

Biolinguistics for Biolinguistics

Kleanthes K. Grohmann

When we started the journal *Biolinguistics*, our inaugural editorial began with the sentence (Boeckx & Grohmann 2007: 1): “Exactly fifty years ago Noam Chomsky published *Syntactic Structures* (Chomsky 1957), a slim volume that conveyed some essential results of his then unpublished *Logical Structure of Linguistic Theory* (Chomsky 1955/1975).” Now, with the journal going in its 9th year of publication, we could say: Exactly sixty years ago Noam Chomsky completed—or, exactly forty years ago Noam Chomsky published—*Logical Structure of Linguistic Theory* (Chomsky 1955/1975), a heavy tome that essentially gave rise to the emergence of the generative enterprise. And, to continue with Chomskyan anniversaries, we should perhaps present another important 50th, namely that fifty years ago Noam Chomsky published the arguably “most influential linguistics work of the 20th century”, *Aspects of the Theory of Syntax* (Chomsky 1965). Though, surprisingly, neither anniversary seems to have made it much into commemoration activities, though see Geoffrey Pullum’s piece just quoted from in *The Chronicle of Higher Education* (<http://chronicle.com/blogs/linguafranca/2015/06/22/revolutionary-methodological-preliminaries>) or Norbert Hornstein’s post plus comments on the *Faculty of Language* weblog (<http://facultyoflanguage.blogspot.com/2015/06/aspects-at-50.html>), and soon the volume edited by Gallego & Ott (to appear).

In this context it could be said that the field of generative grammar took the opportunity to do some housekeeping and introspection. Earlier this month, I returned from Athens, where the widely talked about get-together ‘Generative Syntax in the Twenty-first Century: The Road Ahead’ took place, a round-table gathering with very interesting 8-minute feature presentations on all kinds of topics internal and external to generative syntax (<https://castl.uit.no/index.php/conferences/road-ahead>)—and loads of time and space for discussion with some 150 participants. (Correction: The three days were definitely not enough!)

Rather than launching into a critical discussion of the field—be it generative grammar in general, biolinguistics in specific, or the relationship between the two—I would like to use this editorial space to say a few things about *Biolinguistics*, the journal, and its current state. First off, you will notice that this editorial note appears on the cusp of June and July, halfway through 2015, its above-mentioned 9th year of publication. That much is great news. However, upon inspection of the table of contents for volume 9 (<http://www.biolinguistics.eu/index.php/biolinguistics/issue/view/27>), you will equally soon notice that this is in fact the current volume’s first ‘publication’. This is arguably an issue of considerable concern.



2015 marks not only *Biolinguistics* 9, the journal's 9th year running, it also constitutes the first full year with me as sole editor. I believe that we had 7 good years of joint editorship, followed by an 8th year of transition, and we might now possibly be looking at new arrangements, but more of that below. In the years past, *Biolinguistics* has always been open—open to different topics (biolinguistics construed in the 'weak sense' as well as in the 'strong sense'), open to a variety of perspectives (generative and agnostic, 'pro-Chomskyan' and 'non-Chomskyan', etc.), and of course open to free access for everyone ('open access publication'). (It also embraces openly the internet as an important resource, as can be witnessed from the four URLs provided on the first page alongside four more traditional bibliographical references, and these URLs include even popular weblogs.)

The 'success' or 'impact' of a journal may be measured in many different ways. One option apparently not available to online-publishing journals without a major player behind them is the now infamous 'citation index' (more on that also below). The only tools we have at our disposal are citations in published works as calculated 'by hand' (for example, googling article titles or using authors' citation summaries on Google Scholar and such platforms)—or using OJS's report statistics, that is, the view and download counters integrated in Open Journal Software, an open-source operating system on which *Biolinguistics* runs. I refer to these below, but I readily admit that I am not completely familiar with the settings and hence cannot guarantee accuracy, further complicated by the fact that OJS had some internal system updates which changed the counting statistics; but the ballpark figures should be roughly as provided.

Using this measure then, I am happy to report that as of 30 June 2015, there are 5 articles that have so far been viewed and/or downloaded more than 7,000 times each, with the top-viewed piece clocking in at around 18,000 views. These are followed by 4 articles with more than 5,000 PDF downloads, 7 pieces with more than 4,000, 13 with more than 3,000, and 44 with more than 2,000 PDF downloads. In addition, *Biolinguistics* offers full issues as single-file downloads at the end of each volume/year; these have also each been downloaded several thousand times. Likewise, the least downloaded pieces are typically the most recent ones, but the numbers still range in the hundreds for each. I would think that for a journal that has been carried out without institutional support to speak of, and outside mainstream publishing that still holds sway over publication practices in our field(s), these are very good numbers indeed.

I haven't systematically carried out the above-mentioned former measure yet, that is, calculations 'by hand'. Nor have I carefully analyzed the ratio of number of submissions and acceptance (other than a steady increase of 'decline' from originally ca. 20% to now over 50%). But just looking at the numbers, one might still gain the impression that everything is hunky-dory: The journal is healthy, it is frequently accessed within the community, possibly even cited in many works published elsewhere, and it serves a well-defined field. But certainly the latter may not be so clear to some—'biolinguistics'? While a full treatment of the issues surrounding 'biolinguistics' are beyond the scope, or purpose, of this editorial, I would like to delve into the topic briefly, if only to return to the first apparent conclusion just drawn, namely that "[t]he journal is healthy". There is a lingering, more worrying aspect of 'health' that needs to be addressed as well.

In the above-mentioned inaugural editorial to the journal *Biolinguistics*, we provided a perspective on the field of biolinguistics, the study of the ‘biological foundations of language’ (Lenneberg 1967). Expanding on Jenkins (2000), we connected Chomsky’s (1986) five questions on ‘knowledge of language’ to Tinbergen’s (1963) four questions on ‘the aims and methods of ethology’. Boeckx (2010) is a more recent attempt to flesh out this research program in (text)book length, and the five questions have been picked up by many researchers at different occasions, two also featured quite prominently in Athens (the highly influential #2 and the more distant #5). It may even be worth formulating them as specific ‘problems’, as did long-time *Biolinguistics* task-teamer Evelina Leivada:

1. *What is knowledge of language?*
(Humboldt’s problem; cf. Chomsky 1965)
2. *How is that knowledge acquired?*
(Plato’s problem; cf. Chomsky 1986)
3. *How is that knowledge put to use?*
(Descartes’s problem; cf. Chomsky 1997)
4. *How is that knowledge implemented in the brain?*
(Broca’s problem; cf. Boeckx 2009)
5. *How did that knowledge emerge in the species?*
(Darwin’s problem; cf. Jewett 1914)
(from Leivada 2012: 35–36)

We further suggested that “these five questions constitute the conceptual core and focus of inquiry in fields like theoretical linguistics (the traditional areas of syntax, semantics, morphology, phonology), pragmatics, first and second language acquisition, psycholinguistics, neurolinguistics, and beyond” and that “[w]hat these research questions emphasize is the fact that language can, and should, be studied like any other attribute of our species, and more specifically, as an organ of the mind/brain” (Boeckx & Grohmann 2007: 1).

This led us to the perhaps unfortunate distinction of “a weak and a strong sense to the term ‘biolinguistics’”, which we characterized as follows:

The weak sense of the term refers to “business as usual” for linguists, so to speak, to the extent they are seriously engaged in discovering the properties of grammar, in effect carrying out the research program Chomsky [(1957)] initiated [...]. The strong sense of the term ‘biolinguistics’ refers to attempts to provide explicit answers to questions that necessarily require the combination of linguistic insights and insights from related disciplines (evolutionary biology, genetics, neurology, psychology, etc.). We regard [Lenneberg (1967)] as the best example of research in biolinguistics in this strong sense.

(Boeckx & Grohmann 2007: 2)

In other words, we may indeed want to distinguish *biolinguistics in the broad sense* (language as a cognitive organ) from *biolinguistics in the narrow sense* (neurological and genetic bases of language), as Norbert Hornstein recently did in his blog (<http://facultyoflanguage.blogspot.com/2015/05/what-invites-to-athen-conference-are.html>, comment date-stamped “May 14, 2015 at 8:20 AM”). Labels aside, Hornstein elaborates on the distinction:

[In my opinion], we already have a lot to say about the latter and relatively little to say about the former. What I don't see is why being able to say something about the latter is not doing biolinguistics. In the local world in which I live, there is a smooth transition from questions that look like they belong firmly in the world of formal grammar to [those] that look like paradigm examples of work in psychology. There are even hints of some work relevant to neuroscience. [There] are good examples of how linguistically informed work can combine with techniques from other domains [...] to fatten cognitive conclusions arrived at on linguistic grounds. It also opens new questions[,] the answers to which will heavily rely on what we know about linguistic structure investigated using our standard techniques. In this world, we are all studying the same thing (FoL [the language faculty]) using different techniques. As FoL is a biological entity, we are *de facto* doing biolinguistics even when we don't know a damn thing about genes or even much about brains. [...] So unless one believes that humans are not animals then we are all doing biolinguistics, at least in the [broad] sense. When will we do narrow boiling? Well, ask that question about other domains (vision, audition, face perception) and you will find, I believe, that they are also very far from knowing anything biological in this sense. Why? Because we don't know much about brains and how they link to genes. We can't even [explain *C. elegans*]. So by the stringent criteria often adverted to, nobody is doing biology, i.e. linguistics is, once again, no worse than everything else in the cognitive-neuro sciences.

I will not attempt a 'Where We Are Now'-type reflection of the field or idly ask '*Quo Vadis, Biolinguistics?*', but before sharing some worries for *Biolinguistics*, I would like to spell out, and hopefully dispel, some (mis)beliefs about the field from where I stand—speaking not only as editor of *Biolinguistics* but also as a linguist working on what I take to be relevant research in biolinguistics.

On staying with the theme when Cedric Boeckx and I started the journal *Biolinguistics*, we expressed our hope that “the term biolinguistics will make its way into institutional categories” and “that this journal will contribute to this exciting and rapidly growing field” (Boeckx & Grohmann 2007: 3). Eight years on, there's still some way to go, but we are on track, it seems, judging from the download success reported above, for example. Back then we wrote:

We are fully aware of the fact that the uniquely interdisciplinary character of biolinguistics poses difficult problems of communication and misunderstandings, but we feel that a growing community of scientists of diverse background, including linguists, evolutionary biologists, molecular biologists, neuroscientists, anthropologists, psychologists, computer scientists, (language or speech and hearing) pathologists, and so on, are slowly overcoming these challenges. Only collaboration and mutual respect will make this type of research possible. We would be delighted if the contributions to *Biolinguistics* could clarify issues, unearth new data, and answer some of the questions that will help us understand the nature of language, and what it is that makes us human.
(Boeckx & Grohmann 2007: 3–4)

Biolinguistics is one vehicle to transport such ideas. Beyond the journal, there are a number of very positive developments in the biolinguistics publishing world. More broadly construed, Pierre Pica and I edit the *Language Faculty and Beyond* book series with John Benjamins, which has so far brought out 12 titles

(<https://benjamins.com/#catalog/books/lfab>); closer to the topic is perhaps the *Oxford Studies in Biolinguistics* series edited by Cedric Boeckx, with 4 titles to date (<http://ukcatalogue.oup.com/category/academic/series/language/osb.do>), but also several books and volumes, including our co-edited *Cambridge Handbook of Biolinguistics* (Boeckx & Grohmann 2013), which has already been critically examined (see, for example, the reviews by Stamenov 2014 and Truswell 2014).

Only time will tell which directions this research enterprise will take in the future. However, one hope we also harbored at the journal from the outset is that the terms ‘generative grammar’ and ‘biolinguistics’ are *not* taken to be synonyms, or that the theoretical perspective espoused in ‘Chomskyan’ generative grammar is the only valid underpinning of biolinguistic investigations. The journal is open to alternative views as it is, especially, to psychological and computational analyses and experimental research in the neurobiology of language. However, we can only publish what we get—and if there are no relevant submissions, such work cannot appear in the journal. Let this be my first plea to researchers to write up their research and submit it to *Biolinguistics*. (To be repeated.)

At this point, I would like to concentrate on my own worries, as editor, about *Biolinguistics* (the journal) rather than biolinguistics (the field as such or even as a perceived composite of diverse disciplines)—and sketch a few ideas for the future. The journal webpage still states, as it did from Day One, that “*Biolinguistics* is a peer-reviewed journal exploring theoretical linguistics that takes the biological foundations of human language seriously” (check out <http://www.biolinguistics.eu/index.php/biolinguistics/about/editorialPolicies#focusAndScope> for the full text). So, if any reader is engaged in this line of research, submit your work to *Biolinguistics* for peer review and consideration.

One publishing idea we also mentioned at the outset of the journal is that of a special issue. I happen to believe that special issues are a great idea, for many reasons; among others, when done well, they allow readers to get a good perspective on some hot topic from different directions. We published several in the past: *Biolinguistics* 2.2–3 (2008), 3.2–3 (2009), 4.2–3 (2010), 5.1–2 (2011), and 6.3–4 (2012) were all ‘special issues’ of some sort, either selected papers that arose from international conferences and workshops or real thematic issues. And we tried to ensure that these ‘special issues’ were actually conceived as such rather than ‘conference proceedings’, due to a perceived poor reputation of proceedings; on the one hand, all submissions were double-reviewed like any other article (and several such conference proceedings submissions were in fact rejected), and on the other, we had asked the guest editors to solicit additional papers within the theme, to really turn these into special issues proper. However, our experience with the leading journal impact factor awarding body were such that we were explicitly punished for having done this. The presumably highly decorated, very qualified evaluators concluded that “a major issue in the rejection was the predominance of conference papers over regular articles”.

I can see at least two ways out of this dilemma, and I will consider both very seriously in the near future. One is to have a guest editor selected from the editorial board or of other high, interdisciplinary standing in the field. A second would be to ask for invited target articles and comments. So, to rephrase my plea: Please step forward if you feel you could contribute to this endeavor.

Another interesting idea that arose when I polled the *Biolinguistics* editorial boards for suggestions on how to attract more submissions was to create a new section in the form of a “republication of some ‘classics’ with a short new commentary/update by the original author(s) and/or present authors”. I believe this is definitely worth considering. There are some other ideas out there as well, such as opening up additional sections in the journal in addition to ‘Articles’, ‘Briefs’, ‘Reviews’, and ‘Forum’ as well as perhaps clearly distinguishing theoretical from experimental papers, or more linguistically relevant from neurobiological ones, to mention just a few. I will use the remainder of the year to weigh my options as current sole editor of *Biolinguistics* and think about new strategies for the double-digit volume era.

The main reason I am sharing all of this with the readership is, of course, the now repeated main worry of the journal: *Biolinguistics* just does not receive sufficient submissions to keep publications at a steady flow. So, I would like to use this opportunity one last time for today to appeal to readers and researchers out there working on biolinguistic concerns—strongly construed or more weakly, in the narrow or broad sense, conceptual–theoretical or neuro–experimental—to swing that pen, type those keys, and send us your work using the easy online submission process you are automatically guided through when you click on “New Submission”. Just to remind potential authors, you need to be logged in; that is, in order to submit to the free open-access journal *Biolinguistics*, you will have to be a registered user. However, even this procedure is relatively painless—and fully free of charge.

Please note that any article submitted will be vetted by an editorial team consisting of the journal editor and a specially recruited section editor. If we deem the submission to be appropriate in terms of form and content, we will send it out for review. With this volume, we will slowly move towards three peer reviews for each Article and Briefs submission. Forum contributions have, in the past, not been as stringently reviewed, but with the support of the growing editorial team, we will put additional measures in motion to ensure high-quality publications.

Likewise, if you are interested in putting together a themed special issue, if you have suggestions for a target article and commentators, or if you perhaps even would like to get started on the ‘Classics’ section, please get in touch with me. The same goes for any additional suggestions or ideas, whether to increase the journal’s visibility or to attract more high-caliber submissions.

And in order to end on a high note, please allow me to share with you one more suggestion from the editorial polling: “You should post something I (and others) can tweet.” Despite the email smiley not shown here, this is actually something we had thought about. With Bridget Samuels’ help, we had set up a journal weblog and Twitter account right from the start. For a variety of reasons, however, neither really set off. The main culprits were the usual suspects, complete lack of time and honest absence of knowledge (both mostly on my part). But I do have hopes to reinstate the journal’s social media exposure in the near future—and you can always visit and interact with us on Facebook at <https://www.facebook.com/groups/BIOLINGUISTICS.Journal>. See you there!

References

- Boeckx, Cedric. 2009. On the nature of Merge. In Massimo Piattelli-Palmarini, Pello Salaburu & Juan Uriagereka (eds.), *Of Minds and Language: A Basque Encounter with Noam Chomsky*, 44–57. Oxford: Oxford University Press.
- Boeckx, Cedric. 2010. *Language in Cognition: Uncovering Mental Structures and the Rules Behind Them*. Oxford: Wiley-Blackwell.
- Boeckx, Cedric & Kleanthes K. Grohmann. 2007. The *Biolinguistics* manifesto. *Biolinguistics* 1, 1–8.
- Boeckx, Cedric & Kleanthes K. Grohmann (eds.). 2013. *The Cambridge Handbook of Biolinguistics*. Cambridge: Cambridge University Press.
- Chomsky, Noam. 1955. The logical structure of linguistic theory. Ms., Harvard University & Massachusetts Institute of Technology. [Published in part as *The Logical Structure of Linguistic Theory*, New York: Plenum, 1975.]
- Chomsky, Noam. 1957. *Syntactic Structures*. The Hague: Mouton.
- Chomsky, Noam. 1965. *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 1986. *Knowledge of Language: Its Nature, Origin, and Use*. New York: Praeger.
- Chomsky, Noam. 1997. Language and problems of knowledge. *Teorema* XVI, 5–33.
- Gallego, Ángel J. & Dennis Ott (eds.). To appear. *50 Years Later: Reflections on Chomsky's Aspects*. Cambridge, MA: MIT Working Papers in Linguistics.
- Jenkins, Lyle. 2000. *Biolinguistics: Exploring the Biology of Language*. Cambridge: Cambridge University Press.
- Jewett, Frances Gulick. 1914. *The Next Generation: A Study of the Physiology of Inheritance*. Boston, MA: Ginn & Co.
- Leivada, Evelina. 2012. A non-parametric approach to Universal Grammar within the biolinguistic program. Barcelona: Universitat de Barcelona MA thesis.
- Lenneberg, Eric. 1967. *Biological Foundations of Language*. New York: John Wiley.
- Stamenov, Maxim. 2014. Biolinguistics between the language gene, the fossils of language, Merge, and beyond: Review article of Boeckx & Grohmann (eds., 2013). *Language and Dialogue* 4, 465–477.
- Tinbergen, Nikolaas. 1963. On the aims and methods of ethology. *Zeitschrift für Tierpsychologie* 20, 410–433.
- Truswell, Robert. 2014. Review of Boeckx & Grohmann (eds., 2013). *Lingua* 143, 52–55.

Kleanthes K. Grohmann
University of Cyprus
Department of English Studies
& Cyprus Acquisition Team
P.O. Box 20537
1087 Nicosia
Cyprus
kleanthi@ucy.ac.cy