# Back to 'Mother' and 'Father'

## Overcoming the Eurocentrism of Kinship Studies through Eight Lexical Universals

### by Anna Wierzbicka

This paper addresses one of the most controversial issues in cultural anthropology: the conceptual foundations of kinship and the apparent inevitability of ethnocentrism in kinship studies. The field of kinship studies has been in turmoil over the past few decades, repeatedly pronounced dead and then again rising from the ashes and being declared central to human affairs. As this paper argues, the conceptual confusion surrounding 'kinship' is to a large extent due to the lack of a clear and rigorous methodology for discovering how speakers of the world's different languages actually navigate their kinship systems. Building on the author's earlier work on kinship but taking the analysis much further, this paper seeks to demonstrate that such a methodology can be found in natural semantic metalanguage theory (developed by the author and colleagues), which relies on 65 universal semantic primes and on a small number of universal "semantic molecules," including 'mother' and 'father'. The paper offers a new model for the interpretation of kinship terminologies and opens new perspectives for the investigation of kinship systems across languages and cultures.

## Introduction: 'Mother' and 'Father' as a Conceptual Basis for Kinship Studies

In the introduction to a recent volume titled *Kinship Systems*, Patrick McConvell (2013a) writes, "kinship is one of the foundations of human social life and, together with language, is part of the change that made our hominid ancestors human" (1). In his view, a certain awareness of some "basic family relationships" among apes is undeniable; "however, other primates do not talk about classes of kinship relationships and give them names, as all humans do—and did, for as far back as we can know."

So how do humans talk about "classes of kinship relationships"? McConvell answers this question as follows:

> Kinship is the bedrock of all human societies that we know. All humans recognize fathers and mothers, sons and daughters, brothers and sisters, uncles and aunts, husbands and wives, grandparents, cousins, and often many more complex types of relationships in the terminologies that they use. That is the matrix into which human children are

born in the great majority of cases, and their first words are often kinship terms.

I fully agree that kinship is the bedrock of all human societies and that children's first words are often words analogous to "mama" and "papa." On the other hand, the claim inherent in classical anthropology of kinship and made explicitly in the quote above—that all humans recognize not only mothers and fathers but also sons and daughters, brothers and sisters, and so on—is, in my view, unjustified. As I will discuss more fully in this paper, evidence suggests that all (or nearly all) human groups recognize mothers and fathers (as well as wives and husbands) but not sons and daughters or brothers and sisters. To put it differently, 'mother' and 'father' (in one sense of these words) are lexical universals, whereas 'son' and 'daughter' or 'brother' and 'sister' are not.

For example, in most Australian languages there is no general word for 'brother' that could be used regardless of two children's relative age (for a detailed discussion of Pitjantjatjara, see Wierzbicka 2013a); and in many, there is no general word for 'son' that could be used for both a woman's 'son' and a man's 'son' (see Scheffler 1978). Thus, judging by lexical evidence, it is simply not the case that all humans (demonstrably) "recognize" brothers and sisters or sons and daughters: it is speakers of English (and other European languages) who do. Speakers of many Australian languages do not; they recognize other relationships.

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The lexical semantics of kin terms is important for cultural anthropology because the meanings of these terms are the most reliable guides to how speakers of a particular language conceptualize their social relationships. Kinship is indeed one of the fundamentals of human social life, but kinship only as understood by members of a particular human group, not as an abstract system conceived by outsiders and tied to those outsiders' conceptual vocabulary (derived from European languages). At the same time, if kinship categories of different languages and cultures are to be explained to outsiders (and to semioutsiders, in language revitalization programs), the explanations have to be anchored in concepts that make sense to insiders and outsiders alike, that is, in shared human concepts.

In his book *Dying Words*, in which he speaks of endangered and dying languages of the world and discusses, inter alia, the semantics of kinship in the endangered Australian language Dalabon, linguist Nicholas Evans (2012) says, quite poignantly, that once a language like Dalabon dies "no one's mind will again have the thought-paths that its ancestral speakers once blazed" (159). But if so, it is all the more important to try to understand those thought-paths as best we can, and it is an illusion to think that we can understand them through academic English or algebraic modeling, no matter how elegant such analyses can be (see Goddard and Wierzbicka 2014*a*).

A huge amount of data on the world's kinship terminologies has already been amassed, but if we are to move from formal analyses of languages to understanding "the thought-paths that [their] ancestral speakers once blazed," a great deal of interpretive semantic work will need to be undertaken. Evans's words echo Leibniz's (1981 [1704]) famous statement that "languages are the best mirror of the human mind" (330). What is less famous is what Leibniz says in the next breath: "and … a precise analysis of the significations of words would tell us more than anything else about the operations of the understanding."

A precise analysis of the "significations of words" aimed at discovering "the operations of the understanding [in a given culture]" is one of the central tasks of cross-linguistic semantics, which is clearly of vital importance to cultural anthropology. There is a great deal to be discovered about human thought-paths by reanalyzing the wealth of data collected by anthropologists and linguists over many decades. There is, of course, also a great deal to be discovered through linguistic and anthropological fieldwork currently undertaken in different parts of the world, including programs aimed specifically at endangered languages. But much time and effort can also be wasted through data collection uninformed by appropriate methodologies.

If the field of kinship studies has been in such a turmoil over the last few decades—repeatedly pronounced "dead" (see, e.g., Fogelson 2001) and then again rising from the ashes and being declared central to human affairs (cf., e.g., Bamford and Leach 2009; Carsten 2004; James 2008; Jones 2010*b*)—to a large extent it has been so, I would argue, because of the

prevailing conceptual confusion and a lack of a firm and justifiable conceptual anchor in this indispensable human field of inquiry. In this paper, I will argue that such an anchor can be found in universal (or near-universal) human concepts discovered through decades of intralinguistic and cross-linguistic research carried out in the natural semantic metalanguage (NSM) framework (of which more shortly) and, in particular, in the concepts 'mother' and 'father'.

The key point is that, although this fact is often obscured by language-specific patterns of polysemy, 'mother' and 'father' are lexical universals, so these two words can be used as two cornerstones for describing, interpreting, and comparing kin terms in all languages and cultures. Of course 'mother' and 'father' have never been completely absent from anthropological thinking about kinship. More often than not, however, 'mother' and 'father' have been mentioned in one breath with 'parents' and 'children', and it has not been clearly acknowledged that neither 'parents' nor 'children' (in the sense of 'offspring') are lexical universals, as 'mother' and 'father' are—as demonstrated through wide-ranging cross-linguistic investigations conducted by many scholars, over many years, in the NSM framework to be discussed in the next section.[1]

## NSM: A Metalanguage for Describing Speakers' Meanings across Languages and Cultures

The perspective on language, mind, and culture represented by the NSM approach is summed up in the subtitle of my 1992 book *Semantics, Culture and Cognition: Universal Human Concepts in Culture-Specific Configurations*. The inspiration for this theory was Leibniz's hypothesis about the existence of an "alphabet of human thoughts": a set of simple concepts that are, as it were, "letters" of an innate mental alphabet and elements into combinations of which all human thoughts can be resolved (Wierzbicka 2011). Colleagues and I believe that we have now essentially identified that set and can present a close to final list of elementary and indispensable human concepts that surface as words or word-like elements in all languages. The English version of this set, divided into 12 categories, is presented below (table 1).

Thus, 30-odd years of cross-linguistic (as well as intralinguistic) research have led NSM researchers to the conclusion that "inside" all languages we can find a small shared lexicon (semantic primes) and a small shared grammar and that together this panhuman lexicon and the panhuman grammar linked with it form a minilanguage that can be seen

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1. Gould (2000:30) bases his algebraic analysis of kinship systems on four primary relations: F, M, $\overline{\text{F}}$, $\overline{\text{M}}$. In natural languages, however, only 'father' (F) and 'mother' (M) are demonstrably primary and universal; 'father's child' ($\overline{\text{F}}$) and 'mother's child' ($\overline{\text{M}}$) are not. (Gould's choice was based on formal considerations, not on empirical research into many different languages of the world.)

Table 1. Universal semantic primes (English exponents), grouped into 12 related categories

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1. I, YOU, SOMEONE, SOMETHING~THING, PEOPLE, BODY, KIND, PART
2. THIS, THE SAME, OTHER
3. ONE, TWO, MUCH~MANY, LITTLE~FEW, SOME, ALL
4. GOOD, BAD, BIG, SMALL
5. THINK, KNOW, WANT, DON'T WANT, FEEL, SEE, HEAR
6. SAY, WORDS, TRUE
7. DO, HAPPEN, MOVE
8. BE (SOMEWHERE), THERE IS, BE (SOMEONE/SOMETHING), MINE
9. LIVE, DIE
10. WHEN~TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT
11. WHERE~PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE, TOUCH
12. NOT, MAYBE, CAN, BECAUSE, IF, VERY, MORE, LIKE

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as the intersection of all the languages of the world. The abbreviation NSM is based on the English phrase "natural semantic metalanguage." This name reflects our conviction that this minilanguage provides us with a neutral tool for describing the meanings embedded in the world's languages.

The set of indefinables discovered through empirical cross-linguistic investigations enables us to formulate reductive paraphrases based directly on those indefinables, thus freeing the interpretation of meanings (in any area and in any given language) from explicit or implicit circularity.

For reasons of space, it is not possible to discuss here in detail how the current set of semantic primes and the picture of its inherent grammar have been arrived at in NSM work or how its different aspects can be justified. (For extensive discussion, see Goddard 2011; Goddard and Wierzbicka 1994, 2002, 2014b; NSM homepage 2014; Wierzbicka 1996).

The NSM table of universal semantic primes purports to provide an answer to Leibniz's quest for an *alphabetum cogitationum humanarum*, an "alphabet of human thoughts," which, he thought, could provide a common measure for comparing, articulating, and sharing ideas across languages and cultures (see Wierzbicka 2011). It permits a standardized transcription of meanings in a system independent of the language and culture of the investigator and offers a culture-independent tool for the translation of meanings and ideas. Furthermore, since this "international semantic alphabet" (so to speak) can be accessed and used through a trimmed-down version of any natural language, it allows the meanings of cultural "others" to be transcribed "in their own words," without letting the investigator's own language (e.g., English) come between the indigenous meanings and the conceptual world of the investigator.

Conventional interlinear glosses formulated in English (or whatever the language of the investigator happens to be) do not provide a neutral framework for semantic "transcription," since more often than not they cannot be translated, with exactly the same meaning, into other languages. By contrast, the hallmark of NSM explications is their cross-translatability.

The metaphor of an alphabet, with its historical antecedent in Leibniz's thought, should not lead anyone to think that

NSM posits a universal mental lexicon without outlining at the same time a universal grammar. It goes without saying that meanings and ideas cannot be compared and explained through isolated words: they can be compared and explained only through sentences, that is, through words arranged into meaningful sequences. No one understood this better than Leibniz, who aimed at establishing a "lingua mentalis" rather than just a mental lexicon. NSM, too, is a minilanguage: along with a minilexicon of 65 universal primes (matching the empirically established lexical common core of a large sample of natural languages), it also includes a minigrammar (also matching the empirically established grammatical common core of a large sample of natural languages).

Taken together with their associated grammar, semantic primes are believed to constitute the shared semantic-syntactic core of all human languages. According to NSM researchers, this shared core can be used as an analytical metalanguage for the exploration of the full lexicons and grammars of individual languages: it provides a nonarbitrary standard *tertium comparationis* (common measure) that is free from any English-specific terminological bias.

Needless to say, the proof of the pudding is in the eating. I return to the question of the effectiveness of the NSM framework in kinship studies in the last section of the paper.

## The Principle of Indigenization

Since the set of indefinables discovered through empirical cross-linguistic investigations is, evidence suggests, shared by all (or nearly all) languages, explications formulated in terms of these indefinables can, in principle, be formulated in any language, including that of the analyst's indigenous consultants. Accordingly, the principle of reductive paraphrase (down to the indefinables) is logically linked with the principle of indigenization formulated in my 1987 article "Kinship Semantics: Lexical Universals as a Key to Psychological Reality":

> The principle of indigenization can be formulated as follows . . . : If the semantic formulae are to constitute plausible hypotheses about the native speakers' meanings encoded in language A (say Pitjantjatjara), then those formulae must be translatable into language A. For example, it is permissible to use in the semantic formulae English words such as person, say, good, bad, mother, or father, if the language whose meanings the analysis is trying to represent has words for such concepts; and it is not permissible to use words such as sex, generation, sibling, parallel, opposite, senior, or moiety, if the language in question doesn't have such words. (133)

Kronenfeld (1996:66) argues compellingly against the so-called componential approach to kin terms, which defined them all (including 'mother' and 'father') through abstract and artificial features such as 'lineality', 'ascending generation', 'one degree of generation removal', and so on, pointing out that "one infers lineality from fatherhood" (rather than

the other way around) and linking the "psychological reality" with the evidence of "native usage."

The argument that claims to psychological reality should be consistent with the data on native usage is, to my mind, unassailable (cf. Wierzbicka 1992:329–354). However, the proviso "direct and *implied*" provides, I think, a loophole for conceptual Eurocentrism and Anglocentrism, because what is seen as implied may depend on the analyst's assumptions that are not shared by the native speakers. One might say that "implied data" are not really data but more or less judicious interpretations. Words shared by speakers in a given speech community are "communicative currency" that is the best guide we have to the "conceptual currency" on which this community's culture relies.

It is true that, as is often pointed out (see, e.g., Stasch 2013 and my response to Stasch in the same issue), the absence of a word (e.g., 'parent', 'son', or 'sibling') does not prove the absence of a concept in people's minds, but it does prove its absence from the conceptual currency used by people in their daily communication. By contrast, the presence of a word (e.g., 'mother') proves the presence of a certain conceptual coin ('mother') in their normal communicative exchanges. Accordingly, a "named" concept (e.g., 'mother') has a status in people's lives that a concept posited by scholars with a more or less technical English word (e.g., *parent* or *sibling*) but not named in a particular language cannot have.[2]

In his *Available Light*, Geertz (2000) wrote, "to say something about the forms of life of Hawaiians (or anybody else) that Hawaiians do not themselves say opens one to the charge that one is writing out other people's consciousness for them, scripting their souls" (102). To my mind, there is nothing inherently wrong with saying something about Hawaiians (or anybody else) that they themselves do not say (cf. Wierzbicka 2013*c*). But to say something about Hawaiians (or anybody else) that they could not themselves say (in their own words, because they have no such words) indeed opens one to such a charge.

An interpretation of Hawaiian kin terms that is based on the concepts 'mother' and 'father' can be rendered in Hawaiian words, and so can the explications of kin terms from Australian languages (Kayardild and Pitjantjatjara), which will be presented in this paper. These explications do not simply reproduce what the speakers of these languages themselves say about these terms, but they do not include anything that they could not themselves say (in their own words). Since all these explications are couched in words matching indigenous words, they can also be discussed with bilingual consultants.

In his target article on kinship in *Behavioral and Brain Sciences*, anthropologist Doug Jones (2010*a*) discusses "the principle that we explain the natives' use of language using only translations of terms shared by the natives with everyone else" and identifies it as the most distinctive feature of the NSM-based approach to kinship (i.e., the approach that also underlies the present paper). This is indeed fundamental and distinctive, setting the NSM approach apart from all other approaches. It is not surprising, therefore, that it is resisted. But in an era when anthropology has come to be deeply conscious of the need to move from talking exclusively about other people (the "natives") to consulting with those other people, it is, I think, an idea whose time has come. At the very least, the time has come to debate it.

## The Pivotal Role Played by David Schneider's Critique of 'Kinship'

Since many of the current controversies in kinship studies take David Schneider's (1984) attack on 'kinship' as their central point of reference, I want to state clearly that, as I see it, there was a great deal of truth in Schneider's statements—but also a great deal of error and confusion.

In his devastating critique of kinship studies, Schneider argued that "kinship has been defined by European social scientists, and European social scientists use their own folk culture as the source of many, if not all of their ways of formulating and understanding the world about them" (193). This, I believe, is largely true (as I have argued myself in Wierzbicka 1986, 1987, 1992, 2010*b*, 2013*a*, 2013*b*). Where, I believe, Schneider went wrong was in applying this charge also to 'mother' and 'father' (an error due to his failure to recognize language-specific patterns of polysemy).

Schneider mocked the doctrine of the genealogical unity of mankind, which assumes, as he wrote, that "mother is mother the whole world over" and that "all mothers can be compared by holding one element constant (that they bear children)" (198). But, in fact, cross-linguistic semantic evidence shows that this particular element is indeed constant—not only in human experience but also in human conceptualization of experience—and that by and large the same applies to 'fathers' (cf. Shapiro 2009).

The birth of a large-brained human baby is a dramatic event, even in modern conditions, let alone in premodern ones—and for those present, there can be no mistake as to whose body the baby's body is emerging from. The relation of the 'father' to a child rests, of course, on a much weaker evidentiary basis, but as documented compellingly by Sarah Hrdy (1981), among others, the idea of 'paternity' has played an important part in human thinking throughout history, reaching no doubt well into the evolutionary past. There is also little doubt that in most, if not all, human cultures, there are incest taboos relying on the concept of 'father', such as the following ones (formulated in relation to the Pirahã people of the Amazonia in Wierzbicka 2012; cf. Everett 2012):

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2. As discussed in my *Imprisoned in English* (2014), arguments of this kind usually exhibit a curious double standard. For example, nobody claims that speakers of English have concepts such as 'malanypa' of 'ku̱ta' named in Pitjantjatjara but not in English (to be discussed shortly), but many claim that Pitjantjatjara speakers have a concept of 'brother', not named in Pitjantjatjara but in English.

**common incest taboos involving 'father'**
a woman can't be a man's wife if he is her father
a woman can't be a man's wife if she is his mother
a woman can't be a man's wife if it is like this: her
   mother is his mother, her father is his father

I will argue that a culture-neutral, nonethnocentric exploration of kinship terminology can be grounded in eight kinship-related lexical universals (or near universals), six of which appear in these three most basic incest taboos: 'mother', 'father', 'birth' ['born']; 'wife', 'husband'; 'man', 'woman', 'child'. Everything else is variable and reflects "local" cultures, not universal human experience and thinking.[3]

The words for 'mother' and 'father' that we find in different languages may exhibit language-specific patterns of polysemy, but evidence suggests that in every language one of the meanings matches the body-based meanings of, roughly speaking, 'birth-giver' and 'begetter'. Schneider's critique is justified with respect to many other terms in kinship anthropology's traditional metalanguage, including 'kin types' such as 'son', 'daughter', 'brother', and 'sister' as well as 'parent', 'child' (as a converse of 'parent'), and 'sibling'. But putting 'mother' and 'father' on the same list amounts to throwing out the baby with the bathwater.

In his recent article on Fanti kinship terminology, in a section entitled "Kinship Terminologies as Semantic Systems," David Kronenfeld (2012) writes,

> Kinship terms … always have at least some referent for which genealogical information is crucial. These genealogical senses always provide a kind of fulcrum from which we can work on the other aspects of the terms' meanings—whatever they may be. We always have this genealogical aspect because people everywhere have mothers and (almost everywhere) fathers, who in turn have siblings. The genealogy flows from these connections and the adaption of some set of terms to the genealogy flows from the importance of mothers, fathers, and siblings. (154)

Well, yes and no: people everywhere have mothers and (almost everywhere) fathers, and from an Anglo perspective they may also have "siblings." From their own perspective, however, "people everywhere" have only mothers and (usually) fathers: unlike 'mother', 'father', and other people connected to one another in various ways by reference to 'mother' and 'father'. These connections can be conceptualized in different ways, one of which is the Anglo/English conceptual construct 'sibling'. In other words, the recognition of 'mothers' and 'fathers' is universal, but the recognition of 'siblings' (undifferentiated in gender and relative age) is not (Wierzbicka 2013a, forthcoming).

The editors of a recent volume on kinship analysis, Thomas Trautmann and Peter Whiteley (2012), opened their introduction to the volume with the observation that "anthropology began with kinship" and that "the anthropological

analysis of kinship was comparative from the start" (1). But any comparative analysis requires a *tertium comparationis*. If this *tertium comparationis* mixes universal (or almost-universal) human concepts such as 'mother' and 'father' with English concepts such as 'parent' and 'sibling', the resulting comparative analysis is bound to have an Anglo/English slant (Wierzbicka 2013a, 2014). Such a slant can be eliminated if we restrict our common measure to common human concepts. Cross-linguistic evidence shows that in the area of kinship there are (apart from 'wife' and 'husband') only two such concepts: 'mother' and 'father'.

## "Multiplicity of Mothers"?

The emphasis on 'mother' and 'father' as the two foundational ideas on which kinship systems are built—and as a conceptual basis for kinship studies—is likely to provoke protests from some scholars who take exception to the "genealogical framework" in general and sometimes even denounce 'motherhood' as "the middle class ideal" and "a reflection of Western upper-class concerns" (McKinnon 2005:112, 117; for discussion, see Shapiro 2008). I believe that such an ideologically based rejection of the concepts of 'mother' and 'father' as the foundation of kinship itself and a conceptual basis for kinship studies is mistaken.

This has nothing to do with "individualism" or with a focus on "the nuclear family." Rather, my primary concern is with the need to explicate concepts in a coherent and noncircular manner. No matter how broad the class of women called by the 'mother' word in a given language may be, it is simply not possible to explicate any kinship-related concepts without a direct or indirect reference to the strictly individual event of birth. A phrase like "group motherhood" (McKinnon 2005) reflects what I see as fuzzy thinking, never subjected to the rigors of constructing coherent and noncircular definitions and oblivious to the central place of polysemy in natural language. (I will return to this point very shortly.)

One spurious argument that has sometimes been invoked against 'mother' and 'father' as the mainstays of kinship systems concerns the individualistic outlook that these concepts allegedly imply. For example, anthropologist Rupert Stasch (2013) raises this argument against my account of some aspects of kinship semantics in the Australian language Dalabon.

Australian Aboriginal people are certainly not individualistic, and yet as Margaret Kemarre Turner (an Aboriginal woman and Arrernte speaker) explains in her book *Iwenhe Tyerrtye: What It Means to Be a Aboriginal Person* (2010), Aboriginal people's strong sense of being part of a larger whole is anchored precisely in the concepts 'mother' and 'father':

> Aboriginal people don't worry about themselves as one people [person] on their own … we see that we're not just the one person. … We come from the spirit of our mother and father, and that spirit, *tyerrtye atherrame*, has got a lot

3. For some possible exceptions, see Hua (1997).

of connection. We know that we've got two people in us, in ourselves really. And from that two people, it's just like a big root of a tree comes out. That's how we see it. (37)

Writing in English, Turner often uses the words *mother* and *father* in the plural, too, but she clearly makes a distinction between 'mother' and 'father' in the singular (the birth-giver and the begetter) and the extended meanings of these words referring to certain social categories of people. For example, she writes, "Kinship creates and inspires joyful love for your mothers . . . , love and happiness for your mother's fathers . . . , for your father's fathers, and abiding love for the country" (84). She emphasizes "respecting your mums and dads" (in the plural; 89), but she also talks about "love for your mother, your father [in the singular], and your children" (99), and she singles out in this context "our mother and father, *ratherre* [the two of them], they're the ones now who brought the daylight for us" (99). So there is no question of there being for Turner a "multiplicity of mothers" indistinguishable from a person's actual birth-giver.

The phrase "multiplicity of mothers" belongs to Susan McKinnon (2005:110). If this phrase is to be taken literally, then I would agree with Warren Shapiro (2008) that it makes little sense. Shapiro uses as his crown argument against it the methodological principle of "focality" or "prototypicality": a 'real mother' (genetrix) is more focal or prototypical to the category of 'mother' than any other woman to whom the term for 'mother' can be extended in a given culture. This principle, however, is not sufficient without a set of precise definitions based on a rigorous semantic methodology. From a semantic point of view, the decisive fact is that in a language in which the word for 'birth mother' is also applied to some other women, it is not possible to construct a workable unitary definition of it covering its two (or more) different applications.

Generally speaking, to be able to establish what the meaning of a given word is, one must first determine whether this word is polysemous, and this requires some workable test for polysemy. Such a test can be found in the principle that a unitary meaning can be given a unitary definition and that such a definition needs to be grounded in an independently justified set of indefinables. Otherwise, all attempts at defining words would lead either to an infinite regress or to circularity (Goddard and Wierzbicka 2014*b*; Wierzbicka 2011, 2012, 2015).

Many years of theoretical and empirical work within the NSM framework have led researchers to the conclusion that there are 65 or so indefinable words or word-like elements (semantic primes) in all languages and that any other meanings expressed in any language can be defined, directly or indirectly, through the minilexicon of these 65 or so primes, combined in accordance with a universal minigrammar.

In addition to universal semantic primes ("the alphabet of human thoughts"), cross-linguistic research has identified a few dozen universal "semantic molecules," that is, words found in all (or nearly all) languages that, unlike primes, can be further decomposed and that function as building blocks within more complex meanings (Goddard 2012). For example, words with meanings equivalent to 'men', 'women', and 'children', which can be found in all languages (cf. Goddard and Wierzbicka 2014*b*), are not primes (they can be decomposed), but they function in languages as integrated units of meaning; the same applies to the words meaning 'to be born'.

To illustrate, the English word *mother*, in its basic meaning of 'birth-giver' (from which all the other meanings of this word are derived), can be explicated within the NSM framework as follows:

**someone's mother**
a woman
before this someone was born, this someone's body
  was for some time inside this woman's body

While some readers may find this definition somewhat baffling because of its unconventional form, its content is hardly controversial and corresponds to facts known even to young children: before a baby is born, it is for some time inside a woman's body, and this woman is this baby's mother.

I call the meaning of 'mother' explicated above "basic" because all the other meanings of this word can be explicated, without circularity, through this one meaning, whereas this meaning itself can be explicated via the simpler concepts 'woman', 'child', and 'be born'. Avoiding circularity is the key issue here: the meaning of *mother* as, roughly speaking, 'birth-giver' is recognized as basic because this is the only way to build a coherent and noncircular overall account. (Dictionary definitions such as "mother is a female parent" and "parent is a mother or father" are notorious.)

The words *woman* and *be born*, which are included in the NSM-based definition, are universally attested but are not indefinable. The words *child* and *woman* (and also *man*) have been explicated in terms of the 65 primes in *Words and Meanings* (Goddard and Wierzbicka 2014*b*, chap. 2), and *be born* can be explicated via *woman* and *child*. The explication of 'child' is framed exclusively in terms of semantic primes; that of 'woman', in terms of primes and one independently explicated semantic molecule ('child'); and that of 'born', in terms of primes and two independently explicated molecules ('child' and 'woman'). However, the concept of 'mother' relies on primes and three independently explicated molecules ('child', 'woman', and 'born') while at the same time also referring to a period of pregnancy, when the child's body is inside the woman's body (see table 2).[4] There is no room here

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4. 'Be born [m]', which is a foundational semantic molecule for concepts of kinship, is also necessary for concepts involving "birth order," such as words for older and younger siblings. Like 'mother', 'be born' needs to be explicated with reference to two bodies, a child's body and a woman's body. Roughly speaking, first the child's body is (for some

Table 2. Template

| Someone X (e.g., John) **was born** at this time | |
|---|---|
| Something happened to this someone X at this time it happened in a place | Lexicosyntactic frame |
| Before it happened, it was like this:<br>—there was a woman [m] in this place at that time<br>—inside her body there was the living body of a child [m] | Prior scenario |
| After this, something happened to this woman's [m] body for some time | Process |
| Because of this, after this, the body of this child [m] was not inside her body anymore, it was somewhere near her body<br>this child [m] was someone X | Outcome |

to discuss in detail all the semantic relationships involved, but the key point is that the definitions of *woman* and *child* developed in Goddard and Wierzbicka (2014*b*) do not include any references to being born, so there is no circularity: directly or indirectly, all the definitions in question are based on the indefinables.

Many molecules are language and culture specific; for example, 'read', 'write', 'God', 'number' and 'money' are important semantic molecules of English that function as ready-made units in the meaning of many other English words, but they are of course far from universal. On the other hand, NSM-based cross-linguistic research suggests that 'man', 'woman', and 'child' can be found as words (or distinct meanings of polysemous words) in all (or nearly all) languages, as can 'mother', 'father', 'wife', 'husband', and 'be born'. Evidence suggests that these concepts are important building blocks in the edifice of kinship terminologies across languages and cultures.

The paraphrase of the primary meaning of *mother* presented here is similar to—and yet different from—Ian Keen's (1985) "vernacular definition" phrased as "one's mother is

time) inside a woman's body, then something happens to the woman's body, and after this, the child's body is no longer inside the woman's body but "out." The scenario of 'birth'—played out in time and space—can be explicated more precisely with a template similar to that used for dozens of words of 'doing' and 'happening' in Goddard and Wierzbicka (forthcoming), as in table 2.

The first part of the template, called the "lexicosyntactic frame," presents 'being born' as something that happens to someone in a certain place at a certain time (the unique "coordinates" of birth: where and when someone was born). To explain what happened, it is necessary to set the scene with the presence of a woman (the mother) who is "with child," i.e., having inside her body 'the living body of a child'. The woman's body then undergoes a "process" ('something happens to her body for some time'), which leads to the "outcome" that this child's body is no longer inside the mother's body but is 'somewhere near her body'. The explication is capped off with a component identifying the child in question as 'someone X', i.e., the referent of the grammatical subject of the sentence.

the female person who gave birth to one" (66; cf. my own definition in Wierzbicka [1972:46], to which Keen refers). The main difference lies in the metalanguage of the semantic description: Keen's definition could not be translated into most languages of the world because they do not have a word meaning 'female' (although they do have one meaning 'woman') or a relative clause ("person who"), whereas evidence suggests that the NSM-based explication presented here can be rendered, word for word, in any language.

The concept of 'father'—which, along with 'mother', serves as a fundamental reference point for most, if not all, of the world's kinship systems—can be portrayed in simple and cross-translatable words as follows:

**someone's father**
a man
some time before this someone was born
    this man did something with a part of the body to a woman's body
something happened inside this woman's body because of this
some time after this this someone was born because of this

In the anthropological literature on kinship it is sometimes affirmed that 'father' is socially constructed and therefore not universal (even if 'mother' is), and Malinowski's assertions (1913, 1922) concerning the Australian Aborigines' and the Trobrianders' supposed ignorance of physiological paternity are far better known to many anthropologists than their rebuttals (see, e.g., Pulman 2004).

Statements to the effect that in many societies 'father' is socially constructed are often vague, and yet they are sometimes automatically taken as evidence that in these societies the notion of 'begetting' is unknown. This applies in particular to polyandric societies. As an antidote against such superficial thinking, it is worth quoting here Nancy Levine's (1987) exemplary study of 'fathers' and 'sons' in Tibetan polyandry, where brothers share wives but nonetheless,

> A clear distinction is drawn between paternity in the sense of engendering a child and in the sense of 'giving', literally 'binding' a child in one's name (*ming tag tag pa*). (271)

> It may seem a dubious venture to try to assign paternity where a woman has several husbands. Most polyandriously married women, however, have no more than two, and the men are not always home at the same time. . . . Thus it is wives who control assignments of paternity, here and in the other communities. . . . Later when the child is old enough to understand, they tell him who his or her 'real' (*ngothog*) father is. . . . Real fathers and children are aware of one another's identities. (274)[5]

5. Reports on languages that supposedly lack a word for 'father' frequently surface in academic as well as popular publications. Usually, on closer inspection they prove to be spurious. For example, in a recent

The idea that the words for 'mother' and 'father' have a primary meaning (based, roughly speaking, on the events of birth and conception) and extended meanings is not new (cf., e.g., Gould 2000; Kronenfeld 1996; Scheffler 1978). What is new is, first, the insistence that of all the kin types distinguished in English and used in the traditional anthropology of kinship (such as M, F, B, Z, S, and D), only the first two, 'mother' and 'father', provide stable universal reference points; and second, a rigorous methodology for establishing how many meanings a given word (whether kin term or not) has, and what they are. This methodology, which has been tested in hundreds of studies across many domains, languages, and cultures (see NSM homepage 2014), is not based on componential analysis (relying on artificial symbols of one kind or another; for discussion, see, e.g., D'Andrade 1995) but on reductive paraphrases formulated in natural languages and constrained by a controlled vocabulary of indefinables (words or word-like elements) that have been established through many years of empirical cross-linguistic investigations.

To sum up, Schneider was right to suggest that most earlier approaches to kinship were ethnocentric, but he was wrong to claim that there was no such thing as kinship that could be validly identified across languages and cultures. By recognizing 'mother' and 'father' as shared human concepts we can partially validate Schneider while at the same time going, in a constructive way, beyond Schneider.

## A New Model for Analyzing Kinship Terminologies: The Ordinary Language Model

The key idea of the approach to kinship presented here is that all kin terms in all languages build on the concepts 'mother' and 'father' and that all kinship terminologies, no matter how divergent, can be compared and explained through these two fundamental concepts. As already mentioned, these two concepts are not semantic primes: they are semantic molecules, apparently lexicalized in all languages with exactly the same meaning. It is true that in many languages (e.g., in Pitjantjatjara, to be discussed shortly) the word for 'mother' (in Pitjantjatjara), *ngunytju*, can be applied not only to a person's

'birth-giver' but also to many other women. But words like *ngunytju* can be shown, on language-internal grounds, to be polysemous.

For example, the phrase *mama ngunytju*, literally 'mother father', is used only about a person's biological mother and father (Goddard 1996:67), and only one's biological mother and father can be specified as *ngunytju mulapa* 'true mother' and *mama mulapa* 'true father' (Goddard 1986:153). It is also worth noting comments made by native speakers of Australian languages, such as those cited in Henderson and Dobson's (1994) dictionary of Central and Eastern Arrernte in the entry for the word *meye*:

**meye** *n.*
**1a.** mother. Meye atyinhe ayenge-arle atnerte interleke re meye atyinhe anthurre. *My real mother is the mother whose stomach I was in.*
**1b.** mother's sister; aunt. Meye atyinhe, meye atyinhe-kenhe yaye re meye atyinhe antime. *My mother and my mother's sisters are all my mother too.*

Leaving aside polysemous uses of *meye* in relation to a man's daughter-in-law and to a mother's brother, the dictionary also notes an extended use of *meye*, glossed as "other women of about the right age and the same skin name as your mother." Thus, one meaning of *ngunytju* and *meye* matches the universal sense of, roughly speaking, the birth-giver, and the others are extended; as we will see shortly, the same applies to the words for 'father' in both Pitjantjatjara and Arrernte.

For the moment, I will show how the universal semantic molecules 'mother' and 'father' allow us to overcome the Eurocentrism of the classic approach by analyzing, through 'mother' and 'father' and without 'brother' and 'sister', the Pitjantjatjara kin terms *kamuru* and *kuntili* (in their primary senses, not extended ones).

**[A] *kamuru*₁ ("MB")**
someone can say about a man "this is my *kamuru*" if
   this someone can think about this man like this:
  "his mother is my mother's mother, his father is my
     mother's father"

**[B] *kuntili*₁ ("FZ")**
someone can say about a woman "this is my *kuntili*" if
   this someone can think about this woman like this:
  "her father is my father's father, her mother is my
     father's mother"

As these explications show, the terms *kamuru* ("maternal uncle") and *kuntili* ("paternal aunt") are construed via the level of grandparents. Thus, one's *kamuru* is not conceptualized as a brother of one's mother but as a man who shares his parents (mother and father) with one's mother. Similarly, one's *kuntili* is not conceptualized as a sister of one's father but as a woman who shares her parents (mother and father) with one's father. (I will return to this point later.)

Turning now to a person's own generational level, I will explicate below the Pitjantjatjara words *kuṯa* ("older brother") and *maḻanypa* ("younger sibling"), noting that the molecules 'mother' and 'father' allow us to get rid of two major flaws of the traditional approach (in addition to its inherent Eurocentrism): its conceptual redundancy and its failure to sufficiently account for the entailments. For example, in analyzing the terms *maḻanypa* as "Sb−" ('younger sibling') and *kuṯa* as "B+" ('older brother'), the traditional approach used both "brother" and "sibling", whereas clearly one of them should have sufficed. At the same time, this approach failed to recognize the fact that if one man is another's *kuṯa*, then the other man is the first one's *maḻanypa*. Both of these weaknesses are overcome in the two explications below:

**[C] *kuṯa* ("B+")**
someone can say about a man "this is my *kuṯa*" if this
    someone can think about this man like this:
        "his mother is my mother, his father is my father, he
            was born before I was born"
        someone can say the same about a child if after
            some time, this child can be a man

**[D] *maḻanypa*₁ ("Sb−")**
someone can say about a child "this is my *maḻanypa*" if
    this someone can think about this child like this:
        "this child's mother is my mother, this child's father
            is my father, this child was born after I was born"
        someone can say the same about someone else
            when this other someone is not a child anymore

I would like to draw attention to two aspects of these explications. First, the frame is "someone can say this if it is like this" and not "someone can say this only if it is like this," that is, it does not preclude other uses. This is consistent with the classificatory uses of such forms, which will be discussed later. Second, these explications reflect differences in the prototypical perspective associated with different kin terms. Thus, *kamuṟu* ('mother's brother') and *kuṉṯili* ('father's sister') present relationships that refer, prototypically, to an adult *kamuṟu* ("a man") and an adult *kuṉṯili* ("a woman"), although these adult prototypes can be extended to children; and the same applies to *kuṯa*. By contrast, *maḻanypa* refers, prototypically (though by no means exclusively), to a "younger sibling" who is a child. The reason is that the relationship itself is initially with a child: apart from a firstborn, the moment a child is born it is someone else's *maḻanypa*. This is not the case, of course, with *kuṯa*.

The basic assumptions underlying this analysis are consistent with the general conclusions reached by Scheffler (1978) in his classic *Australian Kin Classification* and can be summed up as follows:

1. "The categories by which the aboriginal people of Australia order their social lives are predominantly kin categories" (ix);

2. "The evidence is quite clear that the so-called terms of relationship designate egocentric, genealogically defined categories, and are polysemous; each term has a structurally primary and specific sense and a derivative, expanded, or broader sense (or senses)" (66); and

3. "The 'kinship terms and extensions' interpretation of the meanings of Aranda and other Australian 'terms of relationship' is the correct interpretation" (21).

Yet while the basic assumptions of the NSM-based model developed here are consistent with Scheffler's, the explications of kin terms presented here look quite different from his and, indeed, from any definitions of such terms offered in the anthropological literature. The main features of this new model, which I will call "the ordinary-language model of kinship terminologies," can be summed up as follows:

1. This model is grounded in the lexical universals 'mother' and 'father'.
2. This model does not use any kin terms (e.g., 'parent', 'sibling') other than those two lexical universals.
3. The explications based on this model are cross-translatable into the language that is being described (Pitjantjatjara, Kayardild, or whatever).
4. The model is transparently relational, as the basic frames used are "someone is someone else's so-and-so" and "someone can say about someone else: . . . 'this is my so-and-so'."
5. The model is transparently egocentric, as what one person can say about another is phrased in terms of the first person pronoun "my": "this is my . . ."
6. The model is based on rules: "someone can say . . . if . . ." (although not rules of the form "if and only if").
7. These rules are formulated in words matching indigenous words and phrases, and they are consistent with what is known about the way that knowledge about the use of kin terms is actually transmitted (see, e.g., Laughren 1984; Nicholls 2009).
8. The model allows us to capture differences in prototypical age-related perspective that were never captured in the traditional approach.
9. The model frees the analyst from the need to supplement the description of kin types with extraneous metacomments, such as "for a male ego" and "for a female ego," and allows for a unitary definition for each meaning.

## No Need for "Male Ego" and "Female Ego": "Siblings" in Kayardild

Number 9 in the numbered set above is so important that I will discuss it more fully with reference to a set of examples: the "sibling terms" from the Australian language Kayardild (cf. Wierzbicka 2013*a*, 2014).

Evans (1995:553) offers two diagrams for Kayardild sibling terms, one for "male ego" and one for "female ego" (fig. 1). If one studies these diagrams closely, one can see that they in-
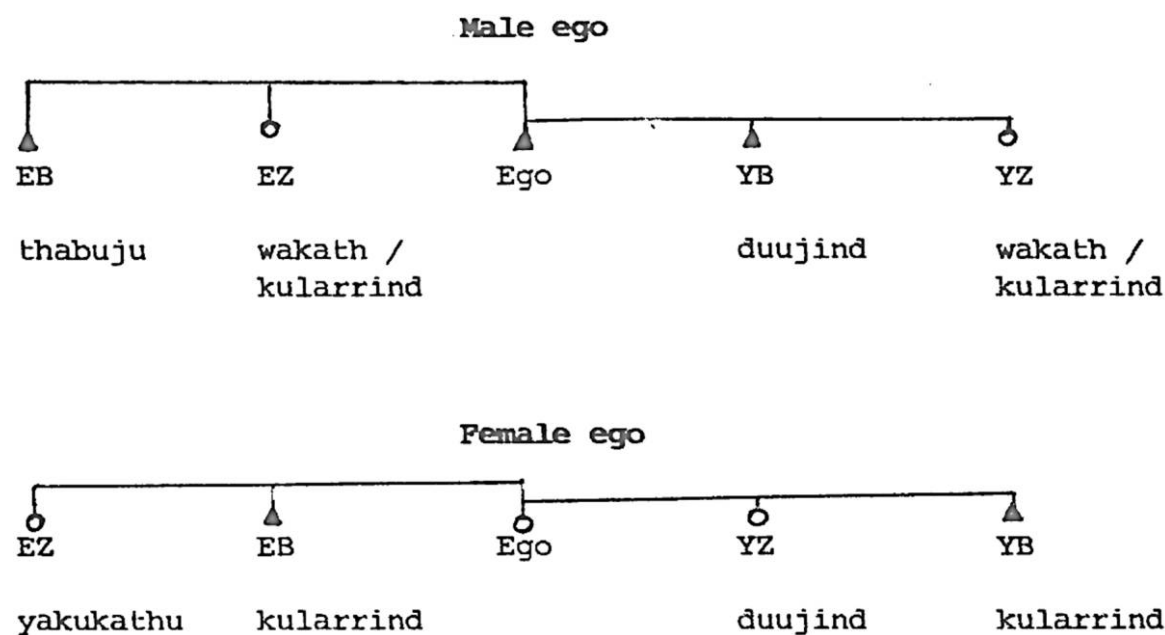
Male ego

EB          EZ          Ego         YB          YZ

thabuju     wakath /                duujind     wakath /
            kularrind                           kularrind

Female ego

EZ          EB          Ego         YZ          YB

yakukathu   kularrind               duujind     kularrind

Figure 1. Kayardild sibling terms (male and female ego).

volve a lot of redundancy and at the same time include the technical analytical construct "ego." To show how we can simplify this analysis and at the same time bring it closer to the insider perspective, I will start with the word *wakatha*, which appears only in the diagram for "male ego" and which is assigned two symbols: "EZ" ("elder sister") and "YZ" ("younger sister"). Since Kayardild evidently does not have a word for "sister" (in general), this diagram could not be reproduced in Kayardild itself. This does not apply to the explication below.

**[E] *wakatha***
a man can say about a woman "this is my *wakatha*" if
 he can think about her like this:
  "her mother is my mother, her father is my father"

Turning now to *kularrinda*, whose gloss phrased in semi-technical English can be very short, simple English matching Kayardild words, this term can be explicated as follows (for further discussion, see Wierzbicka 2013a):

**[F] *kularrinda* ("opposite sex sibling")**
a child can say about another child "this is my
 *kularrinda*" if it is like this:
  one of these children can think about the other one
   like this:
  "this someone's mother is my mother, this
   someone's father is my father"
  after some time, one of these children can be a man,
   the other can be a woman

The same model of description that allows us to dispense with terms like "ego," "opposite sex," and "sibling" in the case of *wakatha* and *kularrinda* allows us also to dispense

with them in describing the meanings of the other Kayardild "sibling terms," that is, *thabuju*, *duujinda*, and *yakukathu*:

**[G] *thabuju* ("older sibling, same sex, male ego")**
a man can say about another man "this is my *thabuju*"
 if he can think about him like this:
  "his mother is my mother, his father is my father, he
   was born before I was born"
  a child can say the same about another child if after
   some time both these children can be men

**[H] *yakukathu* ("older sibling, same sex, female ego")**
a woman can say about another woman "this is my
 *yakukathu*" if she can think about her like this:
  "her mother is my mother, her father is my father, she
   was born before I was born"
  a child can say the same about another child if after
   some time both these children can be women

**[I] *duujinda* ("younger sibling of same sex")**
a woman can say about another woman "this is my
 *duujinda*" if she can think about her like this:
  "her mother is my mother, her father is my father, she
   was born after I was born"
  a child can say the same about another child if after
   some time both these children can be women
  a man can say about another man "this is my
   *duujinda*" if he can think about him like this:
  "his mother is my mother, his father is my father, he
   was born after I was born"
  a child can say the same about another child if after
   some time both these children can be men

Thus, by accepting the eight universals of kinship proposed here, we can reinterpret kinship systems of Australian languages (such as Pitjantjatjara and Kayardild) not only without 'brother', 'sister', and 'sibling' but also without 'sex', 'male', 'female', and, last but not least, 'ego'—and in words with counterparts in these languages themselves.

In their classic study "The Meaning of Kinship Terms," Wallace and Atkins (1960) commented that in kinship studies "the degree of psychological reality achieved in ethnographic reporting is not only uneven but on the average probably rather low" (79) and concluded that "a problem for research . . . must be to develop techniques for stating and identifying those definitions which are most proximate to psychological reality" (78). This paper seeks to develop such techniques.

More than a decade has passed since D'Andrade (2001) remarked that the NSM "offers a potential means to ground all complex concepts in ordinary language and translate concepts from one language to another without loss or distortion of meaning" (246). It seems to me that the translations of the Kayardild "sibling terms" into NSM English proposed here are a good illustration of D'Andrade's point.

## Extended Meanings of 'Mother' and 'Father' in Pitjantjatjara

In his *Australian Kin Classification* (1978), Scheffler argues persuasively that for Australian languages "the 'kinship terms and extensions' interpretation . . . is the correct interpretation" (21). Accordingly, on Scheffler's analysis, in the case of the Pitjantjatjara words *ngunytju* "M" and *mama* "F" the primary meanings are 'mother' and 'father', and any other senses of these words must be seen as extensions. From a semantic point of view, this is evidently right: if (my) *ngunytju* can be defined as, roughly, "the woman who gave birth to me," then it is clear that when this word is used with reference to women other than the birth-givers, some other meaning or meanings must be involved. But how many, exactly?

The answer that I want to argue for is that, in addition to 'birth-giver', *ngunytju* has two other meanings and that it is one of these two extended meanings rather than the primary meaning of 'birth-giver' that provides a prototype for the wide range of women going beyond the narrow circle of the birth-giver's actual sisters. In saying this, I am following in the footsteps of Malinowski, who in his book *The Sexual Life of Savages* (1929) wrote (in relation to the Trobriand system):

> The mixing up of the individual and the "classificatory" relations, kept apart by the natives in law, custom, and idea, has been a most misleading and dangerous cause of error in anthropology. . . . Carrying the genealogy beyond the family circle, we can see that . . . the first person from the larger world to enter into the circle of kinsmen is the mother's sister, who, although she is called by the same term as the

own mother, *inagu*, is very definitely distinguished from her. The word *inagu* extended to the mother's sister is, from the outset, given an entirely different meaning—something like "second mother" or "subsidiary mother." (525)

It is noteworthy that Malinowski refers here to linguistic as well as ethnographic evidence:

> In its second sense *inagu* is used with a different feeling-tone; and there are circumlocutions, grammatic usages, and lexicographical indices which differentiate the secondary from the primary meaning. Only to a linguistically untrained European observer, especially if he is not conversant with the native language, can the word *inagu* (2) (mother's sister) appear identical with *inagu* (1) (own mother). On this point any intelligent native, if properly questioned, could correct the ethnographer's error. (525)

Evidence suggests that the same applies to Pitjantjatjara. Just as the 'mother's brother' (in Pitjantjatjara, *kamuru*) is the focal point for a broad class of 'classificatory mother's brothers' (as it is usually called in Australian studies), so 'mother's sister' (in Pitjantjatjara, *ngunytju*) is the focal point for a broad class of 'classificatory mother's sisters'. That the word for 'mother's sister' (*ngunytju*) is the same as that for 'mother' (birth-giver), significant as it is, can easily obscure the parallelism between the two cases.

Discussions of "focal" and "extended" meanings of the word for 'mother' in different languages often rely on the word 'like' as the key to the extension. Indeed, it has often been reported in ethnographic literature that a word or suffix meaning 'like' is used by native-speaker consultants (cf., e.g., Shapiro 2009:35). Such reports are very valuable. Nonetheless, we must tread carefully here. If the basic meaning of a word like *inagu* 'my mother' (cited by Malinowski) is "the woman who gave birth to me," then there can hardly be, from the native speaker's point of view, a great many other women related to me like my *inagu* is: the birth is a unique event and the birth-giver is in a unique relationship to the born. The mother's sister is not in a unique relationship to me: she did not give birth to me, and there can be several mother's sisters. At the same time, my mother's sisters are all 'like my mother' in so far as they have the same mother and father as my mother. This places them in a special halfway position between the "true mother" and the large class of women whom I can be expected to address and to refer to by the same word. Thus, the small class of my mother's sisters (anchored in the persons of my maternal grandparents) can be seen as a prototype for the large class of 'classificatory mother's sisters': I can think of my mother's sisters as being like my "true" mother in some respects, and I can think of my 'classificatory mother's sisters' as being, in some respects, like my "true" mother's sisters.

Shapiro (2009) says that "in universal system of kin categorization parents probably always provide the focal points for the wider application of kin terms" (34). Strictly speaking,

however, 'mother' and 'father' provide the indispensable reference points for kin terms rather than "focal points" (prototypes) for 'classificatory' mothers and fathers.

Accordingly, I will posit for the Pitjantjatjara word for 'mother' three distinct meanings rather than two: $ngunytju_0$ (mother, that is, birth-giver), $ngunytju_1$ ('mother's sister'), and $ngunytju_2$ ('classificatory mother's sister'). I use the symbol zero for the birth-giver (and also for the begetter) to signal their unique and foundational character as well as to highlight the conceptual parallelism between $ngunytju_1$ ('mother's sister') and $kamuru_1$ ('mother's brother') and that between $mama_1$ ('father's brother') and $kunTili_1$ ('father's sister'). This leads us to the following three explications that distinguish between three situations in which the word *ngunytju* can be used:

**1. $ngunytju_0$ ('mother', i.e., 'birth-giver', as defined earlier)**
**2. $ngunytju_1$ ('mother's sister')**
someone can say about a woman 'this is my *ngunytju*'
    if this someone can think about her like this:
  "her mother is my mother's mother, her father is my
    mother's father
because of this, this is someone like my mother"
**3. $ngunytju_2$**
someone can say about a woman "this is my *ngunytju*"
    if this someone can think about her like this:
  "this is not one of my *ngunytju*-s
  at the same time, this is someone like my *ngunytju*-s"

At first glance, these three explications may seem to contradict each other, as each of them specifies different conditions under which the word *ngunytju* can be used about a woman (or to a woman). In fact, however, they are fully compatible: since none of the three explications says that the word *ngunytju* can be used "if and only if (such and such)," they jointly present three different sets of circumstances under which this word can be used—and this fits the facts. What applies to *ngunytju* 'mother' applies also to *mama* 'father'.

**1. $mama_0$ ('father', i.e., 'begetter', as defined earlier)**
**2. $mama_1$ ('father's brother')**
someone can say about a man "this is my *mama*" if this
    someone can think about him like this:
  "his father is my father's father, his mother is my
    father's mother
  because of this, this is someone like my father"
**3. $mama_2$ ('classificatory father's brother')**
someone can say about a man "this is my *mama*" if this
    someone can think about him like this:
  "this is not one of my *mama*-s
  at the same time, this is someone like my *mama*-s"

Treating the meanings $ngunytju_1$ ('mother's sister') and $mama_1$ ('father's brother') as the prototypes for the broader classificatory categories allows us to present 'mother's sister'

and 'mother's brother' as well as 'father's sister' and 'father's brother' as partly (although not entirely) parallel in both their meanings, the 'focal' one and the 'classificatory' one, as the following explications of $kamuru_1$ and $kamuru_2$ (parallel to those of $ngunytju_1$ and $ngunytju_2$ above) illustrate:

**$kamuru_1$ ('mother's brother')**
someone can say about a man "this is my *kamuru*" if
    this someone can think about him like this:
  "his mother is my mother's mother, his father is my
    mother's father"
**$kamuru_2$ ('classificatory mother's brother')**
someone can say about a man "this is my kamuru" if
    this someone can think about him like this:
  "this is not one of my *kamuru*-s
  at the same time, this is someone like my *kamuru*-s"

Similarly, the two explications of $kunTili_1$ ('father's sister') and $kunTili_2$ ('father's classificatory sister') can be parallel— up to a point—to the explications of $mama_1$ ('father's brother') and $mama_2$ ('classificatory father's brother'):

**$kunTili_1$ ('father's sister')**
someone can say about a woman "this is my *kunTili*" if
    this someone can think about her like this:
  "her father is my father's father, her mother is my
    father's mother"
**$kunTili_2$ ('classificatory father's sister')**
someone can say about a woman "this is my *kunTili*" if
    this someone can think about her like this:
  "this is not one of my *kunTili*-s
  at the same time, this is someone like my *kunTili*-s"

Needless to say, it is not an accident that the word for "mother" and "mother's sister" in Pitjantjatjara are the same (*ngunytju*), whereas the word for "mother's brother" (*kamuru*) is different (or that the words for "father" and for "father's brother" are the same [*mama*], whereas the word for "father's sister" [*kunTili*] is different). In both cases, the formal identity of the words for "same-sex siblings" sends a powerful cultural message (cf. Goddard 1986).

In the case of *ngunytju* ("M") and *mama* ("F"), the key cultural message sent by the terminology is that I can think about my mother's sisters like I can think about my mother and that I can think about my father's brothers like I can think about my father. Thus, while *ngunjtju* ('mother's sister') and *kumura* ('mother's brother') are semantically parallel, up to a point, there is also a difference between the two: only the first of them includes the component "this is someone like my mother." Similarly, while *mama* ('father's brother') and *kunTili* ('father's sister') are semantically parallel, up to a point, only the first of them includes the component "this is someone like my father."

By sorting out the different meanings of words such as *ngunytju* and *mama* we can bring to light the fact that languages such as Pitjantjatjara have a special conceptual category of women who, roughly speaking, share the same

mother and father and a special conceptual category of men who share the same father and mother. At the same time, we can help identify a key conceptual difference between 'uncles' and 'aunts' in European languages and their counterparts in Australian languages. For example, in English one's "uncles" and "aunts" are conceptualized, above all, as brothers and sisters of one's mother and father, whereas in Pitjantjatjara *kamuṟu-s* and *kuṉtili-s* appear to be conceptualized, above all, as men and women who share their mothers and fathers with one's own mother and father, that is, through the level of 'grandparents' (Goddard 1986).

## Explications and Cultural Scripts

The "classificatory" meanings of *ngunytju*, *kamuṟu*, *mama*, and *kuṉtili* can be seen as, above all, licensed ways of addressing a wide range of people who are not close relatives as if they were close relatives. This fits in with the cultural importance of addressing people by a relationship term—and of choosing the right relationship term in a given interpersonal situation. This does not exclude, of course, the use of these terms in reference to people, but it highlights their use as appropriate terms of address.

The "classificatory" meanings of *ngunytju*, *kamuṟu*, *mama*, and *kuṉtilli* as portrayed here do not predict who can or should be addressed by each of these terms, but each of them offers, as it were, a foothold for a cultural rule that will specify that. In NSM research, such rules—referred to as cultural scripts—are specified in the same metalanguage as the explications and are subject to the same requirements of intelligibility, cross-translatability, and verifiability in consultation with native speakers (see, e.g., Goddard 2010; Goddard and Wierzbicka 2004; Wierzbicka 2010*a*).

The cultural scripts relevant in the present context are based on the cultural premise that it is good to address other people by a kin term—that is, a term that recognizes their place in the local social space and indicates how the speaker is thinking about them. At the same time, they tell people with what word (what kin term) they can convey this desirable message to a particular person to whom they want to speak at a given moment. Roughly, such scripts can be formulated as follows:

[A] if a woman can call my mother's mother *ngunytju*
     I can call this woman *ngunytju*
[B] if a man can call my mother's mother *ngunytju*
     I can call this man *kamuṟu*
[C] if a man can call my father's father *mama*
     I can call this man *mama*
[D] if a woman can call my father's father *mama*
     I can call this woman *kuṉtilli*

(This is, of course, only a very small subset of "cultural scripts" relating to kin terms in Aboriginal Australia; see, e.g., Nicholls 2009, 2013; Sutton 1982; for further discussion, see Wierzbicka 2016.) Thus, cultural scripts can work in tandem

with explications to transmit cultural knowledge about the local principles of human interaction. For example, if I know that a man's mother is my mother's mother, I know then that I can address this man as "*kamuṟu*" (as the explication of *kamuṟu*₁ suggests). At the same time, I know that I can address many other men as "*kamuṟu*" (the explication of *kamuṟu*₂ foreshadows that), and the cultural script [C] tells me that I can call any man with this word if I know that this man calls my mother's mother "ngunytju."

In his 1980 article "Particularistic or Universalistic Analyses of Fanti Kin-Terminology," Kronenfeld presents the two goals—cross-cultural comparison of kinship terminologies and language users' likely "cognitive operations"—as equally worthwhile but difficult, if not impossible, to achieve at the same time, and he suggests that "we should turn to alternative analyses for different goals." As this paper illustrates, however, when we use the NSM-based model of kinship analysis—the ordinary-language model—we can achieve both of these goals at the same time. A key role in this model is played by eight semantic molecules: 'mother', 'father'; 'wife', 'husband'; 'man', 'woman', 'child'; and 'be born'.

In his recent article "Kinship as Classification," Parkin (2012) notes that "many anthropologists, after all, have openly marvelled at the ability of certain ethnic groups in places like Australia to devise complicated systems of cross-cousin marriage that they (the anthropologists) have great difficulty in grasping" (206). It seems clear that in order to understand how the speech communities in Australia learn and use their kinship terminologies, it is desirable for the analyst to be able to speak about it to native consultants. Such conversations can hardly rely on the language of algebra or the technical language of anthropology. They can, however, draw on the "ordinary-language" resources of NSM. The empirically discovered universal semantic primes—and, in particular, the eight universal semantic molecules on which kinship terminologies are built—help us to overcome the Anglocentrism and Eurocentrism in the area of kinship studies and to bring to light aspects of social organization and social cognition without using arcane algebraic or other technical apparatus and without, in Geertz's (2000) words, "writing out other people's conscientiousness for them, scripting their souls" (102).

## Concluding Remarks: NSM and Kinship Studies

In a recent article "Culture and Kinship Language," anthropologist David Kronenfeld (2015) discusses the history of the studies of kinship terminologies and singles out "two major approaches [that] have been developed providing a more efficient and insightful rigorous formal representation of kin-types" (163). Kronenfeld illustrates the working of these two approaches with two analyses of the Fanti word *wofa*, glossed in English as 'maternal uncle', and its "reciprocal," *awofasi*.

In the first approach, Kronenfeld notes, "*wofa*, the Fanti maternal uncle term, would be MB, while *awofasi*, its recip-

rocal, would be mZC" (where M stands for mother, m for male, Z for sister, and C for child). In the second approach (which is the one adopted in Kronenfeld's 2009 book, *Fanti Kinship and the Analysis of Kinship Terminologies*), "*wofa*, the Fanti maternal uncle term, would be a+fom, and its reciprocal mof-a" (Kronenfeld 2015:164). The symbols used here are explained as follows: "m is a male person of either sex…, while + is a child to parent link and o a sibling link."

In addition to these two major approaches, Kronenfeld mentions a third approach (the NSM approach), of which he seems rather sceptical:

> Another, third, kind of approach, offered by Wierzbicka (1992, chs 9, 10), uses culture-specific supposedly folk-based definitions of kin terms constructed out of what she sees as universal semantic primes (i.e., universally basic concepts). Her presentation is too brief and minimal for the reader to see how it might apply to the kind of terminological problems and issues addressed in this chapter; on the face of her presentation of it there would seem to exist serious logical problems with any such application. (161)

Kronenfeld does not explain what the supposed logical problems hinted at in the last sentence above are, but in any case I believe that the analysis presented in the present paper can provide answers to his doubts. Since there is no room for fuller discussion here, let me simply show how the meaning of Kronenfeld's key examples—the Fanti terms *wofa* and *awofasi*—could be explained through NSM:

**someone's *wofa***
a man, this someone can say about this man "this is my *wofa*"
someone can say this about a man if it is like this:
   this man's mother is the mother of this someone's mother
   this man's father is the father of this someone's mother

**a man's *awofasi***
someone, this man can say about this someone "this is my *awofasi*"
a man can say this about someone if this man is this someone's *wofa*

In Kronenfeld's 2009 book *Fanti Kinship and the Analysis of Kinship Terminologies* (40), the core meanings of the two words in question, *wofa* and *awofasi*, are provided with English glosses 'maternal uncle' and 'male's nibling', and their core ("kernel") meanings are given as "a+fom" and "mof-a." I submit that the two NSM explications given above have a greater explanatory power and a stronger claim to psychological reality and that, at the same time, they are no less rigorous than artificial formulas such as "a+fom" and "mof-a," and they too constitute formal representations of meaning.

As discussed by Enfield (2002), NSM, too, is a formal semantic metalanguage, even though its formulas are anchored in natural languages and can be understood via natural language. To quote:

NSM researchers prioritise the expressibility of their formal metalanguage via natural language because it is always through (our own) natural language that the ultimate interpretation of formal semantic description is made. Thus, formal semantic metalanguages which are expressed in highly abstract terms … are so obscure at face value as to be opaque to the untrained observer. For the initiate or expert, these technical formulas may be interpretable, but nevertheless only interpretable to the extent that they continue to be privately paraphrased into natural language. Without principles explicitly mapping these formulas onto natural language, these other more abstract formal approaches are inherently indeterminate. The greater formal precision implied by their mathematical style is an illusion—because the abstract is ultimately interpreted in terms of the more immediate (Fraser 1996). (244)

I see three key differences between the explications of the Fanti terms presented here and the formalisms offered by Kronenfeld. First, they are self-explanatory and do not require tutorials in the use of artificial symbols. Second, they are built of simple words available in children's speech and thus present meanings that are potentially learnable. Third, they are cross-translatable into the target language (in this case, Fanti) and can be discussed with native speaker consultants. (For additional examples, see CA+ online supplement A.)

Kronenfeld rejects (with some qualifications) the old search for "psychological reality" in the semantic analysis of kin terms as "impossible and meaningless" (2015:160). I hope the present paper shows that the approach that requires that the analyses be anchored in cross-translatable words makes that old goal not only possible and meaningful but practically achievable.

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# Comments

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## 'Child Of' Is a Universal Molecule Too

Anna Wierzbicka continues her fight against Eurocentricism and Anglocentricism in talking about human experiences across cultures. Here, she proposes what she calls "the ordinary language model" for analyzing kinship terminologies. She argues that "all kin terms in all languages build on the concepts 'mother' and 'father'," which are semantic molecules "apparently *lexicalized in all languages with exactly the same meaning*" (emphasis added). The meaning she proposes is that of "birth-giver" for "mother" and "begetter" for "father." I do not doubt that there are words roughly equivalent to

"father" and "mother" in all languages and linguacultures. However, I am not sure that they embody "exactly the same meaning" across languages. In this comment, I reflect on some challenges that need to be faced.

The first concerns the postulation of the distinct sense of 'begetter', for example, for the 'father' words and assigning other uses also as senses. Thus, for Wierzbicka to make her argument work, she needs to postulate polysemy for equivalent lexemes for these terms in an Australian language like Pitjantjarra. She argues that the senses that are universal and lexicalized cross-linguistically are the foundation of kinship terminologies. One of the arguments for the polysemy of the Pitjantjarra term is that there are linguistic expressions for making a distinction between "biological fathers" (i.e., begetters) and "biological mothers" on the one hand and so-called classificatory fathers and mothers on the other. One may question whether the postulation of polysemy does not destroy the conceptual unity of the term that the speakers have. Moreover, is the opposition between the "biological" and "classificatory" not an outsider perspective?

Be that as it may, a second issue concerns languages in which the kin terms for father and mother have general meanings and are not polysemous. The begetter or birth-giving component cannot be isolated as a sense, but it is part and parcel of the general sense of the words. I would argue that this is the case in many African languages. In these linguacultures, the lexeme for 'father' has a vague rather than a polysemous semantic structure and includes culture-specific components related to protection and also respect. Take the word *tɔ́* 'father' in Ewe (Niger-Congo, West Africa; see Ameka 2012). Pazzi (1980) speaks of some of the responsibilities of the *tɔ́* in terms of "c'est lui qui leur [=les enfants] impose le nom et ses responsable de leur education et orientation. Le géniteur [a] la charge de les nourir et de veiller sur eux jusqu'a l'age adulte" (270).

This word, then, contains apart from the genitor component further components that relate to the following:

this someone does not want bad things to happen to the
   other person
this someone does good things for the other someone
this someone is above the other person

In the languages cited by Wierzbicka, the father or mother word is modified to make a distinction between biological and classificatory. In Ewe and other African languages, it is not the 'father' or 'mother' word that is modified; rather, the point of view of the child is expressed. Thus, in Ewe one can speak of their own child as

| nye | ŋútɔ | wó | ava | nu.me-vi |
|-----|------|-----|-----|----------|
| 1SG | EMPH | POSS | penis | mouth.containing.region-child |

'child from my penis'

Words similar to the Ewe *tɔ́* and its semantics exist in several African languages. Such meanings have been transferred into "father" and "mother" in African Englishes, as the entries proposed by Wolf and Polzenhagen (2009:214–215) indicate.

**father.** (n.). (AfrE). definition: 'elder male community member', 'male person of respect', 'male leader in a social/cultural/religious/ethnic/political group'; term of address

**mother.** (n.). (AfrE). definition: 'elder female community member', 'female person of respect'; term of address

The term-of-address uses will be accounted for with cultural scripts, but the conceptual content of the words need more components than just their role in the biological process.

Furthermore, I suggest that 'child of' or 'offspring' should be a kinship semantic molecule. To start with, this word is cross-translatable in several languages. In fact, its semantics match across languages better than that of 'father'. There is such a word with precisely this meaning in the 2,000 or so languages of Africa. One reservation about this molecule is that in English a parent is less likely to refer to his or her 40-year-old as my child. The gender-specific 'child of' words "son" and "daughter" are applicable. If the mother-child relationship provides the universal basis for biological kinship (Foley 1997:134), then 'child of' is a conceptual building block that should be recognized.

Once 'child of' is accepted, the explication of the Fante (Akan) words for *wofa* and *wofasi* can be improved. Two points of detail here. First, I do not think there is the need for the component 'this man's father is the father of this someone's mother' for someone's *wofa*. The critical ingredient is the mother line. Second, *awofasi* can be a relation to a man or a woman. Leaving that aside, I think that there is a further cultural component for someone's *wofasi*, which can be smoothly handled by a 'child of' molecule:

This man can think about this someone like this:
   this someone is my child

NSM provides a tool for representing the insider's meanings of culture-specific concepts. As semantic molecules are composed of atoms, it is inevitable that the equivalents of semantic molecules across languages do not encode "exact meanings" that are cross-translatable. I question whether 'father' is a cross-translatable semantic molecule. I suggest that 'child of' in the sense of offspring is cross-translatable and is or should be a good addition to the foundational molecules for kin categories across cultures.

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## Avoiding Weird Parents

In Thomas Mann's masterpiece *The Magic Mountain*, the protagonist Hans Castorp, in his early twenties and about to start a shipbuilding career in Hamburg, travels to a sanatorium high in the Swiss Alps to visit a cousin suffering from tuberculosis (Mann 1966). In the crisp mountain air and serene setting, Castrop is transported away from the duties

and drudgery of his regular life in the "flatlands" but, repeatedly, his departure is delayed by bad health: what begins as a slight fever and minor bronchial infection is soon diagnosed by the sanatorium director as symptoms of tuberculosis. Castrop is persuaded to stay. Soon, in the rarefied alpine atmosphere, Thomas Mann's hero meets a group of characters who together represent a microcosm of pre–World War I Europe: there is the "Eastern man," Mynheer Peeperkorn, nonintellectual, sensual, mysterious, incoherent, tyrannical; there is the Jew turned Jesuit, Leo Naphta, who celebrates religious authority and idolizes death; and there is the champion of the Renaissance and the Enlightenment (liberty, reason, science, and progress), the secular humanist Lodovico Settembrini. Commentators have speculated about who Mann's model for Settembrini really was: many claim he is based on the author's brother Heinrich, with whom Mann had a troubled relationship; others suggest the Devil, Mephistopheles; still others suggest the medieval humanist Petrarch, the writer Dante, or the modern Italian politician Giuseppe Mazzini. Some, however, have suggested that Settembrini is the little-known German sociologist and cultural philosopher Franz Karl Müller-Lyer, who is the starting point for the current comment's argument about the Achilles' heel of social psychology, anthropology, and comparative linguistics.

Müller-Lyer would probably have been forgotten to history were it not for a simple illusion he devised that continues to bear his name. In figure 2, look at the first set of lines above: which seems longer? What Müller-Lyer showed was that invariably people say that the second line, with its arrows
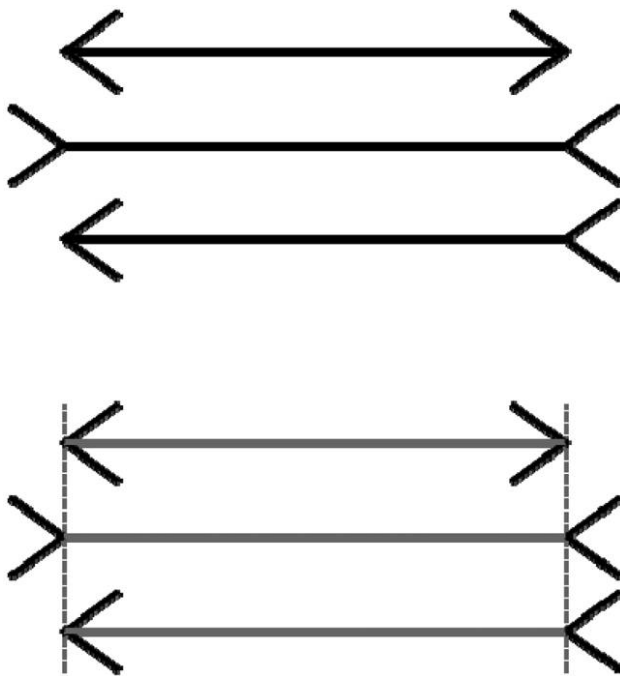


Figure 2. Müller-Lyer illusion. A color version of this figure is available online.

opening outward, is the longer one, whereas in reality all three lines are precisely the same length. All humans succumb to this illusion, he claimed, since all humans, at base, are the same. This was 1889, and further examples of such universals—not just in perception but also in social behavior, decision making, and moral reasoning—were to follow. Updating the Bible and Aristotle, John Lock and David Hume, the science of an invariant human nature had been born again in modern times.

Except that Müller-Lyer was wrong. In an oft-cited paper titled "The Weirdest People in the World?" that appeared in *Behavioral and Brain Sciences* in 2010, a team of anthropologists led by Joseph Heinrich of the University of British Columbia posed a serious challenge to modern-day psychology, cognitive science, and behavioral economics (Heinrich, Heine, and Norenzayan 2010). These fields, the authors argued, pretend to speak for all of humanity, studying human perception and thought but also emotions such as jealousy, happiness, anger, generosity, and empathy. The results of such studies are meant to tell us something about "human nature," but an incredible 96% of the subjects in these studies represent just 12% of humanity. That is because these 96% come from a very specific place: Western, educated, industrialized, rich democracies, or, if you'd like, WEIRD places.

Take a series of experiments that have been conducted in tens of thousands of introductory psychology classes with what is called the Ultimatum Game: subjects are given $100 and asked to share it as they like with a perfect stranger. The person with the cash can give away just as much as he or she wants—$50, say, $80, $20, or nothing at all. Turns out, the results show, that people give $48, on average, and on the receiving end reject offers up to $40. This seems to reflect a basic human understanding of fairness. If you are an educated twenty-first-century American, that is.

Indeed, an American undergraduate is 4,000 times more likely to be a subject in a psychology experiment than a random person outside the West. Four thousand times! And if that were not enough, 67% of American subjects and 80% of international subjects are undergraduate psychology students. That's a selection bias if ever there was one. What does this mean for the results of all such research? Consider the Machiguenga people of the Peruvian Amazon. When Heinrich and his team presented the members of this small tribe with the Ultimatum Game in the mid-1990s, they found that the Indians considered the notion of giving close to half of their money away downright ridiculous—and rejecting an insultingly low offer even weirder. Machiguenga sensibilities were actually much closer to those of modern-day Western economists: after all, rejecting any amount of free money is irrational. Settembrini would have been stumped.

In test after test, WEIRD people and all the rest diverge in their reactions. Very few people in the West would dream of penalizing markedly altruistic people who cooperate and give selflessly, whereas in Inuit cultures such altruists are often punished. Westerners tend to group objects based on resemblance (notebook, magazine, and newspaper go together),

whereas the Chinese group by function (putting a notebook with a pencil, for instance). And, uniquely, privileged Westerners tend to describe themselves by their personal characteristics ("I'm hardworking, fun-loving, smart, and have a great sense of humor"), whereas all the rest tend to do so by their roll in society ("I am a doctor working in the Ministry of Health," "I am a farmer growing cocoa beans," "I am a member of the untouchable caste"). In fact, when all is said and done, WEIRD people really do seem to be the exception rather than the rule. "The fact that WEIRD people are the outliers in so many key domains of the behavioral sciences render them—perhaps—one of the worst subpopulations one could study for generalizing about *Homo sapiens*," the authors conclude (Heinrich, Heine, and Norenzayan 2010: 38).

Which brings us back to the Müller-Lyer test. Even though most of the readers of *Current Anthropology* will tend to think that the second line is about 20% longer than the first and that the third is skewed to the right, it turns out that a number of hunter-gatherer peoples—14 that have been studied to date, to be exact—suffer from no such illusion. Foragers in the Kalahari desert, for example, will immediately tell you, "all three are exactly the same!" And, of course, they are right.

Trying to universalize human experience is tricky, both when everything is working normally (behavioral economics) and when things are breaking down (mental health). As writer Ethan Watters shows in his book *Crazy Like Us: The Globalization of the American Psyche* (2011), America is not only exporting McDonalds, iPhones, and T-shirts, but it is also straitjacketing mental diagnosis. This can be dangerous. Non-WEIRD cultures have long practiced their own myriad ways of thinking about treating anxiety, depression, and illness, many of which do not necessarily conform to the American Psychological Association's prescriptions. Inappropriate diagnosis of posttraumatic stress disorder in posttsumani Sri Lanka, for example, has undermined local healing practices by prescribing unproven drugs at the expense of age-old palliative wisdom. Western guidelines for treating depression in Japan, anorexia in Hong Kong, and schizophrenia in Zanzibar are further troublesome examples. "We should worry about the loss of diversity in the world's differing conceptions of treatments for mental illness," Watters writes, "in the same way we worry about the loss of biodiversity in nature."

Seventy percent of all journal citations in psychology come from studies conducted in the United States, compared with 37% in chemistry. This statistic is cause for worry, since psychology varies across cultures but chemistry does not. Many studies of the psychology of shame, to take but one example, contrast this emotion with guilt. But research conducted by the UCLA anthropologist Daniel Fessler in Bengkulu, Indonesia, shows that local people possess different emotional lexicons; unlike Americans, Indonesians understand shame and guilt not in terms of moral and personal worth but more strongly in terms of respect and fear, facets that concern subordinance in a social hierarchy rather than

any personal failure to conform to social norms (Fessler 2004). Even when it comes to ostensibly "neutral" perception, we discover just how much culture really does matter: that a Kalahari man and you should see Müller-Lyer's lines differently, one hypothesis goes, has to do with the fact that bushmen have been less exposed to carpentered corners and cityscapes.

It may be true, however, that there are human universals, or near universals. Scholars of different stripes and schools argue bitterly about what they might be, citing among other things incest avoidance, territoriality, fear of death, rituals, childcare, pretend play, mourning, etiquette, humor, envy, social structure, art, music, and aesthetics. One of the most contested universals has been kinship, a fundamental category for ordering human social life. So muddled is this field of inquiry, David Schneider argued in 1984, so utterly infused with Eurocentric bias that it should be abandoned altogether (Schneider 1984). All the more reason why we should welcome "Back to 'Mother' and 'Father': Overcoming the Eurocentrism of Kinship Studies through Eight Lexical Universals" by Anna Wierzbicka.

Like Watters, Wierzbicka is well aware of the problem of misunderstanding the world by mistranslating it; her book *Imprisoned in English: The Hazards of English as a Default Language* (2014) makes the case beautifully. One possible reaction is to give up entirely on the possibility of understanding other cultures and languages. To the contrary, Wierzbicka has devoted her career as a linguist to showing how it might be possible to achieve a universal, culture-independent understanding of humans, not least to overcome a parochial, often unwitting Anglocentrism. Central to her life calling has been the natural semantic metalanguage framework, or NSM.

I do not know whether Wierzbicka is correct that there exists a Leibnizian *alphabetum cogitationum humanarum*; whether, like atoms in the physical world, a small number of irreducible concepts inhabit our cognitions, born innately in the brain and providing the building blocks for all humans can imagine. It is a fascinating assertion, to be taken seriously, but elusive.[6] The beauty of her framework, however, is that it need not be ontologically proven to be of value in furthering our understanding of language and culture; its usefulness, in other words, is independent of its truth. Fundamental and unique to NSM is the principle that one should say something about another culture only with words that could be used by that same culture. Whether one believes in innate semantic primes, it is difficult not to see how such a principle may help rid cultural translations of cultural biases. Ultimately, the claim advanced here that—as opposed to 'son',

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6. That it can be shown, for example, that semantic primes exist in all languages is, I believe, necessary though not sufficient proof of their innate nature. More difficult is providing a satisfying biological explanation of such representational innateness.

'daughter', 'brother', 'sister', 'sibling', and 'parent'—'mother' and 'father' are lexical universals, or near universals, must be judged by its instrumental effectiveness in rendering both the cross-cultural comparison of kinship terminologies and the likely "cognitive operations" of language users more transparent.[7]

Whatever the list of universals we might agree upon may be, the lesson is clear: American college students, most of them in psychology departments, should not stand in for "people" and "humanity," nor should anthropologists assume that the language and psychological reality of other cultures is translatable into their own without a rigorous method (although not an abstract or arcane one). As anyone with a pulse (or otherwise following the recent Republican and Democratic primary debates in America) will surely know, the grouping of all Westerners together into a WEIRD prototype is itself an unsustainable and deeply flawed generalization. This is a blind spot missed by Heinrich, presumably in his enthusiasm to make that very point. The team of anthropologists from British Columbia nevertheless recommend that journal editors, grant-giving agencies, and universities force psychologists and behavioral economists to defend their generalizations, create incentives for conducting studies outside WEIRD countries, and collaborate internationally. This is good advice, and Wierzbicka's linguistic study is an exemplar.

When all is said and done, we need to try to avoid weird parents. That WEIRD people should look like outliers when viewed against the rest of the 88% of humanity may not necessarily be due to the fact that they are any stranger than all the rest. There is nothing unique about uniqueness, even if all humans view their own group as remarkable. There's a generalization for you. And one, it seems, that Thomas Mann's hero, Hans Castorp, suffered from like the rest of us. After seven years of convalescence in the sanatorium and despite the universalism preached to him by Settembrini, the terrible trumpets of war resounded throughout Europe. Setting out to fight for his Germany—to the great apprehension of his mother and father, no doubt—Castrop was never heard of again.

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The semantic domain of kinship affords a significant test case for NSM analysis. I agree with Wierzbicka that kinship is grounded in beliefs about reproductive roles, although she neglects the widespread presence of other bases of kinship,

such as the practice of feeding and bringing up a child and of food sharing (e.g., Strathern 1973; Sahlins 2012:6). She also neglects the implications for kinship of new reproductive technologies (Carsten 2004; Strathern 2011).

The attempted reduction of the meaning of kin terms to a couple of semantic molecules and a larger number of semantic primes neglects what is probably the universal structure of sense relations among kin terms within systems of kin classification, namely, their relative product structure (e.g., Burling 1965; Keen 1985, 2014; Kronenfeld 1980; Read 2007; Wallace and Atkins 1960). Dousset (2008:267) provides an example of how a speaker of Ngaanyatjarra (a Western Desert dialect close to Pitjantjatjara) explicated one of the senses of *ngunytju*, 'mother/mother's sister' (example 1). Note the relative-product structure of this gloss in contrast with Wierzbicka's NSM gloss of related Pitjantjatjara concepts. This Ngaanyatjarra explication seems more relevant to Ngaanyatjarra concepts than one expressed in NSMese.

(1) *ngunytju*     *ngunytju-ku kurtu*
    'mother'     'mother's sister'

Indeed, NSM analysis is ill equipped to explicate any but first-order kin terms satisfactorily because, even with the addition of "semantic molecules," the method is incapable of matching the hierarchical and cumulative structure of relative product definitions, in which more distant kin are defined in terms of closer kin. In English kinship, for example, *one's aunt* is commonly defined as *the sister of one's father or mother or the wife of one's uncle*, *one's first cousin* as *a child of one's uncle or aunt*, and *first cousin once removed* as *a child of one's first cousin* or *one's father's or mother's first cousin*. (The exact phrasing varies, of course.) Here, *aunt* and *uncle* are third-order terms, defined as the products of the first-order terms *mother* and *father* and the second-order terms *sister and brother*; *first cousin* is a fourth-order term; and *first cousin once removed* is a fifth-order kin term (see Keen 1985).

It is hard to imagine a convincing NSM analyses of higher-order categories such as *mumalkur* (MMMBD) and *ngathiwalkur* (MMMBS) in Yolngu dialects (northern Australia; e.g., Keen 1982). Yolngu define these as the *ga:thu* (mC/BC) of *waku* (MMM/MMMZ/MMMB), the *galay* (MBC) of *ma:ri* (MM/MMZ/MMB) or the *ma:ri* of *galay*, the *mukul* (MMBD, WM) and maralkur (MMBS, WMB) of *nga:ndi* (M/MZ), and so on. These kin categories could in principle be reduced to the semantic molecules 'mother', 'father', and 'child', but the results would be difficult for a hearer to parse and would certainly not capture Yolngu discourse.

Relative product definitions of kin are not simply analytical constructs; there is ample evidence that speakers of many languages produce them in both spontaneous and elicited discourses. Keen (2014:24–26) adduces examples from Fanti, Arrernte, Ngaanyatjarra, Yir Yoront, Japanese, Hindi, and American and Canadian English, several of which are reproduced here (examples 2–10).

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7. My own view is that NSM-based translation is stronger at explaining the meaning of words to others than at answering the question of what is happening when one understands the meaning of a word.

(2) *na n'nua banyin*          *wofa*
mother's male sibling     uncle
(Fanti; Kronenfeld 1973)

(3) *wofa n'ba*               *ba*
uncle's child              child (skewing definition)
(Fanti; Kronenfeld 1973)

(4) *Atyenge  anherr-areye  is  ampe  atyenge  altyete-kenhe  mape*
IsgDAT  HM/ZSW-pl  is  ZC  1sgDAT  mXC-POSS  group
'My *anherr* are my female cross-cousin's children'
(Arrernte; Green 1998:22)

(5) *kurntili-ku yurntalpa/katja*          *watjirra*
'father's sisters child'               'cross-cousin'
(Ngaanyatjarra; Dousset 2008:267)

(6) *pam-kewrr-mart    pam-ngamanhrr  athlam    pam-warn-mrr*
brother's daughter  mother         out of    W/WZ
'the niece (mD, wBD) of my mother'        'wife'
(Yir Yoront; Alpher 1991:174, 588)

(7) *pam-mar-walqyamn   athlam   ngorvm   pam-koponvmvrr*
nephew             out of   my       wDC/ZDC
'from my nephew'                    'grandchild'
                                   ('nephew's sister's
                                   child')

(Yir Yoront; Alpher 1991:195)

(8) I: What is an uncle?
S: An uncle is your mother or father's brother. Or a brother-in-
   law (female 22;2.4)
(Canadian English; Benson and Anglin 1987:49, 53)

(9) Q. What's a grandmother?
A. Somebody who's your mother's mother.
(Haviland and Clark 1974:38)

(10) What does *kaku* mean?
*vədlančya bhavači baiko* (FBW)
('father's brother's wife')
Will you be a *mavsi* [MZ]? How?
*bahininčya mulanči mavsi*
('I will be my sister's child's *mavsi*') (Maharashtra Brahmin
   girl of 9 years 6 months)
(Hindi; Carter 1984:193)

While they do not exhaust the "meanings" of kin terms (which also have connotative meanings, for example), definitions of primary kin categories in terms of reproductive roles, marriage, and adoption, as well as relative product definitions of higher-order kin terms, are constitutive of kinship terminologies. People map kin-relational categories onto networks of persons by applying such definitions, which determine the distribution of categories relative to the propositus. Cognitive models of the resulting kin networks (e.g., Conklin 1969 [1964]; Dousset 2003; Goodwin 2000; Keen 1978:105), which often have spatial aspects and can be represented visually in several media (Dousset 2003; Enfield 2005), mediate the mapping of kin terms onto persons (Keen 2014:28).

For Wierzbicka, the explication of kin terms seems to be primarily a matter of translation. Anthropologists, however,

also engage in description, analysis, and explanation. Extension rule analysis, for example, is in effect a description of aspects of the form of a kin terminology, mapping categories onto a genealogical grid and pointing to equivalences and differences among them (e.g., Scheffler 1978). Even though there are indeed good grounds for rejecting a componential analysis as a semantic representation, analysis in terms of equations remains a useful descriptive and comparative tool (e.g., McConvell 2013*b*:197).

Kinship abbreviations and symbols are essential analytical tools, and anthropologists are well aware of their limitations as well as their strengths. The replacement of kintype symbols such as FZD on a kinship diagram with lengthy texts in NSMese would render scanning such a diagram for significant patterns all but impossible. Wierzbicka herself uses such approximations, for example, in her gloss of the Pitjantjatjara term *kamuru* as 'mother's brother'. "Horses for courses," to quote a British proverb, which is to say, use the appropriate tools for the job.

## Reply

I am very grateful to the three commentators for engaging with my article. The main goal of the article was to expose the Anglocentrism and Eurocentrism rampant in the field of kinship studies while at the same time showing how these ills can be overcome by a return to 'mother' and 'father' as fundamental analytical tools and how NSM techniques can be helpful here.

Two of the three commentaries, Felix Ameka's and Oren Harman's, support my contention that Anglocentrism and Eurocentrism in kinship studies (and in cross-cultural studies in general) are obstacles to human understanding and applaud my striving to overcome these biases. By contrast, the third commentator, Ian Keen, defends what I see as Anglocentrism and Eurocentrism in kinship studies; this charge seems to have touched a raw nerve, so given the very limited space at my disposal it is on his commentary that I will concentrate.

According to Keen, "kinship abbreviations and symbols are essential analytical tools.... The replacement of kintype symbols such as "FZD" on a kinship diagram with lengthy texts in NSMese would render scanning such a diagram for significant patterns all but impossible." This statement highlights what I see as the central issue: is a symbol like "FZD" (for "father's sister's daughter") Anglocentric or is it not? If this symbol is meant to portray the meaning of a kin term in a language that does not have words like "sister" and "daughter," then it seems obvious that this portrayal is indeed Anglocentric: clearly, this is not how the speakers of that language think.

Ah, but such a portrayal is so concise, so convenient . . . and it allows us to draw diagrams that can be quickly scanned for significant patterns . . . "we" being, of course, Anglophone

anthropologists and linguists, who can take English words (e.g., "sister," "daughter") for granted.

Well, I agree: if our main goal is to draw diagrams that can be quickly scanned for patterns by ourselves and other Anglophone scholars (thanks to our shared English-based symbols), then yes, symbols like "FZD" may serve us better than more extended definitions relying on the globally cross-translatable words 'mother' and 'father' (as well as 'woman', 'man', 'born', etc.)

When all is said and done, if someone wants to analyze kinship terminologies through English concepts and does not mind the Anglocentrism of such an approach, it is their choice. What I object to, however, is the appropriation of the term "cognitive" for such pursuits. Defending his analysis of the words *mumalkur* and *ngathiwalkur* in the Australian language Yolngu as "MMMBD" and "MMMBS," Keen speaks of "cognitive models of the resulting networks." Whose cognition, though, is being portrayed in such "cognitive models"? Presumably, not that of Yolngu speakers, to whom symbols like "D" and "S" cannot mean anything, given that they stand for the English words "daughter" and "son," which have no counterparts in Yolngu.[8]

Keen criticizes the NSM approach to kinship studies for paying too much attention to issues of translation: "For Wierzbicka, the explication of kin terms seems to be primarily a matter of translation. Anthropologists, however, also engage in description, analysis, and explanation." It is true that for me and other NSM researchers the issue of translation is fundamental. For example, if Keen's formula "mother's mother's mother's brother's daughter" ("MMMBD") cannot be translated into Yolngu, then no matter how much sophisticated description, analysis, and explanation formulated in English can be added to that "MMMBD," from a cognitive point of view that whole English-based edifice is built on sand.

In other words, we have to choose: either English-based conciseness and analytical convenience or genuine cognitive models of how the speakers think. We can't always have both.

Keen finds it "hard to imagine a convincing NSM analysis of higher-order categories such as *mumalkur* (MMMBD) and *ngathiwalkur* (MMMBS)." If by convincing he means as short and familiar-looking (to anthropologists) as "MMMBD" and "MMMBS," then I agree, he will not find NSM analyses of such kin terms convincing.[9]

I do not agree, however, that the kind of kinship algebra favored by Keen allows us to capture significant patterns while the NSM framework does not. Significant patterns come to light through NSM too (and they could be enhanced by graphic aids such as underlining, color, labels, etc.). NSM explications are not just strings of text; they are highly structured and can reveal patterns that are both authentic and elegant. In fact, an anonymous reviewer of the "Back to 'Mother' and 'Father'" paper volunteered the opinion that the NSM-based explications of "sibling terms" in Kayardild given in that paper were more elegant than Evans' diagrams framed in English-based symbols like "EZ" ("elder sister") and "YB" ("younger brother"). Yes, NSM explications are less concise than the symbols of kinship algebra, but as discussed in the paper, the assumption that conciseness should be regarded as one of the highest values in scholarly analysis is also Anglocentric.

Ultimately, it is a matter of our goals and priorities. Keen ends his piece with the British proverb "horses for courses," which is to say, he explains, "use the appropriate tools for the job." If the "job" (or the goal) is to engage in intellectual pursuits open only to speakers of English (and insiders of what Oren Harman calls, with reference to Heinrich, Heine, and Norenzayan [2010], "WEIRD cultures"), then analytical tools like "D" ("daughter") and "S" ("son") may be appropriate "tools for the job." If, however, we want to understand how speakers of languages like Yolngu construe and understand their social world, then they will not be appropriate. This is in stark contrast to "mother" and "father," which, in their primary sense, are shared by the inhabitants of both WEIRD and non-WEIRD parts of the world.

According to Felix Ameka, there is a third concept (in addition to 'mother' and 'father') that is also shared by a great many languages of the world: "child of." The figure of 2,000 languages (in Africa) cited by Ameka is indeed impressive. But of course there are about 6,000 languages in the world. In Australia, many languages do not have a word for 'child of'. For example, in Yolngu, the word for a man's child is *gatu* and that for a woman's child is *waku*; in Warlpiri, the two words are *ngalabi* and *guḍu*; in Nyulnyul, they are *wal* and *bap* (cf. Scheffler 1978).

In the ocean of Anglocentrism in which we often seem to be drowning, to see what looks like a little bit of Afrocentrism is refreshing. Still, the vocation of anthropology is to be not Anglocentric, not Afrocentric, and not Australocentric, but—as far as possible—anthropocentric. As I have tried to show in my "Back to 'Mother' and 'Father'" paper, the set of universal or near-universal human concepts posited by NSM semantics allows us to change our basic orientation from 'Anglo' to 'anthropo'.

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8. In their seminal paper "Semantic Relationships in Papago Folk-Definitions," Joseph Casagrande and Kenneth Hale (1967) pointed out that "every language must ... in some degree serve as its own metalanguage to explicate semantic usage" (165). I see this as a fundamental challenge for kinship studies: to explicate a language's kin terms in formulas that could have vernacular counterparts (word for word).

9. In emotion studies, a multidisciplinary Human Affectome Project was recently launched (International Society for Research into Emotions List, February 15, 2016), a project that aims at identifying the full range of human emotions through English emotion terms. The reliance on

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English terms in the study of both human kinship and human emotions (in both cases seen as the only "manageable" approach) is understandable, but surely such an approach is also counterproductive and profoundly limiting.

In closing, I will quote, gratefully, a remark made in his commentary by Oren Harman:

> I do not know whether Wierzbicka is correct that there exists a Leibnizian *alphabetum cogitationum humanarum....* The beauty of her framework, however, is that it need not be ontologically proven to be of value in furthering our understanding of language and culture.... Fundamental and unique to NSM is the principle that one should say something about another culture only with words that could be used by that same culture. Whether one believes in innate semantic primes, it is difficult not to see how such a principle may help rid cultural translations of cultural biases.

—Anna Wierzbicka

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