The Brain, Language, and Literature

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The 21st century has been referred to as "The Era of the Brain" and modern technologies such as fMRI and PET are providing new insights into the functioning of the brain. In this lecture I would like to introduce some of the secrets of the brain hidden in our languages and literature. To offer a better understanding, first I would like to introduce the fundamental anatomy of the brain and its core functions. And then I would like to show how certain secrets of the brain are hidden in various expressions in great works of William Shakespeare, Samuel Johnson and William Blake.

In the play *Romeo and Juliet*, Shakespeare vividly illustrates Romeo's falling in love at first glance, and he clearly seems to observe that vision is the most sensitive sense for falling in love among five senses of vision, hearing, smell, taste, and touch.

In the History of Rasselas, Prince of Abissinia, Samuel Johnson illustrates how blind love is. You may also see various expressions of blinded love in many plays of Shakespeare. Recent fMRI experiments confirm the validity of expressions such as 'love is blind' and 'one cannot love and be wise.'

In the play *Hamlet*, King Claudius, Hamlet's murderous uncle, confesses his crime being seized with pangs of guilt, and says, "O, my offence is rank, it smells to heaven." Recent brain studies show that with feeling of guilt, smell is the most sensitive sense relevant to our emotion among five senses.

In the play *Henry IV*, Prince Hall makes his mind to change his character. Is it possible to change one's skin? In the play *Richard III*, the King Richard III schemes to usurp the crown, but he does not feel any guilt for his immoral actions. In fact, he is portrayed as a typical psychopath, who seemingly kills not for revenge or out of hatred, but just for sport, lacking any sense of right or wrong. Recent brain researches as well as the incident of Phineas Gage show that damage to the frontal lobe of brain may lead to such sociopathic behavior. Even though Shakespeare does not have any knowledge of the brain, he seems to clearly understand the behavior of psychopaths.

In *Songs of Innocence: In Another's Sorrow*, William Blake illustrates good examples of empathy. In the play *Henry V*, you may see the King Henry V's brilliant speech encouraging his troops before the battle of Honfleur against French army. Recent brain researches show that the mirror neurons are relevant to our feeling of empathy as well as to our image training. In fact, it was proven that brain-imaging training or rehearsal beforehand may enhance the quality of those movements.

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Typology of Motion Event Descriptions Revisited: A Crosslinguistic Experimental Study Yo Matsumoto (Kobe University)

Based on the patterns language describes a motion event, Talmy (1991) has claimed that languages can be classified according to the syntactic positions at which path of motion is coded. Revisions of this view have been proposed by Matsumoto (2003), Slobin (2004), Croft et al (2010) and others, questioning 1) the exhaustivity of the types found, 2) the validity of language classification instead of construction classification, 3) the notion of clausal integrity assumed, etc.

In this talk I will discuss the issues related to the typology of motion event descriptions in terms of data collected through Ninjal-Kobe Project on Motion Event Descriptions. This project has examined the data elicited through the identical video clips depicting varipus motion events. Unlike most of the similar experiments that looked at only manner and path, this experiment looked at scenes that differ in manner, path and deixis. Results of 27 clips involving three different manners (Walking, Running, Skipping), three different paths (To-path, Into-path, Up-path), and three different deictic directions (Toward the speaker, Away from the speaker, Neutral) are examined, in additional to video clips for caused motion events. The languages covered are: (English, German, French, Italian, Russian, Hungarian, Mongolian, Japanese, Newar, Chinese, Thai, Tagalog, Yup'ik, Kupsapiny, Sidaama, Kiswahili, and Japanese Sign Language (JSL).

There are three major findings we would like to focus in this presentation. First, languages differ markedly in terms of the complexity of sentences describing a motion event, with not all languages integrating aspects of motion events into a single clause. While almost all speakers of English, German and Russian consistently use a single, simple clause to describe all motion events, other languages like Italian and French shift to multiverbal structures to describe a skipping event and calling event (caused motion by a verbal means).

Second, there are intralinguistic variations as to the location of path coding; languages can shift from adnominal and adverbal (i.e., head-external) coding of path to main-verb (i.e., head) coding of path depending on the particular path categories expressed, or on the types of motion events described (self-motion or caused motion). For example, Up-path tends to be coded in the head verb more often than Into-path and especially To-path, a phenomenon found in Kupsapiny, French, Italian, Newar, and Kiswahili. The third tendency (concerning path) above allows mixed patterns for languages like Italian, which use

the main verb (head) coding of Up-path, but which tend to code Into- and To-paths in terms of prepositions. The use of the main verb for Up-path is especially frequent when the manner involved is walking and the deictic direction involved is other than venitive.

Third, languages very often express deixis in a way different from other path categories, and the special treatment of deixis results in different typological classifications of languages. For example, Newar tends to code deixis in the main verb (=head), allowing Path and Manner to be expressed in head-external elements.

These findings are discussed in relation to revised versions of the typology of motion event descriptions.

- Croft, William, Johanna Barddal, Willem Hollman, Violeta Sotirova, and Chiaki Taoka. 2010.

 Revising Talmy's typological classification of complex events. *Contrastive construction grammar*, ed. Hans Boas, 201-35. Amsterdam: John Benjamins.
- Talmy, Leonard. 1991. Path to realization. *BLS 17*, pp. 480-519.
- Matsumoto, Yo. 2003. Typologies of lexicalization patterns and event integration: Clarifications and reformulations. In Shuji Chiba et al. eds., *Empirical and Theoretical Investigations into Language*, pp. 403-418. Tokyo: Kaitakusha. Reprinted in Adele Goldberg, ed., *Cognitive Linguistics* (Critical Concepts in Linguistics), Vol. III, 2011, pp. 422-439. London & New York: Routledge.
- Slobin, Dan I. 2004. The many ways to search for a frog: Linguistic typology and the expression of motion events. In Sven Strömqvist and Ludo Verhoeven, eds., *Relating*. *Events in Narrative: Typological and Contextual Perspectives*. pp. 219-257. Mahwah, NJ: Lawrence Erlbaum Associates.

Biblical English as a Linguistic Corpus

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Biblical English contains useful, suggestive and noteworthy data which can help explain or trigger new analysis of linguistic phenomena. If complex factors reside in biblical English, it is because it is translated English. My speech will focus on this aspect.

Biblical translations to the vernacular began in the OE period, and countless revisions and new translations have been produced since then. At the same time expressions appearing in the translations have been quoted and referred to in various ways in all sorts of fields and settings, so that many expressions in the biblical languages have left their linguistic marks on English usage beyond the confines of the Bible translations. Some of these expressions have been absorbed into English as they had linguistic structures similar to those found in English, and some have appeared in English wearing the linguistic coats of English, though their original functions differ from those of their English counterparts. Through these practices some biblical expressions, such as by the skin of one's teeth, have been fully assimilated into English. In other words, biblical translators brought multifarious coinages and phraseology into English.

The following are citations from modern translations. We can derive adequate explanations for the constructions of these sentences from English grammar. But the analysis also shows that the syntax of the original language is underlying each of the phrases underlined below.

(1) And God said unto Jacob, 'rise, go up to Beth-el, and dwell there: ...'

New Cambridge Paragraph Bible. Genesis 35:1

- (2) Come and let us sell him to the Ishmaelites, New King James Version. Genesis 37:27
- (3) My lord <u>asked</u> his servants, <u>saying</u>, 'Have you a father or a brother?'

New Revised Standard Version. Genesis 44:19

- (4) The king spoke and said to the wise men of Babylon, "Any man who can read this inscription and explain its interpretation ..." New American Standard Bible. Daniel 5:7
- (5) if they muster against me and attack me, <u>I</u> shall be destroyed, <u>I</u> and <u>my household</u> with me.

 New English Bible. Genesis. 34:30
 - (6) In the fortieth year of the reign of David they were sought, and there were found among them capable men at Jazer of Gilead.

 New King James Version. 1 Chronicles 26:31
 - (7) And it shall be, when the LORD brings you into the land of the Canaanites and the Hittites and the Amorites and the Hivites and the Jebusites, which He swore to your fathers to give you, a land flowing with milk and honey, that you shall keep this service in this month.

New King James Version. Exodus 13:5

The citations above are direct translations from the original language. Conversely, the translations below are made indirectly from the Latin of the Vulgate in the OE and the ME periods. The value of (7) is that it seems to be an explanation for the development of the cognate object, to which Visser (1970: 415) refers, while examples (8a) and (8b) seem to illustrate an important stage in the development of the relative clause. However, within all of these examples we also find traces of the syntax of the original language. From a different point of view, it may be said that English had the syntactic capacity to incorporate these constructions.

- (7) <u>life</u> he <u>lýfað</u> ¬ na ne swýlteð, Poenitentiale Ecgberti, Archiepiscopi Eboracensis. P. 363. Quote from Ezekiel 18:21
- (8a) Thou hast ageen bozt the zerde of thin eritage; the hil of Sion in whiche thou dwellidist in it.

Earlier Version of the Wycliffite Bible. Psalms 73:2

(8b) Thou azenbouztist the zerde of thin eritage; the hille of Syon in which thou dwellidist ther ynne

Later Version of the Wycliffite Bible. Psalms 73:2

When factors as complex as those shown above are sorted and classified by category, they may provide useful and important data that can help explain linguistic phenomena. I will attempt to demonstrate that, when analyzed appropriately, biblical data can play a role.

References

Denison, D. and R. Hogg (eds.). 2006. A History of the English Language. Cambridge: CUP.

Hammond, Gerald. 1988. Making of the English Bible. Manchester: Carcanet New Press.

Hashimoto, Isao. 2008. "Hebraisms in English Bibles" *Studies in English Medieval Language and Literature*. Frunkfurt am Main: Peter Lang. Vol. 22. PP. 2-15.

Norton, David. 2000. A History of the English Bible as Literature. Cambridge: CUP.

Thorpe, Benjamin (ed.). 1840. *Poenitentiale Ecgberti, Archiepiscopi Eboracensis* in *Ancient Laws and Institutes of England*. The Commissioners on the Public Records of the Kingdom. PP. 362-92.

Visser, F. Th. 1970-73. An Historical Syntax of the English Language. 3 vols. Leiden: E.J. Brill.

Waltle, B.K. and M. O'Connor. 1990. An Introduction to Biblical Hebrew Syntax. Indiana: Eisenbrauns.

Bibles Cited

Earlier Version of the Wycliffite Bible and Later Version of the Wycliffite Bible = The Holy Bible: Containing the Old and New Testaments, with the Apocryphal Books in the Earliest English Versions Made from the Latin Vulgate by John Wycliffe and His Followers. Rep. 1982. New York: AMS Press.

New American Standard Bible = New American Standard Bible: Containing the Old and New Testaments. 1995. Cambridge: CUP.

New Cambridge Paragraph Bible, The. (ed.) David Norton. Rev. 2011. Cambridge: CUP.

New English Bible, The. 1970. London, New York: OUP, CUP.

New King James Version = The New King James Version Containing the Old and New Testaments. 1982. Nashville, Camden, New York: Thomas Nelson.

New Revised Standard Version = The Holy Bible: New Revised Standard Version. 1999. Oxford: OUP.

On NP-Ellipsis in Kyushu and Shikoku Dialects

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Bae (2012) claims that examples like (1) are cases with pronominal ga without NP-ellipsis:

(1) [DP Taroo-no taido]-wa ei kendo, [DP **Hanako-no ga**]-wa yoonai.

Taroo-gen attitude-top good though Hanako-gen one-top good-not

'lit. Though Taroo's attitude is good, Hanako's one isn't.' (Bae 2012: Shikoku [Kochi] dialect) However, Maeda and Takahashi (2013: M&T henceforth) find that in sentences of the type in (1), the scopal relation between quantifiers within the DP in the first conjunct must be maintained in the second conjunct. For example, the scopal relation between 'one' and 'most' in (2a) must be retained in (2b).

- (2) a. [taitei-no soshiki-kara-n [ajia-n ikka-koku-n dattai]]-wa most-gen organization-from-gen Asia-gen one- country-gen withdrawal-top mitomerareta kedo,

 was approved though (one >/< most)
 - 'lit. Though from most organizations one Asian country's withdrawal was approved,'
 - b. [yooroppa-n ikka-koku-n to]-wa mitomerarenakatta.

Europe-gen one country-n one-top was not approved (one >/< most)

'lit. one European country's one was not approved.' (M&T: Kyushu [Nagasaki] dialect)

Under the assumption that the presence of scopal parallelism is the result of ellipsis operation, NP-ellipsis must be involved in (2b). Consequently, we now need to explain the fact that NP-ellipsis has taken place in (1) and (2b), but *ga* and *to* have "escaped" from the domain of NP-ellipsis.

M&T argue that the pronominal elements under question are different phonological realizations of E-feature (Merchant 2001) residing in n, as illustrated in (3):

(3) $[_{DP} \dots [_{nP} \underbrace{NP} [_n \text{ ga/to}]]$

In (1) and (2b), the presence of ga and to signals the presence of E-feature, triggering NP-ellipsis.

Notice that under M&T's proposal, the subject DP involving a relative clause in (4) may have the structure in (5), with the NP *syujyutsu* 'operation' elided:

(4) **kinoo okonawareta to-**wa kantan-yatta.
yesterday was performed one-top simple-was
'The one that was performed vesterday was simple.'

'The one that was performed yesterday was simple.' (Kyushu [Nagasaki] dialect)

- (5) $[_{DP} [_{Relative Clause} \text{ kinoo okonawareta}] [_{nP} [_{NP} \frac{\text{syujyutsu}}{\text{syujyutsu}}] [_{n} \text{ to}]]]$
- Yet, Miyamoto (2013) highlights that examples of the type in (4) do not involve NP-ellipsis; significantly, given appropriate context, (4), for instance, does not require a linguistic antecedent.

The current paper argues that *ga* and *to*, being light nouns (Hiraiwa 2012), are subject to N-to-D raising (Abney 1987, Kishimoto 2001), and they move out of the domain of NP-ellipsis. Accordingly, the boldfaced DPs of (1) and (4) have the structures in (6) and (7) respectively. Note that in (6), *Hanako-no*, being an argument, is raised to DP SPEC. Since NP-ellipsis requires DP SPEC to be filled (Saito and Murasugi 1990), NP-ellipsis can take place in (6), but not in (7):

- (6) [DP [DP Hanako-no] [NP [DP Hanako-no] [N' ga]] ga]
- (7) [DP [NP [Relative Clause kinoo okonawareta] [N' #]] to]

Superficially, however, no obvious difference results between (6) and (7).

Interestingly, other light nouns *mono* and *yatsu* also observe the scopal parallelism restriction on NP-ellipsis.

(8) a. taitei-no soshiki-kara-n ajia-n ikka-koku-n dattai-wa most-gen organization-from-gen Asia-gen one- country-gen withdrawal-top mitomerareta kedo,

was approved though

(one >/< most)

'lit. Though from most organizations one Asian country's withdrawal was approved,'

b. [yooroppa-n ikka-koku-n mono/yatsu]-wa mitomerarenakatta.

Europe-gen one country-gen thing/thing-top was not approved (one >/< most)

'lit. one European country's one was not approved.' (Kyushu [Nagasaki] dialect)

Crucially, these light nouns are also not elided in (8b). This supports the claim that these nouns are also subject to N-to-D movement, and they thus move out of the NP.

As Bae (2012) observes, numerals cannot trigger NP-ellipsis in Kyushu and Shikoku dialects, as exemplified in (9):

(9) *Taroo-wa ichi-nichi-ni san-satsu-no hon-o/ba yomu kendo,

Taroo-top one-day-in three-cl-gen book-acc read though

Hanako-wa go-satsu-no ga-o yumu

Hanako-top five-cl-gen one-acc read

'Taroo reads three books in a day, but Hanako reads five ones.' (Shikoku [Kochi] dialect)

This suggests that cases with a numeral, which I assume is an NP-modifier (Saito, Lin and Murasugi 2008, Miyamoto 2009), receive the same account as (4). Accordingly, the structure of the boldfaced DP in (9) is as shown in (10):

(10) [DP [NP [Numeral go-satsu-no]][N, ga]]

Worth noting is the fact that (9) is grammatical if the numeral under question is interpreted as 'in fives'. Note that when *go-satsu-no* is attached to *mono/yatsu*, the same "set" reading results, as shown in (11):

(11) Hanako-wa go-satsu-no mono/yatsu-o/ba yonda.

Hanako-top five-cl-gen thing-acc read

'Hanako reads things in fives.'

(Kyushu [Nagasaki] dialect)

The parallelism between (9) and (11) is shown to further support the current analysis.

This paper concludes that pronominal ga and to are light nouns; accordingly, they are subject to N-to-D raising, making it impossible to detect on the surface whether NP-ellipsis has taken place.

Selected References

Bae, S.-H. 2012. NP languages do not have NP-ellipsis: examination of Korean and Japanese. Ms. Harvard University.

Maeda, M. and D. Takahashi. 2013. NP-Ellipsis in the Nagasaki Dialect of Japanese. JK23, MIT.