino/a(s)	Astringency			
Fresco/s/a(s)Acidity Mouthfeel Finish FlavorsFrutal(es)Flavors Mouthfeel FinishGranBody Flavors Acidity Mouthfeel Flavors Acidity Mouthfeel FinishMaduro/s/a(s)Astringency Flavors Flavors Flavors Sabroso(s)Suave(s)Mouthfeel Finish		Mouthfeel			
Mouthfeel Finish Flavors Flavors Flavors Mouthfeel Finish Gran Body Flavors Acidity Mouthfeel Finish Maduro/s/a(s) Astringency Flavors Flavors Sabroso(s) Mouthfeel Flavor Flavors Flavors Suave(s) Mouthfeel Actingency Flavor		Flavors			
Frutal(es) Frutal(es) Frutal(es) Frutal(es) Frutal(es) Flavors Gran Body Flavors Acidity Acidity Mouthfeel Finish Maduro/s/a(s) Astringency Flavors Mouthfeel Sabroso(s) Mouthfeel Flavors Flavors Suave(s) Mouthfeel Astringency Flavors Flav	Fresco/s/a(s)	Acidity			
Frutal(es) Frutal(es) Frutal(es) Frutal(es) Flavors Acidity Mouthfeel Finish Maduro/s/a(s) Astringency Flavors Mouthfeel Finish Sabroso(s) Mouthfeel Flavors Mouthfeel Flavors Mouthfeel Flavors Mouthfeel Flavors Mouthfeel Flavors Mouthfeel Flavors Mouthfeel Flavors		Mouthfeel			
Frutal(es) Flavors Mouthfeel Finish Gran Body Flavors Acidity Mouthfeel Finish Maduro/s/a(s) Astringency Flavors Mouthfeel Sabroso(s) Mouthfeel Flavor Flavors Mouthfeel Flavors Mouthfeel Flavors Mouthfeel Flavor Flavors Mouthfeel Flavor Astringency		Finish			
Mouthfeel Finish Gran Body Flavors Acidity Mouthfeel Finish Maduro/s/a(s) Astringency Flavors Mouthfeel Sabroso(s) Mouthfeel Flavor Flavor Finish Suave(s) Mouthfeel Astringency		Flavors			
Finish Gran Body Flavors Acidity Mouthfeel Finish Maduro/s/a(s) Astringency Flavors Mouthfeel Flavor Flavor Flavor Sabroso(s) Mouthfeel Flavor Flavor Mouthfeel Flavor Astringency	Frutal(es)	Flavors			
Gran Body Flavors Acidity Mouthfeel Finish Maduro/s/a(s) Astringency Flavors Mouthfeel Sabroso(s) Mouthfeel Flavor Finish Suave(s) Mouthfeel Astringency		Mouthfeel			
Flavors Acidity Mouthfeel Finish Maduro/s/a(s) Sabroso(s) Sabroso(s) Suave(s) Acringency Flavors Mouthfeel Flavor Finish Suave(s) Mouthfeel Astringency		Finish			
Acidity Mouthfeel Finish Maduro/s/a(s) Sabroso(s) Sabroso(s) Suave(s) Acidity Finish Suave(s) Mouthfeel Flavor Finish Suave(s) Mouthfeel Astringency	Gran	Body			
Mouthfeel Finish Maduro/s/a(s) Sabroso(s) Suave(s) Mouthfeel Flavor Finish Suave(s) Mouthfeel Astringency		Flavors			
Finish Maduro/s/a(s) Sabroso(s) Suave(s) Finish Suave(s) Finish Suave(s) Finish Mouthfeel Astringency		Acidity			
Maduro/s/a(s) Astringency Flavors Mouthfeel Sabroso(s) Mouthfeel Flavor Flavor Finish Suave(s) Mouthfeel Astringency		Mouthfeel			
Flavors Mouthfeel Sabroso(s) Mouthfeel Flavor Finish Suave(s) Mouthfeel Astringency		Finish			
Sabroso(s) Mouthfeel Sabroso(s) Mouthfeel Flavor Finish Suave(s) Mouthfeel Astringency	Maduro/s/a(s)	Astringency			
Sabroso(s) Mouthfeel Flavor Finish Suave(s) Mouthfeel Astringency		Flavors			
Flavor Finish Suave(s) Mouthfeel Astringency		Mouthfeel			
Suave(s) Finish Suave(s) Mouthfeel Astringency	Sabroso(s)	Mouthfeel			
Suave(s) Mouthfeel Astringency		Flavor			
Astringency		Finish			
0,1	Suave(s)	Mouthfeel			
Flavors		Astringency			
		Flavors			

DESCRIPTORS OCCURRING IN TWO S	TEDS
DESCRIPTORS OCCURRING IN TWO S	STEP
Amable	Mouthfeel
Amable	Acidity
Compage(a)	Mouthfeel
Carnoso(s)	Body
Elegenta(a)	5
Elegante(s)	Body
Envolvente	Astringency Mouthfeel
Envolvente	Finish
Equilibrado/o/o(o)	Acidity
Equilibrado/s/a(s)	5
Γ_{a}	Mouthfeel Flavors
Especiado/s/a(s)	Finish
Interned a /a /a (a)	
Integrado/s/a(s)	Astringency Flavors
	Flavor
Intenso/s/a(s)	Mouthfeel
Larga /a	Mouthfeel
Largo/a	
Lissen la la (a)	Finish
Ligero/s/a(s)	Mouthfeel
	Flavors
Persistente(s)	Finish
	Mouthfeel
Potente(s)	Mouthfeel
	Body
Redondo(s)	Mouthfeel
	Astringency
Sedoso(s)	Mouthfeel
$\mathbf{T} \in \mathbf{L} \setminus \{0\}$	Astringency
Tostado/s/a(s)	Flavors
DESCRIPTORS OCCURRING DU ONE S	Mouthfeel
DESCRIPTORS OCCURRING IN ONE S'	
Amplio(s)	Mouthfeel
Aterciopelado(s)	Mouthfeel
Bajo	Flavors
Balsámico(s)	Flavors
Bien/Muy equilibrado	Acidity
Corpulento	Body
Dulce(s)	Astringency
Estructurado(s)	Mouthfeel
Expresivo(s)	Mouthfeel
Graso(s)	Astringency
M. F.	Mouthfeel
Medio	Body
Mineral(es)	Flavors
Natural	Acidity
Rico(s)	Mouthfeel
Seco(s)	Mouthfeel
Sutil(es)	Mouthfeel
Untuoso/a	Mouthfeel

Vivo Mouthfeel

In total, there were 37 descriptors identified in English, and 40 in Spanish. The total number of descriptors per language is relatively similar, only 21 of the English descriptors apply to more than one step, while 22 of the Spanish descriptors do the same. Moreover, the maximum number of steps that the descriptors apply to does not vary depending on the language: five in both corpora.

This classification of descriptors, based on their collocational possibilities with key nouns in different steps, reveals their generality or their specificity. Those descriptors that collocate with key nouns from three or more steps are obviously more general than those that collocate with key nouns from a single step. *Rich*, occurring in five steps versus *Silky* occurring in two in the English corpus; *Fresco* occurring in four steps versus *Carnoso* occurring in two in the Spanish corpus.

The question that arises at this point is what makes certain descriptors more general in their application. Is their meaning more generic or do they cover two or more distinct meanings? That is what we will explore next.

5. Discussion: The most general descriptors and their meaning

In this paper, as an example of our study, we will only show the results of those descriptors occurring in three or more steps.

In an effort to determine what makes certain descriptors more general in their application in wine tasting notes than others, we followed a twofold procedure: (1) we looked up the general descriptors identified above in English and in Spanish in three monolingual wine glossaries/dictionaries to see if more than one sense or a generic sense could be identified therein; (2) we then analyzed the general descriptors in context, using our corpus, to see if that could provide any further meaning clues.

We used the dictionaries/glossaries cited below for verification. It should be noted that wine dictionaries/glossaries are notoriously incomplete. Our choice was based on the appearance of at least a few of the descriptors we were studying in the glossary.

English: http://www.zachys.com/oneoone/?id=54 http://www.winespectator.com/glossary/index/word/A http://www.napacabs.com/terminology.aspx

Spanish:

http://www.jmcaro.info/diccionario.htm#-Shttp://www.diccionariodelvino.com/index.php/tema/5/ http://www.delbuencomer.com.ar/index_archivos/diccionariodelvinoa.htm

Of the seven general descriptors in English (those that applied to three or more steps), only four were found in the dictionaries consulted, in any form whatsoever: *balanced*, *full*, *rich* and *soft*. *Balanced* was found only in nominal form (*Balance*), and *full* was found as *full-bodied*. *Juicy*, *smooth* and *well-integrated* were not present in the dictionaries selected or any dictionary consulted.

On the basis of the dictionary entries consulted, *balanced* and *full* can be considered as having a generic sense, which allows them to be applied to different steps: Acidity, Flavors, and Mouthfeel for *balanced*, and Body, Mouthfeel and Flavors for *full*. For example, according to http://www.winespectator.com/glossary/index/word/S.

A wine is balanced when its elements are harmonious and no single element dominates. The "hard" components—acidity and tannins—balance the "soft" components—sweetness, fruit and alcohol.

We consider this definition as all-encompassing, allowing for the descriptor *balanced* to be applied to several different aspects of wine. Two of the three definitions of *soft* clearly indicate that the same definition can be applied to either Astringency or Acidity. In other words, this entry for *soft* could have been written as follows:

Soft: 1. Describes wines low in acid, making for easy drinking.

2. Describes wines low in tannin, making for easy drinking.

The entry is thus considered polysemic, which explains why the descriptor is applicable to both Astringency and Acidity. But what about Mouthfeel and Finish to which *soft* is also applied in our corpus? The third definition of *soft*, by its reference to "texture", hints at its applicability to Mouthfeel, but not to Finish, according to http://www.napacabs.com/terminology.aspx

Soft: A term characterizing texture and referring to the amount of, and relationship between, a wine acid and tannin.

The case of the last descriptor found in the dictionaries, *rich*, is different. While our corpus examples show that *rich* can be used to describe Flavors and Mouthfeel, the dictionary definitions all focus primarily on Flavors, as the dictionaries http://www.zachys.com/oneoone/?id=54 and http://www.winespectator.com/glossary/index/word/S show:

Rich: Describes wines with generous, full, pleasant flavors, usually sweet and round in nature. In dry wines, richness may be supplied by high alcohol and glycerin, by complex flavors and by an oaky vanilla character. Decidedly sweet wines are also described as rich when the sweetness is backed up by fruity, ripe flavors.

However, the words "round in nature" refers to texture and therefore, by extension, to Mouthfeel. And the applicability of *rich* to both Flavors and texture (i.e. Mouthfeel) is clearly indicated in the definition http://www.napacabs.com/terminology.aspx provides:

Rich: Deeply flavorful and textured

Given that three of our seven general descriptors were not found in wine dictionaries/glossaries, we turned to contexts taken from our corpus to see if they could shed some light on the meaning of these adjectives as well as the four others in the field of wine tasting. Context here is used in its terminological sense as "the part of a text or statement that surrounds a particular word and determines its meaning; in other words, a type of textual support on a terminology record that provides information about the semantic features of a concept or the use of a term.

Essentially, we were looking for what terminologists call defining contexts, which provide essential information about the concept, and explanatory contexts, which provide some of the characteristics of the concept. Unfortunately, given the somewhat telegraphic style of wine tasting notes, we found no defining contexts for our general descriptors. And, while there were some explanatory contexts, all they provided was further proof that these descriptors were related to a number of different wine tasting steps. Thus, in the case of *smooth*, which was not defined in any wine dictionary, the following contexts show that this word relates to *body* and Flavors:

The body is round and SMOOTH with a lingering finish.

Palate: Full-bodied with excellent balance, the wine displays flavors of passion fruit, white peach and SMOOTH vanilla before ending with a long, rich finish.

It fills the mouth with SMOOTH cherry, rhubarb, raspberry and plum flavors.

In other words, the contexts seem to imply that the meaning of *smooth* is generic enough to cover a number of steps. And in the following context, a wine is described generally as *smooth*, without any indication of what aspect is being precisely referred to:

Medium-bodied, rich and SMOOTH

Such a very general use of a descriptor is also found in contexts for *juicy*, *rich* and *soft*:

This rich, JUICY, full-bodied wine has velvety tannins and great structure, backed-up by amazing flavors of ripe black fruits and spice.

This is a RICH full bodied wine, and complex wine.

This light to medium-bodied wine is SOFT and juicy with the perfect touch of sweetness.

Thus, while our corpus analysis did not provide any clear definitions for the English descriptors, it did reveal not only their link with different aspects of wine and wine tasting, but also their use in a very general sense.

Seven general descriptors apply to three or more steps in Spanish. While one was not found in any of the dictionaries consulted (gran), six out of seven were found in at least two of the three dictionaries used: fresco, frutal,

fino, sabroso, suave, maduro (delicate, fruity, tasty, smooth, mature in English).

On the basis of the dictionary entries consulted, fino, maduro and sabroso can be considered as having a generic sense, which allows them to be applied to different moves and steps. This can be seen in the definition provided by http://www.delbuencomer.com.ar/index_archivos/diccionariodelvinof.htm:

Fino: etéreo y delicado.

http://www.jmcaro.info/diccionario.htm#-S- describes maduro as:

Maduro: vino en su plenitud de madurez, antes de empezar su decadencia. Con uvas maduras se obtienen vinos ricos en color, dulzor y riquezas naturales.

On the other hand, www.diccionariodelvino.com, defines sabroso as:

Sabroso : Vino con amplias sensaciones sápidas.

We consider these definitions for the three descriptors as very general, allowing them to be applied to several different aspects of wine.

On the other hand, the following definition of suave, provided by http://www.jmcaro.info/diccionario.htm#-S-, seems to present two different senses:

Sedoso y aterciopelado, meloso, de tacto agradable. Armonía de taninos y acidez.

In other words, the entry is polysemic, allowing the descriptor to be applied therefore to both Astringency and Flavors. Indeed, this entry for suave could have been written as follows:

Suave: 1. Vino sedoso y aterciopelado, de tacto agradable.

2. Vino que presenta armonía de taninos y acidez.

However, neither this nor any other definition of suave mentions Flavors to which this descriptor is also applied in our corpus.

One descriptor whose dictionary definitions make it stand out from the others is fresco. According to the dictionary definitions, fresco should not be included in the category of most general descriptors, since the definitions are very narrow and only show this descriptor's relation to Acidity and Mouthfeel:

Fresco: Vino con adecuada acidez para su tipo, por lo que produce sensación de frescura en la boca. Sensación característica de los vinos jóvenes de calidad.

The case of the last descriptor found in the Spanish dictionaries, frutal, is totally different. While our corpus examples show that frutal can be used to describe the steps Finish, Flavors and Mouthfeel in the Taste move, the dictionary definitions all focus primarily and exclusively on Aromas, which in fact is a different move:

Frutal, frutado o afrutado: es un vino que conserva el perfume de la uva madura y fresca que no se ha transformado durante la fermentación. También se aplica al hallazgo de otras frutas.

Frutal: Vino delicado que recuerda a diferentes aromas de plantas, al aroma propio de la uva con que ha sido elaborado o al de algunas otras frutas.

Frutal: Cualidad aromática de los vinos. Presencia de aromas que recuerdan a la fruta (mora, frambuesa, banana, ananá, durazno, etcétera).

Based on these definitions, frutal is not a descriptor of Taste and should not even be considered here, much less be placed in the category of most general descriptors.

Given that definitions for three of our descriptors were too vague (maduro, sabroso and fino) and could be used to cover any step, and given that the definitions of frutal did not even link this descriptor to Taste, we turned to our corpus to look for defining contexts that could help us better understand the meaning and scope of our general descriptors. Unfortunately, we could find no defining contexts for any of these descriptors, although explanatory contexts reveal the relationship of each of them to a number of different steps. What we also found were contexts where five of our seven descriptors (fresco, frutal, maduro and sabroso and gran) were used very generally. Presented below are some of these examples:

SABROSO amable con cierto recuerdo especiado. Agradable, fresco, SABROSO SABROSO suave y fresco. En boca, despliega frescor y sabores intensos a frutos rojos. Agradable, FRESCO, sabroso. Muy elegante, sin aristas. ... Aspecto gustativo Suave, FRESCO y armónico tras un final prolongado con un amplio retrogusto. Con una franca expesion FRUTAL y unos taninos maduros y elegantes. Final: Envolvente y persistente con recuerdos frutales ... En boca la entrada es suave y elegante para luego dar paso a una gran carga FRUTAL. Buena expresividad FRUTAL Rico y denso mostrando un caracter claramente MADURO y tonos fuertes casi dulces de roble sobre sabores de cereza y licor de bayas oscuras. En boca es un vino redondo y de GRAN volumen. En boca es un vino con un GRAN cuerpo, sin aristas, sabroso

En boca es potente y concentrado de GRAN equilibrio.

While we did not find any such general contexts for fino and suave, the corpus did reveal that they can at least be applied to a number of different steps, even if they do not seem to be quite as generic in their meaning as fresco, frutal, maduro and sabroso and gran.

It is interesting to note that, while both English and Spanish each have seven descriptors that apply to three or more wine tasting steps in the Taste move and therefore fall into the most general descriptors category in our classification presented in Section 4 above, most of the descriptors in this category do not match in the two languages, i.e. they are not equivalents of each other. The one exception is soft and suave, which are both clearly polysemic according to our meaning analysis above.

6. Conclusion

This analysis of wine descriptors has confirmed the following:

• Wine tasting vocabulary uses a number of common words in a more or less specialized sense. This is the case of most of the wine descriptors examined. They all exemplify terminologization (Wright and Budin 2001, 752), which is the process of metaphorical extension of a general-language notion to a more precise concept within a special-language domain.

• However, in several instances, writers of wine tasting notes seem to use the descriptors in their general language sense rather than in their more specialized senses:

The Lyeth Pinot Noir is supple and JUICY with lively flavors of Bing cherry and raspberry, balanced with a hint of earthiness and subtle spice.

Vino tinto de Perelada muy SABROSO

This is no doubt what leads to the impression that the descriptors are "weak" and somewhat subjective, as indicated by certain writers cited in the Introduction.

• At the same time, writers of wine tasting notes seem to be extending the metaphorical application of many of these descriptors to aspects (steps) of wine tasting which they were apparently not related to earlier, according to their dictionary definitions. Thus, for example, the following definition for soft:

Soft: A term characterizing texture and referring to the amount of, and relationship between, a wines acid and tannin.

implies that it can be applied to Astringency, Acidity and Mouthfeel, but not to Finish. But our corpus analysis reveals several contexts such as the following, linking soft to Finish:

Tropical fruit nuances seduce you with a SOFT but persistent finish. ...

• There thus seem to be two opposing trends in the terminology of wine tasting notes, as demonstrated by the wine descriptors analyzed. On the one hand, there is the attribution of specialized wine tasting meanings to general

words, while, on the other, there is a tendency to extend these meanings to such an extent that the descriptors become more and more general again.

• Our categorization of wine descriptors from most general to most specific, based on their collocability with key nouns in different steps of wine tasting (presented in section 4), is likely to hold good for many years to come, but with the constant evolution of wine tasting terminology, the descriptors found in each of our three categories are likely to change.

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