Sensory perceptions in language and cognition

Paradis, Carita; Caballero, Rosario

2012

Link to publication

Citation for published version (APA):

General rights
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

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.
WORKSHOP: Sensory Perceptions in Language and Cognition

In SLE 2012. 45th Annual Meeting of the Societas Linguistica Europaea, 29 August – 1 September 2012

Convenors

Rosario Caballero (University of Castilla-La Mancha, Spain)
MRosario.Caballero@uclm.es

Carita Paradis (Lund University)
carita.paradis@englund.lu.se

Summary and aims of workshop

While activations of sensorial experiences are considered to be of crucial importance for symbolization involving high-order cognitive processes (Oakley 2009:125), they are also part and parcel of our daily experiences, including language. For instance, the knowledge and skills of architects, perfume makers, potters, piano tuners, chocolatiers or oenologists require that they are ‘tuned’ to various sense modalities and sensory literacies—from single sense modalities to multiple ones. Even such mundane tasks as choosing a particular brand of toothpaste, soap, clothes or stationary, booking a table at a restaurant, or downloading mobile ring signals reflect our inclinations towards certain colours, smells, textures, tastes or sounds, and our decisions are the result of—conscious or unconscious—operations involving several senses. In other words, we are born synaesthetes, i.e. intrinsically cross-sensory beings, even if cultural factors often shape our sensory literacy in fundamental ways.

Regardless of the basic and ubiquitous nature of sensory perceptions and experiences, the subject still remains under-explored in linguistics—in contrast to what happens in other disciplines within the humanities such as anthropology, psychology, or philosophy (Dutton 2009; Howes, 2003; Merleau-Ponty 1945/1962; among others). Howes (2003: 16) points out that cultures are not only “ways of sensing the world”, but, more importantly, “the sensory profile of a culture […] can mold not only how people interact, but the very form in which they think”. In the framework of Cognitive Semantics, Leonard Talmy (1996: 244-245) has proposed the notion of conception as a possible construct to overcome the scholarly tendency to deal with “discrete categories and clearly located boundaries” through “a cognitive domain encompassing traditional notions of both perception and conception”. If we want to gain further insights into the ways we construe the various worlds at our disposal, the intimate relationship between our sensing, thinking, and communicating the world(s) cannot be neglected.

The overall objective of this workshop is to contribute to our understanding of how various cultures and communities sense the world by paying attention to one of its more accessible manifestations, namely language. The workshop attempts to bring together scholars working on various aspects of how sensory perceptions are verbally manifested and using different methodologies—experimental as well as discourse-based. This involves paying attention to how our lexical resources as well as our discourse, or genre resources shed light on how sense perceptions might be organized in our minds and how we communicate our sensing the world. The general questions addressed in the workshop are the following:

- How do we talk or write about sight, taste, smell, touch and sound (lexical-grammatical resources)?
- What are the concepts and figurative mechanisms that are most often used in describing these sensory experiences?
How do cultural and disciplinary factors influence the way we describe sensory perceptions in text and discourse? How does discourse interaction respond to or reflect those?

The contributions listed below cover the aforementioned questions by paying attention to a wide range of languages, e.g. English, Spanish, Italian, French, Swedish, Finnish, German, Romanian, Hungarian, Polish, Russian, Mandarin, Ewe, Chinese and Lithuanian, some using corpus tools, others approaching the topic from a more experimental perspective. Thus, some contributions focus on how sensory perceptions are conceptualized as suggested by lexicalization patterns, and the semantic, syntactic and pragmatic aspects of perception verbs. Other contributions explore more specific sensory experiences and discuss the linguistic encoding of taste, sight and hearing in various languages and genres. Some papers discuss lexical and syntactic aspects of synesthesia and the translation issues involved, while others are concerned with how sensory expressions contribute to aesthetic evaluation across languages. Finally, the more experimental approaches deal with the psychological factors involved in the construal of sensory categories across languages and cultures.

References


Workshop participants in alphabetical order

| Bieler, Larissa, University of Zürich | On understanding taste: Cooperation strategies on meaning constitution in conversations about taste |
| Diederich, Catherine, University of Basel | The semantics of crispy and crunchy: A corpus-based analysis of taste-related adjectives |
| Dubois, Daniéle, CNRS – LAM (Paris) | Words of knowledge: Naming and discourses for sensory categories |
| Fedriani, Chiara, University of Bergamo | Perception verbs as attention-getting devices: A typological study |
| Gebaila, Anamaria, University of Bucharest | Lexicalized synaesthesia in literature – translation aspects |
| Gladkova, Anna, University of New England, Australia & Romero Trillo, Jesús, Universidad Autónoma de Madrid | The semantics of aesthetics in a contrastive perspective (English, Russian, Spanish) |
| Huumo, Tuomas & Jurtom, Mari, University of Tartu | What is it that we perceive? Differences in construal and the structural alternation in Finnish and Hungarian expressions of the stimulus in perceptive relationships |
| Majid, Asifa & Levinson, Stephen, C., Max Planck Institute, Nijmegen | The language of perception across cultures |
| Norcliffe, Elisabeth, Max Planck Institute, Nijmegen | The lexical organization of perception verbs |
ABSTRACTS IN ALPHABETICAL ORDER ACCORDING TO NAMES OF AUTHORS

ON UNDERSTANDING TASTE. COOPERATIVE STRATEGIES ON MEANING CONSTITUTION IN CONVERSATIONS ABOUT TASTE

Larissa M. Bieler (University of Zürich)

Keywords: taste, conversation analysis, sense-making, co-construction, intersubjectivity, adjectives

Talking about taste is an intersubjective communication about individual perceptions. The present study focuses on interactive processes how subjective experiences are verbalized and made accessible in conversations about taste. Using instances of focus group conversations among German adults, this contribution aims to detect discursive means and patterns used – also beyond the word boundaries – and to analyse their functioning.

Taste is seen here in a linguistic perspective as a relational, interactive or even a “dialogical” phenomenon. Taste is only accessible when the perception is verbalized between subjects. Making taste comprehensible for the interlocutors is thus possible in and through language – and more precisely: in and through dialog. In sensory communication, meaning of words is verbally and physically negotiated and therefore considered as a co-construction, emerging from and observable in discourse. Participants in discussion systematically make clear to each other how the verbalizations of taste that they use are to be understood locally.

As part of an effort to understand the notion of meaning as an interactional achievement, the analysis focuses on discourse strategies being used to constitute meaning and achieve mutual understanding in the verbalization of taste sensations – and on the process of semantic condensation into a lexical form (mostly adjectives!) through the construction of a common agreement. Given the fact that the German vocabulary specific to communicate taste sensations is fairly restricted, the focus is also on the pragmatics on sensory communication, namely how we use language resources to communicate about taste.

The data material is based on the corpus of the interdisciplinary project “Sensory Language and The Semantics of Taste” (see www.sensorysemantics.ch): the corpus contains audio-visual recording of 34 focus group discussions on taste adjectives (fresh, natural, crunchy) and on degustations of food and beverages (Coca Cola, bread, yoghurt, apple).
These focus group talks are limited-time group discussions with usually 5 to 8 persons, aged between 20 and 35 years. Moderators lead the discussions, stimulating the talk with questions and steering it thematically, but otherwise intervening as little as possible in the course of the discussion. The transcriptions are made appropriate to GAT 2 (see Selting et al., 2009).

I first will present a selection of strategies used by speakers to clarify meaning in a discourse. These strategies – metadiscoursive strategies, strategies on a lexical and morphological level, comparisons, synaesthetic references, metaphors and metonymies – are employed to solve the task of taste description. The focus of this contribution then lies on the “references to the outside world”. These are procedures, which show the transfer of knowledge in the group discussions as a communicative construction, given the fact that understanding taste is always based on individual and shared prior knowledge. It is thus molded also by individual life and individual communicatory history as well as by cultural and social prefigurations of the corresponding speech community. Therefore, I deal with the linguistic cues “tense-shift, personal marks and evidential marking”.

I emphasize on three points to underscore the importance of a dialogical approach in the study of the semantics of taste: sense-making, semiotic mediation and the co-construction of knowledge as powerful means to make subjective experiences accessible for others in conversations about taste. I am lead to conclude that understanding taste is possible considering it as intersubjectivity and commonality in the minds of the participants. To achieve mutual understanding in conversation about taste means sharing an experience and also temporary and partially sharing and assuming social knowledge in the given situation (see Linell, 2009: 81 on intersubjectivity, and Clark, 1996: 98 on common ground).

Therefore, processes of meaning constitution in conversation should benefit to be further investigated with the methods of the conversation analysis (Deppermann, 2007:310). Furthermore, the use of focus groups as data mining for semantic analysis is methodologically innovative (see also Markova et al, 2007).

References


THE SEMANTICS OF CRISPY AND CRUNCHY: A CORPUS-BASED ANALYSIS OF TASTE-RELATED ADJECTIVES

Catherine Diederich (University of Basel)

How do you like your waffles? Light and crispy, with a touch of fresh fruit sweetness, or rich and chocolaty? Descriptions of taste perceptions in everyday language use differ from the standardized definitions in scientific contexts to achieve consensus (Lehrer 2009). Strictly speaking, the sensory scientific notion of taste only includes the five basic taste terms (bitter, salty, sour, sweet, umami), however, from experience we know that the perception of taste and its linguistic encoding does not only involve that which we perceive via the taste buds on our tongue. There are a range of adjectives used in descriptions of food and taste. The conceptual domain of taste is broad, involving for example multisensorial aspects and evaluations of tastes. While we communicate taste in a variety of ways, we hardly reflect on the meaning of our descriptions.

This work explores grammatical and conceptual relations in the usage of taste-related adjectives such as crispy and crunchy. The data has been collected from the Corpus of Contemporary American English. As adjectives are semantically underspecified (Paradis 2000: 237), in order to grasp the full meaning potential of the adjectives at stake, the meaning and referential domains are made out in the context of use. The aim of this work is to semantically frame the corpus results and to categorize the activated meaning aspects: while a crunchy salad refers to a product’s freshness, a crunchy cookie links to the sound effect during biting. Different associations are evoked depending on co-occurring words and the broader context. The results are analyzed both qualitatively, in that the highlighted meaning aspects are coded, and quantitatively, aiming to show whether certain highlighted aspects show a significant appearance in the conceptualization of a notion. In a further step, crispy and crunchy are contrasted with their “equivalents” in the German language. This comparison highlights culturally-bound conceptualizations and usages regarding taste and texture-related lexical items.

References


WORDS OF KNOWLEDGE. NAMING AND DISCOURSES FOR SENSORY CATEGORIES

Danièle Dubois (CNRS – LAM Paris)

Psychological experimental research on perception has traditionally developed in the visual domain along a philosophical tradition that presupposes well defined entities “in” a world “to be perceived”, together with a conception of language as a nomenclature (the lexicon as labels “on” things), and analytic experimental procedures. However, as soon as you enlarge the research to everyday life situations, such as in the evaluation of the sound quality of a piano (Cheminée, 2009), comfort aboard a train (Delepaut, 2007a, b), the visual quality of a car


2 The interdisciplinary project Sensory Language and the Semantics of Taste (http://www.sensorysemantics.ch/) for example pinpointed the usage and meaning of an array of German taste terms through focus group and corpus linguistic analysis.
interior (Cance, 2008a; Dubois et Cance, 2010), the qualification of wines by different experts (Langlois, et al. 2011; Vion, 2009), we had to face several issues in psychology and in linguistics as well:

- The linguistic (mainly lexical) resources and devices available in one (i.e French) language differ for every sense modality: if color terms (adjectives) are numerous and shared (Dubois & Grinevald, 2003), there is no specific adjectives for odors accounted by referring (through nouns) to odorant sources (Dubois & Rouby, 2002); In audition, lexical forms can be adjectival terms referring to physical properties (grave/aigu), nominal forms referring to sound sources (“cars”), and also forms constructed on verbs (“grincement”) (Dubois, 2007).

- From a semantic point of view, most sensory words are regularly polysemic, metaphoric, (Rossi, 2009), “holisensoriels” (Cance, 2008) in contrast with consensual well defined terms in expert discourses (Cheminée, 2006) and descriptors in sensory analysis practices for ex. (Giboreau et al., 2007).

- Correlated with variations in language, psychological investigations (such as free sorting task experiments) allow to identify a diversity of symbolization processes involved in constructing sensory categories as “acts of meaning” (Bruner, 1990; Dubois, 2000): if, in our culture, odors largely remain conceptualized as “effects” from the world on a subject, colors stand as abstract concepts referring to “objective/physical” qualities of entities the world. In audition, contrasting descriptions of bruit (noise) and son (sound) reveals that the concept of bruit (noise) is less abstracted from the object-source (odor like) than son (sound), which looks like as colors, as an analytic property of the world.

Furthermore, besides the diversity of lexical forms, other linguistic marks can be identified in discourse analysis, such as personal marks (David, 1997; 2002), metadiscursive marks, evidentials and modalities (Cance, 2008b; Vion, 2009). They allow to characterize different knowledge, diversely elaborated through individual processes (perception and lexical semantics learning) as well as collective practices and expertise (including scientific ones). It prevents us from a simple dualism opposing a unique objective reality (given by natural sciences and “third person” discourse) to subjective worlds. It imposes a shift from the “information processing” paradigm to a situated (Barsalou, 1983) and semiotic approach (Dubois 2007; 2009), reconnecting with the renewal of the phenomenological tradition within cognitive sciences (Varela et Shear, 1999). It also entails reconsidering methodological issues in coupling linguistic and psychological investigations, in exploring the diversity of cognitive constructions scaffold by the diversity of linguistics resources across languages and cultures (Howes, 2006); Evans and Levinson, 2009; Madjid and Levinson, 2011).

Bibliography


The aim of our paper is to explore the development of deverbal discourse markers out of imperative forms of perception predicates through a process of pragmaticalization (e.g. Eng. *Look! Listen!,* Sp. *Mira! Escuche!,* It. *Guarda! Sentire!,* etc.). When these elements are recruited at the level of pragmatics, they no longer act as verbs, but typically function as attention-getting devices, i.e., “pragmatic mechanisms to obtain the addressee's attention” (Romero Trillo 1997: 205). *Look!*, for instance, undergoes a shift from the physical to the cognitive domain through the conventionalized implicature ‘look! (there is something important to see) > there is something important to note’ (Detges/Waltereit 2011) and is no longer used to call attention to something visually accessible. Moreover, while losing (part of) their lexical meaning, such elements acquire procedural and intersubjective functions (Fagard 2010), as in (1) and (2), in which the verbs do not refer to concrete perception anymore.

(1) **Look**, you're not to say anything!

(2) **Sentire**, partiamo dalla cosa piu semplice!

‘**Listen,** we start from the easiest thing.’

In the literature, several proposals have been made as to how this process of pragmaticalization is to be understood (Sweetser 1993, Waltereit 2002, Fagard 2010, Detges/Waltereit 2011) and as to what range of functions different verbs have developed in a number of languages (Dostie 1998, Pons Borderia 1998), often providing insightful comparative analyses (Romero Trillo 1997, Van Olmen 2010, Fagard 2010). However, this body of data cannot be considered as a complete cross-linguistic account, as it mostly relies on a few well-studied families such as Germanic and Romance. The first objective of our study is thus to systematically compare a wider, typologically balanced range of languages. What is more, little has been written about which sensory perception or which degree of passivity (e.g. ‘look’ vs ‘see’) best fits the pragmatic function of attention-getting. For the European languages, it has been noted that the primacy of visual perception verbs is probably due to the fact that, in contrast to other modalities, vision is the primary sense through which we experience the world and which does not really require a special effort (Sweetser 1992: 38). An exploratory study of Mandarin, Ewe, Polish and Lithuanian suggests that this explanation might be true for the languages of the world in general. It seems that, typologically, visual perception is more exploited for attention-getting purpose. Ewe in (3) and Mandarin in (4) can serve as examples here.

(3) **kpɔdja** dɔ to nyuie

‘**Look,** listen carefully.’

(4) **Ní kan**, David, zhe ge kě neng zū yao chong xīn tiāo zhēng

‘**You look,** David, perhaps this needs to be readjusted.’

However, there are differences between cultures with respect to sensory perceptions. In Aboriginal Australia (Evans/Wilkins 2000), for one, eye contact and gaze patterns are considered offensive. In such languages, one might expect verbs of hearing rather than those of seeing to be recruited for pragmatic purposes. This seems to be the case for Kirundi (Van Olmen 2011). In the same vein, one might wonder whether the European reluctance to pragmatize olfactory and gustatory modalities – because they require more effort to be activated and are “less consciously and readily focused” (Sweetser 1993: 38) – holds for all languages. In sum, our typological research seeks to establish i) what is typologically
widespread and what is exotic; ii) if – and to what extent – geographical and cultural factors can influence the pragmatization of perception verbs, or if, by contrast, iii) presumably universal patterns of development do hold and can be explained by means of a implicational hierarchy that acknowledges the distribution of sense modalities.

References


**LEXICALIZED SYNAESTHESIA IN LITERATURE – TRANSLATION ASPECTS**

**Anamaria Gebaila (University of Bucharest)**

Although studies on synaesthesia as a rhetorical figure have been numerous, few researchers have analysed it in everyday language, in associations that lost their synaesthetic value for the speakers and that can be called *lexicalized synaesthesias* (Williams,1976; Paissa,1995; Legallois,2004).

The lexicalized synaesthesia is defined as the extension of meaning of a lexeme from one semantic field of sensory perception to another, through an association easily understandable for the language users, that no longer perceive the association among sensory modalities; such examples are *sharp colours* or *crisp voice*, and their lexicalized status is confirmed by the introduction of these phrases as examples in dictionaries.

Interpreting synaesthesia in a cognitive perspective based on the common element of [intensity] as a variation in the image schema based on the concept of [force] (Cienki,1997:3-4), the present study aims to analyse the amount and the role of lexicalized synaesthesias in the entire corpus of synaesthesias present in Joris-Karl Huysmans’ *À rebours*, in its original
French version (1992[1884]) and in its translations in Italian (1992[1953]) and Romanian (1974); the novel was chosen because of its richness regarding synaesthesias and the comparison between the French version and the Italian and Romanian ones means to look for differences between these three Romance languages in the semantics of synaesthesia. The analysis is concentrated on noun-adjective synaesthesia as adjectives offer the richest material in the transition from one sensory modality to another, but also considers noun-noun and noun-verb synaesthesia and its translations. The study means to treat lexicalized synaesthesia as a prototypical use of certain adjectives for their semantic field, in the vision on prototype given by Rosch (1980).

The comparative analysis reveals differences between the three versions of the novel in the use of lexicalized synaesthesia: while the Italian translator is quite fateful to the original synaesthesias, sometimes choosing to change the order of the adjectival constituents, the Romanian translator to reinterpret literary synaesthesias through lexicalized ones, showing a vivid interest for the target language, but somewhat destroying the literary quality of the novel, that aims mostly at the surprise effect on the reader. Moreover, the relatively low percentage of lexicalized synaesthesias in Huysmans’ novel is correlated to the organization in chapters describing associated sensory perceptions, which enables to spot in these chapters the author’s intent to innovate.

References


THE SEMANTICS OF AESTHETICS VOCABULARY IN A CONTRASTIVE PERSPECTIVE (ENGLISH, RUSSIAN, SPANISH)

Anna Gladkova (University of New England) & Jesús Romero Trillo (Universidad Autónoma de Madrid)

The paper explores linguistic and cultural variation in conceptualisation of the word ‘beautiful’ and related concepts. In particular, it investigates polysemy and spheres of application of the following words: English beautiful, Russian krasivyy, Spanish bonito/a. These words are the most salient examples of the domain of evaluative aesthetics vocabulary in these languages. The study addresses the question of what spheres of perception can be covered by these words (sight, hearing, smell, taste, touch, and sound) and how their meanings can be stated in universal human concepts. As a means of semantic analysis the study implements the Natural Semantic Metalanguage (NSM) developed by Anna Wierzbicka.
and colleagues (Wierzbicka 1996, Goddard and Wierzbicka 2002). NSM is a technique of linguistic analysis that comprises 63 empirically established semantic universals and their syntactic properties. They form a mini-language that lies at the core of any language and can be successfully used to explicate complex and culture-specific meanings. In the domain of perception NSM suggests the following universals: SEE, HEAR, FEEL, TOUCH. These concepts are central in analysing the aesthetics vocabulary along with primitives GOOD, SOMEONE, SOMETHING and THINK. The study proposes semantic explications of the terms in question that can successfully demonstrate similarities and differences in meaning across languages. The data is taken from three online corpora: Russian National Corpus (Russian), Cobuild Wordbanks (English), Corpus de Referencia del Español Actual (Spanish). The study contributes to understanding of ‘naïve aesthetics’ and its encoding in language.

References


WHAT IS IT THAT WE PERCEIVE? DIFFERENCES IN CONSTRUAL AND THE STRUCTURAL ALTERNATION IN FINNISH AND HUNGARIAN EXPRESSIONS OF THE STIMULUS IN PERCEPTIVE RELATIONSHIPS

Tuomas Huumo & Mari Jurtom (University of Tartu)

In a linguistic expression of perception, the range of potential fillers of the experiencer role is relatively narrow: the experiencer must be an animate entity that is capable of sensory perception. In contrast, the nature of the stimulus varies (cf. Dik and Hengeveld 1991): it can be a concrete entity (as in I saw a dog), an event (I saw a dogfight), or some kind of a substance such as radiation (I saw light). Many expressions of sensory (especially non-visual) perception allow alternative conceptualizations of the stimulus either as a signal or as an entity emitting the signal (I heard a nightingale vs. I heard the singing of a nightingale; I smelt a rose vs. I smelt the scent of a rose; for the metonymies involved, see Panther and Thornburg 2003: 225–229). A perceptive relationship can also include mental operations such as the interpretation or evaluation of what is perceived (cf. Kirsner and Thompson 1976; Miller and Johnson-Laird 1976: 583–618), in which case the stimulus can be a proposition expressed by a whole clause (e.g. I saw that he had cried) or another kind of a complex construction (I heard him crying). As Kirsner and Thompson (1976: 209) point out, there are even uses where an event is only perceived globally, without foregrounding its actual participants (I have seen faith accomplish miracles).

In our paper we study the linguistic expression of the stimulus of perception in two Finno-Ugric languages, Finnish and Hungarian. Our special emphasis is on complex constructions that express the stimulus and we set out to find the semantic differences between such constructions. Both Finnish and Hungarian perception verbs allow a wide range of constructions as their grammatical object, extending from whole finite clauses to NP objects headed by a noun and modified by an infinitive, with infinitival constructions in between. In Finnish, the nature of the primary stimulus varies in such constructions: it can be either a grammatical object of the perception verb or a grammatical subject of the infinitival expression or relative clause; cf. Finnish Nää-i-n hääne-t itke-mässä [see-PST-1SG s/he-ACC cry-INF] vs. Nää-i-n hääne-n itke-vän [see-PST-1SG s/he-GEN cry-PRTCP] ‘I saw him/her cry[ing]’ – in the first case the accusative form of the 3rd person pronoun reflects its function as the object of the perception verb, while in the latter example the genitive shows that it is the subject of the infinitive. In Hungarian, on the other hand, it is only the verb form but not the form of the primary stimulus that varies: lättam Őt sítva [see-PST-1SG s/he-ACC cry-
PRTCP] vs. láttam ŏt sírni [see-PST-1SG s/he-ACC cry-INF]. We argue that in general the choice of the construction is related to the conceptualization of the event perceived. We start from the central assumptions of natural syntax (cf. Haiman 1985), which claims that the structure of language is iconic to the meaning expressed, and we examine the possibility that the structural autonomy of the stimulus expression correlates with its conceptual autonomy from the perceiver and the perceptive relationship.

References

THE LANGUAGE OF PERCEPTION ACROSS CULTURES
Asifa Majid & Stephen C. Levinson (Max Planck Institute for Psycholinguistics, Nijmegen)
To what extent is the encoding of perceptual experiences in languages a matter of how the mind/brain is “wired-up” and to what extent is it a question of local cultural preoccupation? Cognitive scientists have assumed that senses such as smell, taste, touch are more ineffable than vision or hearing. On the other hand, cultural anthropologists have illustrated the exquisite variation and elaboration the senses achieve in different cultural milieux. The “Language of Perception” project was designed to test whether the senses are universally expressible – suggesting an architectural constraint on cognition – or whether they differ in expressibility across languages, suggesting cultural shaping. A standardized set of stimuli of color patches, geometric shapes, simple sounds, tactile textures, smells and tastes have been used to elicit descriptions from speakers of more than twenty languages—including three sign languages. The languages are typologically, genetically and geographically diverse, representing a wide-range of cultures. The communities sampled vary in subsistence modes (hunter-gatherer to industrial), ecological zones (rainforest jungle to desert), dwelling types (rural and urban), and various other parameters. We examine how codable the different sensory modalities are by comparing how consistent speakers are in how they describe the materials in each modality. Our current analyses suggest there is substantial linguistic variation in codability of sensory modalities. These results suggest that differential codability may be at least partly the result of cultural preoccupation. This shows that the senses are not just physiological phenomena but are constructed through linguistic, cultural and social practices.

THE ALEXICAL ORGANIZATION OF PERCEPTION VERBS
Elisabeth Norcliffe (Max Planck Institute for Psycholinguistics, Nijmegen)
Lexical typologists have proposed that there are universal constraints shaping how perception verb lexicons are organized across languages, reflecting a basic human psychophysical fact about the relative primacy of the different senses (Viberg 1983, 2001; Evans & Wilkins
2000). Recent evidence from other lexical domains, however, has indicated much more cultural variation in the codability of the senses than this universalist position would predict (Majid & Levinson 2011).

How do we reconcile these views? We revisit the lexical typology of perception verbs, drawing from a database we have developed of 75 languages from 25 different language families. Using multivariate methods, we explore how the senses are ordered and clustered according to different criteria, and to what degree the patterns are cross-linguistically consistent.

We find a strong cross-linguistic tendency for perception verbs to fall along a classical Aristotelian hierarchy of the senses when it comes to the relative complexity of the verb forms: verbs of vision and hearing are typically shorter and morphologically less complex than verbs of tasting and smelling. On the assumption that differential complexity emerges from frequency of use (Zipf 1929), this suggests a striking degree of consistency in the relative frequencies of these verbs across languages. Polysemy patterns, however, exhibit much more cross-linguistic diversity, arguably reflecting cultural differences in how perceptual experiences are chunked and organized.

References

TALKING ABOUT TASTE IN EVERYDAY LIFE AND SENSORY SCIENCE
Maren Runte (ZHAW, Applied Linguistics, Switzerland) & Jeannette Nuessli Guth (ETH Zurich, Switzerland)

Talking about taste is difficult in everyday life as well as in sensory science. As consumers we can easily say whether we like a certain food or not. However, when we are asked to describe taste perceptions the difficulties are apparent.

In collaboration between sensory scientists and linguists we have started to investigate taste terms and their use in the German/Swiss German language. Our analyses are based on data collection of words used in everyday life as well as on sensory lexicons.

Our objective is to demonstrate what characterizes taste vocabularies in both communities and to outline what they have in common and where they are different. Even if there is an overlap in using the same words it is not sure whether the taste terms are used and understood in the same way. Questions we address are what are the difficulties that arise in taste communication and why this is important, e.g. for consumer research. Furthermore, a better understanding of how meaning is created can support panel work in sensory science.

LOOKING FOR SYNESTHETIC ASSOCIATIONS IN EVERYDAY LANGUAGE
Francesca Strik Lievers (University of Pisa, Italy / Polytechnic University, Hong Kong)

Synaesthesia is a privileged point of view from which to observe the association of different senses in language. The term synaesthesia in linguistics refers to a metaphorical process of
transfer from one sensory modality (source) to another (target): a perceptual experience related to one sense is described by lexical means related to a different sense (saying that a \textit{colour} \textit{is warm} is talking of vision in terms of touch, or temperature). In the classic literature about synaesthesia in poetic language (Ullmann 1957, Rosiello 1963) some tendencies and preferred patterns have been recognized: transfers tend to follow a hierarchical order, from the “less differentiated” senses (smell, taste) to the most differentiated ones (hearing, vision). Hierarchies of sensory modalities have been formulated also in studies concerning the semantics of single lexemes. Viberg (2001) proposes for perception verbs a hierarchy where vision is the less marked modality: semantic extensions usually go from one modality to a more marked one, but not the other way around. These two apparently specular hierarchies could be both interpreted as a reflection of the greater psychological relevance of vision (and hearing), which would imply a tendency to enrich the linguistic means to refer to it. If this interpretation is correct, then generalizations from synaesthesia and from perception verbs studies are not contradictory, but converging. To propose well-grounded hypotheses, however, a much wider research on synaesthesia has to be done. The problem with studies like Ullmann’s is that they are based on relatively scant data and, most importantly, these data consist in poetic, or literary, texts, which typically show a high degree of freedom in creating unusual associations of concepts. Looking for synaesthesia in ‘ordinary’ language would allow detecting sensory modalities association patterns that could be more revealing from both a linguistic and a cognitive point of view. To that end, I propose a corpus-based analysis of synaesthesia, even though it is of course not an easy task to automatically recognize metaphors in text (Stefanowitsch - Gries 2006). In the specific case of synesthesia, both source and target domain lexical items belong to the field of perception (broadly intended). The proposed method can then be summarized in the following three steps: 1) Compiling a list (as ample as possible) of perception-related lexemes, with the help of existing lexical resources, 2) Tagging the lexemes in the list according to sensory modality, 3) Mapping the list to corpus data, in order to extract contexts including at least two instances of the lexemes from the list, tagged with two different sensory modalities. The extracted contexts are of this type:

\textit{A visit to Perthshire to [savour]taste traditional Scottish [music]hearing}

Data are from English and Italian, but an extension to other languages is planned for future work. Aim of the analysis is seeing if it is possible to make generalizations about attested vs. non-attested (possible vs. impossible?) patterns of synaesthetic transfer and preferred directions. The results are to be compared to the sensory modalities hierarchies proposed in the literature on poetic synaesthesia and on perception lexicon, and possibly (and cautiously) with the recent findings on neurological synaesthesia: in this last field too, research has drawn attention to the patterns of association within sensory modalities (attested vs. non attested, relative frequency, Novich \textit{et al}. 2011). If some uniformity in synaesthetic patterns is found, this could open a fascinating window into human perception and language.

References


**MAKING SENSE OF PERCEPTION. SENSORY PERCEPTIONS AS PERSUASIVE DEVICES AND EVIDENTIALITY MARKERS IN JOURNALISTIC TRAVELOGUES**

Martina Temmerman (EHB)

**Keywords:** discourse analysis, journalistic writing, evidentiality, representation of sensory experiences

Handbooks for journalistic writing (e.g. Burger & De Jong 2009: 55) often advise (future) journalists to ‘appeal to all senses’ when relating a story, especially in the case of travel journalism, but they do not explain why this is so important. An explanation could be that, travelogues, as Pan & Ryan (2009) call these travel articles published in newspapers and magazines, describe the unfamiliar to the reader, more than any other journalistic genre does. They describe places the reader has not visited (yet) so it is essential that the information should be first-hand, from a journalist who has ‘seen the place with his own eyes’. The fact that the journalist has been there, enhances the truth value of the message. In most cases, travelogues do not only want to share an experience with the reader, they also want to persuade the reader to make the same journey. If this is the purpose, even more ‘evidence’ is needed for the truthful presentation of the description. Involving all senses in the description of the perception makes the representation more complete and might contribute to its persuasive effect.

In order to analyze this representation linguistically, I have collected a sample of 50 travelogues published in Flemish (Dutch language) lifestyle magazines. I will single out all instances of what Halliday (1985) calls mental processes concerning perception, in which the Senser is the journalist. I will categorize the sensory perceptions that are described (also in terms of frequency) and I will give an overview of the linguistic-pragmatic communicative purposes these descriptions have and relate them to the contents being communicated.

According to (amongst others) Hsieh (2008), perception verbs are also a kind of linguistic markers for expressing sensory evidentiality, next to evidential verbs and adverbs. They encode the writer’s evidence for the proposition and in some cases the epistemological positioning of the writer (Bednarek 2006).

Bednarek (2006) and Hsieh (2008) have explored evidentiality in mainstream news discourse. I will compare their findings to the way evidentiality is marked in travelogues. In news discourse, by indicating sensory evidentiality, journalists ‘engage in attaining a maximal balance between their awareness that they cannot be neutral and their belief that they should fulfill the requirement of objective reporting’ (Hsieh 2008: 219). I will show that sensory evidentiality in travelogues is used differently in a twofold way. On the one hand its purpose is to prove the presence of the reporter on the location and on the other hand it is used to virtually replace the reader’s senses, in order to give the reader the feeling of being present or the urge of wanting to be present.

**References**

TRANSFOMING MUSIC INTO LANGUAGE: WAYS OF TALKING ABOUT SENSORY-PERCEPTUAL EXPERIENCE THAT IS CHINESE MUSIC

Adrian Tien (National University of Singapore)

Can music and language be rigorously compared and studied against one another? The answer is that they can be, as long as there is a recognition that (1) we are grappling with two fundamentally different representational systems: one which is sonic (music) and the other which is linguistic (language); (2) we only look at where music and language overlap, rather than where they are entirely different and distinct; and (3) there is a reason and an awareness why we are making such comparisons. Without these “provisos”, comparing music to language would be like comparing apples to oranges. Whilst some work have been done on the so-called “musico-linguistic interface” based on a recognition of the above, most scholarly attention has been given to a comparison of musical sounds and speech sounds e.g. Bloomfield (1933), Jackendoff (1993), Chao (1956), Lam (2010) etc.. But then there is nothing surprising about this since, auditory and acoustic perception readily manifests itself as an obvious area where music and language directly intersect.

This paper sheds important new light on the musico-linguistic interface with the above provisos in mind; in particular, it argues that, whilst music in itself cannot be analysed via linguistic means, aesthetic and cultural concepts written about music can. In western music, composers have generally continued the tradition of “describing” how their works should be performed e.g. Italian terms such as affettuoso ‘tenderly’ and con anima ‘with spirit’ etc. and German words such as Leidenschaft ‘passion’ and innig ‘heartfelt, sincere’ etc.. These musical terms are, essentially, aesthetic and cultural concepts talking about or describing sensory experiences (i.e. music) that are to be expected in a rendition or perception of the work. These concepts can be rigorously explained using language.

The present study draws from a selected range of Chinese musical concepts which encapsulate aesthetic and cultural meanings that can be subjected to linguistic elucidation. Musical concepts in Chinese present a compelling and ideal focal point of study since many have been in use for several millennia and, understandably, these concepts are deeply rooted in the Chinese culture. These concepts not only provide us with a window through which to tap into Chinese music but they are also “cultural key words … which reflect the core values” of Chinese culture (based on Wierzbicka 1991: 333). As our linguistic tool for analyses, the current study adopts the Natural Semantic Metalanguage (NSM), as advanced by Wierzbicka and Goddard over the last 40 years or more (e.g. Goddard & Wierzbicka 2002 and Wierzbicka 1996). By using a set of 64 lexically universal and semantically simple/irreducible “primes” such as FEEL, HEAR, and GOOD/BAD etc., this model allows us to decompose the meanings of Chinese musical concepts into configurations of semantic primes, thus making it possible to “study, compare, and explain” these concepts (Wierzbicka 1991: 333). Analysed meanings of these Chinese concepts illustrate how, why and in what respects these concepts attest to important aesthetic and cultural values in Chinese, as intended in the musical interpretation or perception of the sensory experience that is Chinese music.
Selected references


VERBS OF PERCEPTION AND THEIR EXTENSIONS INTO OTHER SEMANTIC FIELDS FROM A TYPOLOGICAL AND CONTRASTIVE PERSPECTIVE

Åke Viberg (Uppsala University)

Typologically, verbs of perception have been studied from various perspectives. Viberg (1984, 2001) looks primarily at differentiation within the semantic field of perception verbs, whereas Evans & Wilkins (2000) and Vanhove (2008), look at the extension of perception verbs into the field of cognition. The sentential complements of perception verbs has also attracted rather much attention from typologists (Dik & Hengeveld 1991, Boye 2010). There are also a number of detailed comparisons of perception verbs in European languages such as Enghels’ (2007) comparison of French and Spanish visual and auditory verbs and Whitt’s (2010) study of evidentiality and perception in English and German. In this presentation, I will discuss the set of basic semantic parameters that contribute to the structure of the field of perception verbs, the extension of perception verbs into other fields and the types of syntactic constructions in which verbs of perception play an important role.

In addition to a brief general overview, the contribution will present results from a corpus-based contrastive study in progress on Swedish verbs of perception. This study is based on data from the Multilingual Parallel Corpus (MPC) consisting of extracts from (at present) 22 Swedish novels and their translations into English, German, French and Finnish. To a more limited extent, translations of the Swedish texts into other languages than the four mentioned are included in the corpus. There are also some original texts in other languages than Swedish, which makes it possible to widen the comparison on points of special interest. This study is an extension of work earlier presented in Viberg (2008) and partly also in Viberg (2005). Examples of the topics dealt with are the relation between perception and areas such as cognition and evidentiality and extensions into semantic fields such as social contact (See you tomorrow!) and causation (the supervision causative (see to it that-S). An interesting characteristic of Swedish is also the polysemy of låta ‘let; sound’.

References


APPRAISAL EMBODIED IN ENGLISH AND SPANISH VISUAL PERCEPTION TERMS EMPLOYED IN WINE TASTING NOTES AND THEIR POLISH TRANSLATIONS.

Bozena Wislocka Breit (Universidad Politécnica de Madrid)

**Key words:** appraisal, colour, hue, tasting note, translation, wine

Wine, therefore oenology, had always been present in the Iberian Peninsula, but it was only in the second half of the twentieth century when it erupted with force in California, Australia or New Zealand. Strikingly, in less than thirty years since then, it has become an everyday topic in the Polish language as well.

Martin and White (2005) consider appraisal as one of the major discourse semantic resources. Appreciation, itself belonging to the ampler frame of attitude, is further divided into subgroups of reaction, composition and valuation, which go hand in hand with the three basic stages of wine tasting: visual, olfactory and proper taste. The unusually high frequency of foreign words present in Polish tasting notes, along with specific technical terms and uncommon literary expressions, enhance the consumer’s feeling of belonging to a selected social milieu insofar as acquiring a superior quality product.

This inexorable need of translation of imported wine’s tasting notes, here written in Iberian Spanish and in different Englishes, along with the almost complete lack of contemporary proper Polish oenological terminology, have given rise to a completely new lexicon, created ad hoc by Polish importers and semi-professional wine tasters. Due to these circumstances, and to the foremost need to promote wine sales, the texts thus produced show a wealth of neologisms, borrowings, and lexical and syntactic calques, all bearing strongly marked positive features and connotations (Wislocka, 2005, 2010).

Of all sensory sensations, only visual perceptions can be shared simultaneously by different individuals; also their lexical domain contains, comparatively, a much greater number of lexemes than the remaining olfactory sensations, i.e. taste and smell, which defy being truly shared. In this paper, therefore, we will concentrate on the visual phase of the wine tasting, postponing the other two, purely olfactory, for a subsequent research. We hope to show, in a detailed contrastive analysis of chromatographic terms describing wine colour, gloss, transparency, clarity, reflection, iridescence, and viscosity, that direct and sometimes
clumsy translations to Polish have led to, and allowed a greater than otherwise would be expected liberty in creating neologisms and added freely new connotations to already existing lexemes.

The analysis was performed on c.a. 300 tasting notes published by one of the specialized Polish bimonthly publications dedicated to wine: "Swiat win” [El Mundo del vino] since its origins in 1999 until 2010 (Krakow, Poland). These notes have been grouped into four corpora created ad hoc, according to the country of origin of the wine: 34 notes corresponding to New Zealand, 35 to California 93 to Australia and 150 to Spain. Subsequent analysis with the WordSmith Tools has demonstrated their positive polarization through high frequency of positively marked lexemes. Polish texts, when compared with the corresponding notes in English and Spanish, proved to be either direct translations, or more or less free versions, in these cases the original texts were considered parallel corpora.

References