

## 1.1 Universals and the perception lexicon

An important contribution in the study of sensory language is **Viberg’s (1983)** survey of perception verbs. Viberg examined how the lexical field of perception is carved up in various languages according to sense **modality** (vision, hearing, touch, taste, and smell) and more general semantic components which he called activity, experience, and source-based. **Activity** refers to a process that is controlled by the perceiver (as in *look at*), **experience** refers to a state that is not controlled (as in *see*), and **source-based** refers to constructions where the perceiver is omitted (e.g., *The tree looks big*).

Combining the 5 sense modalities with the 3 components leads to 15 different **perception situations** that could be lexicalized in different ways across languages. Table 1 shows how, according to Viberg’s analysis, English has two or more basic expressions for visual and auditory situations, but only a single verb for tactile, gustatory or olfactory situations.

	Activity	Experience	Source-based
SIGHT	look at	see	look
HEARING	listen to	hear	sound
TOUCH		feel	
TASTE		taste	
SMELL		smell	

To test how languages organize the semantic space of perceptual experience, Viberg compared translations from over 50 languages of a set of 15 sentences depicting the logically possible scenarios. Based on these comparisons, he made a number of **universalist** conclusions concerning the structure of the perceptual lexicon. One of them was **the hierarchy of sense modalities**:

**see > hear > touch > taste, smell**

This implicational hierarchy reflects the directionality of **meaning extensions** across sense modalities: terms that have a basic ‘sight’ meaning may be extended to a ‘hearing’ meaning, but the reverse extension from hearing to sight is not to be found.

The hierarchy suggests that vision is the most salient sense modality across languages. In fact, Viberg (1983) presents a number of arguments in favor of vision being in “first place”. First, there is a near-universal presence of a basic perception verb meaning something like ‘see’ across languages. Second, there is high elaboration of lexical items referring to vision. Third, vision

lexicalization patterns predict lexicalization patterns in other sense modalities (e.g., a language will not have an agency distinction like *listen (to)* versus *hear* in hearing verbs unless it also has one in sight verbs). And finally, there are more non-perceptual extensions (e.g., meanings concerning cognition and social interaction) for vision verbs in comparison to other sensory modalities.

Sweetser (1990) argued further that a link between **intellection and sight** in the language of the senses was universal, because vision is “our primary source of objective data about the world”. Sweetser also notes the significance of audition in human intellection, but relegates touch, taste and smell to subjective experience, with only a small role to play in the mental domain.

The primacy of vision over the other senses appears to be well supported by our underlying biology. Humans, like other primates, display considerable visual specialization including high visual acuity (=Sehschärfe), stereoscopic vision, trichromacy, and large visual cortices (Barton 2006). Some estimates suggest that up to 50% of the cortex may be involved in visual function (Palmer 1999). Therefore, the apparent linguistic dominance of vision may be rooted in our pan-human evolutionary history.

Universalist claims, such as those of Viberg and Sweetser, have not been accepted by everyone. Other scholars argued that “sensory perception is a cultural, as well as a physical act” (Classen 1997), and that cultures make use of different sensory domains in different ways, thus exhibiting substantial variation in the processes and values that are associated with them. Senses other than sight can be vaulted to the forefront, as in Feld’s (1982) study of the “ear-minded” Kaluli from the Highlands of Papua New Guinea, or van Beek’s (1992) work on “smell as a social frontier” amongst the Kapsiki of Cameroon and Nigeria. And though Evans & Wilkins (2000) found support for Viberg’s hierarchy in regard to **polysemous extensions** across sense modalities, they argued that in Australian languages audition was a more important source for cognition meanings than was vision. Against this backdrop, Aikhenvald & Storch (2013) have questioned the validity of Viberg’s and Sweetser’s linguistic claims, arguing that the language samples used by these researchers are not representative of the world’s languages. According to them “[t]here is hardly any doubt that universal claims concerning the preferred status of ‘vision’ (e.g., Viberg 1983; Sweetser 1990) are highly Eurocentric, and do not hold for the majority of non-Western societies” (Aikhenvald & Storch 2013).