



Why there are no 'colour universals' in language and thought

ANNA WIERZBICKA Australian National University

Do all people live in a world full of colours? Perceptually, yes (unless they are visually impaired), but conceptually, no: there are many languages which have no word for 'colour' and in which the question 'what colour is it?' cannot be asked and presumably does not arise. Yet the powerful and still immensely influential theory of Berlin and Kay assumes otherwise. While building on my earlier work on colour semantics, this article brings new evidence against the Berlin and Kay paradigm, and presents a fundamentally different approach. The new data on which the argument is based come from Australian languages. In particular, the article presents a detailed study of the visual world reflected in the Australian language Warlpiri and in Warlpiri ways of speaking, showing that while Warlpiri people have no 'colour-talk' (and no 'colour-practices'), they have a rich visual discourse of other kinds, linked with their own cultural practices. It also offers a methodology for identifying indigenous meanings without the grid of the English concept 'colour', and for revealing 'the native's point of view'.

'Colour semantics' vs 'visual semantics'

In his English as a global language David Crystal observes:

There is no shortage of mother-tongue English speakers who believe in an evolutionary view of language ('let the fittest survive, and if the fittest happens to be English, then so be it') or who refer to the present global status of the language as a 'happy accident'. There are many who think. ... that a world with just one language in it would be a very good thing (2003: 14-15).

Linguists usually do not agree, and neither do anthropologists. Nor do either linguists or anthropologists proclaim that English is the fittest language in the world. None the less, in practice, linguists, and also anthropologists, often behave as if they believed that English is indeed the fittest. They do so by absolutizing some concepts which are lexically encoded in English and giving them a fundamental status in human cognition (see Wierzbicka 2006*a*). The concept of 'colour' is a good case in point, as is the idea of 'colour universals' based on English words such as *white*, *black*, *red*, *blue*, and so on.

It has often been pointed out that there are many languages – for example, in Australia, Papua New Guinea, and Asia – which do not have a word for 'colour' (see, e.g., Bulmer 1968; Conklin 1964; Kuschel & Monberg 1974). On the face of it, therefore, 'colour' is not a universal concept, at least not demonstrably so. It is (demonstrably) a very important concept in English, and of course in many other languages, but by no means in all. To assert, as is often done, that speakers of such languages none the less 'think' in terms of 'colour' (although they never speak about 'colour') is to impose on those languages a conceptual grid alien to them. The claim that speakers of languages without a word for 'colour' can none the less have a *concept* of 'colour' is to go beyond empirical evidence. In any case, without a word for 'colour', a putative concept of 'colour' could not be a coin in the speakers' shared conceptual and communicative currency.

This being so, the idea of 'colour universals' – conceived of as empirical universals of language and thought – is self-contradictory. There can be no universals in how people habitually think and talk about colour, given that in many languages people do not talk about colour at all.

This basic point – which I have been making for many years (see, e.g., Wierzbicka 1990; 1996; also Lucy 1997) – has often been rejected on the basis of the axiom that the absence of a word does not prove the absence of a concept. Thus, if English happens to have a word for 'colour' and the Papuan language Kalam (Bulmer 1968) does not, this supposedly does not prove that 'colour' is not just as real in the *thinking* of the Kalam people as it is in the thinking of the speakers of English. The absence of a word for 'colour' in Kalam is said to be simply a 'lexical gap'.¹

The same convenient axiom has been invoked in support of many other putative human universals, for which there 'happen' to be words in English though not in some other languages – in particular, many so-called 'basic human emotions', such as 'sadness' (for which Tahitian, for example, has no word at all, as documented by Levy [1973]). Again, the absence of a word for 'sadness' in Tahitian is said to be 'just a lexical gap'. Such an insoluciant attitude to troublesome lexical data from different languages implies that English is the fittest language of all: a language which just 'happens' to have words for everything fundamental in human thought.

Even if it is true that the absence of a word does not prove the absence of a concept, how can we prove the *presence* of a concept for which there is no word? And if we want to search for human universals, should we not try to rely, as far as possible, on concepts which *are* lexically recognized in all languages, rather than those which happen to be lexicalized in English?

The empirical work undertaken within the natural semantic metalanguage (NSM) theory of language and thought (see the following section) has shown that while many languages do not have a word for 'colour', all languages have a word for 'seeing'. For example, in all languages one can say things like: 'I don't see anything' or 'I see many people' (Goddard & Wierzbicka 2002). As my colleague Cliff Goddard and I have argued for many years, therefore, it makes more sense to ask about the universals of seeing than any putative 'universals of colour' (Goddard 1998; 1999; Wierzbicka 1996). It makes sense to ask, in the first instance, how people in different cultures talk, and think, about what they see – rather than ask about how they talk, and think, about 'colour'. 'Visual semantics' is wider and more fundamental than the 'semantics of colour', and to explore fruitfully the semantics of colour (with respect to languages such as English) we need to do so in the context of a more fundamental inquiry into the semantics of seeing.

As evidence of the recent literature on bilingual experience shows, the structure of the experiential world differs, to some extent, from language to language (see Besemeres 2002; Besemeres & Wierzbicka 2007; Pavlenko 2006). There are in fact many

different experiential worlds, and if we try to explore them through shared human concepts rather than through English alone we can get closer to the experiential worlds inhabited by the speakers of languages other than English. The fact that we may never be able to capture those worlds fully or perfectly is not a good reason not to try to get as close to them as possible.

'Semantic atoms' and 'semantic molecules'

The work carried out, over three decades, within the NSM framework shows that all human languages share sixty-five or so 'semantic primitives' – elementary units of meaning out of which all complex and culture-specific meanings are built. The set of such universal 'semantic atoms', lexicalized in all languages of the world, includes SEE and HEAR, as well as THINK, KNOW, WANT, and FEEL. The full set of empirically established 'semantic atoms' is given in Table 1 (for versions of this table in other languages see Goddard & Wierzbicka 2002). We do not claim that *only* these 'atoms' are universal – some configurations of such 'atoms' may well be universal or near-universal (see Goddard 2001). But the 'atoms' have a unique role in the study of languages and cultures: together with their combinatory properties these concepts can serve as a natural semantic metalanguage for cross-linguistic comparisons and for the search for linguistic and conceptual universals (Goddard 1998; Goddard & Wierzbicka 1994; 2002; Wierzbicka 1996).

On the basis of the 'atoms' listed in this and similar tables, different systems of language and thought build certain 'semantic molecules', which can play an important role in the construction of many other more complex meanings and which are not necessarily universal.

Substantives:	I, YOU, SOMEONE, SOMETHING/THING, PEOPLE, BODY
Taxonomy, partonomy:	KIND, PART
Determiners:	THIS, THE SAME, OTHER/ELSE
Quantifiers:	ONE, TWO, MUCH/MANY, SOME, ALL
Evaluators:	GOOD, BAD
Descriptors:	BIG, SMALL
Mental predicates:	THINK, KNOW, WANT, FEEL, SEE, HEAR
Speech:	SAY, WORDS, TRUE
Action, events, movement, contact:	DO, HAPPEN, MOVE, TOUCH
Location, existence, possession, specification:	BE (SOMEWHERE), THERE IS/EXIST, HAVE, BE (SOMEONE/SOMETHING)
Life and death:	LIVE, DIE
Time:	WHEN/TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT
Space:	WHERE/PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE
Logical concepts:	NOT, MAYBE, CAN, BECAUSE, IF
Augmentor, intensifier:	MORE, VERY
Similarity:	LIKE

 Table 1.
 Semantic primes – English version.

Notes: • Primes exist as the meanings of lexical units (not at the level of lexemes) • Exponents of primes may be words, bound morphemes, or phrasemes • They can be formally complex • They can have different morpho-syntactic properties, including word-class, in different languages • They can have combinatorial variants (allolexes) • Each prime has well-specified syntactic (combinatorial) properties. • Two (or more) primes can share the same lexical exponent, with different syntactic properties.

'Colour' is one such molecule. It is an important semantic molecule in English, as it is in many other languages, and it underlies (and is a part of) the meaning of words such as *blue*, *red*, *yellow*, or *pink*.

The concept of 'colour' emerges in a language when people become interested (often, because of new technologies) in distinguishing purely 'chromatic' aspects of appearance from other aspects, such as, for example, darkness, shininess, vividness, or brightness, which may have more to do with visibility or visual conspicuousness than with specific prototypes. It is not an accident that languages which have no word for 'colour' have no specific 'colour words' either. They may of course have words which, from the point of view of English, are 'words for colours', but these words do not include the concept of 'colour' in their meaning (see Wierzbicka 2005; 2006*b*; see also the following section). When 'colour words' emerge in a language, a word for 'colour' emerges too (often by borrowing). For example, the language of Aboriginal teenagers in Central Australia includes now both the word *kala* and more specific loanwords such as *yala-wana* and *blu-wana* (from 'yellow one', 'blue one') (Langlois 2004: 157).

But if we want to compare the visual semantics of English with that of languages which do not have a word for 'colour', and if we want to do so from a maximally neutral epistemological perspective, not from an Anglocentric one, we can only use SEE, not 'colour', as our conceptual anchor point, because it is SEE, not 'colour', that all languages share.²

Languages without a 'colour' concept - an illustration

Consider, for example, the following visual descriptors used by the speakers of the Australian language Warlpiri (see Hargrave 1982; Laughren, Hale & Warlpiri Lexicog-raphy Group 2006): *yalyu-yalyu*, literally 'blood-blood'; *karntawarra-karntawarra*, literally 'ochre-ochre'; *yukuri-yukuri*, literally 'grass-grass'; *walya-walya*, literally 'earth-earth'; and *kunjuru-kunjuru*, literally 'smoke-smoke'.

The form of these words provides a clue to their meaning as it is understood 'from the native's point of view': they all appear to imply that what the speaker sees is likened to some prototype – blood, ochre, grass, earth, or smoke. This is often confirmed by folk definitions such as the following one for the word *kunjuru-kunjuru* cited in the *Warlpiri-English encyclopedic dictionary* (Laughren *et al.* 2006): 'kunjuru-piya', that is, 'like smoke' (offered while describing a particular flower).

When the Warlpiri dictionary glosses *kunjuru-kunjuru* as 'dark blue, smoky grey, purple', it seems clear that the purpose of this gloss is to help an Anglo reader to get some idea of the word's referential range rather than to capture its meaning from an insider's point of view. By contrast, an NSM explication of *kunjuru-kunjuru* would try to do the latter, and while it would be more explicit than the folk definition, it would be in line with it (the symbol [M] stands for a semantic molecule):

this is kunjuru-kunjuru ('smoke-smoke')=

- a. when people see this they can think about it like this:
- b. 'this is like *kunjuru*[м, smoke]
- c. when people see *kunjuru*[M] somewhere they can see something like this'

Crucially, the Warlpiri visual descriptors can be explicated along the lines proposed here in Warlpiri itself – a point which I will illustrate with a tentative explication of *yukuri-yukuri* ('grass-grass') whose Warlpiri version was provided by Mary Laughren.

this (X) is yukuri-yukuri (nyampu = ju yukuri-yukuri) =

- a. when people see this they can think like this:
- kuja = ka = lu yapa-ngku nyampu nya-nyi, kaji = ka = lu = nyanu kuja wangka-mi: b. 'this is like *yukuri*'
 - ʻnyampu = ju yukuri = piya'
- c. when people see yukuri somewhere, they can see something like this kuja = ka = lu yapa-ngku yukuri nya-nyi nyarrpara, nyampu-piya (marda) ka = lu nya-nyi

The Warlpiri dictionary glosses *yukuri* as 'green vegetation, new growth, fresh vegetation, alive (of plants)', and it quotes a folk definition: '*yukuri* is the green vegetation – grass and trees – after rain and when everything is green [*yukuri-yukuri*] like when it is not dead and waterless – when the foliage and grasses are alive and green'. The NSM explication, which does not rely on English words *colour* or *green*, attempts to capture an insider's point of view and uses only words which do have Warlpiri equivalents.

Anthropologist Diana Young (2005) writes about 'green-ness' in Central Australia like this: 'The earth in the Western Desert is red but after heavy or prolonged rain, and the immediate germination of opportunistic seeds, the ground begins to turn a brilliant green' (2005: 64). As Young points out with respect to two related Central Australian languages, Pitjantjatjara and Yankunytjatjara, 'the bright green of new plant growth occurs only where there is moisture. *Ukuri wiru* or in English "really green" is a phrase [Yankunytjatjara and Pitjantjatjara] people often use about country, or plants' (2005: 65). The same applies to Warlpiri, where the corresponding phrase is *yukuri-yukurinyayirni*. Thus, *yukuri-yukuri* does not mean 'green'; it refers not to (any) green but to 'brilliant green' and it means that something so described 'looks like the earth where it is covered, after rain, with fresh new growth (*yukuri*)'.

Given that Warlpiri visual descriptors can be readily explained in Warlpiri itself, and in a way consistent with native speakers' intuitions (as reflected, for example, in folk definitions), I cannot see any justification for saying that 'really', unbeknown to themselves, Warlpiri people think in terms of categories lexicalized in English – such as 'colour' and 'green' – and not in terms of categories lexicalized in Warlpiri itself.

The Warlpiri dictionary is a priceless resource, and I do not mean to criticize it here. My disagreement is with the Berlin and Kay paradigm, within which a word like *yukuri-yukuri* is glossed as 'green' (or 'grue') and regarded as a 'colour word' (see Kay, Berlin, Maffi & Merrifield 1997: 48), supposedly supporting the hypothesized 'universals of colour naming'.

The Warlpiri visual world

The main features – an overview

What can the world look like to people who are not interested in 'colours'? In this section, I will probe this question in relation to Warlpiri, using as my main database the Warlpiri dictionary.

Generally speaking, the Warlpiri people appear to be particularly interested in four aspects of what they see – all four different from 'colour', with which speakers of languages such as English are clearly preoccupied. Things which attract their special attention are:

- 1. those which (regardless of their colour) are visually conspicuous in a given place, highly noticeable against the background;
- those which (regardless of their colour) *shine* somewhere in one's surroundings

 often, in the distance;

- 3. those which (regardless of their colour) are visually striking because they are not 'the same all over' but present striking visual contrasts and patterns (e.g. they are spotted, striped, or flecked);
- 4. those which strike the onlookers as looking like some familiar and visually conspicuous features of the environment (commonly occurring local minerals, fresh vegetation after rain, the characteristic local soil, the smoke of evening camp fires, etc.).

The English glosses, definitions, and translations of the Warlpiri folk comments included in the Warlpiri dictionary reflect a preoccupation with colour, but the Warlpiri folk definitions and folk comments themselves do not, and in fact no word for 'colour' appears in the Warlpiri parts of the dictionary at all.

As Hale (1959) noted nearly half a century ago, one cannot ask in (traditional) Warlpiri the question 'what colour is it?', and one would normally render this question as 'Nyiyapiya nyampuju?', that is, literally, 'what is it like?' (*nyiya* 'what', *-piya* 'like', *nyampuju* 'this'). If one wanted to be more precise one could of course say in Warlpiri the equivalent of 'what does it look like?' or 'what is it like when people see it?'; but not 'what colour is it?' Thus, for Warlpiri-speakers, the question 'what colour is it?' simply does not (did not) arise. Presumably the absence of 'colour talk' in traditional Warlpiri was linked with the absence of any 'colour practices' such as dyeing.³ On the other hand, the Warlpiri have a rich visual discourse of other kinds, and a rich visual art, including body painting and ground painting, based on pigments, designs, and eye-catching visual contrasts (see Isaacs 1999). A key role in this discourse is played by the concept of *kuruwarri-kuruwarri*, discussed below (pp. 414; 416-17; see Munn 1973).⁴

Visual conspicuousness

The Warlpiri dictionary includes many words that suggest 'visual conspicuousness' without specifying any particular source of it, and it often lists a number of possible sources. For example, the reduplicated form *pirarr-pirarrpa* (from *pirarr(pa)*, glossed 'bright, light coloured, shiny, whitish') is defined in the dictionary as 'bright colour or light colour (white, yellow, orange, red, silver) as opposed to dark colours (black, blue, green, purple)', and in addition it is glossed as 'bright colour, yellow, orange, light colour, shiny'. In fact, it seems clear that the meaning of *pirarr-pirarrpa* does not refer to 'colour' at all: what unites the range, including elements like 'yellow', 'orange', 'silver', 'light' and 'shiny', is not colour but high visibility (against a different background).

Another word, *junyuku*, is glossed as 'bright colours on body, dressed-up, brightly decorated, flash', and it is given the following folk definition: '*Junyuku* is what we call it like when they paint *yawulyu* designs on someone and put a white band on her head and a bunch of Major Mitchell cockatoo feathers. Or when somebody puts on a very nice dress, "Hey! Look at that woman! That dress really makes her look flash"'.

Yet another word, *warntiril-pari*, is similarly glossed, with reference to 'bright colours', as 'coloured, brightly coloured, reddish in colour, ripe colour (of fruit), bright colour, colourful'. In fact, the folk definition offered in the entry of this word suggests that what this word means is not 'colour' but again, roughly speaking, 'high visibility (against a background)'. The English translation of this folk definition, which relies on 'colour', is, I think, misleading: '*Warntirilypari* is something that is light coloured or multicoloured, like when people paint themselves across the nose or the forehead,

either in white or red. That is *warntirilypari*. Or a multicoloured shirt is colourful or colours on a dress – white or red or green'.

The fact is that the Warlpiri folk definition itself includes no words like 'coloured', 'multicoloured', or 'colourful', it only includes words like *yalyuyalyu* (lit. 'blood-blood', that is, roughly speaking, 'looking like *yalyu* – blood') and *yukuri-yukuri* (lit. 'grass-grass', that is, roughly speaking, 'looking like *yukuri* – grass after rain'). The Warlpiri-speaker is giving *examples* of what would be regarded as *warntirilypari*, and what unites these examples is, I would argue, not 'colour' but high visibility.

Things shining somewhere at some time

If the visual semantics of languages like English reflects a preoccupation with colour, that of Warlpiri suggests a preoccupation with things 'shining' somewhere in the speaker's environment. (For the importance of 'shining' in other Australian languages, see Jones & Meehan 1978.) The Warlpiri dictionary presents a large number of words referring to 'shining', and the discourse of 'shining' reflected in the accompanying folk comments is rich, distinctive, and culturally revealing. Below are some examples:

- The verb *jalarlany-ma-ni* is glossed as 'shine, be shiny', and it is illustrated with the following: 'There they are shining [*jalarlany*] over there'; 'After rain the rocks are shiny [*jalarlany*]'.
- The noun *liirl(ki)* is glossed as 'light, white, clear, pale, bright, shining, shiny' and is defined specifically with reference to sunlight: 'of surface which reflects sunlight without absorbing any visible rays'. The verb *liirl-nyina-mi* is glossed as 'be white, shine, glow, glisten, sparkle' and is provided with the definition 'x reflect light'. The dictionary notes that this verb evokes a particular prototype: a place that is normally a source of water but is currently dried up, for example: 'If a white rocky hill shines [*liirl-nyinakarla*] in the distance, then we call it *liirlpari*'; 'Water shines [*liirl-nyinami*] in soakages, rockholes. Ghost gums (stand out) white [*liirl-nyinami*]'; 'Take a hill which sparkles [*liirl-nyinakarla*] from a long way off, then the hill is shiny [*liirlpari*], white'. As these examples illustrate, the stem *liirl* suggests (prototypically) not so much a permanent quality of an object as something that visually 'stands out' in a particular place at a particular time.
- Another word glossed as 'shining from afar' is *pirltarr-ku*. The reduplicated verb *pirltarrku-pirltarrku-wapa-mi* is defined as 'x be bright and easily seen against surroundings' and glossed as 'be highly visible, be bright and stand out'. This is illustrated with the following sentence: 'They can easily bone you walking around (in bright clothes) so that you can be easily seen in the distance'.

The entry for one further 'word of shining', *ratarata*, does not refer to visibility in the distance, but it, too, refers to 'standing out' against the surroundings: 'typically used of something white which stands out on a dark surface'. The examples support this: 'There's a lot of edible sap glistening right there'; 'we can see them [drops of water] glistening on the grass'; 'the white ... flakes shine on the Red River Gums', and so on.

All this suggests that traditional Warlpiri culture encouraged paying attention to 'something shining somewhere', especially in the distance, and deriving therefrom information about what was happening in one's surroundings. In particular, it encouraged paying attention to possible sources of water, and in Central Australia rocks shining in the distance could suggest the presence of rockpools.

For a nomadic people living essentially in a 'natural' world (and in a desert), such a focus of attention is clearly more relevant than that associated with discriminating between abstract 'colours' – a mental habit which makes sense in a world full of manufactured objects, where many objects of one kind can differ from other objects of the same kind in colour alone. The elaboration of 'shiningness' in the Warlpiri lexicon is, indeed, a shining example of the principle of cultural elaboration in general – an important principle which some culture-blind recent writings have tried, and failed, to undermine (see, e.g., Pinker 1995; Pullum 1991).

Visual patterns and contrasts within an object

When one reads English translations of Warlpiri sentences in the domains classified in the dictionary as 'colour' and 'perception', one comes, again and again, against the curious word 'variegated'. *Variegated* is not a colloquial English word, but in general, English dictionaries tend to link it with patches of different colours, especially in relation to leaves.

In Warlpiri sentences, on the other hand, the words translated into English as 'variegated' are not linked with 'colours' and apply, above all, to the bodies of animals. Clearly, they stand for concepts which are salient in the Warlpiri view of the world but have no equivalents in English. For example, the word *kuruwarri-kuruwarri* is glossed as 'variegated, striped, patterned'. This is illustrated with the following folk comments: 'The plains goanna is big and broad, and variegated'; 'We call the blue-tongued lizard variegated – the blue-tongued lizard is variegated. Pretty. Short and small'; 'The blacknosed snake is variegated, Pretty. Striped'. As the last two examples suggest, 'variegation', at least of the kind described with the word *kuruwarri-kuruwarri*, tends to be linked with aesthetic appreciation.

There are twenty-four folk sentences with the reduplicated form *kuruwarri-kuruwarri* scattered throughout the dictionary, and in eighteen of them it is translated as 'striped'. The remaining six instances, however, make it clear that this word does not mean 'striped' as it is also applied to 'designs' on the wings of butterflies, or to 'mark-ings' on the chest of a particular kind of bird. In such cases, expressions like 'mixed colours,' 'pretty coloured', or 'colourful designs' are used instead.

Another 'variegated'-type word is *piirrpiirrpa*, glossed as 'half white, brown and white, whitish, speckled with white', and illustrated with the sentences '[*Jalalapiny-pinypa*] is what we call one whose feathers are speckled with white' and 'The belly [of the Bush Turkey] is speckled with white'. The English phrase 'speckled with white' suggests a conceptual distinction between 'speckled' and 'white', but in Warlpiri the concept is clearly unitary. The noun *piirrpiirrpa* is related to the 'pre-verb' *piirr(pa)*, glossed as 'painting, daubing, smearing', and to the verb *piirr-pi-nyi*, glossed as 'paint with kaolin, cover with pipe-clay, whiten, smear with white', and it seems clear that all these concepts are related.

Some insight into the Warlpiri ways of thinking reflected in such untranslatable Warlpiri words is provided by folk comments like the following one (in the entry for the word *jalajirrpi*): 'The [*jalajirrpi*] is a white one. It doesn't have any other colours, is not flecked or speckled with colours. Its body is the same (colour) all over'. Similarly, insects called *yuljulju* (praying mantis) are described as 'all green; their bodies and wings are green – all of them including their hind legs. They are green all the way down their legs'. Likewise, birds called *kalwaju* are described as follows: 'The heron, its legs are all white really all the way down'.

The repeated mention of 'colours' in the English translation has no direct basis in the Warlpiri sentence. The phrase 'speckled with colours' translates here the Warlpiri word *jiirlpari-jiirlpari*, which is glossed in its own entry as 'dappled, flecked, mottled, spotted, spotty' and is defined as 'having small round marks'. There is no mention of 'colours' in the Warlpiri folk comments, and the interest of the Warlpiri-speaker evidently lies in the presence of patterns or visual contrasts between different places on the bird's body, that is, in the question of whether or not all parts of the body look the same.

Folk comments referring to the presence or absence of patterns and contrasts in the visual appearance of some species occur repeatedly in the dictionary and point to an aspect of the visual world which is evidently of special interest to Warlpiri-speakers.

The English translations of Warlpiri folk comments offer expressions like 'splotches of colour', 'blotches of colour', or 'multicoloured' to render concepts which in Warlpiri indicate striking visual contrasts (as in stripes, spots, and other patterns) rather than different colours. For example: 'The body is really like a leaf, but smaller. It's just spotted [mawurlpari-mawurlpari] – green and black spots on the yam grub. Like stripes and spots [mawurlpari-mawurlpari] as well'; 'The butterflies have small hairy bodies, which are multicoloured [mawurlpari-mawurlpari] and beautiful. Their bodies are yellow, white, black, with little blotches of colour, spots on them'.

Elsewhere in the dictionary, the same butterflies are described in one sentence as *mawurlpari-mawurlpari* and *jiirlpari-jiirlpari*, which is rendered in English as '[having] small coloured patches and little spots'. But a bird called *jarrawarnu* is also described as *mawurlpari-mawurlpari* – a folk comment translated into English as 'black and white like a magpie'.

Other words which focus on striking visual contrasts and patterns within one thing (usually, an animal body) are *warntukul-pari* and *wartirlkirri-wartirlkirri*, the first of which is defined as 'pattern of contrasting patches of black and white', and the second as 'striped, banded, cross-wise markings'.

Obviously, it is not possible to explicate all the 'variegated'-type Warlpiri words within the confines of this article, but a few brief NSM-style observations on the meaning of some of these words are in order:

- *Mawurlpari-mawurlpari* ('spotted, flecked, dappled, variegated, spotchy') implies, it seems, that when people see something so described 'they can see many small things in one place' and that 'these things don't all look the same'.
- The word *jiirl-pari-jiirl-pari* (glossed as 'dappled, flecked, mottled, spotted, spotty' and derived from *jiirl-pari*, which is glossed as 'small and round') appears to mean that 'people can see many small round things in a place' and that 'they all look the same'.
- The word *piirr-piirrpa* (glossed as 'half white, brown and white, whitish, speckled with white') and derived from *piirl(pa)*, 'painting, daubing', appears to mean that these things look like (Aboriginal) people's bodies painted (smeared) in some places with kaolin (white clay).
- Another word, *wartirlkirri-wartirlkirri*, (glossed as 'striped, banded, cross-wise markings') appears to imply that something so described 'looks as if something had moved many times from one side of this thing to another.'

To close this section, let me return to the word *kuruwarri-kuruwarri*, with which I started. Reading the gloss 'variegated, striped, patterned', one would think that

kuruwarri-kuruwarri is a purely visual descriptor focusing on some physical and geometrical feature of an object's appearance. Such an assumption, however, is contradicted by the meaning of the non-reduplicated form, glossed as 'mark, design, drawing, painting, pattern' and defined as follows: 'visible pattern, mark or design associated with creative Dreamtime (*jukurrpa*) spiritual forces: the mark may be attributed to these forces, or it may symbolize and represent them and events associated with them'.

In the light of this definition and other information given in the dictionary, it seems clear that *kuruwarri* is a key cultural word in Warlpiri linked with the ceremonial and religious life, and that the meaning of the reduplicated form *kuruwarri-kuruwarri* is not about 'stripes' and other forms of 'variegation' (patches, blotches, spots, etc.), but rather about visual patterns, which look like markings made somewhere by someone to convey some meaning (as in some of the senses of *kuruwarri* itself). This close semantic link between the reduplicated and non-reduplicated form is particularly clearly visible in sentences where the two forms occur together, with reference to the same visual pattern. For example: 'The Black Kite doesn't have any stripes [*kuruwarri-kuruwarri*] on its wings. Its body is all reddish-brown, even including its wings'. However the Grey Falcon has striped [*kuruwarri*] feathers, especially its wing feathers'. In fact, the word *kuruwarri* itself is sometimes translated in the dictionary as 'stripes', whereas elsewhere it is rendered as 'designs' or 'markings'.

I am suggesting, then, that to describe a kind of lizard or bird as *kuruwarri-kuruwarri* is a bit like saying that the patterns on the wings of some insects look like hieroglyphs – or, indeed, as some culturally important information 'coded' in Aboriginal paintings. So here is a tentative explication:

this thing is kuruwarri-kuruwarri =
when people see this they can think about it like this:
 "this is like kuruwarri[M]
when people see kuruwarri[M] somewhere, they can see something like this"

This could be elaborated with the following component:

people can see something like this in a place if someone did something to something in this place because this someone wanted people to know something about something

As noted by Morphy (with special reference to the Yolngu people of Northern Australia),

[T]he design on the back of a turtle is seen as its design in much the same way as the design painted on a human body is seen as belonging to and representing a clan. A myth, for example, explains the origin of the pattern on the turtle's shell, how it was put there, and why it takes the form it does. Myths explaining the form of natural designs are analogous to those relating to cultural designs; indeed, natural and cultural designs are frequently seen as two manifestations of the same thing (2005: 304).

Those 'cultural designs', intimately linked with Aboriginal mythology, are equally relevant to Aboriginal art (in particular, painting) as they are to the natural environment. In Yolngu, the key term *miy'tji*, which

can be roughly glossed as 'a painting' ... can also be used to refer to any regularly occurring pattern or design, whether it is natural or cultural in origin. The pattern made by interlocking sections of a

turtle's shell, the thin spirals engraved by insects on the cark of the scribbly gum, and the chequerboard pattern in black and white on the cone shell are all alike *miny'tji* (2005: 304).

Morphy goes on to discuss the importance of patterns and 'designs' in Aboriginal art and aesthetics, and to emphasize the key role of cross-hatched lines, geometrical patterns, 'the shimmering effect of the cross-hatching, the appearance of movement, the sense of brightness' (2005: 316). Judging by the material collected in the Warlpiri dictionary, the same preoccupation with contrasting and eye-catching patterns characterizes everyday discourse in Australian languages.

Visual descriptors such as those discussed in this section reflect the same emphases – not on colours, but on contrasting patterns, lines, and circles, the appearance of movement, and the seemingly purposeful and meaningful creative action reflected and encoded in the appearance of things (on related features of Australian Aboriginal art in general and 'desert art' in particular, see, e.g., Isaacs 1999). English does not have a word for *kuruwarri-kuruwarri*, yet nobody would claim that there is a 'lexical gap' in English here and that the concept is really there even though there is no word for it. What applies to the absence of *kuruwarri-kuruwarri* from English applies also to the absence of 'colour' from Warlpiri. It is not a matter of lexical gaps; it is a matter of different ways of looking at the world.

Visual semantics and visual discourse: getting closer to 'the native's point of view' The differences between Warlpiri and English lexical semantics are linked with differences in the prevailing mode of discourse. Generally speaking, Warlpiri-speakers appear to be far less interested in describing and identifying objects on the basis of some visual characteristics than in noting some striking features of their surroundings (and possibly alerting others to them).

For example, in the case of the culturally elaborated domain of 'shiningness', the attention is usually directed not at whether or not some particular object is 'shiny', but at the fact that 'something is shining somewhere in the environment, especially in the distance'.

In the case of reduplicated visual descriptors like *yukuri-yukuri* ('grass-grass') or *yalyu-yalyu* ('blood-blood'), the speaker appears to be interested not so much in describing a particular object or distinguishing between some objects on the basis of their visual characteristics as in drawing attention to something visually striking in his or her surroundings. Phrases like 'very white', 'bright white', 'really green', 'very red, 'very black', and 'bright green' are very common in the English translations of the Warlpiri folk comments, and they often render the Warlpiri suffix *nyayirni*, as in *kardirrinyayirni*, 'very white'. Such phrases suggest that the speaker notes something visually striking about the referent (especially against the background) rather than noting an 'objective' and potentially distinguishing permanent characteristic.

Entries like that of the words *jaljalja* (noun) and *jaljalja-mani* (verb) are very characteristic in this respect. The noun is glossed as 'white and striking, white feather, white plumage', and the verb as 'stand out (of white feathers, typically as head ornament), be white and stand out'. Both words are also given the following definition: 'x (-white plumage) be very visible in head-dress of yDAT (=human) in contrast with its location'. The accompanying folk comments are '*jaljalja-mani* is when a feather is very white and when a person has very white feathers in his hair', and 'The (white) feathers are standing out very white on the person's head and forehead'.

The theme of 'high visibility', of something that visually 'stands out' in a place, is a recurring motif in the entries assigned by the dictionary to the semantic domains designated as 'colour' and 'perception'. Both 'colour' and 'perception' are of course English concepts, concepts for which Warlpiri itself has no words. What the Warlpiri people whose voices are recorded in the dictionary seem interested in is neither 'colour' nor 'perception' but 'seeing', and, in particular, 'what people can see in a particular place at a particular time'. To reiterate my main point, Warlpiri visual descriptors like *yalyu-yalyu* or *walya-walya* are in fact not 'colour terms', and the focus of attention in Warlpiri visual discourse is on noting what is happening in one's surroundings at a particular time, not on describing particular objects or particular places and assigning to them some permanent visual characteristics. Insofar as permanent visual characteristics *are* assigned to certain kinds of referents (usually, living things), they are likely to refer to visual patterns and 'markings' rather than to something like colours.

This comes across in the volume of Warlpiri stories collected by Peggy Rockman Napaljarri and Lee Cataldi (1994), which includes five animal stories: 'The two kangaroos', 'The two snakes', two stories entitled 'The two dogs' and one entitled 'The spotted cat'. The English reader expecting to hear about the colour of the dogs or the kangaroos would be disappointed, but the 'spottiness' of the 'spotty cat' is prominently stressed (in the monomorphemic name of the living kind in question). As for the snakes, the readers hear what only one of them looked like: 'That one was a big snake, a rainbow serpent, a very large rainbow serpent' (Napaljarri & Cataldi 1994: 141). To an Anglo reader, the word 'rainbow' may suggest 'multicolouredness', but what appears to matter to the Warlpiri storyteller is that the snake in question was visually very prominent. In any case, from a Warlpiri point of view a rainbow is not seen as 'multicoloured' but as having two contrasting parts: as the folk definition cited in Hale (1959) and translated by David Nash (pers. comm.) put it, 'we call rainbow [pararri] that which stands high, yukuri-yukuri [lit. "grass-grass", A.W.]; then across underneath it's yalyu-yalyu [lit. "blood, blood", A.W.]'. Thus, even in the case of the rainbow, the Warlpiri speakers are struck by the visual contrast, not by the 'multicolouredness' that is so striking to the English-speaker.

Two methodological conclusions arising from these considerations concern, on the one hand, the value of 'folk definitions', and, on the other, the challenges facing those who want to translate them into other languages (e.g. English). As pointed out by none other than the pioneer explorer of the Warlpiri thought-world, Ken Hale (Hale & Casagrande 1967), folk definitions can give outsiders (e.g. Anglos) priceless insights into ways of thinking of a culturally distant people (e.g. the Warlpiri). The Warlpiri dictionary, which contains a wealth of folk definitions, is an unsurpassed treasury in this respect. On the other hand, to be intelligible to outsiders, folk definitions need to be supplied with translations, and if these translations are not very carefully crafted, it is easy to introduce in them concepts and ways of thinking that are alien to the original. The frequent use of the word 'colour' (and its derivates like 'blue-coloured', 'multicoloured', or 'colourful') in the English translations of the Warlpiri folk definitions is a good case in point.

Translations of this kind are re-coding what the Warlpiri consultants are saying into the categories of the translators' own native language (in this case, English). If subsequently such translations – taken for genuine 'folk definitions' – are regarded as a source of insight into the indigenous categories, the conceptual intrusions stemming from the translators' own habitual ways of thinking risk being accepted as evidence for 'conceptual universals'. The difficulties inherent in translating folk definitions are of course real enough, and, naturally, in many cases the translations cannot render the indigenous meanings accurately and have to approximate them. Generally speaking, however, the more they rely on simple and universal human concepts such as SEE, PLACE, HAPPEN, THE SAME, and LIKE, the less extraneous material they will risk introducing.

Thus, the metalanguage of universal semantic primes provides a bridge between the conceptual world of the linguist or anthropologist and that of the indigenous consultants. It offers a tool for improving the fidelity of (translated) folk definitions as well as for articulating the indigenous meanings in linguistic explications, and thus for getting closer to the 'native's point of view'.

Deconstructing 'colour'

Abstract nouns like 'size', 'temperature', 'texture', 'shape', or 'colour' presuppose a certain classification of knowledge embedded in ordinary language: to ask 'what shape is it?' is to seek knowledge of one kind; to ask 'what colour is it?' is to seek knowledge of another kind. If one asks simply 'what does it look like?' one is not separating shape from colour as two different kinds of thing that one could know about an object, but if one asks specifically about shape, or about colour, one is indeed separating the two. Thus the concept of 'colour' involves singling out one particular 'kind of thing' that people could know about some things. Unlike 'shape' or 'size', this particular kind of knowledge depends entirely on what people can see. This argument leads us to the following explication:⁵

colour

- a. people can know many kinds of things about some things, this is one of these kinds
- b. when people see some things,
- they can know something of this kind about them if they can see them well c. if someone wants to say something

because they want someone else to know something of this kind about something they have to say something like this about some places at some times:

'people can see something like this when they see these places at these times'

Some students of Australian languages are convinced that Australian languages have a 'covert category'⁶ (either identical or comparable to the English 'colour'). I agree that Warlpiri has a covert category of place-related visual appearance, associated with the use of reduplication⁷ (one of the uses; for other uses, see Nash 1986), but as any open-minded consideration of the examples below must make clear, the meaning of that covert category cannot be equated with 'colour'. From a formal point of view, this category can be distinguished from other types of reduplication in that the root is a mass noun (designating a substance):

yalyu 'blood', yalyu-yalyu 'it looks like blood' walya 'earth', walya-walya 'it looks like earth' kunjuru 'smoke' [as in campfire smoke], kunjuru-kunjuru 'it looks like smoke' karntawarra '[one kind of] ochre', karntawarra-karntawarra 'it looks like [this kind of] ochre' yulyurdu 'smoke' [as in cigarette smoke], yulyurdu-yulyurdu 'it looks like smoke' yukuri 'lush new growth', yukuri-yukuri 'it looks like lush new growth'

The glosses given above for the reduplicated forms are only approximations. More precisely, the meaning of the category of question (lexically 'covert' but clearly marked morphologically) can be stated (both in English and in Warlpiri) along the following lines:

420 Anna Wierzbicka

when people sees some things somewhere at some times they can think like this: 'this is like something else (blood/earth/smoke/ochre/fresh grass etc.) people can see something like this when they see a place where there is this other thing'

To say that *yalyu-yalyu*, 'blood-blood', and *karntawarra-karntawarra*, 'ochre-ochre', are 'basic colour terms' (and mean 'red' and 'yellow') whereas *walya-walya*, 'earth-earth', and *kunjuru-kunjuru*, 'smoke-smoke', are "non-basic colour terms" (see Kay 2004), or to suggest that, for example, *kunjuru-kunjuru* means 'purplish' or 'grey-coloured' rather than, essentially, 'looking like smoke', is to fail to recognize an indigenous semantic category and to replace it with meanings and distinctions derived from English (and from the Berlin and Kay theory). By contrast, the meaning assigned to this category in the explication above is not only easily expressible in Warlpiri itself but also is in line with Warlpiri folk comments explaining, for example, *kunjuru-kunjuru*, 'smoke-smoke', as *kunjuru-piya*, 'like smoke'.

The Warlpiri people do of course see what we call 'colours' and can be very sensitive to differences that we would think of as differences in colour. Judging by linguistic evidence, however, what we may see as a 'colour' (e.g. brown or purplish) they may see as 'something that looks like something else' (e.g. earth or smoke).

In her recent piece 'How do we know what they see?' Jane Simpson (2006) writes, with special reference to Warlpiri:

Showing a large number of speakers a large number of Munsell colour chips and asking them how to describe them is a way of reducing the level of bias created by attempts to elicit or understand word meanings through gathering texts and translations of those texts. The stimulus is as close to independence from language as one can get.

Unfortunately, it is not as simple as that. In fact the Munsell colour chart is not a culture-independent 'physical stimulus' but a semiotic object with the culturally specific concept of 'colour' embedded in it. By its very structure it introduces the tacit assumption – alien to Warlpiri-speakers – that 'colour' is a conceptual domain separate from others, and the reliance on this culturally alien preconception blinds researchers to *bona fide* indigenous meanings, including the indigenous, covert category articulated above. Furthermore, the behaviourist reliance on 'stimuli' and 'response to stimuli' (describable in English but not in Warlpiri) precludes treating Warlpiri-speakers as conversational partners capable of understanding the meaning of their own words, and reduces them to silent objects of the investigations carried out, in English, by Anglo investigators.⁸

In principle, then, there is nothing wrong with the idea of 'covert categories' – if there is language-internal evidence for them and if the hypothetical 'covert category' can be plausibly explicated in the indigenous language itself. The idea that Warlpiri has a 'covert category' which can be articulated in English but not in Warlpiri itself is evidently ethnocentric.

As noted earlier, the 'kind of knowledge' linked with the abstract word *colour* is separated in English from other kinds of knowledge, such as those linked with the abstract word *shape*. 'Shininess', 'brightness', and the presence of visual patterns (spots, stripes, etc.) are not recognized in colloquial English as distinct, identifiable 'kinds of knowledge', but 'shape' is, and so is 'colour', which is conceptually separated from all other aspects of 'visual appearance'. A language such as Warlpiri, on the other hand,

does not classify (or 'pigeon-hole') people's knowledge about the visual world in this way and does not separate 'colour appearance' from 'visual appearance in general'.

For example, the English parts of the Warlpiri dictionary are full of references to things described as 'bright white', where the expression 'bright white' often translates Warlpiri monomorphemic words such as *warntikirli*. Elsewhere in the dictionary, the same words are translated as simply 'white', but it seems clear that the Warlpiri meanings do not fully separate 'brightness' from 'hue'. They are global visual descriptors, like *gold* and *silver* in English, not colour words.⁹

The claim that in Warlpiri, 'colour' is not separated from other aspects of visual appearance can also be supported with the observation that in Warlpiri so-called 'colour terms' like *yukuri-yukuri*, 'grass-grass', colour cannot be separated from the contrast between 'light' and 'dark'. For example, English expressions like *dark green* and *light green* have no counterparts in Warlpiri. (One cannot put together words like *yukuri-yukuri* and *maru* or *maru-maru*, 'dark', and obtain a meaning equivalent to 'dark green'.)

The existence of expressions like *dark green* and *light green* in languages like English shows that in these languages 'colour' as such is conceptually separated from 'light'. In languages like Warlpiri, on the other hand, it is not. As the rich material included in the Warlpiri dictionary documents, Warlpiri people can be very interested in what things and places look like. They do not, however, talk about 'colours'. Whether or not they have a concept of colour (a question which, ultimately, cannot be resolved, because one cannot prove the absence of something), they simply do not have 'colour talk'.¹⁰

Concluding remarks

The methodology on which the Berlin and Kay approach to semantics relies – the use of the Munsell colour chart – is simpler and easier to apply than semantic analysis of the kind proposed here or in my earlier work challenging the Berlin and Kay paradigm (e.g. Wierzbicka 1990; 1996; 2005; 2006*b*). As Dimmendaal (1995), Lucy (1997), and others have pointed out, the use of the Munsell chart provides a simple mechanical procedure which does not require any in-depth knowledge of the language to which it is being applied (a fact which may have contributed to the popularity of the Berlin and Kay paradigm). The price to pay for this simplicity has been high. To quote Lucy:

[A] whole level of analysis is missing from the basic colour term tradition, namely, no attention whatsoever is paid to what the various terms actually mean in the sense of what they typically refer to, their characteristic referential range. Yet somehow a tradition that ignores these issues is supposed to provide a way of discovering semantic universals (1997: 335).

The NSM approach to visual semantics takes a similar view: the most important question of all is what the various terms used in different languages actually mean; and not just in terms of referential range, but, above all, in terms of the speakers' conceptualizations.

But to establish what various terms actually mean one needs a suitable metalanguage. English cannot serve this purpose: to try to articulate indigenous meanings in 'full-blown' English, drawing freely on those layers of English vocabulary that are culture-specific, means to fall into the same trap of Anglocentrism that the Berlin and Kay paradigm does.

This applies both to the articulation of indigenous meanings and to the identification of universals: it would be Anglocentric to try to articulate semantic universals in

English using English words without equivalents in many other languages, such as, for example, *colour*. Semantic universals can be established only by observing real human speech, in many languages, and trying to identify the commonalities of linguistic usage. The most important ones among them are words with matching meanings – such as, for example, SEE.

Indigenous meanings can be established and validated only in consultation with 'ordinary' native speakers. 'Scientific English' cannot be used for this purpose. If we want to elucidate other people's ways of thinking without an Anglocentric bias, we need to confine ourselves, in our representation of meanings, to that subset of English which matches the intersection of all other languages.

By relying on this intersection we can reconcile two fundamental aspects of language and thought, often seen as irreconcilable: relativity and universality. The universal human concepts lexicalized in all languages form a basis of vast numbers of conceptual configurations, most of which are language-specific. At the same time, they provide a common measure for describing and comparing those configurations across languages and cultures (see Wierzbicka 1992).

Thus, drawing on the intersection of English and all other languages, Anglophone scholars can explore indigenous meanings in consultation with 'insiders' (native speakers), taking into account those insiders' intuitions. They can then articulate these meanings in a language that would make sense not only to the Anglo scholar but also to the indigenous consultants themselves.¹¹ This applies to visual semantics as much as to any other conceptual domain.

NOTES

This article owes a great deal to extensive discussions with Cliff Goddard. For helpful discussions I would also like to thank Howard Morphy, Diana Young, Mary Laughren, Bill McGregor, Jane Simpson, Steve Swartz, David Nash, and Helen Bromhead.

¹ The term 'lexical gap' is used by linguists in relation to many semantic domains. For example, Levinson (2006, Abstract) states that although there is no term for 'leg' in the Papuan language Yélî Dnye, 'this is a lexical, not a conceptual gap'.

² As discussed elsewhere (see, e.g., Goddard 1999; Wierzbicka 1996), the Berlin and Kay (1969) model does not apply to those languages that do have colour words either; but I cannot discuss this question here for reasons of space. In essence, this model assumes that all languages have some 'basic colour terms', and that these 'colour terms' can, in principle, be matched with English words such as *black, white, red,* and *yellow.* Further, it is assumed that 'basic colour terms' form an implicational (as well as evolutionary) hierarchy which applies to all languages, and which can be identified in terms of English colour words. To quote: '[A]lthough different languages encode in their vocabularies different *numbers* of basic color categories, a total universal inventory of exactly eleven basic color categories exists from which the eleven or fewer basic color terms of any language are always drawn' (1969: 2).

³ In her 'Report' on colour term research in Warlpiri, Hargrave writes: 'In summary, the data appear not to support B&K's [Berlin and Kay's] hypothesis but to reflect the influence of culture upon colour nomenclature, namely that the colours important to desert Aboriginals are those first encoded' (1982: 214).

⁴ The Warlpiri have of course other 'colour practices', such as body painting, ground painting, and the painting of ritual objects such as stones and boards, but these appear to be focused above all on designs, with pigments such as charcoal, white clay, and red ochre being used for the sake of contrasting and meaningful designs, rather than for colour as such. For example, in discussing Warlpiri body painting, Munn (1973) stresses, again and again, the importance of designs, arrangements of elements, and visual configurations, over and above colour as such.

In a more recent study, Dussart emphasizes the links between traditional Warlpiri body paintings and the Warlpiri social identity, kinship, and the land. She notes that through both pigments and designs, such paintings 'evince ties to the land, to each other, to ancestors and to Dreamings that imbue their culture' (1997: 199). The materials used have ritual and social significance and their use is by no means governed by

considerations of colour as such. To say that Warlpiri cultural practices such as body painting or ground painting demonstrate the Warlpiri's sensitivity to colour would leave us, to borrow Geertz's apt words, 'with an externalized conception of the phenomenon supposedly under intense inspection but actually not even in our line of sight' (Geertz 1983: 98, quoted by Dussart 1997: 186).

⁵ This is a modified version of an explication proposed in Wierzbicka (2005).

⁶ I am using the term 'covert category', essentially, in the sense in which it was originally introduced by Whorf (1956 [1945]: 88-9). To put it briefly, overt categories bear a 'visible' formal mark, whereas covert ones can be identified only through their grammatical behaviour.

⁷ In Warlpiri, as in other languages of Central Australia, reduplication falls into a number of distinct types, with distinct meanings (see Wilkins 1989).

⁸ As Young puts it (with reference to Saunders's work), '[S]uch tests ... are doomed to find only the parameters that they construct ... "Colour" is produced by the experimental framework of the contextless "colour space" and the dematerialized patches of light that are presented as "stimuli" both in and out of laboratory settings' (2006: 178).

⁹ Some scholars have sought to demonstrate that perceptual and linguistic representations are different (see, e.g., Dedrick 1997), but others have emphasized the links between what people see (perception) and what people pay attention to. As Oliver Sacks writes in his book *The island of the colour-blind*, the vegetation on the island, which for him and his 'colour-normal' companions 'was at first just a confusion of greens', to the achromatopic (colour-blind) people on the island 'was a polyphony of brightnesses, shapes, and textures, easily identified and distinguished from each other' (1996: 37). When asked how they can distinguish, for example, the yellow bananas from the green ones, the achromatopic islander James replied: '[Y]ou see, we don't just go by colour. We look, we feel, we smell, we *know* – we take everything into consideration, and you just take colour!' (1996: 37). Obviously, the Warlpiri are not colour-blind, but they too, 'take everything into account', not just colour – not because their physical perception is different, but because for cultural reasons (including their way of life) their interest in the visual world is different.

As the condition of achromatopsia shows, there is indeed a neuro-physiological basis to colour perception. But perception is not the same thing as *attention* – and Oliver Sacks, for one, carefully distinguishes between 'forms of perception' and 'forms of attention' (see, e.g., 1996: 12). In different societies of 'colour normals', the predominant 'forms of attention' may be different, depending on way of life, economy, technology, and culture; and this is what linguistic evidence from diverse languages tells us.

¹⁰ As discussed, for example, by Isaacs in her book *Spirit Country – contemporary Australian Aboriginal art*, the introduction of a wide range of colour paints in Western Desert communities in the 1970s caused an outcry – 'partly out of resistance to the "corruption" of Aboriginal traditional values and the destruction of "traditional" art. The colours representing nature – earth, plants, blood, clay – seemed somehow to retain the link with land and its spirituality' (1999: 25). Although Isaacs uses the word 'colour', clearly in traditional 'desert art' visual qualities like *yalyu-yalyu*, 'blood-blood' ('red'), or *karntawarra-karntawarra*, 'ochre-ochre' ('yellow'), were a matter not of abstract 'colours' but of meaningful links between people's visual world and the land (and their own bodies).

¹¹ In his reflective 'auto-ethnographical' piece 'Strangers at home' the Australian writer of Aboriginal descent Kim Scott writes:

Perhaps the English language – yes, even 'Australian English' – carries ways of thinking which correspond awkwardly with the country we inhabit ... In this chapter I've referred to the limits of English in expressing connection with the continent and its deeper history. I've suggested something of what Indigenous languages might offer (2007: 10).

Scott illustrates this with the English word *river*, which in many parts of Australia fits neither the local geography nor Aboriginal ways of thinking about it, but in a sense the same applies to visual semantics. The imposition on Australian languages of English concepts like 'colour', 'blue' and 'green', at the expense of indigenous categories like those reflected in words like *walya-walya* or *kuruwarri-kuruwarri* is like the imposition of the word *river* on regions 'where the word "river" often describes a tenuously linked sequence of ponds barred by sandy dunes from reaching the sea' (Scott 2007: 10).

REFERENCES

BERLIN, B. & P. KAY 1969. *Basic color terms: their universality and evolution*. Berkeley: University of California Press.

BESEMERES, M. 2002. Translating one's self: language and selfhood in cross-cultural autobiography. Oxford: Peter Lang.

——— & A. WIERZBICKA. (eds) 2007. *Translating lives: living with two languages and cultures*. St Lucia: University of Queensland Press.

BULMER, D.K. 1968. Kalam colour categories. Kivung 1, 120-33.

CONKLIN, H. 1964. Hanunóo colour categories. In *Language in culture and society* (ed.) D.H. Hymes, 189-92. New York: Harper & Row.

CRYSTAL, D. 2003. English as a global language. (Second edition). Cambridge: University Press.

DEDRICK, D. 1997. Colour categorization and the space between perception and language. *Behavioral and Brain Sciences* 20, 187-8.

DIMMENDAAL, G. 1995. Studying lexical-semantic fields in languages: nature versus nurture, or where does culture come in these days? *Frankfurter Afrikanistische Blätter* 7.

DUSSART, F. 1997. A body painting in translation. In *Rethinking visual anthropology* (eds) M. Banks & H. Morphy, 186-202. New Haven: Yale University Press.

GEERTZ, C. 1983. Local knowledge. New York: Basic Books.

GODDARD, C. 1998. Semantic analysis: a practical introduction. Oxford: University Press.

—— 1999. Review article: colour categories in thought and language. *Linguistic Typology* 3, 259-69.

— 2001. Lexico-semantic universals: a critical overview. *Linguistic Typology* 5, 1-65.

——— & A. WIERZBICKA (eds) 1994. Semantic and lexical universals: theory and empirical findings. Amsterdam: John Benjamins.

HALE, K. 1959. Unpublished field notes, MIT Archives.

W. Bittle, 165-93. The Hague: Mouton.

HARGRAVE, S. 1982. A report on colour term research in five Aboriginal languages. In *Work Papers of SIL-AAB* Series B8. Darwin: Summer Institute of Linguistics Australian Aborigines Branch.

ISAACS, J. 1999. Spirit Country – contemporary Australian Aboriginal art. Melbourne: Hardie Grant Books.

JONES, R. & B. MEEHAN 1978. Anbarra concept of colour. In *Australian Aboriginal concepts* (ed.) L.R. Hiatt, 20-9. Canberra: Australian Institute of Aboriginal Studies.

KAY, P. 2004. NSM and the meaning of colour words. Theoretical Linguistics 29, 237-48.

— & B. BERLIN 1997. Science ≠ imperialism: a response to B.A.C. Saunders and J. van Brakel's 'Are there non-trivial constraints on colour categorization?' *Behavioral and Brain Sciences* 20, 196-201.

, _____, L. MAFFI & W. MERRIFIELD 1997. Colour naming across languages. In *Colour categories in thought and language* (eds) C.L. Hardin & L. Maffi, 21-56. Cambridge: University Press.

KUSCHEL, R. & T. MONBERG 1974. 'We don't talk much about colour here': a study of colour semantics on Bellona Island. *Man* 9, 213-42.

LANGLOIS, A. 2004. *Alive and kicking: Areyonga teenage Pitjantjatjara*. Canberra: Pacific Linguistics, Research School of Pacific and Asian Studies, Australian National University.

LAUGHREN, M., K. HALE & WARLPIRI LEXICOGRAPHY GROUP 2006. *Warlpiri-English encyclopaedic dictionary*. (Electronic files.) St Lucia: University of Queensland.

LEVINSON, S. 2006. Parts of the body in Yéli Dnye, the Papuan language of Rossel Island. *Language Sciences* **28**, 221-40.

LEVY, R. 1973. Tahitians: mind and experience in the Society Islands. Chicago: University Press.

LUCY, J.A. 1997. The linguistics of 'colour'. In *Colour categories in thought and language* (eds) C.L. Hardin & L. Maffi, 320-46. Cambridge: University Press.

MORPHY, H. 2005. From dull to brilliant: the aesthetics of spiritual power among the Yolngu. In Anthropology of art: a reader (eds) M. Perkins & H. Morphy, 302-20. Oxford: Blackwell.

MUNN, N.D. 1973. Walbiri iconography: graphic representation and cultural symbolism in a Central Australian society. Ithaca, N.Y.: Cornell University Press.

NAPALJARRI, P.R. & L. CATALDI 1994. Yimikirli: Warlpiri Dreamings and histories. San Francisco: Harper-Collins.

NASH, D. 1986. Topics in Warlpiri grammar. New York: Garland Publishing.

PAVLENKO, A. (ed.) 2006. *Bilingual minds: emotional experiences, expressions, and representation*. Clevedon: Multilingual Matters.

PINKER, S. 1995. The language instinct: the new science of language and mind. London: Penguin Books.

Journal of the Royal Anthropological Institute (N.S.) **14**, 407-425 © Royal Anthropological Institute 2008 PULLUM, G.D. 1991. The great Eskimo vocabulary hoax and other irreverent essays on the study of language. Chicago: University Press.

SACKS, O. 1996. The island of the colour-blind. Sydney: Picador.

- SCOTT, K. 2007. Strangers at home. In *Translating lives: Australian stories of language migration* (eds) M. Besemeres & A. Wierzbicka, 1-11. St Lucia: University of Queensland Press.
- SIMPSON, J. 2006. How do we know what they see? (available on-line: http://blogs.usyd.edu.au/elac/2006/09/ how_do_we_know_what_they_see_f.html, accessed 15 February 2008).
- WHORF, B.L. 1956 [1945]. Grammatical categories. In *Language, thought and reality: selected writings of Benjamin Lee Whorf* (ed.) J.B. Carroll, 87-101. Cambridge, Mass.: The Technology Press of Massachusetts Institute of Technology.
- WIERZBICKA, A. 1990. The meaning of colour terms: semantics, culture, and cognition. *Cognitive Linguistics* 1, 99.
- —— 1992. Semantics, culture and cognition: universal human concepts in culture-specific configurations. New York: Oxford University Press.
- —— 1996. The meaning of colour terms and universals of seeing. In *Semantics: primes and universals*, A. Wierzbicka, 287-334. Oxford: University Press.
- <u>2005</u>. There are no 'colour universals', but there are universals of visual semantics. *Anthropological Linguistics* **47**, 217-44.

_____ 2006a. English: meaning and culture. New York: Oxford University Press.

2006b. The semantics of colour: a new paradigm. In *Progress in colour studies*, vol. I: *Language and culture* (eds) C. Biggam & C. Kay, 1-24. Amsterdam: John Benjamins.

- WILKINS, D. 1989. Mpartwe Arrente (Aranda): studies in the structure and semantics of grammar. Ph.D. thesis, Australian National University, Canberra.
- YOUNG, D. 2005. The smell of green-ness; cultural synaesthesia in the Western Desert. *Etnofoor*. Special issue on 'Senses' (eds) R. Bendix & D. Brenneis, **XVIII**, 61-77.
- _____ 2006. The colours of things. In *Handbook of material culture* (ed.) C. Tilley, 173-85. London: Sage Publications.

Pourquoi il n'y a pas d'universaux de la couleur dans le langage et la pensée

Résumé

Tout le monde vit-il dans un monde plein de couleurs ? Du point de vue de la perception, la réponse est oui (sauf en cas de handicap visuel), mais au niveau des concepts, c'est non : dans de nombreuses langues, le mot « couleur » n'existe pas et la question « de quelle couleur est ceci ? » ne peut pas être posée, et ne se pose probablement même pas. Pourtant, théorie de Berlin et Kay, puissante et encore immensément influente, affirme le contraire. Tout en exploitant ses travaux antérieurs sur la sémantique des couleurs, l'auteur apporte de nouvelles preuves à l'encontre du paradigme de Berlin et Kay et présente une approche fondamentalement différente. Les nouvelles données sur lesquelles se base son argumentation proviennent des langues australiennes. L'article présente en particulier une étude détaillée du monde visuel tel qu'en rend compte la langue australienne warlpiri. Les expressions dans cette langue montrent que bien que les Warlpiri n'aient pas de « langage des couleurs » (ni de « pratique des couleurs »), ils ont un riche discours visuel à propos d'autres propriétés liées à leur propre pratique culturelle. L'article expose également une méthodologie pour identifier les significations indigènes en dehors de la grille du concept occidental de « couleur », et pour révéler « le point de vue indigène ».

Anna Wierzbicka is Professor of Linguistics at the Australian National University. She is the author of numerous books, including *Understanding cultures through their key words* (Oxford University Press, 1997), *Emotions across languages and cultures: diversity and universals* (Cambridge University Press, 1999), and *English: meaning and culture* (Oxford University Press, 2006). Her work spans a number of disciplines, including anthropology, psychology, cognitive science, philosophy, and religious studies as well as linguistics.

School of Language Studies, Baldessin Precinct Building (#110), The Australian National University, Canberra, ACT 0200, Australia. Anna.Wierzbicka@anu.edu.au