



Journal *Hybrid*, no. 4

« The question(s) of representation »

The unrepresentable and ineffable

The meaning of colours for lack of words

Alexandre Surrallés

Alexandre Surrallés is a research director at the Centre national de la recherche scientifique (CNRS), specialized in anthropology. A member of the Laboratoire d'Anthropologie sociale at the Collège de France, Paris, he has been conducting field surveys among the Candoshi people since 1991. On this subject, he has published *Au coeur du sens; perception, affectivité, action chez les Candoshi* (MSH-CNRS, 2003; trad. Esp. IFEA-IWGIA, 2009). In 2005, he directed *The Land Within. Indigenous Territory and Perception of the Environment* (with P. García Hierro, IWGIA) and in 2015, *Retórica de los sentimientos. Etnografías amerindias* (with M. Gutierrez-Estevez, Iberoamerica Editorial Vervuert).

Abstract

While colour seems to communicate values that fluctuate depending on cultures and eras, the attribution of emotional correlations to chromatic variations seems on the contrary to constitute a widespread tendency among human groups. Now, is it true that every language includes the notion of colour, as well the terms referring to colours? If certain cultural contexts are devoid of any representation of colour, and consequently of a nomenclature of individual colours, can we still talk about colour semantics, or of an emotional connotation of colours? The ethnography of a population native to the Upper Amazon, who assesses the colour-related sensory experiences without using one of our main descriptive tools – colour names – will give us the opportunity to reflect on what we could call an oxymoron: defining what's ineffable.

Keywords: Amazon, anthropology, colours, perception, sensation

Translated by Nicolas Cognard and Ana Wolf

Published: February 19, 2018

Full text (PDF file)

Introduction

On petals or feathers, as body paint or ceramic decoration, it seems that colour conveys values that vary depending on the place and time. While these values do indeed differ from a culture and era to another, the attribution of emotional correlations to colours appears to constitute a widespread tendency among human groups.¹ In its singularity or in its relation to other colours, colour expresses and arouses such states of mind that it has been considered one of the first support materials of ideas and feelings allowing humanity to develop symbolic systems and superior cognitive skills. For instance, samples of red pigments dating back to the Paleolithic and found in large quantity on excavation sites have been interpreted as a female courting practice consisting in simulating menses, which were associated with fertility, and more specifically at the reproductive age.² If this interpretation proves to be correct, it characterises a complex level of emotional politics that consists in provoking a certain behaviour by means of a trick. Subsequent works have rightly pointed out that the presence of a symbolic use of the colour red during the Paleolithic era, often used together with black and white, could not be reduced to simplistic interpretations. In fact, their appearance in varied contexts, yet often associated with burial sites, demonstrates the existence of sophisticated symbolic associations that convey a wide range of meanings and emotions, in harmony with the emergence of a superior, if nascent, cognitive activity.³

Artists, scholars and philosophers from various cultural and intellectual backgrounds have explored the emotional semantics of colours and have tried to describe it. Historians have also focused on the emotional expression of colour, as well as its variations over time within the same cultural tradition. For example during the Middle Ages, black was not always regarded as a negative colour related to obscurity and death. In the modern era, it has been associated with temperance and dignity. Nowadays, it is also assimilated to elegance.⁴ The history of colours is largely determined by the history of the emotional denotations with which they are ascribed in different societies.

However, it was not until Goethe's famous *Theory of Colours* that the first systematic attempt at exploring the subjective dimension of colours emerged. Goethe indeed considers that if colours are so fundamental in the relation humans have with their environment, it is no surprise that their effects are significant and at once associated with emotions. He adds that when colours are understood as appearances,

1 John Gage, *Color and culture: Practice and meaning from antiquity to abstraction*, University of California Press, 1999, p. 53.

2 Chris Knight, *Blood relations: Menstruation and the origins of culture*, London and New Haven, Yale University Press, 1991.

3 Erella Hovers, Shimon Ilani, Ofer Bar-Yosef and Bernard Vandermeersch, "An early case of color symbolism: Ochre use by modern humans in Qafzeh Cave," *Current Anthropology*, n° 44.4, 2003, p. 509-511.

4 Michel Pastoureau, *Noir, histoire d'un couleur*, Paris, Seuil, 2008.

whether it be individually or combined with one another, they may equally please or displease the eye, whatever the shape and surface of the object on which they appear.⁵ Goethe analyses specific colours, giving them an emotional meaning, such as the colour yellow that would arouse serenity and cheerfulness, thus illustrating the very idiosyncratic nature of this kind of correlations, which did not go unnoticed among anthropologists.⁶

Now, while anthropology takes into account Goethe's conviction that a given colour may arouse particular emotions, this discipline shows, through the analysis of the complex symbolic frameworks often associated with ritual contexts,⁷ that the semantics of colours and its special relation with emotions respond to sophisticated multidirectional correlations. According to the relevant authors, these approaches do not come to terms on the role of nature and culture in perception. Naturalists consider that the relation between a colour and its meaning is determined by the physiology of perception, by the constraints of physical forms, or by synaesthesias rooted in biology.⁸ According to the culturalist perspective, colours can convey meaning insofar as culture appropriates the perceptive distinctions these colours offer, in order to create the oppositions and correlations every symbolic system is based upon.⁹ The lack of space here prevents us from examining the developments of this debate on the symbolism of colours in anthropology. Nevertheless, I will observe that, although the differences between the two main approaches mentioned above and the subsequent ones are significant, all of them share the idea that every language and culture possesses terms to refer to colours. However, is it true that every language includes the notion of colour as well as terms to name them? What if some cultural contexts are devoid of a representation, and by extension of a classification, of colours? Could we still talk about a semantics of colours, or even of an emotional connotation of colours?

The ethnography of a population native of the Upper Amazon gives us the opportunity to reflect on what we could call an oxymoron: the meaning of what's ineffable. The Candoshi people¹⁰ assess the colour-related sensory experiences without resorting to one of our main descriptive tools: the colour names. However, the absence

5 Johann Wolfgang von Goethe, [1810] *Theory of Colours*, Cambridge [MA], MIT Press, 1970, p. 304.

6 Johann Wolfgang von Goethe, [1810] *Theory of Colours*, Cambridge [MA], MIT Press, 1970, p. 306-307.

7 Cf. Victor Turner, "Color classification in Ndembu ritual: A problem in primitive classification," in Michael Barton (dir.), *Anthropological approaches to the study of religion*. Londres, Tavistock, 1966, p. 47-84.

8 Roy D'Andradre et Michael Egan, "The Colors of Emotion," *American ethnologist*, n° 1.1, 1974, p. 49-63.

9 Marshall Sahlins, *Culture and Practical Reason*, Chicago, Chicago University Press, 1976.

10 The Candoshis are settled on the tributaries of the Pastaza River and Morona in the northern Peruvian Amazon. Their population is comprised of approximately 2,500 individuals. Together with the Shapra, they belong to the Jivaro-Candoa ethnical and linguistic family. Hunting and harpoon fishing of big fish constitute the main male activities. Women engage in harvesting and slash-and-burn agriculture, especially of cassava, from which they brew a beer that is at the heart of their social life. They subsist by usually isolating their own household from their neighbours. This isolation is yet tempered by supra-local structures consisting of a dozen residences distributed over a relatively circumscribed area. The local Candoshi groups, strictly exogamic, come from the union of two first groups who again engage in marrying into their own family. These local groups (about twenty of them) are led by a valued warrior who shares power with another chief, to a certain extent: the diarchy reflects the dual composition of the local groups (see Alexandre Surrallés, *Au cœur du sens. Perception, affectivité, action chez les Candoshi*, Paris, Centre national de la recherche scientifique/Maison des sciences de l'homme, "Chemins de l'ethnologie," 2003, p. 3-12).

of words to name colours does not imply that they cannot perceive them. This is why I have examined the Candoshi people's methods to refer to colours. I have called "contrastive perception" the technique they use in order to mention their sensitive experiences of colours, without using a "categorical perception," i.e. without dividing the colour field into categories expressed in chromatic terms. We will get back to this notion of "contrastive perception" later on, which, roughly speaking, consists in comparing objects, the colour of which we want to describe, always in a precise context, using comparatives that have a versatile meaning, in order to better adapt to the percept we want to describe.¹¹ The objective of this article is to take a step further by raising the issue of the form colours take to convey a meaning, or at least a connotation, in the absence of terms to name them. In particular, I will try to determine which emotional connotations these ineffable colours can have and will present data on the semantics of colours that will enable me to put forth hypotheses and draw a tentative conclusion to an ongoing research.

Before getting into the heart of the matter, I would like to note that, in the field of anthropology, these types of issues certainly derive from a crisis in the idea, fundamental in this discipline, that representation is the internalised apparatus of social objectification that allows access and sharing of a world of common meaning. The disturbance in representation, defined here as a way to comprehend the world or a method of conceptualisation of environmental elements, is indeed expressed in human sciences as a whole by an unprecedented interest in everything that cannot be represented or conceptualised, and therefore, in everything ineffable. The representation crisis questions a certain number of hitherto accepted ideas and methods, while preparing the ground for the exploration of new horizons. In the study of the unrepresentable, the ineffable is undoubtedly an essential component. Ineffability – or in other words the difficulty, if not the impossibility, to explain with words experiences whose transcription requires concepts that are either nonexistent or less obvious – was established recently as a fully-fludged field of anthropology. Additionally, the existence of semantic gaps, especially relating to the naming of percepts, proves to be one of the most important issues with regards to the anthropology of the senses and perception, which has aroused a renewed interest over the past few years.¹² It is indeed one thing to describe the smell of a flower for instance, and an altogether different one to describe the shape of a geometric figure. Part of this sensitive experience escapes all conceptualisation or transcription culturally stabilised by semantic conventions, a fact that is often pointed out yet hardly ever dealt with. It implies a private and indescribable dimension of the private experience that has to be lived. As a matter of fact, it seems impossible that a person who has never seen the colour red can understand what "red" means. However long and detailed, no potential description can make up for the absence of empirical knowledge of the colour "red." In this sense, comparative ineffability is an unmissable way out for the anthropology of senses and perception,¹³ in which my text partakes.

11 Alexandre Surrallés, "On Contrastive Perception and Ineffability: Assessing Sensory Experience without Colour Terms in an Amazonian society," *The Journal of the Royal Anthropological Institute (incorporating Man)*, n° 22.4, 2016, p. 810-829.

12 See Hélène Artaud, *Leurrer la nature, Cahiers d'anthropologie sociale*, n° 9, Paris, L'Herne, 2013; Jean-Baptiste Eczet, "Perception et relation. L'expression du *cattle complex* par les Mursi (Éthiopie)," in Carlos Fausto and Carlo Severi (eds.), *Paroles en images: Écritures, corps et mémoires*, Marseille, Open Edition Press, 2016, p. 35-58; David Howes et Constance Classen, *Ways of Sensing: Understanding the Senses in Society*, Londres, Routledge, 2014.

13 Stephen C. Levinson and Asifa Majid, "Differential ineffability and the senses," *Mind & Language*, n° 29. 4, 2014, p. 408.

After a brief description of how the Candoshi people talk about colours, I will present a few correlations of the emotional semantics of chromatic tonalities.

Talking about colours without a colour terminology

In general, anthropology considers that every language includes the notion of colour and terms to name colours. This is not surprising coming from “universalists,”¹⁴ who affirm that all languages share a basis for a terminology of colours. However, their detractors, who advocate a relativist approach and point out the cultural diversity of the ways to divide the range of colours, do neither deny the existence of the notion of colour in every language, nor of terms to name them.¹⁵

However, this unanimity seems to be shaken with the emergence of a series of recent studies. Stemming from researches conducted by anthropologists and linguists from various backgrounds and without prior consultation, a series of works¹⁶ seems to confirm the conclusion drawn by Harold C. in a now classic text, according to which colour, as defined in the Western world, is not a universal concept and does not exist as such in several languages.¹⁷ My experience with the Candoshi people leads me to agree with Conklin. The question is how do the Candoshi people talk about colours without what we consider as one of the most useful tools to do so, which is the colour names, without preventing them from perceiving colour variations or from expressing them.

The Candoshi language is devoid of any term to name colour itself. The word “colour” is absent from the one and only Candoshi dictionary published to this day.¹⁸ However, this is no mistake or omission. Notions such as “multicoloured” or “colourful” are apparently absent too, just like any form of attributive reference to the

14 Brend Berlin and Paul Kay, *Basic Color Terms: Their Universality and Evolution*, Berkeley/Los Angeles, University of California Press, 1969; Terry Regier, Paul Kay and Richard S. Cook, “Focal Colors Are Universal After All,” *PNAS*, n° 102, 2005, p. 8386–8391; Eleanor Rosch Heider, “Universals in Color Naming and Memory,” *Journal of Experimental Psychology*, n° 93, 1972, p. 10-20.

15 Debi Roberson, Ian R. Davies and Jules Davidoff, “Color Categories Are Not Universal: Replications and New Evidence from a Stone-Age Culture,” *Journal of Experimental Psychology: General*, n° 129.3, 2000, p. 369; Debi Roberson, Jules Davidoff, Ian R. Davies, and Laura R. Shapiro, “Color categories: Evidence for the Cultural Relativity Hypothesis,” *Cognitive psychology*, n° 50.4, 2005, p. 378-411.

16 Connie De Vos, “Kata Kolok Color Terms and the Emergence of Lexical Signs in Rural Signing Communities,” *The Senses & Society*, no. 6.1, 2011, p. 68-76; Daniel Everett, “Cultural Constraints on Grammar and Cognition in Pirahã: Another Look at the Design Features of Human Language,” *Current Anthropology*, no. 46, 2005, p. 621-646; Clair Hill, “Named and Unnamed Spaces: Color, Kin and the Environment in Umpila,” *The Senses & Society*, no. 6.1, 2011, p. 57-67; Stephen. C. Levinson, “Yeli Dnye and the Theory of Basic Color Terms,” *Journal of Linguistic Anthropology*, no. 10.1, 2000, p. 3-55; Barbara Saunders, “Revisiting Basic Color Terms,” *Journal of the Royal Anthropological Institute*, no. 6, 2000, p. 81-99; Gunter Senft, “Talking about Color and Taste on the Trobriand Islands: A Diachronic Study,” *The Senses & Society*, no. 6.1, 2011, p. 48-56; Anna Wierzbicka, “Why There Are no “Color Universals” in Language and Thought,” *Journal of the Royal Anthropological Institute*, no. 14.2, 2008, p. 407-425; Diana Young, “Mutable Things: Colour as Material Practice in the Northwest of South Australia,” *Journal of the Royal Anthropological Institute*, no. 17, 2011, p. 356-376. Some of these researches claim that certain languages either do not possess a notion of colour (or terms to name colours), or only incompletely (through the influence of colonisation and borrowings from the colonial language to name them).

17 Harold C. Conklin, “Hanunóo Color Categories,” *Southwestern Journal of Anthropology*, no. 11.4, 1955, p. 339-344.

18 John C. Tuggy, *Vocabulario candoshi de Loreto*, Yarinacocha: Instituto Lingüístico de Verano, 1966.

perception of a colour, for instance in the sentence “this clay pot is red.” Obviously, I have not used questions like “what colour is this object” in my interviews, since this kind of questions cannot be formulated in the vernacular language. The question I would ask when showing a coloured vignette was the following “*ini tamaara?*” (deictic, *ini*, followed by a term meaning “how is it?”). Actually, while there is no specific term for colour or colours, knowledge of colours does not constitute an independent field either, and there is no interest in talking about colours in an abstract way. However, the Candoshi people are interested in colours, and I would even say fascinated by them. When they talk about animals, plants and minerals, and especially fruits and feathers, in other words specific things in concrete situations, they find a way to refer to colours without colour terms. If a Candoshi speaker is presented with a potato that he does not know of because it grows at a higher altitude, and is asked *ini tamaara?*, his answer will not consist of a mere superficial description. He grabs the tuber, smells it, weighs it and turns it, so that his answer is the expression of a multi-sensory experience using comparatives to emphasise the properties of the potato that he finds relevant. It is a hesitant, deliberately subjective, interactive, evolutive and relative description. The colour of things, or rather the similarity of colours with described things and other things, seems related with characteristics other than visual ones: the senses of touch, taste and smell are resorted to as part of an intentional action proper to a given environment.

In summary, it seems that colour as a characteristic of a thing isolated from its other properties, is not relevant for its description, identification or classification. Maybe because it is not relevant in itself in a world where objects, animals and plants are inextricably linked to their colour. What is important in the eyes of a hunter or fisherman who wants to describe a species, is a set of perceptive properties that the said species conveys, along with a description of its behaviour and its specific ecological habitat.

When a hunter describes an animal, he compares it with others, by referring to those whose properties are relevant in a description context. Since the range of things that are likely to be mentioned in a comparison is necessarily a part of all the things that exist in the world, the descriptive possibilities seem infinite and the outcome can therefore be very precise – this form of communication being possible only when the speakers have a common knowledge of the environment. In these circumstances, colour-related terms would limit the vast expressive possibilities offered by the comparison. In short, from a Candoshi perspective, the colour of things is subsumed in and intertwined with other perceptual dimensions. Colours are perceived among other sensitive characteristics of things without being named, through a perceptive or technical act that I call “contrastive perception,” which mainly consists in comparing them.¹⁹

I have understood that the Candoshi people were not looking for a category but a similarity when presented with a vignette from Munsell’s colour chart. A lively debate occurred between two people who were participating in the discussion on the vignettes displayed on the table. I was interested in the terms used in the discussion, and as I had trouble understanding them, one of my interlocutors took a ginger root, cut a piece of it to reveal its colour and compared it with the vignette. The point of this debate was to determine whether the colour of this vignette resembled more a certain type of ginger or a substance with a similar colour secreted by a fish (probably from the Loricariidae

19 Alexandre Surrallés, “On Contrastive Perception and Ineffability: Assessing Sensory Experience without Colour Terms in an Amazonian society,” *The Journal of the Royal Anthropological Institute (incorporating Man)*, no. 22.4, 2016, p. 810-829.

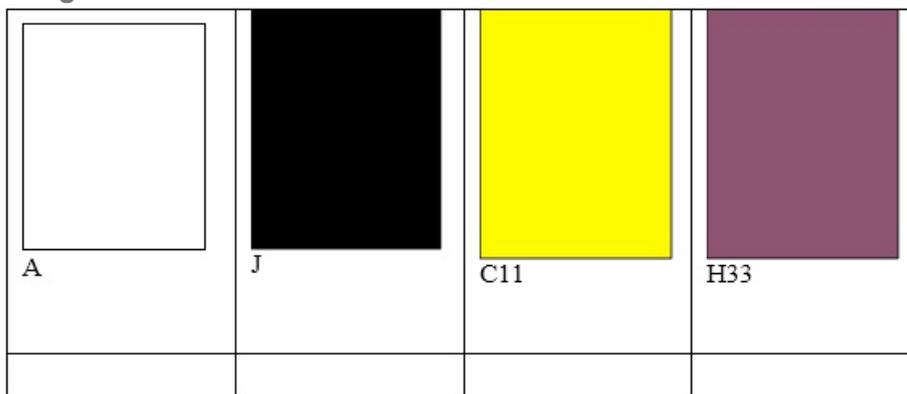
family) when it spawns. Then, I understood that there was a cultural misunderstanding: when asked to give the colour of things associated with the vignettes, they would answer with another exercise: using the environment to find things whose colour was the closest to that of the vignette.

I am taking this opportunity to note that the use of index cards or vignettes as an investigative tool is a highly problematic method. Above all, my results are based on a period of several years of ethnographic observation of the linguistic and cultural practices initiated in 1991, as well as an analysis of discursive and narrative materials. However, the most formal tasks (carried out during three stays in 2002, 2007 and 2012) including the questions on Munsell's vignettes may also provide interesting data and lines of enquiry, when considered critically as sources of qualitative information.

The emotional meaning of ineffable colours

Actually, the investigative method that I have adopted in order to further study the Candoshi people's perception of colours does not only give the aforementioned elements, but also a large correlation between colours and the feelings they convey. The data thus obtained simply results from non-directive interviews with both male and female Candoshi adults, either face-to-face or sometimes in groups, around a coloured index card. The emotional connotations conveyed by colours were soon brought out in the discussions, but in keeping with what I have called a "contrastive perception," no Candoshi has mentioned any of the abstract principles that it would be associated with. There is no symbolic of colours such as "red symbolises passion" in the words of the interviewed. The emotional connotation of colours among the Candoshi people is sometimes very close to the conventional relations a European person could establish. And yet, these feelings never refer to absolute or general emotions or principles.

fig. 1



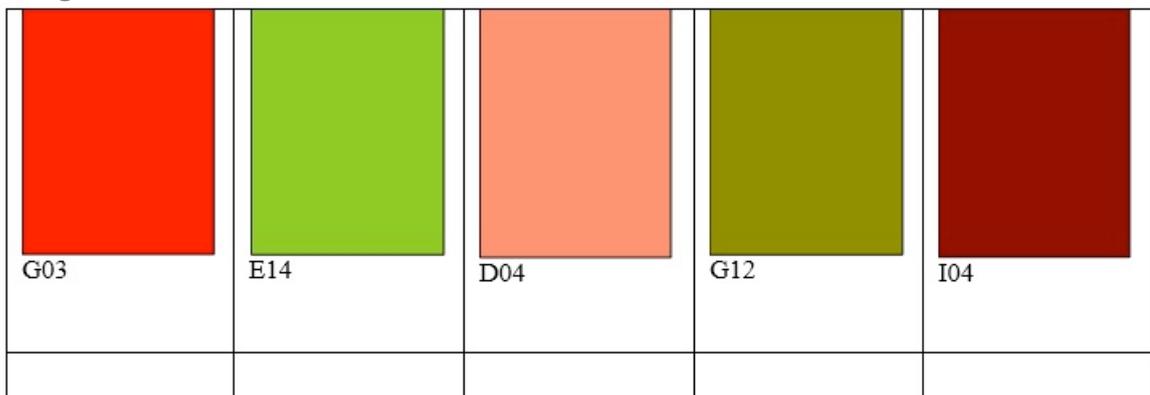
In this sense, the colour white evokes a positive feeling, while the colour black conveys a rather negative one. The white index card (A in Munsell's colour chart) would often be called *boorshimashi*, "like Kapok," and associated with joy, joy of the heart (*magish kisa*), in the Candoshi expression evoking the happiness induced by peaceful relations within the social circle. On the contrary, at the sight of the black colour of the vignette (J), named *kansirpi* (tree resin), the answers often allude to dark memories of hostilities, fire, ashes, hatred of enemies and black face painting, hiding the faces as a sign of mourning or when going to battle.

Sometimes, the emotional connotation follows paths less familiar to us and more specific to the Candoshi cultural context. This could be illustrated by the responses to the colour yellow of index card C11. This colour is named *tsiyaromashi*, like the caracara bird (*Milvago chimachima*) or rather its feathers, or the yellowish cassava

beer that women brew for their husbands, children and guests. In this sense, this colour reminds them of good times, of hospitality and conviviality. It is also evocative of the dry season when trees die and leaves turn yellow, a season that is yet regarded positively because of the abundance of fish resulting from lower water levels.²⁰

With the possible exception of white and black, there is no stable emotional semantics for other colours. It seems that the correlations between colour and emotion, according to what the responses to yellow index card C11 described above, are linked to the object that is referred to in order to name the colour of the displayed vignette. In virtually every case, this object is associated with environmental phenomena in general, and ecological micro-seasons in particular, since they are highly remarkable in the Candoshi life, which is heavily dependent on natural resources in an economy of subsistence that remains very autarkic to this day. The sum of evocations conveyed by the colour magenta of index card H33 provides a paradigmatic example. This colour suggests “the *ungurahui* palm fruit” (*Oenocarpus bataua*), *goonchimashi* in the vernacular language, and the emotional correlate is linked to the feelings associated with the continuity of life, because this fruit grows well throughout the year.

fig. 2



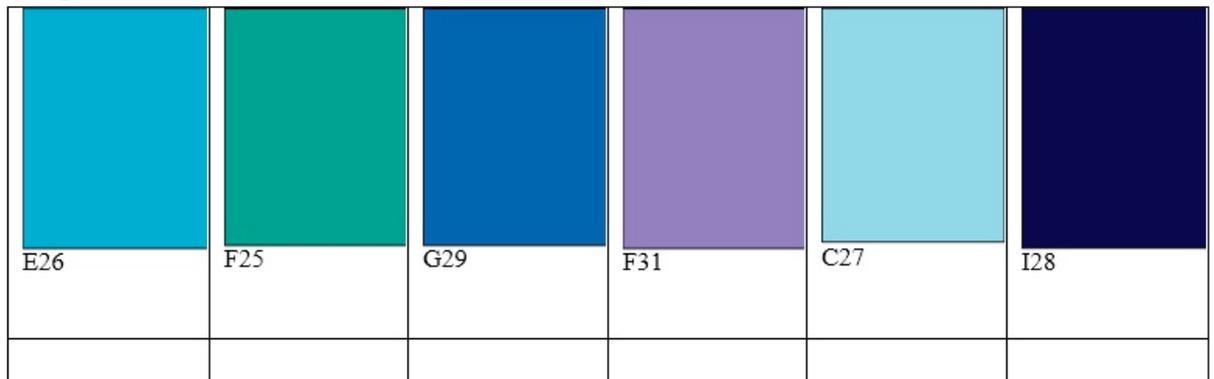
One can find another illustration of the reference to environmental phenomena – which incidentally appears in almost all cases – in the responses to red index card G03. The tone of this index card is said to be *koorashimashi* (“like blood”) or, depending on the display context, *chobiapi* (“like a ripe fruit”). The emotional connotation of this colour is associated with the time of the year when the majority of fruits become ripe, and especially the *aguaje* palm fruit (*Mauritia flexuosa*). The time of fruit maturation gives its name to the micro-season preceding the happiest season of all: that when animals get fat. The abundance of ripe fruits helps fatten animals, and subsequently, the Candoshi people. Everyone is happy, animals, their offspring and obviously humans, who love animal fat, which helps them replenish the energy reserves of hunters and their families, significantly reduced by long months of dearth.

Unlike the colour red, the colour green is associated with unripe fruits through a metonymic relation familiar to Latin language speakers. The colour of index card E14 is named *kamachpamashi*, which literally means “the unripe fruit.” This colour, or rather the period when fruits are green, is evocative of the coming of the rain season. This colour does not arouse joy, but gives a little hope, because it reminds people of the time when fruits start to ripen.

²⁰ For a description of the meteorological seasons and ecological micro-seasons where the Candoshi people live, see Alexandre Surrallés, *Au cœur du sens. Perception, affectivité, action chez les Candoshi*, Paris, Centre national de la recherche scientifique/Maison des sciences de l’homme, “Chemins de l’ethnologie,” 2003, p. 98-108.

At this point, we can establish a first hypothesis on the link between colours and emotions among the Candoshi people: the contrastive perception of colours precludes, or at least complicates, an emotional symbolism of colours. For such a symbolic link to be established, colours should not only exist independently of the medium that integrates them, but they should also be given a stable name. This is not the case in the Candoshi context, where the comparison of objects makes up for the absence of colour names. In the case of contrastive perception, the way emotions and colours meet depends on the colour saturation. Every saturated colour induces a positive emotional connotation. This same colour takes on a more negative connotation as its saturation decreases. For example, colour D04 is called *chombetsortaro*, or “similar to G03.” However, contrary to G03, it has a sad connotation because, according to the received feedback, it is reminiscent of life going by, rotting and spoiled fruits, and of “the heart that bleeds at this sight.” In the same way, index card G12 named *kamachpamashi* reminds the Candoshi people of the same memories as E14, yet tinged with sadness. This tone indeed arouses a form of melancholy, reminding the Candoshi people of a heavy heart caused by the loss of crops. In both cases, the reason given for this negative connotation is that the colour seems to fade, thus reminding one of death. The colour of index card I04 is called *pozanimashi*, “dry land,” a descriptor that often comes up in the interviews, in order to describe the index cards, the colour range of which corresponds to the less saturated spaces between bright colours. This dull and indeterminate colour sparks the utmost apprehension. Synonymous with infertility, it is reminiscent of dry earth, and therefore of hunger and dearth: gardens are not fruitful, shopkeepers have no products to sell and outside help cannot come.

fig. 3



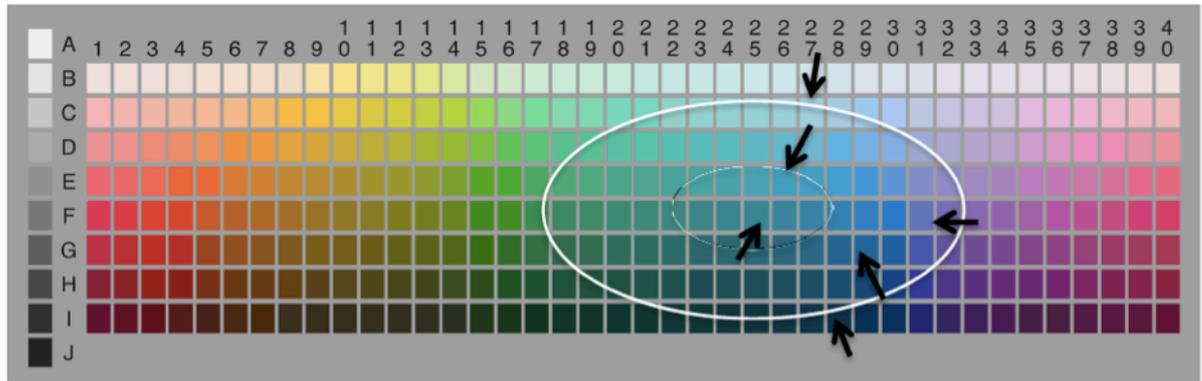
The validity of this hypothesis is clearly illustrated by the emotional connotations of the various vignettes induced by the colour cyan (see above and figure 4), the other important primary colour alongside the colour red according to the theory of subtractive synthesis, which is very important among the Candoshi people and many other populations who cannot distinguish green from blue. The Candoshi people generally name the colour cyan using a comparative referring to the macaw (*Ara ararauna*), named *kavaro* in the vernacular language, because of its blue-green feathers. In fact, *kavaro* refers to a supra-generic category to name psittaciformes or parrots, and can also be used to name the macaw, which is otherwise given a specific name, *karango* or *varpano*. When we focus on the part of the colour chart in which the colour cyan shows a purer chromaticity, for example on index card E26, and when we ask the Candoshi people to describe this colour, they resort to contrastive perception and use one of these three comparisons: *katamshimashi*, “like the tinamou” (implicitly referring to the colour of this bird’s eggs), *aruvimashi*, “like the feathers of the black-faced dacnis” (*Dacnis lineata*) and more rarely, *kavapamashi*, “like the feathers of the blue-and-yellow macaw.” The emotional connotations of this colour are heavily

influenced by memories of the time of the year when the tinamou lays eggs and reproduces, a time which coincides with the dry season, associated with a happy time of the year. This colour consequently arouses great pleasure. The colour of index card F25, which is also very close to the saturation centre of the colour cyan, is named using the same comparisons despite the different chromatic tone, even if the main answer is *kavapamashi*. This colour, like that of the previous vignette, is evocative of the happiest season during which the toucan and the tinamou are hunted for their meat, highly prized by the Candoshi people according to the words of those interviewed. It is also the season when the dacnis (*Dacnis delineata*), *aroovi* in the Candoshi language, nestles lower in the trees, between 15 and 50 metres high, which makes it easier to catch. This colour thus refers to game, to the time when the most prized birds are hunted. It also evokes the time when crowns and other garments are crafted with the feathers of the hunted birds. In short, index cards E26 and F25 have a very positive emotional connotation, associated with the joy resulting from the correlated time of the year.

If we move away from the centre of intensity of the colour cyan, index cards G29 and F31 should, according to our hypothesis, arouse less intense and positive emotions since the chromaticity decreases. The material from the interviews seem confirms it. The colour of vignette G29 is named *kavabana*, a term that shares the same root as the term referring to the macaw, although the suffix indicates a minor level of similarity. It also refers to joy, although way more moderately than in the previous cases, as well as to the dry season, when the lower rainfall and blue sky help the Candoshi people feel more serene, according to the local gloss. For instance, it can refer to a time in life when parents are still alive. In other words, it is not so much a matter of happiness as an absence of sadness, which obviously does not correspond to the same state of mind. The colour of index card F31 is named *kavabatama*, again sharing the same root as the previous examples, but the comparative suffix *-tama* expresses a weaker similarity than the suffixes of the expressions analysed previously. This colour evokes that time of the year which precedes the “good” season and therefore expresses a form of hope, a positive yet ambiguous feeling, because it represents a painful situation to overcome. One of the feelings aroused by this colour is reported by a Candoshi, haunted by his brother’s death and the thirst for revenge, who maintains the hope that the chiefs of the group will one day change their mind and eventually help him.

Further from the centre of intensity of the colour cyan, the emotions aroused by the colours of vignettes C27 and I28 trigger frankly negative feelings. Index card C27 can be described with the expression *kavabana*, just like G29, but this does not mean that it arouses joy. Evoking the imminence of the rain season, namely the time of the year when the berries start to shrink, it causes sadness like the colour of vignette I28, despite the chromatic gap between them. Described with the expression *kizporkavabana*, “like the colour of macaws, but stronger,” in the sense of darker, I28 recalls the Candoshi people of fruitless gardens, and therefore a need to improve their yield so as to avoid hard times. As the intensity of the colour cyan decreases, the emotional connotation shifts from a positive response to a negative one (see figure 4).

fig. 4



Chromaticity of the colour cyan and associated emotions: layout of the vignettes mentioned in Munsell's colour chart

As a conclusion

A first outcome of the survey shows a lack of traditional symbolic correlations between colours and ideas or abstract feelings, such as love, hope or hatred. If I mention these notions in my description, it is only to synthesise the information provided by several informers, who do not refer to such notions, for that matter. The Candoshi people are remote from a term-to-term symbolism between a colour and an emotion, which is typical of what we have called a categorical perception mode. The involvement of personal or subjective memories in the relation between colours and emotions, as is often the case in European contexts, is excluded too. In keeping with the Candoshi contrastive perception, the relation between colours and emotions is almost always established through natural phenomena that are generally representative of an ecological micro-season evoking more or less times of bliss. The chromaticity of colour is also involved in the content of the related emotional connotation.

Let us now conclude with a hypothesis: the hypothesis implied by the richness of the connotations established by the Candoshi people between these coloured vignettes and emotional states. The contrastive perception, because of the need to establish perceptible analogies, is more likely to arouse emotions. In other words, as the terminology used to describe a sensitive experience becomes vaguer, the emotional connotations become more prominent and complex. Similarly to smells for Europeans, colours constitute among the Candoshi people a field that is hardly delineated by perceptive categories, in which contrastive perception prevails by unfolding chains of rich emotional connotations.

ARTAUD Hélène (ed.), "Leurrer la nature," *Cahiers d'anthropologie sociale*, no. 9, Paris, L'Herne, 2013.

BERLIN Brend and KAY Paul, *Basic Color Terms: Their Universality and Evolution*, Berkeley and Los Angeles, University of California Press, 1969.

CONKLIN Harold C., "Hanunóo Color Categories," *Southwestern Journal of Anthropology*, n° 11.4, 1955, p. 339-344.

D'ANDRADRE Roy and EGAN Michael, "The colors of emotion," *American ethnologist*, n° 1.1, 1974, p. 49-63.

DE VOS Connie, "Kata Kolok Color Terms and the Emergence of Lexical Signs in Rural Signing Communities," *The Senses & Society*, no. 6.1, 2011, p. 68-76.

ECZET Jean-Baptiste, "Perception et relation. L'expression du cattle complex par les Mursi (Éthiopie)," in Carlos FAUSTO and Carlo SEVERI (dir.), *Paroles en images. Écritures, corps et mémoires*, Marseille, OpenEdition Press, 2016, p. 35-58.

EVERETT Daniel, "Cultural Constraints on Grammar and Cognition in Pirahã: Another Look at the Design Features of Human Language," *Current Anthropology*, no. 46, 2005, p. 621-646.

GAGE John, *Color and Culture: Practice and Meaning from Antiquity to Abstraction*, Berkeley, University of California Press, 1999.

GOETHE Johann Wolfgang von [1810], *Theory of Colours*, Cambridge [MA], MIT Press, 1970.

HILL Clair, "Named and Unnamed Spaces: Color, Kin and the Environment in Umpila," *The Senses & Society*, no. 6.1, 2011, p. 57-67.

HOVERS Erella, SHIMON Ilani, OFER Bar-Yosef and VANDERMEERSCH Bernard, "An Early Case of Color Symbolism: Ochre Use by Modern Humans in Qafzeh Cave," *Current Anthropology*, no. 44.4, 2003, p. 491-522.

HOWES David and CLASSEN Constance, *Ways of Sensing: Understanding the Senses in Society*, Londres, Routledge, 2014.

KNIGHT Chris, *Blood Relations: Menstruation and the Origins of Culture*, London/New Haven, Yale University Press, 1991.

LEVINSON Stephen. C., "Yeli Dnye and the Theory of Basic Color Terms," *Journal of Linguistic Anthropology*, no. 10.1, 2000, p. 3-55.

LEVINSON Stephen. C. and Majid Asifa, "Differential ineffability and the senses," *Mind & Language*, no. 29.4, 2014, p. 407-427.

LÉVI-STRAUSS Claude, *Le Totémisme aujourd'hui*, Paris, Presses Universitaires de France (PUF), 1962.

PASTOUREAU Michel, *Noir, histoire d'une couleur*, Paris, Seuil, 2008.

REGIER Terry, KAY Paul and Cook Richard S., "Focal Colors Are Universal After All," *PNAS*, no. 102, 2005, p. 8386-8391.

ROBERSON Debi, DAVIES Ian R. and DAVIDOFF Jules, "Color Categories Are Not Universal: Replications and New Evidence from a Stone-Age Culture," *Journal of Experimental Psychology: General*, no. 129.3, 2000, p. 369.

ROBERSON Debi, DAVIDOFF Jules, DAVIES Ian R. and SHAPIRO Laura R., "Color Categories: Evidence for the Cultural Relativity Hypothesis," *Cognitive Psychology*, no. 50.4, 2005, p. 378-411.

ROSCH Heider Eleanor, "Universals in Color Naming and Memory," *Journal of Experimental Psychology*, no 93, 1972, p. 10-20.

SAHLINS Marshall, *Culture and Practical Reason*, Chicago, Chicago University Press, 1976.

SAUNDERS Barbara, "Revisiting Basic Color Terms," *Journal of the Royal Anthropological Institute*, no. 6, 2000, p. 81-99.

SENFT Gunter, "Talking About Color and Taste on the Trobriand Islands: A Diachronic Study," *The Senses & Society*, no. 6.1, 2011, p. 48-56.

SURRALLÉS Alexandre, *Au cœur du sens. Perception, affectivité, action chez les Candoshi*, Paris, Centre national de la recherche scientifique/Maison des sciences de l'homme, "Chemins de l'ethnologie," 2003.

SURRALLÉS Alexandre, "On Contrastive Perception and Ineffability: Assessing Sensory Experience without Colour Terms in an Amazonian Society," *The Journal of the Royal Anthropological Institute (incorporating Man)*, no. 22.4, 2016, p. 810-829.

TUGGY John C., *Vocabulario candoshi de Loreto*, Yarinacocha, Instituto Lingüístico de Verano, 1966.

TURNER Victor, "Color Classification in Ndembu Ritual: A Problem in Primitive Classification," in Michael BARTON (ed.), *Anthropological Approaches to the Study of Religion*, London, Tavistock, 1966, p. 47-84.

WIERZBICKA Anna, “Why There Are no ‘Color Universals’ in Language and Thought,” *Journal of the Royal Anthropological Institute*, no. 14.2, 2008, p. 407-425.

YOUNG Diana, “Mutable Things: Colour as Material Practice in the Northwest of South Australia,” *Journal of the Royal Anthropological Institute*, no. 17, 2011, p. 356-376.