Alternating generations again again:
A response to Wierzbicka on generation moieties

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In a recent paper Wierzbicka (2013a,b) (W) proposed eight ‘cultural scripts’ to supplement two definitions to capture the meaning of the pronominal category of alternate generation moiety as in the Dalabon language of north Australia. After detailing some problems with the analysis, I show that, in the author’s own terms, two definitions can replace the eight ‘cultural scripts’. The replacement definitions are more readily comprehensible, and capture more accurately the denotation of alternate generation moieties. Categories such as these moieties are not well described by a prototype approach. Also, the pair of moiety terms need to be recognised as a terminological set. W’s eight ‘cultural scripts’ are mostly logical equivalents of my proposed definitions, and not culture-dependent norms as implied by the label. Such a large discrepancy between the two accounts calls for adjudication between them, and also calls into question the method used by W to arrive at her account.

Keywords: Australian languages, definitions of kin categories, Kinship in Australian languages, cultural scripts, Natural Semantic Metalanguage, Dalabon
1. Introduction

Australian kinship systems commonly exhibit a principle opposing alternate generations. The study of their linguistic aspects has justifiably been, as Wierzbicka (1986: 36) put it,

... a test case for different models of semantic description. Many of the major problems of kinship semantics can be easily and simply illustrated with data from the area of ‘alternate generations’, clarifying the analytical issues and allowing us to assess the relevance, validity and fruitfulness of various semantic approaches.

The linguistic expression of these moieties varies around the continent; this is encompassed in current work in the Austkin project, which has kindly supplied the base of Figure 1.

In some languages alternating generation moieties are highly salient because of pronominal expression of the pair of concepts disharmonic and harmonic (abbreviated as (dis)harmonic). The (dis)harmonic distinction is encoded in pronominal prefixes in Dalabon, and in pronouns in Lardil, Adnyamathanha, and in Arandic languages (Arrernte, Alyawarr, Anmatyerr, Kaytetye and so on). The technical term disharmonic (resp. harmonic) is used as a label for a set of people across both generation moieties (resp. of one generation moiety). These labels have the unfortunate connotation that social relations are more harmonious within a generation moiety — this may have a grain of truth for some societies but should not be taken as part of the denotation of the terms. See White (1981) for a broad anthropological survey of alternate generation moieties, focussing on the Western Desert.
Figure 1. Australian languages with alternating generation moiety expressions. Highlighted languages are the main ones referred to. Made with QGIS, naturalearthdata.com, and data from Austkin http://www.pacific-credo.net/index.php?page=austkin

Wierzbicka (2013a) (a publication hereafter abbreviated W) recently elaborated her earlier (1986, 1992: 355-371, Chapter 10) Natural Semantic Language (NSM) account of the alternating generation moieties. More than two decades have passed with no published reaction to the NSM account. In this recent paper, W has taken issue with Evans’ (2010: 11) attribution to an idealised Dalabon speaker of the concept he glossed as ‘who are in odd-numbered generations with respect to one another’. In the context of his popular book, Evans’ clause succinctly conveys to an English reader the denotation of the relevant Dalabon morpheme. W has a different goal: to represent the meaning in a way which could be easily translated (in a kind of literal word-for-word way) into Dalabon — or into any language which might lack a word or phrase meaning ‘odd number’ (or ‘number’).
Her avowed motivation is to get at the concepts in the mind of the Dalabon language user, and to this end has crafted the package of eight ‘cultural scripts’, extracted here to Appendix A. W chooses *disharmonic* as definiendum because “[t]he cognitive category that Evans is trying to explain is usually referred as ‘disharmonic’” (W: 11).

The two invited commentators on W’s recent paper, Stasch (2013) and Shweder (2013), both make some telling general points (e.g. about extra-lexical evidence for concepts, and unlexified core concepts), but neither are familiar with an Australian language, and as anthropologists they focus in their remarks on points about the program of the NSM project. Nor has the discussion referred to the literature critical of NSM, notably McCawley (1983), and Riemer (2004, 2006, 2013). In the next section I present some problems with W’s account. In the subsequent section I take up W’s call for ready translatability of technical terms used in cross-cultural description by presenting definitions which are clearer and more accurate than hers. The later sections take up the question of how we might adjudicate between competing NSM accounts of one language’s semantic category, and related questions of methodology.

### 2. Problems with W’s account

#### 2.1 Problem with prototypes

There is a basic flaw I apprehend in W’s approach to the definition of classificatory kinship categories such as alternate generation moieties. A property of so-called classificatory kinship systems is that every kin type falls under one of a dozen or so kin terms. (Sometimes a kin type may fall under more than one kin term, but this is a side issue.) Kin terms of a classificatory kinship system form a terminology set (Koch 2013, to appear) more clearly than do the open-ended terms of a non-classificatory (so-called descriptive) kinship system such as the partly compositional kin terminology in European languages (Dousset 2011: 54). Indeed, that the pair of meanings *(dis)harmonic* form a binary terminology set is

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1 Evans does not use the word in his book; the Dalabon dictionary (Evans et al. 2004: xxx) uses the abbreviation ‘dis’ “for ‘different sides’ or ‘disharmonic’”.

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effectively recognised by W’s definitions as they present the two terms in tandem, with parallel structure:

**(dis)harmonic** I think about these people like this:

‘they are (not) people of the same kind

they are like two people are if [the father of] one of them is the father of the other one,

they are like two people are if [the mother of] one of them is the mother of the other one’\(^2\)

W appeals to “the social model implicit in the indigenous perspective—a model evidently based on prototypes (which can be articulated through indigenous words like ‘father’ and ‘mother’ and on provisions for extensions” (W: 13); ‘A neo-extensionist account’ as Stasch (2013: 28) puts it. The definition of kin categories can be based on ‘focal categories’ or ‘focal relationships’ (based on father and mother) (W: 13) without invoking all the apparatus of prototype semantics. Wierzbicka (2013c: 318-9) advocates using prototype semantics ‘for example, in helping us to dissociate the core meaning of kin categories from their classificatory extensions’. However, a prototype is not so appropriate for a categorial terminology set where the denotation is clear-cut and not a matter of degree, and where the denotation has statable criterial attributes (Lewandowska–Tomaszczyk 2007: 145). This is especially clear with respect to moieties: each person is clearly in one moiety or the other, with no fuzziness to the boundaries (as Wierzbicka (1986: 46) actually already noted). This contrasts with usually recognised prototypes, such as for BIRD where it includes more prototypical birds (say CROW) and less prototypical (say PENGUIN or EMU).

Second, W’s scripts [A]–[H] (repeated here in Appendix A) do not really have the character that one expects from the label CULTURAL SCRIPT. These statements [A]–[H] are not routines or guides for behaviour in a particular culture (except perhaps for the quite general script [C]). The eight scripts form an interconnected package: it is hard to see how a society could change to drop or modify one or more of them independently of the others. (This is not to say that other related definitions could not be added: indeed patrimoieties and matrimoieties can be

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\(^2\) Parentheses enclose parts which are to be included or omitted together, and complementary to parts in square brackets.
defined by similar wordings.) The scripts here (apart from [C]) are not each motivated by specific ethnographic observations, but rather by a necessity to extend W’s definitions of (dis)harmonic from ‘the contrast between parents and their children’ (W: 14) to people at greater generational distances. This is so even though the statements very likely hold true in Dalabon and wider Aboriginal society, and are relevant to reasoning about social categories and behaviour appropriate to them.

2.2 Technical problems

There are also some technical problems with W’s account. I indicate a possible solution to some of these, but leave it to NSM practitioners to make definitive patches.

1. In the definitions of (dis)harmonic W makes the move from a pair of individuals to a group by way of the specification that ‘these people’ are thought of ‘like two people’ of a specified kind. The definitions are open to misapprehension. For instance, consider a group consisting of a grandmother and her grandchild. Someone attempting to apply this definition might think of this pair (‘not people of the same kind’) as ‘like two people are if one of them is the mother of the other one’. That is, someone could think of a grandmother as a kind of mother, as a speaker of a language like English might tend to do given the compound nature of grand-mother. In W’s package of definition and ‘cultural scripts’ there may be the possibility that this interpretation of W’s explication of disharmonic would eventually run up against some combination of the ‘cultural scripts’ that rules it out; I have not been able to infer whether this is the case. If such a move were to be embraced by NSM theory (that is, if ‘cultural scripts’ are needed to reduce (rather than extend) the range of application of an explication), then the supposed validity and universal translatability of the

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3 There is a parallel here with an earlier NSM use of ‘cultural scripts’ to recognise that in English aunt (resp. uncle) applies to the spouse of a consanguineal uncle (resp. aunt).

4 For this way of putting it I acknowledge David Wilkins’ input.
explications *tout court* would appear to be compromised.

2. In W’s script [A] (*A CULTURAL SCRIPT FOR THINKING ABOUT PEOPLE AS TWO PARTS OF ONE BIG SOMETHING*) it is not explicit that the two parts are a partition of the whole. The script could be taken as being about ‘two parts’ which have some people in common, and that there are people not in the ‘two parts’, i.e. in neither part. See my suggested improvement in [A'] in the next section.

3. In W’s script [D] *A CULTURAL SCRIPT FOR IDENTIFYING WITH PEOPLE WHO SHARE ONE’S MOTHER AND FATHER* the two clauses about father and mother are implicitly coordinated. However, the script is just as valid (and probably more in line with cultural practice) if the two clauses are read disjunctively, that is if the script identifies PEOPLE WHO SHARE ONE’S MOTHER OR FATHER.

4. In W’s script [H] (*A CULTURAL SCRIPT FOR MUTUAL IDENTIFICATION WITH OTHERS*) ‘the relationship ... is presented as transitive’ (W: 17). There is no other mention of transitivity and in script [H] the relationship is presented as strictly mutual, or symmetric (in the standard terminology of relations). A binary relation that is reflexive and symmetric is not necessarily transitive. This could be patched by adding a ninth script asserting transitivity.

5. W’s package apparently falls short of capturing the denotation of the moieties. I say ‘apparently’ because it is hard to mentally combine the ten definitions and scripts to see if they jointly denote the two alternating generation moieties. W seems to be aware that her package of scripts is incomplete: ‘This script explains, to some extent, why great-great-grandparents can be thought of in the same way as grandparents ...’ (W: 17)
6. Contrary to the standard claim by NSM, the proposed semantic prime \textsc{part} is not readily translatable in a number of Australian languages (Dalabon and Warlpiri included). The semantic prime \textsc{part} is not universally lexicalised and has not been established as a ‘universal semantic prime’ in the NSM sense of a lexical unit which can ‘be translated, with exactly the same meaning, into other languages’ (W: 3). This has long been a point of contention with NSM: in the inventories of ‘primes’ compiled by Goddard & Wierzbicka (1994), Evans (1994: 222-3) found it difficult to identify the exponent of \textsc{part} in Kayardild, as did Harkins & Wilkins (1994: 303-4, 309) for Arrernte, while Goddard (1994: 255-6) valiantly discerned it as a sense of the Yankunytjatjara nominal suffix \textit{-tjara} ‘having’.\footnote{From the entries in his dictionary (Goddard 1992: 147) the stem \textit{tjara} appears to have the meaning ‘divided, apart, spatially separated’. In Pintupi/Luritja, another dialect of the Western Desert Language, Hansen & Hansen (1991: 141) define \textit{tjarru} as ‘forked stick; divided; the fork where branches protrude from the trunk or other branches’, and the combination \textit{tjara kutjupa} ‘branch; another subject; lit. ‘another fork’; can be used literally to refer to the fork of a tree branch or creek tributary; can be used figuratively of a change in subject matter under discussion’.} Note also that, in the context of discussing a Nicaraguan language, but undoubtedly drawing on his knowledge of Australian languages, Hale (1994: 283) concluded: ‘I think that a criterion of terminological isomorphy for universal concepts is too strong’, while still entertaining ‘the proposed universality of fundamental concepts’. (Hale (1994: 283) considered \textsc{part} to be a universal concept, ‘unnamed’ in some languages.) Dalabon is another such language: no lexical unit corresponding to \textsc{part} is recorded in the sizeable dictionary (Evans et al. 2004); ‘Dalabon does not have a dedicated expression meaning “part of”’. (Ponsonnet 2012: 359). For the definitions of \textit{(dis)harmonic} to be readily translated into Dalabon, their use of \textsc{part} presents a problem.

The last difficulty could be overcome by using, in place of \textsc{part}, \textsc{side}, now one of NSM’s ‘universal semantic primes’ (W: 3, Goddard & Wierzbicka 2014: 12). \textsc{side} is a spatial concept,\footnote{In Cliff Goddard’s ‘Chart of NSM semantic primes’ (15 March 2013, the English exponent is \textit{on one side}, with ‘basic combinatorial abilities’ \textit{on this side}, \textit{on the same side}, \textit{on one side}, \textit{on two sides}, \textit{on all sides}.} and, in Dalabon at least, could be appropriately used to define \textit{(dis)harmonic}. Describing the Dalabon (dis)harmonic pronominals, Evans et al. (2004: xxx) observed:
These are used of people belonging to odd-numbered generations, or who are on different sides of a location (e.g. opposite sides of a river, or hunting an animal or burning off from different sides), or who are seen as in opposing groups (e.g. enemies in a story).

Some of the dyads covered by (dis)harmonic are spatial, but some are more abstract (such as enemies, or the generation moieties). Within NSM the non-spatial sense of ‘side’ might be claimed to be an allolex of PART; but when Dalabon people talk about body parts “they don’t use ‘side’ in the way one would expect if it really meant ‘part’” (N. Evans email 17/4/13); this can be seen in the entries of the several words indexed under ‘side’ in the Dalabon dictionary (Evans et al. 2004). One difference seems to be that ‘sides’ (in the relevant sense) usually occur in pairs. It is also relevant to note that the English word ‘side’ is used to gloss alternate generation moiety terms in other Australian languages: Pitjantjatjara/ Yankunytjatjara egocentric names nganjarka ‘our side’ and tjanamiltjan(pa) ‘their side’ (Goddard 1992: 82, 145), and Ngaanyatjarra sociocentric names ngumpalurrungkatja ‘shade side’ and tjirntulkul(tula)(pa) ‘sun side’ (Glass & Hackett 2003: 236, 438).

3. Replacement definitions

My starting position for an alternative understanding of alternate generation moieties is the combination of standard definitional rules as stated for example by Dousset (2011: 98):

1. Parents and children will never be in the same moiety.
2. There are only two moieties in the society.
3. All the people of a society have to be in one of these moieties.

I recast these three rules within the NSM framework, and propose these as a replacement for W’s CULTURAL SCRIPTS [A]–[H] (Appendix A). (The connection with odd/even parity is discussed in §5.1 below.) For the purposes of this section, I minimise changes to W’s formulations, keeping to the current NSM vocabulary and syntax. I have avoided words which NSM avoids in definitions, such as ‘different’, ‘opposite’, ‘in’, in this spirit:
we can try to enter the mental world of speakers of a language like Dalabon by relying on indigenous conceptual categories such as ‘father’ and ‘mother’, but not on technical terms such as ‘harmonic’ and ‘disharmonic’, ‘odd-numbered’ and ‘even-numbered’. (W: 12)

\[A']\textit{moieties} people know that people can think like this:

‘people here are like one big something,
this something has two parts
every person is part of one of these two parts’

This definition is equivalent to W’s [A] ‘CULTURAL SCRIPT FOR THINKING ABOUT PEOPLE AS TWO PARTS OF ONE BIG SOMETHING’. I have here retained temporarily W’s phrase ‘is part of one of these two parts’. As suggested in the previous section, using \textit{side} in place of \textit{part} would be an improvement. Also, to be clear that the two moieties are a partition, a clause might be needed like ‘no person is part of two of these parts’.

There is more than one kind of \textit{moiety}; the kind we are considering is like this:

\[E']\textit{alternate generation moieties} people know that it is like this:

two people A and B are not part of the same part if one of them is the father of the other one

two people A and B are not part of the same part if one of them is the mother of the other one

The last two clauses need to be read together, just as in W’s (W: 14) equivalent [E] ‘CULTURAL SCRIPT FOR CONTRASTING ONESELF WITH ONE’S MOTHER AND FATHER’: if either conditional is satisfied, then A and B are in different parts.

The required terms can now be defined for groups of people:

\textit{harmonic} these people are \textit{harmonic (in the same generation moiety)} if every two people are part of the same part

\textit{disharmonic} these people are \textit{disharmonic (in the opposite generation moiety)} if they are not \textit{harmonic} (or, not every two people are part of the same part)

Note that these definitions have to follow on the heels of [E] because ‘same part’ has to be taken to be the ‘same part’ identified in [E’], namely an alternate
generation moiety. To assist comparison I have retained W’s expression ‘part of the same part’ although preferring an expression like ‘on the same side’ or ‘in the same group’.

I have not distinguished between sociocentric moiety names (W’s [A]) and egocentric moiety names (W’s [B]), as that distinction is not needed to understand (dis)harmonic.

3.1 Extension from dyads to groups

Because definition [E’] is framed in terms of two people it may be better (or even necessary) to proceed by way of intermediate definitions confined to pairs of individuals:

\[\text{harmonic}\] Two people A and B are harmonic (in the same generation moiety) if A and B are part of the same part

\[\text{disharmonic}\] Two people A and B are disharmonic (in the opposite generation moiety) if A and B are part of different parts (not part of the same part); equivalently, if A and B are not harmonic

Then for a group the definition is that a group is harmonic if every pair of two people in the group is harmonic; otherwise a group is disharmonic. This replaces W’s move from a pair of individuals to a group by way of the specification that ‘these people’ are thought of ‘like two people’ of a specified kind (as discussed above at the beginning of §2.2); and my definitions also seem to obviate the need for W’s script [C].

3.2 Deducibility of Wierzbicka’s scripts [D] [F] [G] and [H]

From [E’], W’s ‘script’ [D] (‘people know that someone can think like this about someone else if it is like this: this someone’s father is this other someone’s father, this someone’s mother is this other someone’s mother’) is deducible:

[D’] A CULTURAL SCRIPT FOR IDENTIFYING WITH PEOPLE WHO SHARE ONE’S MOTHER AND/OR FATHER

people know that two people A and B are part of the same part \([\text{moiety}]\) if: A’s father is
B’s father, A’s mother is B’s mother.

Now W’s [F], [G] and [H] do not need to be stated; their truth is an easy logical deduction from [A'] and [E'], like this:

[F']: if two people A and B are in different parts, and B and C are in different parts, then A and C must be in the same part (because there are only two parts)

[G']: if two people A and B are in different parts, and B and C are in the same part, then A and C must be in different parts

W’s [H] is like saying:

[H']: if A and B are in the same part, then B and A are in the same part
if A and B are in different parts, then B and A are in different parts

So, while scripts [D] [F] [G] and [H] are true of alternate generation moieties, these scripts are not needed to define them. Further, W’s uncertainty about the implications of her script [H] can be set aside:

This script [[H]] explains, to some extent, why great-great-grandparents can be thought of in the same way as grandparents (and great-great-grandchild in the same way as grandchildren) whereas great-grandparents (and great-grandchildren) cannot, … (W: 17)

instead one can easily see that grandparents must be in the same generation moiety as their grandchildren, and so also the same generation moiety as great-great-grandparents and great-great-grandchildren.

4. Comparison with W’s definitions and scripts

4.1 Advantages over W’s approach

Overall, the two definitions [A'] and [E'] are a preferable way to define (dis)harmonic than the proposed eight ‘cultural scripts’. First, the problems set out in §2 are avoided. Second, it is generally easier to grasp concepts when there are fewer stipulations to digest, and the total package is easier to keep in memory. Given an aim is cross-cultural understanding, the easier simpler path to understanding would seem to be preferred.

7 As in W’s version, the two clauses are not both required to apply; so the heading for [D] could read ‘WHO SHARE ONE’S MOTHER OR FATHER’. 
A reviewer points out that this needs some qualification. It depends whether one approaches a problem from a practical point of view, lining up familiar intellectual steps, and learning the result by heart; or whether one has grasped an overview of the matter embracing general rules. The former is what Lévi-Strauss (1966) called bricolage; the latter is the classic statement of scientific findings. If the goal is to represent the relevant concepts as conceived by a cultural insider, then we can expect that, in everyday life, people probably use various combination of these approaches. If the goal is to explain a cultural complex to an outsider, from a different culture, then the analytic approach is more useful.

4.2 Choosing between the two accounts

It could be argued that my preference for the easier path to understanding is itself a bias derived from my culture and formation, and indeed Wierzbicka (2013c: 309-10) has come close to this when discussing explications of some other Australian kinship terms:

... in my view, length cannot be regarded as an argument against intuitive plausibility.
In an oral culture, parallelism and repetition are usually valued rather than avoided, and ‘conciseness’ is a modern Anglo value, not a universal one.

In other contexts, as with any theory, criteria of simplicity and intelligibility have been appealed to by proponents of NSM (e.g. ‘the NSM approach to kinship … can achieve elegance without sacrificing intelligibility and intuitive plausibility’, Wierzbicka 2013c: 319) while Riemer (2006: 354-9) has problematised how these criteria are applied within NSM. Bohnemeyer (2003: 214) decried the absence of (theory-external) “evaluation criteria for NSM’s ‘reductive paraphrases’”, and lack of method for choosing between explications Riemer saw as one of the foundational flaws of NSM:

The alleged impossibility of an algorithm to determine an expression’s degree of simplicity and its consequent explanatory utility would not affect NSM if it did not claim for itself a high degree of actual explanatory effectiveness (Riemer 2006: 358)

The justification for one particular semantic description over another cannot therefore be made objective and rigorous, but always rests on necessarily subjective, intuitive judgements of semantic appropriateness. In order to escape ethnocentrism, it is not
enough for a definition to be framed in supposedly universal terms: it must also be based on culture-neutral evidence. A definition does not stop being ethnocentric simply because its formulation uses universal elements, since it may embody an entirely culture-dependent perspective at a deeper level. (Riemer 2006: 370)

An illustration of Riemer’s last point can be seen in my discussion in §2.2 above as to whether a grandmother is like a mother.

One source of adjudication between competing definitions would be Dalabon speakers themselves (W: 12). The proffered explanations (here, of (dis)harmonic) could be translated into Dalabon and presented to them for ranking or comment. Most Dalabon would presumably feel little need of the definitions — we accept that they are already familiar with the concepts (dis)harmonic from childhood — but they could see it as part of their cross-cultural education of outsiders such as us English speakers.

Parallel to this, the proffered definitions could be presented to speakers of any language, especially languages which lack the (dis)harmonic category. This should be easy to do by NSM tenets, for any language where the exponents of the universal semantic primes have been identified. The people exposed to the NSM explanations could then be tested for how well they have grasped the category defined. What, though, if the feedback is mixed? Or if we find that other methods of explanation are sometimes as (or more) effective? As Riemer (2006: 357) observed, ‘successful explanation is subject to significant interpersonal variation’.

4.3 W’s methodology

The NSM approach starts with the exponents (usually in English) of the universal semantic primes and tries combining them to approximate the required meaning. There is no discovery procedure for achieving this; rather it seems to draw on intuition and successive refinement. In the explication of (dis)harmonic W made successive refinements by way of ‘cultural scripts’ to improve the fit of the denotation. This method is flawed to the extent that it leads to such results as the package for (dis)harmonic which has the problems discussed in §2.
Note that the twin concepts \textit{(dis)harmonic} are not lexicalised in Dalabon. They occur only as part of the meaning of non-singular subject pronominal prefixes on intransitive verbs. Another consideration is that \textit{(dis)harmonic} is a technical term (and concept) in English (and most languages), whereas Dalabon (and other Australian languages) has the concept in its everyday repertoire. While the distinction between technical terms and others (non-technical, everyday terms) is commonly made in NSM discourse, NSM theory as far as I know has not dealt with defining technical terms (except for, at times, advocating an NSM explication as a substitute for a technical term). Yet technical terms are more readily defined (in a non-NSM sense); the insiders familiar with them are used to reflecting on them, and, to a point, explaining them to outsiders. Sometimes, as we see for \textit{(dis)harmonic}, a technical term in one language (e.g. English) is equivalent to a commonplace concept in another (e.g. Dalabon).

5. Explanation of alternate generation moieties

W says NSM is ‘a standardised framework for comparing and explaining meanings across languages and cultures’ (W: 4, and elsewhere). These are two distinct functions. Even were we to grant that NSM ‘permits a standardised transcription of meanings in a system independent of the language and culture of the investigator’, and along with this that these meaning transcriptions could be compared, it doesn’t follow that NSM’s meaning transcriptions would be suited to explaining meanings cross-culturally. This point has been made by Riemer (2004: 285-6): as Riemer puts it, ‘to explain a meaning correctly we do not have to build it up out of a would-be level of elementary particles, but only relate it to things which are already familiar to the audience for whom the explanation is intended’.

Investigating how speakers do explain kinship categories is a good indication of the cognitive processes involved. Although it is beyond the scope of this paper, a brief indication can be given of the available resources. One good example is how a Warlpiri man once explained alternate generation moieties in Warlpiri to Ken Hale (Hale 1966: 932-7, Tape 2.14 side 2). The explanation followed the man’s explanation of the meaning of many kinship terms, and then matrimoiety and then patrimoiety terms, and proceeded in over 300 words in terms of subsections.
and several simple kin terms. The explanation was a kind of reductive paraphrase:
but unlike NSM paraphrases, the Warlpiri man used terms reduced only in one
degree of complexity, rather than directly using ‘simplest’ elementary terms.

Explanation of kinship in general can use ‘relational products’ (Dousset 2008:
266ff) (which spell out a kinship link through known intermediate kinsmen or
kintypes), and can draw on resources beyond spoken language, such as gesture,
graphic devices, and analogies. For instance, Henderson & Dobson (1994: 40-1)
present a way of conceptualising same and opposite (Arrernte nyurrpe) generation
moieties as the fingers of each hand with ‘two hands together, with the fingers of
one hand fitting in between the fingers of the other’. These non-linguistic forms
of expression are typically used to support an explanation couched in the
language. The gesture or graphic devices are not meant to stand alone, nor are
they meant to call on some (apparently non-existent) universal iconography.
Nevertheless the multi-modal combination can be an effective expression of
meaning, and can help reveal indigenous conceptualisations. Thus I do not see it
as any advantage of an NSM-based analysis that ‘[i]t gets over formalistic grids,
graphs and diagrams’ (Wierzbicka 2013c: 319) when such para-linguistic devices
are part of the native speaker’s expression of meaning.

5.1 The concepts of parity and alternation

In rejecting Evans’ (2010: 11) gloss ‘who are in odd-numbered generations with
respect to one another’, Wierzbicka makes this claim:

But strictly speaking, this cannot be how the native speakers of Australian languages
think because their culture has no concept of ‘odd number’ and their languages have
no words for it (not even for ‘number’, let alone ‘odd number’). (W: 11)

W’s assumption here that the concept of ‘odd number’ presupposes the concept
of ‘number’ must be questioned. The parity of a set (whether its cardinality is odd
or even) can be determined by grouping the set into pairs without being
concerned with its cardinality. The evidence from kinship reckoning above is that
the (dis)harmonic category involves a ready reckoning of an odd versus an even
number of generations of separation. Henderson and Dobson’s (1994: 40-1)
diagram of a pair of interdigitated hands shows an appreciation of alternation.
Beyond the domain of kinship, consider this report (presumably based on Curr’s own experience in Victoria):

No Australian Black in his wild state can, I believe, practically count as high as seven. If you lay 7 pins on a table for a Black to reckon, and then abstracted 2, he would not miss them. If one were removed, he would miss it, because his manner of counting by ones and twos amounts to the same as if he reckoned by odds and evens. (Curr 1886: 32) via Alpher (2000: 18)

Curr’s generalisation about the limits of counting did not hold universally across Australia, but nevertheless his distinction between counting and reckoning ‘by odds and evens’ is valid. Indeed, some Australian languages may have terms directly expressing parity. In Yir-Yoront, the notion could be built on the expressions yi-koyrr+w ‘two each’ (and likely also ‘by twos’, B. Alpher email 13/4/13) and yi-pul-yirr ‘one each’ (vs. yi-yirr+w ‘each one’), built on koyrr ‘two’, yirr ‘one’ respectively (Alpher 1991: 209, 673). Similarly in Anindilyakwa (Stokes 1982: 58).

An appreciation of parity would be one aspect of a general cyclic principle in Australian Aboriginal thought. The anthropologist Stanner perceived this principle as clearly realised in the alternating cycle of the generation moieties:

Time as a continuum is a concept only hazily present in the Aboriginal mind. What might be called social time is, in a sense, ‘bent’ into cycles or circles. The most controlled understanding of it is by reckoning in terms of generation-classes, which are arranged into named and recurring cycles. As far as the Aborigine thinks about time at all, his interest lies in the cycles rather than in the continuum, and each cycle is in essence a principle for dealing with social interrelatedness. (Stanner 1956: 60 per White 1981: 27)

6. Conclusion

Two definitions are proposed which better capture the meaning of (dis)harmonic than W’s eight ‘cultural scripts’. Discussion of the competing definitions calls into question some of the tenets of Natural Semantic Metalanguage, and such definitions cannot be the full description of the native speaker’s understanding of the concepts involved. Particular local representations of kinship point to more abstract conceptualisations, and to variation across speakers and languages.
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Appendices

A. W’s explications and scripts

Extracted from (Wierzbicka 2013a: 14-17):

disharmonic I think about these people like this:
‘they are not people of the same kind
they are like two people are if one of them is the father of the other one,
they are like two people are if one of them is the mother of the other one’

harmonic I think about these people like this:
‘they are people of the same kind
they are like two people are if the father of one of them is the father of the other one,
they are like two people are if the mother of one of them is the mother of the other one’

[A] A CULTURAL SCRIPT FOR THINKING ABOUT PEOPLE AS TWO PARTS OF ONE BIG SOMETHING
people know that people can think like this:
‘people here are like one big something, this something has two parts
many people are part of one of these two parts, these people are people of one kind
many other people are part of the other of these two parts, these people are people of another kind’

[B] A CULTURAL SCRIPT FOR THINKING ABOUT OTHER PEOPLE IN TWO WAYS
people know that everyone can think about other people in two ways
they can think about some people like this: ‘I am someone of one kind, these people are people of the same kind’
they can think about some other people like this: ‘I am someone of one kind, these people are not people of the same kind’

[C] A CULTURAL SCRIPT FOR IDENTIFYING WITH MANY OTHER PEOPLE
people know that everyone can think like this about many other people:
‘I am someone of one kind, this is someone of the same kind’

[D] A CULTURAL SCRIPT FOR IDENTIFYING WITH PEOPLE WHO SHARE ONE’S MOTHER AND FATHER
people know that someone can think like this about someone else if it is like this:
this someone’s father is this other someone’s father,
this someone’s mother is this other someone’s mother

[E] A CULTURAL SCRIPT FOR CONTRASTING ONESELF WITH ONE’S MOTHER AND FATHER
people know that it is like this:
someone can’t think like this about someone else if one of them is the father of the other one
someone can’t think like this about someone else if one of them is the mother of this other someone

[F] A CULTURAL SCRIPT FOR IDENTIFYING ONESELF WITH PEOPLE WITH WHOM ONE’S FATHER AND MOTHER CAN’T IDENTIFY
people know that it is like this:
someone can think like this about someone else if this someone’s father can’t think like this about this other someone
someone can think like this about someone else if this someone’s mother can’t think like this about this other someone

[G] A CULTURAL SCRIPT FOR CONTRASTING ONESELF WITH PEOPLE WITH WHOM ONE’S FATHER AND MOTHER CAN IDENTIFY
people know that it is like this:
someone can’t think like this about someone else if this someone’s father can think like this about this other someone
someone can’t think like this about someone else if this someone’s mother can think like this about this other someone
A CULTURAL SCRIPT FOR MUTUAL IDENTIFICATION WITH OTHERS

people know that it is like this:

if someone can think like this about someone else, then this other someone can think like this about this someone

if someone can’t think like this about someone else then this other someone can’t think like this about this someone

B. Further criticism of Wierzbicka (2013a)

I have a couple of other criticisms of points in W’s paper, independent of the discussion of (dis)harmonic. They are to do with the arguments W advances for the NSM approach, but do not vitiate the logic of her main argument.

B.1 IPA analogy

W promotes a misapprehension of the IPA (International Phonetic Alphabet), and draws a false analogy with NSM.

The analogy between NSM and the IPA is far from perfect, if only because the latter is, to some extent, arbitrary (there could be alternative systems of transcription), whereas NSM, which is the result of empirical cross-linguistic investigations, is not. Thus, the key difference is that the IPA was invented whereas NSM was gradually discovered (W: 3)

However, the articulatory distinctions encoded in the IPA are precisely ‘the result of empirical cross-linguistic investigations’. The IPA justifies each distinctive symbol by a phonological opposition known to operate in some natural language, and characterises it in well-founded anatomical terms. The arbitrariness in the IPA is within the form of the symbols (or letters) chosen to represent each articulatory combination (and in aspects of the IPA chart’s presentation). It would be just as misguided to claim that NSM is arbitrary because W presents the proposed primes in a certain order and by way of recognisable words of English (arbitrarily chosen from all possible languages) in the arbitrary English orthography.
B.2 Imperfection and the appeal to Leibniz

W has long promoted NSM as the apotheosis of logical language dreamt of by Leibniz and others, but I think this characterisation misses the mark. One aspect of the discrepancy is where W invokes Leibniz to support her view that ‘the effectiveness of NSM … does not depend on its perfection or even on the absolute universality of the primes’ and for support invokes ‘Leibniz, who wrote of his projected universal language’:

Although this language depends on true philosophy, it does not depend on its perfection. That is to say, this language can be established even if the philosophy is not perfect: as our knowledge grows, this language will also grow. In the meantime, it can marvelously help us to use what we do know, to see what is lacking, and to invent the means for getting there, and especially to resolve controversies in matters which depend on reasoning. (W: 5)

This passage is a note written in French by Leibniz on a copy of Descartes’ letter to Mersenne (Leibniz & Couturat 1903: 27-28). With this translation compare that of Rossi (2006: 174-5) of the whole passage:

Although this language depends on true philosophy, it does not depend on its perfection. Let me just say this: this language can be constructed despite the fact that philosophy is not perfect. The language will develop as scientific knowledge develops. While we are waiting, it will be a miraculous aid: to help us understand what we already know, and to describe what we do not know, and to help us to find the means to obtain it, but above all it will help us to eliminate the controversial arguments which depend on reason, because once we have realised this language, calculating and reasoning will be the same thing.

The second sentence differs; compare also the paraphrase of this second sentence in Cohen (2002: 4):

It could be established while philosophy was yet imperfect and grow as knowledge grew

As clarified by Rossi’s (2006: 173-5) discussion, Leibniz here meant by ‘philosophy’ what Descartes meant: an encyclopaedic structuring of human knowledge (including what we might call ontology), separate from the (constructed, logical) language used to describe it. W employs the quotation to suggest Leibniz was talking about imperfection in the universal (logical) language,
but actually Leibniz (and Descartes) are not, they were considering imperfection in philosophy: ‘C'est à dire cette langue peut être établie, quoique la philosophie ne soit pas parfaite’ (Leibniz & Couturat 1903: 28). Though of course, the kind of universal language envisaged in the times of Leibniz and Descartes was rather different from NSM (as shown by Leibniz’s final clause (in the Rossi (2006: 174-5) translation, omitted by W).

In W’s translation ‘the philosophy’ (in ‘this language can be established even if the philosophy is not perfect’) is easily taken, in the context W provides, to be something like ‘the philosophy of the [ideal] language’ but it is clear from the wider context that that was not what Leibniz meant.

Whether or not Leibniz has been validly invoked, W’s statement is in any case open to the challenge from Riemer (2006: 374-6):

> the only attitude to disconfirming evidence which NSM can afford to adopt is that later research will allow apparent disconfirmations of the theory to be brought under its scope and that, as a result, the theory can maintain its claim that the existing primitives underlie all meaning. … any degree of final acknowledged empirical failure should be enough to stimulate a revision of its theoretical claims (though not necessarily of its practice). … If the value of the primes is that they underlie all meaning, the theory cannot afford to restrict them to only that subset of meaning for which they actually work.