

## Vantage theory and linguistic relativity

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### Abstract

Rob MacLaury's Vantage Theory, VT, models the way in which a cognizer constructs, recalls, uses, and modifies a category in terms of point of view or vantage. Alongside of VT, there is place for the kind of semantic specification found in the lexicon. VT2 (Allan 2002, "Vantage theory, VT2, and number", *Language Sciences* 24 (5–6), pp. 679–703) was proposed to preserve a quasi-traditional, comparatively formal semantics while accommodating the importance of viewpoint to meaning. In MacLaury's VT an object or event is categorized relative to the perspective of a cognizer such that VT is a theory of points of view which give rise to categories. VT2 captures the conceptualizations that lie behind the various elements in the cognizer's categorization such that it is a theory of points of view embodied in conceptualizations. In this paper I adopt Adam Głaz's useful concept, Extended Vantage Theory (EVT), to encompass both VT and VT2.

There is an underlying assumption in EVT that categorization reflects human needs and motives, which obviously intersects with linguistic relativity. Humboldt was the originator of the linguistic relativity hypothesis: "Die Sprache ist das bildende Organ des Gedanken" (p. LXVI from Humboldt 1863, Einleitung. *Über die Verschiedenheit des menschlichen Sprachbaues und*

*ihren Einfluss auf die geistige Entwicklung des Menschengeschlechts*, in *Über die Kawi-Sprache auf der Insel Java*, Erster Band, Druckerei der Königlichen Akademie der Wissenschaften, Berlin). Humboldt judged that because language and thought are intimately connected, the grammatical differences between languages are manifestations of different ways of thinking and perceiving. The structure of language affects perceptual processes and also the thought processes of speakers. This view passed via Steinthal to Whitney and hence to Boas, who initiated the furor over Eskimo words for snow being incommensurate with English words for snow; but the disparity can be explained as the adoption of alternative vantages.

However, the linguistic relativity hypothesis seems to have language determining vantage instead of it being the language-user who does so – which is contrary to MacLaury's view. I argue that the weak version of linguistic relativity preferred by Whorf allows that while language shapes cognizers to adopt a certain point of view it does not prevent them from adopting a different one, particularly if they become aware of different vantages: this is the route by which languages become mutually intelligible.

I conclude that EVT and linguistic relativity are mutually compatible and mutually enlightening.

*Keywords:* Categorization; Conceptualization; Extended Vantage Theory; Humboldt; Linguistic Relativity; Point of View; VT2; Whorf

## **1. Overview**

Vantage Theory, VT, (MacLaury, 1997) is a theory of human categorization in terms of point of view or vantage. There is an underlying assumption that categorization reflects human needs and motives, which obviously intersects with linguistic relativity. Humboldt was

arguably the originator of the linguistic relativity hypothesis: “Die Sprache ist das bildende Organ des Gedanken” (Humboldt, 1863, p. LXVI). Humboldt judged that because language and thought are intimately connected, the grammatical differences between languages are manifestations of different ways of thinking and perceiving. The structure of language affects perceptual processes and also the thought processes of speakers. Language mediates world-view such that different world-views correlate with different language structures that no sole individual can change; consequently languages are stable organic wholes. This view passed via Steinthal to Whitney and hence to Boas, Sapir, and Whorf. However, the linguistic relativity hypothesis seems to have language determining vantage instead of it being the language-user who does so – which is contrary to MacLaury’s view. On a weak version of the “Whorfian hypothesis” (the version to which Whorf himself subscribed) the basis for classification is the characteristic perceived or believed to be salient in the referent (the figure against the (back)ground). This looks close to MacLaury’s notion of vantage, but it is different because VT is a theory of categorization, not a theory of conceptualization. A number of papers in this journal issue presuppose that MacLaury’s VT is a theory of conceptualizations, which is but a small step from categorizing; but I do not believe that MacLaury viewed VT in that way. He defined it as “a model of the method that a person uses to construct any category, to use it, to change it, or to recall it” (MacLaury, 2002, p. 494). Therefore, as I argued in Allan 2002, it would be a step forward to add onto VT something like VT2 – which does apply the notion of vantage to conceptualization and the combination gives rise to what Adam Głaz (this issue) usefully refers to as Extended Vantage Theory (EVT), which embraces all these different conceptions of vantage theory: it maintains non-discriminatory, analytic, and synthetic viewing along with the standard mechanism of vantage construction through the conceptualizer’s selective focus on similarity or difference. EVT and linguistic relativity are mutually compatible and mutually enlightening.

## 2. Vantage Theory and VT2

MacLaury's VT is a model of categorization in terms of point of view or vantage. Alongside of VT, there is place for the kind of semantic specification found in the lexicon. VT does not replace, but coexists with, semantic descriptions. For example, the semantics of *green* describes the stimuli that in VT give rise to the category green using coordinates and notions of similarity and difference among such stimuli. For instance at the boundaries of blue and green we might get a hue which is green with a touch of blue (for instance Munsell D21) which could be represented as in Fig. 1.

INSERT FIGURE 1 ABOUT HERE

Colour is perceptible only through vision, so a congenitally blind person cannot experience colour at all. They are told about it and have transferred experiences such as that *red* is characteristic of something very hot, *green* is the texture of vegetation. What a person blind from birth understands by a colour term such as *green* is conceptual and analogical, not experiential. Sighted human beings experience colour as light waves reflected from things: *green* is the colour of live vegetation (seen in daylight). If you tell a blind person *A banana is yellow*, they will know this colour-of relation without ever knowing what *yellow* means because they cannot know what yellow is the way a sighted person can. There is neuropsychological evidence for what Davidoff (1997) calls an "internal colour space" separate from "object-colour knowledge". The internal colour space contains the colour yellow, the colour of the banana is part of one's object-colour knowledge. I therefore suggest that colours be defined using  $\vee$ , the inclusive (*and/or*) disjunct, in 0:

(1) For every  $x$  that is labelled *green*:

[colour  $x$  reflects light in the range 470–580 nanometers, and focally around 512 nm]

∨

[colour-of there is some  $y$  such that, if  $y$  is a living leaf then, in daylight, the wavelengths of light reflected from  $x$  (i.e. the colour of  $x$ ) is approximately identical with the wavelengths of light reflected from  $y$ ]

The first member of the disjunct is a description in words that describes the experience of a swatch of green colours; (1) is not meant to suggest that people could name wavelengths of green, but presumably they are cognitively aware of them. The whole disjunction in 0 suggests one explanation for the fact that  $\text{ORANGE} = \text{RED} \cap \text{YELLOW}$  (verified by wavelengths and colour charts) but the English terms *orange*, *red*, and *yellow* are contraries. The proposition  $\text{ORANGE} = \text{RED} \cap \text{YELLOW}$  is true for the internal colour space: orange is reflected light in the range 590–610 nanometers: both yellow and red stretch their periphery through this range. However, as object-colour knowledge, each of orange, red, and yellow is distinctive: the citrus fruit named *orange* is not the colour of blood, nor the colour of a banana. (See MacLaury, 1997, pp. 12, 90, 170, 417f; Allan, 2001, 301–306; Allan, 2002, pp. 681–683).

VT models the way in which a cognizer<sup>1</sup> constructs, recalls, uses, and modifies a category. VT specifies the constitution of a category, the relation between its centre (what constitutes the focus or best example) and its margin, its extent (or range), and its capacity to undergo change. The representation is in terms of fixed landmarks and movement towards

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<sup>1</sup> MacLaury refers to the cognizer as the “viewer”; *viewer* is meant metaphorically (a blind person categorizes) like the terms *viewpoint* and *point of view*. Nevertheless, I prefer *cognizer* and Rob MacLaury never objected to it.

sameness or difference as the extent of the category is explored with different levels of attention paid to the components of the category that can be related in terms such as “cognitive distance”, “close resemblance”, and “degree of proximity”. These levels of attention allow for the same category to be viewed from different vantages.

Allan (2002) used the grammar of number and quantification in English to reveal different conceptualizations of what is spoken of, claiming that each of the different conceptualizations is a vantage. This extends VT from a theory of categorization to an add-on theory of conceptualization, dubbed VT2 so as not to cause confusion with the original. In MacLaury’s VT, the aim is to explain how and why comprehension is projected by the cognizer on an external scene, whereas in VT2 the aim is to preserve a quasi-traditional, comparatively formal semantics while accommodating the importance of viewpoint to meaning. Thus, if VT is a theory of points of view which give rise to categories, VT2 is a theory of points of view embodied in conceptualizations. In Allan 2002, the grammar and semantics of number allow for the expression of different VT2 vantages as English speakers exploit the resources of the language to reveal different conceptualizations of what is spoken of, i.e. different vantages.

In VT, a vantage consists of coordinates in an arrangement, while in VT2 the structure of a vantage is an array of frames of conceptualization (see Fig. 2) that corresponds to the levels of concentration in VT. Consequently, adjoining frames of conceptualization correspond to different points of view. Within arrays of frames of conceptualization, the semantics for English quantifiers in Allan 2002 were treated as bundles of fixed and mobile coordinates expressed as “analytic” and “synthetic” vantages.

INSERT FIGURE 2 ABOUT HERE

In VT, a “synthetic” vantage focuses on similarity or aggregation, a property it shares with a dominant vantage. In VT2, any emphasis on similarity is synthesis, including what for VT is nonsynthetic attention to similarity in a dominant vantage.

In VT, a cognizer who takes the dominant vantage may zoom in from naïve (unreflective) emphasis on similarity to analytical emphasis on difference, while in VT2 a cognizer zooms from nondifferentiation to differentiation because the analytic vantage focuses on difference or separation. In VT2, the process begins with a synthetic vantage and, as the level of attention reaches a depth of about 3 or 4, the higher levels are suppressed so that the deeper level assumes attention Level 1 as an analytic vantage. So, typically, an analytic vantage is successor to a synthetic vantage, such that VT2 revises the simultaneity of VT’s dominant and recessive vantages. The switch from analytic to synthetic vantage in VT2 is a switch to a new frame of conceptualization, which expresses a new point of view and perhaps, therefore, a new frame-based vantage (see Fig. 2). Hence, within VT2, the construction of a vantage is captured in the array of frames. The dominant and recessive vantages of VT are reflected in distinct arrays of frames of conceptualization in VT2.

In VT, only within a recessive vantage may the cognizer zoom in from analysis to synthesis, synthesis being achieved solely in that vantage and in that order while, in VT2, the cognizer can toggle between analysis and synthesis, in either direction.

In VT, a frame at maximum includes a dominant and a recessive vantage, while in VT2 a frame contains up to four levels of concentration and is one of several potential views within a conceptualization (see Fig. 2).

In sum, in VT an object or event is categorized relative to the perspective of a cognizer. VT2 captures the conceptualizations that lie behind the various elements in the cognizer’s categorization. Thus, to adopt Adam Głaz’s useful concept (Głaz (this issue)), Extended Vantage Theory (EVT) encompasses both VT and VT2.

In EVT (both VT and VT2) there is an underlying assumption that categorization and conceptualization reflect human needs and motives. There is obviously some intersection with linguistic relativity, but what is the true relationship? Where are the points of similarity and difference? MacLaury (2000), in a paper called “Linguistic relativity and plasticity of categorization”, has surprising little to say about my topic other than the rather encouraging:

At present, the model of vantages refashions universalism to accommodate cognition as points of view,<sup>2</sup> which offers another way to evaluate linguistic relativity.

(MacLaury, 2000, p. 286)

And so it does.

### 3. Linguistic relativity from Humboldt till today

The differences between languages are not those of sounds and signs but those of differing world views. (Humboldt, 1963, p. 246)

Throughout the eighteenth century, language was conceived to have a “genius” that links it to the culture of its speakers.

Nations, like single Men, have their *peculiar* Ideas, [...] these *peculiar* Ideas become THE GENIUS OF THEIR LANGUAGE. (Harris, 1786, p. 407 [*Sic*])

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<sup>2</sup> MacLaury’s phrase “cognition as points of view” very well describes Extended Vantage Theory.



It was certainly this correlation that Condillac had in mind in his *Essai* when he wrote: “Everything confirms that each language expresses the character of the people who speak it” (Condillac, 1746, II.i.143 [p. 198]); and later in the last chapter of Book III of his *Cours d'études pour l'instruction du Prince de Parme*, he talks about the mutual influence of languages on opinions (world-view) and opinions on languages (Condillac, 1947–1951, II, p. 90). Better known for an interest in the mutual influences of language and culture is Wilhelm von Humboldt's Introduction to *Über die Kawi-Sprache auf der Insel Java, nebst einer Einleitung über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluss auf die geistige Entwicklung des Menschengeschlechts* (“On the Kawi language of the island of Java, with an Introduction concerning the variety of human language and its influence on the intellectual development of mankind”, Humboldt, 1836–1839).<sup>3</sup>

Humboldt (1767–1835) believed that language is prior to or at least simultaneous with thought, such that thought is aided by language.

The real matter of language is, on the one hand, the sound as such, and on the other the totality of sense-impressions and spontaneous mental activities which precede the creation of the concept with the aid of language. (Humboldt, 1999, p. 52; Humboldt 1836, p. LXI)

Humboldt believed that language emanates from the collective activity of men and not from some individual – a view similar to that of Epicurus (1926: iii.1488), Lucretius (1984 ll.1041–58), and Locke (1700: III.i), but dissimilar from Plato (1997) or Herder (1772). Humboldt is more sophisticated than most Romantics in recognizing that language use is goal-directed behaviour and this is reflected in the functional motivations for language structures.

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<sup>3</sup> The Introduction, Humboldt 1836, is translated into English in Humboldt 1999, which often recreates the convoluted language of the original text; so I sometimes use the Cowan translation in Humboldt 1963.

The analysis essential to the study of linguistic structure compels us, in fact, to look upon language as a method which pursues certain aims by certain means, and hence to consider it truly a creative formation of a given nation. (Humboldt, 1963, p. 281; Humboldt, 1836, p. LVIII)

The final clause in this quote echoes an earlier statement that “languages are bound to and dependent on the national groups which speak them” (Humboldt, 1963, p. 255 [Humboldt, 1999, p. 24]). That is, languages reflect the culture and mentality of their speakers. Because language and thought are intimately connected, and the grammars of different languages are structurally different, it follows that grammatical differences between languages indicate different ways of thinking and perceiving.

The persistent *work of the mind* in using language has a definite and continuing influence even on the true structure of the language and the actual pattern of its forms; but it is a subtle influence, and sometimes escapes notice at first sight. (Humboldt 1999, p. 148)

There was no novelty in Humboldt recognizing that children do not inherit a language but learn whichever is (or are) in their linguistic environment. Nor was it novel to observe that adults find it difficult to learn a second language because they are hampered by adherence to the characteristics of their mother-tongue.

If children are transplanted before they learn their native tongue, they develop their linguistic capacity in the foreign one. This undeniable fact, it might be said, clearly

shows that language is the mere reproduction of what is heard, depending entirely on social intercourse without consideration of the unity and diversity of the people involved. In the first place, however, it has by no means been determined by exact tests that the inclination towards such children's native speech did not have to be overcome at some cost to the finest nuance of skill in the adopted language. But even disregarding this possibility, the most natural explanation is simply that human beings are everywhere human and the development of linguistic capacity may therefore take place with the aid of any given individual. That does not mean that it comes any less from the individual's innate nature; only, since it also needs outer stimulus as well, it must become analogous to whatever stimulus it receives. This it can do since all human languages are interrelated in some sense. (Humboldt, 1963, p. 292f; Humboldt, 1836, pp. LXXIIIf)

Yet there is a commonality among languages; what his contemporaries refer to as "general" or "universal" grammar, Humboldt refers to as "the congruence of all human tongues". The human predisposition to use language needs an external stimulus for the individual to learn the language spoken in their particular environment. These are topics about which neither VT nor VT2 have had anything to say.

For Humboldt, as for many in the Western Classical Tradition in linguistics (see Allan, 2007), language is a reflection of the individual's subjective perception of the world – there is no direct correlation between the forms of language and the speaker's referent; it is the speaker's cognitive awareness of the referent that is indicated by the language expression. This is totally consistent with EVT.

Just as no concept is possible without language, so no object is possible without it for the psyche, since even external ones receive their intrinsic substance only through language. For words are born of the subjective perception of objects; they are not a copy of the object itself but of the image of it produced in the psyche by its perception. And since subjectivity is unavoidably mingled with all objective perception, one may – quite independently of language – look upon each human individuality as a singular unique standpoint for a world-view. (Humboldt, 1963, p. 293f; Humboldt, 1836, p. LXXIV)

Although Humboldt does not explicitly say so, it is clear that individual subjectivity is culturally endowed because different languages incorporate different world-views. This, I think, is a valuable point for Vantage Theory to bear in mind. The question arises whether a world-view is a vantage or a cluster of vantages, but I leave this to be resolved on another occasion.

Now everyone uses language to express his most particular individuality; for it always proceeds from the individual, and each uses it primarily for himself alone. Yet it suffices everyone, insofar as words, however inadequate, fulfil the urge to express one's innermost feelings. Nor can it be claimed that language, as a universal medium, reduces these differences to a common level. It does indeed build bridges from one individuality to another, and is a means of mutual understanding; but in fact it enlarges the difference itself, since by clarifying and refining concepts it produces a sharper awareness of how such difference is rooted in the original cast of mind. The possibility of serving to express such diverse individualities seems, therefore, to presuppose in language itself a perfect lack of character, with which, however, it can by no means be

reproached. It actually combines the two opposing properties of dividing itself, as one language in the same nation, into an infinity of parts, and as such an infinity, of uniting itself, as one language of a particular character, against those of other nations.

(Humboldt 1999, p. 151; Humboldt, 1836, p. CCXII)

Language is the external manifestation, as it were, of the spirit of a nation. Its language is its spirit and its spirit is its language. (Humboldt, 1963, p. 277; Humboldt, 1836, p. LIII)

Every language receives a specific originality through that of the nation, and has on the latter a uniformly determining reverse effect. (Humboldt, 1999, p. 152; Humboldt, 1836, p. CCXIV)

Humboldt is saying that languages unite speakers because each language has its “genius” (*Sprachgefühl*) that differentiates it and its speakers from the languages and peoples of other nations; but, at the same time, every individual uses language in a different way that “is rooted in the original cast of mind” (a very Herder-like remark). The “genius” of a language captures a world-view that makes it difficult for the non-native speaker to engage with.

Every language sets certain limits to the spirit of those who speak it; it assumes a certain direction and, by doing so, excludes many others. (Humboldt, 1963, p. 245)<sup>4</sup>

Language is the formative organ of thought. (Humboldt, 1836, p. LXVI; Humboldt, 1999, p. 54)

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<sup>4</sup> This is a quote from *Einleitung in das gesamte Sprachstudium* (“Introduction to general linguistics”) (1810–1811).

[E]ach language draws a circle around the people to whom it adheres which it is possible for the individual to escape only by stepping into a different one. The learning of a foreign language should therefore mean the gaining of a new standpoint toward one's world-view, and it does this in fact to a considerable degree, because each language contains the entire conceptual web and mental images of a part of humanity. If it is not always purely felt as such, the reason is only that one so frequently projects one's own world-view, in fact one's own speech habits, onto a foreign language. (Humboldt, 1963, p. 294; Humboldt, 1836, p. LXXV)

Here we see that Humboldt is truly an originator of the so-called "Sapir-Whorf", "Whorfian" or "linguistic relativity" hypothesis.

Humboldt judged that because language and thought are intimately connected, the grammatical differences between languages are manifestations of different ways of thinking and perceiving. The structure of language affects perceptual processes and also the thought processes of speakers. Language mediates world-view such that different world-views (vantages) correlate with different language structures that no sole individual can change; consequently languages are stable organic wholes. These views arose in part from German Romanticism in which the individual is only significant as part of a nation and furthermore is powerless to alter it as an individual (Brown, 1967, p. 116).

Humboldt enthused Heymann (aka Hermann) Steinthal (1823–1899; see Steinthal, 1848), who in turn inspired William Whitney (1827–1894) to write in *The Life and Growth of Language*:

Every single language has thus its own peculiar framework of established distinctions, its shapes and forms of thought, into which, for the human being who learns that language as his “mother-tongue”, is cast the content and product of his mind, his store of impressions, however acquired, his experience and knowledge of the world. This is what is sometimes called the “inner form” of language – the shape and cast of thought, as fitted to a certain body of expression. But it comes as the result of external influence; it is an accompaniment of the process by which the individual acquires the body of expression itself. [...] It amounts simply to this: that the mind which was capable of doing otherwise has been led to view things in this particular way, to group them in a certain manner, to contemplate them consciously in these and those relations. (Whitney, 1875, pp. 21f)

Whitney was the link to Franz Boas, Boas to Sapir, Sapir to Whorf.

For Boas, experience and culture are reflected in language, so the principles of classification will often differ from language to language (Boas, 1911, pp. 24ff). Boas initiated the furore over Eskimo words for snow lacking parity with English words for snow; but there is plenty of evidence that they are not in fact incommensurate (see the discussion in Allan, 2007, pp. 230f) but, rather, are distinct vantages. However, Sapir wrote:

It would be possible to go on indefinitely with such examples of the incommensurable analyses of experience in different languages. The upshot of it all would be to make very real to us a kind of relativity that is generally hidden from us by our naïve acceptance of fixed habits of speech as guides to an objective understanding of the nature of experience. This is the relativity of concepts or, as it might be called, the relativity of the form of thought. (Sapir, 1949b, p. 159 [Sapir, 1924])

Sapir takes the Leibniz-Herder-Hamman-Humboldt line that thought and language are interrelated, with thought dependent on language.

Language is primarily a pre-rational function. It humbly works up to the thought that is latent in, that may eventually be read into, its classifications and its forms; it is not, as is generally but naively assumed, the final label put upon the finished thought.

Most people, asked if they can think without speech, would probably answer, “Yes, but it is not easy for me to do so. Still I know it can be done.” Language is but a garment! But what if language is not so much a garment as a prepared road or groove? (Sapir, 1949a, p. 15 [Sapir, 1921])

Language and our thought grooves are inextricably interrelated, are, in a sense, one and the same. [...] Language is a particular *how* of thought. (ibid., pp. 217f)

If Sapir’s thought grooves are in fact vantages, he was wrong to think they cannot be modified. Whorf thought differently, as we shall see. Sapir’s deterministic view of language is more clearly revealed in the following:

The relation between language and experience is often misunderstood. Language is not merely a more or less systematic inventory of the various items of experience which seem relevant to the individual, as is so often naively assumed, but is also a self-contained, creative symbolic organization, which not only refers to experience largely acquired without its help but actually defines experience for us by reason of its formal completeness and because of our unconscious projection of its implicit expectations



into the field of experience. [...] Such categories as number, gender, case, [etc. ...] are systematically elaborated in language and are not so much discovered in experience as imposed upon it because of the tyrannical hold that linguistic form has upon our orientation in the world. Inasmuch as languages differ very widely in their systematization of fundamental concepts, they tend to be only loosely equivalent to each other as symbolic devices and are, as a matter of fact, incommensurable. (Sapir, 1931, p. 578)

INSERT FIGURE 3 ABOUT HERE

Both Sapir and Whorf were influenced by gestalt psychology, which feeds neatly into vantage theory. An important aspect of gestalt theory is the differentiation of figure from ground: in Fig. 3.a one can see either a black vase on a white ground or a pair of white faces on a black ground; but not both at the same time. In Fig. 3.b there are several different ways to perceive the figure: is it a set of interconnected squares, triangles, and trapeziums; or is it a cube, and if so which face is to the front? The Sapir-Whorf hypothesis was that different language communities select different gestalts, different figures and grounds in a manner analogical to the different potentials of Fig. 3. The switch between figure and ground is a change of vantage. The question at issue is whether the other vantage(s) can be recognized by someone who has already adopted one vantage. Sapir seems to think not; but readers might doubt this for themselves when they switch figure with ground in Fig. 3. These are diagrams not language, but the switch between vantages is certainly possible, and MacLaury among others has shown that such switches occur in language.<sup>5</sup>

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<sup>5</sup> Adam Głaz (p.c.) questions whether the changes in perspective in Fig. 3 result from a realignment of coordinates. I think it can be expressed that way.

Whorf's "Facts are unlike to speakers whose language background provides for unlike formulation of them" (Whorf, 1956, p. 235 [Whorf 1941]) looks very Sapirian. His classic statement of the relativity principle is:

[T]he "linguistic relativity principle" [...] means, in informal terms, that users of markedly different grammars are pointed by their grammars toward different types of observations and different evaluations of externally similar acts of observation, and hence are not equivalent as observers but must arrive at somewhat different views of the world. (Whorf, 1956, p. 221 [Whorf, 1940a])

For instance, Whorf reviews aspectual forms in Hopi verbs that denote "vibratory phenomena and the punctual events to which they are related", concluding that

The Hopi aspect-contrast which we have observed, being obligatory upon their verb forms, practically forces the Hopi to notice and observe vibratory phenomena, and furthermore encourages them to find names for and classify such phenomena. (Whorf, 1956, pp. 55f [Whorf, 1936])

This is perhaps Whorf's earliest statement about linguistic relativity and it takes a very reasonable and arguably incontrovertible position with respect to the effect of language on the conceptualizing of phenomena. In order to speak a language correctly one has to cut the denotata in certain ways. Stephen Levinson writes of reports of spatial orientation in an Australian Aboriginal language being incommensurate with reports of spatial orientation in English.

Instead of notions like ‘in front of,’ ‘behind,’ ‘to the left of,’ ‘opposite,’ etc., which concepts are uncoded in the language, Guugu Yimithirr speakers must specify locations as (in rough English gloss) ‘to the North of,’ ‘to the South of,’ ‘to the East of,’ etc. The system is used at every level of scale, from millimetres to miles, for there is (effectively) no other system available in the language; there is simply no analogue of the Indo-European prepositional concepts. [...] Thus Guugu Yimithirr speakers appear to think about space in a fundamentally different way than we do. (Levinson, 1996, pp. 180, 181)

As he elsewhere points out,

There’s no simple conversion algorithm, like 1 foot = 30 centimetres, relating [say] ‘left’ and ‘north’. The notion ‘the boy is north of the tree’ crucially involves ancillary information: the bearings of the boy and the tree. In the same way, ‘the boy is left of the tree’ encodes ancillary information missing from the cardinal-direction conceptualization of the scene – namely the viewpoint of the observer and his orientation with regard to boy and tree. From one coding of the scene, you cannot reconstruct the other. (Levinson, 1997, p. 33)

In short, Guugu Yimithirr and English require speakers to think (i.e. (re)construct experience) in different ways.<sup>6</sup> Nevertheless, Levinson succeeds in explaining the Guugu Yimithirr vantage to English readers to whom it is completely comprehensible; and given that all Guugu Yimithirr people also speak English, one must presume that they can adopt the English

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<sup>6</sup> Adam Glaz (p.c.) suggests that different sets of coordinates are selected to give rise to these different categories.

vantage. It is not that one vantage is translated into the other, but that the construction of the category shifts as the vantage changes.

Wally Chafe was surprised when a Seneca (Northern Iroquoian) man talked about *cutting off the notches* when speaking of a serration (Chafe, 2000, p. 114). Now *notches* are V-shaped cuts, which cannot be sawn off; whereas the Seneca “translation” *o:nó?sgæ:?* (deriving from the verb “stand upright”) refers to the peaks of the serrations, which can be cut off. Obviously, “the same” referent is conceived differently, as one person might see a black vase on a white ground in Fig. 3.a and another might see two white faces on a black ground. Chafe’s example is something of an echo of Whorf’s contrast between English and Shawnee conceptions of cleaning a gun (Whorf, 1956, p. 208 [Whorf, 1940b]). Vantage theory helps identify how and why the different vantages are justifiable, though not why different communities cut the denotata differently.

Those who claim that Whorf believed language determines thought should take heed of the following:

The statement that “thinking is a matter of LANGUAGE” is an incorrect generalization of the more nearly correct idea that “thinking is a matter of different tongues.” (Whorf, 1956, p. 239 [Whorf, 1941])

This clearly allows for an individual to accommodate different ways of thinking by learning different languages and the world-views of their speakers (so far as this is possible). It is not even necessary to speak the other person’s language, simply to know about its structure (Whorf, 1956, p. 263 [Whorf, 1942]). In this, Whorf differs from Sapir and it is clear evidence that Whorf himself believed in only a weak form of the “Whorfian hypothesis”. The weak version of the “Whorfian hypothesis” is that a language directs its speakers toward certain

aspects of perceived phenomena – but, because perception is independent of language, other aspects of phenomena can be commented upon, if desired, by circumlocution, or by the novel use of a language expression. A speaker may use an unusual classification (ranking on a scale between dead metaphor and innovation) to get some particular point across. For example, tall people can be classified by the “long” classifier instead of the “people” classifier in some Bantu languages and in the Mayan language Yucatec. This suggests that the basis for classification is the characteristic perceived or believed to be salient in the referent (the figure against the (back)ground). We readily recognize such behaviour as adopting alternative vantages.

Whereas there is evidence that one’s language necessarily influences the way entities in the (physical and metaphysical) world are spoken of, and this must reflect cognitive processes, it would seem that these different ways of thinking in different language communities have little effect except on the language used. In the words of Slobin (1996, p. 91), it “affects the ways in which we think while we are speaking” but is by no means a mental strait-jacket: the human mind can and does go anywhere.

#### **4. EVT and linguistic relativity**

VT models categorization in terms of point of view or vantage; VT2, which is a spin-off from VT, models conceptualization in terms of vantage. For convenience, I use Głaz’s term Extended Vantage Theory (EVT) to refer to the combination of classical VT and VT2. The linguistic relativity hypothesis holds that the structure of language affects perceptual processes and also the thought processes of speakers. Language mediates world-view such that different world-views correlate with different language structures that no sole individual can change; consequently languages are stable organic wholes. The question I have been

looking to answer in this paper is the applicability of EVT to linguistic relativity, and vice versa.

The strongest dogma of linguistic relativity postulates that “the ‘inner form’ of language” causes the mind which was capable of doing otherwise to be led to view things in a particular way (to paraphrase Whitney, 1875, pp. 21f). Thus Whitney and later Sapir, who wrote (Sapir, 1949a, p. 217) that “[l]anguage and our thought grooves are inextricably interrelated, are, in a sense, one and the same”, believed that language determines vantage instead of it being the language-user who does so – which is contrary to MacLaury’s view (MacLaury, 1997, pp. xv, 392; MacLaury, 2002, p. 404). A weaker version of linguistic relativity seems to have been preferred by Whorf. This would have it that language shapes cognizers to adopt a certain point of view but does not prevent them from adopting a different vantage, particularly if they become aware of different vantages. Today, the most enlightened believers in linguistic relativity argue that different ways of thinking in different language communities have little effect except on the language used. This weak version of the Whorfian hypothesis does seem compatible with EVT. Indeed, it accounts for the fact that different language communities take different vantages with respect to denotation and reference of colour terms; it allows for modification of the range of these terms over time, sometimes as the result of language contact (as in the adoption of Spanish-based colour terms in the indigenous languages of Mesoamerica, cf. MacLaury, 1997, pp. 421f). So I conclude that EVT and linguistic relativity are mutually compatible and mutually enlightening.

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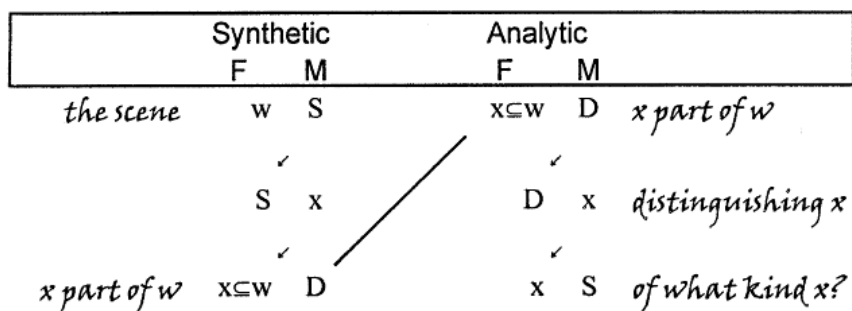
## FIGURES

Vantages Zoom in	Dominant		Recessive	
	Fixed	Mobile	Fixed	Mobile
Level 1	<i>green</i>	S	<i>blue</i>	D
Level 2	S	<i>blue</i>	D	<i>green</i>
Level 3	<i>blue</i>	D	<i>green</i>	S
Synopses:	<i>green</i> SS	<i>blue</i> D	<i>blue</i> DD	<i>green</i> S

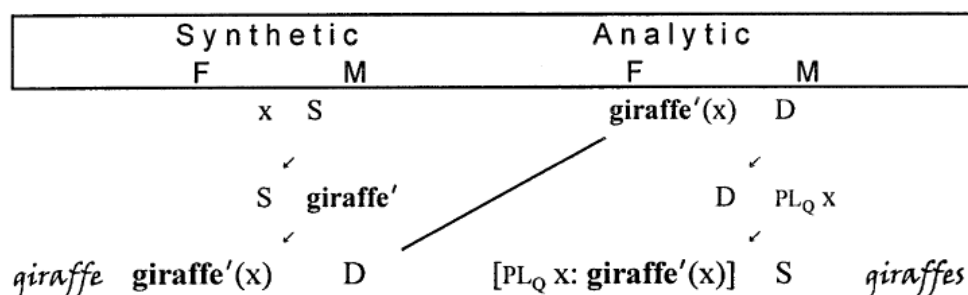
Fig.1. The hue of Munsell D21.

## Three giraffes PRED

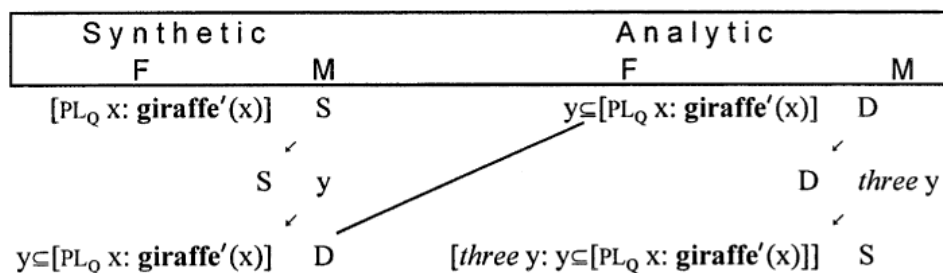
(a) Frame 1



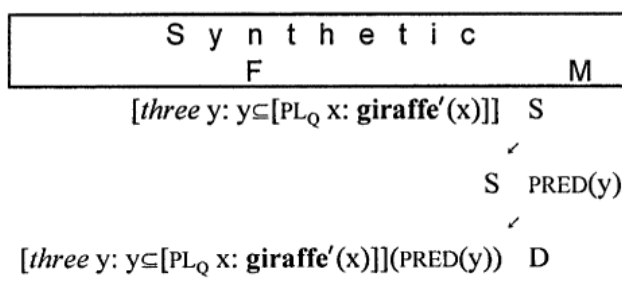
(b) Frame 2



(c) Frame 3



(d) Frame 4

Fig. 2. *Three giraffes* from Allan (2002, p. 689).

Key: F = fixed coordinate; M = mobile coordinate; S = similarity; D = difference;  $PL_Q$  = the plural quantifier.



Fig. 3. Figure and ground change in an ambiguous figure.