



# LUND UNIVERSITY

## **We drink with our eyes first: The web of sensory perceptions, aesthetic experiences and mixed imagery in wine reviews**

Paradis, Carita; Hommerberg, Charlotte

*Published in:*  
Mixing metaphor

*DOI:*  
[10.1075/milcc.6.09par](https://doi.org/10.1075/milcc.6.09par)

2016

[Link to publication](#)

*Citation for published version (APA):*

Paradis, C., & Hommerberg, C. (2016). We drink with our eyes first: The web of sensory perceptions, aesthetic experiences and mixed imagery in wine reviews. In R. W. Gibbs (Ed.), *Mixing metaphor* (pp. 179-202). John Benjamins Publishing Company. <https://doi.org/10.1075/milcc.6.09par>

*Total number of authors:*  
2

### **General rights**

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

### **Take down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117  
221 00 Lund  
+46 46-222 00 00



# **We drink with our eyes first**

## **The web of sensory perceptions, aesthetic experiences and mixed imagery in wine reviews**

*Carita Paradis, Lund University & Charlotte Hommerberg, Linnaeus University*  
carita.paradis@englund.lu.se

### **Abstract**

This chapter analyzes the language resources that writers have at their disposal to describe their experience of the web of sensory perceptions that are evoked in the wine tasting practice. The task of the writer is to provide a mental understanding of the sensations as well as a prehension of the experiences. We show that this involves the weaving together of the senses, starting with the sight of the wine followed by a description that is iconic with the wine tasting procedure. The descriptors are systematically used cross-modally both through ontological cross-overs and through longer stretches of mixed imagery. We also show how the socio-cultural context of wine consumption correlates with the types of imagery used in wine descriptions.

### **1. Introduction**

The power of language to evoke vivid sensory imagery is an important prerequisite for successful communication about topics dealing with both facts and fiction. This power has been exploited and celebrated by poets, advertisers, politicians, educators and many others. There are topics that are more challenging than others when it comes to the means of expression that speakers have at their disposal to make themselves understood. One such topic is the description and evaluation of sensory perceptions. This chapter addresses the question of how descriptions and assessments of the complexities of sensory perceptions are accomplished. While we focus on the wine reviewing genre, occasional instances of wine descriptions from literature as well as in marketing texts are also included.<sup>1</sup> At first blush, such descriptions come across as a “wonderful, chaotic, creative, heroic, challenging” (Gibbs 2010, p1), but on closer inspection such descriptions are also very systematic and orderly in their communication of multiple layers of meanings.

Wine reviews are short texts, primarily aimed at consumers, written by wine journalists and/or connoisseurs. It is the reviewer’s professional task to be able to convey the representation of the perceptual landscape in a way that is understandable and appealing to the reader’s sensory system. The reviewing task presupposes considerable knowledge in several different domains, related to both the production and the consumption side of wine. In addition, it also presupposes extraordinary perceptive talents for the identification of the niceties of the four different types of sensory perceptions involved in the wine tasting practice, i.e. VISION, SMELL, TOUCH, TASTE, and the combined impression of the perceptions resulting in an aesthetic response to the entire experience. Last but not least, the ability to communicate this experience through language is of utmost importance for the reviewers’ credibility among consumers and consequently their professional success (Hommerberg 2011; Hommerberg & Paradis 2014).

---

<sup>1</sup> It should be noted that our definition of the notion of ‘wine review genre’ is delimited to those instances of winespeak that have the purpose of providing consumption advice. Instances of winespeak from for instance the literature and marketing are thus not seen as being part of the wine review genre. See Hommerberg (2011) for a discussion of the notions of genre and register in relation to winespeak.

The tasting practice is the *sine qua non* for all wine review writing, starting from the reviewer's inspection of the wine's appearance in the glass, through the nose and the mouth, and finally into the gullet. The appearance of the wine is the only sensory perception that can possibly be identified in isolation. However, visual appearance has been shown to be of crucial importance for descriptions of olfactory and gustatory experiences of wines too (Morrot et al. 2001). Already when the glass is agitated to release the smells of the wine, we are under the influence of its visual properties. After that we swirl the wine around the mouth and breathe in air so that we optimize the experience of the taste and the texture of the wine. The situational context and the specific practices of wine tasting pave the way for mixed descriptions both at the level of the individual senses and more holistically. For instance, in the case of individual sense descriptions, as in *a sweet nose of earth*, a notion of TASTE, *sweet*, is used to describe SMELL, and in *long taste* the notion of LENGTH, *long*, is used as a descriptor of TASTE. At the text and discourse level a range of ontological domains combine and plait together the perceptions in a stream of sensory experiences in the text as a whole, as shown in (1). Italics are added to highlight the domain mixtures.

- (1) There is something about these kitchen sink red blends that just gets me excited. This offering from Ben Marco is terrific. It is opaque and *pitch black colored*. It opens with a fragrant *black raspberry* and *black licorice bouquet*. On the palate, this wine is *full bodied*, balanced, rich, and very fruit forward. The *flavor* profile is a delicious *boysenberry* and *vanilla oak* blend with *notes* of *blackberry* with a hint of *blueberry*. The *finish* is *dry* and its moderate *dusty tannins* are nicely *prolonged*. This tasty fruit *bomb* is a wonderful wine. Grill up a big stack of messy ribs and enjoy it with this gem. Enjoy – Ken<sup>2</sup>

In this example, the visual descriptors include notions of transparency, color and pitch. Its smell is described through words denoting objects, *raspberry* and *licorice*, and the color term *black*, and its taste through berries, spices and wood, with *notes of* and *hints of* other berries, suggesting musical overtones. The finish, or the aftertaste, is what is left on the palate after the wine has been swallowed. It is described through a notion of touch (*dry*) and substances (*tannins*) that have a tactile effect in the mouth, here also described to be both subdued by dust and presented to be moving along an unbounded scalar dimension of LENGTH.

Two things make the description of wine particularly challenging. Firstly, as in sensory descriptions in general, there is an alleged paucity of sensory vocabulary, in particular in the domain of smell (Engen 1982; Sweetser 1990; Holz 2007; Vanhove et al. 2010; Burenhult & Majid 2011; Majid & Burenhult 2014), and although all sensory perceptions are important in wine assessment, smell is of particular importance, since if you block your nose, you cannot taste the wine. Secondly, the very transformation of perceptions into cognition calls for exploitations of form-meaning resources that can communicate the ineffable. Wine reviewers have to make use of the conceptual domain matrices evoked by words denoting concrete objects and situations in the world in order to be able to straddle the gap between perception and cognition. The elusive mixture of sensations in wine tasting takes the form of mixed metonymizations, metaphors and similes in wine reviewing discourse. Such construals of meaning are taken to be motivated by the fact that concrete word meanings elicit qualitatively different processing in the form of mental imagery than abstract word meanings in that they evoke rich sensory experiences which are intimately tied up with our experiences in life (Huang et al. 2010). Expressions evoking a mixture of ontological sources, construed through synaesthetic metonymizations (zone activations) of specific conceptual dimensions or through

---

<sup>2</sup> <http://www.kenswineguide.com/> (accessed on 4 November 2011)

metaphors and similes are essential for the transfer of sensory perceptions into text and discourse (Caballero & Suárez Toste 2010; Paradis 2010; Caballero & Paradis 2013; 2015)

The contention of this chapter is that when we experience comestibles or beverages such as wine, our entire sensorium is activated at more or less the same time along with our aesthetic and emotional responses. Portrayals of sensory perceptions in wine reviews are mixed because they are affected by the fact that the sensory perceptions themselves merge into a mixture. Section 2 provides a short account of the tasting event in relation to the textual structure of wine reviews. Section 3 relates how the stream of sensory experiences of the wines are described using terminological descriptors through properties and objects, followed by a description of metaphors and similes and their role in the representation of sensory and aesthetic experiences in section 4. In Section 5, the focus is on the discursive role of mixed imagery in winespeak and how the socio-cultural dimension of consumption also affects the way that mixed imagery is drawn on in wine reviews. Section 6 concludes the chapter.

## 2. Describing and evaluating sensory experience

Wine reviews normally deal with one or more of three different events: the production of the wine, the description/assessment of the wine tasting experience and a reference to the future consumption, for instance the wine's ideal drink time. This is illustrated in (2) by means of a review from Robert Parker's wine magazine *The Wine Advocate*.<sup>3</sup>

- (2) While this is a strong effort from a property that too often does not live up to its pedigree, I had hoped the 2005 Beychevelle would merit an even higher score. A deep ruby/purple hue is accompanied by a sweet perfume of roasted herbs, black cherries, and even blacker fruits. The wine is medium to full-bodied with sweet tannin, good acidity, and a fruitcake-like spiciness and earthiness. Pure and long with a tannic clout that is neither intrusive nor excessive, this elegant, powerful effort should be at its finest between 2017-2030.

The three different events that are referenced in (2) are fundamentally distinct in terms of time and space frames, source of evidence and mode of knowing (Hommerberg & Paradis 2014). The first sentence provides information about the background and the production of the wine, followed by the description of the sensory experience of the actual tasting event, where the source of evidence is first-hand information about the reviewer's direct visual, olfactory, gustatory and tactile perceptions. The very last piece of information offers an assessment and a recommendation of the future consumption event.<sup>4</sup> The reviewer's source of evidence when referring to ideal future drinking time is an intricate mixture of inferences based on the reviewer's background knowledge and wine tasting experience as well as on the perceptual experience of the wine reviewed.

The central part of the review text is the depiction of the tasting event, and many reviews include only this part, as illustrated by Jancis Robinson's text in (3):<sup>5</sup>

- (3) Bright crimson. Extremely sweet and ripe – almost New World – with some floral aspects. This one is lively and flirtatious with some pretty dry sandy tannins underneath. Rather unusual. Could do with just a tad more acidity to lift it. Just a bit confectioned? Very brutal finish.

<sup>3</sup> <https://www.erobertparker.com/entrance.aspx>

<sup>4</sup> For more details about recommendations in wine reviewing, see Paradis (2009a, 2009b) and Hommerberg (2011).

<sup>5</sup> <http://www.jancisrobinson.com/>

As noted in previous investigations of wine discourse, the presentations of the tasting event are typically iconic descriptions of the tasting practice, i. e. wine reviewers' descriptions of the tasting event mirror the journey of the wine from the glass through the nose and the mouth and finally into the gullet or the spittoon (Silverstein 2003; Herdenstam 2004; Caballero 2007; Hommerberg 2011; Caballero & Paradis 2013). The iconic representation of the tasting procedure, which is a typical feature of wine reviews, is shown in Table 1, where the reviews written by Robert Parker and Jancis Robinson, represented as (2) and (3), have been broken down in accordance with the sensory perceptions that the text refers to:

Table 1. Breakdown of wine reviews (2) and (3) into three perceptual domain descriptions<sup>6</sup>

	Robert Parker	Jancis Robinson
VISION	<i>A deep ruby/purple hue</i>	<i>Bright crimson.</i>
	<i>is accompanied by</i>	
SMELL	<i>a sweet perfume of roasted herbs, black cherries, and even blacker fruits.</i>	<i>Extremely sweet and ripe – almost New World – with some floral aspects.</i>
TASTE and TOUCH (mouthfeel)	<i>The wine is medium to full-bodied with sweet tannin, good acidity, and a fruitcake-like spiciness and earthiness. Pure and long with a tannic clout that is neither intrusive nor excessive,</i>	<i>This one is lively and flirtatious with some pretty dry sandy tannins underneath. Rather unusual. Could do with just a tad more acidity to lift it. Just a bit confectioned? Very brutal finish.</i>

While this representation may seem simple and straightforward when we read the wine texts, the tasting procedure involves highly complex interactions of sensory perceptions which are related to the requisites and limitations of the human senses. In the wine tasting situation, the senses are ordered hierarchically so that one can smell the wine without tasting and feeling it, but one cannot experience the taste and mouth-feel without simultaneously smelling the wine. The visual experience is in a super-ordinate position compared to all the other senses, since the color of the wine can be observed without interference of other sensory input. Physiologically, vision is also known to be our most consistent source of objective data about the world. Herdenstam (2004: 60) points out that as much as one third of the brain is occupied by the interpretation of visual information, while only 1% of the capacity of the brain is dedicated to smell, and the senses of smell and also of taste are associated with much more subjectivity than vision. Smell is known to appeal to emotions, but to simultaneously be an elusive phenomenon from a cognitive point of view (Classen et al.1994:2–3). Zucco (2007:161) notes that communication among humans about olfactory perception is complicated by the fact that humans are conscious of smells only when they are present: It is not possible to retrieve olfactory stimuli from memory, since olfactory representations are not conceptual, merely perceptual. This characteristic of the sensory apparatus dates from primate evolution, when humans began to exchange olfactory perspicacity for enhanced color vision (Goode 2007:81).

When interacting with the wine, tasters experience the wine through all their senses more or less at the same time, not one at a time. The visual inspection is an exception, since it takes place prior to the entirely individual internal bodily experience of the taster. The experiences are processed in the brain and eventually supporting and contributing to the experience that has to be described through the language in the reviews. As clarified by Table 1, the references to vision and smell are more or less clearly distinguishable. In Parker's as well as

<sup>6</sup> We sincerely thank Ms Jancis Robinson and Mr Robert Parker for giving us access to their wine reviews for the purpose of this study.

Robinson's review, the descriptions of the gustatory and tactile properties of the wine (taste and touch) are however intertwined, presumably because at the third stage of the tasting procedure, when the wine is in the mouth, the different sensory inputs are difficult to tease apart. The term *palate* is in fact often used to refer to both of those sensory domains.

### 3. Sensory descriptors

The role of words and expressions in winespeak as in human communication generally is to trigger the activation of conceptual structures, constrain their application in accordance with the current context and to activate sensory and kinesthetic experiences. Whereas activations of such experiences are taken to be of crucial importance for symbolization more generally (Oakley 2009: 125), they play an even more central role in descriptions of vision, smell, taste and mouthfeel in wine reviews. It has been shown in the linguistics literature that descriptions of perceptions are characterized by synesthesia (Viberg 1984: 136; Sweetser 1990; Shen 1997). Olfactory experiences are described in terms of things and events that we perceive through our eyes (Lehrer 1975; Morrot et al. 2001; Popova 2003, 2005; Plümacher & Holz 2007; Paradis & Eeg Olofsson 2013; Paradis 2015b). In the psychological literature, there is evidence that suggests that verbal descriptions are not essential, or even necessarily activated, for successful odor-guided cognition. For instance, Parr, Heatherbell & White (2002) show that whereas olfactory perceptual skill is critical to wine expertise, verbal skill such as forced naming of a perceived odor and/or matching terms may in fact interfere with olfactory performance in some situations. Similarly, Herdenstam (2004:79) observes that when the wine taster concentrates on the component parts in order to give an analytic (decomposed) description of the wine tasting experience, the synthetic aspect (the unity) of the experience is eclipsed. Many descriptors of the smell of wine express everyday things that most readers can relate to and have past experiences of, e.g. fruit (*apple, lemon*), herbs and spices (*vanilla, nutmeg*), flowers and plants (*violet, cedar*), sweets (*chocolate, jam*), beverages (*coffee, tea*) and minerals (*chalk, earth*). Common descriptors also relate to body parts of human beings (*body, backbone, nose*) and to people's personalities and behavior, such as *masculine, shy, intellectual* and *voluptuous* (Suárez 2007; Caballero 2007).

Paradis & Eeg Olofsson (2013) identify two main types of more terminological descriptions of the sensory perceptions. The first type of description is through words for properties along dimensions in the different sensory modalities as well as properties of objects, in which case the objects are named. They list some common and typical descriptors for the visual experiences, using collocates of *color* in their data base, for the olfactory experiences, using *aroma*, and finally for gustatory and tactile experiences using *palate*. The results are shown in Table 2.

Table 2. List of examples of different descriptors of *color*, *aroma/s* and *palate*

<i>color</i>	<i>aroma/s</i>	<i>palate</i>
<i>black, blue, amber, crimson, garnet, deep-ruby, green, purple, plum, red, white</i>	<i>apricot, earthy, floral, game-like, oaky, Oriental, musty, spice-box, perfumed, almond,</i>	<i>austere, big, chewy, dense, dry, deep, fat, pure, rich, ripe, supple, sweet, long</i>
...	<i>apple, blackberry, rose, nut,</i>	...
<i>dark, deep, soft, solid, shallow, bright, dense,</i>	<i>peach</i>	<i>textured, creamy-textured,</i>
<i>brilliant, full, strong, weak,</i>	...	<i>silken-textured,</i>
<i>young, thick</i>	<i>animal-like, caramel-infused, chocolate-drenched, cassis-</i>	<i>concentrated, multi-dimensional, sustained, oily</i>



---

...	<i>scented</i>	...
	...	
	<i>deep, dusty, focused, full,</i>	
	<i>huge, expansive, thin, tight</i>	
	...	

---

As Table 2 shows, the descriptors of *color* are basically of two types: conventionalized color terms, such as *black* and *crimson*, which are descriptors relating to visual assessments, and descriptors such as *dark*, *deep* and *soft*, which are used across the sensory perceptions. The descriptors that combine with *aroma/s* are mainly objects of different kind, such as *apricot*, *spicebox*, *apple*, but also derivations such as *animal-like* and *cassis-scented* and again cross-modal property words such as *deep* and *thin*. Interestingly, color descriptors can in fact also be found to explicitly modify *aromas*, as in (3), although such combinations are very rare in the database.

- (3) The Abruzzo might seem rather far south for Chardonnay, but the mountains of the interior cool down temperatures during the evening and night, and the 2001 Chardonnay Marina Cvetic, in addition to its ripe lemon and *white aromas* and subtle oak spices, manages to combine a tonic acidity to the volume and viscosity of the flavors.

Furthermore, among the descriptors of *palate* in Table 2, both cross-modal terms such as *dry* and *deep* and modality specific terms such as *textured* and *oily* are frequently used. It deserves to be pointed out that both *color*, *aroma/s* and *palate* are modified by descriptors that evoke properties; only *aroma* and *aromas* are modified by object descriptors.<sup>7</sup> However, although most of the object descriptors are mainly employed to describe olfactory characteristics, it is important to note that these objects also provide visual as well as gustatory and tactile information. The object descriptors represent a mixture of different sources, from various different spheres such as FRUIT, FLOWERS and PLANTS, HERBS and SPICES, SWEETS, BEVERAGES, and MINERALS. These concrete objects are used to evoke contingent properties that the objects produce or properties that are typical of them. They are also the kind of objects that form part of most wine descriptions and terminologies, such as the Aroma Wheel (Noble et al. 1984), which was developed by oenologists at the University of California at Davis for descriptions of smell. The Aroma Wheel has been further developed for both whites and reds and for taste as well by the German Wine Institute.

As already mentioned, smell, taste and touch, unlike visual experience, are perceived *effects* of the wine. They are more strongly tied to the experiencer and less autonomous (Dubois 2007: 173–175). In a study concerned with the categorization of odors, Dubois (2007) notes that there is no prior categorization to build on, and what is more, olfactory sensations do not have names, at least not in Indo-European languages. It should, however, be noted that the differences across cultures may be greater than we think due to the fact that very little research on these things has been carried out in cultures other than Western cultures (Classen 1993; Howes 2004, 2011; Majid & Levinson 2011; Díaz Vera & Caballero 2013; Majid & Burenhult 2014; Caballero & Paradis 2015; Paradis 2015a). Dubois reports on an identification experiment of 16 familiar odors across 40 participants. The experiment shows

---

<sup>7</sup> Paradis & Eeg-Olofsson (2013) and Paradis (2015b) offer a semantic analysis of the cross-modal descriptors for properties and objects, construed through synesthetic metonymizations. They argue for a monosemy view of the meanings of those descriptors, which means that, while the type of construal is one of metonymization (a salience phenomenon), they are not metonyms proper but rather zone activations within senses (Paradis 2004/2011).



that the majority of the responses to the olfactory test items by the participants include the name of the *source* of the odor, such as LEMON, ORANGE and APPLE. On a more specific level, the participants produce specifications such as *sweet lemon*, *green apple* or use a name of another artifact such as *lemon drops* or *apple shampoo*. This is also what we encounter in wine descriptions in wine reviews.

#### 4. Sensory and kinesthetic imagery

The second type of description identified by Paradis & Eeg-Olofsson (2013) is the use of imagery including both metaphorization and similes. These techniques are secondary in the sense that, while properties and object descriptors are always present, the descriptions construed as metaphorizations and similes are not always present. Properties and objects contribute with stative descriptions, while metaphorizations and similes tend to be more dynamic and kinesthetic. The expressions of meanings that are dynamic may involve verbs/adjectives or nouns construed through metaphors and similes in ontological domains such as ANIMATE BEINGS, BUILDINGS, MACHINES, MALLEABLE ENTITIES, and EXPLOSIVE ARTIFACTS.<sup>8</sup> The main function of the dynamic expressions is to describe the experience of taste and touch as well as to give a holistic evaluative description of the wine. Unlike the object descriptors from the vegetal, chemical or geological spheres, discussed in Section 3, the metaphors and similes are both more dynamic and also more clearly associated with an evaluative element. They lack the terminological basis that characterizes the previously described synthetic metonymizations. An indication of this is that metaphorical descriptions are not found in Aroma Wheels or other analysis schemas but are more idiosyncratic across wine critics and perhaps they can be said to be one of the distinguishing-marks of their writing styles. Examples (4), (5), (6) and (7) from *Wine Advocate* all contain expressions of imagery.

- (4) In the past I have described certain wines as being like *ballerinas*, *well-known actresses*, *football players*, etc. These are *rugby players*, strong, rough (at first), but explosive, with considerable stamina (staying power)
- (5) If tasting [X] was like *swallowing and electric eel*, this is like *getting hooked up to a generator*.
- (6) The 1996 Chateaneuf du Pape smells like *an old hippy haven* with its incense, smoky, roasted herbs, and fleshy, overripe black cherry fruit.
- (7) ... this *blockbuster* reminds me of Mohammed Ali - "*It floats like a butterfly and stings like a bee*." It is majestic, large-scaled, and undoubtedly a future legend.

All the above examples are tokens of the critic's efforts to be both crystal clear and perhaps also entertaining. In (4) Robert Parker is making a metadiscursive contrast on his own writing, pointing out that *ballerinas*, *actresses* and *football players* are distinct from *rugby players*. Examples (5) and (6) are both vivid descriptions of the taste and smell respectively, and (7) gives a forceful description of the wine in question in which the reviewer concludes with a general evaluative description in the form of a mixture of metaphor, *blockbuster*, and three

---

<sup>8</sup> Note that the vast majority of potentially dynamic meanings, i.e. verbs, do not at all express dynamic meanings but stative meanings such as 'being' and 'possessing'.

similes in a row, *reminds me of Mohammed Ali* and *floats like a butterfly and stings like a bee*, mixing the notion of blockbusters, boxers, with fragile and elegant creatures such as butterflies and bees, which are clearly more potent, audible and punctual than the slow, sailing movements of the butterfly. The critic, in this case Robert Parker, makes his presence explicit by using the word *me*, adding a personal meditative, emotional touch to the simile.

Caballero (2007) reports on the use of manner-of-motion verbs in wine reviews when exploring them from the point of view of figurative language in wine discourse. She reports that these descriptions are used to provide general evaluations as well as information about the smell and the taste of wines in a dynamic, rather than in a static way, as shown in examples (8), (9), (10), and (11) (examples (11), (33), (35) and (20) respectively from Caballero (2007).

- (8) [This wine] *kicks off* with the purest scent of smashed berries, and then offers up a supercharged black-cherry-laden palate.
- (9) Here's a wine that doesn't slap you silly, but *creeps up sideways*, with seductively soft tannins that carry subtle flavors and blackberries and herbs.
- (10) Sturdy, rich and detailed, with complex, earthy currant, sage, mineral tobacco and anise flavors that *fan out* and saturate the palate.
- (11) [This wine] *pours* out beautifully focused pear, quince, honey and spice flavors, yet manages to feel elegant and restrained as the flavors *sail on and on*.

Caballero notes that the manner-of motion verbs are either used to describe something that happens very abruptly or something that is durative indicating that the wine has the potential of lingering for a long time. Examples (9), (10) and (11) are all dynamic renderings of the experience of the wines; (8) is an example of the abrupt initiator, while the others are durative. The descriptors that express forcefulness and abruptness are often found early on in the wine review, while descriptors that express duration and persistence are often used in the final evaluation of the wine.

As suggested by the title of this chapter, VISION is an extremely important source of information in the context of wine description and evaluation. It is the first stage of the tasting event which provides hints about the smell, taste and touch and about the status of the wine in terms of quality and age.<sup>9</sup> The importance of vision in the choice of object descriptors for smell in the wine reviews in corpus data can be explained with reference to an experimental investigation carried out by Morrot et al. (2001). They set up an investigation of the interaction between VISION and SMELL assessments in wine description in two steps. The first part is a lexical analysis of descriptors used in wine tasting comments by a French wine maker and experts from one English and two French wine tasting guides, which showed that when the smell of a wine was described, the descriptors used denoted objects that have the same color as the wine, i.e. dark objects for red wine and light-colored objects for white wine. The lexical analysis led them to hypothesize that the existence of synaesthesia of SMELL and VISION in wine description is psychophysically grounded. The hypothesis was later confirmed by an experiment, in which the smell of a white wine artificially colored red with an odorless dye was described by means of descriptors used about red wines by a panel of 54 professional tasters. Because of the visual disinformation, the olfactory information went unnoticed by the tasters. According to Morrot et al. (2001), humans have never developed a specific olfactory

---

<sup>9</sup> Even though the universality and primacy of vision may be questioned, or deserve to be questioned, it is of particular importance for wine assessment (Howes 2013).

terminology to describe odors, which obviously constitutes a serious challenge for wine critics. Corpus evidence of wine descriptions from Paradis & Eeg-Olofsson's investigation also reveals that the smell descriptors pattern differently in the descriptions of red wines and white wines, as shown in (12) and (13).

- (12) The 2003 Chardonnay Sbragia Limited Release (2,000 cases) is surprisingly restrained and delicate for this cuvee. Medium to full-bodied, with copious quantities of *buttered popcorn*, *pineapple*, *orange blossom*, and *melon* characteristics as well as outstanding depth, purity, and balance, it will last for 2-3 years.
- (13) ... The dark, saturated ruby color is followed by an unevolved, super-rich nose of *roasted herbs*, *nuts*, *black fruits*, and *Asian spices*. Spectacularly rich, with an unctuous, multi-dimensional flavor profile, and a chewy, robust finish, this big wine (14.5% alcohol) exhibits marvelous balance, as well as the potential to last for 10-15 years.

Example (12) is a description of a white wine and (13) of a red wine. What is important here is the critic's choice of descriptors for smell. In the case of smell descriptors of the white wine (*butter*, *popcorn*, *pineapple*, *orange blossom*, *melon*), the colors of the descriptors are light, while the reverse is true of the descriptors of the red wine (*roasted*, *nuts*, *black fruits*). The sum of them together is more than the individual descriptors. The clearly light objects and the clearly dark objects have an effect of what may not be as clearly colored, e.g. *Asian spice*.

As has been shown, most of the descriptors span over more than one of the sensory domains and their use in those different domains does not give rise to ambiguities or infelicities in language use, which, had that been the case, would be suggestive of substantial sense distinctions (Paradis & Eeg Olofsson 2013, Caballero & Paradis 2013 – also, including architecture). Many of the descriptors are actually explicitly used for descriptions of more than one modality, e.g. *soft color*, *soft smell*, *soft taste* and *soft textures* and so are the properties of the objects, e.g. *lemon*, *vanilla*, *blackberry*, which are primarily descriptors of smell, but in that capacity they also range over the other modalities as shown in (12) and (13). Most of the descriptors which, for instance, are used in the part of the text describing smell, are clearly crucial for our understanding of the color, taste and touch of the wine. Paradis & Eeg-Olofsson's (2013) and Paradis (2015b) argue that synesthetically flexible notions map onto the same primitive concepts for the different sensory perceptions, or put differently, no conceptual primacy exists in the realm of sensory perceptions. The contention is that it is not the case that SOFT smell is primarily a notion of touch. *Soft* spans the experiences of sharp of the sensory perceptions of VISION, SMELL, TASTE and TOUCH. They call the conceptual preference hierarchy into question and thereby also the primacy of earlier uses of the words as an argument for primacy. Instead, they argue that the lexical syncretism is grounded in how the conceptualization of our sensorium works, i.e. we cannot taste something without smelling something and we cannot taste something without feeling something, and over and above everything, in wine tasting, is the sight of the wine. Even though vision seems to have special status in wine tasting, the investigations do not provide support for the notion of conceptual primacy of one of the meanings as reflected in language. This does not mean that we fail to acknowledge the physiological differences between the various specific sensory modalities, but what we do acknowledge in the context of wine assessment is that, at the conceptual level and at the level of the transformation of sensory perceptions into conceptual structure and subsequently into language, there is the flexibility of the uses of the descriptors. Conceptual structure in the domain of sensory experiences appears to be a supramodal representation, expressed through syncretic word forms, which do not pertain to a single type of experience but to an overarching representation capable of capturing modal convergences and similarity

structures that define categories, such as properties of objects and imagery (Binder & Desai 2011, Paradis 2015b).

## 5. The discursive role of imagery

The past few decades' exploding interest in wine among new groups of consumers worldwide has entailed an increasing demand of authoritative consumption advice in this field. Deference for authority is a natural way of shaping our understanding when we access any new domain of knowledge, and most of today's international consumer groups can be understood to enter the epistemic domain of wine as adults without previous cultural background to influence their judgment of taste (Orrigi 2007:185–187). In response to the globalized wine trend, the writing of wine reviews has developed into a profession in which people can earn money and in some cases even make a living (Charters 2007:157). The wine review is therefore an expansive field of discourse, where the talents of the critic are crucial for successful communication with the readers, and hence for professional success.

The role of imagery in wine reviews is multifaceted, opening up for a mixture of potential discursive impacts. Imagery has the discursive potential of selecting and thereby simultaneously concealing parts of the communicated experience, thus persuading the addressee to see the world in certain particular ways rather than others. In addition, metaphors can function as covert ways of establishing communal values without apparently imposing a value system on the addressee. Simultaneously, the use of imagery can forge interpersonal bonds and contribute to the construction of both the writer's and the addressee's identity, since it draws on shared associations with past experiences (Charteris-Black 2004:11–13). An additional function of imagery, especially in genres such as the wine review, which are constrained by a limited format, is that it allows several layers of meaning to be communicated in a condensed linguistic form. It is therefore economical.

Among wine lovers, it is common that the experience of wine is first and foremost seen as an aesthetic pleasure similar to the experience of art or music, and for that reason wine reviews often contain mixtures of imagery that range over the whole register of aesthetic and emotional responses in the reader. Although an instance from literature rather than the wine reviewing genre, the following passage from Evelyn Waugh's *Brideshead Revisited* can perhaps be seen as an extreme illustration of mixed aesthetic imagery in wine description. Framed as the narrator's nostalgic memory of prewar carefreeness, it describes the two main characters' aesthetic/emotional response to their experience of tasting three different wines from an ancestral British wine cellar:

'...It is a little, shy wine like a gazelle.'  
'Like a leprechaun.'  
'Dappled, in a tapestry meadow.'  
'Like a flute by still water.'  
'...And this is a wise old wine.'  
'A prophet in a cave.'  
'...And this is a necklace of pearls on a white neck.'  
'Like a swan.'  
'Like the last unicorn.'

The quotation above is taken from a passage in which the two main characters of Waugh's novel, Charles Ryder and Sebastian Flyte, are engaged in tasting wine in Sebastian's aristocratic home. Under the increasing influence of the wines' alcohol, they come up with more and more colorful, poetic depictions of the wines they are tasting. Although the two

gentlemen are thus portrayed as somewhat intoxicated, it is not impossible to interpret the vivid imagery of their discourse as having some kind of meaning in relation to the sensory experiences evoked by the wines they are discussing. For instance, the expressions *shy like a gazelle*, *pearls on a white neck* and *the last unicorn* may bring to mind characteristics such as reserve, youth, purity, innocence and chastity. When associated with the target domain of wine, these characteristics can be taken to refer to a young wine with restrained smell and taste, which at its present stage of maturity does not overwhelm the senses, but which holds promises of future sensory and aesthetic delights as it reaches its full maturity. *Leprechaun*, when associated with wine, may be understood as an unreliable wine whose smell is captivating, suggesting a hidden treasure, but which ends up being a disappointment since the taste of the wine does not confirm the quality that the smell promised. *The wise old prophet in the cave* conjures a fully mature wine, which has developed all its olfactory and gustatory potential. *Pearls on a white neck* as well as *prophet in a cave* are conceivably associated with a positive value, while we can imagine *leprechaun* to carry negative evaluation, although this value is only communicated covertly so that it has to be inferred by the interlocutor. Hommerberg & Don (2015) offer a taxonomy for analyzing the values expressed in winespeak based on the Appraisal model.

It is noteworthy that Charles and Sebastian employ a combination of metaphor and simile in their dialogue. The strategy of using the explicit marker *like* to signal that the comparison between source domain and target domain is not self-evident, but rather incomplete or hypothetical (Low 2010:295). In the dialogue above, *gazelle*, *leprechaun*, *flute*, *swan* and *unicorn* are presented as meaningful sources of comparison in order to enhance the recipient's understanding of the discussed entity, but the simile marker allows the focus of attention to remain concentrated on the target domain, i.e. the wine. This contrasts with the depictions of the wines as being *shy*, *wise*, *a prophet in a cave* and *a necklace of pearls*, where the recipient's capacity to construe the comparison is taken for granted rather than explicated in the text. In this passage, it is interesting to note how metaphors and similes work in combination to reinforce the interlocutors' depictions of the wines' qualities. For instance, the metaphorical description of the wine as being *shy* is subsequently intensified by the simile which compares the wine's shyness to that of a gazelle, an animal which depends on its innate reserve for its survival.

While the mixtures of imagery used by Charles and Sebastian may have the capacity to invoke certain aesthetic responses and evaluations with respect to the wines' qualities, they simultaneously construe the invoked source domains as being accessible to and meaningful for the two participants, thus confirming their group identity. The imagery used in the passage positions the novel's characters as members of a group for which references to *tapestry meadow* and *pearls on a white neck* evoke comparable past experiences, essentially associated with British upper-class upbringing, acculturation and education, where the capacity to enjoy sensory pleasure from consumption experiences was elevated to an art associated with extreme refinement in true Romanticism spirit. While it should be noted that Waugh's novel is written in the aftermaths of the Second World War and sheds critical rather than idealizing light on the extravagance of the prewar period, the passage nonetheless serves as an illustration of the socio-cultural role of imagery in the register of winespeak.

Silverstein (2003), who has studied wine reviews written by the British expert Michael Broadbent, takes particular note of occurrences of figurative expressions such as *well-bred* and *gentlemanly*. Broadbent's wine jargon positions the audience as members of a social group identifying itself with respect to inherited breeding and life-long acculturation, while simultaneously excluding those that do not belong to this group. Shesgreen (2003) however, observes that "the language of social class and gender", which used to be popular in wine reviews during the latter half of the 20th century, is more or less out of fashion among today's

most influential wine critics. Instead, what he refers to as “the language of fruit and vegetables” (extending into the domain of wine through a process of metonymization, or more precisely zone activation as discussed by Paradis & Eeg Olofsson (2013) and Paradis (2015b) is currently more widespread, at least among American wine writers.

While confirming Shesgreen’s observation concerning the strong preponderance of fruit and vegetable descriptors, Hommerberg’s (2011) study of American wine critic Robert Parker’s reviews also reveals patterns of mixed imagery that seemingly reach beyond portraying the purely perceptual dimension of the wine tasting experience, which is exemplified in (14) below:

- (14) *Lush*, medium-bodied, and *sensual*, it will benefit from 1-2 more years of bottle age, and should drink well for 12-14.

The use of *lush* and *sensual* in (14) invites association to somewhat imprecise source domains, leaving the exact interpretation of these items up to the addressee. While *lush* suggests abundance or opulence in general, the co-occurrence in this particular instance with *sensual* may tend to, from a male, heterosexual perspective, inspire associations to the characteristics that the items *lush* and *sensual* would refer to in the domain of WOMAN and apply these to the domain of WINE. The potential discursive impact of such imagery is manifold: On the level of the sensory perception of this particular wine, the items can be taken to communicate a view of this wine as being unrestrained and accessible in its supply of olfactory and gustatory qualities. Simultaneously, while this is not overtly articulated, the choice of imagery in (14) also covertly invites the audience to share the evaluative position that being unrestrained and accessible are desirable qualities in a wine. A further understanding of the potential meaning-making that these items may give rise to is to position the writer and audience in the same group as members of a male, heterosexual discourse community. For female readers, the corresponding stereotypical reading of the same items might be that drinking this wine is like being a lush, sensual woman who is attractive to heterosexual men. While the presentation may thus invoke the source domain of WOMAN, it is worth noting that the association is only drawn on implicitly by means of the metaphorical invocation of the source domain. The construction represents the comparison between source domain and target domain as accessible to and unproblematic for readers. This makes the metaphor different from the simile, which specifies the relation between source domain and target domain as one of partial similarity rather than identity, as illustrated below by the constructed example (14a):

- (14a) This medium-bodied wine is *like a lush, sensual woman*. It will benefit from 1-2 more years of bottle age, and should drink well for 12-14.

The degree to which the expressions *lush*, *sensual* in 14 actually do invoke associations to the source domain of WOMAN may of course differ across readers. For a wine expert familiar with Parker’s writing, these items may instead be interpreted as non-figurative, precise descriptors, designating particular sensory impressions caused by chemical combinations in the wine’s molecules (see also Caballero & Suarez Toste 2010). However, since it can be expected that the primary target audience of wine reviews is made up of consumers in general rather than wine experts, it is probable that the source domain of these figurative expressions is still likely to color readers’ interpretations to some extent.

Rather than resorting to myth, aristocracy or poetry to find appropriate source domains for figurative expressions, the associative imagery used by today’s wine critics frequently draws on the worlds of sports, architecture, business, sex and personification in general. The mixture of imagery in (15), which is also taken from a review written by Parker, illustrates how the

source domains of SEX and SPORTS CAR are brought together in order to characterize the aesthetic/emotional impact of the wine's smell:

- (15) Smelling *like a concoction whipped up by a deranged monk who spent too much time in solitary confinement*, it pushes the olfactory senses into overdrive with its array of earthy, jammy fruit, and herb scents.

Rather than stating it explicitly, the allusion to a monk in solitary confinement implies the idea that he thinks of nothing but sex, which leads to a transference of this obsession to the concoction that he is producing. The expression *smelling like a concoction* explicitly signals the partiality of the comparison relation. This contrasts with the corresponding metaphorical version, which is constructed for analytical purposes in (15a):

- (15a) This is *a concoction whipped up by a deranged monk who spent too much time in solitary confinement*.

The tentative similarity relation construed by the simile construction is distinct from the association to the source domain of SPORTS CAR in (15), where the metaphorical expression *pushes the olfactory senses into overdrive* establishes a comparison between the source domain and the target domain without explicitly stating that the comparison relation is one of similarity. In other words, the comparison to the source domain of SPORTS CAR, one of the key symbols stereotypically related to male potency, is presented as unproblematic for readers to associate with the domain of wine. It is therefore less noticeable that this comparison is being made. While the evaluative orientation of this passage is not explicitly stated, both the simile and the metaphor nonetheless invite a positive reading.

The macho lingo that can be found in some of Parker's texts resurfaces in reviews written by other contemporary critics. In (16), which is taken from a review written by Robinson, the critic employs associations with body-building drugs to invite the audience to join her in her negative assessment:

- (16) ...this is a wine *on steroids*. Where is the gentle refreshment value?

While communicating negative attitude, the reference to *steroids* simultaneously identifies the audience as a group for which the connection between the domain of BODY-BUILDING and the domain of WINE is unproblematic. The recipient is implicitly encouraged to imagine a (male) person with an unnaturally sturdy body whose muscles are not, or not only, the result of physical activity. Interpretations may differ among readers, depending on their familiarity with wine discourse. For habitual members of the discourse community, the expression *wine on steroids* may take on a specific meaning, referring to how the wine was produced, suggesting that artificial techniques were employed. This type of imagery in wine reviews can therefore give rise to a mixture of different possible readings. Again, the metaphorical construction suggests a well-established comparison relation, which does not call for a detour through a simile construction.

Since wine critics' careers depend on retaining the audience's interest, mixtures of imagery are sometimes drawn on in wine reviews as attention-grabbing devices to create an element of surprise for entertainment purposes. The following depictions can be seen as examples of such exaggerated present-day imagery:



(17) ...it rumbles like an 18-wheeler over the palate; the finish is like one of those wild skies dotted with angry clouds but sunny with crepuscular beams. Oh man, Rieslaner!<sup>10</sup>

(18) This dark wine...helicopters into the mouth with spinning blades of intense fruit.<sup>11</sup>

It takes considerable effort on the part of the prospective reader to interpret the imagery employed in (17) and (18) so that it becomes meaningful in relation to the context. While it is not easy to imagine what an 18-wheeler could have in common with the taste/mouthfeel of a German white wine, it is perhaps possible that the simile is intended to highlight the wine's grip as it is perceived by the palate's tactile receptors. The potential meaning of the poetic simile involving a dramatic skyline is even more obscure in relation to the qualities of a Rieslaner's aftertaste and evaporation. Perhaps the simile only relates to the emotions evoked by the stunning scenery occasionally encountered in nature and draws on a comparison between these emotions and the emotional response evoked by this wine's finish. The combination of the two similes in (17) also opens up for further interpretations depending on the reader's past experiences. Since this text is intended for promotion on the American wine market, the combination of the two similes may also conjure the familiar image of a huge truck on an otherwise deserted interstate highway pictured against the backdrop of a spectacular skyline. The construction with *like* in (17) invites readers to interpret the relation between source domains and target domain as being not quite established. This contrasts with the metaphor in (18) which construes the comparison between source domain and target domain as taken for granted. The helicopter metaphor drawn on in (18) presumably purports to highlight and reinforce the impression of intensity that the wine gives rise to against the palate (see section 2). Both (17) and (18), while perhaps unusually extravagant, can be said to be typical of today's wine discourse in that the mixtures of imagery drawn on do not tend to invoke myth, inherited breeding and upper-class education. This type of descriptions defines both wine writers and prospective readers as members of a group that is prone to experience wine in terms of present-day phenomena accessible to everyone rather than prestigious heritage suggesting inherited breeding reserved for the few. In contrast to the metaphors and similes in drawn on in Waugh's novel, the mixed imagery used in today's wine discourse relates to a wider audience without aristocratic roots and upper-class education. This development can be seen as a consequence of the exploding interest in wine as a status beverage among ever-growing groups of new consumers world-wide. Importantly, the suggestive, multilayered meaning potential of the mixed imagery used in examples (14) – (18) above could not have been achieved by means of corresponding literal expressions.

## 6. Summary

This chapter is concerned with the descriptions and evaluations of the web of sensory perceptions that arise in the wine tasting practice and which subsequently are written up and communicated through language to the readers of the discourse community. The transition from the tasting practice to the discourse practice involves not only the transition from perception to conception but also the transition into language. Our particular window into the study of these complexities is through the language resources made use of in the wine reviewing genre. We have described how the social context and the purpose of wine

---

<sup>10</sup> The extract presented in 17 is taken from a text written by Terry Theise, an American importer of German wine, which means that the ultimate purpose is to promote rather than review the wine. Nonetheless, Theise is also regarded as a reputed authority.

<sup>11</sup> Example (18) is from a review written by Andrew Jefford for *Financial Times* of London.

reviewing serve as the motivating mechanisms for the mixture of ontological domains to enable successful communication. This involves the weaving together of the descriptions of the different individual senses to an experience that also activates the whole sensorium.

What we note is that the mixing of ontological structure is pervasive in wine reviewing. It may be regarded as *the* technique used in the descriptions at the discourse level as well as at the level of the meanings of words and constructions. The terminological analytical descriptions are rather well-established terms for properties and objects from a mixture of ontological domains, and the holistic and synthetic descriptions are often more idiosyncratic metaphors and similes that by definition are construals of comparison across domains in which case the source domain is a 'concrete' conceptual structure and the target domains an 'abstract' ditto. We have identified ontological mixtures (and lexical syncretism) both in the case of terminological expressions of property descriptors such as *soft* and *sharp*, and object descriptors referring to vegetal, chemical and geological matters that in spite of their being descriptors of smell, range over the sensory perceptions involved in the tasting event, i.e. SMELL, TASTE and TOUCH. However, in contrast to the more stative and terminological descriptors, there are different types of imagery where we more clearly deal with comparisons across domains and cultures as is the case for metaphors and similes such as the flavors that *sail on and on*, or the wine that is like an *old hippy haven*. In contrast to the terminological descriptors, the source domains of the imagery and the mixture of imagery used in the wine reviews reflect certain socio-cultural values and thereby play an important role for the creation of a sense of belonging and affinity.

## 7. References

- Binder, J. R. & Desai, R. H. (2011). The neurobiology of semantic memory. *Trends in Cognitive Sciences*, 15. 11., 527–536.
- Burenhult, N., & Majid, A. (2011). Olfaction in Aslian ideology and language. *Senses & Society*, 6.1., 19–29.
- Gibbs, R. W. (2010) The wonderful, chaotic, creative, heroic, challenging world of researching and applying metaphor: A celebration of the past and some peeks into the future. In L. Cameron (Ed.), *Metaphor in the real world*. Amsterdam: Benjamins.
- Caballero, R. (2007). Manner-of-motion verbs in wine description. *Journal of Pragmatics* 39., 2095–2114.
- Caballero, R. & Paradis, C. (2013). Perceptual landscapes from the perspective of cultures and genres. In Caballero, R & Díaz Vera, J., *Sensuous cognition – Explorations into human sentience – Imagination, (e)motion and perception*, 77–105. Berlin: de Gruyter Mouton.
- Caballero, R. & Paradis, C. (2015). Making sense of sensory perceptions across languages and cultures. *Functions of language*, 22.1, 1–19.
- Caballero, R. & Suárez Toste, E. (2010). A genre approach to imagery in winespeak. In Low, G., Todd, Z., Deignan, A., & Cameron, L. (Eds.), *Researching and Applying Metaphor in the Real World*, 265–287. Amsterdam/Philadelphia: John Benjamins.
- Charteris-Black, J. (2004). *Corpus approaches to critical metaphor analysis*. Basingstoke: Palgrave MacMillan.
- Charters, S. (2007). On the evaluation of wine quality. In Smith, B. C. (Ed.). *Questions of taste. The philosophy of wine*. Oxford: Signal books. 157–182.
- Classen, C. (1993). *Worlds of Sense. Exploring the Senses in History and Across Cultures*. London: Routledge.

- Classen, C., Howes, D. & Synnott, A. (1994). *Aroma. The cultural history of smell*. London & New York: Routledge.
- Deutsches Weininstitut. Available at [www.deutschesweine.com](http://www.deutschesweine.com).
- Díaz Vera, J. & Caballero, R. (Eds.). (2013). *Sensuous cognition – Explorations into human sentience – Imagination, (e)motion and perception*. Berlin: de Gruyter Mouton.
- Dubois, D. (2007). From psychophysics to semiophysics: categories as acts of meaning. A case study from olfaction and audition back to colors. In Plümacher, M. & Holz, P. (Eds.) *Speaking of colors and odors*, 167–185. Amsterdam/Philadelphia: John Benjamins.
- Engen, T. (1982). *The perception of odors*. New York: Academic press.
- Goode, J. (2007) Wine and the brain. In Smith, B., C. (Ed.). *Questions of taste. The philosophy of wine*, 79–98. Oxford: Signal Books.
- Herdenstam, A. (2004). *Sinnesupplevelsens estetik. Vinprovaren, i gränslandet mellan konsten och vetenskapen*. Stockholm: Dialoger. English title: *Experience of an aesthetic sensation. Wine tasters in the field between art and science*.
- Holz, P. (2007) Cognition, olfaction and linguistic creativity: Linguistic synesthesia as poetic device in cologne advertisement. In Plümacher, M. & Holz P. (Eds.) *Speaking of colors and odors*, 185–202. Amsterdam/Philadelphia: John Benjamins.
- Hommerberg, C. (2011). Persuasiveness in the discourse of wine: the rhetoric of Robert Parker. Växjö: Linnaeus University Press.
- Hommerberg, C. & Paradis C. (2014) Constructing credibility through representations in the discourse of wine: Evidentiality, temporality and epistemic control. In D. Glynn, D. & Sjölin, M. (Eds.) *Subjectivity and Epistemicity. Stance strategies in discourse and narration*.
- Hommerberg, C & Don, A. (2015). Appraisal and the language of wine appreciation: a critical discussion of the potential of the Appraisal framework as a tool to analyse specialised genres. *Functions of Language*.
- Howes, D. (Ed.) (2004). *Empire of the Senses: The Sensual Culture Reader*. Oxford: Berg.
- Howes, D. (2011). Cultural synaesthesia: Neurological vs. anthropological approaches to the study of intersensoriality. *Intellectica* 55,. 156–87.
- Howes, D. (2013). Sensuous Cognition: the language of senses. In Caballero, R & Díaz Vera, J. (Eds.), *Sensuous cognition – Explorations into human sentience – Imagination, (e)motion and perception*. Berlin: de Gruyter Mouton.
- Huang, H-W., Lee, C-L & Federmeier, K. D. (2010). Imagine that! ERPs provide evidence for distinct hemispheric contributions to the processing of concrete and abstract concepts. *Neuroimage* 49,. 1116–1123.
- KensWineGuide. Available at [<http://www.kenswineguide.com/>]. Date of access 4 November 2011.
- Lehrer, A. (1975). Talking about wine. *Language* 51.4: 901–923.
- Low, G. (2010). Wot no similes? In Low, G., Todd, Z. Deignan, A. and Cameron, L. (Eds). *Researching and applying metaphor in the real world*. Amsterdam & Philadelphia: John Benjamins.
- Majid, A. & Levinson, S.C. (2011). The senses in language and culture. *Senses and Society*, 6.1,. 5–18.
- Majid, A. & Burenhult, N. (2014). Odors are expressible in language, as long as you speak the right language. *Cognition* 130.2. 266–270.
- Morrot, G., Brochet, F. & Dubourdieu, D. (2001). The color of odors. *Brain and Language* 79,. 309–320.

Noble, A., Arnold, R., Buechsenstein, J., Leach, E., Schmidt, J., & Stern, P. (1984). Modification of a standardized system of wine aroma terminology. *American Journal of Enology and Viticulture*, 107–109[CP1].

- Oakley, T. (2009). *From attention to meaning: explorations in semiotics, linguistics, and rhetoric*. Berlin: Peter Lang.
- Orrigi, G. (2007). Wine epistemology: The role of reputational and ranking systems in the world of wine. In Smith, B. C. (Ed.). *Questions of taste. The philosophy of wine*. Oxford: Signal Books. 183–197.
- Paradis, C. (2004/2011). Where does metonymy stop? Senses, facets and active zones. *Metaphor and symbol*, 19.4. 245–264 (reprinted in P. Hanks & R. Giora (Eds.), *Metaphor and Figurative Language: Critical Concepts in Linguistics*, Amsterdam: Routledge).
- Paradis, C. (2009a). This beauty should drink well for 10–12 years: A note on recommendations as semantic middles. *Text & Talk*, 29.1., 53–73.
- Paradis, C. (2009b). Prime time: the middle construction in wine drinking recommendations. In Bowen, R., Möbärg, M. & Ohlander, S. (Eds.), *Corpus and discourse - and stuff. Papers in honour of Karin Aijmer*, 243–251. Gothenburg Studies in English 96. Acta Universitatis Gothoburgensis.
- Paradis, C. (2010). Touchdowns in winespeak: Ontologies and contruals in use and meaning-making. In Goded Rambaud, M. & Poves Luelmo, A. (Eds.), *Proceedings for the 1<sup>st</sup> Congress on linguistic approaches to food and wine descriptions*, 57–72. Madrid: UNED University Press.
- Paradis, C. (2015a). Meanings of words: theory and application. In U. Hass & P. Storjohann (Eds.) *Handbuch Wort und Wortschatz (Handbücher Sprachwissen-HSW Band 3)* Mouton de Gruyter, Berlin.
- Paradis, C. (2015b). Conceptual spaces at work in sensuous cognition: Domains, dimensions and distances. In Gärdenfors, P. & Zenker, F. (Eds.), *Applications of Geometric Knowledge Representation*. Dordrecht: Springer Verlag.
- Paradis, C. & Eeg-Olofsson, M. (2013). Describing sensory experience. The genre of wine reviews. *Metaphor & Symbol*. 28.1.1–19.
- Parker, R. Available at <https://www.erobertparker.com/entrance.aspx>.
- Parr, W., Heatherbell, D. & White, G. (2002). Demystifying wine expertise: Olfactory threshold, perceptual skill, and semantic memory in expert and novice wine judges. *Chemical senses*, 27.8, 747–755.
- Plümacher, M. & Holz, P. (Eds.). (2007). *Speaking of colors and odors*. Amsterdam: John Benjamins.
- Popova, Y. (2003). ‘The fool sees with his nose’: metaphorical mappings in the sense of smell in Patrick Süskind’s *Perfume*. *Language and Literature*, 12., 135–151.
- Popova, Y. (2005). Image schemas and verbal synaesthesia. In B. Hampe (Ed.), *From perception to meaning: Image schemas in cognitive linguistics*, 1–26. Berlin & New York: de Gruyter.
- Robinson, J. Available at <http://www.jancisrobinson.com/>.
- Shen, Y. (1997). Cognitive constraints on poetic figures. *Cognitive Linguistics*, 8.1., 33–71.
- Shesgreen, S. (2003). Wet dogs and gushing oranges: Winespeak for a new millennium. *Chronicle Review* (online), 49. Available at <http://chronicle.com/free/v49/i26/26b01501.htm>.
- Silverstein, M. (2003). Indexical order and the dialectics of sociolinguistic life. *Language and Communication*. 23., 193–229.
- Sweetser, E. (1990). *From etymology to pragmatics: metaphorical and cultural aspects of semantic structure*. Cambridge: Cambridge University Press.

- Suárez Toste, E. (2007). Metaphor inside the wine cellar: On the ubiquity of personification schemas in winespeak. *Metaphoric.de*, 12,. 53–64.
- Vanhove, M. (2008). Semantic associations between sensory modalities, prehension and mental perceptions: a crosslinguistic perspective. In Vanhove, M. (Ed.), *From Polysemy to Semantic Change: Towards a Typology of Lexical Semantic Associations*, 343 –370. Amsterdam: John Benjamins.
- Viberg, Å. (1984). The verbs of perception: a typological study. *Linguistics* 21.1,. 123 –162.
- Zucco, G. M. (2007). The unique nature of a memory system. In Plümacher, M. & Holz, P. (Eds.) *Speaking of colors and odors*, 155–165. Amsterdam: John Benjamins.

Draft