

# Experience, Evidence, and Sense

*The Hidden Cultural Legacy of English*

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## Making the Familiar Look Foreign

### 1.1. Mere Words or Keys to a Cultural World?

In his tribute to Clifford Geertz the teacher, his colleague Robert Darnton (2007, 32) writes that Geertz “tried to make the distant seem familiar and the familiar look foreign—as in *Gulliver’s Travels*, one of his favorite books.”

The present book, which focuses on English as a cultural universe, shares the second of these two aspirations: to make the familiar look foreign. Darnton says further that Geertz wanted to help his students break “through the barrier of culture-bound thinking” (ibid.). This is also the ambition of *Experience, Evidence, and Sense*.

According to Darnton, Geertz’s main objective was to show “how people construe the world through signs, not merely by means of verbal clues but also by reference to objects from everyday life” (ibid.). Like its predecessor, *English: Meaning and Culture*, this book shows the ways in which “verbal cues” (and especially certain keywords) define the conceptual world inhabited by speakers of what I call “Anglo English” (see section 1.2). It shows that new techniques developed in linguistic semantics can help both outsiders and insiders penetrate this world better than has heretofore been possible. It also demonstrates that these techniques can help native speakers of Anglo English break through the barriers of culture-bound thinking, barriers that are often invisible even to Anglo anthropologists and linguists (who are professional students of “otherness”), let alone other scholars.

Geertz was rather exceptional in that effort, and he understood the pivotal role of languages in the construction of cultural worlds. His main goal, however, was to make the distant seem familiar rather than the familiar look foreign, and,

as an anthropologist rather than a linguist, he understandably did not see the semantic analysis of English as one of his main priorities.

For me as a linguist, however, this *is* a priority. It is the task of this book to “other” or “denaturalize” English or at least one important aspect of English. Darnton (2007, 33) says in his tribute that Geertz worked hard to get across the notion that “symbolic systems . . . hold together with a power of their own . . . and that the interpretation of them requires rigorous empirical study as well as conceptual clarity.” This also applies to the systems of meanings encoded in language: They, too, hold together with a power of their own, and their interpretation also requires rigorous empirical study, as well as conceptual clarity.

This book demonstrates that certain culture-specific keywords can act as linchpins for whole networks of meanings and that to penetrate their meanings is to gain entry into a whole cultural world. To paraphrase Darnton, “the game is difficult, but anyone can play.” Darnton applied these words to anthropology as practiced and taught by Geertz, but they can also be applied to cultural semantics as understood in this book. The game is difficult to the extent that it is unfamiliar and requires a degree of concentration, but it does not involve any technical apparatus whatsoever. Meanings are explored here through the prism of simple words like *do*, *happen*, *know*, *want*, and *think* (see section 1.6), and any mentally alert person who speaks and reads English can participate in this exploration.

## 1.2. The Cultural and Historical Baggage of English

In his book *English as a Global Language* David Crystal (2003, 20) states that “Language is the repository of the history of a people. It is its identity.” This statement echoes the deep insight of the founder of general linguistics, Wilhelm von Humboldt (1988, 60), who affirmed, two centuries ago, that “there resides in every language a characteristic world-view . . . every language contains the whole conceptual fabric and mode of presentation of a portion of mankind.”

Although some culture-blind theories of language and cognition, developed in the twentieth century, have at various times attracted a great deal of attention, empirical “language-and-culture” studies have not undermined Humboldt’s view but on the contrary supported it with extensive evidence. (For references and discussion see, e.g., Wierzbicka [1992, 1997]; see also Shweder [1991] and Pavlenko [2005].)

But given the fact that English has now become (or is quickly becoming) a global language,<sup>1</sup> there is a widespread temptation today to modify Humboldt and to say that, while his proposition may apply to all other languages, it does not apply to English. English (so the argument goes), unlike other languages, is “neutral”—a purely functional, international language that is free from the baggage of any particular history and tradition; furthermore, English is so diversified that, although dozens of different traditions may be reflected in it, no one tradition provides a shared “conceptual fabric” (in Humboldt’s sense).

With the ever-increasing dominance of English in the contemporary world (cf., e.g., Graddol 2006), there is a growing urgency to the question of whether an

irreconcilable conflict from many different other languages

The position *Culture*—is that even of them worthy of English; moreover Anglo English is calls the English of puts it, “the tradition USA, UK, Ireland 2006 *English*, describe English.

It goes with unchanged and from British English (Wierzbicka 1986 Goddard [2006, in ences between Bri Malouf 2003]). At “Englishes of the stand them as expect compare them with course, is also an to Anglophone co the validity of this essential to their culture.

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As I have derived words like *right*, instances of words and pass on a great ble” to native speakers equivalents exist history, and their patterns associate extent to which, knowledge constituted embedded in the

irreconcilable conflict exists between the view that English is shared by people from many different cultural traditions and the notion that English itself—like any other language—has certain cultural assumptions and values embedded in it.

The position I take here—as in my 2006 book, *English: Meaning and Culture*—is that even though there are many “Englishes” around the world (all of them worthy of recognition, appreciation, and study), there is also an Anglo English; moreover, this Anglo English is not a cultural tabula rasa, a blank slate. Anglo English is what the Indian American linguist Braj Kachru (1985, 1992) calls the English of the “inner circle” and includes, as David Crystal (2003, 60) puts it, “the traditional bases of English, where it is the primary language: . . . the USA, UK, Ireland, Canada, Australia and New Zealand.” This book, like my 2006 *English*, describes the cultural content—or cultural baggage—of this Anglo English.

It goes without saying that Anglo English is neither homogeneous nor unchanging and that, for example, Australian English differs in many ways from British English. I have studied such differences in numerous publications (Wierzbicka 1986, 1992, 1997, 2002a, 2003a [1991]), as have others (see, e.g., Goddard [2006, in press]). There are also profound semantic and cultural differences between British English and American English (see, e.g., Kövecses 2000; Malouf 2003). At the same time, to adequately characterize what Kachru calls “Englishes of the outer circle” (such as Singapore English) and to fully understand them as expressions of local cultures, it is eminently useful to be able to compare them with Anglo English. The concept of Anglo culture, which, of course, is also an abstraction, can be particularly useful to millions of immigrants to Anglophone countries like Britain, the United States, and Australia. To deny the validity of this concept is to deny immigrants the cultural training that is essential to their social advancement. Anglo English is an essential part of Anglo culture.

Philosopher Hans-Georg Gadamer (1975, 11) writes that “if we are not to accept language automatically, but to strive for a reasoned historical understanding, we must face a whole host of questions of verbal and conceptual history.” Both my 2006 *English* and the present book address such questions of “verbal and conceptual history” and explore English as a vehicle of cultures. In particular, they investigate the links between aspects of English and aspects of Anglo culture.

As I have demonstrated in *English: Meaning and Culture*, everyday English words like *right*, *wrong*, *reasonable*, and *fair* (among many others) are important instances of words that are used automatically and yet contain a wealth of history and pass on a great deal of cultural heritage. Words of this kind may be “invisible” to native speakers, who simply take them for granted and assume that their equivalents exist in other languages. By analyzing such “invisible” words, their history, and their current use, including the conversational routines and discourse patterns associated with them, I have shown from a linguistic point of view the extent to which, as literary scholar David Parker (2001, 4) puts it, “cultural knowledge constitutes a shared social space” that is handed down through and embedded in the English language itself.

Rather than denying the existence of the cultural baggage embedded in Anglo English, I believe it is important to explore the contents of that baggage—important for practical, as well as intellectual, reasons: for language teaching, “cultural literacy” teaching, cross-cultural training, international communication, and so on.

In addition, this book extends the exploration of the hidden cultural legacy of English and focuses in particular on some of the most basic “Anglo” assumptions about ways of knowing—assumptions that English carries with it, imperceptibly, in its spectacular expansion in the modern world.

### 1.3. The Legacy of “British Empiricism”

English is saturated with “British empiricism”. The phrase “British empiricism” is often dismissed as a cliché, but linguistic evidence shows that this cliché carries with it a great deal of truth. The contrast between “British empiricism” and “continental rationalism” is also often dismissed as a cliché, but again, linguistic evidence shows that there is a great deal of truth in it. A century ago Bertrand Russell (1943[1912], 114) wrote in *The Problems of Philosophy*:

One of the great historic controversies in philosophy is the controversy between the two schools called respectively “empiricists” and “rationalists.” The empiricists—who are best represented by the British philosophers, Locke, Berkeley, and Hume—maintained that all our knowledge is derived from experience; the rationalists—who are represented by the Continental philosophers of the seventeenth century, especially Descartes and Leibniz—maintained that, in addition to what we know by experience, there are certain “innate ideas” and “innate principles,” which we know independently of experience.

Commenting on this passage, British philosopher Roger Woolhouse undermines this contrast between British empiricists and continental rationalists as simplistic:

The idea that the English Channel has intellectual significance was perhaps shared by Voltaire, who saw European and British philosophers as having temperamentally different styles. But the philosophers Russell mentions would not have accepted it. Berkeley and Hume were indeed both British, but they would not have seen themselves as falling, along with Locke, into a school diametrically opposed to Descartes and Leibniz on the Continent. Though Locke undoubtedly set many of the parameters of their thought, Berkeley and Hume are as often critical of him as they are in agreement with Nicolas Malebranche, a French Cartesian. Pierre Gassendi was French too, but Locke’s philosophy shows marked similarities with his. Nor would these philosophers have characterized themselves or others primarily by these labels. (Woolhouse 1988, 1)

But linguistic evidence is, in an important sense, on Russell’s side. Whatever view one takes of the history of European philosophy, a great cultural divide

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was also closely associated with the Royal Society and was elected a member in 1668.

Gribbin (2001, 149) notes in his *Science, a History, 1543–2001* that “The three people who between them established both the scientific method itself and the preeminence of British science at the end of the seventeenth century were Robert Hooke, Edmund Halley and Isaac Newton” and that “the Newton bandwagon . . . has now been rolling for 300 years.” One might add that the rise of concepts like empirical science and empirical evidence in modern English is inextricably linked to this “rolling of the Newton bandwagon.”

### 1.6. Natural Semantic Metalanguage as an Effective Methodology for Cultural Semantics

The lexicon of a language is a treasury of meanings. If these meanings can be revealed—accurately, precisely, and in a way that makes them transparent to both insiders and outsiders—much can be learned about the entrenched ways of thinking characteristic of a given society or cultural sphere and about their cultural and historical underpinnings. Given the significance of English in the contemporary world, it is particularly important that the hidden cultural and historical baggage of English be well understood.

As I have argued in *English: Meaning and Culture* (2006), the task of revealing that hidden baggage of English requires a suitable methodology. As I have demonstrated there and show again here, such a methodology is based on a small set of simple, intelligible, and universally available words, that is, words with semantic equivalents in all languages. This small set of universal words (that is, universal word meanings) provides a “natural semantic metalanguage” (NSM) for exploring languages, cultures, and ways of thinking.

Those semanticists (formal or generativist) who see detailed attention to the meanings of words as something of little importance or interest and prefer instead to develop abstract systems of semantic representation (see, e.g., Jackendoff 2006) are like Francis Bacon’s spiders spinning webs out of themselves. Lexicographers, on the other hand, have traditionally followed the way of the ant. For example, the *Oxford English Dictionary* has accumulated a great mass of valuable data but presents it in an entirely atheoretical manner, producing a jungle with no paths leading from A to B, no clear signposts, and no consistent system of semantic analysis that would allow either insiders or outsiders to find their way.

By contrast, the approach taken in this book follows the way of the bee in that it gives close attention to the meanings of words gathered from the gardens of literature and modern linguistic corpora and then transforms them by means of a coherent semantic methodology—NSM.

In this section I illustrate the use of this methodology by analyzing the meanings of the modern English word *empirical* and, for comparison, that of the French word *empirique*. By using the NSM analytical framework, we can extend our exploration of the concepts associated with these words and arrive at an analysis that is both more precise and more illuminating. To be able to

present this analysis, however, we need to discuss the methodology itself.

The NSM approach to assumptions: first, that every core of all natural language core of all languages, which

As Leibniz argued explained. At some point, *ad infinitum* explains nothing (clear), or we could never explanation depends therefore natural primes that constitute

A natural language is a meanings can be formulated of language and thought depends on the existence of clear (and presumably innate) of human communication taken within the NSM framework conceptual primes.<sup>4</sup> Table 1

The first hypothesis, which decades by means of extensive lexical exponents for each fixed expressions). The second wide-ranging empirical investigation can enter into the same corresponding syntactic trappings may differ the elements, their combination and Wierzbicka 2002; cf. also

This means that, just indefinable concepts, we can concepts. Furthermore, if we have a minilanguage, one tool for the description and corresponding discourse practices: in short

Since this metalanguage explications constructed in reality. Consequently, unlike alisms, NSM formulae are (speakers’ intuitions). Because NSM can serve as a “cultural values, assumptions, norms, societies, communities, sub

In some situations, an E lingua franca for basic communication

present this analysis, however, I first need to give an overview of the methodology itself.

The NSM approach to linguistic description is based on two fundamental assumptions: first, that every language has an irreducible core that enables its speakers to understand all complex thoughts and utterances; second, that the irreducible cores of all natural languages match, so that we can speak, in effect, of the irreducible core of all languages, which in turn reflects the irreducible core of human thought.

As Leibniz argued eloquently three centuries ago, not everything can be explained. At some point, all explanations must come to an end, for a *regressus ad infinitum* explains nothing. Some things must be self-explanatory (intuitively clear), or we could never understand anything. The explanatory power of any explanation depends therefore on the intuitive clarity of the indefinable conceptual primes that constitute its ultimate foundation.

A natural language is a powerful system in which very complex and diverse meanings can be formulated and conveyed to other people. The NSM theory of language and thought assumes that the intelligibility of all such meanings depends on the existence of a basic set of conceptual primes that are intuitively clear (and presumably innate), require no explanations, and constitute the bedrock of human communication and cognition. Cross-linguistic empirical work undertaken within the NSM framework suggests the existence of sixty-three universal conceptual primes.<sup>4</sup> Table 1.1 presents them in two versions, English and French.

The first hypothesis, which NSM researchers have pursued for more than three decades by means of extensive empirical investigations, is that all languages have lexical exponents for each of the conceptual primes (words, bound morphemes, or fixed expressions). The second hypothesis, which has also long been pursued in wide-ranging empirical investigations, is that in all languages conceptual primes can enter into the same combinations. Of course, the word order and the morpho-syntactic trappings may differ from language to language, but the hypothesis is that the elements, their combinations, and their meanings will be the same (cf. Goddard and Wierzbicka 2002; cf. also Peeters 2006; Goddard 2008).

This means that, just as we can have a rudimentary universal lexicon of indefinable concepts, we can also have a rudimentary universal grammar of such concepts. Furthermore, if we have a minilexicon and a minigrammar, then we can have a minilanguage, one that is carved out of natural languages and can be used for the description and comparison of languages, their lexicons, grammars, and discourse practices: in short, a natural semantic metalanguage.

Since this metalanguage is carved out of any natural language, the semantic explications constructed in it are intuitively meaningful and have psychological reality. Consequently, unlike semantic formulae based on various artificial formalisms, NSM formulae are open to verification (they can be tested against native speakers' intuitions). Because it is based on the shared core of all languages, the NSM can serve as a "cultural notation" (Hall 1976) for the comparison of cultural values, assumptions, norms, and ways of speaking across the boundaries between societies, communities, subcultures, and epochs.

In some situations, an English version of the NSM can also serve as a simple lingua franca for basic communication between speakers of different languages

TABLE 1.1. Table of Semantic Primes: English and French Versions

English Version	French Version	
I, YOU, SOMEONE, SOMETHING/ THING, PEOPLE, BODY	MOI, TOI, QUELQU'UN, QUELQUE CHOSE/CHOSE, GENS, CORPS	substantives
KIND, PART	TYPE DE, PARTIE	relational substantives
THIS, THE SAME, OTHER/ELSE	CE, LE MÊME, AUTRE	determiners
ONE, TWO, SOME, ALL, MUCH/ MANY	UN, DEUX, IL Y A... QUI, TOUT, BEAUCOUP	quantifiers
GOOD, BAD	BON/BIEN, MAUVAIS/MAL	evaluators
BIG, SMALL	GRAND, PETIT	descriptors
THINK, KNOW, WANT, FEEL, SEE, HEAR	PENSER, SAVOIR, VOULOIR, SENTIR, VOIR, ENTENDRE	mental predicates
SAY, WORDS, TRUE	DIRE, MOTS, VRAI	speech
DO, HAPPEN, MOVE, TOUCH	FAIRE, ARRIVER, BOUGER, TOUCHER	action, events, movement, contact
TO BE (SOMEWHERE), THERE IS/ THERE ARE, TO HAVE, TO BE (SOMEONE/SOMETHING)	ÊTRE (QUELQUE PART), IL Y A, AVOIR, ÊTRE (QUELQU'UN, QUELQUE CHOSE)	location, existence, possession, specification
LIVE, DIE	VIVRE, MOURIR	life and death
WHEN/TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, IN A MOMENT	QUAND, MAINTENANT, AVANT, APRÈS, LONGTEMPS, PEU DE TEMPS, POUR UN TEMPS, EN UN MOMENT	time
WHERE/PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE	OÙ, ICI, AU-DESSUS, AU- DESSOUS, LOIN, PRÈS, CÔTÉ, DANS	space
NOT, MAYBE, CAN, BECAUSE, IF	NE...PAS, PEUT-ÊTRE, POUVOIR, À CAUSE DE, SI	logical concepts
VERY, MORE	TRÈS, PLUS	intensifier, augmentor
LIKE	COMME	similarity

- Primes exist as the meanings of lexical units (not necessarily as distinct lexemes).
- Exponents of primes may be words, bound morphemes, or phrasemes.
- They can be formally complex.
- They can have different morphosyntactic properties, including word class, in different languages.
- They can have combinatorial variants (allolexes).
- Each prime has well-specified syntactic (combinatorial) properties.

who do not speak English well oriented minilanguages such as "Globish" is an English-t historical and cultural baggage paramount carriers of this baggage are included in the lexicon. I three English keywords studied saturated with British empiric words that constitute the lexical fact "Glenglish."

The inventor of Globish, J is a tool. A language is the vehicle. It is a means of communication. Globish may be a more feasible still, to some extent, a vehicle invisible cultural legacy of English words. By contrast, the NSM finding semantic counterparts in culture.

To demonstrate NSM method French word *empirique* and other version of NSM, which closely

Reading these explications written not in English but in NSM bound to seem strange. The words in the individual lines are clear, Yet to take in the full meaning of minitexts differ from one another

*empirique* (e.g., *approach*)

- someone thinks like this (about s
- "I want to know some thing
- maybe I can know these th
- because of this, I want to d
- I don't know well what I car
- I don't want to think about it
- I know that before, when p
- they could know som
- maybe the same will happe
- it can be bad if someone thinks li

*empirical* (e.g., *approach*)

- someone thinks like this (about s
- "I want to know some thing:
- I know that people can't kno
- if they don't do things



who do not speak English well. In this respect it can be compared with practically oriented minilanguages such as “Globish” (Nerrière 2006).

“Globish” is an English-based minilanguage that purports to be free of the historical and cultural baggage of English. In fact, however, many words that are paramount carriers of this baggage—for example, *fair*, *right*, *wrong*, and *mind*—are included in the lexicon. In particular, *experience*, *evidence*, and *sense*, the three English keywords studied in this book, which, as I have demonstrated, are saturated with British empiricism, have all made it onto the list of fifteen hundred words that constitute the lexicon of “Globish.” This shows that “Globish” is in fact “Glenglish.”

The inventor of Globish, Jean-Paul Nerrière, says that “It is not a language, it is a tool. A language is the vehicle of a culture. Globish doesn’t want to be that at all. It is a means of communication” (quoted in Blume 2005). In many situations Globish may be a more feasible communication tool than normal English, but it is still, to some extent, a vehicle of culture—in particular, Anglo culture. The invisible cultural legacy of English is hidden in the meaning of many Globish words. By contrast, the NSM minilexicon of sixty-three words that have matching semantic counterparts in all languages is independent of any one specific culture.

To demonstrate NSM methodology, I propose two explications: one of the French word *empirique* and one of the English word *empirical* (in the English version of NSM, which closely matches the French version).

Reading these explications, one should bear in mind that they are minitexts written not in English but in NSM-English and that, on first encounter, such texts are bound to seem strange. The words are familiar, the syntax is easy, the ideas expressed in the individual lines are clear, and the overall style is so simple as to seem childish. Yet to take in the full meaning of each minitext and to spot the places where the two minitexts differ from one another requires some effort on the reader’s part:

*empirique* (e.g., *approach*)

- a. someone thinks like this (about something):
- b. “I want to know some things about this
- c. maybe I can know these things if I do some things
- d. because of this, I want to do some things
- e. I don’t know well what I can do
- f. I don’t want to think about it for a long time
- g. I know that before, when people did some things  
they could know some things about things like this because of this
- h. maybe the same will happen to me now”
- i. it can be bad if someone thinks like this

*empirical* (e.g., *approach*)

- a. someone thinks like this (about something):
- b. “I want to know some things about this
- c. I know that people can’t know things like this about something  
if they don’t do things of some kinds to some things

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- d. if people do things of these kinds to some things, they can see some things because of this
- e. at the same time some parts of their bodies can touch some things
- f. after this, they can know some things because they have done these things
- g. I want to do some things like this now"
- h. it is good if someone thinks like this

The French concept as explicated here suggests, above all, a lack of method: There is an element of groping here, of haphazardness, and of reliance on collective and hearsay experience (rather than on one's own sensory experience), as well as on luck ("maybe"). The explication does not explicitly say, "I don't want to think about it," which would imply that the word *empirique* can never be used in neutral contexts, but it does exclude extended reflection as a way to proceed ("I don't know well what I can do; I don't want to think about it for a long time").

The English concept, on the other hand, suggests a conscious acceptance of a methodical approach that involves doing "certain things to some things" and is based on personal sensory experience (defined via seeing and touching). This positive emphasis on the senses and on the experimental method based on them links the modern English concept of the empirical with the revolution in thinking set in motion by early British empiricists like Francis Bacon and John Locke and scientists like Newton, Halley, Hooke, and Boyle. The NSM methodology offers a framework within which such differences can be explored and elucidated.

In a recent discussion of my work, semanticist Ray Jackendoff (2006, 356), who works in the generativist (Chomskyan) tradition and advocates a variety of semantics that he calls "conceptual semantics," has written the following: "Conceptual semantics begins to offer a theoretical approach to language processing that fits together with findings in psycholinguistics... and lends itself to plausible speculations behind the evolution of the language capacity... Wierzbicka, by contrast, stays very close to the linguistic ground."

This book, too, stays "very close to the linguistic ground"—it explores materials found "on the ground" through the prism of a coherent semantic theory whose basic assumptions have remained stable for more than three decades of testing, during which the hypotheses in question were continually revised in response to the data. As more and more scholars became involved in this enterprise, the testing was applied to more and more languages, and as the advent of modern corpora radically increased the scope of data available for many languages (including English, French, and Russian), the empirical basis for collecting and testing data has also radically expanded.<sup>5</sup>

The belief in the value of introspection and disciplined semantic intuition that I defend in my 1972 book, *Semantic Primitives*, is a constant in the semantic explorations in the NSM framework. Objective data, such as those that occur in contemporary linguistic corpora, cannot interpret themselves, and to make sense of them one still needs to consult one's semantic intuitions. At the same time, to reject these enormously rich new sources of data and to continue to rely on analyses of one's own invented examples (as Chomsky did in the 1960s and as

those working in the (century)—is to show a single-minded that the empirical reality can on

Jackendoff is by no contemporary semanticists are equally removed. For example, Ruth Ker can be analyzed as formal inference systems such set up to model truth-semanticists are and are

To borrow the words (1985, 67), the artificial linguists "can tell us something about them, but not about the and models can spin forth they are not interested in and culture.<sup>6</sup>

Jackendoff (2006) continues this approach, arguing, first, that the "ground") and, second, that... analyzes words simply very close to the linguistic eyes high above that ground words simply in terms of analyze them intelligibly. everyday words, can achieve not possible with more terms

For example, Jackendoff discusses *obligations* in terms of letters, and abbreviations. Following this method, conceptual semantics is empirical as EMP and the (supposedly) universal. Principles of analyzing words in terms of explain anything to anyone.

Symbols like RT, OE encoded in the English words. To find out what these correspond to in other languages (e.g., from words *Pflicht* and *Verpflichtung* words—as is normally done and useful. In NSM work, these conditions are couched are not but are drawn from a high

those working in the Chomskyan tradition continue to do in the twenty-first century)—is to show a commitment to the way of the spider so extreme and so single-minded that those who are interested not only in theories but also in empirical reality can only marvel at it.

Jackendoff is by no means the only prominent exponent of such an attitude in contemporary semantics or even the most extreme one. So-called formal semanticists are equally remote from and apparently not interested in empirical data. For example, Ruth Kempson's (1996, 561) statements that "natural languages can be analyzed as formal inference systems in like manner to familiar logical inference systems such as predicate calculus" and that "these logic systems are set up to model truth-preserving relations" can give a flavor of what formal semanticists are and are not interested in.

To borrow the words of distinguished French typologist Claude Hagège (1985, 67), the artificial formalisms and abstract models favored by many linguists "can tell us something about... the cleverness of those who fashion them, but not about the languages themselves." Inventors of such formalisms and models can spin formal webs with considerable artfulness and virtuosity, but they are not interested in exploring language-specific meanings shaped by history and culture.<sup>6</sup>

Jackendoff (2006) contrasts NSM methodology unfavorably with his own approach, arguing, first, that it is too empirical ("stays very close to the linguistic ground") and, second, that it avoids formalisms: "Wierzbicka, by contrast... analyzes words simply in terms of other words" (356). However, staying very close to the linguistic ground means being able to see what those with their eyes high above that ground are likely to miss. As for the charge that I analyze words simply in terms of other words, I believe that this is the only way to analyze them intelligibly. Moreover, NSM explications, which comprise simple everyday words, can achieve a degree of intuitive clarity and accessibility that is not possible with more technical modes of semantic description.

For example, Jackendoff's analysis of the meaning of the words *rights* and *obligations* in terms of artificial formulae includes brackets, indices, Greek letters, and abbreviations like "RT" (for "rights") and "OB" (for "obligations"). Following this method, one could analyze the meaning of the English word *empirical* as EMP and then suggest that EMP is universal, as RT and OB are (supposedly) universal. Proceeding in this way, one can indeed avoid the charge of analyzing words in terms of other words, but it is not clear how one could *explain* anything to anyone or verify one's claims.

Symbols like RT, OB, or EMP are not self-explanatory, and the concepts encoded in the English words *right*, *obligation*, and *empirical* are not universal. To find out what these concepts are and how they differ from those encoded in other languages (e.g., from the French words *droit* and *empirique* or the German words *Pflicht* and *Verpflichtung*), we indeed need to analyze them using other words—as is normally done in dictionaries, which also endeavor to be intelligible and useful. In NSM work, however, the other words in terms of which explanations are couched are not chosen at random, as is usually done in dictionaries, but are drawn from a highly constrained list of simple words that, as decades of

cross-linguistic investigations undertaken by many scholars have shown, appear to have their semantic counterparts in all languages.

The English word *empirical* does not have an exact semantic equivalent in French, but *want*, *do*, *someone*, *something*, *maybe*, and *before* do in *vouloir*, *faire*, *quelqu'un*, *quelque chose*, *peut-être*, and *avant*, respectively. Such matching word meanings give us a shared conceptual currency in terms of which all meanings can be intelligibly described and compared across cultures, languages, and epochs. They also give us a tool that enables us to explore the cultural baggage of modern English and its implications for the world at large.

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EXPERIENC

## Evidence: Words, Ideas, and Cultural Practices

In the word *evidence*, together with its conjugates, *to evidence*, *evidencing*, *evidenced*, and *evidentiary*, the English language possesses an instrument of discourse peculiar to itself: at least as compared with the Latin and French languages. In those languages the stock of words applicable to this purpose is confined to the Latin verb *probare* and its conjugates: a cluster of words with which the English language is provided, in addition to those which, as just observed, are peculiar to itself.

(Jeremy Bentham 1978 [1827] vol. 1, 17)

### 3.1. Evidence as a Key Cultural Concept in Modern English

*Evidence* is a keyword in present-day English. In many domains, it is almost impossible to engage in a serious discussion in English without drawing on it at some point. I illustrate this, first of all, with two brief exchanges from Australian TV program transcripts:

1) 7:30 report: TV current affairs program (about Dick Smith, the head of the Australian Civil Aviation Safety Authority, titled "A Turbulent Career," March 23, 1999):

DICK SMITH: I think it was cancelled because of pressure from outside forces. I think there was a tremendous industrial issue against change. . . .

DAVID HARDAKER: John Woods was attacked for being resistant to change.

JOHN WOODS  
these things  
DICK SMITH

2) *Lateline*  
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JOHN WOODS: It was a convenient smear. . . . Where's the **evidence**? It's easy to say these things.

DICK SMITH: I have **evidence**.

2) *Lateline: current affairs TV program* (a discussion including former British foreign secretary Robin Cook and two members of the British Parliament's Foreign Affairs Committee, June 17, 2003):

COMMITTEE MEMBER: But you accept that absence of **evidence**, I think it's Donald Rumsfeld's phrase, is not in itself **evidence** of absence?

ROBIN COOK: No, but the absence of **evidence** is a bloody thin ground on which to go to war.

OTHER COMMITTEE MEMBER: You never produced any **evidence** to show containment was working.

ROBIN COOK: I think that the **evidence** is already there on the ground in the absence of any chemical or biological weapons or long-range missiles or weapons capable of being fired in forty-five minutes or a rebuilt chemical factory—none of which have been found. That to me does suggest that containment was working quite well.

As these two examples illustrate, there is in present-day English a whole rich discourse based on the word *evidence* and its collocations. In particular, discussions, debates, and polemical exchanges often hinge on the use of this crucial and, as Bentham noted, uniquely English concept. In section 4 I cite more examples of the use of *evidence* in argumentative interpersonal exchanges. Here I illustrate the significance of *evidence* in contemporary Anglo discourse with examples from a polemical article in the *New Republic Online*. It is not a scientific article but an "opinion piece," titled "The Case against Intelligent Design: The Faith That Dare Not Speak Its Name" (Coyne 2005):

Darwin . . . provided voluminous and convincing **evidence** for them. The weight of this **evidence** was so overwhelming that it crushed creationism.

The overwhelming **evidence** for evolution can be found in many books. . . .

Darwin's third line of **evidence** came from biogeography.

In the last 150 years, immense amounts of new **evidence** have been collected. . . .

But support for the idea of natural selection was not so strong, and Darwin had no direct **evidence** for it.

. . . many of the missing links cited by *Pandas* [book title] as **evidence** for supernatural intervention are no longer missing.

In sum, the treatment of the fossil **evidence** for evolution in *Pandas* is shoddy and deceptive.

And what about the strong **evidence** for evolution from biogeography?

Given the overwhelming **evidence** for evolution and the lack of evidence for ID [Intelligent Design], how can intelligent people hold such views? Is their faith so strong that it blinds them to all **evidence**?

As these examples illustrate, *evidence* is a very common word in English (at least in certain registers), as well as a very important one. In this particular article (twenty-four pages long), there are no fewer than seventeen references to *evidence*, and this word plays a crucial role in the argument: in a sense everything depends on it. As the examples in this article also illustrate, *evidence* has a very

rich phraseology: *convincing evidence, the weight of evidence, direct evidence, strong evidence, overwhelming evidence, well supported by evidence, new evidence, to collect evidence, to give no evidence, no direct evidence for, to deal with evidence, much of the evidence, lack of evidence*, and so on. The most characteristic grammatical frames of *evidence* in the key modern sense include *evidence for, evidence that, evidence in favor of (or against)*. Equally characteristic is the modern collocation *conclusive evidence* (the earliest example cited in the OED is dated 1768). Two characteristic examples (also from the OED):

Conclusive evidence of the impermeability of the strata. (*Nature* 1889)  
Experiments have been carried out which gave conclusive evidence that positrons are ejected from lead by the  $\gamma$ -radiation. (*Science* 1933)

Given how crucial *evidence* is to contemporary Anglo-English discourse, it is truly remarkable that other European languages have no word for *evidence*. The best that the bilingual dictionaries can offer as the supposed equivalent of the English *evidence* is words like *preuves* (French), *prove* (Italian), *Beweise* (German), or *dowody* (Polish), that is, words that correspond in fact to the English word *proof*. Indeed, these words would normally be used to translate English sentences that include the word *evidence* (sentences such as those cited here from the article in the *New Republic Online*).

In fact, however, *evidence* does not mean the same as *proof*, and to “prove” something is not the same as to “provide evidence” for it. “Proofs” can be given in mathematics or in logic on the strength of pure thinking. *Evidence*, however, requires more than thinking—it also requires some basis in what people can see, hear, touch, or smell. It requires an empirical basis, that is, a basis in empirical reality.

It is this empirical character of the concept of evidence, encoded in the word *evidence* as it is used in contemporary English, which makes the English *evidence* and the French *évidence* “false friends” (*des faux amis*), as recognized in the English-French *Dictionnaire des faux amis* (Van Roey, Swallow, and Granger 1998). Essentially, the French word, in contrast to the English one, has no empirical implications—a fact reflected in its definition in the French Academy Dictionary (*Dictionnaire de l'Académie*): “*évidence*: the quality of that which commands the mind’s immediate assent by imposing itself in a clear and distinct manner” (“Qualité de ce qui emporte l’assentiment immédiat de l’esprit en s’imposant à lui de façon claire et distincte”), and earlier, in *Littré*’s (1963 [1860]) definition: “*évidence*: the property of that which is evident; the notion of a truth so perfect that it does not require another proof” (“Caractère de ce qui est évident; notion si parfaite d’une vérité qu’elle n’a pas besoin d’autre preuve”).

As these definitions suggest, the French *évidence* focuses on the clarity and indeed obviousness of whatever it is (that “commands the mind’s immediate assent”). The English *evidence* requires both more and less: more because it demands some basis in empirical reality, and less because it does not have to

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command “the mind’s immediate assent”: in fact, in English, *evidence* can be expected to be critically examined rather than immediately assented to.

What exactly is the difference between “reality” and “empirical reality”? And why is it that mathematics and logic do not seem to deal with the latter? Presumably, the main reason is that mathematics and logic rely (or are seen as relying) on pure thinking. “Empirical reality,” on the other hand, presupposes some basis in people’s experience, which includes things that happen to people or, more precisely, things that people can know because of what has happened to their bodies (and not solely because of what they arrived at by thinking).

Emphasizing the influence of seventeenth- and eighteenth-century British empiricism on the general intellectual climate of the time, historian Felipe Fernández-Armesto (1998, 153) writes: “Newton’s work was both genuinely pioneering and embedded in the broader context of English and Scottish thought of the time: empiricism—the doctrine that reality is observable and verifiable by sense-perception. The success of science surely made possible this distrust of metaphysics.”

I suggest that this is where the unique Anglo concept of evidence (as we know it in nineteenth- and twentieth-century English) was born and nourished: in the intellectual climate created by seventeenth- and eighteenth-century English and Scottish thought. Remarkably, the modern concept of evidence, born in British philosophy, law, and science (see section 3.4), has become one of the key concepts in Anglo culture, and *evidence* has become almost a household word in modern English. It is certainly deeply entrenched in law, science, research of any kind (including in the humanities), and journalism, not to mention detective stories and the like. By its salient presence in English discourse, the word *evidence* seems to constantly send the message that “thinking” is not enough for “knowing” and that something else is needed: either seeing or something similar to it (sensory perception). Every time this word is used, this message is reinforced.

Early British empiricists did not see knowledge as an alternative to truth, and Locke, for example, “explicitly aimed to defeat the despairing idea ‘that either there is no such thing as truth at all’; or that mankind hath no sufficient means to attain a certain knowledge of it” (Honderich 1995, 496). At the same time, Locke made “truth” depend on testing (“trial”) and “evidence,” saying, for example, that “trial and examination must give [truth] price” (ibid.). He gave a key role in this context to “the evidence of the senses.” As the empiricist ideas spread, however, references to “truth” seem to have gradually declined, and the emphasis was placed more and more on experience, observation, facts, and “evidence.” David Hume, for example, declared in his *Enquiry concerning Human Understanding* that “A wise man . . . proportions his belief to the evidence” (Hume 2000, 84).

But what exactly did Locke mean by “evidence” when he expressed his full confidence in the “evidence of the senses”? And what did he mean when he affirmed that a wise man “proportions his belief to the evidence”? Was the word *evidence* used at that time in the same sense in which it is used now? Fernández-Armesto says, for example, that “Locke . . . adopted a crudely commonsensical attitude to the evidence of our senses” (1998, 153) and that “experimental



evidence collected by Newton himself helped to suggest the limitations of sensations" (ibid., 155). But did Newton talk about his experiments as "evidence" for this or that view? Did he use the word *evidence* at all, and if he did, was he using it in our sense of the word?

To answer such questions, we need to engage in rigorous semantic analysis, not only synchronic but also diachronic (historical). This requires a suitable methodology, and again, such a methodology is available in the NSM approach.

But while universal semantic primes are a reliable analytical tool for reconstructing the meaning of words, expressions, or constructions from earlier periods, it is important to emphasize that any such reconstruction is only hypothetical. In a sense, any semantic analysis is only hypothetical: we seek to propose a set of explications that best account for the observable usage of a word or an expression. In synchronic analysis, however, our explications can also be tested against the intuitions of the native speakers. In historical semantics, this is not possible: there are no native speakers of earlier stages to consult; all we can rely on is the evidence of the texts and especially of the contexts. At the same time, the meanings of the words surrounding the one under investigation did not stand still, either, so even the evidence from collocations must be treated with caution and hermeneutical suspicion.

A sixteenth- or seventeenth-century sentence containing the word *evidence* may sound to us perfectly modern, and its meaning there may seem to us quite clear. But then we must ask ourselves: why was it also possible for the same writer to use *evidence* in contexts in which we could not possibly use it today? We need to arrive at an explication that (barring polysemy) would be substitutable for the word as defined in *all* contexts and not only in those in which it could still be used today.

In a sense, difficulties in doing historical semantics are familiar to anyone who has ever seriously engaged in it. For NSM semanticists, however, they are particularly acute, given the severe methodological constraints under which its practitioners work: the use of a highly restricted metalexicon, the ideal of substitutability in context, and a total ban on technical vocabulary in semantic descriptions. Arguably, however, it is precisely these methodological constraints that give us the best chance to gain some insight into the ways of thinking of the past generations: if we can assume anything about their conceptual resources at all, it is safer to assume that they too had those concepts that can be found in all languages today than that they had any others—in particular, any language- and culture-specific concepts of present-day English.

For example, if we want to understand what sixteenth-, seventeenth-, or eighteenth-century writers meant by "evidence," it is more helpful to use simple words in our explications—words like *know*, *think*, *say*, and *see* (which, evidence suggests, have exact semantic equivalents in all languages)—rather than to rely on complex and highly language-specific words of present-day English such as *fact*, *empirical*, *perception*, or *evidence* itself.

The emergence of the modern concept of evidence (as just used in the phrase "evidence suggests") is as important for the history of philosophy and science as

it is for the history of science. Hacking has written

Many modern scientists and the evolution of the late emergence of the concept of evidence beforehand. The way that the probability was calculated. What could be called "inductive evidence"

So when did the concept of probability generally, in the links between the emergence of Joseph Glanvill's "Why is the probability a simplistic answer with which to provide his own answer"

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it is for the history of the English language and Anglo culture. Philosopher Ian Hacking has written about it as follows:

Many modern philosophers claim that probability is a relation between an hypothesis and the evidence for it. This claim, true or false, conceals an explanation as to the late emergence of probability: the relevant concept of evidence did not exist beforehand. The way in which it came into being has much to do with the specific way that the dual concept of probability emerged. One of the preconditions for probability was the formation of this concept of evidence.

What concept of evidence? Crudely, that which some philosophers have called "inductive evidence." (Hacking 1975, 31)

So when did the concept of evidence, which is crucial (according to Hacking)<sup>1</sup> to both "probability" and "induction," emerge in British philosophy and, more generally, in the world of thought associated with the English language? Hacking links the emergence of "induction" and, by implication, of "evidence" with Joseph Glanvill's *Vanity of Dogmatizing*, which was first published in 1661: "Why is the problem of induction such a newcomer on the scene? There is a simplistic answer. Until the seventeenth century there was no concept of evidence with which to pose the problem of induction!" (Hacking 1975, 31). Hacking calls his own answer "simplistic" but also "partially right":

Despite such intimations as one may find in Glanvill in 1661, it is significant, and explicable, that the problem of induction had to wait in the wings some eighty years after the birth-decade of probability. . . . Glanvill merely raises the flag over a new philosophical continent, discovered at the time of probability, but which cannot be exploited until other events have occurred. But our simplistic answer is partially right. A concept of evidence is a necessary condition for the stating of a problem of induction. A problem of induction does not occur in the earlier annals of philosophy because there was no concept of evidence available. (ibid.)

Hacking does not explain exactly what he means when he says that "the relevant concept of evidence did not exist beforehand": does he mean that no individual philosopher thought in this way or that there was no such concept in the public domain, that is, no such **shared** concept?

Unfortunately, historians of ideas seldom make such distinctions and seldom pay attention to John Locke's profound insight that, while "simple ideas" can be compounded at will by individual thinkers, it is the word that can give such a conceptual compound stability and make it a shared tool for thought and communication. A combination of semantic components created by an individual speaker "would cease again, were there not something that did, as it were, hold it together, and keep the parts from scattering" (Locke 1959 [1690], vol. 2, 50). Locke's metaphor for this stabilizing role of the word was a knot: "Though therefore it be the mind that makes the collection, it is the name which is as it were the knot that ties them fast together" (ibid.).

This book is based on the Lockean assumption that words matter and that concepts encoded in the meaning of words provide shared conceptual "knots" for

a given speech community. This does not mean that there can be no concepts that are not lexically encoded; rather, it means that the lexical encoding of certain concepts provides evidence for their status as "knots" in the shared conceptual framework of a given community of discourse.

The word *evidence*, too, is such a knot (or rather a set of knots); each meaning of *evidence*, at each stage of its semantic development, has acted as such a knot for speakers of English.

### 3.2. An Outline of the Semantic History of *Evidence*

#### 3.2.1. From certainty to doubt: An overview

The semantic history of the English word *evidence* provides important evidence for the changes in the ways of thinking about knowledge that were predominant among English speakers between the sixteenth and the twenty-first centuries. In tracing this history in a broad outline, I start with the entry for *evidence* in the *Oxford English Dictionary* (OED).

The OED ascribes to *evidence* nine different meanings, subdivided in some cases by means of letters and united in overarching categories in other cases by means of Roman numerals. The two main categories emerging from this rather confusing presentation are the following two (labeled by the OED as 1 and 5):

1. The quality or condition of being evident; clearness, evidentness.
5. Grounds for belief; testimony or facts to prove or disapprove any conclusions.

In addition, the OED mentions what it calls "legal uses of 5." Of these, the main one is defined as follows: "Information, whether in the form of personal testimony, the language of documents, or the production of material objects, that is given in legal investigation, to establish the fact or point in question."

The first of the two main groups (1 and 5) singled out by the OED is illustrated by examples like the following two:

Certain Truths, that have in them so much of native Light or Evidence . . . it cannot be hidden. (1665)

So evident that we require no grounds at all for believing them save the ground of their own very evidence. (1882)

The available examples of this first category appear to be fairly homogeneous semantically, and the meaning in question appears to be straightforwardly derived from the meaning of the adjective *evident*, which can be described along the following lines: "It is evident = people can't not know it." *Evidence* is no longer used in this sense in contemporary English, and this meaning is not of central interest to this chapter. It needs, however, to be borne in mind if only so that we do not confuse the other meanings of *evidence* with it.

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To say that this category is fairly homogeneous semantically does not mean that all of the examples ascribed to it by the OED have exactly the same meaning or that over the ages there was no semantic development within this category at all. In fact, as we will see later, *evidence* in the sense derived from the adjective *evident* appears to have changed (probably in the seventeenth century) from something nongradable ('the evidentness') to something that is a matter of degree ('the degree of evidentness'). (I return to *evidence* in the sense of 'evidentness' later.) I focus, however, primarily on the second category, which is far less homogeneous. Since (according to the OED) this category includes examples ranging in time from 1380 to the present day, the OED appears to imply that, from the fourteenth century to the present day, there has been some constant concept of evidence in English and that it can be defined, approximately at least, as "grounds for belief."

In fact, as I demonstrate here, such a portrayal misrepresents the facts and conceals extremely significant shifts and developments. It is true that some sentences from earlier periods may sound as if the word *evidence* were used in them with the same meaning that it has today. Such sentences, however, are misleading. Since they appear to be compatible with the present-day meaning we tend to read this meaning into them. When we consider a wider range of examples from the same period, however, it becomes clear that none of the meanings that we can plausibly posit for that period are identical with those found in present-day English.

In sorting out the different meanings lumped together in the putative overall category "grounds for belief," I posit five different stages in the semantic development of *evidence*, which, I argue, have led to the emergence of the cultural key concept as we know it in present-day English. These five stages are not strictly consecutive because at each stage both an older and a more recent meaning coexist. It is now generally accepted in historical semantics that semantic change is always accompanied by periods of polysemy: different meanings of a word must coexist for some time, and often they do so for long periods (cf. e.g., Traugott and Dasher 2002; Wilkins 1996). Furthermore, while different meanings of a polysemous word differ from each other discretely by the presence or absence of certain semantic components, the spread of a new meaning is always gradual (cf. Schuchardt 1972 [1885]) and often imperceptible.

The change of meaning may be particularly hard to notice for those who live in a period when it occurs if this change involves important cultural concepts like those encoded in the different meanings of *evidence*. A semantic change is in such cases the result of changes in discourse practices, which both reflect and promote new ways of thinking. As a result of gradually spreading new ways of thinking and speaking, a word (e.g., *evidence*) starts to appear more and more often in new contexts and in new collocations, and some of the meanings initially conveyed by those new contexts and collocations rub off on the keyword itself, first as invited inferences and ultimately as part of the new semantic invariant.

For example, in English the word *drink* has long been used in contexts referring to alcoholic beverages and often co-occurred with words like *wine*, *beer*, and *bottle*. As a result, it acquired at some stage a permanent association

with alcohol, which led to a new meaning, as in "I have been drinking hard" (1611, OED) or "They sit long and drink soundly" (1630, OED). This new meaning coexists, of course, in modern English with the more general one that can apply to any liquid.

In the case of *evidence*, different meanings have coexisted for centuries. Nonetheless, we can identify a certain general direction of semantic development, and broadly speaking, the five stages can be presented in a chronological order. In a highly simplified way, they can be described as follows:

**Stage I (roughly, fourteenth–eighteenth centuries)**

*Evidence* means something comparable to what Shakespeare called "an ocular proof" (from Latin *oculus* 'eye'). When Othello says to Iago "give me the ocular proof," he is asking for something that he can see with his own eyes, that is (to his mind), something irrefutable. When the scientist Joseph Priestley writes in 1777 about "the form in which evidence is presented in Euclid," he is still using the word *evidence* in reference to something that is absolutely irrefutable, as the testimony of one's own eyes is. The assumption is that the testimony of one's own eyes cannot be doubted: an "ocular proof" is as reliable as a mathematical or logical proof.

**Stage II (roughly, seventeenth–nineteenth centuries)**

At this stage *evidence* means, generally, a source of certain and reliable knowledge—as certain and reliable as knowledge based on sight ("people can know it well")—not quite "a proof" but more than "grounds for belief." For example, when Milton writes polemically (in 1644) of "the clear evidence of the Scripture," he appears to have in mind "what people can know well" rather than "what people can't not know," as he is arguing against Catholics, who in his view reject that "clear evidence" in favor of "the unwieldy volumes of tradition."

A paradigmatic example of such certain and reliable knowledge was the testimony of trustworthy eyewitnesses, first in law and subsequently, in other domains. In particular, as Shapiro (2000, 119) notes, reference to eyewitness testimony was a commonplace in the language of English naturalists associated with the Royal Society. Here, too, the adjective *ocular* was sometimes used. "Naturalists routinely referred to 'ocularly manifest' observations or to 'ocular demonstration[s] . . . of matter of fact.' Royal Society members witnessed Valentine Greatsake's inexplicable curves in order to 'have an ocular Testimony of Truth' as 'eyewitnesses of what was done'" (ibid., 120).

But there is an important difference between an "ocular proof"—the irrefutable testimony of one's own eyes (Stage I)—and an "ocular testimony" of trustworthy eyewitnesses (Stage II).

**Stage III (roughly, late seventeenth–nineteenth centuries)**

At this stage, *evidence* means, in general, a source of knowledge comparable to knowledge based on sight. This knowledge is no longer seen as clear and certain, but neither is it thought of as mere "grounds for belief": it is still a matter of what people "can know," though not necessarily "can know well."

**Stage IV (roughly, late eighteenth–twenty-first centuries)**

At this stage *evidence* begins to be understood as, roughly speaking, "grounds for belief." The implication is that it is or can be *solid* grounds and that a belief

based on it can matter of knowledge.

**Stage V (roughly, late nineteenth–early twentieth centuries)**

This stage is characterized by the weakening of *evidence* as a source of knowledge. Those grounds now seen as "solid" are now seen as "grounds for belief."

Each of these semantic components can be formulated as a proposition that is

- I. people can know it well
- II. people can know it well
- III. people can know it well
- IV. people can know it well
- V. people can know it well

The second component can be formulated as "belief" which reflects different attitudes:

- I. when people can know it well, they can know it well
- II. when people can know it well, they can know it well
- III. when people can know it well, they can know it well
- IV. when people can know it well, they can know it well
- V. when people can know it well, they can know it well

In what follows, headings: Stage I: knowledge; Stage II: belief; and Stage III: present some examples. Here I point out constitutes an example

based on it can be compared with one based on sight. It is no longer, however, a matter of knowledge but a matter of belief.

**Stage V (roughly, nineteenth–twenty-first centuries)**

This stage, which prevails in present-day English, represents a further weakening of the confidence that people place in evidence. As in stage IV, *evidence* is seen as “grounds for belief” (not a matter of knowledge), but those grounds are no longer expected to be solid and trustworthy. “Evidence” is now seen as “*possible* grounds for belief”—possible but always questionable, in fact, grounds for a hypothesis, a conjecture, or a claim rather than for justifiable belief.

Each of these five stages in the evolution of *evidence* can be linked with three semantic components, the first of which I represent as follows (*it* refers here to the proposition that is being asserted):

- I. people can't not know that it is true
- II. people can know well that it is true/that it is like this
- III. people can know that it is like this
- IV. people can think that it is like this
- V. people can say that it is like this

The second component, essentially the same in all cases, is causal and refers in some way to the prototype of knowledge based on seeing. Initially, it can be formulated as “because they know something else (well).” The third component reflects different attitudes toward the reliability of what people can see. Those different attitudes can be portrayed as follows:

- I. when people see something  
they cannot *not* know some things about it because of this
- II. when people see something, if they see it well,  
they can know some things about it well because of this
- III. when people see something  
they can know some things about it because of this
- IV. when people see something  
they can think some things about it because of this
- V. when people see something  
they can say some things about it because of this

In what follows, I discuss the five stages one by one under the following headings: Stage I, “ocular proof” or the equivalent; Stage II, clear and certain knowledge; Stage III, knowledge based on observation; Stage IV, grounds for belief; and Stage V, support for a claim. Fuller linguistic evidence for these stages is presented later (in section 3.3). In sections 3.2.2 to 3.2.7 I present some examples with brief discussion and very selective supporting evidence. Here I point out that the set of explications proposed in this section (3.2.1) constitutes an exercise in internal reconstruction and that the coherence of the

overall picture emerging from it is in itself an argument in favor of this reconstruction.

Apart from the internal coherence of the overall picture presented here and from the linguistic evidence (presented more fully in section 3.3), I draw to some extent on what some of the most influential philosophers of different periods—in particular, John Locke and David Hume—say about *evidence*. My primary concern is, of course, the history of English as spoken by “ordinary people” rather than the views or the linguistic usage of philosophers. But in the case of English, these things are closely related. It is well known that philosophers like Locke and Hume, who were widely read and admired in Britain and America, significantly influenced the intellectual climate of their times and have shaped, to some extent, the conceptual vocabulary of English (cf. Bauman and Briggs 2003; Porter 2000; Ashcraft 1991; Wierzbicka 2006). The changes in the meaning of key English words like *evidence* reflect this influence.

### 3.2.2. Stage I: The “ocular proof” or equivalent

Stage I can be illustrated with examples like the following ones:

The deeds that Christ did been [are] unsuspect **evidence** that Christ is both God and man. (Wycliff 1871 [ca. 1380], 107)

This horse . . . was to Troy an **evidence** of love and peace for evermore. (Gower 1901 [1390], Book 1p67)

There is no **evidence** whereof to know a difference between the drunken and the wode [madman]. (ibid., Book 6 p182)

But it ought to be . . . as we shall prove by open **evidence** through God's help. (A Compendious Old Treatise showing . . . that we ought to have the scripture in English [Tyndale 1450 in Arber 1871, 172])

Angelical actions may therefore be reduced into three general kinds; first, most delectable love arising from the visible apprehension of the purity, glory, and beauty of God invisible . . . ; secondly, adoration grounded upon the **evidence** of the greatness of God . . . ; thirdly, imitation bred by the presence of his exemplary goodness. (The first Book of Ecclesiastical Polity [about angels]) (Hooker 1969 [1594], 55–56)

*Evidence* in this sense is closely related to *evidence* in the sense of “evidentness.” For example, because of Christ's deeds it is “evident” that Christ is both God and man; the Trojan horse is, so to speak, “an ocular proof” of the Greeks' love and goodwill; God's greatness is “evident” (because of his creation); and the “open evidence” will make “evident” the truth that the writer seeks to establish. In another passage in Gower (1901[1390], book 4, 325), the allegorical character called Sloth is accompanied by his secretary, called Negligence, “who would not “look” [i.e., notice] his evidence,” in other words, who would not notice what is obvious.

In Wycliff's translation of the Bible, *evidence* translates the Latin *evidentia*, and the context makes it clear that it refers to something obvious and undeniable

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arrived at through scientific procedures. The decline of faith in what is "evident" can also be linked with the development of modern science and its status in Anglo culture, reflected in the development of the English language. Far from pointing in two different directions, the two phenomena—caution in accepting what is "evident" and confidence in scientific (and other similar) "findings"—are in fact two facets of the same trend.

### 3.3. Linguistic Evidence

In several contemporary examples cited at the beginning of this chapter the word *evidence* was used with highly positive adjectives like *overwhelming*, *convincing*, and *strong*. Looking more broadly at how *evidence* is used in present-day English, one must conclude that such usage is not typical of contemporary discourse. In fact, in the article from the *New Republic* quoted in section 3.1, Coyne (2005) seeks to crush Darwin's opponents with negative expressions like *no evidence*, *no direct evidence*, and *lack of evidence*, and such a negative or skeptical attitude toward "evidence" is much more common in contemporary usage. For example, when one examines the collocations of *evidence* in a large database such as the COBUILD corpus, one is struck, above all, by the critical and skeptical attitude reflected in them.

To begin with, of all the adjectival collocations, including *evidence*, by far the most frequent is *no evidence*. Thus, of the 2,106 occurrences of *evidence*, nearly a quarter fall into this group. By comparison, in the Helsinki corpus (1500–1710), there are 39 occurrence of *evidence* and only one of *no evidence* (that is, less than 3 percent). Further, in Locke's writings (in the three volumes that I have been able to access electronically [Locke 1824, vols. 1, 2, and 5]), there are 228 occurrences of *evidence* but only six of *no evidence* (that is, less than 3 percent). Newton's theological writings have 26 occurrences of *evidence* but none of *no evidence*.

Second, the second largest group of adjectival collocations, including *evidence*, in COBUILD is *some evidence*—a collocation not attested at all in the OED before the nineteenth century. As far as I have been able to ascertain, there are no examples of it in Locke, Newton, or Hume. *Literature Online* provides only five results for the eighteenth century and fifty-five for the nineteenth. By implication, *some evidence*, too, involves a negative assessment: To say that *there is some evidence* is to imply that there is not a lot.

The third most frequent quantifier collocating with *evidence* in COBUILD, namely *enough* (fifty-seven occurrences), is also not as positive as it might seem: Nearly half of them (twenty-six) refer in fact to a situation where "there is not enough evidence," and many others refer to hypothetical situations ("if there is enough evidence" and the like). Thus, the high frequency of the collocation *enough evidence* reflects, above all, a concern about **whether** there is enough evidence rather than a positive assessment. This concern—"is there or isn't there enough evidence?"—is all the more striking given that the collocation *enough*



*evidence* appears to be very recent. In any case, the Helsinki corpus has no examples of it, and in the OED material the earliest example is dated 1924.

Repeated Google searches yield a similar picture: the negative collocation *no evidence* is by far the most frequent among all the quantitative ones, and the positive ones, like *plenty of evidence*, *lot(s) of evidence*, and *a good deal of evidence*, are the least frequent, as the following figures (February 15, 2007) illustrate:

no evidence	13,100,000
some evidence	1,350,000
lack of evidence	1,280,000
little evidence	1,190,000
enough evidence	1,140,000
much evidence	1,070,000
plenty of evidence	676,000
lot of evidence	452,000
great deal of evidence	247,000
lots of evidence	144,000
good deal of evidence	82,000

Thus, the material in COBUILD, as well as the results of Google searches, indicates caution and skepticism with respect to *evidence*. This is in stark contrast to earlier periods, when adjectival collocations emphasized either the indubitable existence of “evidence” or its quality rather than its quantity.

Even positive assessments of quantity like *much evidence*, *abundant evidence*, and *plenty of evidence* appear to have come into English only in the nineteenth century. The isolated earlier examples of these collocations such as the following two do not refer to quantity but emphasize “how very evident” something is:

The command must need come with much **evidence** when it wrapped the will into such a height. (OED 1641)

'Tis abundant **evidence** how much Christianity loses by these contests of under-factions. (OED 1667)

The new critical and skeptical spirit with respect to “evidence” is also evident in emphatically negative collocations such as *not a shred of evidence* and *not a scrap of evidence*, which apparently spread in English in the nineteenth and twentieth centuries. An expression like *not a shred of evidence* appears to have a polemical edge and to be directed at something that someone else has said.

Another striking feature of the present-day phraseology of *evidence* has to do with the choice of verbs with which *evidence* can combine. In present-day English it combines particularly readily with the verb *suggest*: “Evidence suggests that . . .” Judging by the data from the OED, this collocation first appeared in the twentieth century. A search for quotations in the OED containing both

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*evidence* and *suggest* has yielded forty-seven examples from the twentieth century but none for the seventeenth, eighteenth, or nineteenth centuries, despite the fact that the verb *suggest* is well attested in English from that time, as the following examples illustrate:

One idea may suggest another to the mind. (Berkeley 1709)

A certain kind of sound suggests immediately to the mind a coach passing in the street. (1764)

A search for quotations combining *evidence* and *show* has yielded twenty-one examples, beginning in the early nineteenth century, and a search for quotations containing *evidence* and *prove* has yielded thirty-two examples, beginning in the mid-seventeenth century.<sup>7</sup> The general trend seems to be clear: from *prove* to *show* to *suggest*. (A search at *Literature Online* has produced similar results for the combinations of *evidence* with *suggest*, *show*, and *prove*: *Prove* begins in 1635, *show* in 1719, and *suggest* in 1798.) In the COBUILD corpus, the frequency for the collocations *evidence suggests* is ten times higher than that of *evidence proves*, and in a Google search (August 27, 2008), twenty times higher.

Among qualitative assessments of *evidence*, the most frequent ones in present-day English (judging by both COBUILD and Google searches) include (in addition to *empirical evidence*) *clear evidence* and *hard evidence*. Of these two, the former goes back to the seventeenth century, although not necessarily in the same sense. The latter, however, appears to be quite recent. In the OED database, the earliest example of it is dated 1958, and in *Literature Online*, 1990.

The rise of the collocation *hard evidence* appears to be related to the advent of stage V in the semantic evolution of *evidence*, that is, of the stage in which *evidence* is linked with what people **say** rather than what they **think**. To see this, consider the following sentences from COBUILD, in which *hard evidence* cannot be substituted for *clear evidence*:

X-rays reveal **clear evidence** (\*hard evidence) of alteration in the underdrawing of both paintings.

From beneath the soil at Drumanagh, **clear evidence** (\*hard evidence) has emerged of a Roman coastal fort of up to forty acres.

Today's growing problems are **clear evidence** (\*hard evidence) that the end of this system of things is near.

The reason why *hard* cannot be substituted in these sentences for *clear* is this, I suggest: *hard evidence* implies that it is hard (difficult) to dispute something that somebody else is saying, whereas these sentences cannot be construed as referring to something that someone is saying. *Clear evidence* suggests here that people "can't not think" (because of what they see) that there was some alteration in the underdrawing of both paintings, that there was a Roman fort at Drumanagh, and that the end of a certain system of things is near. No one can raise objections to something that people can see; one can, however, object to

something that someone says. Whenever *evidence* can be construed as a possible objection to something that someone says, the phrase *hard evidence* can be used, implying that "it would be hard to say anything against it." Consider these examples from COBUILD:

Syria says it won't take action against any Palestinian group unless and until **hard evidence** linking it to the Lockerbie incident is presented.

These officials have yet to produce **hard evidence** to back up their assertion.

The most vexed issue in the Old Testament is the absence of **hard evidence** to substantiate the Israelites' exodus from Egypt . . .

In these examples, the implication is that if somebody challenges the assertion in question, evidence has to be produced—which would be hard for anyone to challenge in turn. The same applies to the "allegations" and the "view" in the following sentences:

The concern has been that there is little **hard evidence** around to prove allegations.  
Is there any **hard evidence** to support your view of yourself/the world/other people?

The allegations and the view can easily be challenged; to defend them, the first speaker has to come up with something that would be hard for anyone to dispute.

Both collocations, *hard evidence* and *clear evidence*, have a high frequency in present-day English (a Google search yields well over a million occurrences for each one). This suggests that stage V *evidence* coexists with stage IV *evidence* and that stage IV is still quite prevalent.

### 3.4. The New Discourse of *Evidence*

As I mention at the beginning of this chapter, English has now developed a rich new discourse of evidence based on the most recent (stage V) meaning of the word *evidence*. This discourse centers on supporting what one says (especially one's claims but also hypotheses, suggestions, and allegations) and challenging what somebody else says (especially someone's claims, assertions, hypotheses, and allegations). I illustrate this with a number of extended excerpts from Australian TV and radio programs, as well as media discussion forums, followed by brief comments.

1) *Lateline: TV current affairs program* (a debate between two journalists about the prime minister's case for Australia to go to war against Iraq [March 14, 2003])

TONY JONES [HOST]: Andrew Bolt, you've made the **claim** that **there is direct evidence**, so perhaps you can tell us what it is because the PM has been unable so far to provide to the Australian public that **direct evidence**. What is it?

ANDREW BOLT: I just did. There's been **evidence** of meetings in Sudan . . .

DAVID MARR: **What's the evidence?**

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### 3.6. Concluding Remarks: Semantics, Culture, and Society

The story of *evidence* told in this chapter is, of course, incomplete, and it raises a host of questions for future research. In particular, it is important to find out how the keyword *evidence* is used in different varieties of English (e.g., American English vs. British English), different registers (e.g., scientific, political, religious), different modalities (e.g., oral vs. written), different genres (e.g., public debates, interviews, informal academic discussions, encyclopedic exposition), and so on. It is also important to study in more detail the use of *evidence* in various thematic domains and diverse professional “languages”—for example, in legal discourse, medical discourse, philosophical discourse, and sociopolitical discourse.

Much more work also needs to be done on the semantic history of *evidence* and on the gradual emergence and differentiation of the discourse of evidence in different genres, registers, and varieties of English. The interaction between philosophical uses of *evidence* and its use in literature and everyday language in a variety of periods is also a fascinating subject for future study, as is the use of *evidence* in “new Englishes” such as Indian English and Singapore English.

But it is not the purpose of this chapter to say everything that can be said about *evidence* in relation to English and “Englishes,” and it would be foolish to try to do so. The focus of this chapter is on the meanings of the word *evidence* in a historical and cultural perspective and on the new discourse of evidence, which plays a fundamental role in modern English across a wide range of genres, registers, and domains. The topic addressed here is, I believe, of great interest and importance, both theoretical and practical, and while this study acknowledges its limitations, it does not seem necessary to apologize for them.

The study demonstrates, plainly and in detail, the close links between semantic change, cultural history, and the history of ideas, and it shows how these links can be studied in a rigorous and illuminating way through the use of a semantic methodology (NSM) particularly suited to the needs of cross-linguistic, cross-cultural, and cross-temporal research. It also shows how the unique Anglo concept of evidence—puzzling or even incomprehensible to cultural outsiders—can be explained in an intelligible way to learners of English who may need to master it to be able to flourish socially, academically, and professionally in the modern world.

In his study of a “semantic history of common sense” sociologist Frits van Holthoorn (1987, 102–103) writes:

The history of words, semantic history, seems to offer exciting possibilities of exploring unknown paths of historical culture, but endeavours in this field are very often disappointing. Either they remain lexicographical exercises from which no further-reaching conclusions can be drawn or they become arbitrary affairs because the author of such a study switches from the word (or term) he is studying

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The earliest that Locke comes with light and truth” (initially illustrate:

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An experimental evidence Moreover those . . . a Upon the clear evidence They then concluded of his being, as they For by endeavouring often-times smother'

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to the concept presumably underlying the word and then looks for other words presumably expressing that concept.

As this book (along with its predecessor, *English: Meaning and Culture*) demonstrates, the semantic history of words, especially cultural keywords, indeed offers exciting possibilities of exploring unknown paths of historical culture, but it needs an effective semantic methodology. Such a methodology is now available in the NSM approach to semantics in general and cultural and historical semantics in particular (cf. Bromhead 2009).

Summing up the historical investigation of *evidence* reported here, we can say that the emergence of the new concepts and the new discourses of evidence described here is the result of two distinct though related historical processes. One process can be summed up by the phrase “from certainty to doubt”; the other, in the phrase “from truth to empirical facts.”

The earliest occurrences of *evidence* implied clarity and certainty that Locke compared with bright sunshine. *Evidence* was then associated with light and truth. The “brightness” of truth was seen as the source of “evidence” (initially close in meaning to “evidentness”), as the following quotes illustrate:

Certain Truths, that have in them so much **light** or **evidence** . . . it cannot be hidden. (OED 1665)

When all things sensible are shut out, it is then that the Spirit enlarges . . . and sees by a **light** whose **evidence** is beyond that of the Sun. (*Literature Online* 1770)

Judging by the material in the OED and *Literature Online*, the collocation *the evidence of (its) truth* was common in the seventeenth and eighteenth centuries, rare in the nineteenth century, and no longer used in the twentieth. Here are a few examples:

An experimental **evidence** of this most known **truth**. (1633)

Moreover those . . . are a most pregnant **evidence** of this irrefragable **truth**. (1633)

Upon the clear **evidence** of **truth** and reason. (1662)

They then concluded, as he had intended they should, that he was drowned; those remains of his being, as they thought, but too sure **evidence** of that fatal **truth**. (1671)

For by endeavouring to perplex the Cause, and darken the **evidence** of **Truth**, a Man is often-times smother'd in his own Smoke. (1708)

The “evidentness” of some truths was seen as comparable to the “evidentness” of what one can see with one’s own eyes, and such luminously “evident” truths were not restricted to any particular domain or kind: the truths of faith or mathematical truths were described in terms of “evidence,” as was “the evidence of the senses.” It appears, however, that *evidence* gradually started to collocate less with *light* and *truth* and more with *facts*, as in the following examples from the OED:

The plain **evidence** of **facts** is superior to all declarations. (1769)

Authentic **facts**, and unquestionable **evidence**. (1782)

These **facts** are supposed to furnish pretty strong **evidence** that the organ described as oosporangium is a real oogonium. (1889)

Nothing that any psychologist may say about the general "mobbishness" of savages can weigh against the **evidence** of **facts** in such a case. (1975)

But although "the evidence of facts" was often seen as "strong," even "unquestionable," the certainty derived from factual (and ultimately sense-related) knowledge did not seem as absolute as that previously linked with faith, "mathematical truths," or indeed, an "ocular proof": as Locke put it, "certainty and demonstration, are things we must not, in these matters, pretend to" (Locke 1975 [1690], 557).

Locke's views on these matters were no doubt symptomatic of a wider mood of the British Enlightenment, and above all, they were themselves hugely influential: it is widely acknowledged that epistemic caution and modesty preached by Locke had an enormous impact on his contemporaries and on many subsequent generations of his readers (cf., e.g., Ashcraft 1991; Porter 2000). A cautious and epistemologically "modest" tone became a hallmark of modern Anglo discourse, especially in British English, but also more generally:

I am apt to doubt that, how far soever human industry may advance useful and experimental philosophy in physical things, *scientific* will still be out of our reach. . . . Distinct ideas of the several sorts of bodies, that fall under the examination of our senses, perhaps, we may have: but adequate ideas, I suspect, we have not of any one amongst them. And though the former of these will serve us for common use and discourse, yet whilst we want the latter, we are not capable of scientific knowledge; nor shall ever be able to discover general, instructive, unquestionable truths concerning them. *Certainty and demonstration*, are things we must not, in these matters, pretend to. (Locke 1975[1690], 556–57)

The semantic history of *evidence* is a good illustration of the more general trend "from certainty to doubt" and from "truth" to "matters of fact," "experience," and sense-related "empirical" knowledge.

The fact that in American English *evidence* is now used in the same cautious way and with the same frequency as it is in British English is an illustration of the pervasiveness of Lockean epistemological attitudes in modern Anglo discourse. For example, in the COBUILD's two corpora, UK books and US books, the frequency of *evidence* is roughly the same: 17 and 15 per million words, respectively.

Ironically, even a sworn opponent of British empiricism like Noam Chomsky strongly relies on the concept of evidence (and also empirical)—whether he is presenting his own theory or arguing against the empirical tradition. Here are some examples from *Language and Mind* (1972):

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(ibid.)

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This idealization must be kept in mind when one is considering the problem of confirmation of grammars on the basis of **empirical evidence**. (27)

The native speaker has acquired a grammar on the basis of very restricted and degenerate **evidence**; the grammar has **empirical** consequences that extend far beyond the **evidence**. (ibid.)

There is some **evidence** that a similar principle of cyclic application applies also on the syntactic level. (45)

**Evidence** in support of this approach is provided by the observation that interesting properties of English sentences<sup>4</sup> can be explained directly in terms of deep structures assigned to them. (106)

As these quotes (which can easily be multiplied) illustrate, one may consciously choose one philosophical attitude and oppose another, while at the same time unconsciously allowing some concepts created within that other tradition to shape one's own conceptual framework. This is often the way our native language influences our thinking even when we imagine that we are totally free and independent of it. The only way to truly liberate ourselves from such pressures (or to give in to them consciously) is to adopt a cross-linguistic approach to our own conceptual tools.

The philosophical underpinnings of different languages at the various stages of history are easy to miss because every language allows its speakers to choose between different philosophical positions. For example, one French philosopher may be an "empiricist" (in some sense of the word), and another, an "antiempiricist" (or a "rationalist"), and the same holds, of course, for British and American philosophers. Ergo (it is argued), there is no link between languages and philosophical orientations, and suggestions that there may be are often dismissed as groundless stereotyping (cf., e.g., Sériot 2005). For example, in *The Oxford Companion to Philosophy* the author of the entry on "empiricism," Alan Lacey (1995, 228), writes the following: "The traditional contrast between 'British empiricists' and 'continental rationalists' cannot be regarded as anything but a rough label of convenience, however true it may be that . . . empiricism in particular reached a zenith among the former."

There can be no quarrel with the statement that "British empiricists" and "continental rationalists" are "rough labels of convenience" if one acknowledges at the same time that "empiricism reached its zenith among the former." It should also be recognized, however, that this is not the whole story and that "British empiricism" left a profound mark on the English language. Given the present position of English as a global language, such philosophical and cultural underpinnings of this particular language are especially important to acknowledge. (For a fuller study of these underpinnings, see my *English: Meaning and Culture* (2006) and also my earlier studies such as Wierzbicka 2002a, 2002b, 2003b.)

In their history of scientific discourse "from the 17th century to the present," in a chapter titled "Argument in the 20th century," communication scholars Gross, Harmon, and Reidy (2002, 187) write:

To do science is to assert that a fact or a theory is true of the natural world and to defend that assertion. We call such assertions "knowledge claims." Any assertion is open to challenge: even for a statement as apparently innocent as "It rained today," the question can always be asked, **what is your evidence?** In our terminology, however, a knowledge claim is an assertion *explicitly* open to such challenge, one for which its author *must offer* appropriate **evidence**. (emphasis in bold added)

Thus, the question "what is your evidence?" is seen as crucial both in daily life and in science—but especially in science: the concept of science is defined here through the concept of evidence.

This is, indeed, a twentieth-century view—and one that depends on the English language (as it developed from the seventeenth century to the present).

At the risk of belaboring the point, I point out again that English makes a conceptual and lexical distinction between "evidence" (empirical and open to challenge) and "proof" (not necessarily empirical and in principal not open to challenge), whereas, for example, French and German do not and that, as Jeremy Bentham noticed nearly two centuries ago, in the word *evidence*, "the English language possesses an instrument of discourse peculiar to itself" (Bentham 1978 [1827] vol.1, 17). When we trace the semantic path of this word over several centuries, we see that the modern concept of evidence, seemingly so "scientific" and (one might imagine) universal, is in fact eminently "made in England" (cf. Malouf 2003) and that it is the product of a complex history of ideas, culture, and society.

Discussing the cultural baggage inherent in the English language, literary scholar David Parker warned of the ethnocentrism inherent in viewing English as culturally neutral:

Western modernity has a long history of discursively constructing itself, using vocabularies largely derived from the Enlightenment, as the template for the future of mankind. This is why it is so important to understand Western modernity not as a universal destiny but *as a particular historical formation*, with its own multifiliated traditions, and not least the vocabularies of disengaged rationality and universalism that are internal to these traditions. These, as we all know, can be precise and necessary instruments for the sciences, law, or administration, but to use them rather than be used *by* them requires an understanding of their history, as part of the "traditionary content" handed down through the English language. (Parker 2004, 31–32)

The concept of evidence is an important part of that "traditionary content" handed down through the English language. To use it rather than be used by it, one needs to recognize this fact and to reflect on its implications.

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