

(This is a penultimate version. The final version is due to be published in *Blackwell Companion to Epistemology* (3rd Edition). Please refer to the published version).

CROSS-LINGUISTIC STUDIES IN EPISTEMOLOGY

Davide Fassio & Jie Gao
Zhejiang University

THE CROSS-LINGUISTIC TURN IN EPISTEMOLOGY

Linguistic data are commonly considered a defeasible source of evidence from which it is legitimate to draw philosophical hypotheses and conclusions. Linguistic methods popular amongst philosophers include linguistic tests, standard and comparative semantic analysis, testing language usage and use frequency with the help of language corpora, and the study of syntactical structures and etymologies. Epistemologists have applied linguistic methods to a wide range of philosophical issues, including epistemic contextualism, epistemic norms of assertion and practical reasoning, the nature of know-how, whether beliefs are states or performances, whether belief is a weak or a strong attitude, and what kind of gradability is instantiated by theoretical rationality and epistemic justification. Traditionally epistemologists have relied almost exclusively on linguistic data from western languages, with a primary focus on contemporary English. However, in the last two decades there has been an increasing interest in cross-linguistic studies in epistemology.

Several factors may have contributed to what we may call a *cross-linguistic turn* in contemporary epistemology. One factor is the recent expansion and growing popularity of this discipline across most regions of the world, and in particular in South and East Asia. This is apparent when we consider the target languages of such studies, most of which focus on Asian languages such as Mandarin Chinese, Japanese, Sanskrit and Hindi. Another important driving force of this turn is attributable to the so-called *challenge from cross-linguistic diversity of epistemic terms* (Stich & Mizumoto 2018, Mizumoto 2020, Grundmann 2020: 228). This concerns the alleged existence of extensional differences between related epistemic locutions in different languages. Following Stich and Mizumoto (2018), a number of philosophers have questioned the truth of the following thesis:

(Universality Thesis) The properties of the English word ‘know’, English sentences of the form ‘S knows that *p*’, and related locutions that have been studied by Anglophone epistemologists are shared by the standard translations of these expressions in most or all languages (Stich & Mizumoto 2018: ix-x).

If the Universality Thesis turned out to be false, epistemic notions in English wouldn’t have exact analogues in other languages. Epistemic terms in different languages and their corresponding concepts would have different extensions and meanings. If so, there would be no guarantee that epistemologists using different languages would be talking and thinking about the same subject matter. For instance, the English verb ‘know’ is commonly translated in Mandarin by the word ‘知道’ (zhīdào). But arguably the extension of ‘know’ is much wider than that of ‘知道’—for example, only the former can express knowledge by acquaintance. Would a Chinese epistemologist asking ‘what is

knowledge?’ in her own language be raising a different question than the one a native English speaker would ask? Would they be theorizing about different concepts, and maybe utterly different mental states?

The above problem doesn’t merely affect the possibility of genuine communication across academic communities speaking different languages. It also threatens the status of epistemology as a discipline concerned with general metaphysical issues independent of specific languages and cultures. If the Universality Thesis turned out to be false, the choice of doing epistemology in English rather than in any other language would seem arbitrary. English epistemology would be just one of several language-relative epistemologies, each deprived of universal significance (although maybe worthwhile from a linguistic perspective). Moreover, the cross-linguistic diversity of epistemic terms would suggest that such terms are likely to be idiosyncratic aspects of a language, raising doubts on whether they pick out authentic features of our mental reality.

Cross-linguistic studies in epistemology might be even more interesting and valuable if the Universality Thesis were true. Suppose that some specific epistemic term ended up being universally inter-translatable and having similar linguistic properties in most languages. This would be a clue that the term plays a more fundamental role than others in our folk epistemology. The presence of terms with exactly the same meaning in most or all world languages could also be of deep metaphysical significance, suggesting that such terms refer to a common underlying reality—they would ‘carve nature at its joints’.

In this entry, we provide a brief overview of cross-linguistic data discussed by contemporary epistemologists and the philosophical debates they have generated. Our focus is on studies concerned with linguistic methods in a narrow sense. We set aside related research fields often discussed in connection to cross-linguistic studies, such as cross-cultural studies of ordinary folk intuitive judgments pursued in experimental philosophy, and anthropological studies falling under the label of ethno-epistemology (Maffie 2005; Mizumoto et al. 2020: Ch.8-10).

KNOWLEDGE

It is a familiar fact to most polyglots that the English words ‘knowledge’ and ‘to know’ can be translated by more than one term in most other languages. Just to mention a few examples, in French ‘know’ can be translated by either of two terms: ‘savoir’ and ‘connaitre’; in German by ‘kennen’ and ‘wissen’; in Japanese by ‘shitteiru’ and ‘wakatteiru’; in Sanskrit by ‘jñāna’ and ‘pramā’; in Mandarin by ‘知道’ (zhīdào), ‘认识’ (rènshi) and ‘了解’ (liǎojiě). These words are not precise synonyms of the English verb ‘to know’. They cannot be used in the same contexts, and thus do not have the same extension. Just to give an example, the French verb ‘savoir’, the German ‘wissen’ and the Mandarin ‘知道’ are used to translate propositional knowledge (‘I know that it is raining’) and cannot be used to express knowledge by acquaintance (‘I know Mary’).

This evidence can’t be explained by a lack of expressivity or an ambiguity specific to the English verb ‘know’. The problem of translatability of knowledge verbs occurs also between other languages. For instance, the Mandarin verb ‘了解’ cannot be perfectly translated by any of the other languages’ verbs listed above. This verb is sometimes used to express propositional knowledge, though of a deeper and more informative kind than the verb ‘知道’, akin to a sort of understanding. In some contexts, ‘了解’ expresses the process of finding out information. Sometimes this verb is also used to express acquaintance of a deep sort—for instance, when the object of ‘了解’ is a person, one knows well the person’s character, history and personality, and is able to predict the dispositions of that person (Arakawa et al. 2018: §4).

Some have taken these extensional differences as evidence against the Universality Thesis. Since epistemic terms expressing knowledge in different languages are not perfectly inter-translatable, they have different meanings and refer to different concepts. According to Mizumoto, these and similar data suggest that “there are multiple, different concepts of knowledge” (2018: 4).

One possible reply consists in claiming that such cross-linguistic differences are merely a matter of ambiguity of certain terms. By disambiguating the word ‘know’, we can identify a plurality of meanings, each mapping into specific words in other languages. We could then identify clusters of words in different languages having the same semantic content. For instance, words expressing acquaintance (‘connaître’, ‘kennen’, ‘认识’), propositional knowledge (‘savoir’, ‘wissen’, ‘知道’, ‘shitteiru’), and so on. We could then claim that these clusters of words are inter-translatable and share the same meaning.

However, things are not so simple. Even if we focus on clusters of verbs commonly used to translate a specific type of knowledge (acquaintance, propositional knowledge), we encounter semantic differences across languages *within these clusters*. As an example, consider words used to translate propositional knowledge in other languages. According to standard classifications based on lexical aspects of the verb, ‘know’ is a stative verb such as ‘love’ and ‘believe’, expressing a state or a stative condition (Vendler 1967). By contrast, the Japanese verb ‘shiru’ is a punctual verb such as ‘hit’ and ‘arrive’ (Arakawa and Mizumoto 2018; Iida 2018: 31-32; *cf.* Farese 2018). This verb expresses activity and change, and could also be translated by ‘get to know’ or ‘find out’. Moreover, the Mandarin ‘知道’ is also a stative verb, but it has even less strength of activity implication than its English counterpart. For instance, ‘知道’ doesn’t admit imperative forms such as “Know yourself!” (Arakawa and Mizumoto 2018: §6). Ganeri (2018: §2) also observes that the Sanskrit verbs for translating ‘know’ and expressing propositional knowledge, ‘jñāna’ and ‘pramā’, refer to cognitive episodes or events rather than dispositional states. These data point to translatability problems even within the small class of verbs used to express propositional knowledge in different languages. Similar issues arise for verbs translating other types of knowledge.

Some authors acknowledge the above cross-linguistic differences, but insist that there is a universal core meaning common to knowledge verbs of all languages in the world. An articulated defence of this view has been provided by proponents of the Natural Semantic Metalanguage (NSM) research program (Boguslawski 2002, Goddard and Wierzbicka 2014; Wierzbicka 2018; Goddard 2020; Farese 2018; see also Hannon 2015). Relying on a method of reductive paraphrase, the NSM program aims to identify an inventory of basic, indefinable and self-explanatory terms that have lexical equivalents in all human languages, on the basis of which the meanings of all other lexical terms can be analysed. These universal, cross-translatable, semantically primitive concepts are also called *semantic primes*. Their syntax seems to be universal as well, constituting a sort of cross-linguistic mini-language. NSM linguists consider this mini-language as “the irreducible core of all languages, which in turn reflects the irreducible core of human thought” (Wierzbicka 2006: 17).

So far empirical research in NSM has identified 65 semantic primes. KNOW is one of the terms in this list (other epistemically interesting primes are THINK, FEEL, SEE, HEAR, TRUE and MAYBE). Wierzbicka and Goddard argue that KNOW has four universal grammatical frames expressible by the sentences “I know”, “someone knows it”, “someone knows something” and “someone knows something about something”. Each of these frames appears to have equivalents in every language.

Wierzbicka (2018) and Goddard (2020) also provide a few observations that are particularly significant for contemporary epistemological debates. First, they observe that most languages have ‘know that...’ sentences expressing propositional knowledge. Nonetheless, these constructions are not primitive. They can be further

analysed into more basic terms (e.g., “I know that he did it” is reducible to: “it is like this: he did it” + “I know it”). Second, Wierzbicka (2018: 222-223) observes that the concept KNOWLEDGE has a much more restricted usage than KNOW. For instance, the sentence “I know what time it is” cannot be translated as “I have knowledge of what time it is”. The English word ‘knowledge’ expresses an abstract concept typically implying a public, goal-directed and valuable activity. ‘Knowledge’ is not as simple, indefinable and universal as ‘know’ and has counterparts in fewer other languages.

KNOWING-HOW

A contemporary debate in which philosophers have made extensive use of cross-linguistic evidence concerns the nature of knowing-how. This debate opposes intellectualists to anti-intellectualists. Intellectualists think that ‘knowing how’ attributions can be reduced to some kind of propositional knowledge (knowledge *that* something is the case). Anti-intellectualists deny such reduction and claim that ‘knowing how’ attributions express skills, abilities or dispositions that cannot be fully explained in terms of propositional knowledge.

Stanley and Williamson (2001; see also Stanley 2011) have provided a powerful defence of intellectualism. According to these authors, ‘knowing how to do something’ is (roughly) the same as ‘knowing *that* such and such is a way to do that thing’. Their arguments partially rely on standard semantic analyses of English ‘know how’ constructions. For instance, Stanley (2011) argues that intellectualism is supported by the syntax and semantics of embedded how-questions in sentences of the form “S knows how to ϕ ”.

Stanley and Williamson’s approach focuses primarily on linguistic considerations about English expressions. However, several philosophers, including Stanley himself, have examined the issue from a cross-linguistic perspective. Some have argued that linguistic analyses of the expressions translating ‘know how’ in other languages do not support Stanley and Williamson’s conclusions (Rumfitt 2003, Wiggins 2012, Douskos 2013, Ditter 2016). For instance, in languages as diverse as French, Russian and Turkish, knowing how ascriptions do not appear to involve embedded how-question constructions. These philosophers conclude that the linguistic evidence provided by Stanley is not robust enough to draw metaphysical conclusions about the nature of knowledge-how. In response, Stanley (2011) acknowledges a certain degree of cross-linguistic variation, but holds that these differences are superficial. They do not extend to a deeper semantic level. For instance, Stanley observes that also in languages in which practical knowledge is not expressed by sentences that involve an embedded question, it is easy to provide a compositional semantics that involves an embedded question for that language (2011: 135-138).

Against intellectualism, it has also been argued that although in many languages there are constructions analogous to the English ‘know how’, not all English sentences of the form “S knows how to ϕ ” can be translated in such languages with equivalent expressions involving the verb ‘know’. For instance, Wierzbicka (2018: 241) observes that the equivalent of a ‘know how’ expression in Polish can be used to translate practical knowledge that can be explained verbally (“I know how to open it”), but not for non-verbalizable skills (“I know how to swim”). In many languages, some English sentences of the form “S knows how to ϕ ” can only be translated using verbs expressing ability (e.g., the Mandarin ‘会’ (hùi) and ‘用’ (yòng)).

The current debate reflects the same kind of dialectic we witnessed in the previous sections. On the one hand, we have philosophers who accept a certain inter-translatability and uniformity of meaning of ‘knowing how’ ascriptions across different languages (e.g., Stanley 2011: 132). On the other hand, we have philosophers that deny

the Universality Thesis and argue for a cross-linguistic and cross-cultural conceptual fragmentation (e.g., Tsai and Lien 2018, Mizumoto, Tsugita & Izumi 2020).

BELIEF

We have seen that it is debated whether there is a universal core meaning common to knowledge verbs of all world languages. This is clearly not the case for other terms expressing mental attitudes such as belief and confidence. There is robust cross-linguistic evidence that the English notion of belief doesn't have counterparts in many other languages. For instance, Chad Hansen (1992: 44) argues that there is no correct translation of 'believe' in ancient Chinese. Similarly, Iida (2018: 23, 27-28) argues that the words used to translate 'believe' in contemporary Japanese cannot be naively identified with the corresponding English term. Iida claims that the Japanese verbs commonly used to translate 'belief' and 'believe'—'shinnen' and 'shinjiru'—sound strange when used in relation to ordinary beliefs. Such terms are rather used to express one's life principles or deep convictions. Moreover, the verb 'shinjiru', like the knowledge verb 'shiru', is not stative but punctual, expressing activity and change. As Maffie observes, "[p]eople in other cultures appear to employ different folk psychologies when characterizing their mental states [...], and these folk psychologies need not include belief. [...] Belief is simply not a useful notion in representing the mental states of individuals in (at least some) other cultures" (2005: §2.iv.c; see also Needham 1972: 217).

Authors in the NSM program also agree that epistemic verbs such as 'believe', 'suppose', 'guess' and 'understand' are English-specific and not cross-translatable into most world languages (Wierzbicka 2006: ch.7, Goddard 2003, 2020). Even when we can find translations of these terms in dictionaries, often the respective meanings do not fully coincide. 'Believe' has "a highly language-specific set of meanings, complicated patterns of polysemy, and a complicated grammatical profile" (Goddard 2020: 140). There is however another verb expressing mental attitudes that NSM theorists classify as a universal prime: this is the verb 'think' used in non-parenthetical expressions such as "someone thinks this". 'Think' is much weaker than 'believe': while the latter conveys a considered conviction or commitment, the former is used to express mere personal opinion and lack of knowledge, it conveys subjective uncertainty and doesn't lay claim to the possession of evidence (Goddard 2003; Wierzbicka 2006: 37-38; 2018).

Notably, some philosophers have recently challenged the idea that the English verb 'believe' expresses a strong kind of attitude such as a conviction, a commitment or the inner counterpart of knowledge (Hawthorne et al. 2016). They argue that belief attributions express a weak kind of attitude akin to 'think' and 'guess', whose attribution requires relatively low degrees of confidence and low evidential standards. There is some linguistic evidence that verbs expressing belief in other languages, such as the Mandarin '相信' (xiāngxìn), are as weak as their English counterpart. These data may provide further grounds for assimilating 'believe' to other weak attitudes such as the universal prime 'think', and suggest that the strong notion of belief may ultimately be a technical term without counterparts in any natural language.

EPISTEMIC SOURCES AND APPRAISALS

Contemporary epistemology is also concerned with the sources and methods by which we acquire knowledge, and

the normative standards we use to assess epistemic standings such as beliefs and hypotheses. Epistemologists have surprisingly neglected cross-linguistic data relevant to such topics. This is unfortunate, since here we find quite significant differences between English and most other languages.

The English language has specific words denoting a wide variety of *epistemic appraisals*. An incomplete list includes ‘correct’, ‘accurate’, ‘justified’, ‘rational’, ‘reasonable’, ‘reliable’, ‘warranted’, ‘safe’, ‘plausible’, and ‘probable’. English also has specific words expressing *sources of knowledge*, such as ‘evidence’, ‘experience’ and ‘senses’. It also includes an exceptionally large repertoire of epistemic adverbs expressing nuanced differences in one’s epistemic standing, such as ‘obviously’, ‘seemingly’, ‘conceivably’, ‘apparently’, ‘allegedly’, ‘supposedly’, ‘reportedly’, ‘arguably’, ‘presumably’ and ‘certainly’. Though some of the words listed above are occasionally used by academics in a technical sense, they correspond to terms often used by ordinary English speakers.

The wide range and conceptual richness of epistemic terms available in contemporary English don’t have a parallel in any other language. Most of the words listed above are either untranslatable or do not have precise translations in most other languages (Wierzbicka 2006, 2010; Goddard 2020), including in European languages close to English. For instance, most of the epistemic adverbs listed above do not have precise translations even in close languages such as German and Dutch (Wierzbicka 2006: 247-249). The same is true for terms such as ‘evidence’ and ‘common sense’, which do not have precise translations, not just in unrelated language families, but even in related ones such as French and Italian. Wierzbicka (2006: 31) also observes that there are no words corresponding to ‘accurate’ and ‘accuracy’ in German or French.

Even more strikingly, the words ‘justification’ and ‘justified’, so commonly used by English-speaking epistemologists, are completely absent in most other languages. In epistemology books and manuals, these terms are often translated with neologisms (e.g., the Mandarin ‘确证’ (quèzhèng) for ‘justification’). Ganeri goes so far to claim that “justification is a parochial feature of a way of thinking rooted in English lexical quirks” (2018: 15).

Wierzbicka (2006: §§2.3-2.4; 2010: §1.3) has argued that such a peculiar abundance of epistemic terms in modern English should be primarily ascribed to the extraordinary and profound influence of 18th-century British empiricism (most notably John Locke’s *Essay Concerning Human Understanding*) and the scientific revolution on the English language and culture (see also Yolton 1977: 8).

While many other languages lack terms expressing specific epistemic assessments and sources of justification such as evidence and experience, most languages can express detailed information about these properties in alternative ways. Lisa Matthewson and Jenifer Glougie have argued that “[i]n many languages, justification is tracked by (certain types) of evidentials” (2018: 149). Evidentials are grammatical elements in a language that encode information about the evidence that a speaker has in support of a certain statement (Aikhenvald 2004). This information may concern several aspects of evidence, such as its source (perception, testimony, inference) or its degree of reliability, trustworthiness or certainty.

In some languages, evidentials are encoded in the grammar in an obligatory way. For instance, in Cuzco Quechua and Nivacle one cannot assert a proposition such as “it’s raining now” without indicating by means of specific grammatical constructions what type of access the speaker had to the fact (whether she witnessed the rain herself, inferred it, or was told about it). In most other languages, evidential information can be optionally expressed through lexical markers such as modal verbs (e.g., ‘must’, ‘may’), adverbial markers (e.g., ‘reportedly’, ‘allegedly’, ‘obviously’) or phrases (e.g., ‘it seems/looks like/appears/turns out/is said that’, ‘I think/see/conclude that’, ‘as I can see’, ‘as far as I understand’). For example, according to von Stechow and Gillies (2010: 3), the modal ‘must’ can signal that the speaker has reached a certain conclusion via an indirect inference. It is inappropriate to say

“it must be raining” for someone who has just directly witnessed or received a trustworthy report that it is raining. In contrast, it seems appropriate to say this when one reaches the conclusion that it is raining through inferential reasoning (“if Barcelona didn’t lose and didn’t win, it must have drawn”). Similarly, Glugie (2016) and Matthewson and Glougie (2018: 161-162) argue that adverbs such as ‘actually’ indicate that the speaker has reliable evidence for her statements, while ‘supposedly’ and ‘apparently’ mark evidence acquired by reasoning, inference or not fully trustworthy reports.

Several scholars have suggested that evidentials can be classified on the basis of the marked information source. Moreover, it has been pointed out that types of information sources can be ranked on a reliability scale which is reflected by the uses of evidentials. These uses indicate that common and culturally shared knowledge and personal experience (vision, testimony, memory, inner experience) are considered more reliable than other forms of direct sensory non-visual experience (e.g., auditory, tactile) and reported evidence (hearsay and direct specific quote), which in turn are considered more reliable than inference from indirect evidence (Aikhenvald 2004).

Importantly, the use of evidentials and the reliability scales that they convey seem to be common to most languages of the world. This strongly suggests that sources of knowledge and justification are tracked and ranked in parallel ways across different languages. Matthewson and Glougie (2018) take these cross-linguistically recurrent patterns as *prima facie* evidence in support of similar ways of conceptualizing justification and knowledge across cultures. This however doesn’t yet vindicate the Universality Thesis, since different languages express attitudes toward information and knowledge in strikingly different ways (Chafe & Nichols 1986: vii), using different and hardly cross-translatable terms.

THE RELEVANCE OF CROSS-LINGUISTIC STUDIES FOR EPISTEMOLOGY

In the introductory section we have already discussed one main reason why epistemologists should care about cross-linguistic analyses, namely, the threat posed by the challenge from cross-linguistic diversity of epistemic terms. As shown in the previous sections, the jury is still out on how the challenge should be resolved. Some linguistic evidence speaks against the inter-translatability of most epistemic terms across many languages. Other data suggests the existence of universal core epistemic notions shared by all languages.

In response to the challenge, some philosophers have suggested that we should endorse a pluralistic perspective allowing a variety of language-specific epistemologies (Mizumoto 2018). Others have embraced a radical scepticism about the relevance of linguistic data for epistemological theorizing (Hazlett 2018), possibly accompanied by a revisionist stance on epistemic folk concepts (Carnap 1950, Grundmann 2020). Alternatively, one may propose a monist approach appealing either to some kind of superiority of one specific language, or to the practical necessity of a standardized and universal linguistic framework in philosophy and science.

Besides the challenge from cross-linguistic diversity, there are also other reasons why epistemologists should be interested in cross-linguistic analyses of epistemic terms. First, comparative linguistic analyses may provide evidence that certain concepts (and their corresponding properties) are more fundamental than others. If a term finds quite precise translations in the most diverse world languages, chances are that it picks out some authentic feature of our mental reality. Conversely, the untranslatability of a term in most languages may be a clue that the term is an idiosyncratic feature of a specific language, and that the corresponding concept fails to ‘carve nature at its joints’. For instance, data from the NMS program suggest that the concept of knowing is deeply rooted in most languages and cultures, while believing and justification seem to be English-specific quirks. This, on the one hand, may provide

further evidence that knowledge shouldn't be analysed in terms of justified belief (Williamson 2000); on the other hand, these data may suggest that the notions of belief and justification don't capture essential aspects of human mental life, and maybe shouldn't occupy the centrality commonly attributed to them in contemporary epistemology.

Second, philosophers could use cross-linguistic analyses to enrich and make more precise the conceptual frameworks they use in epistemology. Instead of thinking of languages as competitive models of how the world could be, we can take them as maps approximating certain aspects of reality. Some of them are more precise or richer than others; some are equipped with better conceptual tools. The expansion of philosophical terminology with an enriched cross-linguistic vocabulary could enable us to draw more fine-grained and precise distinctions and enhance our conceptual schemes, providing more accurate and insightful explanations of the epistemic reality. In the previous section we stressed the incomparable richness and depth of English-specific folk terminology in describing epistemic sources and appraisals. Conversely, we saw how other languages use different terms to denote different kinds of knowledge, providing more fine-grained representations of our epistemic attitudes. Instead of regarding linguistic and conceptual diversity as an obstacle to communication or a limit to philosophical theorizing, we could consider it an opportunity to enhance our theories and better understand the world and ourselves.

While epistemologists have traditionally been interested in linguistic analyses, they have almost systematically neglected cross-linguistic data until recent years. The debates surrounding cross-linguistic studies in epistemology are relatively new, though they are quickly gaining popularity. A lot of work in this field remains to be done. Philosophers have focused on only a fraction of the relevant literature in comparative linguistics. Moreover, cross-linguistic approaches in epistemology shouldn't be considered in isolation, but informed by related cross-cultural research programs in experimental philosophy and ethno-epistemology. We cannot but agree with Mizumoto and Stich that "epistemologists [...] should pay much more attention to the epistemic language and epistemic concepts that prevail in cultures around the world. Cross-linguistic and cross-cultural analysis of epistemic terms, sentences, and concepts has a crucial role to play in philosophical epistemology" (2018: xii).

REFERENCES

- Aikhenvald, A. (2004) *Evidentiality*. Oxford University Press.
- Arakawa, K. & Mizumoto, M. (2018). Multiple Chinese Verbs Equivalent to the English Verb "Know". In Mizumoto, M. & Al. (eds.), *Epistemology for the rest of the world*. Oxford University Press.
- Boguslawski, A. (2002). There is Go Getting Round Gettier. *Journal of Pragmatics* 34(8): 921-937.
- Carnap, R.(1950). *Logical Foundations of Probability*. Chicago: The University of Chicago Press.
- Chafe, W. & Nichols, J. (1986). Introduction. In W. Chafe & J. Nichols (eds.), *Evidentiality: the linguistics coding of epistemology*, pp. vii-xi. New Jersey: Ablex Publishing Co.).
- Ditter, Andreas (2016). Why Intellectualism Still Fails. *Philosophical Quarterly* 66 (264):500-515.
- Douskos, Christos (2013). The linguistic argument for intellectualism. *Synthese* 190 (12):2325-2340.
- Farese, G., M. (2018). Is KNOW a Semantic Universal? *Shiru, wakaru* and Japanese Ethno-epistemology. *Language Sciences* 66: 135-150.
- Ganeri, J. (2018). Epistemology from a Sanskrit Point of View. In Mizumoto, M. & Al. (eds.), *Epistemology for the rest of the world*. Oxford University Press.
- Goddard, C. (2003). 'Thinking' Across Languages and Cultures: Six Dimensions of Variation. *Cognitive Linguistics* 14(2-3): 109-140.
- Goddard, C. (2020). Overcoming the Linguistic Challenges for Ethno-Epistemology: NSM Perspectives. In Mizumoto, M. & Al. (eds.), *Ethno-Epistemology: New Directions for Global Epistemology*. Routledge.

- Goddard, C. & Wierzbicka, A. (2014). *Words and Meanings: Lexical Semantics Across Domains, Languages and Cultures*. Oxford University Press.
- Grundmann, T. (2020). Conceptual Construction in Epistemology: Why the Content of Our Folk Terms Has Only Limited Significance. In Mizumoto, M. & Al. (eds.), *Ethno-Epistemology: New Directions for Global Epistemology*. Routledge.
- Hannon, M. (2015). The Universal Core of Knowledge. *Synthese* 192 (3):769-786.
- Hazlett, A. (2018). Theory of Knowledge Without (Comparative) Linguistics. In Mizumoto, M. & Al. (eds.), *Epistemology for the rest of the world*. Oxford University Press. pp. 251-266.
- Hawthorne, J., Rothschild, D. & Levi, S. (2016). Belief is weak. *Philosophical Studies* 173 (5):1393-1404.
- Iida, T. (2018). Knowledge and Belief Through the Mirror of Japanese. In Mizumoto, M. & Al. (eds.), *Epistemology for the rest of the world*. Oxford University Press.
- Maffie, J. (2005). Ethnoepistemology. *Internet Encyclopedia of Philosophy*.
- Matthewson, L. & Glougie, J. (2018). Justification and Truth: Evidence from Languages of the World. In Mizumoto, M. & Al. (eds.), *Epistemology for the rest of the world*. Oxford University Press. pp.149-186.
- Mizumoto, M. (2018). Introduction. In Mizumoto, M. & Al. (eds.), *Epistemology for the rest of the world*. Oxford University Press.
- Mizumoto, M. (2020). Introduction. In Mizumoto, M. & Al. (eds.), *Ethno-Epistemology: New Directions for Global Epistemology*. Routledge.
- Mizumoto, M., Ganeri, J. & Goddard, C. (2020). *Ethno-Epistemology: New Directions for Global Epistemology*. Routledge.
- Mizumoto, M., Tsugita, S & Izumi, Y. (2020). Knowing How and Two Knowledge Verbs in Japanese. In Mizumoto, M. & Al. (eds.), *Ethno-Epistemology: New Directions for Global Epistemology*. Routledge.
- Needham, R. (1972). *Belief, Language, and Experience*. Oxford: Blackwell.
- Rumfitt, Ian (2003). Savoir Faire. *Journal of Philosophy* 100 (3):158-166.
- Russell, B. (1914). *Our Knowledge of the External World*. Chicago and London: Routledge.
- Stanley, Jason & Williamson, Timothy (2001). Knowing How. *Journal of Philosophy* 98 (8):411-444.
- Stanley, Jason (2011). *Know How*. Oxford University Press.
- Stich, S. & Mizumoto, M. (2018). Manifesto. In Mizumoto, M. & Al. (eds.), *Epistemology for the rest of the world*. Oxford University Press.
- Tsai, C. & Lien, C. (2018). On How to Defend or Disprove the Universality thesis. In Mizumoto, M. & Al. (eds.), *Epistemology for the rest of the world*. Oxford University Press.
- Vendler, Z. (1967). *Linguistics in Philosophy*. Ithaca: Cornell University Press.
- von Stechow, K. & Gillies, A. (2010) "Must ... Stay ... Strong!" *Natural Language Semantics* 18: 351-383.
- Yolton, John W. 1977. *The Locke reader: Selections from the works of John Locke*. Cambridge: Cambridge University Press.
- Wiggins, David (2012). Practical Knowledge: Knowing How To and Knowing That. *Mind* 121 (481):97-130.
- Wierzbicka, A. (2006). *English: Meaning and Culture*. Oxford University Press.
- Wierzbicka, A. (2010). *Experience, Evidence, Sense: The Hidden Cultural Legacy of English*. Oxford University Press.
- Wierzbicka, A. (2018). I KNOW: A Human Universal. In Mizumoto, M. & Al. (eds.), *Epistemology for the rest of the world*. Oxford University Press. pp. 2015-250.