The swing of the pendulum: the status of analogy in linguistic theory from the Neogrammatici up to the present

Olga Fischer (University of Amsterdam/ACLC)

In this talk, I consider the role played by analogy in language processing and the status given to it in linguistic theorizing both synchronic and diachronic, starting with Hermann Paul's *Prinzipien der Sprachgeschichte* (1886), via psycholinguists such as Ester (1973), to the most recent writings on this topic, 'swinging' between 'taxonomic' neogrammarian views and 'mentalistic' generative ideas.

For most Neogrammarians, analogy was an exception (*falsche Analogie*): sound changes were seen as *laws*, with exceptions to these inexorably relegated to the 'back-benches'. A strong dislike of analogy is also found in the Transformational Generative tradition (cf. Kiparsky 1974 (but see Kiparsky 2011), Lightfoot 1979: 359ff. and many others). The thinking there was (and still is) that analogy cannot be captured within rules, it is taxonomic and unrestrictive, making analogical explanations 'arbitrary'.
The neogrammarian emphasis on the study of language as a scientific enterprise, on laws (rules), is probably one of the reasons why in later linguistic (esp. generative) models, analogy kept being seen as secondary, a mechanism involving mere surface phenomena that cannot be used to explain the grammar system nor grammar change. Instead, re-analysis (in the form of rule re-ordering/rule-loss, and later parameter shifts, Move/Merge etc.) became the most important mechanism in change.

It is interesting that a number of Neogrammarians, notably Paul and Brugmann, gave analogy a much more prominent place both in language change and language learning. The link between these two domains now seems generally accepted: for Paul as well as later linguists the principles that play a role in language acquisition must also play a role in change. The lowering of the status of analogy in later (synchronic) grammatical models therefore led to the idea that it could neither be an important principle in language learning nor in change. This ultimately resulted in the idea within the generative school that language acquisition is guided by children's 'innate grammar' rather than by analogy.

I would like to look at advances made in more recent (psycho)linguistic research through the rise of the new fields of corpus linguistics, usage-based models (such as (diachronic) Construction grammar e.g. Hilpert 2013), neurolinguistics (e.g. Pulvermüller 2002) and cognitive science (Hofstadter1995, 2005, Hofstadter and Sander 2013,the work of Gentner and associates 2006, 2010, 2011, 2012, Kalénine et al. 2009), to see where these have brought us. Based on these findings, I will put in a plea for analogy as the basic principle in language acquisition, processing and change. I will argue (*pace* most generative models, pace grammaticalization theory (cf. Traugott and Hopper 2003: 310, and historical linguists such as Harris and Campbell (1995: 50-51), that re-analysis is not primary but should be seen as a meta-linguistic mechanism; a mechanism that *describes* change but does not *explain why* and *how* change takes place. Similarly in synchronic models, 'rules' describe and show regularities, but do not *explain* them. If it is indeed correct that, as Katz (1964: 133) wrote in the early days of generative grammar, that,

> since the psychologist and the mentalistic linguist are constructing theories of the same kind, i.e.
> theories with the same kind of relation to the neurophysiology of the human brain, it follows that the

> linguist's theory is subject to the requirement that it harmonize with the psychologist's theories dealing with other human abilities and that it be consistent with the neurophysiologist's theories concerning the type of existing brain mechanisms.

then we should follow new developments in these areas, we should align these to our own linguistic modeling in the hope that we look for the reasons for change in the right places and that our model indeed, some day, reaches this 'harmony'.

References

Esper. E.A. (1973) *Analogy and Association in Linguistics and Psychologie.* Athens: University of Georgia Press.

Fischer, O. (2011) ''Grammaticalization as analogically driven change?', in H. Narrog and B. Heine (eds), *The Oxford Handbook of Grammaticalization* (Oxford Handbooks in Linguistics) Oxford: University Press, 31-42.

Gentner, D. (2010) 'Bootstrapping the mind: Analogical processes and symbol systems', *Cognitive Science* 34: 752-775.

Gentner, D., Anggoro, F.K. and Klibanoff, R.S. (2011) 'Structure mapping and relational language support children's learning of relational categories', *Child Development* 82: 1173-1188.

Gentner, D. and Namy L.L. (2006) 'Analogical processes in language learning', *Current Directions in Psychological Science* 15: 297-301

Gentner, D. and Smith, L. (2012) 'Analogical reasoning', in V.S. Ramachandran (ed.) *Encyclopedia of Human Behavior* (2nd ed.). Oxford: Elsevier, 130-136.

Harris, A. C. and Campbell, L. (1995). *Historical Syntax in Cross-Linguistic Perspective.* Cambridge:University Press.

Hashimoto, N., McGregor, K.K. and Graham, A. (2007) 'Conceptual organization at 6 and 8 years of age: Evidence from the semantic priming of object decisions', *Journal of Speech, Language and Hearing Research* 50: 161-176.

Hilpert, M. (2013) *Constructional Change in English. Developments in Allomorphy, Word Formation, and Syntax.* Cambridge: University Press.

Hofstadter, D. (1995). *Fluid Concepts and Creative Analogies. Computer Models of the Fundamental Mechanisms of Thought.* New York: Basic Books.

Hofstadter, D. (2001) Epilogue: Analogy as the core of cognition, in Gentner et al. (eds), 499-532.

Hofstadter, D. and Sander, E. *Surfaces and Essences: Analogy as the Fuel and Fire of Thinking.* New York: Basic Books.

Kalénine, S, Peyrin, C., Pichat, C., Segebarth, C., Bonthoux, F. and Baciu, M. (2009) 'The sensory-motor specificity of taxonomic and thematic conceptual relations: A behavioural and fMRI study', *NeuroImage* 44: 1152-1162.

Katz, J.J. (1964) 'Mentalism in linguistics', *Language* 40: 124-137.

Kiparsky, P. (1974). 'Remarks on Analogical Change', in J. M. Anderson and C. Jones (eds), 257-75.

Kiparsky, P. (2011) 'Grammaticalization as optimization', in D. Jonas, J.Whitman and A. Garrett (eds), *Grammatical Change: Origins, Nature, Outcomes.* Oxford: University Press.

Lightfoot, D. W. (1979). *Principles of Diachronic Syntax.* Cambridge: University Press.

Paul, H. (1909, 4th ed.[1886]) *Prinzipien der Sprachgeschichte.* Halle: Niemeyer.

Pulvermüller, F. (2002). *The Neuroscience of Language. On Brain Circuits of Words and Serial Order.* Cambridge: University Press.

Traugott, E.C and Hopper, P. (2003) *Grammaticalization* 2nd ed. Cambridge: University Press.

Nani-prefaced polar questions in Japanese conversation and their English counterparts

Makoto Hayashi
Nagoya University

     Nani ('what'), as an interrogative pronoun, is ordinarily used in a *wh*-question, such as in *nani ga tabetai?* ('What do you want to eat?'). Inspection of spontaneous language use in everyday conversation, however, reveals that *nani* sometimes appears with a polar (i.e., *yes/no*-type) question, as seen in the following excerpt.

(1) (a late-night telephone call between two college students; simplified transcript)

```
01 A:    ore:, ato de mata denwa kakenaosu wa.
         I'll call you back later.

02 B:    aa ore neru kara ii yo.
         Oh I'm going to bed, so it's okay.

03 A:    aa honto ni.
         Oh really.

04 B:    u:n.
         Yeah.

05 A:    un.
         Yeah.

06 B: →  nani benkyoo shiteru no mada:.
         Nani are you still studying?

07 A:    u:n.
         Yeah.
```

In line 06, *nani* is used as a preface to the subsequent polar question rather than as part of a *wh*-question (note how A's response in line 07 treats B's question as a polar question rather than a *wh*-question). Here, *nani* is used interjectionally and does not serve as a syntactic constituent within the question's structure. The present study explores these interjectional uses of *nani*. Based on 85 instances of *nani*-prefaced polar questions collected from 15 hours of naturally-occurring conversations among native Japanese speakers, I show that *nani*-prefacing is used to convey specific types of stances that the speaker adopts towards the proposition put forth in the question. I will also discuss similar uses of *what* serving as a preface to polar questions in everyday conversation in English.
     A first notable feature of the polar questions prefaced with *nani* is that, with these questions, the speaker presents his/her understanding of some matter that is somehow related (or relatable) to what a co-participant has said in the preceding context, and seeks confirmation about it from that co-participant. A second notable feature is that the matter about which the speaker seeks the co-participant's confirmation is, in most cases, not overtly mentioned in that co-participant's prior utterance. For example, in line 06 in (1) above, B seeks confirmation about his understanding that A is still studying, but the proposition put forth by B's question (i.e., that A is still studying) is not overtly mentioned by A in the prior context.
     These two features are observed in all the instances of *nani*-prefaced polar questions identified in my data (n=85). Based on empirical analysis of the cases collected, I argue that *nani* in these questions is used to indicate the speaker's stance that the proposition put forth in

the question may not be transparent in, but is *inferable* from, the addressee's prior talk. In other words, *nani*-prefaced polar questions are used as a method to bring to the interactional surface what is implicit (or what the speaker regards as implicit) in the addressee's prior talk.

Bringing to the interactional surface what is inferable from the addressee's prior talk with *nani*-prefaced polar questions serves a variety of interactional ends across different contexts. With relevant data excerpts, I will demonstrate that *nani*-prefaced polar questions are used to convey a specific range of affect towards what the addressee has said, such as unexpectedness, incredulity, disapproval, etc. I will also show that these questions provide their speakers with a resource to perform such acts as teasing a prior speaker or implementing a topic shift during the course of a conversation.

Inspection of spontaneous conversations in English suggests that *what* in English is used in a similar manner, though the number of instances collected so far is still small (n=11). For example, in the following excerpt, Amy prefaces a polar question with *what* in line 06.

(2) (two friends making an arrangement for a get-together; simplified transcript)

```
01              ((Bud off line for 26 seconds to get his calendar to see if he
02              is free on Saturday.))
03 Bud:     Theoretically I'll be here.
04 Amy:     Theoretically?
05 Bud:     Yeah.
06 Amy: →   You mean, (don') you- what you carry multiple calendars so
07      →   you never know?
08 Bud:     Well, I do have two. One in the office and one at home.
09 Amy:     Oh.
```

Here, too, what Amy seeks confirmation about with the *what*-prefaced polar question is something inferable from, but not directly stated in, Bud's prior talk. I will show that, in this and other instances from English conversations, *what*-prefaced polar questions are often used to tease a co-participant by bringing to the interactional surface what is implicit in that co-participant prior talk.

Expressions of Directive Speech Acts Revisited

Hidemitsu Takahashi

Hokkaido University

In research on directive speech acts, a great deal of attention has been devoted to the problem of inferencing supposedly involved in interpretation (Searle 1975; Sperber and Wilson 1986), the division between conventional vs. non-conventional indirect directives (Searle 1975), preferences for the way directives are expressed (Curl and Drew 2006), the influence of culture (most notably, politeness) on performance of directives (Leech 1983; Brown and Levinson 1987; Sifianou 1993; Aikhenvald 2010) as well as varying degrees of manipulative strength (Givón 1993), and cross-cultural comparisons of request strategies (Fukushima 1996; Wierzbicka 2003; Flöck 2016; Aikhenvald and Dixon 2017). Along these lines of studies, we are also witnessing a growing number of Cognitive/Construction Grammar-based analyses – concerning the operations of cognitive metonymies and speech act scenarios (Panther and Thornburg 1998), the illocutionary forces and conventionality of speech act constructions (Yamanashi 2001; Mori 2006), the constructional nature of request forms (Stefanowitch 2003), and the ICMs and/or specification links of indirect directives (Pérez Hernández and Ruiz de Mendoza 2002; Pérez Hernández 2013).

While there is a vast literature, researchers regardless of their paradigms have not much considered the *kinds of propositional contents* speakers more commonly convey in choosing a particular directive form. Work on direct vs. indirect directives normally compares sentences like *Close the door* and *Can you close the door?* to discuss their differences in "indirectness" and/or "politeness," but is *close* a representative verb of the *Can you VP?* request strategy in the first place? To this date, little attention has been paid to the possible correlation between directive constructions and their propositional contents. Furthermore, to the best of my knowledge, the types of argument structure verbs preferentially take in directive constructions have not been explored. In Takahashi 2012, I conducted a comprehensive analysis of the English imperative as part of my long-term project on expressions of directives. Major findings include:

(i) Four most frequent verbs in English imperatives are *tell*, *let*, *look* and *come,* followed by such verbs as *get*, *take*, *be*, *go*, *give*, *do*, *forget*, *listen* and *wait*.

(ii) Some verbs exhibit a preferred argument pattern, "VERB plus *me/us*," as illustrated in *Tell me about school* and *Let me put it this way*.

(iii) Imperatives are approximately fifteen times more frequent in use than all the variants of indirect directive expressions, despite common belief to the contrary.

(iv) The imperative can be best analyzed as forming a category involving the scalar notion of force exertion. Imperatives prototypically exert positive force but less prototypically may lose force or exert negative force in both English and Japanese.

(v) The imperative may readily act discourse-organizationally or interjectionally (e.g. *let's see, tell me, come on, look*) or serve as a conditional/concessive (e.g. *Double your offer; I won't sell.*).

These findings naturally raise further related questions. What verbs are common with indirect directive constructions? How are such verbs used? Can the "VERB plus *me/us*" argument pattern be found in all directive constructions? Are indirect directives capable of acting discourse-organizationally the way imperative verbs are. In this talk I explore these questions. There are three major findings I would like to address. First, there are both commonalities and differences in distributions of verbs and their usage between imperatives and indirect directives, as well as within different subtypes of indirect directives. Second, the "VERB plus *me/us*" pattern can be observed in many (but not all) indirect directives, though participating verbs can vary among different constructions. Third, in stark contrast with the imperative, indirect directives are extremely limited in their ability to depart from the norm and play a less directive or non-directive role.

These findings are discussed in relation to overall research on speech act constructions in English (and Japanese), preferred argument structure and the theory of Construction Grammar.

Selected References

Brown, Penelope and Stephen C. Levinson (1987) *Politeness: Some universals in language usage*. Cambridge University Press.

Panther, Klaus-Uwe and Linda L. Thornburg (1998) "A cognitive approach to inferencing in conversation." *Journal of Pragmatics* 30, 755-769.

Pérez Hernández L. (2013) "Illocutionary constructions: (multiple source)-in-target metonymies, illocutionary ICMs, and specification links." *Language & Communication* 33, 128-149.

Searle, John R. (1975) "Indirect speech acts." In Peter Cole and Jerry Morgan, eds., *Syntax and Semantics* 9, 59-82. Academic Press.

Stefanowitch, Anatol (2003) "A construction-based approach to indirect directive speech acts." In Panther, Klaus-Uwe & Linda L.Thornburg, eds., *Metonymy and pragmatic inferencing*, 105-126. John Benjamins.

Takahashi, Hidemitsu (2012) *A cognitive linguistic analysis of the English imperative: With special reference to Japanese imperatives*. John Benjamins.

Wierzbicka, Anna (2003) *Cross-cultural pragmatics: The semantics of human interaction*. Mouton de Gruyter.

Yamanashi, Masa-aki (2001) "Speech-act constructions, illocutionary forces, and conventionality." In Daniel Vanderveken and Susumu Kubo eds., *Essays in speech act theory*, 225-238. John Benjamins.