

## A pragmatic promenade in the French landscape of colours

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Berlin & Kay (1969) list a number of criteria (without discussing them in details) that allow for the identification of basic colour terms. One of them (criterion V) is morphological: basic terms have a distinct morphological distribution from non-basic terms (however Berlin & Kay suggest that this criterion should be referred to in case of doubts). In IE (indo-european) languages such as English or French, basic terms allow for suffixations, whereas non-basic terms don't. Hence, they notice, a basic term like *red* produces *reddish*, whereas a non-basic term like *chartreuse* does not produce *\*chartreuseish*. The same holds in French: *rouge* produces *rougeâtre*, but *turquoise* doesn't allow *\*turquoiseâtre*.

It is interesting to observe that in French a similar distribution holds with verbal derivations having reflexive readings meaning *to become of colour X*. In English, some colour verbs use a suffix (*to redden*), while other are simply produced by transcategorisation (*to green*). French has a homogeneous derivation system: *rouge*, *vert*, *brun* etc. produce *rougir*, *verdir*, *brunir*, etc. whereas *sapin* or *outremer* will not allow *\*sapiner* or *\*outremerer*. This remark holds only for these verbs in their reflexive (therefore non agentive) interpretation (*becoming red / blue* etc.). Some non-basic colour verbs are perfectly natural with transitive meanings (*vermillonner* for *rendering X vermillion*, *dorer* for *covering with gold* for example). Reflexive basic colour verbs also

have transitive readings (*rougir* in the sense of actively making something red), but we are not looking at this meaning here.

There are a number of issues regarding this morphological criterion.

First, despite their being listed in most dictionaries, at least one French basic term's derivation seems quite unnatural: *orangeâtre*<sup>1</sup>. *Orangeâtre* does appear occasionally but its frequency is very weak (168 occurrences on the Internet in one year, according to a raw Google.fr ® research done in February 2015) compared to the derivation of the other basic terms (*jaunâtre* tops the list with 34000 occurrences and *rosâtre* is at the very bottom with around 4000 occurrences. There are also some doubts regarding *violâtre*, which has 560 occurrences in one year).

Second, we notice that verbal derivations with reflexive meaning are also unnatural with *orange*. The verb *oranger* works with transitive meaning and maybe for some reflexive meanings but only in participial-adjectival form, as in *le ciel orangé du couchant*, which is something different. The verb *oranger* does not exist in French: there is no tensed phrase such as *Le ciel \*orangea dans le couchant* (compare with *Le ciel rougit / rosit / jaunit etc. dans le couchant*). A similar observation seems also to hold with *violet* and *marron* (the prevalent term for *brown* in the French of France – *marron* doesn't occur in Switzerland for example and it is not a basic terms anyway, merely a very common substitute).

Third, we notice that some non-basic terms do allow for occasional derivations: *olive* allows the derivation *olivâtre* very naturally, but not *\*oliver*. *Blond* doesn't allow *\*blondâtre* (but *blondasse*, which is slightly different) but produces *blondir*. *Roux* – probably the most interesting of French colour terms – allows both *roussâtre* and *roussir*.

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<sup>1</sup> See Bloemen & Tasmowski (1983); these authors present an analysis of the frequency of colour terms in French and discuss the relation between frequency and basicity, which they see rather as a continuum.

Fourth, we notice that some non-basic terms that do not standardly provide *-âtre* derivatives nonetheless have some potential for it. *Beigeâtre* appears 78 times in our list and is even listed in some major dictionaries, and even the unlikely *azurâtre* is present in a few literary / poetic texts.

We suggest that a pragmatic explanation could account for most of these facts.

Let us consider Berlin & Kay's (1969) criterion V through the lens of pragmatics and conceptual (categorical) cognition. It is usually assumed that *-âtre* indicates approximation (Kleiber 2008); we stress however that the 'approximation' here is in fact relative to one of the available prototypes (focal points): a *rougeâtre* and a *verdâtre* are indeed red and green but remote from any of the prototypes of these colours. Thus *X-âtre* indicates remoteness not from *X* (which would amount to being not-*X*) but from the prototype(s) of *X* (see de Saussure 2014 for an elaboration). The difficulty of applying the meaning function of *-âtre* to *orange* comes from the fact that *orange* does not clearly identify a chromatic range but rather a definite shade: since the task of identifying a type of colour that is still a sort of orange but one which is remote from a prototype of orange becomes cognitively very weird to perform and amounts to saying that some colour is 'approximately precisely' orange, or something of the like.

Indeed, *orange* doesn't encompass an easily accessible subordinate lexicon that clearly distinguishes between a variety of shades (except darkness or lightness of course): expressions like *orange abricot* or *orange feu* seem quite unnatural in French, contrary to *jaune citron*, *bleu nuit* or *rose bonbon*. As a consequence, *orange* seems to share properties of both basic terms (in particular it is not itself a subcategory of some overarching term) and of non-basic terms, since it doesn't have subcategories identified with lexemes and therefore is not really acknowledged conventionally as encompassing a chromatic range (regardless of the obvious fact that it does so, of course). Thus, *orange* seems to behave as if it were one and only one precise tone

(whereas it is not in reality nor even in perception, needless to say). We lack the words in ordinary language for shades of orange, and this, we suggest, leads to a problem when it comes to combining with *-âtre*. Yet, we won't say that this explanation is entirely linguistic.

We suggest that there is actually a pragmatic mismatch in representing the approximation (by the suffix *-âtre*) of a specific tone in a single lexical categorization with non-basic terms.<sup>2</sup>

Sperber & Wilson 1986/1995 have nicely shown the range of reasons for which it is fair to assume that cognition is geared to the maximization of relevance, relevance being an equilibrium between cognitive effect (informativity) and processing cost (effort of decoding and drawing informative inferences)). In the case of non-basic terms, that is, of precise shades within a chromatic range itself denoted by an abstract, basic, term, we suggest that the search for relevance is normally not successfully achieved by those morphemes as it would involve a notion of 'being approximately of a specific shade'. The reason for this is that it does not provide a piece of information significantly different or more meaningful than what would be achieved by the derived generic, basic, term. In other words: approximating a specific shade does not normally provide significant increase or difference in informativity relatively to the approximation of a generic basic colour. As an example, *\*sapinâtre* is odd inasmuch as it is pragmatically redundant with the more abstract and generic *verdâtre* without providing an easily graspable distinct or richer meaning. This is probably sufficient to rule out the existence of such terms in the lexicon.

But we insist that this is pragmatic, not strictly linguistic: there is no logical-semantic inconsistency in being approximately turquoise, and wordings such as *approximativement turquoise* are perfectly fine. It is the concatenation of the notions in a

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<sup>2</sup> On the suffix *-âtre* and its semantic values, see Bottineau (2010).

single lexical unit that raises issues of relevance with regard to the generic counterpart.

This assumption relates to the distinction between information provided by single lexical items and periphrases or complex expressions. The rarity of a categorical need is certainly a factor influencing lexicalisation, since lexicalisation in turn provides a facilitated means of expression (and of reasoning). But there is far more to this than mere frequency of conceptual need: some constraints do actually apply to conventionalization which are due to the human cognitive system; an example of this phenomenon is the inability of languages to conventionalize the quantification *not-all* (see Newmeyer 2009), even though nothing prevents us to utter something like *Not all the students came to the party*, or to convey this quantification through scalar inferences: *Some students came to the party*. We venture that a similar constraint applies to the morphological combinations that we observe not only in non-basic terms but also in *orangeâtre*, however on the lexical level, thus at the level of conceptual categories (not grammatical ones as in *not-all*). Since conceptual categories are flexible (Barsalou 1987), we suggest furthermore that the constraint here is pragmatic; as a consequence, such terms are not completely impossible: they simply need the appropriate context to make sense (be relevant). Therefore they are occasionally subject to contextual accommodation, provided that the hearer has ways to raise assumptions about specific intended interpretations that are apt to fulfil the expectations of relevance.

Getting back to the case of *beigeâtre*, our intuition is that the supplement of meaning is not simply a derogatory one (a supplement of meaning that this suffix bears commonly, but not obligatorily<sup>3</sup>); it has a particular flavour which is due to the

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<sup>3</sup> *Rougeâtre* and *jaunâtre* are often associated with beauty : « Elle baissa vite, avec embarras, son bras nu, belle anse rougeâtre » (Colette, *La naissance du jour*) ; « champignon d'un beau jaunâtre » (Secrétan, *Mycographie suisse*) ; similar remarks can be made about other derived basic terms, even though the derogatory connotation seems more common with them.

particular way this derogatory meaning occurs. It is specifically achieved through a type of metarepresentation that bears some similarities with irony. Judging, for example, a sofa as *beigeâtre* will typically be interpreted as concerning a sofa which does not deserve to be called by the name of the shade *beige*. The utterance thus represents a subtle sort of mockery involving targeting someone (real or imaginary) who would call this sofa *beige*, which is judged ridicule, the conclusion being that the sofa is less-than-*beige* in aesthetic quality. The translation from approximation of colour to approximation of beauty or purity achieves relevance in this kind of cases.

The case of *beigeâtre* is however special in the sense that it has some degree of conventionalisation: dictionaries list the word as indicating ‘unpleasant’ or ‘dirty’ *beige*. Yet the same explanation makes also sense for cases without conventionalisation.

For example, some terms bear strong connotations of beauty and therefore cannot be accommodated towards not-beauty if derived by *-âtre*. Take *azurâtre*, which hardly occurs at all, but seldom appears in poetry or literary works. *Azur* bears very strong positive connotations (e.g. *Côte d’azur*). A poet writing about a *triste azur* would make an oxymoron of some sort, but *azurâtre* as a single lexical unit can hardly be oxymoronic on its own, since merging a full oxymoron in a single morphological construction is unlikely. Therefore, not only the ‘approximation’ meaning is pragmatically odd, for the reasons given above, but its accommodation by translation to the scale of connotations is not available. An *azurâtre* cannot be an unpleasant kind of *azur* because the connotations of *azur* block this interpretation. Therefore a poet mentioning a *brume azurâtre*<sup>4</sup> might tell us about a foggy day with touches of true and beautiful blue sky behind the moving screen of the mist, for example. It’s more common in such cases to use the participle *azuré*, but this one still carries a notion,

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<sup>4</sup> in Alain van Crugten, *Personnes déplacées*.

symbolic or real, of agentivity (the French singer Serge Gainsbourg, in one of his famous songs, talks about the *ciel azuré*: that sky is beautiful as a painting).

What about *roussir* and *olivâtre*? *Olivâtre* tends to be specialized for faces, which implies that it tends to be a substitute of *vert* specifically for the shades signalling sickness. Non-basic substitutes of basic terms tend to behave like the term for which they stand, just as *blond*, but still keep some of their original non-basic properties, just as *blond* cannot produce *\*blondâtre* (*blond* is therefore the opposite of *olive* in this respect).

*Roux* is fascinating. It is very complicated to identify the kind of colour which it designates. It seems to be a mixture of brown and red, without being clearly a type of red. But it also qualifies the orangeish – if I dare say – or even the frankly orange type of hair ('raid hair'; the French novelist Jules Renard story *Poil de carotte* is about the childhood of a red-haired child). In this respect, *roux* looks like one of these basic terms with wide chromatic scope but unclear focal prototypes or maybe several prototypes in chromatic zones relatively remote from one another. It does also fit the same morphological distribution as basic terms in general, allowing *roussâtre* and *roussir*.

Does *roux* belong to the category of basic terms? It could be that *roux* fills a gap for borderline yellow-orange-red-brown colours, rather than a specific shade inside one of them; it is possible that *roux* gains some level of autonomy in the lexicon without having a clear focal point. According to the other criteria by Belin & Kay (1969), *roux* looks like a basic term inasmuch as it is monolexic (criterion I), it is not a shade of another colour (criterion II), it is not specific for particular classes of objects (criterion III), but it is unclear as for criterion IV, which is about its saliency among speakers as a colour term. It is not the name of an object (criterion VI), it is not a borrowing (criterion VII) and has no morphological complexity (criterion VIII) (see also Kay et al 2010: 21 for a summary and reassessment of the criteria). The reason for

which it would not be classified as *basic* lies only in the fact that it is not saliently a colour term for French speakers, which is a weak notion to decide for the belonging of a word to a certain category. Much clearer is the fact that it has controversial focal points. A nice experiment still to design but easy to perform would consist in asking subjects to pick-up focal points for *roux* in the Munsell table and do the reverse with other subjects (i.e. to name those focal points). It's predictable that they will fall into another category, like *orange, red, brown*, even though maybe at their boundary. This only would probably suffice to show that *roux* is in some sense an outsider among colour terms: not basic, and not non-basic in the classical sense.

Recent work (besides the huge research of the *World color survey* directed by Paul Kay) have shown ways to think differently about colours than through a simplistic *all-universal versus all-relativist* opposition where holding one position prevents from whatever coming from the other side. Certainly, a number of scholars have been trapped in this polarity (and some still are), but not only recent experiments have shown how the stabilization in the lexicon of basic colour terms influences perception (typically, a lexical boundary will induce a distortion of the perception of actual distances between shades, see Gilbert et al. 2006 and for a survey Regier & Kay 2009 and more recently Reboul 2015), but new approaches, in particular by Jraissati (2009), and new ways to think about perception and language in the domain of colours (Reboul 2015, Ciaccio 2015), open to more elaborated models where language adds categorical tools without erasing fundamental abilities. What is more, as Jraissati (2009) suggests, there is some notion of degree in the 'basicity' of colour terms. We venture that abstraction, which is the main feature of basic terms, is implemented in languages gradually and to various degrees across time, and therefore more recent terms have chances to behave half-way between basic and non basic categories. *Violet* is might be a case of this sort (Jraissati 2009). *Orange*, our data suggests, is an even



clearer one. *Violet* appears in French as a colour term in XIIIth century French, and *orange* only around 1550 (Mollard-Desfours 2008).

*Roux*, again, resembles *orange* as it is without hyponyms (there is no such thing as *roux renard* for example), but still allows far better than *orange* the derivations discussed above. The problem with *roux* might be that it retains still nowadays a notion of 'burning' (a number of expressions in contemporary French still match *roux* with fire, as in *ça sent le roussi*) ; and what is burnt becomes of a colour that depends on the material burnt.

*Roux* is however not the only colour term that traces back to fire in a way or another. Looking at various IE roots, it's quite clear that a number of terms for *red* originated as a separation from *black-dark* (it's particularly clear in Slavic), and a number of terms for black such as latin *ater* derive from an older notion of fire or smoke. Conversely, old Germanic *blakaz*, which will provide not only *blank* (shining), but also French *blanc* and English *black* (which replaced *swaert* in middle English; *blac* could designate both a shining white and a shining ink in old English) trace back to a notion of fire. The fire is of changing colour, brilliant, red, yellow, but also making dark and obscure fumes. It is not extravagant to speculate that when colours started to differentiate in IE languages, a process not yet achieved in proto-indo-european (which had roots for yellow-green, but not for blue and the subsequent series), they did so by abstracting from natural categories, and typically from the fire, as far as the first one, historically speaking, is concerned (red). Note also, incidentally, that *blakaz* shares common origins with the range of *bl-* colours anchoring on an old PIE root with *bl:* *blue*, *blond* but also *flammeus* (one of the Latin non-basic terms for *red*) and the Slavic terms for white as in *Belgrade*, the 'white city'.

All this takes us too far away from language and cognition. The linguist however can't help walking in these landscapes where language meets nature and culture at the same time, certainly not explaining them and not entirely explained by any of

them. Looking at small facts like this one unveils a little of the complex ways in which human history and histories went in order for individuals to grasp the outer world with verbal and cognitive tools, which in turn play a central role also in the development of cultures. As Reboul (2015) demonstrates: “language adds an entirely new cognitive dimension (...), but does not thereby alter the original abilities and representations”. Far from being separated from one another by some ineffability of our relative worldviews, as a strong Sapir-Whorf view would romantically say, we are linked to one another by our common cognitive apparatus, which expresses itself in an unlimited number of ways but never without connection to our common human nature – which involves seeing the world in colours.

## References

- Barsalou, L. W. (1987), The instability of graded structure: implications for the nature of concepts. In Neisser U. (ed), *Concepts and Conceptual Development*, New York: Cambridge University Press, 101-140.
- Berlin, B., & Kay, P. (1991). *Basic color terms*. Univ. of California Press.
- Bloemen, J., & Tasmowski, L. (1983). Les noms de couleur en français: Catégories et focus. *Linguistica Antwerpiensia*, 17, 16-17.
- Bottineau, T., (2010), Les valeurs sémantiques du suffixe -âtre, marqueur d'opérations sur le plan notionnel, *Syntaxe et sémantique*, 11, pp. 35-54.
- Ciaccio, L. A. (2015), Color terms and color perception. Reconciling universalism and relativism, *Rivista Italiana di Filosofia del Linguaggio*, 9:2, 1-13.
- de Saussure L. (2014), Remarques sur la distribution morphologique des termes basiques de couleur en français, *Travaux de linguistique*, 69, 77-90.
- Gilbert, A.L. et al. (2006). Whorf hypothesis is supported in the right visual field but not the left. *Proceedings of the National Academy of Sciences* 103, 489-494
- Jraissati, Y. (2009). *Couleurs, culture et cognition. Examen épistémologique de la théorie des termes basiques de couleur*. ENS-EHESS Institut Jean Nicod, PhD dissertation, 316p.

Kay, P., Berlin, B., Maffi, L., Merrifield, W. R., Cook, R. (2010). *The world color survey*, Stanford: CSLI publications.

Kleiber, G. (2008). Adjectifs de couleur et gradation: Une énigme très colorée. *Travaux de Linguistique*, 55, 9-44.

Mollard-Desfour, A. (2008), Les mots de couleur : des passages entre les langues et les cultures, *Synergies Italie*, 4, 23-32.

Newmeyer F., (2009), Peut-on reconstruire la langue des premiers êtres humains ? *Nouveaux cahiers de linguistique française*, 29, 99-113.

Regier, T., & Kay, P. (2009). Language, thought, and color: Whorf was half right. *Trends in Cognitive Sciences*, 13(10), 439-46.

Reboul, A. (2015). A new look on the Sapir-Whorf hypothesis on colours, based on neuroscientific data, in Bogushevskaya V & E. Colla, *Thinking colours. Perception, translation and representation*. Cambridge Scholars Publishing.

Sperber, D. & Wilson, D. (1986). *Relevance. Communication and Cognition*. London : Blackwell (2<sup>nd</sup> ed.: 1995).