

## Interview with Gary Libben

Roberto G. de Almeida (RA)

*It is really a pleasure to have this opportunity to conduct this interview with you. You had a tremendous impact in my career, but, beyond that, I think your impact in the psycholinguistic study of the lexicon has been unprecedented.*

Gary Libben (GL)

I thank you! I am delighted that we have this opportunity to talk about the past and the future and to explore ideas and research perspectives together. In that context, let me begin by congratulating you on your book “On Concept, Modules, and Language”. I have really enjoyed reading it and very much admire the kind of intellectual conversation that you created among the authors within it. And, our conversation is such a treat for me. There are so many points of interweaving experiences and interests that we share. I think that it is fantastic that you are a Professor in the same department and same university in which I was once an undergraduate student. I feel we had a wonderful time working together at the University of Alberta (starting literally one day after you had defended your PhD thesis). Since then, we have collaborated on so many interesting things. And, just this year, we are again co-supervising a new Postdoctoral Fellow. I feel that we are very fortunate as academics and researchers! There are few other professions in which such things are possible.

RA

*Thank you. I agree. I can also say I was very fortunate that you brought me to Canada—and I really look forward to continuing collaborating with you. Now, I had an eclectic background, one that included Communication. And, in journalism, we are trained not to exchange pleasantries with the interviewee. So, I guess I’ll start with a “hard-hitting” question, typical for this sort of interview: “Why did you choose linguistics as a field?”*

GL

Well, like so many people I chose linguistics mainly by accident! My first degree in your department – the Department of Psychology at Concordia University in Montreal—was a wonderful experience. Of course, it was a long time ago and, like so many other students of that era, the next step for me following my undergraduate degree was clearly to discover the world on “five dollars a day”. So, I set off to Europe! After a while, though, I discovered that earning a few extra dollars while living abroad wouldn’t be a bad thing. At the time, teachers of English as a second language were in great demand. But, there was a catch: you needed to have a degree in applied linguistics or TESL to actually get paid. So, I came back to Concordia University and registered in a graduate program in Applied Linguistics. Again, it was a great experience from beginning to end. After I had figured out how to spell linguistics, I registered for my first ‘qualifying’ course. The professor was brilliant and used Gleason’s textbook, which was almost entirely problem based. I was just fascinated by the fact that people could solve problems in

languages that they had never before encountered and that there was so much systematicity in language systems and in language behaviour. I think that it was through that initial course experience that I came to believe that if you were looking to have a great window to what makes us special as humans -- a really good window to the human mind -- looking at language would be the way to do it.

And, making up experiments seemed like the obvious way to go. I was fortunate to have professors who gave me a lot of freedom to explore such options and I also had access to computational resources in the Computer Science Department (in which I worked as a research assistant).

RA

*Now, you started some of your early work investigating aphasia. So, what led you to that path and, then, what made you take a perhaps slightly different direction methodologically? It should be noted that you always studied aphasia cases and refer to aphasia cases as a source of data for your work. But you started with aphasia, right?*

GL

Initially, my involvement in the study of aphasia was also an accident. As you know, the downtown campus of Concordia University is just a few blocks away from the main campus of McGill University. A friend of mine mentioned that I might be interested in a neurolinguistics course that was offered by Michel Paradis at McGill. So, I walked over one afternoon, knocked on the door of his office, and asked him if I could register in his graduate course in neurolinguistics. He said sure – he is just that kind of welcoming person!

I knew absolutely nothing about aphasia before and it was through that first course with Michel Paradis that I got hooked on neurolinguistics and the study of bilingualism. It was a whole new world for me. It was a course on bilingual aphasia but, of course, I had no idea what monolingual aphasia was, so I had some catch-up work to do.

As soon as I started this catch up work so that I could keep up with Michel Paradis' course (he was a great instructor), I came to quickly appreciate how evidence from aphasia is so important to our understanding of how human brains 'do' language. I think what I found to be most compelling was simply the way in which, by relating patterns of behaviour among persons with aphasia to the areas and amount of brain tissue that had been affected, you could get at least an initial sense of what did what.

This is, of course, a great over-simplification and, in many cases, completely untrue. But, at the time, it resonated for me and accorded (perhaps somewhat bizarrely) with my experience owning and riding a BSA motorcycle. Those things were beautiful -- and almost completely unreliable! I think I never went more than a month without having to fix or rebuild something. And that was the connection to aphasia! I knew from the motorcycle owner's manual that, for example, the electrical system contained something called a 'Zener diode'. But it was only through its need to be replaced multiple times after the bike died, that I came to understand what role it was supposed to play in the working system as a whole (or at least that if it stopped working, your battery wouldn't charge).

At the time, I was just coming to appreciate the extent to which such a perspective is naïve in many ways. Fortunately for us, human brains have a great deal more plasticity than motorcycle parts do. But, I felt then (and still feel now) that it was a good start. And, in a way, I think we are still searching for a better conceptualization of language in the mind/brain that captures how computational plasticity, modularity, and robustness interact. I know that these questions are at the core of your work and I am keen to learn from your insights on these matters.

RA

*I certainly think that cognitive science worth doing is about the fixed characteristics of the human mind/brain. The perspective you take, which I think is correct, is that of the so-called cognitive neuropsychology, which is to do exhaustive testing of aphasia cases to try to understand how different computational mechanisms and their interaction may be disrupted. I think today this is still the best approach: use single-case studies and case series to determine the missing parts of the jigsaw puzzle and their effects on other functions.*

GL

Yes! In most of my work, I have tried to develop and use research techniques that allow us to study as many people as possible. But that type of work has real limitations. I really do think that great insights can be obtained from the study of single cases. To me, the reason for this is the simple reflection on experience in life. Paradoxically, the experiences that we end up considering to be revealing of something fundamental – or perhaps even universal—in human nature are experiences that often involve only one person. It doesn't seem to me that with studies of fifty, a hundred, or a thousand people, you easily get that strong sense of having access to human nature. I feel that case studies of aphasia are comparable in some ways. They enable you to truly learn from the research participants with whom you partner. I also try to do this in my work with research groups, but it is somewhat more difficult and a lot more complex.

RA

*Case studies are no doubt a very important source of data on linguistic principles as well as on how language interacts with other cognitive systems. I remember very well the case of that patient you studied, investigating compounds, in which the disruption was very specific to certain constituents; you could infer from the individual's pattern of performance that different constituents were being semantically affected, with the patient using associates of the same constituents like “dumbbell” (the patient would say “stupid weights... Arnold”) “butterfly” (“pretty fly...yellow”), clearly showing morpho-semantic decomposition and access to multiple meanings of each constituent. It's a very important source of data for our understanding of how compounds are represented and processed.*

GL

Thank you. I did feel that that study was revealing. It certainly taught me a lot about how compound words may be represented in the mind and brain and, in particular, how our brains may be organized to value redundancy and resiliency over efficiency. The research participant in the study that you were referring to was a very young person – she experienced a brain haemorrhage at the

age of 22. That is terribly young! But through working with her and other persons with aphasia, I have really come to appreciate how some people can turn their personal misfortune into valuable knowledge that can help others and advance knowledge.

RA

*You were studying linguistics for your PhD in the early 80's, which was of course what I would say the height of the modern cognitive revolution, the one that started in the 50's and 60's. A lot of important theoretical debates were going on in the 80's. How did you see your emerging interest at the time as a graduate student in linguistics; did you have this feeling, that you were at the center of some of these debates?*

GL

I am not sure that, at the time, I fully appreciated the extent to which the cognitive revolution was a revolution. But, I did have a feeling of being part of the 'breaking of new ground'. This was true in both the technical and theoretical aspects of research. On the technical side, I feel very fortunate to have been one of the first people to have had an Apple II computer. My PhD Supervisor, Michel Paradis, bought three of the very first TRS 80 Model 100 portable computers for me to work with in our bilingual aphasia testing research, and I worked with the first IBM PCs that came out. (Just for a sense of how early this was, none of these computers were shipped with disk drives of any sort. The operating systems and all other files needed to be uploaded by cassette audio tape via a headphone jack).

The key feature of all these devices is that they were 'personal'. You could configure them yourself, you could invent new things with them. So, for me, they really opened up amazing new opportunities to just play around with new ideas and ways to implement them computationally.

On the theoretical side, I felt matters to be more complex. I knew people who were strongly supportive of Chomskyan approaches to language. I knew others who were strongly opposed. Certainly, in my immediate surroundings at McGill, those in favour had great influence over the nature of discussions and the trajectory of research. The Linguistics Department had very strong ties to MIT and I had heard that some of my fellow PhD students would drive down to MIT for the weekend to pick up on new developments.

You know, thinking about this again, I think both then and now, I just never got won over to the view that one side was right and the other was wrong. What I did experience, however, was that the cognitive revolution really changed the study of language in a great way. In retrospect, it is so simple. Perhaps, it is just as simple as this: Disciplines that attract smart people, end up being really interesting places! In my experience, smart and dedicated researchers, whether they end up being right or wrong, are always worth listening to because, well, you know, it is hard for them to open their mouths and not have interesting things come out.

RA

*Can you talk a little bit about the lexicon, which has been the focus of your inquiry? The lexicon of course has always been the center of many controversies in linguistics and psycholinguistics, regarding what it does, the kinds of representations it holds, how it interacts with other systems*

*and, as Jackendoff once said, it's the holy grail with regards to lexical semantic representations as well. So, what drew you to study the lexicon?*

GL

Well, if I tell you that “it was an accident”, again, you're not going to be very surprised. Mainly, though, like in so many things, the initial exposure may be accidental, but the reasons that that initial exposure leaves an impression and has consequences are not accidental.

So, although I do not recall being drawn to the study of the lexicon, I do recall stumbling upon it and then being surprised by how interesting it was. The ‘surprise’ part came, I think, from the fact that, in my graduate studies in linguistics, there were courses on almost everything except the lexicon. Now, in retrospect, I see that this was likely a reflection of the then-current view that the lexicon was essentially an adjunct to the grammar. It contained elements that were arbitrary and which had to be learned individually. That made the lexicon, from a grammatical perspective, somewhat less interesting. But, what I think really impressed me was that, from a different perspective, the lexicon was amazingly interesting! I came to realize that exactly those properties of lexical representations that could be seen as uninteresting from a grammatical point of view, were the properties that could create interdisciplinary bridges among linguists, psychologists, and neuropsychologists. And I felt that morphology would be at the core of this. I had just taken a course on morphology from Glynn Piggott at McGill, had just read Mark Aronoff's 1976 book, and had just been introduced to the study of acquired dyslexia by John Marshall, who was a Visiting Professor at McGill. So, all those pieces came together.

Now that you have given me the opportunity to reflect on those early experiences, I think I would say that what drew me to the study of the lexicon was that it can simultaneously be seen as being on the periphery of multiple disciplines, but also at the center of those same disciplines, when you consider them together as a cluster.

My experience since those early days has strengthened, rather than weakened, that view. I think that lexical research has been a fantastic intellectual and multidisciplinary meeting ground and I expect it to continue to bring researchers together.

RA

*It's interesting that you mention your relations with these different fields. I mean, a key investigation on the nature of the lexicon, in particular, and linguistics, in general, is how words and morphemes are perceived and what role they play in linguistic structuring, compositionality, etc. So, what sorts of issues do you see as taking center stage in current research?*

GL

That's a great question. If I could take a really high-level approach to this, I would say that I think our biggest challenge is to find a way to deal with *the fallacy of misplaced concreteness*. It is easy for us to slip into believing that the constructs that we use are real in the psychological or neuropsychological sense. This would extend to constructs such as ‘the morpheme’, or ‘lexical representation’ or ‘selectional restriction’, or perhaps even ‘the lexicon’ itself. I consider this to be a very substantial problem in the interdisciplinary study of language. When you bring together a theoretical discipline such as linguistics with a behavioural science such as psychology or

neuropsychology, it is easy (and incorrect, in my view) to find yourself asking questions like “How are morphemes represented in the mind and brain”?

But we do this quite routinely! It seems to me that we need to bear in mind that the fact that we use the word ‘morpheme’, the fact that we use the word ‘mental lexicon’, and even the fact that we use the word ‘word’ doesn’t really mean that these are real things. But, by using them, we become prone to the *fallacy of misplaced concreteness*. We talk about words in the mind but, of course, you know, no one has ever seen a mind. I think that becomes a bit of a challenge. And I think that the way it is going to play out is that some of those constructs will turn out to be (sort of) real and some will turn out to remain valuable theoretical constructs. And it’s not going to be an all-or-none answer. For example, I think it is going to turn out to be the case that certain things that we call *morphemes* will be on one side of the fence and other things that we also call *morphemes* will be on the other side of the fence. If we can continue with derivational morphology as an example, I think there are lots of people that would not have an independent cognitive representation for the suffix *-al* as in words such as *autumnal* or *arousal*. I certainly do not think that there would be many people who have an independent cognitive representation for the suffix *---dom*, as in the word *wisdom*, simply because it’s not productive for most people. But I think that it does not follow from this that all morphemes are not real. It would not follow that *un-* as a negating prefix is not real. It certainly does not follow that the morphemes in a compound such as *blackboard* are not real just because they bear the label ‘morpheme’. So, I think this is going to be our challenge -- to use the theoretical terminology that has been made available to us and not be hampered by it. It’s not going to be that easy, I think.

RA

*Yeah, well, all psycholinguistics suffers from this interesting duality: it’s an empirical part of cognitive science and at the same time it is somewhat autonomous because it’s dealing with empirical investigations of linguistic-specific forms of representation, how they are processed, and how they are represented. A lot of psycholinguists are guilty—and a lot of linguists too—of seeing psycholinguistics as dependent on theoretical linguistics. Although it’s quite possible, in fact, that they are dealing with quite different phenomena: it is quite possible that the rules and representations used in, say, parsing and word recognition, are not exactly the same as those postulated in theoretical linguistics. So how do you see this relationship between theoretical linguistics and psycholinguistics? Do you think psycholinguistics is dependent on linguistic variables or it’s another empirical domain for investigating linguistic representations and processes—just like, you know, native speaker intuitions count as empirical investigation?*

GL

Another great question – but not an easy one! Let me start with the approaches that I think are not appropriate. I think the view that psycholinguistics is an antidote to theoretical linguistics is not right. But I also think that the view that psycholinguistics is the route to demonstrating the validity of theoretical linguistic constructs is not the way to go either.

So, I don’t feel that there is a dependency relation between psycholinguistics and linguistics. I feel that it is more about two complementary approaches to insight.

To return to derivational morphology, let's say it turned out that the vast majority of those things that we call 'morphemes' do not have independent representations in the minds of most native speakers of contemporary English. Does this mean that the construct of a morpheme is not valuable? No, I think it is very valuable because a theoretical analysis is a different kind of analysis. So, I see these two as not just two sides of the same coin, I see them as two perspectives on the same mystery.

And, you know, it is perhaps better to have more than one perspective on the broader mystery, because I am not sure that we actually know what the mystery is. Maybe the big mystery of language is that we have so much in common. Or maybe the mystery is, if we have so much in common, why don't we all speak the same language.

RA

*I mean I think a legitimate program is exactly finding the commonalities between languages and I think this has been one of the great things about the cognitive revolution, at least on the linguistics side—which is trying to find these commonalities. So, psycholinguistics, I think we would agree on this, is in fact complementary to theoretic linguistics and I think we need both sources of evidence; and, you know, we can make theoretical claims about the nature of linguistic representations from psycholinguistic experiments. In fact, if you look at a lot of linguistic evidence coming from theoretical linguistics is an experiment of  $n = 1$ . Linguistic intuitions are psychological data, and so are psycholinguistic experiments!*

GL

Yes, that's a very nice way to put it! But I feel that I should add that, in my experience, the traffic between linguistics and psycholinguistics has been mostly going one way. You find that a construct gets tested in the psycholinguistic domain, but it's a little bit harder to find psycholinguistic findings that lead to changes in linguistic theory. I just don't see those quite as often. And I think maybe this is because psycholinguistics, as an enterprise, is more permeable. It just accepts new things very easily. A theory, however, tends to be less permeable because when we change an element of the system it has to be compatible with other elements of the system. Maybe that contributes to why the two enterprises are not equally permeable.

RA

*Right. Yeah, I have an anecdote here: I had a colleague, who is a theoretical linguist, but also who manifested interest in experiments. But the approach was somewhat different from our approach: If the experiment confirms the linguistic hypothesis, the experiment is good; if it doesn't, then the experiment is not good. This means the conclusion was done, the question was to find evidence for  $X$  assuming  $X$  is real.*

GL

Indeed, I am afraid I have seen something like that as well.

RA

*So maybe we can shift gears just a little bit, if you don't mind, and talk about the "sociology" of the science.*

GL

Yes, of course!

RA

*You have played an important role in establishing an international community of researchers on the lexicon. It was, and still is I think, a very interdisciplinary group, a leading group of researchers working on a particular phenomenon, actually several phenomena related to how words are represented and processed in the brain, including how patterns of dissolution inform us about the psychological reality of linguistic constructs. This led to the creation of *The Mental Lexicon* journal, which was also important in establishing an outlet for this field. So, you've been behind the scenes working in the journal, you have participated in grant committees, and taken many institutional roles as Dean, as vice-President of Research at different institutions. So, you understand well the political and sociological mechanisms of this and many other fields. One of the issues with how science works has to do with anonymous peer-reviewing—not only in journals but also in the review of grants. And scientists, as much as we want to believe the contrary, are not necessarily rational; and even if they are, they are also staunch defenders of their fields. So how do you see all these sociological factors playing a role in advancing science?*

GL

Let me start by addressing your comment about the international community of researchers. I think that one key thing is that we, you and I and all of us, have benefitted from the fact that, as I have mentioned, the mental lexicon as a field has been a meeting ground for many disciplines. There's something special about the field that just makes it that way. It makes you want to reach out to engage with knowledge and methods of other disciplines. I think it would be hard, for example, to say that you are interested in the mental lexicon, but that you don't care at all about human memory. Odds are, I think, you're going to miss something really important -- for the simple reason that words are something that you commit to memory in one way or another. So, not being interested in the relevant characteristics of human memory functioning doesn't seem like a great way to go forward. And, on the other side, if you were to say: "Well, I really don't care about linguistics", I think that's not going to be good either because then you're going to run the risk of thinking things like: the words 'elephant', 'backpack', 'civilize' – they are all pretty much the same, each having eight letters and being surrounded by spaces. That too, in my view, will leave behind lots of potential for insight.

RA

*You are certainly right about this: the lexicon is at the interface of many interesting issues in cognitive science—and even within linguistics it has been at the center of many disputes—so it does attract researchers from many disciplines and theoretical positions...*

GL

But now, let me try to address your broader question about research structures in general. It is a much harder one. I think that the key to advancing scholarship is to not be afraid to create new things. Before we created *The Mental Lexicon* journal, a lot of people said things like: “Well, if there were a need for a journal like this, there would already be one”. I heard almost exactly the same sentence when we proposed developing the first International Conference on the Mental Lexicon. I am really glad that we went ahead and created these things anyway.

I learned a fantastic amount about the enterprise of research in my work in the Dean’s Office at University of Alberta and in Central Administration at the University of Calgary and Brock University. Those are positions in which you are forced to address the individual needs and perspectives of disciplines as well as the overall goals of advancement in research and scholarship. It is very hard to lead communities of researchers. I am not convinced that it is even wise to try. The reason for this is that simplistic models of leadership do not take into account what is perhaps the greatest strengths of the best researchers—they are not good followers! This strength needs to be cherished and supported.

Regarding your comment about the peer-review process, I think that with all its flaws, it is still the best system we have. I also feel that it is getting better. I have noticed more and more that people sign their reviews as a matter of personal policy. I have heard fewer and fewer stories of researchers being shut out of publication for ideological reasons (the expansion of the number of journals has, of course, a lot to do with this). And, all in all, I feel that the peer-review system might have the effect of making us better people. There is something beneficial, I think, about having to acknowledge criticism and respond to it in a point-by-point manner. If you are publishing a lot in peer-reviewed journals, this is something that you have to do almost every week of the year. I would like to think that it might have some therapeutic value.

RA

*So, maybe we can kind of segue this into the job market for linguists. What sorts of background or skills do you think people who are in a linguistics program should aim to get nowadays?*

GL

Oh, again that’s a great question. I think that students in linguistics now do need to be transdisciplinary in their interests, but really mainly in their skills!

When I was first hired as a junior professor in a department of linguistics, nobody asked me about my programming ability, they didn’t ask me about my statistical ability either. But now I think that a job candidate’s ability to work with large datasets is an important factor. Their soft skills and research team experience are also important. Soft skills have, of course, always been important. But I feel that, increasingly, the bar is getting higher on those things.

RA

*Computational skills are very important.*

GL

Yes, and, you know, it is surprising to me that it has turned out this way. The universal popularity of one-button cellphones seemed to indicate a move away from needing to understand how things work on the inside of the box. But I am also seeing, at least in psycholinguistics, that you need coding ability, you actually need to understand the guts of things to be able to manipulate them.

RA

*There's always this view of linguistics that it's somewhat autonomous. But nowadays you need to also understand that linguistic postulates must have psychological plausibility, neurological plausibility, and you need to understand computational mechanisms related to whatever claims you make about certain algorithms that underlie our linguistic abilities—so, what sort of autonomy is that?*

GL

Absolutely, yes.

RA

*I remember when I was a graduate student in Psychology, I was taking linguistics courses and I met a student who I thought was also taking a Psychology course with me; I said "Aren't you taking such and such course in psychology?" His answer was "I don't like psychology!" I didn't say it at the time, but I felt like saying "but linguistics is psychology! so you don't like what you do?"*

GL

That is interesting! Let me follow up with another concrete scenario and a question: Your first job was in a department of psychology; my first job was in a department of linguistics. Do you think that our research has been shaped by that difference (maybe in response to thematic differences with the two types of departments or maybe in response to matters associated with tenure, promotion, etc.)?

RA

*Well, I think there are similar institutional pressures, as you know, issues such as tenure and promotion are highly quantified and they are, you know, based on the number of lines in your CV to a large extent—unfortunately.*

GL

Yes.

RA

*It is not the depths of your thoughts unfortunately, but the length of your CV that counts, so it's a different metric altogether.*

GL  
Right.

RA

*And so, I only felt that we're doing something different when, in my tenure evaluation, someone asked "Why aren't you in the linguistics department?" I then had to explain that what we do, I do, is psychology even if we are also doing theoretical linguistics. What I was doing was psychology. It was trying to understand the algorithms of the brain and, you know, that's essentially psychology. But that question came from a behaviorist, so I should not put too much weight on it. Other than that, I mean, we've been collaborating and working with people from different departments and I never felt inadequate with regards to the environment that I was in. My work was always very interdisciplinary, I was very eclectic in my background, as you are, and, you know, we care about the content of the ideas, not from which departments they come from. Universities are great at building walls, right?*

GL

Yes, we are very good at walls, very good at walls.

RA

*Very thick and tall walls, if we are going to persist with this metaphor. But, you know, for us the struggle is to knock them down, right?*

GL

Yes.

RA

*So, what we do is psychology. What linguists do, to a large extent, is psychology. Of course, you can be in linguistics without being concerned with internal representations, but if you do linguistics as it has been done for the last 70 years—the linguistics that was part of the cognitive revolution—and if you're concerned with how the mind/brain works, looking at linguistics as a manifestation of a human capacity, then you're doing psychology. You are doing psychology because you're trying to understand internal mechanisms. But, you can do what some call e-linguistics, external linguistics, just being concerned with describing a phenomenon, not interested in how this phenomenon might be a manifestation of internal mechanisms, without any concern for describing the mechanisms themselves—but that's not the linguistics, not the cognitive science that we are interested in doing. In principle, we want to understand human nature, trying to understand how the brain "does" language, but also, perhaps how aspects of language emerge from our interactions with the world and with one-another, how language may also be shaped by different forms of experience. Ontogeny and experiences, right?*

GL

Yes, absolutely! I really think that you are right. And that kind of thinking is very much behind the recent work that I have been doing in trying to better understand how linguistic structure in

general and morphological structure in particular emerges from the behaviours associated with language use. For the most part, this is empirical, work, where conclusions are drawn from observed patterns of data. But I do think that we can also benefit from some guiding principles that help us to make sense of those data patterns.

For me, one of those guiding principles has been what I have called “*the maximization of opportunity*”. The basic idea behind this is that the human language processing system does not seek to be as efficient as possible in processing language. Rather, it seeks to maximize the opportunity to create as much meaning as possible.

The notion of *maximization of opportunity* carries with it a particular perspective on the human language system: I think it suggests that what we humans have in common is that we keep as many language and interpretation options open as long as we can. Personally, I think that is what is behind the ambiguity effects that you and I have found in the processing of suffixed words with ambiguous roots.

I think we are on the way to a much deeper understanding of lexical processing. But the next challenge is to find the best way to model this kind of processing and to characterize linguistic representations in a manner that foregrounds their structural potential and their malleability. As you know, I have been working in an approach that has the notion of morphological superstates at the centre. I feel that characterizing the structure of multimorphemic words in terms of morphological superstates enables us to think about words in terms of their morphological and interpretive possibilities. I feel that we are now in a position to better understand how the realization of these possibilities are shaped by patterns of language activity over time and by the dynamics of an individual’s lexical system.

By understanding how language is shaped by different forms of experience, we will be advancing our understanding of the interplay among language as a system, cognitive dynamics, brain function and capacity, and individual variability. I feel that we are still at the beginning of this road. So, you and I will have more conversations ahead of us. But, for now, let me thank you very much for this one! I have really appreciated the opportunity to explore so many things with you in this chat.

RA

I have been raised in a paradigm of cognitive science that has been misconstrued as ignoring the role of experiences—or, to speak of language, usage-based aspects of linguistic competence and performance. I say misconstrued because, to a large extent, symbolic cognitive science has focused on what is invariant in the species, that is, between individuals, but without really ignoring individual differences or malleability or flexibility within the system. But explaining what is invariant has always been a methodological strategy and accounting for flexibility can also be part of that explanatory framework. I had a sneak peek at your upcoming book, *The Nature of Language*, and you strike a great balance between these views of psycholinguistics, the one that focusses on malleability and usage and the one that focuses on invariant principles. Of all the people in the field, I think you have been the most capable of bringing together these two paradigms—and that is remarkable! I look forward to reading it and to continuing this conversation with you for many years to come.

*In SKASE Journal of Theoretical Linguistics [online]. 2024, vol. 21, no. 1 [cit. 2024-06-26]. Available on web page <http://www.skase.sk/Volumes/JTL56/08.pdf>. ISSN 1336-782X*