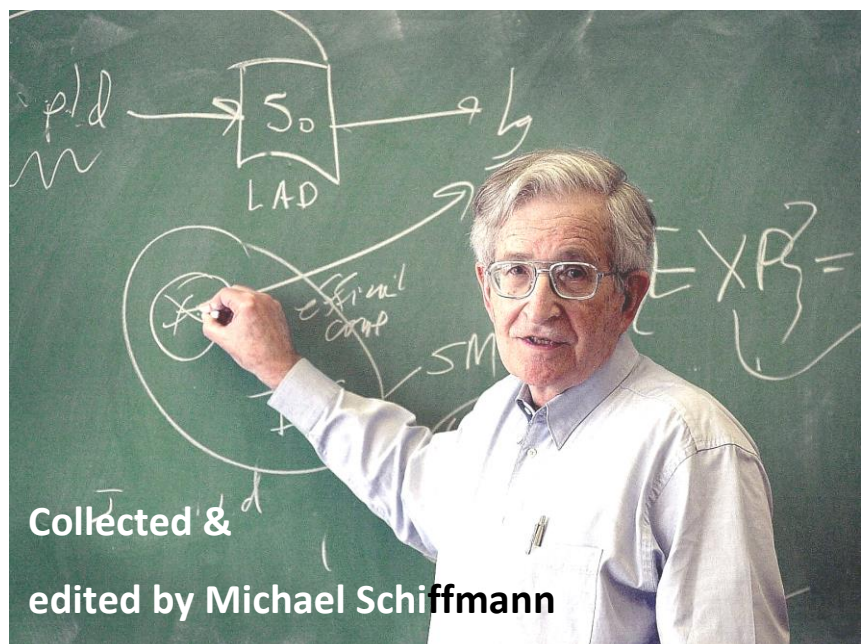




# Revolutionary New Ideas Appear Infrequently

Essays for Noam Chomsky's 90<sup>th</sup> Birthday I

(Or Don't They?)



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## Introduction

### Chomsky at 90 – We're Here for You, and You for Us

by Michael Schiffmann

As this project started to kick into high gear a couple of days ago and I sent the first results around to confirmed and potential contributors as well as some others, I received an excited phone call by an ex-student who I had cc-d these



first essays to: “Man, what are you doing again – this is some really, really crazy stuff!” Having myself gotten into this, I could hardly disagree, and I told Iwo that everything was going well way beyond my expectations, with one excellent contribution after another reaching my mailbox day by day.

Remembering well that I had first met him in a seminar based on Noam’s *Syntactic Structures* and Howard Lasnik’s *Syntactic Structures Revisited*, I then asked



him, “What, then, has Chomsky and all of what we did afterwards meant to you?” He said: “Before I got into this seminar, I thought everything there at the department was mere talk, and all of a sudden, here was the real thing! We were doing rational analysis, we were doing science!” Out of this and other seminars grew the Syntax Reading Group at the English Department of the University, a small bunch of mostly (but not exclusively) hardcore generativists of one or the other stripe, about which a few words later on.



Just one day after this telephone call, I stood in front of my class on “Language Myths,” where “Do Chimpanzees or Other Non-Humans Have Language?” was the topic of

the day. After the obligatory students’ presentation, I tried to do my best to show that what appears to be a dumb, or even almost vacuous question can be turned into a deeper one by turning to specifics: What does the chimpanzee do and what do humans do? It turns out that, (1) whatever the “signs” of chimpanzees actually are, they lack the phonology and the phonological features of human sign language, (2) counterexamples such as “wa-

ter bird” for swan to the contrary, there is no real sign of morphology in the signs of apes, (3) the “syntax” of chimpanzees such as the famous Nim Chimpsky (“give orange me give eat orange me eat orange give me eat orange give me you”) is singularly unimpressive and has nothing to do with human syntax, and (4) even though humans can use signs/words to refer to objects, events, ideas, configurations etc. in apparently sharply constrained ways no one yet completely understands, apes do so in a completely different, essentially associationist fashion.

The potential infinity inherent in (1), (2) and (3) is lacking, and so are the concepts that humans use to deal with the world. So if by “language” we mean HL (= Human Language), the answer is a resounding No. QED.



How did it happen that I got into the business of trying to introduce students to some basic tenets of cognitive science, something I would have never dreamt of immediately after I had finally managed to get out of high school in 1976 without having had to repeat a class or the exams?

In 1979, the tragedy of the first two Indochina wars, namely, the one led by French colonialism and the one led by U.S. neocolonialism, was compounded by a third Indochina war which mainly involved the two nominally socialist states of Vietnam and a country few people in the Western world had ever heard of, Cambodia. At the time, I was just beginning to free myself from the ideological shackles of various Marxist-Leninist or Maoist parties and was thus looking for independent quality literature particularly on the politics of Cambodia, preferably in German because in high school, my knowledge of English had barely allowed me to scrape by. This would later change, and not only would I become a translator of English into German, but also, the other way around.<sup>1</sup>

The one thing I could get hold of at the time was a slim volume called *Cambodia, Laos, North Vietnam*<sup>2</sup> by a certain Noam Chomsky, which as it turned out was the second part of a larger book that had appeared in the U.S. This got me interested and I started to read more, first the collection *For Reasons of State*,<sup>3</sup> which also contained interesting material on Cambodia, of course,

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<sup>1</sup> By now, Thomas Schmidinger, *Rojava: Revolution, War and the Future of Syria's Kurds* (Pluto 2018), and Schmidinger, *Battle for the Mountain of the Kurds: Self-Determination and Ethnic Cleansing in Rojava* (PM 2019).

<sup>2</sup> Noam Chomsky, *Kambodscha, Laos, Nordvietnam. Im Krieg mit Asien II*. Suhrkamp, Frankfurt 1972.

<sup>3</sup> A much shorter German edition in which all material on Indochina was deleted appeared as *Aus Staatsraison*. Suhrkamp, Frankfurt 1974.

and inevitably, *American Power and the New Mandarins*. Then came Ed Herman's and his magisterial two volume study *The Political Economy of Human Rights*, the second volume of which, *After the Cataclysm. Postwar Indochina and the Reconstruction of Imperial Ideology* was devoted to the treatment of Vietnam, Laos, and Cambodia by the Western media (and academia) after these three unfortunate countries had been laid to waste first by the French and then by U.S. intervention, a treatment that they showed in meticulous detail to be extremely unfair and selective in order to portray the "enemy" regimes that had come to power there in the worst possible light.

Different from others who denounced Chomsky as an apologist for postwar repression in Indochina in general and the nefarious Pol Pot regime in particular, after some time spent scratching my head, I soon understood what I believe is one of the main tenets of Chomsky's political thinking: The distinction between facts on the one, and the ways these facts are packaged and sold by various power systems on the other hand.

Even though this sounds quite trivial, in actual fact it is not. It may well be that few people would be willing to go as far as the Ex-U.S. Secretary of State, Madeleine Albright, who did not only say that sacrificing half a million Iraqi children who had died from U.S.-imposed sanctions was a price worth paying when it

came to toppling the Iraqi dictator Saddam Hussein,<sup>4</sup> but also once stated that she just couldn't believe how good and benevolent the United States was and has always been. Whether it's official speakers of states, Fascists, Stalinists, followers of this, that, or the other party or movement, there is always a strong tendency to follow the standard George Orwell ascribed to "the nationalist": He "not only does not disapprove of atrocities committed by his own side, but he has a remarkable capacity for not even hearing about them."<sup>5</sup> Many Western media and spokespersons who did not only – rightly – denounce the actual crimes of the postwar regimes in Indochina, but also resorted to a flood of distortions and lies to exaggerate them were the very same ones who had not only not disapproved of most of the U.S. crimes in Indochina but had also failed to even hear about them – let alone report them to the general public that might have acted on them.

So here was a stark, if not exactly intellectually challenging lesson to follow: Apply the same standards to everyone, particularly to yourself. Rationality 101, or Morality 101, easily dismissed as it goes back to the Bible and is found in all Holy Scriptures whether they have actually been written down or not, but turning you into a hypocrite or worse if you don't fol-

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<sup>4</sup> Those who have a hard time believing this might want to watch it here: <https://youtu.be/4iFYaeoE3n4?t=36>.

<sup>5</sup> Quoted in the first volume of Chomsky's and Herman's study mentioned above, p. vii.

low it. Or as Shigeru Miyagawa (see this volume) might have said it, by – again – establishing this principle, Chomsky “hit it out of the park,” particularly as Chomsky has had this uncanny ability to follow this Morality 101 principle in his incredibly many speeches, articles, and books on political, social, and moral topics.

That was *one* of the things that hooked me when I became acquainted with his political writings. But there was another one that, together with the first, made for an irresistible combination: If Chomsky had written on an area you were interested in, and you had taken time off to go on with the other realms of your interests and your life, as soon as he kicked in with some new piece, he would have gathered and digested literally all the information worth gathering and digesting on that topic, and deliver it to the reader or, more and more, his live or internet audience complete with sources everyone could check for accuracy.

Different from Morality 101, the capacity to appreciate, put in order, and process so many vastly varied facts presumably is a talent that only few people have. But as all of what he says is deeply informed by this morality, whenever one turned to Noam’s writings on some topic, one had the opportunity to gain insights one would have missed otherwise, either for lack of the moral, or for lack of the factual dimension.

It has been said, among others by me, that Noam's political theory fits on the back of a stamp, but that does not mean at all it's empty, nor does it mean that it is easy to live by the ethical lessons that can – but do not have to be – be concluded from it. In addition to applying the same standards to all actors, the theory makes the observation made by Lord Acton in the 19<sup>th</sup> century “Power tends to corrupt, and absolute power corrupts absolutely. Great men are almost always bad men.” It is up to us whether we want to draw the same moral conclusions from this stance as Chomsky: Treat everyone alike, and always question authority and power, to see whether they can be justified.

To me, it all made eminent sense, and Chomsky thus aided me to return to the ideals of my very early youth after some years in the Leninist wilderness of dogmatic splinter parties: “Anarchy is sanity,” as he told a crowd of perplexed high school students who were invited to meet him on the occasion of the award of the Carl-von-Ossietzky Prize to him in Oldenburg in 2004. Reading Chomsky definitely helped me to return to Bakunin.

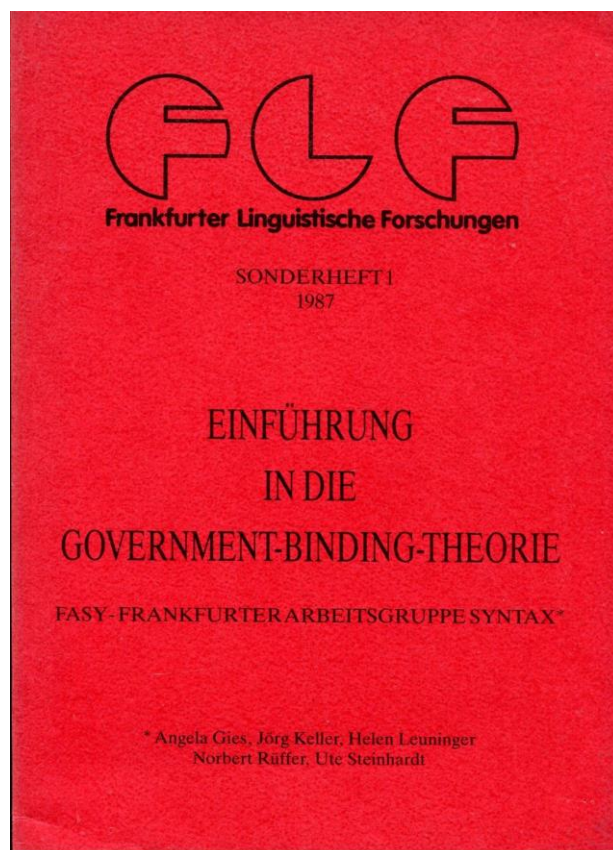
How did Chomsky's linguistics enter the picture? The year 1981 came, and I was arrested for alleged illegal actions demanding an end to the solitary confinement of prisoners of the so-called Red Army Faction (RAF). This landed me, too, in solitary confinement in the infamous German supermax prison

Stuttgart-Stammheim, where I spent 45 days under the accusation of “support for terrorism.” Apart from teaching me that solitary is *really* bad, this gave me a lot of time to read, and apart from *The Political Economy of Human Rights* Vol. I (I had read Vol. II first), I turned to the German translation of *Language and Mind*, which I read in just two days. It left me with the same experience as the one of some of the contributors to this volume: there was clearly something very interesting to this, but actually, I didn’t understand a word. But even so, I must thank my jailers for helping to lay the groundwork of me becoming a generative grammarian.

I first met Noam in person the very first time he came to Germany – before, he had always hesitated because of what he called “very personal reasons,” which I suspect had to do with Germany’s Nazi past. He spoke at a conference on “International Terrorism” shortly after the mysterious La Belle disco bombing in Berlin which was immediately attributed to Libya and Gaddafi and followed by a heavy bombardment of that country in which Gaddafi’s adopted daughter died. Edward Herman was also there, and I will never forget what Ed said in his speech to the meeting: “Gaddafi talks big, but carries a small terrorist stick, but the United States talks antiterrorism and counterterrorism, but carries a gigantic terrorist stick.”

While I did not have much personal contact with Noam at that opportunity, I did go out for lunch with Ed, him, and a few others, and what struck me most about both him and his co-author Herman was the difference between the air around them and the demeanor of some of the other speakers at the conference, who were less known and had fewer merits than this pair but were in inverse proportion full of themselves.

The next time I saw Chomsky speak was 1990 in Hamburg and while I no longer remember what the talk was about, during the long discussion that followed it he said something that I will never forget because it characterizes Noam so well. Someone in the audience had made much of science in general and political



and social science in particular and clearly addressed Noam in his lengthy and unfocused question as a member of the club. The essence of Noam's response was: "I don't oppose torture and massacres because I am a scientist, I oppose them because I a human being!"

In the meantime, after a long

incubation time, the generative virus had struck. Somewhere, I had come across a 150-page generative syntax booklet produced by a group of students around Helen Leuninger in Frankfurt called *Introduction to Government-Binding Theory*, and this time, I did not have to be in prison to read on! Little did I know that GB(T), as it was affectionately called, was already being replaced by new frameworks building on but quite different from it.

What struck me most was the aspect of GB that became known under another – for the uninitiated! – fancy name, namely, the theory of principles and parameters, or PPT.<sup>6</sup> For me, all of a sudden a number of things began to fall into place. The universal grammar (UG) of generative grammar (GG) of which I had already read in *Language and Mind* started to take on a concrete shape, the principles, and just as concrete was the way in which GG now illuminated the problem of language acquisition, which I nowadays often try to sketch for students by asking: “How is it possible that small children who are yet unable to bind their shoelaces can unfailingly *construct* the grammars of their languages in their heads, even though no linguist has ever been able to completely *describe* any such grammar, despite 2,500 years of trying?” The answer: By fixing the parameters left open by the principles of UG.

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<sup>6</sup> Here and below, lots of abbreviations, I know. They may, however, be helpful for non-linguists reading the essays that follow.

For me, PPT was the right thing at the right time. I started to read voraciously, and not just the German textbooks by Grewendorf et al., von Stechow & Sternefeld, and Felix & Fanselow, but many English textbooks and monographs as well. At the same time, I started reading Chomsky's linguistic and philosophical work with increasing intensity, and retrospectively, I think that is the point where I became interested in the history of generative grammar, or, to be a bit more modest, generative syntax. Once again, things started to fall into place, and I was beginning to see how the things that had once looked so strange to me such as phrase structure rules (PSR), transformation rules (TR), or evaluation metrics (this one had no abbreviation of its own) had made sense from the start and could, looking back, be construed and explained as, not necessarily necessary, but certainly logical steps in then development of the theory.

One book, and therefore, one man, unfortunately absent from the present collection, helped me enormously to put all the aspects and implications of Chomsky's work in linguistics together and to make sense of them, and that was the interview collection *Language and Politics* edited by Noam's friend and (almost) age-mate Carlos Otero.<sup>7</sup> I later stole that title for a collection of essays and articles I translated into German for the

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<sup>7</sup> Carlos Otero (ed.), *Noam Chomsky: Language and Politics*, 2<sup>nd</sup>, expanded edition, AK Press, Chico 2004 (1<sup>st</sup> edition 1988).

occasion of Noam's 70<sup>th</sup> birthday.<sup>8</sup> Who ever said that history doesn't repeat itself?

Many of these interviews communicate Noam's views on a variety of topics in a fashion that is particularly clear to the layperson, by which I mean the non-linguist and non-philosopher (even though the latter category in my view actually doesn't exist). Among other things, he takes a clear stance on the perennial question of human nature, explaining that, contrary to behaviorist claims, it cannot not exist because otherwise, humans would have been a malleable plaything of their accidental environment from the get-go and would have never made it to the creatures who lead lengthy intellectual fights over such issues – and also stating that we might just as well welcome that fact, at least if we prefer being humans to being amoeba.

There is a well-known “leftist” aversion against the concept of human nature because talking about it seems to cement right-wing arguments about the natural place of women, workers, blacks, natives and their respective masters. But that aversion, I learned, or internalized, perhaps from this volume more than from anywhere else, is based on a category mistake. Logically, talk about human nature is concerned with what is common to

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<sup>8</sup> Noam Chomsky, *Sprache und Politik*. Philo, Bodenheim 1999. And lo and behold, this volume also contained a Tabula Gratulatori(a), which included Günther Grewendorf and Dieter Wunderlich.

all human beings. A reactionary might of course want to say that we all share the wish to live in a society split into masters and servants, but this is hardly very convincing. Actually, the reactionary version of human nature is that some are born to rule and others are born to serve. But this version has nothing to do with the *egalitarian* variety of human nature Chomsky proposes, in which humans at the most important and basic level are the same to the point of almost being indistinguishable. Perhaps the most striking example for this is language: If viewed from the right perspective, namely, the incredibly sophisticated knowledge each speaker/hearer of any language has and shares with all others, the differences between a Ralph Waldo Emerson and Jane USA, or James Joyce and a cockney in London, or and Ingeborg Bachmann and a welfare recipient in Bavaria are fine details and virtually non-existent.

For me, reflecting about all these things was a milestone and I've tried make something of the insights gained from this ever since: in my thinking, in my life, in my political practice, in my teaching. Which brings me to my last point, not because I could not go on for a while talking about "Me and Chomsky," but because the deadline for this introduction is approaching mercilessly.

Having been an educator in the kindergarten, a failed student of South Asian languages, a truck driver (that was fun!), a factory

worker, a mailman (fun, too!), and all sorts of other things, in the mid-1990s I was charged by friends who would no longer put up with me as they knew perfectly well that all these activities had little nothing to do with what occupied my mind: “When are you going to pursue this – totally unintelligible – linguistics and Chomsky business seriously? When will you file your application to the Ruprecht Karl University of Heidelberg?”

And so it went. I did apply, and became a student of “Allgemeine Sprachwissenschaft” and “Anglistik” at the age of 38. Without him ever knowing it, it was Noam who had brought me there. And I am grateful for it. In 2004, I became a Ph.D. with my thesis on the U.S. death row prisoner Mumia Abu-Jamal,<sup>9</sup> and one of my friends at the institute, Michael Isermann, helped start my teaching career at the English Department of the U. of Heidelberg, which has been quite bumpy but a lot of fun.

That’s the short story of why I’m now talking about apes in front of students instead of handing out the mail or driving a truck, but it would be incomplete without the Heidelberg Syntax Reading Group, an entity apparently quite similar to what had coalesced around Helen Leuninger in Frankfurt in 1987. Teaching *Syntactic Structures* and other GG stuff had formed a strong bond between a number of students both inside and

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<sup>9</sup> Its German book publication supported by a blurb by – Noam Chomsky!

outside of the English Department, and after having an incredibly insightful (and often also well-attended) Spring Course in Minimalist Syntax based on David Adger's book *Core Syntax*, we launched the Syntax Reading Group (SRG), whose participants read every single published post-1993 piece on syntax by Noam until we were forced to dissolve because the participants had to get jobs here, there, and everywhere.

Why is the SRG important enough for me to include it in this introduction? Because to me, it represented some of the finest things people interested in the nature of the world and the nature of human beings can produce through free deliberation. On one day, after a long session, one of us said, "The beautiful thing about this is that with each question we believe to have solved, a new one arises." This is also why I still teach even though translations (yes, as mentioned above I did overcome my English deficiencies and have translated eight of Noam's books) would earn me more.

I have come to appreciate that the students are the real teachers.

There is a lot more to say that can't be said here as the deadline is 24:00 and it is 23:25 now. Just as all other people, Noam has been known to occasionally be brusque, uncomprehending, or emotionally upset. From what I've heard from some people, I also believe that it's not fun to be at the receiving end of his

wrath, at least after some provocation. I would have liked to elaborate on this aspect a bit more, too, but time is too short.

What does that mean? It means that even the exception of a great man who is NOT a bad man is after all human. Celebrating Noam does not mean denying the deep ironic comment by the late German ex-con and poet Peter-Paul Zahl:

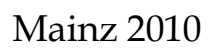
You've been bad comrades throughout of all of these years  
All these headaches, I owe only to you  
Too narrow was the size of the halo  
That you've tried to put around my ears

Fortunately for all of us, Noam, with all his talents, moral qualities, and most of all, humanity, does not stand on a pedestal unreachable for the rest of us. In my view, his very special power consists in the incredible ability of being inspired by others, and then to inspire them, us, in turn.

Thank you, Noam, for being who you are.

And thanks to all the contributors of this incredible project, who have given from their time so generously, for themselves no doubt also, for all of us who will read this – and for you!

(and, in memoriam, the Syntax Reading Group)



## Some notes on the centrality of Chomsky's methodology to the cognitive sciences

Nicholas Allott



Chomsky changed the way that I thought long before I met him. Unlike many of the other contributors to this book, I haven't studied with him, and I don't have stories about him to share. What I will mostly do here instead is

to comment on some of Chomsky's ideas which, in my view, are fundamental to the study of language and cognition (including, but going beyond, generativist work in syntax, which is well covered by other contributors here).

### *Some personal notes*

I happened to encounter Chomsky's work in politics, linguistics and philosophy just about simultaneously. I was starting an MA in linguistics at University College London, with no academic background in the subject. The convenor of the won-

derful course which allowed this unusual entry into the field was Neil Smith (for whose connections with Chomsky see his essay in this volume) and one of the lecture series – on pragmatics – was given by Deirdre Wilson, who did her PhD with Chomsky. When I went on to doctoral studies with Deirdre as my first supervisor and Neil my second I was delighted to realise that I had become a kind of academic grandchild of Chomsky's on two sides.

The MA in linguistics at UCL also included an excellent introduction from the independent-minded generativists there to P&P-era and Minimalist syntax. But my personal inclination has always been towards Chomsky's broader project of studying language as a mirror of the mind, and the implications for philosophy and cognitive science. I go back again and again to *Cartesian Linguistics* and *New Horizons in the Study of Language and Mind*, far more than to (for example) *Syntactic Structures* or *Minimalism*.

At the same time, a old friend had introduced me to Chomsky's political work, and I found myself embarking on the crash course in international relations and left libertarian thought that you get from going through Chomsky's back catalogue and chasing up some of the many works he recommends: essential preparation, as it turned out, for involvement in the

Stop the War movement when it sprang into being in the autumn of 2001, all of which is another story.

### *Chomsky's centrality to cognitive science*

The crucial ideas of Chomsky's that I want to set out are connected in various ways, and it's somewhat arbitrary to divide them up, but I will discuss them in this order: i) the Galilean style; ii) the suggestion that progress will mostly come from studying relatively discrete mental systems in abstraction from the rest of cognition; and iii) the requirement that theories be explicit.

### *The Galilean style*

What Chomsky calls the 'Galilean style' in theorising<sup>1</sup> seems to be essential to systematic investigation of nature. It involves abstracting away from much of the messy detail of phenomena with the aim of developing law-like accounts of underlying regularities. Explained like this, it strikes most scientists as obvious, but in the study of language it certainly bears restating. As most readers of this book will know, many linguists still feel that the great diversity of linguistic phenomena somehow refutes generative syntax – ignoring the crucial point that only *analyses* of data can clash with theories.

Similarly, a lot of work in linguistic pragmatics seems to be motivated by another view that flies in the face of the Galilean style: that it is illegitimate to abstract away from certain important aspects of people's experience. But if you want to understand (say) how language mediates certain social relations, it may very well be necessary first to develop a theory of language by abstracting away from language use, and to develop a theory of the essential core of communication by trying to answer a basic question: how can a speaker and a hearer coordinate on a thought, given the polysemy and open texture of language?<sup>22</sup> Both these research programmes are thoroughly Galilean in Chomsky's sense – along, arguably, with all serious work in the sciences.

### *Mental organs*

A related claim is that progress is likely to be made in the cognitive sciences by focussing on discrete mental systems which underlie abilities, particularly those systems with a large innate component. This is the view that Chomsky has sometimes called the 'new organology'. It obviously receives support from the success of the generative grammar research programme. A number of other such mental organs or faculties have been investigated in detail since Chomsky suggested this

research strategy, including the number sense (or senses), mindreading/theory of mind, folk physics, utterance interpretation, and moral grammar.

Given these successes, some of them spectacular, I think it is important to be aware that the strategy wasn't always obvious. Of course, it still faces resistance: there are many in psychology and linguistics who dislike talk of innate domain-specific capacities. Pursuing alternative research strategies is fine, I suppose, but something close to Chomsky's recommended programme has been central to most of the interesting work in cognitive science, and I think it's accurate to say that there has been essentially no success in explaining human linguistic abilities in work based on the assumption that there is no dedicated innate language faculty.

### *Explicitness*

The last of the three ideas I want to discuss is Chomsky's requirement that theories be explicit. This is often specified with reference to syntax: the system that syntacticians postulate should be freestanding, in the sense that it should not tacitly presuppose part of the competence that they are trying to explain, as traditional grammars do.

That much is, or should be, a commonplace of introductory

linguistics courses. What is perhaps less often discussed is the desirability of extending this kind of rigour to cognitive science more generally. One such discussion is at the foundation of Deirdre Wilson and Dan Sperber's relevance theory, which attempts to bring explicitness in Chomsky's sense to theorising about communication, improving on Grice's well-known framework. Grice tried to explain how one can be rationally justified in taking a speaker as conveying an implication; but what the implication is in each case is largely left to intuition. An explicit theory would instead generate it.

It's important to see that this explicitness is not the same as formalization, setting out one's theory in a logical or mathematical system of notation. Formalisation doesn't entail explicitness: one can present in formal terms a theory that is not fully explicit. Again, a good example comes from pragmatics. There is an approach that formalises Gricean inference in game-theoretic terms as a strategic choice between meanings. This approach is formal but not explicit, given that it does not attempt to show how the rival candidate meanings are generated.

As Chomsky has said, one should only formalise when there's some particular reason for doing so. Formalisation is not a criterion of adequacy for theories in cognitive science. Explicitness, on the other hand, seems to be essential.

## *Envoi*

My aims when I set out to write this piece were to stand as a representative of the very large number of researchers whose work has been shaped by Chomsky's without their having had extensive direct contact with him, and to sketch out briefly how profound – and profoundly beneficial – his influence has been in linguistics and cognitive science beyond work on syntax. On a personal note, the centrality of Chomsky's thought to my academic life can perhaps be gauged from the fact that in trying to do that I have appear to have produced a kind of *apologia pro vita sua*. It's a great honour and a pleasure to be able to thank him here: Thank you, Noam, and happy birthday!

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<sup>1</sup> Following the physicist Steven Weinberg.

<sup>2</sup> Another point that Chomsky has made is relevant here: just because some phenomenon is socially or personally important it doesn't follow that there is any corresponding underlying law-like system to be found.

## **ZIG ZAG: The accidental scientist....**

Tom Bever



This is a story – probably typical for us all – of how I lurched from one accidental interest to another, was ultimately captured and tamed by Noam and Morris (respectively), and went on to a life of largely experimental crime in the language and cognitive sciences.

### **ZIG**

The first I heard of Noam was in 1962, when I was emerging from my own academic crisis. I had gone to college planning to become an entomologist. At age 11, I had dug up an anthill in the backyard of our Cambridge house (I was already in the shadow of MIT, because my father was an emerging professor there). Following instructions from a hand-me-down boy scout project book (from my brother) I dumped the debris from the anthill, ants and all (and by luck, the queen) into a giant war surplus

Hellman's Mayonnaise jar (shaped just like the regular jars, but roughly 3 feet high), in my bedroom, sitting in an infant wading pool as a moat. Following instructions, I covered it with blankets so the ants would think that the glass edges were simply impenetrable rocks and they built their tunnels next to them.

After the designated two weeks, the veil was lifted, and I could watch them negotiate their hive lives at least in part. It seemed clear and manifestly necessary that ant duos when meeting head on in a narrow tunnel, had to decide who went over and who went under as they went on their missions. A brief moment of mutual antennae vibration seemed to be sufficient for the interchange, and I became intrigued as to how they managed to communicate about whatever it was that was important to them. So I watched and surmised that the antennae were vibrating in some kind of informative rhythm....Morse code and all that....

Mating season appeared and my mother lowered the boom: ants flying around the house in search of mates and a new hill were not to her taste....

But the fascination stuck with me.... Even in high school I took a novel course in biology (rather pioneering for its time) and tried to create a project on ants, but the locale (a small town in New

Hampshire) was in the middle of winter, the ground was frozen, ants quite protected.

Nonetheless, the fascination still stuck.

In the meantime, my parents sent me to Europe for a summer to get over a young woman I was dating of whom they did not approve (it didn't work, it only prolonged the relationship). The spillover from that was I went to the Goethe Institut, and studied German, discovering that I liked learning languages so much that I went back of my own will a summer later.

## **ZAG**

At college, following my ant-fascination, I set about to become an entomologist, majoring of course in biology. Alas, there was a series of courses I had to take, step by step to gain acceptance into the course on ants (taught by Professor Carpenter, no less): introductory biology, zoology, crustaceans, insects....and at last....but I never got there....

## **ZIG**

Well, I was also in great demand as a theatre lighting designer, something I had actually started in at the above-mentioned Cambridge grade school. At Harvard there was no central theatre at

that time: so all the plays were presented in House Dining Halls. This meant that nothing could be done to set up the lights and rehearse the plays until after the supper debris was cleared away. I stayed up until 2am quite regularly and enjoyed consorting with the less nerdy thespians.

This gave me a great lasting education in Shakespeare, but seriously interfered with the laboratories associated with each of the courses I had to take on the way to the ants. And I was increasingly aware that biology at that time was lackluster in contrast with the new insights into the structure of genes and their replication. So, de facto, I stopped going to the labs, and pretended everything would be all right in the end.

Of course, it was not. By the end of my sophomore year I was flunking out. Harvard had a policy of not expelling such students, but rather requiring that they take a year off. So I was given the choice of a year off or going to summer school and getting two As to show that I was on track.

## **ZAG**

I already knew that my interest in ant communication paralleled an interest in learning languages, so I dallied with the idea of

joining the Army Security Agency, which at the time offered to trade a two-year commitment for intense training in a language at the Monterey Institute. While I was about to enlist, they changed the requirement to three years: that gave me pause, I was concerned that I would not really get back to college with that long a break. (This was extremely fortunate: it was just the period when Eisenhower was sending “advisors” to Vietnam....if I had enlisted, they might have taught me Vietnamese and I might have spent my time in a Saigon basement decoding radio traffic....or worse, been an interpreter in the field.)

So I went to summer school and duly got two As. One was in Greek, reading Plato’s *Crito*, which I had read in prep school, so it was a breeze. The other was introductory psychology, which at the time was operant psychology, vertebrae and social psychology experiments. I ended up at the top of a class of 300+, and the “section man” took me aside and suggested that I follow a career in psychology (George Reynolds, who years later became head of Psychology at Berkeley).

### **ZIG - the circle opens**

That fall I looked into what majors would have the smallest number of requirements, and give credit for psychology courses

as well as language courses: answer? Linguistics. So, I signed up for two courses, one by Joshua Whatmough, a relic from British boarding schools with a specialty in Italic dialects, and a humanitarian view of the field; his course ranged from the dreary to the incomprehensible, with a mishmash of structuralist byways.

Fortunately, the other course was George Miller's undergraduate class in psychology of language.

George was working with Noam at the time on formal models and linguistic theory, and the course was dominated by careful reading and discussion of Syntactic Structures.

Well! That breathtaking monograph captivated and saved me at the same time. Its clarity and fast paced race through an astounding contrast with the traditional view I was getting from Whatmough imprinting me on a lifelong course of attempts to combine formal models with models of acquisition and behavior....and ultimately neurology. But it was not only the content that overwhelmed me: I was also intoxicated by the style of argumentation, on the one hand stark and spare, on the other hand, rich in sparks of implications.

It was fortunate in a way, that via Whatmough I was seeing how confused the field was in general, so that Noam's icy blast had something to sweep away. I had fallen into an academic seesaw, floundering in the past on Tuesdays and Thursdays, and riding into the future on Wednesdays and Fridays. It was an exquisite weekly intellectual whiplash.

I had yet to meet or even see Noam. He was an oracle floating on an island somewhere, and a grey eminence before his time.

But in the spring of my junior year, I had shoehorned myself into George's graduate seminar on the psychology of language. This seminar, meeting in the bowels of Memorial Hall, is memorialized as the forum for the major confrontation between Noam and Skinner, concerning Skinner's attempts to account for language with operant theories, and Noam's destruction not only of those attempts but of the entire operant Stimulus Response Edifice, as collateral damage.

I had never seen any swordsman so deft and calm as Noam quietly sliced his opponent – the leader of Anglo-American psychology – into small bits. Breathtaking, again in its content and in its inimitable style, deadly serious, unrelenting and effortless.... Danny Kaye's swordsmanship came to mind.

## ZAG

Time passed. By chance I got a really lucrative research assistant job (for the time, \$15/hour) working for a psychiatrist, interested in schizophrenic speech, who created one of the first modern studies in infant language acquisition: she believed Freud's dictum that schizophrenia reflected regression to childhood, so one should study normal language acquisition to understand adult schizophrenic language. I had accumulated various technical skills related to audio-visual processing, so I was hired to create a Rube Goldberg way to collect a cheap cinema record of infants and mothers talking to each other.

This was important because it gave me an entre' into the small emerging MIT/Harvard group seminar focusing on language acquisition, to a great extent under Noam's influence, as a leading member of the group. The personnel were stellar: Roger Brown, Noam, Morris, George, Roman (Jakobson), Eric (Lenneberg) the psychiatrist, and me, the lone undergraduate (a Junior). Jakobson was an advisor on the language acquisition project, and through that connection he became my undergrad tutor (the prior one being Dell Hymes).

There are many stories to tell about My Life with Roman, but that is for another encomium.

The important outcome of that connection was a critical discussion with Morris, who in 5 minutes taught me both how to be a scientist and how to be a teacher. When he invited me to join the first class at MIT, I jumped at it, collapsing all my dual fascinations with Noam in writing and in person with one giant quantum leap.

## **ZIG**

Yet, in this new bold program, I could not grasp what syntax is about. It seemed to be a weird secret cult, with no boundaries, no way to tell if you were getting it right or not. My downfall was hastened by Barbara Hall (later, Partee), who was a co-student in the first class: in the basic syntax class taught by Ed Klima, she understood everything quickly and loudly: after each incomprehensible formulation, Ed moved on, ever propelled by her enthusiastic comprehension. I was left in the dust.

So, I opted for phonology: at least there one knew when one has a (reasonably complete) solution. And Morris was Aaron to Noam's Moses....approachable, harmlessly profane, encourag-

ing....so phonology became fun. These were the early days of generative grammar, and almost anything a grad student did in a class became publishable, or at least fodder for the LSA. So I prospered in the confines of the mouth, ear and distinctive features.

## **ZAG**

Another important accident was where I lived: in Belmont, on a major route to MIT in Cambridge. With only one family car, a nonworking wife and new child, I was stuck on how to get to school each day. Jerry Fodor, a fresh postdoc in the program, lived further out, and offered to ferry me back and forth on a regular basis. Jerry's generosity was a godsend, giving me both a personal ride and someone to discuss my continuing interest in the biology of communication and emerging understanding of issues in the biology of cognition. Jerry was at his best, deeply thoughtful, funny and kind.

This fortuitous contact was aided by the new chair of the new department in neuroscience (aka "psychology") led by Hans Lucas Teuber ("Luke"): he was initially eager to form some kind of relationship with Noam and saw Jerry and me as a conduit for that. So, he gave us a giant room, a state of the art tape recorder,

a small budget and left us alone. This enduring contact blossomed into an early phase of experimental psycholinguistics and a course that mated Generative Grammar and behavior, and eventually a foundational book with Jerry and Merrill Garrett.

Noam was polite with Luke, but kept his distance.

## **ZIG**

Life with psychology started to bloom: when Jerry went on leave in my third graduate year, I took over our course on cognition, biology and linguistic structure, which ultimately became “psycholinguistics”. I realized that I needed more time and support to expand my base in psychology, and went to Morris and Noam to ask their advice: amazingly, Noam said, “why not try for a Harvard Junior Fellowship”.... I was flattered and surprised since my direct contact with Noam had been slight, and my performance in syntax poor. The major event was a prolonged argument with him about how to integrate cyclic semantic composition into syntactic derivations, which occurred in his office over several meetings. I did not win the argument (who ever does?) but I did not lose either: at the end, he mused, “well, I think you have a point”. I went home, ecstatic and floated on that for several weeks. I had doubted that he remembered this, but recently

he recalled at least the general content of our discussions, and noted that it is still a central problem.

Noam had been a notorious junior fellow, and with his help as well as from Morris and Roman, I was chosen. The society itself was a big disappointment, way too pompous and self-important. But it did two important things for me: it sent me for a 6 month's visit to Jean Piaget; it gained an official entre' back into George Miller's domain, now the Center for Cognitive Studies at Harvard. George gave me an office, a lab, several research assistants and other support: with this support, I had many published studies by the time I graduated.

## **ZAG**

A family anecdote intrudes on this account. My father – a professor of metallurgy at MIT, often distraught by its transition from a scientific institute of Technology, into a university, was (politely) mystified by my interest in linguistics. One evening, he co attended an MIT social/academic dinner, and was seated next to Noam, possibly by alphabetic chance. Noam was deep into Humboldt's views on language at the time, and was struggling with several normal but long German sentences, which he in fact had with him. He asked my father, a native speaker of German,

to help understand them, and a conversation ensued about the nature of language, its productivity, and so on. My father spoke with me a few days later, and approvingly said, *“Now I understand what you are doing and why you are studying with him”*.

This did not relieve me about my own path since I was already confident in it, but it did please me that my father now recognized Noam’s genius.

## **ZIG**

Of course, I attended The Thursday Course that Noam taught, every year for 7 years. I followed the transition from the Syntactic Structures model, and embraced the Aspects model as a good structural vehicle for experimental predications and psychological modeling. Gradually, very very gradually, I came to understand a bit more about syntactic theory. But I have made scant contributions to syntax itself: I am more an eager consumer of it.

I graduated and went my own way, ever more immersed in issues of the relation between cognition, behavior and linguistic structure. Like many others in the early 1970s, I surfed on the crest of excitement about Noam’s work and its implications for

behavioral and cognitive science. My professional career moved on, and I quickly became a full professor at Columbia.

Noam was supportive, at a distance, and we had occasional correspondence (which I may still have buried in an overstuffed filing cabinet that has followed me around in my academic peregrinations). I recall a critical letter from Noam around 1970: I was dallying with Jerry Katz and Paul Postal with interpreting grammar as a platonic object (that is, as expressing natural forms – crucially different from today’s interest in universals of the “third kind” based on natural *law*. Platonic forms characteristically exist without a local cause, natural laws are explicitly causal). Noam wrote me a few short lines on the issue of how language might have arisen in hominids, a mantra that I have never forgotten, roughly the following.

*Perhaps there is a natural law that we do not yet understand that applies to a grapefruit sized concentration of entangled and neurophysiological connections, which results in the capacity for language and other human cognitive abilities.*

That possibility changed my view: in my interpretation, it collapsed the essence of the notion that we were trying to capture with invocation of Platonic forms, together with possible natural

law. Of course, Platonic forms were more comfortable because they are here before us, albeit an explanatory dead end: a mysterious natural law is....remote, maybe never to be understood....But the notion of natural law was more satisfying and not a dead end, even if we can not yet see the light at the end of the tunnel.

### **ZAG: the circle closes.**

Time has moved on. I have had positions at Columbia, Rochester where in each case, I built a new program in the language sciences, attempting to integrate training for students in linguistic theory and the study of mind and brain. After several decades of academic wandering, I arrived at Arizona, where there was a strong psycholinguistics group, a strong linguistics department, and a leading group in the study of navigation in rats (my own research had turned to the question of whether we can use navigation skill in the rat as a model of cerebral asymmetries for language – answer, yes, but no one has picked up on it yet).

Arizona has been and is a comfortable and supportive context, albeit with the perennial issues raised by a State University. I

have served as department head (who knew?), and other administrative capacities.

The most important by far, has been de facto central responsibility for bringing Noam here to the university. This was a long campaign, starting with two separate visits for special (largely political) events; and then a complex set of negotiations, mediating between Noam and Valeria on the one hand and the university on the other. There are more than a thousand emails attesting to the complexity of the discussions.

But, here he is, going strong, a model for us as he moves the field into ever more explanatory force, opening up possibilities for new investigations of the multiple sources of universal grammar, perhaps pointing to a grander simplification and synthesis.

**ZIG**

And most important to me: is the emergence of our collegial and personal friendship.

**ZAG**

Who knows what happens next?

# Continuity and Change: Sixty Years of Generative Enterprise

## Noam Chomsky's 90. Birthday

by Manfred Bierwisch



This very remarkable anniversary is a great and natural occasion to look back to the years when the Generative Enterprise began. This was, of course, a rather different situation at the east coast of the USA, where the Enterprise was actually initiated by Noam, and in the eastern part of

Germany, where I lived under the quite peculiar conditions of a split city. It was under these circumstances that I came across *Syntactic Structures*, two years after the publication of this absolutely unique booklet, the effect of which was close to magic: Although the average reader couldn't have any idea of the unbelievable work of ingenuity contained in the *Logical Structure of Linguistic Theory*, from which it was abstracted, the power of this background was nevertheless present, starting in fact a new era not only in linguistics, to be noticed in the time to come. I had

just finished a dissertation on German verb morphology, largely along the lines of European structuralism, the by then most advanced way of doing linguistics, which was still largely ignored at German universities. Controversy, rather than acceptance, was therefore the main effect of my thesis. There was, on the other hand, a fairly general notion around in those days, that actual developments in information theory and computer science should be recognized also in other fields of research, including the social sciences. This orientation was taken up by a group of post-docs I belonged to at the East-German Academy of Sciences. We had the idea, that efforts of formal explanation are reasonable also in the analysis of language. Inspired by *Syntactic Structures*, I came up with an attempt to formulate principles for a scientific account of the grammar of German. A copy of this attempt, I dared to send to professor Noam Chomsky at MIT, although I thought this to be close to self-overestimation. Hence, I was not merely surprised, but really happy and proud, when I a short time later received a ten-page letter with Noam's detailed comments on my attempt. I felt grateful and instructed in quite unusual ways, since Noam - appreciating the overall-orientation of our attempt - spelled out with patience and friendliness, where he saw clarification to be indicated - e.g. with respect to the relation between different accounts of the

same phenomena - and where he saw proposals of *Syntactic Structures* taken up correctly.

With this background in mind, I wrote the *Grammatik des deutschen Verbs*, a booklet that showed a couple of syntactic features to be characteristic, in fact crucial, for the syntax of German. One of these features, viz. the fact that the organization of subordinate clauses is surprisingly central compared to that of simple main clauses, had already been noted e.g. by the structuralist grammarian Jean Fourquet. Thus (1b) is in some sense more basic than (1a), as shown by the constituency in (1c), although (1b) is a subordinate and (1a) a main clause.

- (1) (a) denn Hans schenkt Eva Blumen  
(b) weil Hans Eva Blumen schenkt  
(c) [weil [Hans [Eva [Blumen schenkt]]]]

The decisive point is, that in the new analysis (1a) is related to (1b) by a transformational rule, that accounts for quite a number related, but different phenomena concerning the position of the finite verb, e.g. in assertions vs. questions as in (2a) vs. (2b) or the fact that the otherwise quite arbitrary behavior of the synonymous verbs in (3) and (4) are simply the result of this transformation interacting with the independently needed distinction between stressed and unstressed prefixes in *án-fang-en*

vs. *be-ginn-en*. (The *t* for trace in (3) and (4) indicates the place of the verb without the transformation.)

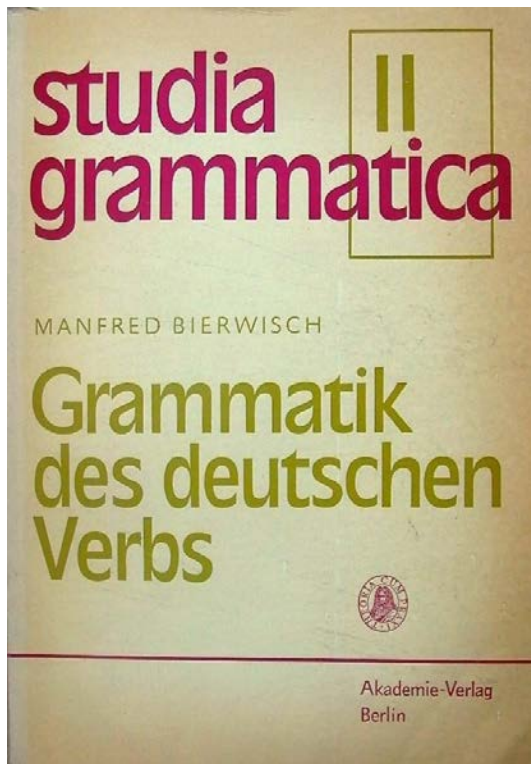
- |                                     |                                  |
|-------------------------------------|----------------------------------|
| (2) (a) er kommt noch               | (b) kommt er noch?               |
| (3) (a) begann es nach einem Jahr t | (b) fing es nach einem Jahr an t |
| (4) (a) es begann nach einem Jahr t | (b) es fing nach einem Jahr an t |



More importantly, however, this transformation belongs to a systematic component of the grammar, which determines the interaction of verb-placement with other rules such as question formation in (2b), (4a) and (4b) or different types of topicalization as in (5a) and (5b), Wh-placement as in (6b), (6c), and a fair number of other syntactic constructions.

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| (5) (a) nach einem Jahr begann es | (b) begonnen hat es nach einem Jahr |
| (6) (a) Eva hat ihn dann gefragt  | (b) wen hat Eva dann gefragt        |
| (c) wann hat Eva ihn gefragt      |                                     |

The analyses grossly alluded to by these examples have been remarkably modified in the development over the following years: More facts of different type were taken into account, and - perhaps more importantly - different interrelations between various types of phenomena were observed, leading to new types of analysis using additional technical means. Thus, in the first phase of Generative Grammar, based essentially on the



outline given in *Syntactic Structures*, there was no concept of trace as used in (3) and (4), to mark the initial position of a transformationally moved constituent; and the introduction of traces required to clarify their status in the mental structure to be analyzed by this means. Thus, the recognition of additional facts and further rele-

vant interrelations among them together with new theoretical concepts led to repeated revisions of the theoretical framework by which the Generative Enterprise was motivated. The elegant and comprehensive framework described and motivated by Chomsky in *Aspects of the Theory of Syntax* (1965) acquired pretty soon a kind of classical status, attracting interest far beyond linguistic circles. The reception of basic ideas of generative grammar by an increasing number of research groups led to a wide variety of pertinent analyses and interesting results, but also to alternative proposals and sometimes fairly sharp controversies about the criteria and organization for theoretical descriptions. There is no doubt that these debates, competing ideas and disputes, even if they were bound to incompatible proposals, were

all inspired by the groundwork based on Chomsky's ideas. And he did not only provide the orientation for competing parties, but also the motivation for modifying and improving theoretical positions. In this sense, Chomsky was, and still is, a - or rather the - leading participant of a dynamic, lively development - the Generative Enterprise.

But besides the changes, differences, and controversies within the realm of linguistic research, there were problems and conflicts in the political world of which linguists in different places were, more or less, active participants. This, of course, was a very different issue at Noam's place - the MIT at the east-coast of the United States - and my position at the Academy of Sciences in Berlin at its rather different periods. In the late fifties, when I got in touch with generative grammar, Berlin was still an almost unreal place, where it was a subway ride to get from (pretended) socialism to complacent capitalism. In spite of unpleasant experiences with the late Stalinist bureaucracy, I was still convinced, that issues of grammatical analysis are an essentially apolitical matter. Political arguments against linguistic positions were simply abusing them to defend conservative positions or unscientific prejudices. This complied fully with my reception of *Syntactic Structures* and apparently also with Chomsky's position, irrespective of some rumors about the rad-

ical convictions, he was said to hold in political matters. This neutral relation between generative grammar and issues of political interpretation was changed pretty soon in an increasingly tensed political situation: The building of the Berlin wall separated the two parts of the city, interrupting not only the subway-connection between socialism and capitalism, as part of a generally growing hostility. Political problems for linguistic positions came up for two completely different reasons.

For one thing, the ongoing escalation of the Vietnam war did not allow for neutral habits, simply ignoring the atrocities as far away. Hence we were fascinated by Noam's paper *The Responsibility of Intellectuals*, which demonstrated at once the deeply argued critical position of one of the leading American scientists, and the fact that linguistics is simply something different. One should expect, that reproaches for ideological tenets contained in a scientific doctrine - a frequent practice in eastern countries those days - were two-ways inapplicable to generative grammar: First, the initiator of the theory sharply criticized the policies of the USA, and second, there is obviously no connection between political and linguistic claims. This rational argument didn't hold in East-Berlin, however, where someone with a politically left position, arguing against the same war, was still politically suspicious, if he could be blamed to belong

to the wrong faction. This leads to Chomsky's anarchist orientation, which was the basis of his engagement against the role of the US in the Vietnam-war, and more generally, of his views on human nature and the expectations and goals of human society. (In a way, we were only faintly aware of at that time, this perspective is ultimately connected to the view that language is that part of human nature, the structure of which is the proper objective of linguistic theory.)

A second, quite different, but closely related, suspicious aspect of generative grammar had nothing to do with the Vietnam war, but with communist parties in Europe, which at that time were looking for emancipation from the Stalinist doctrine.

One very specific attempt was related to a brand of structuralism (somehow deriving from Levy-Strauss), which thereby was doomed to be rejected for strictly political reasons, since the ruling parties took every modification of the ideology as a direct offence against their authority. This provided a welcome pretext for those in the linguistic community, who wanted to block new concepts and ideas. This perspective had no room for subtleties like the fact, that generative grammar was an important step beyond structuralism. All these reproaches were bundled by interested colleges and functionaries into a great accusation against generative grammar, Chomsky's anarchism, and structuralist

ideology, with drastic effects: the research group at the academy was dissolved, imposing various sanctions on their members with respect to publication, traveling, meetings, etc.

Times went on, the Vietnam war ended; some functionaries got replaced; certain prejudices collapsed, the generative grammar returned to the Academy, after ten years its research group was reestablished. And steadily, in smaller or greater steps, the development of the theory went on. Thus, the format reached in *Aspects of the Theory of Syntax*, had dispensed with the initial distinction of simple vs. embedding transformations, but it had still a wide range of potential transformations. This could remarkably be reduced by extracting general conditions determining their application. An important major step in this development was presented 1979 in an international seminar in Pisa, which I had the chance to attend, meeting Noam for the first time in person. The overwhelming impression of these Pisa-lectures, published as *Lec-*



*tures on Government and Binding*, was the integration of continuity and ground-breaking changes: Building on the conceptions and insights reached so far, an essentially new idea was proposed, lat-

er on referred to as *Principles-and-Parameter-Theory*. This framework assumes the language capacity, which the acquisition and use of linguistic knowledge are based, to be characterized by a system of universal principles with parameters. While the principles determining the format of possible linguistic expressions are part of human nature, due to biological endowment, the values of their parameters are fixed by individual experience. Different rules are now seen as operations determined by different parameter-values of underlying schemata. This general view emerged as a natural, but radical step along the continuous tendency to strengthen and generalize grammatical systems by systematic simplification. It started with analyses that reduced different structures to the same transformation, as hinted at in examples (2) to (6) above, it then simplified transformations by extracting general conditions, extending now this strategy to the system of principles which by different parameter-values different values accounts for the variety of different human languages.

It must be added at this place that knowledge of language obviously and necessarily involves the interaction of the combinatorial possibilities, to be explained by the system of principles and parameters, with the whole wealth of conceptual knowledge accumulated and stored in the lexical system. The realm of lexical knowledge is based on the capacity of symbol formation, which

means the far-reaching ability to create and store the fixed connection of a signal with an independently organized conceptual structure. The interaction - or rather integration - of lexical elements with the combinatorial structure provided by the system of principles and parameters must play a crucial role not only for specifying and fixing the parameter values, but also for the organization of the system of symbols, their internal structure and their relation with other lexical items. With these considerations in mind, the language capacity must be characterized as the ability to acquire and use symbol combinations.

Although Noam had a clear understanding of the nature, importance, complexity of lexical elements, where the connection of concepts with independently structured sounds is routed, his primary concern clearly was the combinatorial system, its character and specificities.

In this respect, a further move introducing radically new ideas, preserving however substantive previous insights, was *A Minimalist Program for Linguistic Theory*, initiated 1993. Chomsky doesn't consider this program as a theoretical change, as it is supposed to merely radicalize the theory of *Principles and Parameters*. Grossly simplifying the matter, one might say, that analyses along the *Minimalist Program* intend to show that processes of syntactic combination can all be reduced to ultimately one type

of operation, called MERGE. By this operation, a syntactic unit is combined either with a new constituent (by 'external merge') or re-combined with a specified internal part of it (by 'internal merge' or 'movement', leaving a trace at its origin). The various conditions and constraints this operation is subject to, such as optional or obligatory application, morphological conditions, or selection constraints, are fixed by features or lexical properties of the syntactic units. To the extent to which this program could be substantiated, it creates a completely new perspective for understanding the language capacity: If the principles, which constitute the combinatorial nature of human language with all its complexities reduce to ultimately one type of operation, whose different effects are determined by parameters fixed by particular (largely lexical) conditions, then understanding its biological basis might be an important leap closer. This perspective certainly contributed to the motivation of the *Minimalist Program*. In a wider context, this becomes visible in Noam's summarizing survey *What Kind of Creatures Are We?* from 2016, where the language capacity and its biological basis are emphasized as the crucial characteristic of the human species. At least that much is uncontroversial: An evolutionary developed basis for a single type of operation with variants determined by individual or collective experience is a more reasonable view than to postulate a biologi-

cally fixed basis for a complex system of combinatorial principles. The crucial point, maintained since the very beginning of the Generative Enterprise up to the concluding survey just mentioned, is the Basic Property: the human language capacity provides an infinite system of hierarchically structured expressions with phonetic and conceptual interpretation.

An interesting corollary of this aspect of the Minimalist Program is the following: The more determinants of the combinatorial systematicity are traced to the integration with lexical information, the more the language capacity must be seen to participate on the second component of symbol combination, viz. the primary capacity of symbol formation. The decisively human character of symbol creation, correlating concept formation with the system of sound structure, creates the lexical system, without which there were no language at all. Noam fully recognizes the importance of the lexical system, including its indispensable biological foundation, even though it is not the main area of his active contribution. As a matter of fact, in spite of enormous work in lexicography and lexicology over the last centuries, there is still only limited understanding of the theoretical principles of lexical organization, of its contribution to and dependence on the combinatorial nature of language. In this respect, the Minimalist Program leaves as many questions unanswered, as it promises to

solve in with respect to the combinatorial structure. There are, however, many occasions and problems, showing how these issues can be approached within the generative framework.

One important, deep and general aspect must finally be noted in relation to the Minimalist Program and its wider context: As the language capacity is the most important and consequential feature of human nature and its biological basis, the theory of language is ultimately concerned with a central component of the conditions by which human beings develop their common welfare. Thus, although linguistics has no connection to the content of political affairs, the theory of language is nevertheless concerned with an integrated part of the complex of conditions on which political possibilities essentially depend. Thus, in the sense of conditions for common welfare, linguistics get in touch with political concerns, as Noam has practiced a whole life-time.

Looking back on the surprising history of the Generative Enterprise, one recognizes an unusual, impressive chain of debates, innovations, and success - continuing a great history of studies on language and cognition. The view to the future is open, full of questions and problems, among others about how language is connected to or integrated with the nature of symbols, and of course other mysteries that are not visible yet.

## To Noam from Akeel Bilgrami



I can do no better on an occasion such as this than to say what I did in response to a question that was put to me recently in an interview. Let me repeat the question and

my answer. It expresses as exactly as words will allow, the honour I feel in having Noam as a friend and an intellectual compass.

*Question (from Prof. Uday Mehta):* How have friendships ( I am thinking of Noam Chomsky, for instance, to whom you dedicate this volume of your essays), specifically “academic”, friendships molded your life in the American academy

*Answer (Akeel Bilgrami):* It’s hard to talk about specific friendships in a public forum, Uday. But, I do see the point of your question. Speaking generally (individuals apart), in the academy and in intellectual life more broadly, when you learn about ideas from others they become friends in a way that is closely tied to personal respect as much as intimate or amiable relations. Any-

one with any experience in the academy will notice that intellectual ability is far more common than intellectual character, and may even perhaps be less important than it. I reckon all of us over a lifetime of thinking and writing come across and, if we are lucky, come to know a handful of people (if that) of whom one thinks: if he or she thinks I am alright, I must at least approximate being alright. They may be one's friends, of course, but they are not merely so.

I wish Noam every good thing on his 90<sup>th</sup> birthday.

Akeel

## To Noam, for his 90<sup>th</sup> birthday

Željko Bošković



When talking about Noam's contributions to the field, one aspect of it is often forgotten, or at least not explicitly acknowledged so I will start with that. Noam has made generative linguistics the most exciting intellectual endeavor of the 20<sup>th</sup> century, attracting sharp young minds into the field who would have otherwise gone elsewhere. He is still doing it, even now, at 90. Noam, you simply cannot ever stop. For 60 years now, your work has been creating intellectual excitement which has been recruiting the brightest, most curious minds into our field.

If one really wants to understand what our field is about, one should not look further than *Syntactic Structures*, or the transition from the Government and Binding theory into Minimalism.

Through no fault of mine I wasn't able to be there for *Syntactic Structures* (one thing struck me this fall when I was re-reading *Syntactic Structures*—*Syntactic Structures* is also a great lesson in how to talk to non-linguists about what we are doing). I am a minimalist child though. Remembering my grad student days and those annual Thursday Fall lectures of Noam's, and the papers that would follow them, the packed room, the interactions, the intellectual excitement which was so palpable one could cut it with a knife... The way and the speed with which our field was changing, evolving, the questions it was probing, the re-evaluation of everything we took for granted with a take-no-prisoner attitude, all of that made it impossible not to keep falling in love with it every single Thursday afternoon. I was thinking of my friends in other fields, like chemistry, biology...the kind of changes they can see in their lifetime as practicing scientists, and then look at us, the linguists, just look at what happens in a couple of those Thursdays. From that perspective, everything looked boring in comparison to linguistics, you have made it a party field Noam (an intellectual party of course).

I do have a little thing for speed. I timed myself once, going to Noam's Thursday lecture: 1 hour and four minutes from Storrs to Cambridge. I did enjoy almost each one of those minutes (I didn't

enjoy finding the parking spot ones). But the speed and the way the field was changing on those Thursdays, and the sheer intellectual joy that each minute of those Thursdays was bringing was incomparable. (I learned later that one of those Thursdays resulted in a warrant for my arrest being issued in the state of Massachusetts. Apparently there is a point when speeding is not just speeding. And they did not understand that I was doing it to get to your lecture. Occasionally I thought I missed my occupation, I should have been a Formula 1 driver, but that thought never lasted longer than a second, linguistics was way faster on those Thursdays.)

One of those Thursdays, driving back from your lecture, I turned on the radio, and there was you talking about politics. I got home, my landlord, who had a PhD in physics, was reading an article on artificial intelligence, and you were there too. I was standing there and my landlord was looking at me, wondering why I am smiling.

Another Thursday, I got so engrossed talking about your lecture in the car that I failed to take a turn on Mass Pike to Connecticut, realizing what had happened only 40-50 miles later, when I got close to the border with New York (I would not have been surprised if my fellow grad students who were driving with me brought passports with them the following Thursday, just in case I got into it again).

My first contact with Noam was on one of those Thursdays. I did not have much background when applying for a PhD program. I decided not to apply to MIT, thinking maybe I should first go somewhere else for a year. I went to UConn, liked it there (how could I not, Howard Lasnik was teaching *Syntactic Structures* in Syntax 1), so I never applied. It didn't really matter when it comes to Noam. The way those Thursday lectures unfolded, where the first part was for everyone (with a packed room, people flying in just for the lecture), and then the second part, just for the students, it did not matter from where, the way you handled that second part, the intellectual honesty in raising problems and admitting to the problems, the openness of the discussion, made us all feel close to you, and part of a much larger intellectual enterprise with you. You supported us all.

I certainly felt supported by you. You cited a hastily written manuscript of a lowly second-year grad student from another place who you never even talked to at that point for an opposing view (the opposing view was movement into a theta-position, it seemed to me that giving up DS simply led to it). My first personal interaction with Noam was on one of those Thursdays in grad student days. Noam came up to me, telling me that we should meet (at that point he only "knew" me from asking some questions in the class).

What stuck with me most from those Thursdays was not the details of the theory, not even the big picture when it comes to the theory, but the way of thinking, intellectual skepticism, not taking anything for granted, and especially trying to look at everything with fresh eyes, almost like a child. A child can look at things from a completely different perspective; how often have we all been amazed by a child saying something that at first sight seemed off the wall, but was actually incredibly insightful and came from looking at the world from a completely different perspective, unencumbered by the baggage of pre-conceived notions that adults carry around. It is incredibly hard to do that in science. The way Noam was able to do that was simply amazing. This is what really stuck with me from those Thursday lectures, I've been trying to be childish ever since. Noam gets into that mode with the Martian metaphor: imagine a Martian coming down to earth and seeing these funny looking creatures apparently trying to communicate. This is also what I am trying to get across to my students: be a Martian, be a child! (I was at the it's-all-ba moment regarding early Optimality theory at one of those Thursday lectures, this is what it took to see that). And when you have that kind of a childish moment, be as brave as the child would be, don't be afraid to follow your conclusions. (In an e-mail interaction

about some paper of mine Noam called my conclusions surprising and provocative. I hoped he meant childish.)

Then there is the respect for disagreement, for criticism, and divorcing oneself from the criticism of one's work. Once Noam told me that we were looking at some issues rather differently. Most of the time when I disagreed, it was because of Noam. Even when I disagreed I agreed. Remembering one instance of that sort, my first reaction to the original phases proposal, where CP is always a phase. I was thinking we are going to be using phases to define trouble makers for the locality of movement, what about the syntactic context of the CP then? What I was thinking of course was *Barriers*: is CP a barrier? It *depends*, on its structural position (I cannot believe that *Barriers* is out of press, how is that possible??). Most of my disagreeing was actually agreeing.

Of course, no one disagreed with Noam more than Noam himself, an incredible lesson in not taking one's work personally which should be explicitly taught in all first semester grad classes. I have the utmost respect for Anne Mark's work as an editorial assistant for *Linguistic Inquiry*. But there is always one issue that I have problems with, when Anne suggests changing "Bošković (xxxx) argues" into "in Bošković (xxxx) I argue". It is just a paper, it is not me. The paper happens to have that particular name, but it is

a paper, it is not me, there is nothing personal about it. This is why there is nothing personal when others argue against it, and I can argue against it without having a split personality disorder. That was instilled in me during my minimalist childhood. Anyone going to your lectures then, reading those papers coming out of the lectures, should have come out of them with that attitude. No one disagreed with Noam more than Noam. How much more civil and productive our field would be if everyone took what was behind that really seriously.

I have to admit though that while it wasn't that difficult for me to think of cases where I disagreed with you in syntax, it's different with politics; my childish eyes there are apparently not that different from yours (or is it just that politics is less of a childish endeavor in the above sense). I know that people are often asking you about the connection between your linguistics and your politics; one of our interactions about politics ended up in linguistics (well, sort of, it had to do with some minor though politically revealing lexical differences), but it took something as crazy as the Balkans for that. You sent me a short article from the Sunday Times which was very revealing about the Balkan's political mess and which pretty much everyone missed (certainly initially). You of course didn't. I didn't, thanks to you. (This

wasn't the only case of that sort. And I thought I was on top of everything regarding that situation....)

I've just realized that I couldn't have found a better day to write this. It happens to be a Thursday (nothing intentional about it, but it also just happens to be the fourth Thursday of November).

Whether agreeing with Noam's work or not, every linguist, and taking his broader contributions in mind, every intellectual, **everyone**, owes him a Thank you Noam, so here it is, a Colossal thank you Noam. I will update this in 10 years. On a Thursday.

# Reflections on Chomsky

John Collins



By the time I was born, Noam Chomsky had already initiated and led the development of the generative research programme, specified the Chomsky

hierarchy as the fundamental framework for the computational characterisation of any language, formal or natural, demolished behaviourism, resuscitated nativism as a fecund empirical hypothesis, placed semantics on a new footing in relation to syntax, reconceived many historical currents as nascent cognitive science, specified the crucial creative aspect of language as a signature of human thought and freedom, diagnosed many would-be a priori truths as empirical falsehoods, applied generative approaches to phonology, and he was about to publish 'Remarks on Nominalization'. I had a lot of catching up to do, once I had grown language, by which point Chomsky had...

The list of all of Chomsky's significant contributions is daunting. Over and above any list of achievements, however, Chomsky makes language deep and fascinating and central to who we are in a manner that makes us more interesting and valuable to ourselves and each other. I'd like to develop this theme in a personal way. I shall leave aside the many times I have pestered Noam for insights and the unfailing generosity he has shown by sending me papers, commenting on my work, and encouraging my own research. I once received an automated response of 'Too busy'. The next hour I received an explanatory message. In philosophy, there is discussion of the notion of moral luck. As I put it to students: the average Joe's faithfulness to his partner is moral luck - he should count himself lucky he is not Mick Jagger. There is no moral luck with Noam: to be good with every opportunity to be a jerk is decency indeed. Words are not enough to capture Noam's far more significant attempts to make our world a more just and caring place.

The first Chomsky I read was 1975's *Reflections on Language*. It is one of his less celebrated volumes, although it remains my favourite. It is his first extensive engagement with contemporary philosophy, after the skirmishes of *Aspects* and *Language & Mind* (the engagement with philosophy goes way back, of course; for example, one of Chomsky's first papers was on Car-

nap, and he once told me that he had written the review of Skinner with Quine in mind). *Reflections* discusses at length the views of Strawson, Seale, Quine, Dummett, and many others. I remember literally laughing out loud (lol, indeed), at reading that language isn't *for* anything. It introduces the 'problem/mystery distinction', which will feature prominently in all of his subsequent philosophical discussions, and which is only now being discussed with proper philosophical seriousness. We also have the first appearance of the rational alien scientist (who oddly always agrees with Noam), and the first full elaboration of the poverty of stimulus considerations via the structure-dependence of head-to-head movement in polar interrogatives (a paradigm, for good or ill, in all future discussion). The book also contains a lovely discussion of trace theory, raising, control, and related phenomena, which were the beginning of the development of LF as a structure beyond S-Structure (in old money, as it were). The book pitched issues of the acquisition of various competences in terms of learning theories with domain-specific content. This discussion had a huge impact on subsequent research into domain specificity and modularity, which continues today. As if this were not enough, the book also discusses at length the moral significance of empiricist and rationalist philosophy, and the centrality of freedom, as both an

essential human political goal and a fact of our use of language, as a moral bulwark against the attempted manufacture or coercion of a kind of person.

I have heard a few philosophers say that Chomsky has a 'tin ear' for philosophy. This is true, for every philosopher has a tin ear for it! At any rate, I sometimes imagine what Chomsky's philosophical standing would be had he just written, say, the Skinner review, the first chapter of *Aspects*, *Cartesian Linguistics*, *Language & Mind*, *Reflections on Language*, *Rules & Representations*, the first two chapters of *Knowledge of Language*, and *New Horizons*. Perhaps the most significant post-WWII philosopher. I more or less finished *Reflections* in one sitting, starting on a long train journey back from yet another failed job interview. I thought, and still think, that it is one of the greatest philosophical texts of the 20<sup>th</sup> century. What I value most in it is not its truth, although there is a good deal of it, nor any other intellectual insight, but a certain way of going about things. It asks very hard and peculiar questions about language, why the structure of language is a certain distinctive way as opposed to any other way, and what follows from merely taking that question seriously. It is a stunning philosophical achievement to have us be so disorientated by language, but never alienated from it. Only a philosophical tin ear would fail to appreciate it.

I grew up being somewhat alienated from language. I required speech therapy as a child and suffered from a bad stammer. Both retarded my education at primary school, where the teaching involved the recitation of times tables while standing on a chair in front of a shouting nun. Being from a solid northern working class background, university was not an avenue open for me, but slaloming through the army and the collapsing social institutions of late 80s Britain, I found myself at university, which was akin to floating on a cloud after the army, with even more drinking but less exercise. I continued to be alienated from language. I had a mental rule. If someone asked me to repeat myself three times, especially if accompanied by a pained expression, I would punch them, or, as was more often the case, simply say, 'I'm no longer interested in talking to you'. Thus it went on. The academic job market proved to be another hurdle, embroidered with what one can only imagine to be well-meaning feedback of the kind, 'You need to project your voice'; 'Some people couldn't understand you'. A background to these personal woes was the prevailing philosophical conception of language as some social art, an ideally transparent channel of communication, an activity involving more and less adept participants. And so I found myself on a train with *Reflections on Language*.

I ceased to be alienated from language. Language is a natural phenomenon that we create rather than are answerable to. The normativity most often associated with language can and should be resisted. If we need to be corralled and cajoled into language, then that is not language at all, but an imposition. We are all, within relevant parameters, equally creative with language. It is an expression of freedom for beings who can set their own goals rather than merely decide on options. Yet language is not mere anarchy. It has a beautiful agile structure, whose investigation is as rewarding as the discovery of own potential and the acknowledgement of fundamental similarity between humans, regardless of background or class. Thank you, Noam, and happy birthday, too. May there be many more.

## Noam Chomsky – Surprise, Surprise

by Tecumseh Fitch

One of the pleasures of a life in science is that it provides a parade of opportunities to meet, in person, someone whose name and words you already know from reading their publications. I've been lucky enough in my career to finally meet many illustrious scholars (mostly in my "home field" of biology and evolution, but also great linguists, psychologists, physicists, and literary figures) whose words had already touched me, and of-



ten helped form my young brain and/or entice me into new intellectual territory. Some of these greats, like John Maynard Smith, Wolf Singer, Bill Hamilton, Pat Kuhl, John Hopfield or Bob Trivers came across more or less as I'd expected from the printed word (OK, Trivers was perhaps a *bit* more extreme...). Others

(like Stephen J. Gould, E.O. Wilson, Richard Lewontin, Liz Spelke, Peter Marler, or Richard Dawkins) surprised me by being more mild-mannered and easy-going than their controversial and sometimes firebrand writings led me to expect, and a

few (George Lakoff, Susan Sontag and Doug Futuyma come to mind) surprised me by being more argumentative or aggressive than anticipated. But one scholar – Noam Chomsky – easily takes the cake by providing the sharpest contrast between expectation and reality I’ve encountered in my career.

First a bit of background. I first became interested in language through traveling in the course of my biological studies on coral reef fish, in Puerto Rico and then Israel, and picking up some Spanish and Hebrew. In 1985 I had just finished my degree and while traveling in Europe was starting to learn German, and growing increasingly frustrated with the grammar. Like anyone, I’d heard of Chomsky as someone who’d revolutionized linguistics, and thought (in retrospect naïvely) “why not learn from the master?” So I got myself a copy of Chomsky’s “Aspects of the Theory of Syntax” and started reading. This story always elicits a smile from linguists who know perfectly well that, for someone seeking insight into the distinction between the German dative and accusative, *Aspects* is not the best place to start. Nonetheless, I found the first chapter concerning language as part of human biology intriguing, and I guess some first small seed was planted then.

Later I became interested in language evolution through reading Phil Lieberman’s *magnum opus* “The Biology & Evolution of

Language,” and it was there that I first encountered an extreme but pretty widespread perspective on Chomsky as public enemy #1 of evolutionary thinking about language. When I went to Brown in 1987 to do a PhD in language evolution under Lieberman, I saw firsthand how controversial some of Chomsky’s ideas were among linguists, psychologists, and neuroscientists, and where his reputation spanned the full gamut from demi-god to arch-demon. If you wanted to start an argument over beers with linguists, mentioning Chomsky was always a good way to do so. And when in 1990 Pinker & Bloom’s famous Brain & Behavioral Sciences article on language evolution came out, I thought it represented a pretty fair viewpoint about what “Chomskyans” really thought.

All this is to say that by the time I started my post-doctoral career in Boston as a post-doc at MIT and then a young lecturer at Harvard, I had some vague and relatively negative ideas about what Chomsky thought about language evolution (e.g. “there’s a language organ in the brain, very complex, that evolved all at once via a single mutation”) that I would wager were pretty widely shared (and not surprisingly, since Chomsky had written so little, and so cryptically, on the topic).

My big change in opinion came, in 2001, from a surprising place – an interview with Chomsky published in “Spare Change

News", a low-circulation non-profit local Cambridge newspaper – sold to me by a homeless guy at Harvard Square. Although the interview mostly concerned politics, in one section the interviewer asked something about whether he thought language came from God. This made Chomsky chuckle, and then to clarify (to me for the first time) what his asides about natural selection and language evolution were all about. In essence (and opposed to most people writing on language evolution at that time) he was suggesting that natural selection operates within constraints imposed by physics, chemistry, neurobiology, and development, constraints that make it *inevitable* that certain aspects of language will represent "spandrels" or "exaptations" – features that were not in any direct way "selected for" any specific communicative function. Although Chomsky didn't use quite these terms, the idea was clear enough, and precisely the constraints-based viewpoint I had been pushing in my recent discussions with evolutionary psychologists like Steve Pinker or philosophers like Dan Dennett. This issue also represented a major focus of evolutionary debate at that time between scholars like Steve Gould, Richard Dawkins, and John Maynard Smith.

So, suddenly, a few sentences in "Spare Change" suggested that not only had Chomsky's somewhat offhand comments about evolution made sense in this context, but also that his perspective

on the issue was quite close to ideas I was actively pursuing at the time. This led me to find a similar 1999 interview, which in turn prompted me to send him a short email to verify my interpretation (which, to be honest, I didn't really expect an answer to). The next morning I was extremely surprised to find – lo and behold – an answer from Noam Chomsky in my inbox! (Of course, this will not surprise anyone who knows Noam – he is one of the most prompt, tireless, and efficient correspondents I've ever encountered, and he answers virtually everyone). He not only confirmed my interpretation but extended it in some interesting directions that started an email correspondence, and our first meeting at his office at MIT. Again, surprise! I was amazed during this one hour meeting by how well-informed Noam was on the evolutionary issues we discussed (D'Arcy Thompson, Turing, and Maynard Smith) and how humbly (but nonetheless incisively) he presented his opinions, and listened to mine. This was very far from the take-no-prisoners, master debater style I had been expecting, and the discussion led to a number of quite concrete points of agreement and disagreement.

This first meeting led me to invite him to a class on language evolution that I was teaching at Harvard, together with phonologist Bert Vaux and anthropologist Mike Wilson. The course was patterned as what we called a “parade of stars” - after a

few introductory lectures, we invited big name scholars, mostly from the Boston area, to come and discuss a paper or book (the students loved these, and it was also fun and easy for the teachers). Again, I didn't really expect a positive response to this invitation, but again I was surprised to get a yes.

So in April 2001, Noam Chomsky came to our afternoon seminar at the Peabody Museum building to discuss language evolution. Again, I was amazed at how understated and open-minded he was, but also by how quickly he would cut off lines of questioning that he thought would go nowhere. The discussion did indeed go somewhere, ranging widely through the literature on language evolution, and evolutionary theory more generally, and also touching on the brain and genetics.

We typically followed these seminars with a dinner invitation, and again Noam surprised us by agreeing to join us (despite some previous political engagement) for dinner and beers at our standard pub, Brew Moon at Harvard Square (now sadly replaced by a shopping mall). The conversation continued for hours more. Again, throughout this exchange I was continually amazed by how well-informed Noam was about all of these issues and yet how humbly he listened to ours (both teachers and students).

It was during this many-hour conversation that I first realized that the term "language" could be used in so many different

ways, often depending on the disciplinary background of the speaker (biology, psychology, linguistics or anthropology), and it was at Brew Moon that the idea of the Faculty of Language in Broad and Narrow senses (FLB and FLN) was born. But although Noam and I continued our email correspondence in the following weeks, we still had no plan to write anything for publication.

The idea of writing something together came, from Marc Hauser, during the course of a three-way email exchange including Hauser, Chomsky, and me, concerning a book chapter Marc and I had written and sent to Noam for comments (eventually published, in 2003, in Morten Christiansen & Simon Kirby's "Language Evolution" book). The chapter was titled "What are the Uniquely Human Components of the Language Faculty?", and Marc and I thought we were being pretty daring by suggesting that the answer to the question it posed was "not much." But in a sequence of back-and-forth emails Noam surprised us (to be honest *shocked* us) by not just agreeing with our arguments, but by ceding large swaths of what we took to be the intellectual battleground to us. Indeed, he suggested that the unique components came down to very little indeed – a single powerful recursive operator, Merge, that operates in human but not animal thought.

I still vividly remember that, after getting these emails from Noam, Marc and I would walk out of our adjacent offices at William James Hall with dazed looks, shaking our heads and thinking “Are we hallucinating? Is everything we (and everyone else) thought we knew about Chomsky’s ideas about language evolution completely backwards?”

It was during the course of this email exchange that we realized this realization was too important for it to remain confined to a bunch of private emails. Marc then suggested to Noam that we write something together, based on the preceding email exchange, and Noam agreed. Memorably, Marc in his excitement left a typo in the email, and wrote “i was thinking of a journal like science or natur.” Noam answered “I’ve never heard of that journal but I don’t really care where its published”. In the event, we ended up submitting it to *Science*.

After a few in-person meetings at Noam’s office where the hypothesis the FLN includes only recursion became clear, we started writing. Though most of this happened via email, one memorable chapter in our writing process came when, as organizer of the EvoLang meeting at Harvard in March 2002, I invited Marc and Noam, along with Michael Studdert-Kennedy, to present statements followed by a roundtable discussion as one of the culminating events of the conference. This was the

first time, I think, that Noam publicly aired his strong support for studying language evolution from a comparative perspective, and this approval elicited glee from the biologists (I remember Richard Lewontin attending, among other luminaries) and surprise or consternation from some of the linguists.

Anyway, the rest is history: we published our joint paper on the human language faculty in *Science* in 2002, and it promptly elicited a heady mix of excitement, derision, debate and commentary that continues to this day (with more than 5000 citations, it now packs quite a scholarly punch). By the time the paper came out I was a visiting fellow in Berlin, at the Wissenschaftskolleg (Institute for Advanced Study), where it rapidly became clear that depending on one's disciplinary background the paper could be read in many different ways.

For many biologists, the moral seemed to be "Hooray for the comparative approach and FLB!" while for many linguists the message was "Language = FLN = recursion" which met with approval or disagreement depending on their persuasion. But for everyone, the message that language evolution was something that can and should be discussed scientifically, from a broad multi-disciplinary viewpoint, came through loud and clear. Although there are in retrospect some things I wish we had done differently (especially, clarifying our notion of "re-

cursion,” since it turned out that each author had slightly different conceptions about this term), there can be little doubt that Hauser, Chomsky & Fitch (2002) helped put the study of language evolution in the spotlight for the first time in many years, and induced many linguists to take this topic seriously after decades of disdain.

But returning to the theme of this little essay, Noam Chomsky is someone who surprises, surprises again, and then continues to surprise. For a man whose career has been highly critical, he is remarkably open-minded. For one so acclaimed, he’s surprisingly humble and generous with his time. For one so famous for winning debates, he’s remarkably mild-mannered and unprejudiced. And for a scholar whose contributions in the two fields of linguistics and politics are so massive and pervasive, it is truly amazing how much he has read and knows about other fields like evolutionary biology.

In conclusion, on the occasion of Noam’s 90th birthday, it is a pleasure to share these memories of meeting and then working with him on two papers, back in the early 2000s. It has been an honor. Since Noam has surprised me time and again, and shows no signs of slowing down intellectually, I very much look forward to more surprises!

## **Noam Chomsky: a sketch**

Robert Freidin

Emeritus Professor of Linguistics

Princeton University

From 1976 to 1979, I had the great good fortune to be a postdoctoral visitor in the Department of Linguistics & Philosophy at M.I.T. with Noam Chomsky as my sponsor. There I saw firsthand how Noam's genius and generosity nurtured the development of linguistic theory at M.I.T. and beyond.

Noam taught two graduate linguistics seminars each year, one on his latest thinking about the theory of grammar and the other on the foundations of the field from the perspective of human intellectual history (including philosophy, psychology, and the natural sciences), which also incorporated some of his current ideas. For example, in one foundational course titled "Cognitive Theories", co-taught with Jerry Fodor, he presented what was then and may still be the clearest and most persuasive discussion of trace theory, starting with its phonological motivation and then going through its syntactic and semantic motivation. (Ask Howard Lasnik and Norbert Hornstein, who were also there.)

In his seminars on linguistic theory, Noam would begin with the basic standard ideas (for example, “there is a language faculty”, which, he pointed out, is not an uncontroversial assumption) and proceed eventually to new and unexpected proposals. The seminars that followed would review these new ideas, reinforcing them before expanding on them. By the end of the seminar, what had seemed at first to be new, at odds with prior theory and therefore strange and suspect, was now both familiar and understandable.

These seminars were part of a conversation between Noam and the students and visitors attending them. We his audience would work with the ideas and analyses presented in seminar, to see how they applied to languages or phenomena Chomsky hadn’t discussed, and to explore alternatives. We would discuss our work among ourselves, and in hour-long appointments with Noam. And we would discuss among ourselves our conversations with Noam. All of this created a rich intellectual environment for linguistic research, which was made possible in part because Noam was in his office Monday to Friday, 9 to 5 holding back-to-back appointments (when he wasn’t teaching) with students and visitors.

Noam spent the spring semester of 1979 in Pisa at the Scuola

Normale Superiore, where he composed the nine hours of lectures he gave at the GLOW meetings there in April—what ultimately became *Lectures on Government and Binding*. When I saw him in his office at the Scuola that April, he told me that this was the first time in years that he had been able to bring his own work to his office—a fact that underscores how Noam’s contribution to the field extends beyond the thousands of pages he has published and thousands of hours he has lectured.

Thank you, Noam, and happy 90<sup>th</sup> birthday!



Princeton University, April 2016; (left to right): Valeria Chomsky, Carlos Quicoli, Noam Chomsky, Robert Freidin, Howard Lasnik, Jon Sprouse, Joshua Katz; photo by Roberta Lasnik

# **A Personal Note on Noam Chomsky: Celebrating Noam's 90<sup>th</sup> Birthday**

Naoki Fukui

Sophia University, Tokyo

December 2, 2018

Unlike the other contributors to the volume, I have no particularly amazing personal anecdotes to offer about Noam, despite the fact that I have known him ever since I was a graduate student at MIT in the 1980s, and have been in contact with him, for more than 35 years now. So, I decided to express my heart-felt appreciation to him by briefly going over part of my adult life to show how this intellectual giant has influenced the development of a person who happened to be born on the other side of the planet, in a small country in Asia – Japan.

I came to know the name “Noam Chomsky” relatively early in my life, perhaps at the age of 13 or 14, when I became interested in various subjects such as philosophy, literature, mathe-

matics, physics, social and political thought, etc. There is a district in central Tokyo, called Kanda, which is filled with numerous bookstores. Since this area is on the way to my school, I would often hang around and stop by the bookstores when I went home after school. Like some of my classmates (one of whom has become a professional mathematician, another a mathematical economist), I was quite interested in math, particularly number theory, set theory, and logic. I was also interested in philosophy and literature, and was wondering how I should put my various interests together. This was a serious problem, since in Japan then – and perhaps now, too – “science” (*rirei* in Japanese) subjects and “humanities” (*bunrei* in Japanese) are incompatible and should not go together. But I was interested in both kinds.

On one day, I discovered, by accident, the Japanese translation of *Syntactic Structures*. And this is how it all started.

I had just begun learning English, and I kind of liked the subject. I even played around with the rules of English stress assignment (which later brought me to *The Sound Pattern of Eng-*

lish), because it didn't seem to require me to be able to read English sentences. So I dropped by and looked at the shelves with the tag "Languages" in one of the big bookstores in Kanda, and happened to open the thin book. The pages of the book, I still remember, looked rather strange. The book looked like – to the eye of a junior high school kid – half English, and half mathematics. Out of curiosity, I bought the book and started reading it. I didn't understand a word. But I had a feeling that the book contains something very interesting and even exciting, and wanted to understand what it was all about. I started looking for some other sources that could help me understand the book, but I found none, except for a few articles which talked about "new linguistics." So I bought the English original and tried to read it. But my English was not good enough to comprehend the content.

Now that I knew there's such a field as Linguistics, I departed for a while from *Syntactic Structures*, and read various linguistics books in Japanese. They were interesting, but did not seem to be as exciting as *Syntactic Structures*. Then, the Japanese

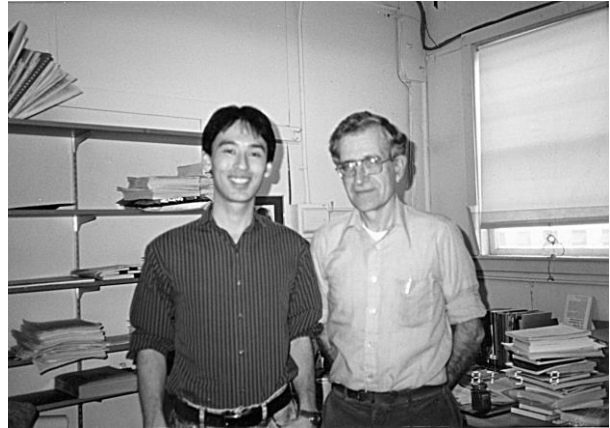
translation of Emmon Bach's *An Introduction to Transformational Grammars* came out, and I tried to read it carefully, including the Translator's (Kazuko Inoue) very detailed notes and commentaries. I felt I gained some ideas about what the whole business was all about, vaguely, though.

During my high school years, I read the linguistics literature on and off, doing many other things – I was also politically active. But I continued to try to read Chomsky's writings, mostly in Japanese, but when the Japanese translations were not available, also in English (note that a normal high school kid's English proficiency in Japan may not be good enough to read Chomsky...). I also took some of the evening courses in linguistics (introduction to linguistics, phonetics, historical linguistics, generative grammar, etc.) offered by the Tokyo Institute for Advanced Studies of Language. I gained a lot from these courses, but my main interest still lied in generative grammar. As I was to enter college, I immediately chose, even though I was not a particularly religious person, ICU (International Christian University), a relatively unknown small liberal arts

college in Tokyo, simply because Kazuko Inoue – the Translator of Bach's book mentioned above – was teaching linguistics there. After spending several years at ICU, during which I could happily interact with young linguists around Kazuko Inoue, I went on to enter the graduate program in linguistics at MIT in 1982.

I met Noam for the first time in that same year, and the rest is straightforward, i.e., just like everyone else's stories. I took his courses, along with many other courses offered at MIT and Harvard, attended his political talks, made lots of appointments with him, wrote papers asking for his comments, wrote my dissertation with him as one of the chief advisors, continued to work with him as a post-doc at the Center for Cognitive Science at MIT, until I returned to Japan in 1987. The only regret I have about my stay at MIT during these years is I was not quite ready to interact with many interesting people gathered in Cambridge, Mass. at that time, simply because of my English. Apart from linguistics (and related fields), little knowledge was stored in my brain in English then. Thus, I had to re-read all the

stuff regarding, say, social and political issues in English, just to be able to understand what Noam was talking about in his talks. This was true for other



subjects, too, and it was an enormous task. The “language barrier” was – and still is, to some extent – very disturbing indeed.

After leaving MIT, I started teaching in Japan, moved to the University of Pennsylvania, and then, in 1990, I was fortunate enough to join the project of creating a new linguistics department at the University of California, Irvine – a project initiated by Jim Huang and others. I happily worked together with Jim and other colleagues there, until Jim left for Harvard, and then I left for Sophia, Tokyo in 2003. Since then, I’ve been teaching linguistics at Sophia University. During all these years, I have encountered many difficulties and hardships, and every time I needed advice, I asked Noam (and Morris Halle) for advice. They always immediately responded with deep, insightful, candid, and straightforward comments and advice that I could not

expect from anyone else. This pattern has continued until today, though, sadly, I cannot have advice from Morris any more.

Ever since my years as a teenager, I have always been excited about the vision that Noam has been forcefully putting forth – the prospect for the “Second Scientific Revolution” – the creation of a natural science in the area of human language and mind. I have also been attracted by his left-Marxist/anarchist thought, as I was independently interested in anarchism. Since the “Anarchism (Anarcho-syndicalism) vs. Bolshevism controversy” (*ana-boru ronsoo*) that took place in the early 20th century, the anarchist tradition has been put aside and pretty much wiped out in Japan, and the “left-wing” civil movement has been dominated by (various versions of) Marxism. I noted strong anarchist tendencies in the student movement in the 1960 mass struggle against the Japan-US Security Treaty (*60-nen Ampo*), and particularly in the student revolts in the 1968 – 1972 period (*Zenkyootoo* [All-campus Joint Struggle League] movement), although none of the participants talked about their movements in these terms. I wanted to see how we could remove its (sometimes fabricated

and imposed) “bad connotations” (anti-scientism, anti-rationality, extremism, etc.) from the concept of anarchism, and replace by this type of radical liberalism, the authoritarian tendencies that seemed to be observed too frequently in the leftist movement at that time. In this connection, then, it was really a happy surprise back in my high school years to find out that “Chomsky the scientist” (as I discovered through reading linguistics books) and “Chomsky the anarchist” (as I came to know by reading *Asahi Journal* and *Sekai* [The Globe], Shunsuke Tsurumi, Makoto Oda, etc.) was in fact one and the same person. The recognition, in fact, pushed me into working on generative grammar rather enthusiastically, and, even though there have been times in which I didn’t read technical papers on linguistics, I have always been paying close attention to Chomsky’s scientific-philosophical writings (*Language and Mind*, *Reflections on Language*, *Rules and Representations*, etc.) as well as his political books (Noam’s first political book, *American Power and the New Mandarins* (1967) was translated into Japanese and was published in 1970, which I read as a high school student).



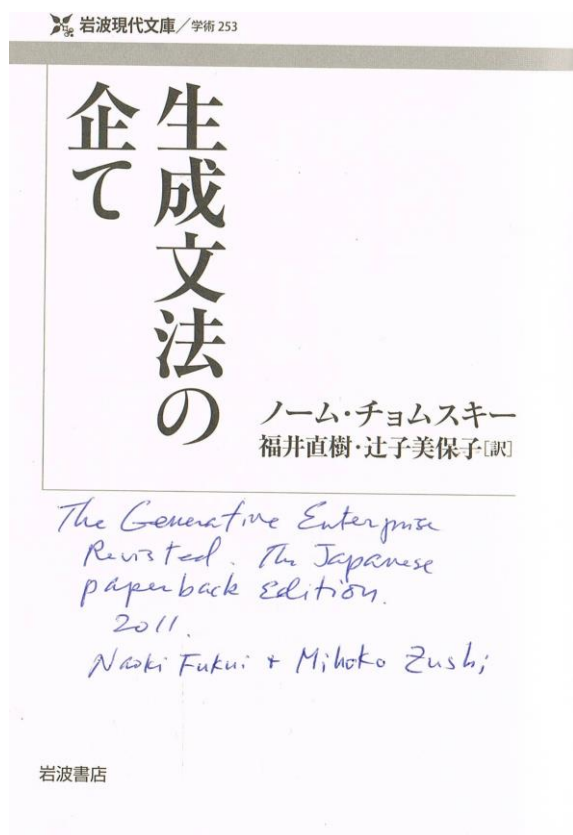
In 2014, I had a great opportunity to invite Noam to deliver two public lectures (along with other technical seminars) at my institution,

Sophia University. One on science/linguistics, and the other on politics/political thought. As is well-known, this is a very natural combination – outside of Japan, in fact. Starting in 1966, Noam had visited Japan several times, but his politics side had been, for some reason, carefully dissociated from his linguistics, leading to his remark (Interview, *Japan Times*, February 22, 2014) “I was quite struck by the fact that Japan is the only country I visited – and there were many – where talks and interviews focused solely on linguistics and related matters, even while the world was burning.” I wanted to change this situation and asked Noam to give the two lectures as I mentioned above; I also arranged an interview with *Sekai* on social and political issues. Whether successful or not, this was the first time in Japan that Chomsky gave a politics talk with a linguistics

talk. His two lectures at Sophia, along with his interview (by Mihoko Zushi and I) were put together and translated into Japanese, and was later published as *Wareware-wa Donoyouna Ikimono-nanoka* [What Kind of Creatures Are We?]: *Sophia Lectures* (Iwanami, 2015), in which we, the Editors, discussed the two sides of Noam Chomsky in detail and explored the reasons why in Japan, his politics has been apparently avoided by those who seem to like his linguistics.

As I briefly mentioned above, when I was a teenager, I (tried to) read some of Noam's writings in Japanese translations. This had a huge effect of hampering my understanding of his thought, due mainly to the problems of translations. To alleviate the problematic situation, and to help future generative grammarians in Japan – or more specifically, to help young teenagers and researchers in other fields (who usually don't bother to read English outside of their specialized fields) – understand the core ideas and ideals of the generative enterprise, I have launched the project, with the help of Mihoko Zushi, for translating major writings of Noam Chomsky into readable and

reliable Japanese. Translating (Chomsky's) English into natural, readable Japanese is no easy matter, certainly much more difficult and trickier than translations between two European languages. So far, we have translated into Japanese *Syntactic Structures* (a new translation with a rather lengthy commentary),



Chapter 1 of *Aspects* (ditto), *The Generative Enterprise*, and *Foundations of Bilingualism*, a collection of Noam's foundational writings including Introduction to *LSLT*, Chapters 1 and 2 of *Knowledge of Language*, *Language and Nature*, etc. I am happy to see some impact of this project

on the side of young scholars. Thus, one of the students in my class told me that he had read as a high school student the Japanese translations of *Syntactic Structures* and *Aspects*, and decided to major in generative linguistics at college. Let's hope that there will be more long-lasting positive effect for years to come.

Well, I can go on, but I think it's getting boring to most people. Boring though as it may be, this is how a person who was born and grew up in Japan has been influenced by Noam Chomsky – and his influence is literally indelible. I would say that I owe 60% of my “intellectual self” to Noam, the rest collectively comes from other giants such as André Weil, Alexander Grothendieck, Bertrand Russell, and Japanese theoretical physicists, mathematicians, philosophers, writers/literary critics, social scientists, and other intellectuals including former student radicals.

One might say, “Only 60%?” Hey, 60% is a lot, more than a half, which means Noam is more important for me than my biological father!

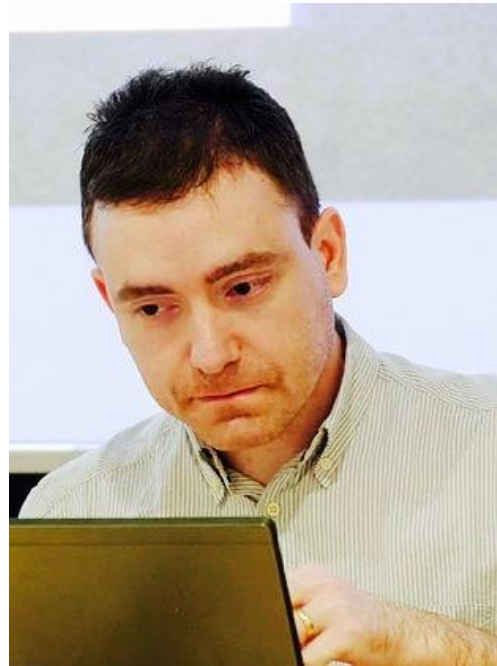
Happy 90<sup>th</sup> Birthday, Noam. 90 is already an achievement, but 100 would be – and will be – much better. I look forward to continually living in this (otherwise not so pleasant) world with you!

## Generation of '81

Ángel J. Gallego

Universitat Autònoma de Barcelona

The first time I heard the name Chomsky, I was a high school student. It was the early nineties, and I was 13 or 14—can't remember. There was this young teacher, Sergi Quintana, who came to my school with new ideas about language teaching. He quickly



became (un)popular, for most students failed his exams, and when I say 'most' I mean around 70%. With him, analyzing sentences stopped being a mechanical tree-drawing exercise that nobody ever understood or found interesting: Instead, it became a puzzle-solving challenge, a mathematical game, something that had a scientific patina. Many classmates were scared and most of them didn't

like the change, but I think everyone realized that, done that way, grammar was something serious—like math, physics or chemistry. I soon started talking to Sergi, who provided me with some readings on something called “generative grammar”. I couldn’t understand much of it, but there was something there, I could feel it, something that made the study of language exciting. Years later I went to UAB, precisely where Sergi came from, to study Spanish Philology.

When I arrived at UAB, I spent the first months getting myself used to the university functioning. I had heard of these guys, Brucart, Hernanz, and others, but did not have the chance to be taught by them, as they were holding admin positions at the time. Precisely at that time I started feeling interested by literature. I submitted short stories to different contests (even won one), and I thought I would end up being a writer. I can’t remember how, but I found out that José M. Brucart was teaching an advanced syntax course, which was basically a course on GB syntax. I was fascinated by those lectures. I attended before taking the course for credits, and... I didn’t understand a thing! But I

loved it. Next year I took it for credits, and I kept going to that class (*Estructures Gramaticals*, that was the name) for two more years at least, just for the joy of it. Intellectually, that was one of the most inspiring periods in my life. One day Brucart told me about this Juan Uriagereka, who had glossed Chomsky's most recent manuscripts. I remember myself reading "Minimalist Inquiries" and "Derivation by Phase" (carefully and masterfully glossed by Juan) at the Faculty of Letters cafeteria when I was an undergraduate student. Again, I did not understand much, but I enjoyed trying to make sense out of very cryptic ideas.

I met Juan Uriagereka in 2004 when he was teaching doctorate courses at UPV, after having interacted with Esther Torrego at the Instituto Universitario Ortega y Gasset ("la Ortega"). I still remember what he told me the first time we met for lunch: "Hola. No sé tú, pero yo tengo un hambre de cojones; vamos a sentarnos por allí" ("Hey. Don't know about you, but I am starving; let's grab a table over there"). After talking to him for a couple of hours, I was sure I wanted to work with Juan, and next year I went to Washington DC (where I survived thanks to Leticia Pablos, Ma-

saya Yoshida and Tomohiro Fujii). While visiting UMD, I flew to Boston to meet different people: Cedric Boeckx, Esther Torrego, David Pesetsky, and of course Noam Chomsky. I remember I had scheduled that appointment months in advance (with Bev Stohl, Noam's secretary until very recently), and I still remember the first time I sent him a message: I was working on the MA thesis and I sent him one e-mail with several questions on adjuncts. I was not sure he'd reply, but he did, very quickly. I had told him that I'd understand if he could not reply, as I was sure he would receive thousands of e-mails every day. He replied in less than 48 hours, and the first thing he wrote was "Well, not thousands, but hundreds, and I try to reply to all of them, at least briefly". I was amazed—still am—about how quick and detailed his e-mail was. Our exchanges have never stopped ever since, and I still don't understand how he does what he does. I am not yet 40, and I am sure I cannot even do 20% of what he does—needless to say, I'm just talking about quantity, not quality.

The first time I met Noam in person, I told him about some ideas on Phase Theory I was developing for my thesis.

Phases were trendy at the time (the 2005 manuscript had circulated before publication), and I wanted to modify his ideas in order to account for some syntactic quirks of Romance. He turned down all my ideas (ALL!), one after the other, encouraging me to look at the facts from a different angle. The appointment was really quick (only 30 minutes), but I left his office with a smile in my face. And that smile lasted for hours—I still had it when I ordered a beer, a sandwich, and some chips at Logan airport, while waiting for my flight back to DC. I thought that, although Chomsky had not liked my ideas, nobody could ever take that lifetime experience (discussing ideas with Chomsky himself!) from me. I was very happy.

I have met Noam on several other occasions, and he has always treated me as an equal, offering me sincere advice, profound respect, and even personal comfort when I needed it. He has also been generous enough to cooperate with me (and other colleagues) on various initiatives: publications, events, talks, etc. And this is it, in a nutshell: It is his closeness, his generosity, and his constant willingness to get involved in things that come from anyone (especially

students) that I have admired the most about Noam. I remember this one time when, in the middle of an appointment at MIT, he took out a wrapped sandwich and asked me whether I would mind if he had lunch there, in front of me, and offered to share it. Again, I was surprised by his simplicity and naturalness. And this has happened again, again, and again. There have been moments in my career in which I thought about quitting, and it is in those times when knowing someone like Noam (having him as an example) has been key not to give up. In fact, he is an ever-present reason to keep doing what I do, a constant source of inspiration, not only on the intellectual plane.

I'd like to say, incidentally, that I never had the chance to attend Noam's lectures at MIT. It's a pity, as I always pictured those gatherings (which Juan Uriagereka, Raquel González, Gemma Rigau and Carme Picallo had told me many stories about) as some sort of linguistic version of the literary meetings that were a fundamental part of important Spanish literary movements in the XIXth and XXth centuries—the Generations of '98 and '27 (and even before, with the avant-gardes). I always had the impression that

the intellectual discussions at Chomsky's class gave rise to some kind of unnoticed Generation of '81 (or '55, although I was raised with *LGB*).

Noam Chomsky has given us many things. Many ideas. Most of them have not reached society, sadly. Beyond his intellectual contributions, which are obvious and will remain for eternity, I would emphasize two over the others. First, he has provided us with a new way to look *at ourselves*, human beings, and the world around us by developing a beautiful theory that makes the study of language something interesting, something that poses questions, challenges, passion—yes, passion, as science is about passion too. Second, he has given us a model of generosity and commitment that is simply amazing. If I had to choose, I would signal the latter as one of the most precious discoveries in my life, as it has been what has personally guided and inspired me to keep pushing and try to put my 2 cents to what Noam started some 60 years ago. Like many others, I am just a 'torch carrier' of his ideas but also—or so I hope—his way of pursuing them.

## High times with Chomsky

Günther Grewendorf, Munich

Meeting Noam Chomsky is always a special event. I have had the privilege of encountering him several times and talking with him on various occasions. His 90th birthday is a unique occasion to rekindle the memories of these meetings, describe the feelings that these memories evoke and briefly outline what these encounters meant to me.



I saw Noam for the first time 1986 in Brussels where he gave a linguistic as well as a political speech. It was a few days after Chernobyl and I remember that I carefully cleaned my shoes before I entered the hotel room, since I didn't want to bring the polluted Bavarian dirt into my room. The next morning, Noam gave a lecture at the University on the theory of barriers. A large part of the big audience was puzzled about the complicated constraints on locality, which at first sight no longer permitted the derivation of a simple sentence such as “Who did Mary kiss?” But Noam convinced us all that that was the right way to go and to apply the notions of locality and minimality

to syntactic analysis. After the three-hour talk, he had appointments for two hours with friends and colleagues from Europe before he started on his political speech, which again lasted three hours. I was deeply impressed, not only by the ideas and arguments that he presented (most of it without any elaborate manuscript) but also by his vitality and fitness.

In 1993 I spent a sabbatical at MIT and, of course, I couldn't wait to attend his class on Thursday afternoon. After the first sessions on the general theory of language etc. everybody was wondering with what revolutionary change in syntactic theory this lecture was going to end. After the first four sessions on general topics of universal grammar the audience started to give up hope that revolutionary ideas in syntax would reveal themselves in this class. I also began to think that this semester was obviously not the most exciting choice for a sabbatical at MIT. When I asked Head of Department Wayne O'Neil what his impression was, he said to me "be patient, I am sure that Noam has something revolutionary in mind that will completely change syntactic theory," And so it was: He developed the theory of Bare Phrase Structure and dispensed with X-bar theory. Wow!

At the end of this sabbatical I had my first personal appointment with Noam in the legendary Building 20. I was quite nervous about meeting a living legend and could hardly un-

derstand that he was willing to spend an hour of his valuable time on discussing syntactic problems with me. When I entered his office his first two questions were “where are you from?” and “what are you working on?” The first one was easy. As for the second one, things became critical. I presented the theory of scrambling that I had developed with Joachim Sabel on the basis of Mark Baker’s notion of a minimality barrier and tried to convince Noam that this theory could explain important differences between scrambling in German and Japanese. I could tell by the look on his face that he wasn't really impressed (and wasn't in a good mood either). So I considered my performance as a total disaster and found myself in a critical situation. Although my mind went almost blank and I was tempted to give up and leave the room, I dared to make a new start, feeling in me the Bavarian rebelliousness of “now I am really going to show him.” Can you imagine my relief when he all of a sudden said “Oh now I see, it's tricky?” So the day ended with a lot of beer at an MIT party where everybody wanted to hear how the meeting with Noam had gone.

Since 1993 I have had many appointments with Noam, all of them relaxed, friendly and extremely interesting. No comparison with the intimidating discussion on Baker’s theory of minimality and on scrambling in German and Japanese. Sometimes I

brought him a bottle of olive oil from the olives I grow in Tuscany. My hope is that this may have contributed to his long life.

In March 2005 I had the honor to comment on Noam's talk given at the symposium "Interfaces + Recursion = Language?" held at the Berlin-Brandenburgische Akademie der Wissenschaften in Berlin. After his talk and the discussions that followed there was a reception organized by the Berlin linguists to give Noam and the audience the chance to relax with drinks, food and chats. I was looking out for Noam since I wanted to follow up on some problems that had come up in the panel discussion. I found him surrounded by a group of people waiting for the opportunity to have a word with the most famous intellectual in the world. He patiently took time to talk to everybody and his wife Carol failed to pull him away and take him to their hotel. I noticed that poor Noam obviously hadn't had anything to eat let alone to drink and I brought him a plate with salad and sandwiches and a glass of wine. He kindly thanked me and put the plate on a bench behind him. Looking at the bench I saw that he had already put down five other plates with salad and sandwiches there, which thoughtful people had brought him.

In 2006 I had undertaken the job of writing a monograph on Noam Chomsky in the series "Denker" ('Thinker') published

by the C.H.Beck-Verlag Munich. The book was written in German with the chapters (following a biographical sketch) “Sprache und Geist” (‘Language and mind’), “Sprache und Grammatik” (‘Language and grammar’) and “Sprache und Verantwortung” (‘Language and responsibility’). Before I started on the project, I asked Noam for his opinion on my plan. His reaction was rather typical. He considered writing a book about him as a waste of time and suggested instead I should rather write a couple of papers on syntax.

Disregarding Noam's advice I wrote the book and when it had appeared I sent him a copy since I knew that he could read German. His answer was like a birthday present: “Just found the book (and your letter), and started reading it. And couldn't stop. Really appreciate it, and am learning or re-learning a lot from it too.” And then he came back to the waste-of-time verdict and continued: “Leaves me schizophrenic. The principled side of my brain says that you should have written papers on syntax instead. But the personal side is very pleased that you disregarded my advice.” And I was very pleased and grateful that he showed me a small part of his personal side.

Some years later (in March 2010) I met Noam again, this time in Stuttgart (Germany), where he was awarded the Erich-Fromm-Prize and where he also gave a linguistic talk at the University

of Stuttgart. After his talk we had a coffee and a sandwich in the cafeteria together with Manfred Bierwisch. I had brought my Chomsky book and asked him to honor it with his regards. The few words he wrote in the book show that he is not only a strict intellectual and uncompromising political activist but a very supportive friend and colleague with a good sense of humor: "Great book, except that the verbs are in the wrong place." The humorous allusion that German unlike English doesn't show the universal underlying V-O verb order is the only colonialist statement I have ever heard from Noam.



My last meeting with Noam was in August 2014. I spent a couple of days in Boston with my wife to see friends and enjoy the

New England summer. But while there I realized that it was a bad idea to be in Boston without seeing Noam. Although I hadn't made an appointment, I called up Bev Stohl and asked her whether Noam was around and, if so, whether there was a chance to see him. Despite such short notice Bev was incredibly kind and arranged an appointment for me and my wife. It was a great pleasure to see Noam again, open and friendly as ever. Not surprisingly our conversation started with him and me discussing several problems concerning the theory of labelling, the adequacy of syntactic structures without endocentricity, the notion of locality and the trigger of syntactic movement. In the course of our linguistic conversation he turned to my wife, who had silently listened to our discussion, and asked her about her profession and her intellectual interests. When she told him that as a historian she was very interested in politics and had been engaged in the leftwing movement of the '68 generation the linguistic conversation was instantly over and labelling no longer relevant. For the rest of our visit he focused his attention to my wife and the debate proceeded exclusively between him and her on questions such as the Israel-Palestine conflict, the role of the US in the Middle East, and the political situation in South America. So the way our conversation developed was rather typical of Noam. He, as a unique intellectual, stands for

linguistics as well as politics, a combination that usually requires more than one person.

But then he was always bigger than one person in my eyes.

## Noam @ 90, keep fighting the good fight!

Kleanthes K. Grohmann

University of Cyprus – CAT Lab – *Biolinguistics*

Noam turns 90, so I will use my space to briefly reflect on the past quarter century that I have known him. I have known you.



Continuing my contribution to your 70<sup>th</sup> birthday celebrations, I want to express my deep admiration of your insights about language and politics, dear Noam, the guidance of my life since... Well, since, as is the case for so many others, you actually sent me a two-page typewritten response to my illegibly handwritten (!) letter. Let me present a few wildly unrelated stories, unrelated to one another and only

tangentially to Noam, perhaps, but none possible without him.

But before I go there, here some raw numbers (equally unrelated or -connected). Noam is now a bit over four times as old as I was when I first contacted him, pretty much close to 25 years ago on the day. It took another 5 years for me to meet him in person for the first time when he visited Maryland in

1998 (though I went to his lecture at UCL in '95)—exactly 20 years ago. And it was a dozen years ago that we embarked on the *Biolinguistics* journal project together. (Incidentally, the first-ever issue came out just a couple of days before Noam's birthday in 2007.) As a matter of (fun) fact, when my co-founder and I started working on the journal, back in 2006 when Noam also joined the advisory board, he was 77 years old. And today is also the 77<sup>th</sup> anniversary of what is known as Pearl Harbor Day (something of an insider's joke going back to Howard Lasnik, if I recall correctly, which relates to Noam's reluctance to appreciate his birthday—or so we're told). As for numbers, at the time of my first letter to Noam, he was over three times as old as I was, in the *Biolinguistics* birth year, it went down to 2.3 times as old, and now we're down to less than twice. In other words, Noam gets younger as I grow older! Poor logic jokes aside, 2006 not only marked the origins of *Biolinguistics* (which as a journal or field would not even be conceivable without Noam, regardless of one's take on the biological foundations of language, to go with the title of Eric Lenneberg's wonderful book whose 50<sup>th</sup> anniversary of publication we also celebrated in the open-access journal, free for everyone). On behalf of the University of Cyprus, I had the pleasure and honor of inviting Noam to Nicosia in May to receive yet another honorary doctorate. The photograph at the

end of this piece was taken outside the beautiful building where we held the accompanying conference in the old town.

Last week I went on a short trip to Berlin, and aside from work I was looking forward to meeting up with one of my oldest friends, writer and playwright Martin Heckmanns. We first met at the cusp from childhood to adolescence, a period which was filled with a lot of music and dancing and drinking and politicking. (Punk and politics, of course, also played a big role in my life later, I'll return to it momentarily.) But my contact to Martin has become less over the years, divided by countries and continents, it went down from a few hours every day to a few hours every year. But these hours are as intense as ever. And almost every time we have met during the past quarter century, one question was definitely on the menu: "What's new with Chomsky?" Well, last week I could tell him that many of us are involved in preparing an exciting 90<sup>th</sup> birthday – and just as with Martin and me, we don't have to be physically present to be close. After 25 years of Noam figuring so prominently in my own life, my education, my growing into adulthood, my academic training, and my human development, I for one feel very close. Thank you for being there, Noam!

On my way to Berlin, I read a short piece on 'Punk im Walgesang' in the German weekly newspaper Die ZEIT. It reports recent research published in the *Proceedings of the Royal*

*Society* that humpback whales prefer a particular tune which over time grows more complex and intricate, but every few years the humpbacks start a new tune, always a bit simpler than the previous. The writer summed it up as: “Punk follows classical music.” The political pun of the piece was the final question: “Who teaches punk to the [center-right German political party] CDU?” This immediately reminded me of the then innovative initiative I started with fellow linguist Jeff Parrott, the infamous *Punks in Science* (which we abbreviated as PIS, way before we became aware of the Polish right-wing party PiS). Apart from two generative linguists at the heart of the real PIS, this is also something that would never have happened without Noam’s influence. As we summarized our goals back then:

“The 7-second (no pun intended) version is that punks question authority, reject the old, strive for the new, ask for and offer honesty. What does good science do? The same! Moreover, a punk who’s looking beyond personal good (“fun”) is what a good scientist should be: responsible for a better world. [...] Noam Chomsky has always applied to the conscience of scientists, the ‘responsibility of intellectuals’. [...] The basic rationale is that we are privileged to spend our time reading, writing and thinking, educating ourselves, researching

(for our own sake or for other goals) etc. Not many people have this choice, and given that we do, we have the responsibility to look beyond ourselves. Similarly, not all punks are destructionist nihilists. Some people call punks ‘anarchists’, but those of us who are have, of course, a very different conception of ‘anarchism’.”

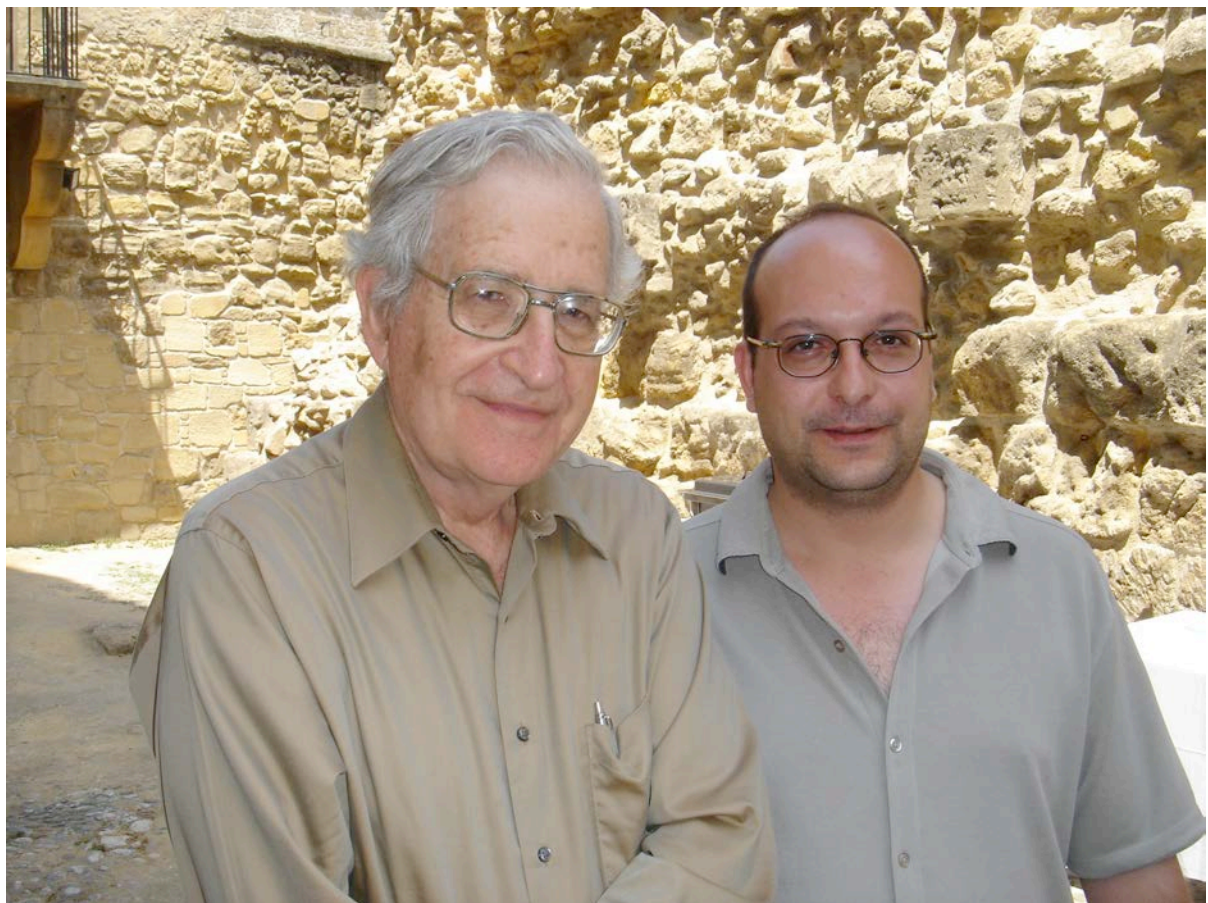
So, while punk may not have guided Noam’s life, his 1967 treatise on *The Responsibility of Intellectuals* certainly held its influence over us 30 years later—and another few years later, when I co-taught in the summer of 2004 an exciting seminar on ‘Science and Responsibility’ at the University of Cologne with my friend Kay González-Vilbazo (plus our literary scholar Ingo Breuer). Another course with Chomsky as the centerpiece on many different levels.

And, sure, there’s anarchism. It also played a big role in that seminar—as it has throughout my life, even before I had ever heard of Chomsky. And since I mentioned Die ZEIT above, the same issue also featured an enthusiastic book review of the new German translation of Ramón José Sender’s *Requiem for a Spanish Peasant*, a Spanish novelist born in Aragon. What’s the connection? Apart from dealing with the Spanish Civil War, it also relates to Noam’s answer in a TV interview many years ago to the question who was the most important anarchist: “Probably the most important anarchist thinkers, at least that I

know of, were the poor, illiterate peasants in Aragon and Catalonia in 1936 who actually constructed a successful life in anarchist society.” (Coincidentally, Wikipedia tells me that one of Sender’s grandsons is “a designer best known for his work on the Obama campaign logo”, to relate this to modern-day politics, too).

As alluded to above, I already had the honor of participating in a celebration of Noam’s birthday in the past, for his 70<sup>th</sup>, in an electronic essay collection put together by Janet Fodor, Jay Keyser, and Amy Brand. Mine was ‘Language and Politics: The Pillars of Society’, a second-year term paper I had written in the spring 1995 Philosophy of Language seminar taught by Ian Roberts. (And yes, the subtitle was taken straight from a song by the British punk band Serious Drinking.) Looking back, I was pleasantly surprised to see that I had already been able to squeeze in the relatively new concept of VCN in this kind of paper: “Chomsky considers this relationship [between ‘his’ language and politics] rather “tenuous” and it may fall under the category “not practically related”. Nevertheless the connection is (virtually) conceptually necessary [...]” Just sayin’, since I have not yet really talked much about language and linguistics here. And since I’m running out of space (read: taking up too much of your time already), I won’t. I won’t talk about VCN, which my graduate advisor Norbert Hornstein

was so keen on pushing (and which I have adopted largely from him), I won't talk about the distinction of the language faculty into FLN and FLB (and what it might tell us about a grammar of wine—or better: vine—if I ever find the time). I won't talk about the Fibonacci-Juan-Biolinguistics triangle. And I won't talk about all the other ideas, concepts, analyses, and crazy extensions (anti-locality, anyone?) you have allowed me—and the rest of us—to indulge in for all these years. I will just say a BIG thank you, Noam: Punk on!



## Noam and Me\*

Norbert Hornstein



It is not clear to me why it is that Noam would wish to know how I came to be a fervent acolyte, but the editors of this tribute assure me that he would. So here goes.

I met Noam when I was an undergrad at McGill. In fact I met him four different times.

The first time was through Harry Bracken.

Harry taught philosophy at McGill and I was his student (and I also often ate lunch with him and Jim McGilvray (who, at the time, was a useful Empiricist foil for Harry (yes, Jim has changed))). One

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\* Thanks to my good and great friend Elan Dresher for vetting the contents and checking the spelling and punctuation. For those that do not know this, Elan played Noam in a skit he and Amy Weinberg and I performed for Noam's 50<sup>th</sup> birthday. I played Koko the Gorilla. Amy played Penny Patterson. The skit involved a debate between Noam and Koko about whether Gorillas could be linguistically competent. To my mind, Noam lost that debate. I can be very persuasive when a gorilla. I mention this here because one of the benefits of knowing Noam before spell checking is that he automatically corrected my spelling and punctuation when I gave him a paper to read. Given the historical connection between Noam and Elan, it seems fitting that Elan has done me that service here. I have always relied on the kindness of good copy editors.

of Harry's interests was to understand the contrasting Empiricist and Rationalist worldviews. He was a staunch Rationalist partisan and firmly believed that the world/universe would be a much better place were Rationalist conceptions of minds and persons the default. The class spent considerable time rehearsing the 17<sup>th</sup> and 18<sup>th</sup> century debates. We also spent a lot of time on Noam's writing, which, at the time included *Aspects* (chapter 1), *Language & Mind*, and *Cartesian Linguistics*. Why Noam? Because for Harry, he was Descartes' 20<sup>th</sup> century avatar, fighting the good fight against arch Behaviorists like Skinner and (our own home-grown Empiricist) Hebb. This was my first introduction to Noam: leader of the anti-Empiricist Rationalist resistance.

My second introduction built on this. The impresario was Elan Dresher. At the time, Elan was a grad student in linguistics. He was also a great friend and weekend drinking buddy. Like all young Montrealers, we went out Fridays and Saturday nights. Unlike all Montrealers, we seldom had dates. So we sat and talked, and talked, and talked. About everything. We argued about whether the Loch Ness monster existed (Elan argued compellingly that the evidence was mixed, and at least as good as the evidence for the existence of the Great Blue Bear (which we took as very solid)), about whether sugar grew in cubes (again Elan

pointed out that the transition from cubes to grains was more “natural” (dare I say economical) than the transition from grains to cubes and so an elegant Nature would opt for the cube growth option), and, of course, about the virtues of Empiricism and Rationalism. We discussed and argued these points for hours, with Descartes’ views (and those of his modern-day paladin Noam Chomsky) generally winning the day.

I should add that at the time Elan was quite taken with the music of Woody Guthrie and he wrote a “train” ballad about Rene D that included the following verse:

Rene Descartes on the train line  
Wearing an Engineer’s hat  
Said, go and tell the people at Harvard  
That a man ain’t nothing like a rat!

There were many more verses and I suggest that you get Elan to sing it for you when next you see him.

So the first two “meetings” with Noam were what we might today call somewhat “virtual.” The next one brought me closer to the actual life and blood Noam, though still at a small remove. Here’s the story.

I was a student at McGill from 69-75 (yes, six wonderful years) and at the time Noam was very well known for his politics. It was thus somewhat odd that I mainly initially got to know him as a leading Rationalist linguist and philosopher (at the time, these two domains were close kissing cousins). However, given the times, I soon also started reading his political stuff. *The Responsibility of Intellectuals* and *At War with Asia* were standards. But Noam was everywhere, writing in the *New York Review of Books* (something that he would not do ever again after the war) and the lefty rag of the times, *Ramparts*. At any rate, we all devoured this stuff.

However, the US invasion of Viet Nam was not the only war of importance at that time. There was also the 67 war in the Mid East and the recurring intense conflict between Israel and the Palestinian people. I (together with Elan) were quite involved with the latter at McGill. We both went to a Zionist High School (Herzliah) and co-edited a magazine (*Strobe*) that discussed some of these issues in its pages (actually, he was editor, I was his sidekick). At any rate, we were deeply involved. I (and Elan) was a lefty Zionist politically, favoring a two-state solution based on the 67 border (which, truth be told, I still think is the most realistic proximate decent option). But I was quite definitely a Zionist in that I believed that Israel was basically forced into its military and polit-

ical responses by recalcitrant Palestinian (and Arab) initiatives (the old Ebanism “they never miss an opportunity to miss an opportunity” being a tacit mantra). I believed that Israel did not do much more than respond to events as best it could. This is important background for my third Noam meeting.

He published a piece in *Ramparts* arguing that Israel was the prime mover in the region and that it was responsible for initiating much of the trouble and intransigence. I could not believe what I was reading. I got really annoyed and decided to write Chomsky a letter showing him the error of his ways. What the hell did he know! Not much from what I could tell. So, I, a graduate of Herzliah and a lefty Zionist, was going to set him straight. I wrote him (yes, in those days we still wrote letters) a many-paged letter that went over his mistakes line by line and popped it into the mail feeling pretty good. I am not sure why, as I did not think that this intervention would lead anywhere. I honestly expected no reply. The whole effort was expansive virtue signaling (to myself largely), just good to get things off my chest and let Noam know that someone was monitoring his mistakes.

Well, you all probably know what happened next, as has happened to countless many before and since. Within the week I received a many-paged typed line by line reply to my letter telling me nicely

(but firmly) that I might want to consult various sources (e.g. *The Economist*, BBC transcripts, various histories (those by the Kimche's come to mind) etc.) that would show me that my view of the situation was not (ahem) entirely well grounded. This reply was entirely unexpected, and unfortunately quite impressive and extensive, but I was not convinced. I went to the library, chased down the sources, and wrote another revised note making similar points to the first but with slightly better backing. Suffice it to say, that after three or four iterations of this process I came to the tentative conclusion that I really did not know what I was talking about. I was not sure that Noam was right. But I was pretty sure that my former very firm views were very tenuous. This was a real revelation. Even bigger than discovering that Rationalism is right and Empiricism is (at best) wrong. I do not know if you have ever been privy to an episode of radical Cartesian Doubt where everything you thought was solid seems to evaporate (By the way, a bout of Cartesian Doubt is a bit like vegetables: good for you but not all that pleasant when you are in the midst of it). This was my first experience of that and if for nothing else, my third encounter with Noam will remain ever memorable (and my debt to him enormous).

The last intro was not epistolary but in the flesh. I met Noam for the first time (Elan was there too) at U Mass Amherst at the sum-

mer institute. I just walked up to him, introduced myself and we shook hands. He looked nothing like Descartes, or his demon. Elan agreed.

So that's how I got to meet Noam. Since then we have remained in contact, mainly via email (except for the four years in Cambridge when I got to see him pretty regularly). I discovered that there were more things that I did not understand beyond the politics and history of the Middle East. Many many (maybe a few too many?) more things. But I am sure that this is a standard reaction. I discovered that Noam likes nothing more than finding points of disagreement, and following ideas to see where they might lead. I found that I like that too, at least the way he does it. Noam's great gift has been showing me how much fun it could be to think about things. It really is fun, even if that involves changing your mind again and again and again. Quite a nice gift, and I appreciate it every day.

## To Noam

from Ray Jackendoff



During a recent party, a younger colleague asked me: “Don’t you think that if Chomsky hadn’t come along, someone else would have come up with generative grammar? Wasn’t it sort of in the air?” My immediate response, within microseconds, was a flat and definitive No. My colleague was kind of stunned. So I went on to explain: What made generative grammar remarkable was the revolutionary conjunction of two important ideas. First, Chomsky proposed to think of language not as something out in the world, but as a mental phenomenon, a kind of knowledge, grounded in the structure of the brain, and ultimately in human biology. Second, he developed a rigorous and captivating formalism for describing the intricacies of grammar. (I say ‘captivating’ because, in the course of my Presidential address at the LSA, I asked: “How many of you became a linguist because you thought Chomsky’s account of the English auxiliary in *Syn-*

*tactic Structures* was just SO COOL?" – and hands went up all over the room.)

Either of these ideas alone would have been a work of genius, but ultimately the biological basis of language alone would have degenerated into flabbiness, and the computational nature of language would have led to extensive but ungrounded formalism. It was the synergy between the two that spurred the fascination of generative grammar among linguists, psychologists, philosophers, anthropologists, and even literary and musical theorists. But aside from linguistics, none of these other disciplines took off in the same way, in part because – despite the ideas being “in the air” – nobody developed a formalism with the same rigorous and creative oomph of transformational grammar.

Over the years, I have come to disagree with Noam on just about every detail of the formalism (beyond the existence of phrase structure), and as well on many aspects of the overall architecture of the language faculty. I have even begun to wonder (horrors!) whether Zellig Harris’s notion of transformations might be closer to the truth than Noam’s. But I still consider myself to be working within his overall vision of what language is like and how one

should investigate it. I still believe that children have come equipped with a brain specialized for learning language, and I find it important to find out what that specialization is. And I still find it imperative to explore the structure of language in rigorous formal terms, even if my technology is quite different from his (and becoming more so). And I'm still in awe of his incredible intellect, which created this crazy field we're in. I wouldn't be in the business if it weren't for Noam.



So thanks, Noam, and congratulations on reaching this amazing milestone with marbles and feistiness intact. Biz a hundert tsvansik!

**On the occasion of Noam Chomsky's 90th birthday,  
December 7, 2018**

**Samuel Jay Keyser**

Throughout most of my professional life it has been my great good fortune to have known and worked with two pillars of modern linguistics, Noam Chomsky and Morris Halle. Noam celebrates his 90th birthday on the 7<sup>th</sup> of December 2018. Sadly, Morris will not join in. He died earlier this year on April 2, 2018 at the age of 94.

History has known extraordinary pairs—Romulus and Remus, Castor and Pollux, Gilbert and Sullivan, Currier and Ives. It has been our incredible luck to have lived in the company of Chomsky and Halle.



Speaking for myself, I can say that my entire professional life and most of my worldview

has been shaped by one or the other of this incomparable pair. I am certain that Noam feels the same about Morris.

That is why the celebration of Noam's 90th birthday is a bitter-sweet occasion. It is sweet because Noam continues to work as energetically, courageously, tirelessly and insightfully as ever. That in



itself borders on the miraculous. The occasion is bitter because of Morris' absence.

I retired from the Massachusetts Institute of Technology (MIT) in 1998 and in 2004 MIT Press published a memoir of my time at the Institute, *Mens et Mania: The MIT Nobody Knows*. I hope the reader will forgive me if I quote from this memoir in appreciation of one of history's great twins, Noam Chomsky.

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### **The Steps of Widener**

I met Noam Chomsky in the spring of 1961, on the steps of Harvard's Widener Library. We went across the street to Nedick's for coffee. Widener is still there. Alas, Nedick's is

not. I was there because Noam and Morris Halle were thinking about writing what, in my view, was a seminal work in twentieth-century linguistics, *The Sound Pattern of English*. For me that book is as important to linguistics as *Principia Mathematica* is to philosophy. Sadly, most linguists working today haven't even read it. By the same token most philosophers haven't read *Principia*. No matter. The book will rise again....I once wrote Chomsky asking why he thought *Sound Pattern* had fallen on deaf ears. He wrote back, "A century ago the leading physicists dismissed the molecular theory of gases as a calculating system because there was no way to 'see' molecules. That continued with chemistry until my childhood. In the subjects dealing with humans, those drives are intensified by other factors." Noam didn't elaborate on those other factors. But here's one. There is a kind of intellectual parricide that haunts fields like linguistics, fields that are a cut above the soft sciences, like sociology and anthropology, but not quite at the hard science level, like physics, chemistry, and microbiology. In *The Brothers Karamazov* Alyosha asks, "Who among us would not wish to kill his own father?" That rings true of

linguistics, I'm afraid—an adolescent science if there ever was one.

I was on Widener's steps that morning because Noam and Morris had a theory of how modern English phonology works. They wanted to know if it held for earlier stages of the language. My name came up. The reason was that after I graduated from George Washington University in 1956, I went to Oxford, England, on a Fulbright scholarship to study Old and Middle English philology at Merton College...Over coffee at Nedick's I listened to Noam explain what he and Morris were up to. All of a sudden, we weren't talking about dead languages that survived in obscure texts like the *Ancrene Wisse*, a medieval rulebook for anchorite novices. Or the emendations in the latest edition of the Old English poem *The Exodus*. Now we were talking about how the mind works. This was a whole new ballgame. On the spot, I decided to give up the year at University College London that I had been offered. Better to spend it at MIT and find out what these guys were doing. That was the smartest decision I ever made. It turned me from an amateur into a professional. It also taught me the importance of colleagues in academia. However good my work has been, it is twice as

good as it would have been without the benefit of superb colleagues.

Wynton Marsalis once said that playing in a jazz band is like being in a marriage. The job of each musician is to make the others sound as good as possible. That's what scholarship in a healthy department is like. Each member of the department makes his or her colleagues as good as they can be. MIT certainly served me in that way.

Noam invited me to spend a year as a research affiliate...Visiting another university while still a graduate student at Yale was not that unusual. After one had completed one's graduate classes, the dissertation could be written anywhere. After Noam's invitation, I had chosen to write mine while a visitor at MIT. Just before I left for MIT, Bernard Bloch, the legendary editor of *Language*—at the time the field's most prestigious journal—called me into his office. He wanted to know if I would like to do a book review for his journal. The book was *The Pronunciation of English in the Atlantic States*, a linguistic atlas that recorded the speech of several hundred speakers over an area reaching from Pennsylvania to South Carolina. Of course, I would do the review. That was how one made one's way in

academia. One published. Here I was, still a graduate student, and Bloch was offering me an opportunity to publish in the number one journal in the field. How could I not do it? I accepted with trepidation. I had never written a professional piece before, not even a book review. This would be my coming-out article.

Bloch handed me a copy of the book, all 182 pages of it plus 180 full-page maps that recorded how people pronounced a large set of key words throughout the Atlantic States. It was a hefty volume and the weight of it brought home what it was I had agreed to do. I had no idea how I would do it. This was my trial by fire.

I knocked out a first draft of the review. I sat on it for a few days. I rewrote it, polishing it as best I could. Then I gave it to Morris.

He kept it for a day. Then he called me into his office.

"Keyser," he said. "This is a lousy piece of work."

"What's wrong with it?" I stammered.

"You're just trashing the book," he said.

"So?"

"That's too easy. If you don't like what the authors are doing, then show how to do it better yourself."

Morris was right. There was nothing creative about my review. I had written the academic version of a negative political ad. Reflecting on that moment some fifty years later, I realize that it was a watershed in my career as a linguist, in fact, the watershed. What it came down to was this: how do you handle criticism? Over the years I have encountered students and faculty who are unable to separate their work from themselves. A criticism of one is a criticism of the other. This is death to good work and also to good working relationships. I don't know what part of my character enabled me to say to myself: you can walk away and be pissed off and learn nothing, or you can listen to what this guy has to say and maybe learn something.

I studied the book in a completely different light. How could I demonstrate that there was a better way of doing this? I managed to find one. I took the data and showed that, looking at it from a different perspective, one could say some interesting things about how dialects differ along the Atlantic States and, in fact, in general. I rewrote my review and went back to Morris.

He kept it a day.

“Now you’re talking,” he said. “But you need to make the argument clearer.”

I went back to Morris at least fifteen times. Each draft was better than the last. Finally, with the fifteenth draft he said, “Now it’s ready to show to Chomsky.”

I did just that. Noam read it, said he liked it, but wondered why I hadn’t made a certain point about theoretical work in general. Another set of scales dropped from my eyes. In one simple comment Noam had raised the level of the review from good to important. I was flabbergasted. I was also grateful that I was at MIT.

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My friendship of over 57 years with Noam Chomsky has been a gift that keeps on giving. The excerpt I just described from *Mens et Mania* focuses on how a single comment can make all the difference. I would like to end this encomium with a similar account, this one describing a much more recent encounter with Noam. It is drawn from the preface to *Modernism, the Sister Arts and the Easter Egg: a theory of what*

*happened to poetry, music, and painting at the turn of the 20th century.* The book will be published by MIT press.

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Over dinner one evening later in that same year (2016), Noam Chomsky mentioned an idea that he had advanced 50 years earlier at a meeting at Harvard University. It fell upon deaf ears. He put it aside. The idea was as striking as it was simple. The shift in scientific thinking resulting from the “Galilean revolution” coupled with Newton’s epochal formulation of the principle of action at a distance and the shift that took place in the sister arts of poetry, painting and music that went under the name of “Modernism” were the same phenomenon; the brain reaching the limits of its natural predilections and being forced to look elsewhere for inspiration.

That night at dinner I was listening. I remember replying that not only did I think he was right, but that I thought a strong case could be made from the point of view of the arts...In this book, I argue that the sea change that the sister arts of poetry, painting and music underwent at the turn of

the 20<sup>th</sup> century is the result of the abandonment of a natural aesthetic based on shared sets of rules between artist and audience, shared in the same way that the rules of English are shared by the readers of this sentence and its author. Further, the abandonment of these rules and the abandonment of the mechanical philosophy of the Galilean revolution and of Descartes are the same phenomenon, the brain encountering limitations and having done so, the strategies it then employed.

If successful, the present work will have demonstrated that one of the most important movements in Western cultural history, the shift to Modernism, was initiated by internal mental constructs abetted by subsequent cultural phenomena and not the other way around.

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As Yogi Berra is reputed to have said, "It was déjà vu all over again."

Thank you, Noam.

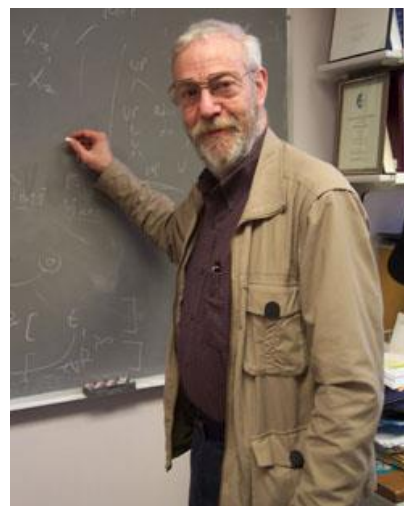
# Recollections of Working with Noam Chomsky\*

Howard Lasnik

University of Maryland

December 2, 2018

As an undergraduate math major at Carnegie Institute of Technology, I became friendly with an advanced graduate student in the department. When he had just finished his thesis (1967, I think), he told me the most impressive thing I could possibly imagine for an



academic: He had received a letter from Kurt Gödel requesting a copy of that thesis. It remained the most impressive thing I could imagine until 1976, when Noam Chomsky asked me to write a paper with him. At that time, there was great emphasis among generative grammarians on explanatory adequacy, how it's possible for the child presented with very limited data arrives at the correct grammar. A few years before, Chomsky had published "Conditions on Transformations", a huge step in this direction, and was just completing "Conditions on Rules of Grammar", an important refinement. With one of my students,

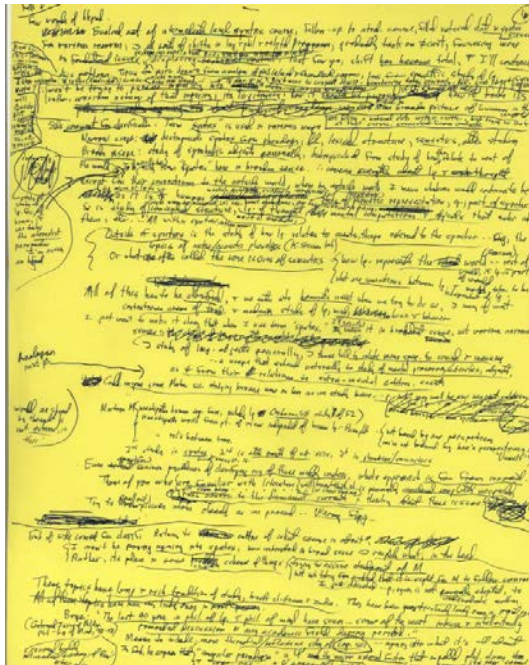
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\* [Expanded from a portion of my Foreword to *Chomsky's Linguistics* (2012)]

Joe Kupin, I was engaged in formalizing a restrictive theory of syntax, Lasnik and Kupin (1977), “A Restrictive Theory of Transformational Grammar”. In my concurrent investigations of the English auxiliary verb system, I was coming to the conclusion that the core ideas of *Syntactic Structures* and *LSLT* were fundamentally correct and that many of the stipulative properties of the analyses presented there could be factored out into a filter barring stranded affixes. Meanwhile Noam had been exploring filters determining the distribution of NPs in sentences. At one of our frequent meetings, Noam suggested that we join forces to further explore filters, a seemingly necessary augment to syntactic theory, given the generality (hence, over-generating capacity) of the developing simple theory of transformations.

Needless to say, working so closely with Noam was an extraordinarily stimulating experience. He could see the consequences of an idea astonishingly quickly, usually much more quickly than I could, even when the idea was mine. And even though we worked on the paper essentially full time for about two weeks, he was simultaneously performing several other full time tasks (reading, writing, preparing lectures). We began working on the paper in the late fall of 1976. We quickly realized that working in the office was hopeless, with all the inter-

ruptions and distractions, so we decided to wait until the semester was over and to work at his then residence in Lexington, MA (which borders my town of Arlington). I have a vivid



recollection of arriving 9:00 AM the first day after the semester. He showed me into his study and EVERY surface was covered, with books, journals, newspapers from all over the world. The books and journals were on linguistics, philosophy, psychology, history, politics, and several other topics. And

he had read, or was in the middle of reading ALL of them. He had to clear a path for me to walk in, a chair so I could sit down, and a place on a table so I could write (yes write; no personal computers yet). We worked non-stop until 7:00 PM. The next morning, I again arrived at 9:00, and again EVERY surface was covered, with books, journals, newspapers from all over the world. A whole new batch which he had read, or was in the middle of reading. Absolutely amazing.

We met like this for the better part of two weeks, and we came up with a mess of analyses and handwritten notes including bits

of analyses, trees, lists of sentences, occasional prose paragraphs, but it was just this huge jumble and it was unclear to me at that point, how we would ever turn it into a publishable manuscript in a reasonable amount of time. But after we reached the point where we thought that we had accomplished pretty much what we had set out to (our line wasn't perfect, for sure, but we felt we couldn't do much better at this point), Noam said to me one evening: "I think it's pretty good, we have a decent line on all these things, we know how we want to put it together. Why don't you just leave all the stuff with me and I'll throw together a really rough draft that we can then work out together." That was at 7:00 PM. At 9:00 the next morning he dropped off at my house a fifty-page rough draft! It was really rough and it needed a lot of work, but just the physical accomplishment (to say nothing of the intellectual one) is unbelievable.

Noam actually prided himself on his typing ability. He was a lightning fast typist – around 100 words per minute on an IBM Selectric. That's fast! I have known him for 50 years, and he has never displayed any ego at all with this one excep-

(28) (i) \*how many packages did there arrive in the mail  
(ii) \*how many packages were there placed on the table  
(iii) \*how many men did there enter the room  
(iv) \*how many journals did there hit the stands

(24) and (26) must be incompatible with *wh*-movement, or (28) would be permitted.<sup>48</sup> Similarly, (29i) is much worse than (ii), indicating that (i) has undergone (invisible) rightward extraposition, again barring *wh*-movement:

(29) (i) \*how many men did there arrive  
(ii) ?there arrived three men

The incompatibility is not between *TH/EX* and *wh*-movement. Thus in (30) both operations apply<sup>49</sup>:

(30) (i) to whom was there a present given  
(ii) ?at which airport did there arrive three strange men

Rather, the two operations cannot apply to the same phrase.

Why does the English-specific rule *TH/EX*, which extracts *DO* either to left or right, bar *wh*-movement? A preliminary question is whether the position of *EN* (= *DO*) is immune to all syntactic operations, for example, *wh*-movement from within *EN*. Compare the examples (31):

(31) (i) what are they selling books about *t* (in Boston these days)  
(ii) \*what are there books about *t* (in Boston these days)

The contrast rules out one pattern of derivation for (31ii): given the base form (32), apply *wh*-movement to *what* within *EN* (as in (31i)) and then apply *TH/EX* to *EN* including the trace of *what*, yielding (31ii):

(32) there are being sold [<sub>NP</sub> books about *what*] (in Boston these days)

If that were possible, the two cases of (31) should be on a par. We conclude that the base position of *EN* is completely inaccessible to *wh*-movement, either as a whole or in part.

It remains to determine whether the *EN* output of *TH/EX* is accessible to *wh*-movement. We know that the whole *EN* is not. The natural expectation is that no part of *EN* is either, in which case, the contrast in (31) cannot be attributed simply to the degradation of movement from an internal phrase (see note 44). The examples (33) provide some evidence that the expected conclusion is correct:

tion. I remember one time in I think the mid-1980's when he called me one morning to say he has just finished a new manuscript (maybe *Barriers?*), just printed it and wanted me to take a look right away. I said that surely he would want to proofread it first, but he said that wouldn't be necessary. In surprise, I asked why not. He replied that he never makes typos. I was amazed, and not convinced, but he said he would give me \$10 if I found a typo. I actually found one (that's pretty accurate typing) but never asked for the \$10. I guess I thought I would rather have something on him.

Obviously his intellect is the thing that most strikingly sets him apart from the rest of us. Morris Halle had a wonderful metaphor: "Noam is plugged in." But there are also some physical attributes that helped him accomplish all that he has. One is the typing ability I just mentioned. Another is that he has never had to spend much time eating or sleeping. After our first day working on "Filters and Control", I arrived the second morning at 9:00, the appointed time. Noam answered the door saying "Good, right on time". Then he asked me what the brown bag was that I was carrying. I said "Sandwiches." He asked "Sandwiches?" I responded "Yes, normal people have to eat". He replied "Oh, didn't we eat yesterday?" This lack of concern for

food was pretty standard for Noam. He never seemed to spend much time or thought on meals. He also evidently needs much less sleep than most people. I was with him one Thursday before his regular weekly MIT lecture. A reporter had just arrived and she wanted to know if she could ask some questions, so she walked along with us to class. One of her questions was something like this: "Professor Chomsky, you do so much, so many lectures all around the world, so many books, so many articles. How is this possible? Do you not sleep?" The question was obviously hyperbolic, but Noam took it literally and replied "What do you mean not sleep? I get my four hours a night just like everyone." As far as I could tell, he was totally serious. He thought, maybe still thinks, that everyone survives, even thrives, on four hours sleep a night. I have independent evidence that that was his normal regimen. In 1982 when Noam was giving a political talk in Montreal, he stayed the night at the home of Bob Freidin, who was then teaching at McGill. Bob told me that Noam would go to bed at 2:00 AM and get up at 6:00. Four hours a night, just like everyone!

## Getting to know Noam

David W. Lightfoot

Georgetown University

In the mid-60's the UK voted for Labour governments that were populated by good writers and good thinkers ready to change the world. Western Europeans born at the end of World War II were imbued with universal, enlightenment values, believing that people should receive living incomes, have access to decent health care and to education. We gazed uncomprehendingly across the Atlantic at the antedeluvian John Birch Society and at fascistic McCarthyism; instead, we were going to make the world a better place. Together with some other undergraduates in London, I negotiated in the first student-run health care facility at British universities. Because of that, I was appointed as a Labor Relations officer for Ford Motor Company's Engine Plant, when the company was bringing in new, less brutal pay systems. I was dealing with 5,000 men and 135 women - good



practice for founding and chairing a Linguistics Dept at UMaryland in the 80's. The women made upholstery for the seats and their work was classified as "unskilled," because they were women and therefore they were paid less than men making pistons and camshafts. There is now a very good movie about the Ford strike that led to the 1972 Equal Pay Act, *Made in Dagenham*, dealing with the struggle for equal pay for equal work for men and women and ending the practice of advertising jobs with one salary for men and a lower one for women.

I was never going to last long in the jungle of the motor industry and won a Fulbright scholarship to come to the US and study linguistics, in particular, the development of Indo-European languages. They put me on the antiquated liner, the Queen Elizabeth I, in the cheapest, run-down cabin right above the propeller, throbbing its way through Atlantic waves and giving me a five-day headache. I prepared for my entry into linguistics by reading Leonard Bloomfield on the cold, gray boat, bemused by his attacks on "mentalism."

I headed for Ann Arbor and soon learned that there was more to linguistics than changes in the Indo-European languages. I was introduced to "transformational grammar" by being given a corpus of 400 sentences of Yoruba and being told to write a phrase struc-

ture grammar (transformations would come in the following semester), which would generate exactly those 400 sentences AND NO MORE! I began to hear about a so-called “tin god in Boston,” who had new ideas about “mentalism” and was bringing changes to the teaching of Latin. But the first things I read by Noam were political, ‘The responsibility of intellectuals’ and ‘Objectivity and liberal scholarship,’ which I immediately began advocating for as obligatory reading for all American undergraduates. Ah, the dreams of youth! I was impressed by what he was arguing, that intellectuals had responsibilities unlike those of technologists and that the history of the Spanish civil war needed to be re-thought (which got me reading everything by George Orwell). But I was most impressed by *how* he was arguing, with low-key precision and rigor and without rhetorical flourishes, charisma, or appeals to panaceas.

I attended a lecture that Noam gave at Michigan State where a school friend of his, Joseph Reif, then on the faculty at U Michigan, introduced us. Noam gave an early version of ‘Remarks on nominalizations,’ where he was arguing with the same rigor and the same style as in his political work. That paper set the scene for ‘Conditions on transformations’ and changed everything. I left graduate school, liberated from having to jump through other people’s hoops, and started to read freely with my students at McGill

University, where I had lunch most days with Harry Bracken, a philosopher working on the seventeenth century and the Cartesians. The Cartesian mentalistic innateness hypothesis was getting fleshed out in rich detail, bringing major linguistic insights like the A-over-A condition and the lexicalist hypothesis. I began to see new ways of thinking about change in syntax from one generation to another and wrote a big book about it. Noam had asked to see it but I never expected to receive twenty pages of single-spaced comments, packed with challenging questions and insights. I still have them, a testimony to the generosity and wisdom of a man with apparently unlimited time and energy for students and faculty at Cambridge, Mass and around the world. And a prelude to similar commentaries on later books. Like most other colleagues, I came to take this for granted but have always regarded him as a model, guiding my own behavior, encouraging enthusiasts to explore and to engage with his thinking, considering alternatives, and what his thinking entails for ideas about the evolution of the language faculty, about relationships with cognitive science beyond the confines of language, and about connections between political ideas and scientific thinking about other cognitive faculties, and other big issues.

Those big issues were never far from his mind and they shaped the vast body of correspondence that so other contributors to this

volume have commented on. Darwin was another of the great correspondents of science but, unlike Darwin, Noam was helped by email. Like Darwin, it is in his commentaries on the work of others that we see new ideas emerging. Darwin and Chomsky both have believed in the great value of criticism in examining the ideas of others and seeing how analyses relate to the big issues. Many have commented on how Noam's 1959 critique of B. F. Skinner's *Verbal behavior* boosted his early career and helped to shape generative linguistics by keeping it oriented towards issues relating to matters of acquisition.

In the correspondence with the rest of us, we see Noam beginning to change his mind. One of the striking things about his career is the way he has changed his mind and reformulated the goals of the field repeatedly, raising the stakes each time and quickly increasing the empirical range. The earliest work brought a huge DESCRIPTIVE success, accounting for the properties of English auxiliary verbs. At the core of that success was a horrendous phrase structure rule, which nobody would entertain today,  $Aux \rightarrow C(M) (have+en) (be+ing) (be+en)$ , with much language-specific information, even specific English morphemes. Many people saw beyond the specificities and were impressed by the understanding that *Syntactic Structures* brought to the syntax of English aux-

iliaries. Soon computational operations, whether phrase structure rules or transformational operations, were being defined narrowly to “Affect alpha” and the like, benefitting from very specific



conditions in UG like the Specified Subject Condition. Nobody cared about the specificities of those conditions, because they must result from the properties of our biochemistry and nobody had or has the faintest idea about how our biochemistry shapes our cognition. Nobody cared, that is, except Noam. His most recent initiative has been to try to minimize the information attributed to our biology, in the hope that we might one day be able

to specify a simple mutation that might have been the source of the evolution of the language faculty in the species just some thousands of years ago.

Each of these shake-ups have been foreshadowed by explorations in the correspondence we all have with him and that is one way in which he has taken us all down the paths he has sketched out.

I have outlined some of our first encounters, which have energized encounters with my own students. My first class at McGill in 1970, an Introduction to Linguistics, had 90 students, nine of whom went on to become major figures in linguistics and psychology. I would like to think that they were helped along their paths by the close readings we shared of 'Conditions on transformations' and similar, later papers of Noam's. What a model he has been, a generous man keen to share ideas, including some tentative ones, not yet properly worked out, and keen to look for ways of re-thinking issues and coming to new analyses in order to better understand the language faculty.

And still it goes on. Here's to the next decade.

# A Visitor from the Republic of Law

Matthias Mahlmann

University of Zurich, Faculty of Law

## 1. Law, ethics and philosophy



In 1997, a PhD student from Berlin, working on the philosophy of law, arrived in Boston, and carried four things along with him: a backpack, an idea, an invitation and a name of a host.

There are many things that may be of interest in Chomsky's work for somebody who takes the law with its millennia of history, the intellectual edifice that generations have built, its enormous social impact, and – not the least – its aspiration for justice as an important subject of serious study. First of all, human rights are a central point of normative orientation in Chomsky's thought. The *Universal Declaration of Human Rights* of 1948 embodies some of the basic normative signposts that provide in his political work a non-negotiable framework for the structuring of society and the evaluation of action of (importantly) friend and foe.

Democracy is another central feature of his reflections, understood, however, in a demanding way, as a political order of true human autonomy that includes not only the political, but also the economic and social sphere. This evidently touches upon another central concern of legal systems, namely to make a crucial step forward on the way to the self-liberation of human beings by securing human freedom through the organization, creation and limitation of public power pursued today in particular in the framework of democratic constitutionalism. In addition, there are many attempts to organize economic structures legally in a way that takes human beings as subjects of their life seriously.

Finally, the rule of law plays a major role in Chomsky's critique of US foreign policy and its internal affairs or in his assessment of international relations in general. Chomsky is an anarchist, but a very peculiar one. An important element of his political thought appears to be a keen sense of the central political importance of law as a tool to protect the rights of human beings, and to outwit the destructive forces of arbitrary power. This is an important insight, especially for a thinker of the left. The tragic history of leftist thinking in the 20<sup>th</sup> century was, among others, haunted by a fatal legal nihilism; fatal in the literal sense, because it devoured very many people including some

legal theorists of that tradition. If one needed further illustration beyond that for the importance of the rule of law, one would only need to look at current politics: the attack by authoritarian movements destroying hard-won democratic structures in many parts of the world including Europe is not accidentally targeting institutions, practices and the normative framework of the rule of law. There is method in the apparent madness of some of these ethno-nationalist movements: If you want to create unrestrained centers of power you have to remove the fetters of the rule of law. The arch-enemy of an anarchist, the state, also gets some credits in Chomsky's analysis: At many occasions in his writings he underlines the importance of the state order that is at least potentially democratically controlled as a counterbalance to other powers in a society, not the least of the economy. These are important considerations if critical democratic politics are supposed to be more than gratuitous radical posturing unconcerned with the hard and dire realities of social life.

This appreciation of the importance of law extends to the international sphere as well. Legal sources are the object of his critique but often serve as a source to buttress the political case that is made. The weakening of an international order based on law, the sometimes openly voiced contempt for it by major ac-

tors in recent years, in times where there is an urgent need for international cooperation, for example to deal with the existential threats of climate change or nuclear armament, is a recurrent concern in Chomsky's political work.

## **2. A moral deep structure of legal systems?**

These are important, but not the only reasons, why it is interesting to think about Chomsky's work if one wants to understand better the wide world of the law. Another reason is derived from the cognitive interest to decipher the deep structure of the law, to use an early Chomskyan term. A crucial step in this direction is to regard an analysis of morality and moral cognition as a precondition of understanding the nature of legal systems. To be true, law is not morality. The law is a socially institutionalized, historically grown normative system, aiming to regulate external behavior and not attitudes of human beings. Morality in contrast is the ensemble of obligations derived from principles of justice and concern for others that affects people's decision-making, their motivations and reasons for action and (in Kant's words) necessitates their will without depriving them of their freedom as autonomous agents by the sometime irresistible force of a moral ought. But law and morality are intricately linked: Legitimate

law is necessarily based on moral principles. The law attempts to realize justice; even the vilest law pretends to serve this aim. The application of the law, its interpretation and concretization, needs to be committed to this purpose to continue to be a legitimate practice. In addition, the analysis of morality shows a structure that in many very important ways is mirrored in the make-up and conceptual framework of the law.

Morality is an intricate object of study. The task is to understand the working of moral cognition, the possibly universal features of moral thought and judgement; its richly structured texture including phenomena like agency, obligations, permissions, prohibitions, or rights. Other frontiers include such grand questions like the meaning of justice or goodness or the explanation of its volitional and emotional impact. To be true, there are many social moralities, often widely divergent. But even in this case, the set of different moralities is based quite clearly on some restrictive principles that limit the possible variations. This is even more obvious for a reflective morality, a morality that stands the test of critical thought. On this level, there is very a substantial convergence, say as to the impermissibility of colonial conquest, slavery or the subjugation of women. The development of the international human rights culture proves the practical possibility to unite humanity

around certain substantial normative positions, fragile, imperfect and endangered as it surely is. It is hard to doubt the possibility of universalism if some of the most important current legal aspirations of our time are based on it.

Language is the mirror of the mind and an essentially human property. But morality is surely as defining for human existence as language and law is no less central. Legal systems have served often power and privilege. They were tools to enforce grave injustices and are still employed for that particular task. But throughout legal history another tradition has been alive and that is the striking attempt to institutionalize and make effective a normative order of decency. If one wants to understand what humanity is about, one has to spend some thoughts on this remarkable endeavor and its deeper causes.

If one is interested in such questions, one might develop the idea to get inspiration from Chomsky's work on language to see whether there are perhaps interesting things to be learned from the study of that essential human property for these other essential features of human existence just discussed. The idea the visitor to Boston brought along with his backpack was to do exactly this and therefore to systematically explore the question of whether there is not only a language faculty, but a moral faculty, perhaps even something that is sometimes called a

universal grammar of morality. That does not imply the assumption that the full ethics of say, secular egalitarian humanism or the content of complex legal instruments like the *Universal Declaration of Human Rights* is inborn. The question is rather, whether there are important cognitive preconditions for the possibility of developing a full ethics of secular egalitarian humanism or the *Universal Declaration of Human Rights* that need to be identified to explain the normative world of morality and law humans necessarily and universally inhabit.

Such a perspective is not a substitute for normative theory; on the contrary, normative questions in the last instance have to be answered on normative grounds to avoid a naturalistic fallacy. But, and that is important, such study may reveal that there is something like a, at least partial, convergence of normative theory and human moral cognition. If this were so, this would allow for a bit of optimism in a somber world as human beings may, in fact, be able to be what morality commands them to become.

### **3. An invitation and a courageous host**

The invitation, being the third thing the visitor to Boston brought along, was from Noam Chomsky. The doctoral student had worked on these ideas already a few years and was just

about to finish a book on this topic. On the one hand, the project broke ranks with well-established patterns of enquiry in practical philosophy, because of its substantial concept of human nature, the assumption that moral psychology needs to be factored in a theory of moral understanding, its material universalism and meta-ethical cognitivism. On the other hand, it seemed to continue in its most modest and limited ways by normative reasoning embedded in a theory of the mind the thread spun by major thinkers of the past from Socrates to Kant that assumed that moral understanding is an elementary part of the nature of human thought. He decided to write to Chomsky about the project and to ask him about his opinion, not the least because Chomsky had occasionally made some quite substantial remarks about the possibility of a study of morality in a way that was not identical to, but fruitfully inspired by, the productive approach to language that he pioneered. The doctorate student did not expect an answer and was quite prepared to shelf a preformulated reply from an assistant and to get on with his work afterwards, but thought that he should give it a try. To his surprise he got immediately a very substantial and encouraging answer and planned quickly to travel to Boston to spend some months there for a deeper understanding of at least some of those many things he had not understood so far.

The best thing of all was that Chomsky pointed out another doctoral student, John Mikhail, who happened to work on the very same topic. The latter turned out to be a very courageous man: He let the unknown visitor after he had received out of the blue a letter from Berlin even stay in his room in Cambridge as he was away some months.



The doctoral student from Berlin spent an intellectually outstanding time at MIT and learned much about the study of language, the theory of mind, the idea of enquiring into the nature and structure of morality and law in a mentalist framework and about a plausible concept of human nature. It did not take long to be deeply impressed by the strikingly original thought of his newly found brother-in-arms and generous landlord. He profited much from his new linguist friends Caterina and Orin at MIT who met with a certain amused bewilderment this strange visitor with slightly obscure intellectual interests from the outmoded and dusty corners of human enquiry (and made quite a bit of fun of him), who even tried to explain to them that the law is not a realm or an empire serving the interests of the few, but in its true self a republic of free thought committed, if it is worth a penny, to the quest for justice.

He learned much about true, fearless, and rigorous scientific work and he saw the passion and determination to improve up close that inspired every answer of Chomsky to whatever question was asked. Clearly, no progress was too small for him to be worth a serious effort.

This passion for improvement seemed to have two sources: first, the pain felt because of a world where human beings live with so much sorrow and tragedy despite the very different possibilities of this very particular species. Given this state of affairs, improving things wherever one can in order to make things at least a little bit better, is something like a categorical imperative of a humanism that has not yet given up on itself. Second, the firm belief that these other possibilities of the human species truly exist and can enrich the life of everybody quite considerably if one does not throw them in the dustbin of ignorance and folly. The unrelenting spirit of improvement mirrors an indestructible passion for life.

#### **4. Creating a world for the creatures we are**

We live in a time of a very serious attack on democracy and human rights. The specter of a new form of authoritarianism, camouflaged with a democratic façade, buttressed by a political

culture, in which propaganda and the systematic strategic distortion of reality and not reasons and arguments count, that survive critical scrutiny, has won important victories in recent years. The battle against these new forms of authoritarianism will not be won without a deep and well-founded sense of what human beings are like. It is a source of potential weakness of those who fight against these authoritarian movements if there is a lack of a clear concept of human nature, as difficult and ambivalent this concept surely is. What kind of creatures human beings are needs to be identified as much as the normative principle that should guide them to determine the cause of action that human beings justifiably take in the political sphere. Chomsky's thought is in this respect a source of many insights. A central element of his work, of his linguistic theory, of his philosophy of mind and of his political criticism is a vision of humanity that connects it with the best thought on this matter throughout the centuries: It is the belief that human beings are richly endowed, unfathomably inventive, free beings with the dignity of autonomous subjects of their life. Human beings are furnished with the tools of creative thought and understanding and, the noblest thing perhaps of all, the desire to honor justice, to make other people count equally, to give them their due, to respect their liberty and worth, and, through this, to pay tribute

to what is of (sometimes) enrapturing greatness in the human mind and feeling self.

## FOR NOAM: SOME REMINISCENCES AND THANKS

Robert May



I've known Noam for half his life; when I first met him, when I began as a graduate student at MIT, he was 45. The first time I saw Noam was two and a half years prior, in 1971, when he gave the inaugural Russell lectures at Trinity College, Cambridge. Although I had read his political essays in the *New York Review of Books* in high school, my first exposure to his linguistic ideas was as a freshman at Swarthmore, when I first read *Aspects*, and it was the first chapter that got me hooked. I had the great fortune that Lila Gleitman was at Swarthmore during my last two years; one could not have asked for a better tutor on the importance of Noam's ideas about language and mind.

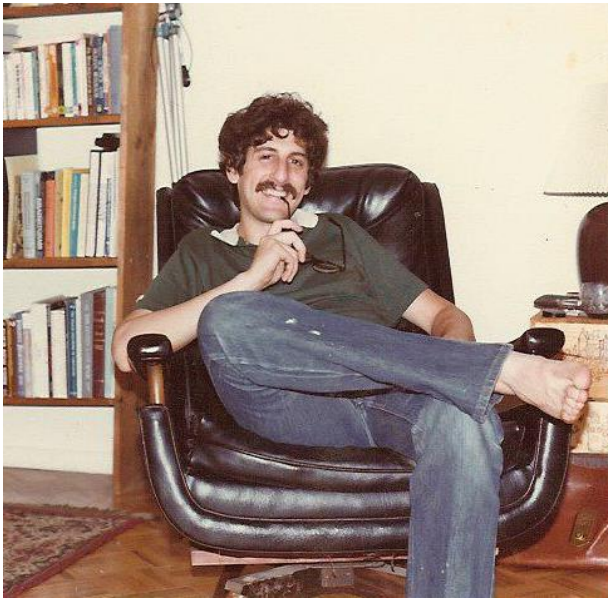
The Russell lectures, which appeared as *Problem of Knowledge and Freedom*, were unsurprisingly given to packed houses in Cambridge. Since the lectures were under the aegis



of Trinity College, it fell to the master of the college to make the introduction. At that time, the position was held by the retired Tory politician Rab Butler, who by that time was Lord Butler. Needless to say, he did not put terribly much enthusiasm into the introduction. The large stage had Noam at the lectern, and Butler sitting in a chair, rather behind him, was sound asleep through the entire proceedings. I doubt that Noam noticed, but the audience did, much to its bemusement, given that their political views did not, shall we say, align with those of the old, sleepy conservative politician. (There is also a story, more amusing, about the dinner at the Master's lodge that accompanied the lectures. But I leave that to Noam to tell.)

When I arrived at MIT in September 1973, everyone was reading "Conditions on Transformations." I freely admit that I had a hard time with that one as a beginning graduate student, and I pretty much worked on it intensely my first semester there. Noam, as all know, had his class on Thursday afternoon at 2 o'clock; at that time, Noam would walk in, take off his watch and place it on the table, roll up his sleeves, and teach, without a break, until he was done. Taking a break was a later innovation. Of Noam's classes that I attended at MIT, three stand out in my memory, and have influenced my thoughts ever since. The first was a class in semantics, in response to clamoring by the graduate students. The first paper we

read was Tarski's "The Concept of Truth in Formalized Languages" – the long version! We then moved on to Quine's "The Problem of Meaning in Linguistics" and "Two Dogmas of Empiricism". Hearing Noam discuss these two seminal papers was a revelation, given how profoundly his reaction to them played in the formation of core aspects of his emerging ideas. Only later did I learn that Noam had heard Quine give these papers as talks at Penn, and that was the reason that he wanted to go to Harvard.



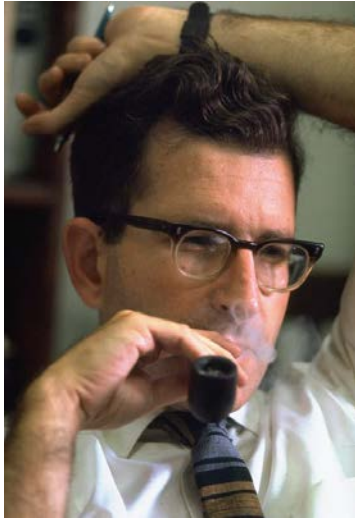
The second class was dubbed by the graduate students (or maybe it was just me) "How I Invented Transformational Grammar". In it, Noam drew out the line of development of his ideas starting from where he first interacted with Harris's structural linguistics to the theory of *Aspects* and "Remarks on Nominalization". As was his practice, there was an article or book that accompanied the course, and this was published as the Introduction of the published version of *The Logical Structure of Linguistic Theory*. From my first reading, this has ranked at the very top of my favorite papers of Noam's. It is one of very few pieces of intellec-

tual autobiography that he has written; to my mind, it is an essential piece of commentary on the intellectual history of the mid-20<sup>th</sup>-century.

The last of the three was “Conditions on Rules of Grammar”. Noam’s class that semester was in a room with very large windows looking over Memorial Drive. When the class started, it was a bright sunny day, but after over four hours (remember, no break!), the sun was setting and it was almost impossible to see what he was writing on the board. At that point, someone turned on the lights, and it almost broke the spell of a totally enraptured audience. The central phenomenon under discussion in the class was crossover, weak and strong. On display in this context were many of the ideas that Noam and I discussed as I worked on my dissertation: Logical Form, the relation of *wh*-movement and QR, and the intuition that there is a basic distinction between bound variable and definite-NP anaphora were all central topics of *The Grammar of Quantification*.

When I was writing my dissertation, I had my regularly scheduled weekly appointment with Noam. While it may be a bit of reconstructive memory, but I always think of those meetings as falling into three camps. They were distinguished by three tells that would predict how that day’s meeting was going to go. If Noam was

smoking his pipe, he was invariably in a good mood. Put claim A



up on the board hoping to argue to C, Noam would already be at Z. At the other end of the spectrum was when Noam would tear off about a quarter-inch strip of paper down the long side of a pink MIT notepad, and roll and unroll it repeatedly. Then he was not in a good mood – the time would be spent about why

anyone would believe claim A. The third were the paper-clip sculptures; each one intricate and different. In that case, it was a toss-up about which of the two options would unfold in the meeting. This is, of course, rather fanciful, but regardless of what happened, there were no complaints. I still regard those times with Noam as among my most rewarding and formative intellectual moments.

Inevitably, after graduate school I saw Noam less often, especially after I moved to California in the mid-1980s. But again, there are occasions that stick in my mind. In 1979, at GLOW and the Pisa lectures at the Scuola Normale in Pisa burns bright - Noam on sabbatical, very relaxed, working through the ideas that would lead to *Lectures on Government and Binding*. In 1988 in Israel, at a conference held half in Tel Aviv, the other in Jerusalem, where there were a host of truly memorable experiences. In 1993, when



Noam in Pisa 1

Noam gave a series of lectures at UC Irvine, where I was teaching

at the time. In 2013, at the Dewey lectures at Columbia, and most recently, in 2016 at the memorial conference for Jim Higinbotham at Rutgers.

While in Israel, Noam gave two political talks. The first was in Tel-Aviv. The topic was the founding of the state of Israel. Documents from that period had just been released un-



der Freedom of Information, and it revealed the depth of the dealings to obtain US support for the state. The talk was very enthusiastically received by the Israeli audience. A week later, Noam spoke in East Jerusalem to a Palestinian audience. As I recollect, the basic message was simple: you can be led by whomever you want, but terrorism is murder and cannot be condoned. The talk was not well-received. Shortly thereafter, Noam and many of us at the conference went to Dahariya in the West Bank, where the Israeli's had an internment camp for Palestinians. It was a rather dank and rainy day, and after the demonstration we drove back to Tel Aviv, stopping off for pork barbecue. (Yes, that's right – the pigs live on platforms that are certified as being high enough off

the ground that the pigs do not touch Jewish soil!) Noam, after the demo, continued to visit Palestinian towns, ending the day at a dinner in Ramallah hosted by Palestinian leaders and intelligentsia. As he recounts it, he was rather muddy from the day; they were all well-dressed. The agenda for the evening had been set: Having heard about the talk in East Jerusalem, it had been decided that he was in need of a re-education about the Palestinian cause. The irony of the situation was not lost on Noam!

Prior to coming to Irvine, Noam had been quite ill with the flu. Fortunately, he felt sufficiently recovered to make the journey, and the southern California sun in February was definitely curative. On Noam's last day, we were sitting in my office in the early evening and we decided to go for a beer at the student center. My daughter, then in a stroller, was with us, and as we were leaving, Noam gently pushed me aside, took the stroller and pushed it across campus. This has become, of course, part of family lore, a story told repeatedly. When my daughter was in high school, upon hearing the story for the umpteenth time, asked if she could meet



Noam. Noam graciously agreed, and we met the East Bay at his

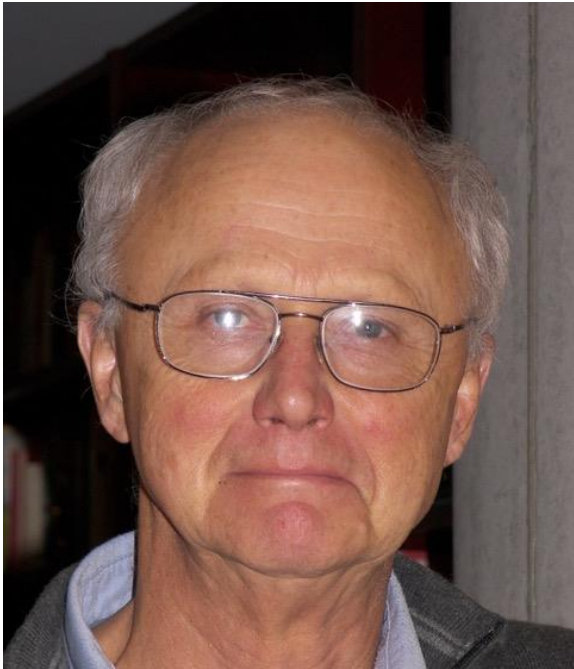
son's house, where we had, by Noam's account, the best tuna fish sandwiches in the world. To my daughter's delight, we spent the afternoon together talking about linguistics, philosophy and politics. Noam's thoughtfulness that day was deeply touching, and the day remains a great memory for my daughter and me.

For the publication of Noam's Dewey lectures at Columbia, *What King of Creatures are We?*, I was pleased to be asked to contribute a book jacket blurb. Usually, these are mere pabulum, but in this case my comments were just plainly true: "Noam Chomsky's writings invariably reflect the force of intellect and cogency of thought that befits one of the greatest thinkers of our time". It has been the greatest privilege of my life to have known Noam and to have been his student. A day does not go by when I do not think of his teachings, his ideas, his comportment as an intellect and the standards he sets for thought and life. Noam's commitment to the growth and enhancement of knowledge as one of mankind's truly good endeavors in a world filled with venality gives one hope. Noam remains eternally an optimist even as each day he works to reveal the evils that surround us, from the Vietnam War a half century ago to the dangers of nuclear warfare and climate change today, with so many stops in between.

What I have said here are a few anecdotes that dwell in my memory; there are many, many more. But even telling them would not do justice to what Noam has meant to me in my life. For that I am thankful and grateful. But even more important is what Noam has meant to the world, and for that we are all thankful and grateful. The best of wishes for the happiest of birthdays!

## Noam Chomsky

James McGilvray



Like many others, my intellectual life was profoundly changed through reading, listening to, and speaking with Noam. He is a true intellectual worker.

I was a relatively newly minted philosophy PhD when I first encountered him. I was on a 1972-73

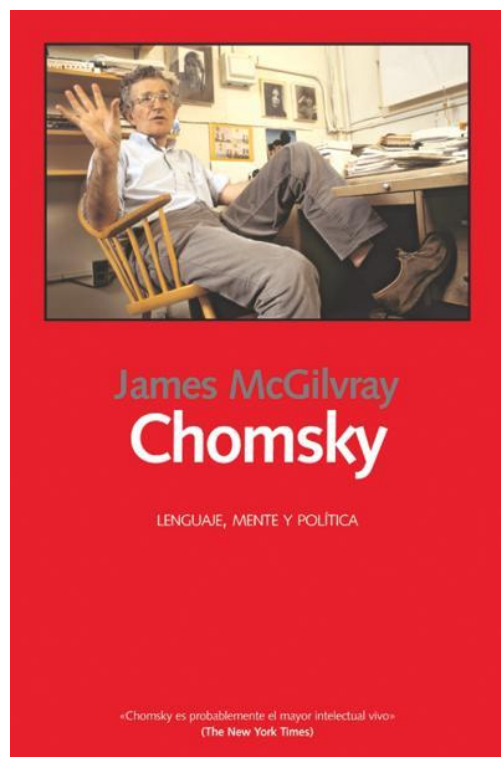
postdoc at MIT, where I had gone to work with Haj Ross; at the time, I was attracted to generative semantics and issues in pragmatics. But of course, I sat in on Noam's classes and got a chance (all of fifteen minutes!) to talk with him in his Building 20 office. I wanted to talk about scientific realism – a popular philosophical position at the time – to explore the prospects of thinking of linguistics as a science reducible to a 'fundamental' science. Convinced that I could instruct Noam, I very quickly learned otherwise: he had read more of the basic articles and understood the

issues far better than I. It was an experience in intellectual humility. And also fruitful: I gained insights and different ways of proceeding in my own work.

The inspiration would continue: speaking with him, listening to his classes and talks, and reading his work carefully never failed to provide new ways of looking at matters, whether in the study of language, mind, or politics.

That early encounter was also instructive in a different way. Noam is a polymath and then some. He seems to read and understand virtually everything he can find about his broad interests. And – while I didn't fully appreciate this until later – like other good philosopher-scientists (a very rare breed), he systematizes while remaining skeptical about the prospects of the effort. There are signs of systemizing in his *Reflections* and some earlier work and systemizing becomes a focus of many of his philosophical papers of the 1990s, especially – I think – his “Language and Nature” in *Mind* (1995) and surrounding works. These and other efforts rely in part on his relatively early and extraordinary *Cartesian Linguistics*, a book from which I still learn, even though I have re-read it many times.

After MIT I went on to teach philosophy at McGill, where I found some extraordinarily talented students, including, during those early years, Norbert Hornstein and Alison Gopnik. And I met and became close friends with my colleague Harry Bracken. As Norbert points out in his contribution, I was then what Noam would call an empiricist. But as Norbert indicates, I changed, due in part to my experience at MIT but also to Harry's not-always-subtle efforts to get me to abandon my empiricist ways and adopt the Cartesian 'rationalist' approach.



For some years following, I kept some distance from Noam's rationalist and internalist ways of looking at language, the mind, and politics. But that distance continued to decrease. It was virtually erased in 1997 when – a sabbatical year – I drove from Montreal to Cambridge once a week to sit in on Noam's 'philosophical' class. Sometimes after class we would continue

conversations in his office. I cannot imagine a more intellectually

inspiring year, unless it was one where I would have been able to meet with him more often.

I got several chances to speak with Noam after that, including those occasions that led to *The Science of Language*. I cannot thank him enough for these opportunities, for his work, and for his friendship.

I write about my own experiences, but I know others have had similar experiences and are equally grateful to Noam. My best wishes for your 90<sup>th</sup>, Noam. And for those that follow.

And, again, thank you.

## For Noam at 90

John Mikhail

Georgetown University Law Center



Noam Chomsky is the Galileo of linguistics and cognitive science. Much like Galileo, Descartes, and other intellectual giants of the scientific revolution, centuries from now philosophers and scientists will still be reflecting on his monumental contributions to the study of language and mind. The fact that I genuinely believe these statements to be true, not mere hyperbole, makes knowing Noam as well as I do a continuous source of wonder and inspiration. I feel fortunate to call him my teacher, mentor, and friend, and to join with others in celebrating him on his 90<sup>th</sup> birthday.

I first met Noam in the fall of 1989, when I was an undergraduate at Amherst College. Two classmates and I designed an “independent study” course on the Palestinian-Israeli conflict and asked Noam if he would be willing to serve as an instructor for

the course, along with one of our Amherst professors. To our surprise, he readily agreed and offered to meet with us on a regular basis over the course of the semester. As a result, on three or four occasions—once every month, if I recall correctly—the three of us drove from Amherst to Cambridge to meet with Noam in his office at MIT. These were still the days of Building 20, when Jamie Young was Noam's assistant, and Noam shared a suite of dilapidated offices with Morris Halle. I still remember how excited I felt entering that building and meeting Noam for the first time. If memory serves me, he spent two hours with us that afternoon, which seemed exceedingly generous at the time, and which now strikes me as truly extraordinary.

We met with Noam several more times that semester, and, on one occasion, when my friends had a conflict, I drove to Cambridge and did so by myself. Each of these conversations was deeply unsettling, but, partly for that reason, intellectually exhilarating. One by one, Noam calmly pointed out the tacit assumptions in virtually every question we posed to him about Israel, Palestine, and American foreign policy, before going on to explain why those assumptions were untenable. Thanking him at the end of our last meeting, I paused to reflect on the remarkable

opportunity we had been given and to take in the surroundings one last time. Two posters on the walls of that office, which had jumped out at me during our first visit, once again caught my eye. The first was "Return to Sender," a colorful poster by Jacek R. Kowalski that I later learned won first prize in the 1979 contest "Palestine: A Homeland Denied," sponsored by the Iraqi Cultural Centre in London. It featured an over-sized image of a standard air-mail envelope addressed to "Palestine" with the words "Return to Sender: No Such Address" stamped across it. The second poster was a haunting black-and-white photograph of Bertrand Russell, with a quotation from Russell's autobiography: "Three passions, simple but overwhelmingly strong, have governed my life: the longing for love, the search for knowledge, and unbearable pity for the suffering of mankind."

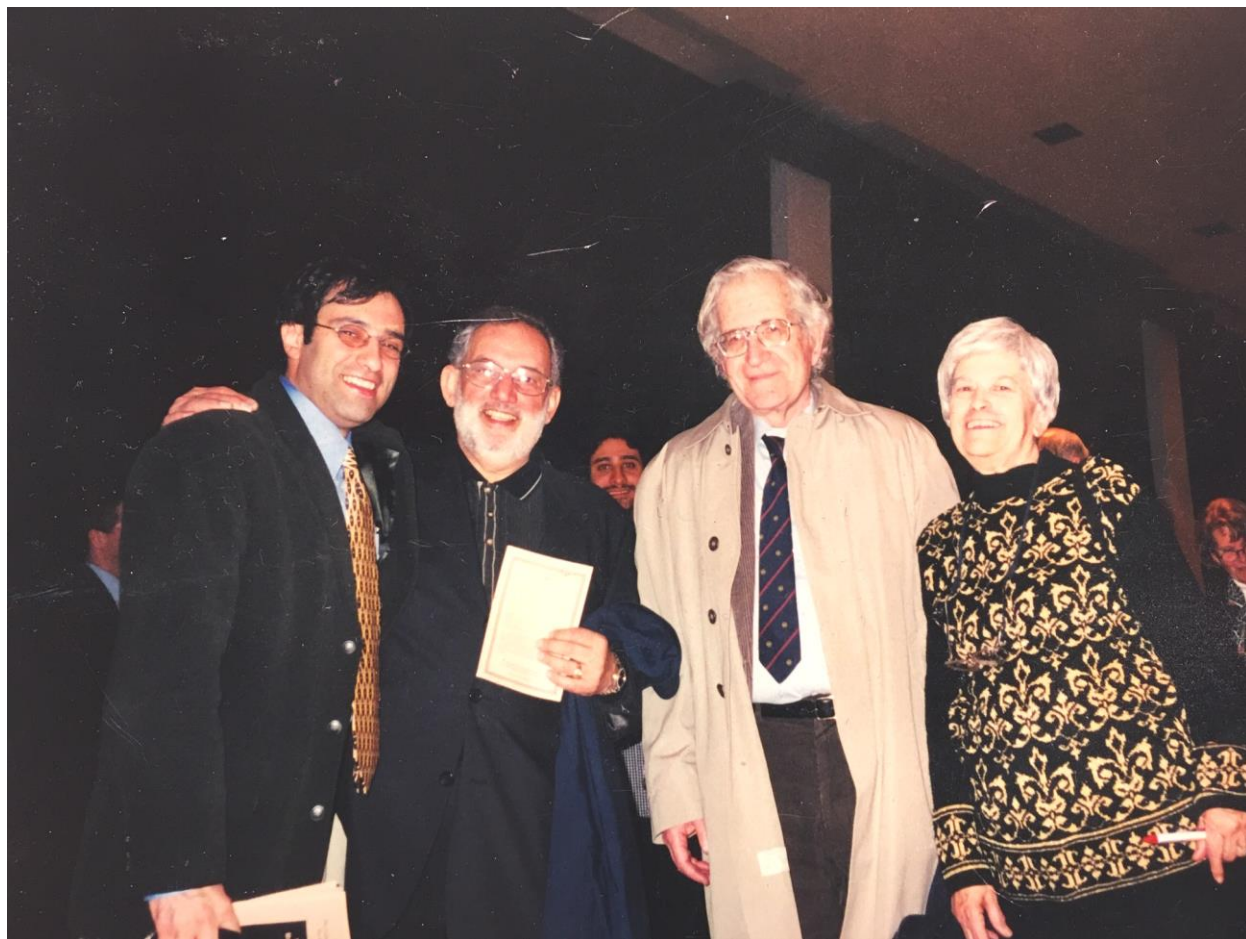
I remember thinking at the time that both posters were stunning and beautifully encapsulated Noam's values and priorities. I never expected to see those posters, or Noam, again in that setting, but happily this assumption proved to be mistaken. Through a series of unlikely events, I embarked upon a PhD in philosophy a few years later at Cornell and then spent 1994-95 as a visiting graduate student at Harvard. My friend Philippe Schlenker was

also visiting Harvard at the time, and at his suggestion, I began attending Noam's Thursday course at MIT in the spring of 1995. Later, to receive credit for that course, I wrote a seminar paper for Noam entitled "Moral Competence" — a modest study of a possible analogy between linguistics and moral theory. Thus began my investigations of the "linguistic analogy" and its implications for moral and legal philosophy, a fruitful topic which has fascinated and occupied me ever since.

During the next five years, I met and corresponded with Noam on a regular basis, particularly after he agreed to sit on my dissertation committee. I regularly attended his Thursday course, for which I served as a teaching fellow one year. And I read virtually everything he ever wrote, beginning with *The Logical Structure of Linguistic Theory* and *Syntactic Structures* and extending to *The Minimalist Program*, the papers that became *New Horizons in the Study of Language and Mind*, and the work that eventually made its way into *On Language and Nature*. All of these interactions with Noam and his brilliant ideas were among the most stimulating intellectual experiences of my life. They sparked a love of philosophy, linguistics, and cognitive science that has stayed with me ever since. It was Noam who encouraged me to

read deeply in the history of philosophy and the history of science, which I did for the first time during this period. It was Noam who paved the way for me to become affiliated with the MIT Department of Brain and Cognitive Sciences, where I began conducting experiments in moral psychology for the first time. And it was Noam who, directly or indirectly, brought me into contact with many of the people who formed the core of my intellectual community during those exciting years: Ray Jackendoff, Gil Harman, Matthias Mahlmann, Liz Spelke, Josh Tenenbaum, and other friends and colleagues too numerous to mention.

Like other contributors to this volume, I have many fond memories of time spent with Noam. Two events, in particular, stick out in these recollections. In March 2001, Noam gave the first “Mikhail Memorial Lecture” at the University of Toledo, kicking off a lecture series in honor of my parents that is now in its eighteenth year. Although they have since passed away, both of my parents were alive at the time, and they took great pleasure in hosting Noam at their home and sharing an intimate meal with him, together with their children and grandchildren. Noam was one of their favorite authors, and it had always been their hope to arrange for him to speak in Toledo. Unsurprisingly, Noam’s lec-



ture was a big success. It was attended by approximately 1200 people, translated into several different languages, and published as Chapter Seven of his book, *Middle East Illusions*. Before departing the lecture, Noam and my mother – a courageous activist in her own right – found each other among the crowd and warmly embraced, an image I will always cherish. Sadly, my mother was dying of cancer at the time and did not live long enough to attend another Mikhail Lecture. Nevertheless, she and Noam maintained a regular correspondence for the next year, until her health gave way and she could no longer keep up with it.

Another fond memory I have of Noam occurred in November 2005, not long after I arrived in Washington, DC, and began teaching at Georgetown. David Lightfoot had invited Noam to deliver a lecture at Georgetown, and he did so that evening, in front of another big crowd. After the lecture, I connected with Noam, and the two of us went for a drink. To my surprise, we ended up sharing a large pitcher of beer and spending over three hours together that night, closing the place down. It was the first and only time I ever drank with Noam – and it was a lot of fun! We laughed together about many things, and our conversation roamed over a wide range of topics, from language, evolution, and moral cognition to history, politics, and current events. It was a special evening, and one I will never forget.

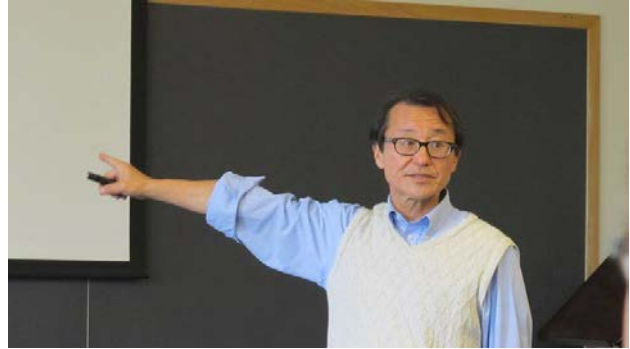
Happy Birthday, Noam. I will always be grateful for everything you have done for me and – like so many others whose lives you have touched – be inspired by your extraordinary achievements.

## To Noam, On His 90<sup>th</sup> Birthday

December 7, 2018

Shigeru Miyagawa

This year, the Boston Red Sox won the World Series by totally dominating the National League champions L.A. Dodgers 4 games to 1.

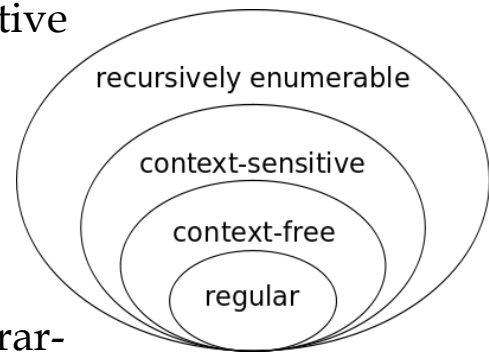


This was on top of a season in which the Red Sox won a franchise record 108 games, moving past the 1912 team whose record stood for over 100 years.

I mention this because Noam is known to have sat in the stands at Fenway Park once in a while during his time at MIT. Given his ambivalence about sports in general, it's not clear whether he is a die-hard fan (probably not) and elated at how the Red Sox completely dominated its opponents in post-season play (unlikely). Especially now that he spends most of his time in Tucson, he may not even know, but he should feel happy that a team that he took the time to go and watch had such a great season.

I also mention baseball because Noam hit the first and, when one takes into account impact on other fields, possibly

the only home run in the generative study of human language. In his 1956 work, “Three models for the description of language,” he proposed what came to be called the Chomsky Hierar-



chy, which is a containment hierarchy of classes of formal grammars from the simplest to the most powerful. With it, he proved that human language cannot be modeled by a simple formal system such as a regular grammar. Crack! He hit it out of the park!



The Chomsky Hierarchy has had a profound influence on computer science, where it gave support to the development of recursively-defined concepts. And the idea that human language requires something more powerful than a regular grammar has been the basis for some of the most im-

portant studies on the neuroscience of human language. Fitch and Hauser, in a 2004 *Science* article, showed that monkeys can learn patterns modeled on a regular grammar, but once they encounter patterns higher on the Chomsky Hierarchy — what

they called Phrase Structure Grammar — their comprehension breaks down completely. Friederici and colleagues showed (e.g., 2006 *PNAS* article) — in some cases using stimuli modeled on Fitch and Hauser's experiment — that stimuli based on simple or complex grammars activate different parts of the brain, pointing to a neuroscientific basis for the Chomsky Hierarchy.

The idea that human language can only be modeled by a grammar more powerful than a regular grammar forms the foundation for much of generative study of language even today. Topics that excite linguists, such as syntactic movement, ellipsis, agreement, and case marking, are often expressed in a system that assumes some relation at a distance, which is most readily captured by a system more powerful than a regular grammar.

I became interested in linguistics as an undergraduate student when I learned that human language has transformations that can relate two items at a distance, sometimes over a surprisingly long distance. I have no doubt that it is Noam's home run that got me hooked on the field, and that is why I've committed my entire career to it. I am a die-hard fan.

He continues to profoundly influence my work. My 2010 *Linguistic Inquiry* monograph, *Why agree? Why move?*, would

not have seen the light of day had it not been for crucial suggestions Noam made along the way as I was struggling to understand the role of agreement across languages. I acknowledged his contribution in the Preface of that work:

*This work began with a series of discussions with Noam Chomsky over several years about how to make a minimalist-type approach relevant to languages that do not have phi-feature agreement – Japanese, for example. I am grateful to him for these discussions and to many key suggestions that pushed the project forward at critical junctures.*

Until Noam moved to Arizona, we had offices next to each other in the Stata Center. With all the activities surrounding his office, in linguistics, politics, and whatnot, his office felt so much more powerful than mine. It was sort of a Chomsky Hierarchy of offices. His was a Turing machine and mine was at the lower end of the totem pole. I cherish those moments when he would step into my office for a moment while the camera crew was setting up equipment in his office for another of a long line of interviews. It didn't feel so much as one of the most influential thinkers of our times dropped in as Babe Ruth coming by to say hi before going off to hit another home run.

I can't thank Noam enough for creating a field that gave me and other formal linguists a career in which we've all had our own turn at making discoveries. Although they aren't home runs by a long shot, they are little gems that excite us and sustain us to keep going.

Happy 90<sup>th</sup>! Hit another one out of the park!



## **A few reminiscences of Noam Chomsky**

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I am sure that I am not the only contributor to this volume who feels a bit stymied about what to write. The career paths of the great majority of the world's linguists have taken the course that they have because of Noam's contributions to the field. I feel comfortable writing 'the great majority', since the career paths of even Noam's fiercest opponents have been shaped largely in response to his work. One need only casually glance at an overview of cognitive or functional linguistics to see that this is true. So what to write here that might distinguish my contribution from all of the others? I'll try to focus more on Chomsky the person, based on my observations of him and my interactions with him, than on Chomsky the linguist.

I am probably best known for my chronicling and analysis of the work produced in theoretical linguistics, in particular for my (unfortunately named) book *Linguistic Theory in America*. I quite simply would have had nothing to write about if Noam hadn't

founded the field of generative grammar and continued to dominate it since the 1950s. I wonder if I would even have stayed in linguistics. In the mid 1960s I was a student at an East Coast university where generative grammar wasn't even part of the syllabus. We read everything that Charles Hockett and Martin Joos had written, but not much that was more recent than that. But I was encouraged by my professors to attend the 1966 LSA-sponsored Linguistic Institute at UCLA. It was the only one that Chomsky ever taught at and it was a revelation. I was so blown away by the two classes he taught that I decided that I had to get out of my current situation as rapidly as possible. Knowing that I didn't have the grades to get into MIT, I applied to Illinois, where I was immediately accepted and told to 'report' in the middle of the year (has any other student had that kind of experience?). Being at Illinois was like being at a little MIT, since just about all of my professors had been Noam's recent students: Robert B. Lees, Arnold Zwicky, Michael Geis, and Ted Lightner.

I was able to spend the last year of my graduate studies (1968-1969) as a visiting graduate student at MIT. I met Noam for the first time that year, though our brief encounter obviously made more of an impression on me than on him. The high point of the year for me was sitting in on his seminar in syntactic theory (it



was called a 'seminar', though dozens of people attended each week). Noam was lecturing on the material that would end up being published as the article 'Deep Structure, Surface Structure, and Semantic Interpretation'. It was a wonder watching

Noam deftly dealing with the objections of George Lakoff, Jerry Katz, and every other linguist in Cambridge (and farther afield) who raised arguments against his current theorizing. I attribute my not ending up as a burned out generative semanticist several years later to Noam's magnificent performance in that class.

Two other strands of my research owe their origins directly to hypotheses developed by Noam many decades ago (though he certainly would not endorse wholeheartedly the direction that I have taken them). One is the idea, first put forward in *Syntactic Structures*, of the autonomy of syntax. Much of my research in the past few decades has been devoted to making this idea precise and testable. At first it was for me an arm against mainstream functional linguistics, which of course rejects autonomy *tout court*. But more recently, I have trained my autonomy-defending guns against several manifestations of the minimalist program, in par-

ticular the cartography program, which has developed in a markedly anti-autonomist direction. I do not know if Noam has read this material, but I assume that he would raise a number of objections to it. Oh well, how many linguists for whom Noam is the greatest inspiration have followed him in lockstep over the years? Practically none.

The other strand of my research involves the newly-fashionable topic of the evolution of language. Others before Noam had argued that language evolution was not driven primarily by communicative pressure, but he certainly developed the idea of a non-communicative basis for language in the most eloquent fashion. I keep returning to his arguments in *Language and Mind* and other writings from the 1960s and 1970s, when I try to underscore the point that language has in no sense been 'designed' for effective communication over evolutionary time.

My first extended conversation with Noam was in December 1978, when I interviewed him for the then in preparation *Linguistic Theory in America*. Despite his hectic schedule, he never gave me a hint that it was time to wrap things up because of later appointments. I remember with a smile that he told me with a sigh of relief that I was his first interviewer who didn't seem interested in the relationship between his linguistics and his politics. In the

course of the interview, he told me something that seemed astonishing at the time, though in retrospect quite prescient. I can't remember his exact wording (I do have the tape somewhere or other), but he remarked that European linguists seemed more adept at developing generative grammar than American linguists (not that he disparaged the work of any of the latter). I found that assertion quite remarkable, given the tiny number of European generative grammarians that there were in the 1970s. He put this point in writing several years later in 1982, remarking: 'There is far more material that I read with interest than was ever true in the past. Most of it comes from Europe, in fact, ...' Indeed, time seems to have proven him right. More recently, the Dutch linguist Hans Bennis made a compatible observation: 'If you were to make a list of the 50 most important contributors to generative grammar today, about 40 would be Europeans'. Why would this be? I don't know.

The longest period that I have ever been around Noam was at a conference in Israel in April 1988. In fact, the conference revolved around his work: Asa Kasher organized it with the theme 'The Chomskyan Turn'. I have a few amusing anecdotes to share. Noam was followed around the entire four days by a hulking young man with an enormous backpack. Everybody knew that he was

Noam's bodyguard. Everybody but Noam, that is. At one point we were at a restaurant table around which eight or so people were seated. Noam asked the young man cheerily: 'What are you working on?' Startled, he answered 'Um, linguistics'. Noam persisted, asking him what *topic* in linguistics. The answer, barely audible, was 'Oh, linguistics linguistics'. Only then did Kasher reveal that the guy was his bodyguard and that the backpack contained an assault rifle!

We sat next to each other on the flight back from Tel-Aviv to Zurich. Getting on the plane was a bit of a challenge, at least for me. The customs and immigration people at the airport knew somehow that we had been to a protest demonstration on the West Bank a few days before. Since Noam spoke to them in Hebrew, they let him through right away, while they interrogated me for 15 or 20 minutes. They didn't seem to know or care that he had an empty tear gas canister in his luggage. You might wonder why, since Noam is obviously not a military hardware aficionado. The answer is that the canister was stamped 'Made in Pennsylvania', his home state. He found that a delicious irony. The flight back was quite pleasant — we talked more about our colleagues and their quirks than we did about Big Ideas in Linguistics. But the incredible thing was that he carried onto the plane a big stack of

newspapers in English, Hebrew, and Arabic. He took out of his pocket a tool that would be banned on any airplane today. It was a combination of a knife and a pair of scissors that allowed you to cut an article out of a newspaper without requiring you to destroy the rest of the paper. So the whole time that we were in deep conversation, he filed the articles in folders that he had brought with him.

I taught at the University of Washington in Seattle for almost forty years and in that period of time Noam came to visit and speak three or four times. His last visit (around the year 2000) is the one I remember the most vividly. I needed to reserve a room on campus where he could meet with the UW faculty and students for an informal discussion. So I picked what I was told was the 'most elegant' space on campus for that sort of thing. It was elegant alright: mahogany tables and overstuffed leather chairs. The room was also lined with murals depicting an armed Captain Vancouver and his crew encountering the indigenous people of the Pacific Northwest for the first time. Just perfect for Noam, right? He had given a public lecture the evening before lambasting Western imperialism! I apologized profusely for the room and Noam was fortunately good humored about it. Anyway, the discussion went very well.

Noam is famous for replying practically instantly to any letter or email that he receives, whether they are from a respected colleague of his or from a complete unknown. I was told once that he writes dozens of letters a day, which would not surprise me if it is true. I'll close my piece with an example from just a few years ago of how on top of his correspondence he continues to be. I was in the process of writing the paper, published in the journal *Language*, entitled 'Getting the Word Out: The Early Generativists' Multi-Pronged Efforts to Diffuse Their Ideas'. I knew that in the early 1960s, Paul Postal had taught a course at MIT on structural linguistics and other non-generative approaches. It was universally known as 'The Bad Guys Course'. I sent a message to Noam asking for his take on that course. His reply came the following day:

In the early '60s, I was working on topics in history of linguistics/philosophy that are discussed in *Current Issues, Aspects, Cartesian Linguistics, Language and Mind*. And as usual taught a course on what I was working on. It became pretty clear that students weren't interested, so I handed it over to junior faculty to run it as they and the students liked. They changed it to a course on contemporary critique of genera-

tive grammar, which, as you know, was widespread and quite passionate, and other approaches; and it soon came to be called by them the 'bad guys' course. I didn't like that. Morris didn't either. But it was their baby, and we didn't interfere.

I'll leave you to interpret his reply as you wish, but for me it is an example of Noam at his finest: a crisp assessment of a controversial and tricky issue.



## For Noam

Jean-Yves Pollock,  
Emeritus professor of Linguistics,  
Université Paris-Est Marne-la-Vallée



Although the idea of celebrating Noam's 90<sup>th</sup> birthday by describing how his work shaped many linguists' intellectual life is very appealing, it also has its drawbacks: it forces each con-

tributor to put forward his or her own essentially uninteresting intellectual itinerary. Such trajectories, though of course crucial to each of us, should be considered irrelevant to our field: as in any scientific domain, what only matters is the results, insights, generalisations etc. that are contributed to the body of results of that field, irrespective of the circumstances under which they are obtained.

However it is also true that, unlike biology, chemistry or physics, ours is an extremely young field, invented by Noam a mere 70 years ago. The question of why some people, especially in Europe, were attracted to it some 50 years ago, sometimes

in opposition to the dominant intellectual scene, might therefore be considered of some interest, if only from a historical point of view.

I was a student at the Sorbonne in the mid-sixties. After two years of extremely hard work vainly attempting to be admitted to the 'Ecole Normale Supérieure', I became an 'angliciste' out of laziness: my family on my father's side was British and I had been partly brought up in a bilingual environment. Still, two months into those studies, I realised I had made a mistake. On the literary side the curriculum was dominated by what was then all the rage in Paris, a mixture of structuralism and Lacanian psychoanalysis, which I found totally incomprehensible –though I did manage to write the papers that were asked of me using their fashionable jargon–, destined ten years later, in a slightly altered and 'enriched' form, to have a glorious future in the French departments throughout the US under the name of "French Theory". As for the linguistic curriculum, it was –and still is for all I know– dominated by a variety of structuralism called 'théorie de l'énonciation', a rather distant offshoot of Emile Benvéniste's work on demonstratives, personal pronouns and tense. The theory of language that framework promoted I found far less interesting and more hazy than that implicit in, say, Otto Jespersen's *Modern English Grammar* or

*Growth and Structure of the English Language*, two books that were largely ignored in English departments in France at the time.

Still, even that sort of parochial linguistics was at least understandable and for lack of anything better, I chose it as my major. I even went out of my way to study acoustic phonetics and phonology at the “Institut de phonétique” on rue des Bernardins, within a stone’s throw of the Sorbonne. It was in the library of that institute that one day I picked up Noam’s *Syntactic Structures*. Although I didn’t have the back-ground in logic and mathematics that would have allowed me to fully understand the technical points it was making, that book fascinated me because I thought it offered the sort of formally rigorous framework concerning the syntax of English that I believed Jespersen had been groping for: Noam’s “affix-hopping” and the underlying structure of the clause that rule presupposed really mesmerized me.

From that day on I tried to get hold of all the books and articles on generative grammar I could get my hands on. Nicola Ruwet’s *Introduction à la grammaire générative* published in 1967 was of considerable help in mapping out a territory that was still completely unknown in France at the time and for three or four years afterward I accumulated a substantial though passive knowledge of some of the most important research that

was being done at MIT and at the few linguistics departments in the US where generative linguistics was present. It should be stressed that although that did require some work, it was still feasible at the time: there was so little work of importance in the field that, with some effort, it was possible to read it all. It should also be stressed that what I was doing I considered as a weird personal hobby since I didn't know of any institution in France where I could've been taught the literature I was reading and at no point did I seriously consider the possibility of contributing to it.<sup>1</sup>

Still, after I was hired as assistant professor of English linguistics at Paris 12 University in 1971, I made abundant use of that literature in my teaching. Things could've carried on in that semi satisfactory way for quite a while had I not met Jean-Roger Vergnaud and Lisa Selkirk in 1973. They told me of the existence of the linguistics department at Vincennes where Nicolas Ruwet and Richie Kayne taught and, more importantly, encouraged me to attend the Summer School that was to be held at Amherst in June, July and August 1974.

Amherst was a revelation: I played volley-ball with Morris Halle and Jay Keyser! I sat on Ray Jackendoff's lectures! Noam gave a series of lectures which I recorded and transcribed and

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<sup>1</sup> Even though I translated and presented Katz & Postal's *An integrated theory of linguistics descriptions* published by Mame editions, Paris, in 1973.

later sent to him! –for a while he even mentioned that transcription in his list of references as ‘The Amherst Lectures’ –and I met there a number of people who were to become friends and play a major role in my becoming a genuine, active, generative linguist, chief among them Edwin Williams. He’d just defended his thesis at MIT and had taken a one-year position at Vincennes the following year. Back in Paris he somehow managed to convince me I could actually contribute to the field. Since he was pestering me so much, I did write something that was still on the history of science or philosophical side though it did make a few descriptive points.<sup>2</sup> Without telling me he gave the paper to Richie Kayne. Richie, who I had never met, later called me on the telephone and commented on the paper for a couple of hours! A few days later Edwin introduced us. The same year I wrote my first genuine syntactic paper,<sup>3</sup> which Richie advised me to send to Noam, which I did, without much hope of an answer. A couple of weeks later I received a letter –there was no e-mail then! – from him containing a detailed three page-long commentary!

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<sup>2</sup> It was later published as “Comment légitimer une innovation théorique en grammaire générative: la théorie des traces”. *Langages* n° 42, Juin 1976, 77-110.

<sup>3</sup> “Trace Theory and French Syntax” later published in *Recent Studies in European Languages*, Linguistic Inquiry Monograph 3, 1978, 65-112, MIT Press.

I need hardly stress how different from the current French scene all this was: full professors in France didn't mix with junior faculty, never commented on their work and certainly did not encourage them the way all the people I just mentioned did. The support I got from them and from Noam in particular has never stopped over the next forty-five years and it has played a major part in keeping me active in our field, to this very day.

So a thousand thanks, Noam, for still being around and for having created a lively, immensely rewarding field, whose members have continued to be so supportive and so stimulating.

## TURNING POINTS

For Noam, at the occasion of his 90<sup>th</sup> birthday

Eric Reuland, Utrecht institute of Linguistics OTS

Intellectually I met Noam for the first time, I guess around 1964. After a year of studying astronomy in Groningen, I had just switched to being a student of Slavic languages and Linguistics, and I was advised to read *Syntactic Structures*<sup>1</sup> as a new and promising development -



linguistics as the formal study of language. For me it represented a turning point, and for the first time conveyed to me the importance of studying not only what is the case, but also what cannot be the case. That there are theories of language that will never work, irrespective of how hard one works to patch them up.

The Groningen linguistics environment of that time did not really stimulate developing a theoretical focus, but when in 1968

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<sup>1</sup> Noam Chomsky. 1957. *Syntactic Structures*. The Hague: Mouton.

I had to choose a topic for my MA thesis I was advised to read a recent dissertation on coordination<sup>2</sup> by the Amsterdam linguist Simon Dik, written from a functional perspective, who argued that generative grammar, specifically Chomsky's *Aspects* model,<sup>3</sup> was unable to handle coordination. In order to evaluate this claim I devoted considerable time to an in-depth study of *Aspects* and ended up concluding in my thesis that Dik's criticisms were unfounded. My study of the *Aspects* model brought me to another turning point: a theory of grammar should provide a precise model of the language faculty: not too little power, but also not too much. Enter the picture: Boolean conditions on analyzability, avoiding the power of Turing machines, and structure preservation as a means to limit the strong generative capacity of transformational grammars. I spent some time exploring formal issues in the theory of grammar, but was hesitant about choosing this subject as a dissertation topic.

Then I came across “Filters and Control.”<sup>4</sup> This was an eye-opener: a precise description of some aspects of subordination in English, but – as became obvious to me as soon as I

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<sup>2</sup> Simon Dik. 1968. *Coordination: its implications for the theory of general linguistics*. Amsterdam: North-Holland Publishing Company.

<sup>3</sup> Noam Chomsky. 1965. *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press.

<sup>4</sup> Noam Chomsky and Howard Lasnik. 1977. “Filters and Control.” *Linguistic Inquiry* 8. 3, 425-504.

started reading it – it didn't work for Dutch. However, interestingly, it was a near miss. This was enough to turn me around to empirical work, and prompted me to write a dissertation addressing the puzzles it raised for Dutch and Frisian.<sup>5</sup> The text of the dissertation was finished before the Pisa lectures, which represented another turning point, and subsequently stimulated me to focus on one of the issues addressed in my dissertation, locality domains as domains of governors.

After my PhD defence I was accepted as a visiting scholar at MIT for the Spring semester of 1980<sup>6</sup> - a period of very lively debate since a first draft of LGB<sup>7</sup> was around. This was the occasion I met Noam in person for the first time. Since I had been told that it might take some weeks to get an appointment, I had asked for one as soon as I had arrived. But course I didn't know what to expect. For me it was a fascinating experience, since Noam didn't take anything I said about what I had prepared for granted. Everything I had thought of appeared to have an angle I hadn't thought of, but Noam discussed them all in a very effective, but also friendly and stimulating manner. So

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<sup>5</sup> Eric Reuland. 1979. *Principles of Subordination and Construal in the Grammar of Dutch*. Diss. Groningen University.

<sup>6</sup> My stay was financially supported by a grant from the Netherlands Organisation for Scientific Research (NWO).

<sup>7</sup> Noam Chomsky. 1981. *Lectures on Government and Binding*. Dordrecht: Foris

I got to understand the issues I was interested in, such as the puzzles posed by Dutch auxiliaries<sup>8</sup> and English gerunds.<sup>9</sup> I was very lucky to be able to visit MIT quite regularly in the years to come, and whenever I had the opportunity to see Noam I had the same 'pressure cooker' experience. Once things went too fast. Right before I went to Paris for a GLOW talk,<sup>10</sup> I had a meeting with Noam that entirely turned around my perspective on infinitival complements in Dutch. I decided to replace the standard account of full versus partial extraposition of infinitival complements by an account in which the complement clause is base generated as a sister to the right of the matrix verb, followed by leftward movement of complement material into the matrix clause. That was fine by itself, but since I decided to combine both perspectives in one talk, making the switch halfway, it resulted in a presentation from which I think only Hans den Besten got the point.

In 1989 Groningen University asked me to be one of the organizers of a conference at the occasion of its 375<sup>th</sup> anniversary. The theme I proposed was Knowledge and Language. The year before, Edward Herman, together with Noam had

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<sup>8</sup> Eric Reuland. 1982. "Why count your auxiliaries in Dutch." *NELS* 12, 221-234.

<sup>9</sup> Eric Reuland. 1983. "Governing *-ing*." *Linguistic Inquiry* 14. 1, 101-136

<sup>10</sup> Titled: "Dependencies and Violations of Configurationality."

published a book on *Manufacturing Consent*.<sup>11</sup> The book was a critical evaluation of the role of the mass media as institutions for effective propaganda for the current system. In short, exposing the role of the media in manufacturing consent. There had been a very critical review of this book in the *NRC-Handelsblad*, a prominent Dutch newspaper, by Frits Bolkestein, then a member of parliament for the VVD, a Dutch conservative 'liberal' party, and who became the Dutch Minister of Defence in 1988. In a nutshell his thesis was that there was no effective manufacturing of consent, but it would actually be fine if there were. This resulted in a polemical exchange between Bolkestein and Chomsky in the *NRC-Handelsblad*. To me that looked like a very fitting theme for a personal debate between Chomsky and Bolkestein. I contacted Bolkestein via a mutual acquaintance, proposed the idea to Noam and both agreed to a public debate, to be moderated by Wout Woltz, then the editor-in-chief of *NRC-Handelsblad*.<sup>12</sup>

There was a clear structure for the debate in terms of turns and times per turn which I had carefully explained to Bolkestein in advance and to which he agreed, and one further condition by Noam, to which Bolkestein had agreed as well, name-

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<sup>11</sup> Edward S Herman, and Noam Chomsky. *Manufacturing Consent*. New York: Pantheon Books.

<sup>12</sup> Which led some reports to conclude incorrectly that the event was organized and sponsored by *NRC-Handelsblad*.

ly that he would not bring up the Faurisson affair since that would detract from the main topic.<sup>13</sup> The debate had been sharp, but on the topic, such as the role of the press in covering the Cambodia versus the East Timor atrocities, until suddenly, I can still vividly see the scene, Bolkestein drew – I think from the pocket of his jacket – a copy of Faurisson's book and brought the issue up contrary to the agreement. I recall thinking, well, this is the end of the debate as I had it in mind. And it was. A turning point, indeed. And Noam was prepared. All of a sudden we saw Noam turning into a political debater who gave no quarter. He showed that Bolkestein had quoted from the wrong edition, and then he went on relentlessly, continuing with the further points he wanted to make, stating the facts and supporting them by precise references to his sources – in the meanwhile carefully sticking to the structure of the debate – whereas Bolkestein tried to respond with opinions and accusations. During the debate the moderator had assiduously timed both Noam's and Bolkestein's exchanges. Noam ended stressing that those who believe in democracy and freedom should be serving the victims of power and privilege and how these values may be prerequisites to our survival. I perfectly recall

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<sup>13</sup> The Faurisson affair was a controversy caused by the inclusion of Noam's essay "Some Elementary Comments on the Rights of Freedom of Expression," as an introduction to a book by the holocaust denier Robert Faurisson, without his approval (or even knowledge).

Bolkestein's bewilderment when he wanted to respond and to his surprise the moderator told him that his time was up. He got up, gathered his staff, and marched out of the church where the debate was held.

For me the conference was also an occasion to start thinking seriously about the contrast between Plato's problem and Orwell's problem discussed in the Preface to *Knowledge of Language*,<sup>14</sup> which I had been intrigued by the moment I read it. Plato's problem is how we can know so much even when the evidence available to us is so sparse. Orwell's problem is why we know and understand so little even when the evidence available to us is so rich. Noam had indicated that these problems are very different and that whereas Plato's problem is deep and intellectually exciting, Orwell's problem is much less so. Plato's problem is addressed "by studying the innate endowment that bridges the gap between experience and knowledge attained," To solve Orwell's problem "we must discover the institutional and other factors that block insight and understanding .... and ask why they are effective." Yet, I couldn't and cannot keep myself from wondering to what extent there might be an overlap. While it is clear that factors reflecting the power structure within the society play a significant role in our understanding of why insight is blocked,

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<sup>14</sup> Noam Chomsky. 1986. *Knowledge of Language: Its Nature, Origin, and Use*. New York: Praeger.

for me the question arose whether some innate factors might not also help impede the acquisition of certain types of knowledge.<sup>15</sup> I found Noam to be skeptical<sup>16</sup>, but yet he acknowledged<sup>17</sup> that also Orwell's problem may have unexplored depths.

In this vein I keep wondering why it is that some images, presented or evoked, propagate like waves through the social media? And why are rational assessments so limited in their



appeal? As Wade Goddard, a photographer from New Zealand, put it in the text to his pictures of the destruction of Mostar in former Yugoslavia's civil war<sup>18</sup> - *What leads a people to destroy another and themselves in the process?* Contagious dreams - dreams of a utopia? But why are

such dreams contagious despite the suffering their pursuit will

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<sup>15</sup> Eric Reuland. 1993. "Reflections on Knowledge and Language." In: *Knowledge and Language: From Orwell's Problem to Plato's Problem*, Volume 1, ed. Eric Reuland and Werner Abraham, 11-28. Dordrecht: Kluwer.

<sup>16</sup> Noam Chomsky. 1993. "Mental Constructions and Social Reality." In: *Knowledge and Language: From Orwell's Problem to Plato's Problem*, Volume 1, ed. Eric Reuland and Werner Abraham, 29-58. Dordrecht: Kluwer.

<sup>17</sup> p. 56.

<sup>18</sup> For me the most moving picture is that of a young girl (around 9 years old?) cycling through the rubble of the city.

so obviously cause? Because, despite what our common sense would tell us, in the dream the utopia is for the "us"? And the suffering just for the "them"? Or is general suffering consciously accepted just for the sake of the "greater good"?

So far, I don't know of any systematic study of this issue from such a perspective (although marketing psychologists appear to make an excellent living from studying the issue for the sake of business profit, and recent interventions in elections by manipulated social media make a thorough study more urgent than ever). Such a study would be a true turning point.

Moving from this - for now - unsolved issue, to the more solvable issues, which involve the study of language, the minimalist program<sup>19</sup> constituted yet another crucial turning point. It called into question every stipulation that had entered the system in previous years, paving the way for fundamental explanations, including explanations based on factors outside the language faculty proper ("3<sup>rd</sup> factor" explanations).<sup>20</sup> For my own research the most significant contribution was the strict separation between the grammar and the interpretation system, and thereby the demise of syntactic indices as annotations of dependencies in the structure. It forced a fundamental rethink-

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<sup>19</sup> Noam Chomsky. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press

<sup>20</sup> Noam Chomsky. 2005. "Three factors in language design." *Linguistic Inquiry* 36.1, 1-22.

ing of the notion of binding and of the binding conditions, which has kept me busy until now.

In this approach the only way to represent a dependency in syntax is by the relation *X - is a copy of - Y*. This copy-of relation is the syntactic expression of identity<sup>21</sup> and underlies both *Move*(ment) as in *Who did you defend - ?* (where *who* has moved to the initial position leaving behind a silent copy) and *Agree*(ment) as in *John **defends** himself* but not *\*John **defend** himself*. For instance in a Dutch sentence such as *Jan verdedigt zich* 'John defends himself' the element *zich* is underspecified for number, and receives a copy of the value *singular* from the antecedent *Jan* via the inflection system of the verb. It led me to the study of languages I had never dreamt of working on before, and intriguing results, showing how the apparent diversity can be explained on the basis of a few general principles interacting with independent morpho-syntactic properties of the languages involved.<sup>22</sup>

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<sup>21</sup> The subject of an extensive discussion with Noam at the TiLT conference in Budapest (2004).

<sup>22</sup> What is needed is a general property of local identity avoidance (based on the Inability to Distinguish Indistinguishables – IDI), a condition on chain formation reducible to the principle of recoverability of deletions, and a general economy principle. Much of this work was done together with Tanya Reinhart and Martin Everaert. See the following contributions for overviews and references:

In a meeting I had with Noam in the Fall 2004 there was another turning point. In a binding relation the antecedent must be structurally prominent.<sup>23</sup> Noam brought up that a consequence of the Agree-based approach to binding we were discussing, was that there should be cases where not the antecedent itself, but an element in the verbal system linked to the antecedent by Agree has the necessary prominence and mediates the binding dependency, and indeed I was able to find such cases.<sup>24</sup> We continued discussing these and other issues in an e-mail exchange as a follow up to this meeting.<sup>25</sup> Interestingly, recent work on Mandarin<sup>26</sup> and Russian<sup>27</sup> shows a configuration, where the complementizer is the prominent element. It is

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Eric Reuland. 2011. *Anaphora and Language Design*. Cambridge, MA: MIT Press, and Eric Reuland. 2017. “Why is Reflexivity so Special? Understanding the World of Reflexives.” *Studia Linguistica*, 12–59, DOI: 10.1111/stul.12070.

<sup>23</sup> Technically: the antecedent must *c-command* the element it binds. It must be a sister to a constituent containing the bound element as in [*binder* [... *bindee*...]].

<sup>24</sup> For instance in the following configuration in Icelandic:

- |     |       |                   |              |               |                   |
|-----|-------|-------------------|--------------|---------------|-------------------|
| (i) | Thad  | <b><i>kom</i></b> | <i>maður</i> | með börnin    | <b><i>sin</i></b> |
|     | There | arrived           | a man        | with children | SIG               |

For discussion, see: Eric Reuland. 2005. “Agreeing to bind.” In Hans Broekhuis, Norbert Corver, Riny Huybregts, Ursula Kleinhenz, and Jan Koster, eds., *Organizing Grammar: Linguistic Studies in Honor of Henk van Riemsdijk*. Berlin: Walter de Gruyter.

<sup>25</sup> Noam Chomsky. 2008. On phases. In Carlos Otero and Maria Luisa Zubizarreta, eds., *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*, 133–166. Cambridge, MA: MIT Press.

<sup>26</sup> Iain Giblin. 2016. *Agreement Restrictions in Mandarin Long-distance Binding*. PhD Diss. MIT.

<sup>27</sup> Peter Zubkov. 2018. *The Grammar of Binding: A study with reference to Russian*. Utrecht: LOT International Dissertation Series.

valued by a subject argument and in turn transmits this value to the anaphors in its domain. This option appears to be realized very generally, much more so than I thought at the time.

Through the years we had been working on an occasion to invite Noam to visit Utrecht. In March 2011 he was finally able to accept our invitation, combining it with visits to Leyden and Amsterdam. We made a proposal to him to include a rather special type of event, turning around the standard format. To deliver a lecture primarily for students, from BA to PhD, based on issues brought up by the student, and with only the students having the possibility to interact and ask questions. The staff was able to follow but from a distance. He agreed to the proposal enthusiastically, and thus it happened. There as a very lively discussion on a great variety of subjects and the students thoroughly enjoyed what they rightly felt was a unique occasion.

The last time so far we met in person was in November 2013, when I had given a talk at MIT, and we had a very stimulating exchange of ideas about the topics I had raised in the talk. Intellectually we have kept meeting over the years, lastly on the subject of emergence of language when his book with Bob Berwick *Why only us?*<sup>28</sup> came out, while I was writing up my thoughts on the relation between imagination and the

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<sup>28</sup> Robert Berwick and Noam Chomsky. 2016. *Why Only Us: Language and Evolution*. Cambridge, MA: MIT Press,

emergence of language.<sup>29</sup> It very much helped me sharpen my thoughts, while the final section led me back to one intriguing aspect of Orwell's problem: How one part of our brain is able to create bureaucratic systems for businesses and societies that the other part is unable to cope with, causing people to be alienated from the very environment they have to live in.

Dear Noam, it has always been a great privilege to know you, to learn from you in classes, talks, meetings in person or by mail, reading your work, and thinking about how you would react to anything I write up.

Happy birthday! Have a great day, and I hope we will be able to enjoy your presence and your contributions to linguistics, politics and to society in general for many more years to come.

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<sup>29</sup> Eric Reuland. 2017. "Language and Imagination - Evolutionary explorations." *Neuroscience and Biobehavioral Reviews*, 81 (Part B), 225-278.

## 1957 and all that

Ian Roberts

University of Cambridge

1957 was a very good year. Well it definitely was for me: it was the year I was born. It was also a good year from other, perhaps



broader, perspectives: the first space flight by Sputnik marked the beginning of the Space Age and the first phase of rock and roll had Elvis, Sam Cooke, The Crickets and The Everly Brothers all topping to US charts. And of course, *Syntactic Structures* was published. I've always liked to think that I

came into the world at a propitious time.

Naturally, it took a few years for me to realise what an important year my birth year had been for linguistics. I was a bit quicker with space travel and rock and roll: the Apollo missions and The Beatles are among my most vivid memories from my 1960s childhood of the wider world outside my family. In fact, a combination of an interest in various forms of explora-

tion, mostly of inner space, and in increasingly strange and ever-more cacophonous rock music led me, by the mid-70s, to Karlheinz Stockhausen. In 1973, I bought a record implausibly entitled *Stockhausen's Greatest Hits* (in recent years I have repeatedly searched the internet in vain for this item). I knew absolutely nothing about serialism, *musique concrète* or the European avant-garde tradition, and I couldn't understand the music at all. But somehow, in a way that I couldn't have begun to articulate back then, I realised that what Stockhausen was doing was incredibly original and important.

A couple of years later, as part of my undergraduate degree in French and Linguistics, we were advised to read *Syntactic Structures*. So I finally became aware of the other great innovation from 1957. I'd heard of Noam by then, but I hadn't taken any courses in generative linguistics or read anything. I knew absolutely nothing about the formal sciences, rewriting systems or the general intellectual milieu which Noam had come from, and I couldn't understand the book at all. But somehow, in a way that I couldn't have begun to articulate back then, I realised that what Noam was doing was incredibly original and important.

In that same summer of 1976 (when the pure cacophony of punk rock began, something very easy to understand in 1970s

England), just after reading *Syntactic Structures*, I came across a book in a second-hand bookstore called *For Reasons of State*, by someone called Noam Chomsky. The book was a fascinating and convincing critique of US foreign policy, and I found it brilliant and inspiring (as well as fairly easy to understand). For a short time I seriously entertained the thought that there must be two people called Noam Chomsky: one who revolutionised linguistics and one who was a prominent and articulate left-wing critic of US policy. I was fascinated by both of them. After a while (remember this is long before Google and so on), I found out that actually there was only one Noam Chomsky. I was certainly not the first person to be amazed at how one person could contribute so much that was so important and interesting in such seemingly disparate areas (and this was before I heard of Noam's contributions to computer science, philosophy and psychology), and I'm sure I wasn't the last.

The 1970s turned into the 1980s. I got a mediocre BA in French and Linguistics and then, through an unlikely series of events involving Larry Hyman and a Dutch train (this story has been told elsewhere), I ended up in graduate school at USC, arriving just a year after Osvaldo Jaeggli had arrived from MIT. One class with Osvaldo convinced me that generative syntax was what I wanted to do. The real "aha!" moment actually came about two weeks

into my first semester, reading “Conditions on Transformations” on a bus on Vermont Avenue. I suddenly realised that not only did I understand the Specified Subject Condition but, through that, the whole enterprise. Human minds are the kinds of minds that can have (something like) the SSC in them! This absolutely extraordinary and amazing idea, Noam’s extraordinary and amazing idea, has stayed with me ever since, and I’ve tried over many years to convey its importance and profundity as best I can to my students, and tried to see for myself, in my own very limited way, what some of its implications might be.

Largely thanks to Osvaldo I was accepted as a Visiting Student at MIT in the Fall Semester of 1983. As a third-year graduate student, I latched to the third-year cohort at MIT: Mark Baker, Kyle Johnson, Juliette Blevins (Levin at the time), Diane Massam and Richard Sproat are the people I particularly remember, several of them becoming lifelong friends and collaborators. Noam was teaching an early version of *Barriers* (the version he taught the following year was the basis of the 1986 book). We had two appointments, I think. My main recollection is being completely in awe, but finding him basically a nice person who was very happy to discuss all sorts of things, even British politics (which was almost as awful then as it is now). It was a great time: there were many interesting visitors (I partic-

ularly remember Peter Coopmans, Dany Jaspers and Peter Ludlow), Jim Higginbotham was teaching, Luigi Rizzi was teaching, the fourth-year cohort included Mamoru Saito, Nigel Fabb, Mario Montalbetti and Lisa Travis, etc. etc. What really struck me was how MIT at that time seemed like an intellectual paradise: the perfect place to develop and discuss ideas (e.g. passive arguments ...). And it was clear that Noam and Morris were the creators, the leaders and the inspiration of all this.

Since that time, Noam and I have met up in various places fairly regularly. It's always a pleasure, and I've never quite lost the initial feeling of awe that I had as a graduate student. Back in 1976 when I first read *Syntactic Structures* and *For Reasons of State*, it wouldn't have occurred to me in my wildest dreams that I would actually meet both Noams (simultaneously!). Like many other people, I have numerous anecdotes that illustrate Noam's generosity of mind. But I'll relate just one: a couple of years ago my son was studying (Linguistics, as it happens) at University College, London. His room-mate was a historian, writing an undergraduate thesis on the 1960s New Left. When he found out that his room-mate's father knew Noam, he asked me to put them in touch, which I did. He then sent Noam a series of fairly detailed and recondite questions on the topic. Noam replied immediately, at length and in impressive detail.

Remember, this was the person voted the world's top public intellectual in a *Guardian* poll in 2005 responding to a query from a colleague's son's room-mate! I know Noam is irritated by accolades of the *Guardian* type, but in a way this anecdote shows us where his greatness lies.

Few people have given the world as much as Noam has, both in the direct intellectual sense and as an example of integrity in intellectual life. My own intellectual life has been profoundly shaped by his influence. I can't achieve what he has achieved (but then I don't need to, as he's done it), but the best way I can repay my debt to him is to try to transmit his ideas, and above all his *approach* to ideas, to my own students. Then one of them can write a piece like this at the next milestone.

Happy birthday, Noam. May there be many more.

# Finding a Home for Acquisition in Noam's Linguistic Theory

Tom Roeper

What can I add as a tribute to Noam on his 90<sup>th</sup> birthday that has not been detailed by his legions of admirers? Michael Schiffman—several years ago—asked me to give my perspective as a language acquisition linguist on my experiences in the 60's and 70's in Chomsky's classes and as a visitor to MIT.

So I thought I would recount how my personal interactions with Noam were intermingled with the emergence of language acquisition as a critical dimension of linguistics. As others have, I will focus on the mixture of theoretical arguments and direct discussion of experiments which I had with Noam. They provide, to my mind, poignant glimpses of his personality. In a word, Noam never erected a wall between his personal style and the articulation of his intellectual innovations. His informal demeanor was, quite deliberately, how he opened the mind of a genius to others.

It all started one day in the Spring of 1966 when I wandered down to MIT to check out Noam Chomsky. I was a grad student in English at Harvard who had written an undergrad thesis on the mystery of why in 20<sup>th</sup> century poetry there were 10 times as

many definite articles as in, for instance, John Donne in the 17<sup>th</sup> century, where indefinites proliferated (“Catch a falling star” versus Eliot “The wasteland”). The answer lay in the shift from the religious/Platonic 17<sup>th</sup> century view of what mattered (ideas) to the empiricist view of science (observations) in the 20<sup>th</sup> century. In his lectures, to my delight, Noam utterly revitalized the Platonic (rationalist) perspective.

After one lecture from Noam I was hooked for life. I never missed one (I think) for the next five years. Every idea I have had since then has been derivative from his---even those I have used to try to to alter his views of acquisition.

When I was 15 (in 1958) I remember my grandmother saying to me “when you go to college, don’t believe those ideas about behaviorism”. She was a psychoanalyst who had studied with Freud. When I heard Chomsky defend the notion of rational constructs as a true description of mental competence, it felt to me like “of course, how could it be otherwise”. Deep structure, innateness, and the unconscious are what I grew up with in the Freudian milieu. And when I heard in 1967 his political ideas, I felt like saying “of course” again. They were just like the anarchist views prominent in the German Jugendbewegung where my grandfather had been a leader.

Nonetheless, despite being soft-spoken, deliberately casual in his speech (and how he wrote on the blackboard), and being delighted with challenging questions, he was still inherently intimidating. I remember coming up to him for the first time after class in 1967 with a question in mind --- but then I found myself mumblingly nervous about just saying the words “deep structure” since I was never really sure I knew what it meant. (It took me a long time to learn that a lot of scientific terms were never meant to be completely understood.) He answered my question with the air of “yes, that’s a good question to ask”, relaxing me quickly and thereafter I never felt inhibited.

Despite feeling philosophically at home, there were some big hurdles. While hierarchical trees and transformations seemed again like such an elegant explanation, they could hardly be wrong, references to many mathematical terms like set theory, algorithms and the Chomsky Hierarchy felt alien. A Coptic scholar friend, Bentley Layton (now a Harvard professor) came with me to one lecture and said “you can’t believe that---it is too mathematical to be human”. I remember Haj Ross telling me that I had to understand Shannon’s information theory to do linguistic theory. I definitely didn’t. That was part of what steered me toward acquisition.

The Saussurean idea of a Competence/Performance distinction made sense, but references to “performance explanations” just seemed opaque. If language was essentially innate, then children’s language should give us direct insight into the contents of UG. Why should we presume performance blocks it? However, the notion of “performance” came in again (and again) to avoid just assuming that children’s sentences reflected grammar. It was universally assumed that the other mental dimensions interfered with performance so powerfully that in the words of one (since reformed) linguist “you will never learn anything from the empirical record in acquisition”. Acquisition was entirely a logical question (hence the book (eds. Baker and McCarthy) *The Logical problem of language acquisition*.) The book does represent the core of the acquisition story, but the actual acquisition path can give us many insights unavailable from intuitions alone.

At that time, essentially every child deviation from adult English was to be seen as a performance error.

In that vein, in an early paper on the acquisition of gerunds I pointed out myself that adult teeth are not grown baby teeth as one might first suppose---an entire tooth system gets abandoned first. May be---and Aspects floated this idea too---a child’s language could be entirely defined in cognitive and non-grammatical

terms, with formal grammar emerging late all at once (much as learnability theory was built up on the “instantaneous idealization”) So was there a point in looking at language below 5yrs?

Still I thought: Why should early grammar not be a direct reflection of grammatical competence and an early stage in choosing grammar? It was the tenor of the times that made this proposition seem unlikely (with perhaps some sociological factors as well (one person told me “acquisition was for women”). There was no evidence to support the negative conclusion that children’s expressions, any more than adults’, were not direct reflections of grammar.

Around 1967 in one lecture Chomsky himself brought up the question: why do children say “he big” instead of “he is big”. His answer was that there was a two-word “memory limit” for two-year-old children that prevented them from saying “is”. This struck me as far from obvious. After all, it was observed that there was a sudden “explosion” allowing children to go to 3, 4, 5 word expressions in a matter of weeks at just over 2 years (or before). How could it be that memory suddenly grew that quickly? Did kids heads suddenly expand? That was the origin of my decision to simply study competence---to describe everything children did in the same grammatical terms used for adults---and

give no credence to performance explanations, maximizing the use of generative notation, not minimizing it.

Dave Lebeaux and Andrew Radford a decade later argued persuasively that “he big” showed that children directly generated Small Clauses, a significant addition to the inventory of construction types. They argued that children used them first because functional categories had to emerge for larger sentences to appear (possibly maturationally).

Performance factors---which everyone else thought was hard-headed respect for neurology---always seemed tinged with mysticism to me. I thought “Memory” for language, vision, emotion, must have separate representations---but everyone treated it like a “domain-general” ability, a currently popular term which still seems woefully imprecise.

How much of the acquisition problem had come into view then? Chomsky argued in class that children have to choose a grammar from a large set using an Evaluation Metric (outlined beautifully in *Aspects*). Therefore at some point they must have intermediate grammars that are not yet adult which reflect steps on a choice path. If so it was (and is) necessary to elaborate them with sufficient precision that a choice is possible (which later became the parametric approach). All the available technology of generative

grammar should be brought to bear to state children's grammar so that such a choice operation could be elementary. This line of reasoning suggests that we may be able to separate grammar acquisition from grammar choice (see Yang (2015), Roeper (2018)).

From 1970 I think I had appointments with Noam almost every year up until this year and many in the year MIT invited me to be a Visiting Professor under their Sloan grant (1980-81). Those meetings were a critical anvil on which to hammer out what I did experimentally and theoretically in acquisition. Often, even as a graduate student, he asked me "what do you think?". The question seemed like an honor but it was a part of his effort to establish equality between people.

Politics was always an ingredient. It turned out we had both been in Mississippi in 1965 when I taught Freedom School for SNCC. Noam was curious about our mutual experiences in Nicaragua, or how my family fared when we went as UN-volunteers in Bosnia. And we chatted about his email exchanges with my daughter (Maria Roeper) when she was the primary founder of the Workers' Rights Consortium fighting sweatshops.

Noam was always very supportive of acquisition, and curious about experimental work: I remember around 1981 he once asked me what experimental games he could play with his

grandchildren. I warned him “you might get hooked” and he laughed. I suggested one I had done with Ana Perez to explore bound variables: every animal went home. Did each animal go to his own home? Indeed, 3yr olds do exactly that. (I sent him some materials, but I never found out if he tried it).

Still, in the early years, the “performance” option remained his first choice for every deviation. The first question I asked him in 1969 was why 4yr olds would stick in a resumptive pronoun in German data I had collected for my dissertation.

Children repeated without a problem:

Fussball spielen macht Spass [foot-ball playing makes fun [= is fun]

But when I put in “zu” (to) creating a VP-fronting construction, many children inserted a “resumptive” pronoun “das” in subject position:

Repeat: “Fussball zu spielen macht Spass (to play football makes fun)” => “Fussball zu spielen, das macht Spass.”

Noam said “well it is just preserving the sentential nature of the moved element”. Was it just a “just”? Only a year or so ago, did I finally see the importance of the example in a grammar gradually building V2. German and English children both hear and use V2 in some situations (“here comes Daddy”, “no’said Mom” –in many children’s books). The German child adds more and more pre-posed elements (Adverbs “da geht er”, objects “Fleisch isst er”) and finally fronted VP’s as above. It is the last step in the full V2 generalization for German children ( $XP\ YP\ \underline{V} \Rightarrow XP\ \underline{V}\ YP$  where XP can be (almost) anything, while English children keep a highly restricted generalization: Quotation V, stylistic inversion (into the room ran John) or specific verb marking (come, go, \*here marched soldiers). So the child’s early failure to do V2 with VP-fronting revealed the abstract level toward which the V2 generalization gradually moves: an open XP for German children, but many examples are needed to attain the full generality. (It is a formal explanation that falls between Wexler’s claim that V2 comes early and Yang’s claim that it comes late.)

Could more abstract structure be immediately available? After Tom Wasow and I wrote a paper in 1972 (“On the Subject of Gerunds”), I wanted to see when children would get the fact that

nominal articles (the) could block subject-control in verb-derived gerunds:

A. John enjoyed singing (John sings – clearer with “John enjoyed singing songs”)

B. John enjoyed the singing (anyone sings)

Wasow and I argued that there was a hidden PRO subject for gerunds which a nominalization operation blocked. Hence we can say: the destruction of the city without saying who did it. I thought children probably would not get it until they were 8-9, so we experimented with children from 3-9 years (using other nominal markers as well like: Mom likes not singing / Mom likes no singing).

After all, there is a lot going on with definite articles: anaphora (previous mention), Specificity, maximality, uniqueness, and one could imagine that these properties might be separately triggered with sharp evidence, taking a while. Verb-Noun conversion looked like a candidate for the caboose on this train—last acquired. In any case, nominalized forms of the-V-ing are certainly not frequent (for those re-attracted to frequency explanations).

To my surprise, we found evidence that 3yr old children were tuned into this difference: half of them chose a non-subject

for (b) with John 100% for (a). What does that mean? It means that children might get all the sophisticated UG information (NP can dominate VP, blocking a subject projection) very, very early. An abstract notion of DP pops into place straight from UG. It is not so surprising when we consider vision. Children seem to see in 3D, get colors, angles, and even more sophisticated geometrical computations in vision from the outset.

Noam was intrigued by this acquisition evidence and was persuaded—he discussed the experiment in a paper in the early 1970's. And then more evidence started to pour in.

In the early 70's the Piagetians were eager to explain the absence of subjects in early grammar “eat raisin” as a sign of egocentricity (Hermine Sinclair-de-Zwart). I pointed out that missing subjects included 3<sup>rd</sup> person cases (“go fast” = “it goes fast”). I tried to extend the cognitive idea by suggesting that may be there was a form of “subject-centricity” at the cognitive level. But Nina Hyams showed in the late 1970's that empty subjects reflected a new concept: parameters with specific triggers, in particular, expletive there-insertion. Again we find children below 2yrs saying “there no squirrels” (1.11) or “there be no more these” (2.2).

Carol Chomsky was another mentor of mine and her marvelous acquisition work on raising and the easy/eager distinction

was a big step forward for the field. She contrasted PRO-control (the doll is eager PRO to see) was easier than object-raising (doll is easy to see *trace*), though she did not use full grammatical descriptions to describe it. Noam presented Carol's work in class and confessed that maybe he liked it so much because it was his wife's. Noam's humor and self-critical candor was both exemplary and endearing. It is his singular humanity that I and perhaps others value most in him.

Dave Lebeaux later proposed that children might have a default Operator that would be needed for object-raising with no adjectives: "this is to eat" (2yrs) [ $\text{this}_1$  is [ $\text{CP OP}_1$  to eat  $\text{trace}_1$ ]. It shows again the relevance of a very abstract discontinuous relation from very early on.

Carol gave me some suggestions before I went to Germany to do dissertation work. I thought that since SVO, under markedness theories, was the typical linguistic structure and Matrix clauses---hence much of what a child hears---is SVO, then the German child should begin with SVO. I found the opposite: German children had OV (hands wash) from the outset and English children had VO (wash hands). William Stern was the professor for my great uncle Curt Bondy (who got Stern's position at the University of Hamburg in 1953 after having been imprisoned in

Buchenwald in the war). Stern wrote in his 1928 diary that he had observed OV sentences in his 2yr old daughter Eva, who I later met in Israel. She gave me a copy of Stern's book and said "she was glad I was carrying on his tradition". While this tribute to Noam celebrates his over-arching role, I am constantly reminded that the paths of intellectual influence are so much more complex than we realize.

In my dissertation, following Emonds theory of structure-preservation, I thought that maybe children were programmed to look to the subordinate clause as a direct trigger for OV deep structure. I still think that acquisition operates at that level of abstract triggers. When I sent Noam a copy of my dissertation, he wrote me that "it was fascinating" which I took to be code for "I'm not sure you are right".

Root infinitives then became a large Topic of research promoted by Ken Wexler and how children moved to CP with V2---getting tense inflection-- showed repeatedly that the grammatical level of description was on the right track.

I remember in 1976 when I noticed the term "triggering experience" in his book (*Reflections on Language*) and asked Noam if pragmatics would be included. He said "of course" although the reigning view before was that syntax was "autonomous" and

therefore its acquisition was autonomous. Noam had asked in the 60's as a hypothetical question "could you learn language from listening to the radio?", where no meaning would be supplied. I think the "triggering *experience*" choice of words represented an important shift in his thinking toward a biological view of grammar. Others have commented on the fact that new ideas were often adumbrated in just a phrase in his letters.

In the late 70's Larry Solan and Helen Goodluck showed that c-command was available to 3-4yr olds for pronouns. Yukio Otsu showed that 3yr olds were sensitive to subjacency for Sentences like {John fixed a dog with a broken leg with a bandage => what did he fix the dog with => "a bandage/\*a broken leg). Jill deVilliers and I began research on LD wh-movement and showed that 3yr olds had no problem with: "when did he say he took a bath" and 4yr olds had paired readings like "who ate what". Recent work, again showing little of performance effects, revealed that 3-clause sentences are no different (when did he say he thought he hurt himself) or "who gave what to whom?". And current work on pragmatics shows that every dimension of grammatical interfaces are robust in nursery school.

Then the 90's came and Minimalism emerged. I was a visitor at MIT for a semester and had chatted with Noam at one meeting

about Merge and I said casually “you know kids early use of things like “no run”, “no soap” etc looks like an example of pure merge. It is not a reflection of a VP or NEGP in PSR rules, nor any direct adult model.” He nodded and said quietly “yes’. A few days or weeks later in his lecture, he said in another casual aside and “acquisition data about negation shows children carry out pure Merge, right Tom?” and I was caught off guard completely, then mumbled something like “yes”, adding a couple of examples. It was good to see acquisition data acknowledged as a direct reflection of a fundamental concept.

I had had a long-term dream of writing a book that mixed linguistics, philosophy, and everyday life focusing ultimately on the necessity of Free Will, but readable by parents and teachers. We all produce unique actions every moment just like we produce unique sentences, born of free will in the unconscious.

And the book was to be full of linguistic things you could try with your children. [How do you figure out if your child know the difference between “uh-oh” and “oops”?] It was to be, I hoped, a vision of human nature from Cognitive Science.

I put my heart in the book. And then I could not get it published. Finally, Noam kindly interceded with MIT Press and they accepted the book (*The Prism of Grammar: How acquisition illumi-*

*nates humanism*). He wrote a blurb for the cover and I was pleased that he mentioned the larger goal [a book “for anyone seeking to understand who we are and what we should be”]. He told me that he often recommended it. In fact, I got an email from him one day asking me to send a copy to a prisoner interested in linguistics.



Let that be my last recollection: Noam’s humanity extends to support for a single unknown individual in prison.

Noam’s influence as a person—for most of those writing about him in this collection—has been as great as his influence as an intellectual.

## Noam at 90 – A Life of Inspiration

Neil Smith

When I graduated in 1961, my tutor took me aside and explained that the future was ‘generative’. I had no idea what he meant. When I defended my PhD thesis in 1964, a Hallidayan, ‘Scale and Category’ treatment of the verb in the Nigerian language Nupe, the external examiner’s first question



was “Why didn’t you use a transformational approach? It was that same year that I had my first direct experience of Chomsky - when I failed to meet him. He was giving a lecture in London where I had just received my PhD, and virtually all the London linguists were invited to meet him. I wasn’t invited because I wasn’t in a linguistics department, but in the department of Africa in the School of Oriental and African Studies (SOAS), and Africanists didn’t count. But I heard the lecture – about putting recursion in the base, and this exposure sowed a seed.

I was fortunate to have a lectureship, in West African Languages, in London, but there were several problems. The first

was that in those days SOAS was racist; the second was that the Africa department was anti-American; the third was that, when I interacted with Generativists, I seemed always to lose the argument. I was arrogant enough to think that this was not a lack of ability but a result of having the wrong theory. So I decided to go to MIT to sit at the feet of the master.

I obtained a Harkness fellowship and sailed to New York, landing on September 1<sup>st</sup> 1966. From there I went to Boston and MIT, but when I arrived Chomsky was on sabbatical in Stanford! Fortunately, Morris Halle took me under his wing (and turned me into a phonologist).

After being gazetted as 'forthcoming' for the previous eight years *The Sound Pattern of English* had still not seen the light, and Morris and I had endless discussions about the new distinctive feature system he was working on. (One of my proudest memories is being acknowledged in SPE, by the two greatest linguists of the century, even if the Nupe example I provided them with was pretty trivial).

Chomsky came back in January 67, and my life has never been the same again.

The day he came back I was summoned to the presence: Morris had lent me the unique complete copy of SPE – can you imagine such a thing happening today? – and Noam needed it,

NOW! So he drove me in his car to Back Bay, where my wife and I had rented an apartment, to fetch it. On the way to Hereford Street Noam complained that he had had the rug pulled from under his feet, as Morris had changed the feature system while he was away, and he wanted to catch up. Fifty years later my mind is still boggling at the thought of anyone pulling the rug from under Chomsky's feet.

After that remark, I sat in the car trying desperately to think of something sufficiently profound to talk about, but I failed and we ended up talking about my friend R. M. W. (Bob) Dixon, whose *Linguistic Science and Logic* had been recently subjected to a withering critique in *Aspects*. I couldn't defend him.

At the level of personal interaction I didn't have much to do with Chomsky for the rest of my time at MIT. Even in those days he was in constant demand from colleagues, students and visitors seeking illumination or the chance to demolish his latest arguments, and I knew I was not in the same league as them. But I attended all his lectures and was doubly awakened and enlightened, even converted, linguistically and politically.

While Chomsky was away in Stanford, a rival theory to his was being promulgated at MIT, Harvard and a number of other centres. This was Generative Semantics, whose prime proponents were Haj Ross and George Lakoff. Their criticism of

Chomsky and the perceived elegance of their own theory had resulted in the widespread view that Chomsky was finished. As a result everyone was agog to attend his lectures and see how he handled his anticipated imminent demise.

The course consisted of the lectures which, three years later, were published as 'Remarks on Nominalization'. After half a century I still think this was intellectually and confrontationally the best lecture course ever. The scintillating clarity of the exposition, the dazzling subtlety of the argumentation, the devastating ruthlessness of the treatment of purported counter-examples – all combined to confirm my linguistic conversion. The original belief that I needed to go and listen to Chomsky was fully vindicated.

But that was not all. I had expected syntax, but I had had no prior knowledge of Chomsky's other, political and activist, persona. I discovered that, with Louis Kampf (author of *On Modernism*), he was scheduled to give Course 21.995 "Intellectuals and Social Change"<sup>1</sup>. This turned out to bring about my political conversion. The rubric for the course read as follows:

The role and responsibility of individuals who challenge the assumptions of the established political and social order, and who are concerned with ideas and their conse-

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<sup>1</sup> p.356 of the MIT Bulletin for 1967/68; Volume 102, Number 6.

quences. Discussion of current issues that have given rise to action and protest, in particular: American foreign policy, the problem of poverty, the Negro revolution, the role of university students. Questions of individual commitment, and the available alternatives for action. Historical background, with emphasis on socialist, anarchist, and liberal responses to recurrent problems which have faced the committed individual since the Enlightenment and Industrial Revolution. Study of the conditioning of these responses by the relation of intellectuals to established institutions such as government and the universities. Individual research on topics of particular current significance.

The course was 'limited to 25 students' but, as a post-doc, I didn't count as a student and so I sat in and even smuggled my wife in too. As background reading I was given the first off-print from Chomsky that I ever received: the 1966 *Mosaic* version of *The Responsibility of Intellectuals*. This was published (in February 1967) in *The New York Review of Books* and launched Chomsky as the leading opponent of the Vietnam war, and public intellectual at large.

As with his linguistics lectures, I was overawed, almost overwhelmed by the breadth as well as the depth of his scholarship.

One of his typical asides referred to “a 700-page dissenting opinion to the Tokyo Tribunal” (by Radhabinod Pal). I hadn’t even heard of the Tokyo Tribunal but Chomsky appeared to have read everything. It was during this course that I realised that my political ignorance was culpable and that I needed to widen my views.

My next proper encounter with Chomsky was at the Pisa lectures, to which Deirdre Wilson and I were invited because of our 1979 Penguin *Modern Linguistics: The Results of Chomsky’s Revolution*. Deirdre couldn’t go, but I had an exhilarating foretaste of *Lectures on Government and Binding*. I have never contributed to syntactic theory but I have always tried to keep up with developments; Pisa was a wonderful opportunity to do just that.

Fast forward another decade or so: Cambridge University Press asked me to write a book about Chomsky’s Linguistics and Philosophy. I agreed, provided only that I could cover his politics as well. Very reluctantly CUP agreed.

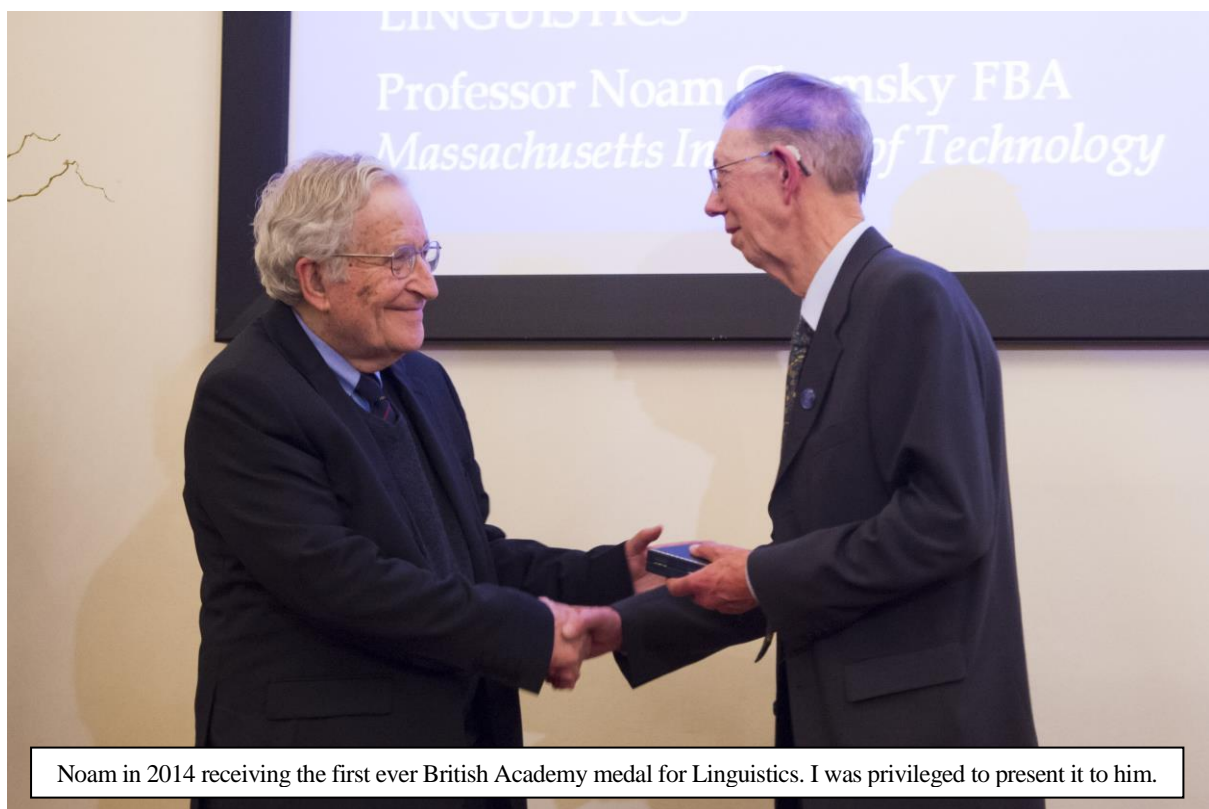
*Chomsky: Ideas and Ideals* appeared in 1999. It took me five years. Half-way through I sent Noam a draft of some 300 pages. Silence. Most untypical: he usually reacts to all communication by return. A little later I got an apologetic message – would I still like comments? His silence was due to his having cancer. I

obviously said ‘yes please’ and over the following days received **sixty** pages of notes. The man is unbelievable! This dedication to the linguistic community, and to mankind in general, is one of the reasons he is held in such respect, admiration and even awe. The contrast with ‘the average academic’ is striking and his perceived selflessness has doubtless contributed in a small way to his own success.

Fast forward again, and we come to the Minimalist Program. I was visiting MIT again, just in time to receive an advance copy of ‘Categories and transformations’ (chapter 4 of *The Minimalist Program*). This ‘more far-reaching departure’ as he calls it in the Introduction again had me simultaneously entranced and baffled. What was ‘last resort’ doing in a competence theory? What was the force of the observation “that *domain* and *minimal domain* are understood derivationally, not representationally”? Why were ‘sublabels’ so opaque? Fortunately, my own students were later able to explain these mysteries to me.

This is bringing us closer to the present, as witness the harvest of Anniversaries we are enjoying: *Syntactic Structures* in 2007, *Aspects* in 2015, celebrated with a special volume (number 77) of *MIT Working Papers in Linguistics* with a Preface by Chomsky himself; and a special volume *The Responsibility of Intellectuals: Reflections by Noam Chomsky and Others after 50 Years* to cele-

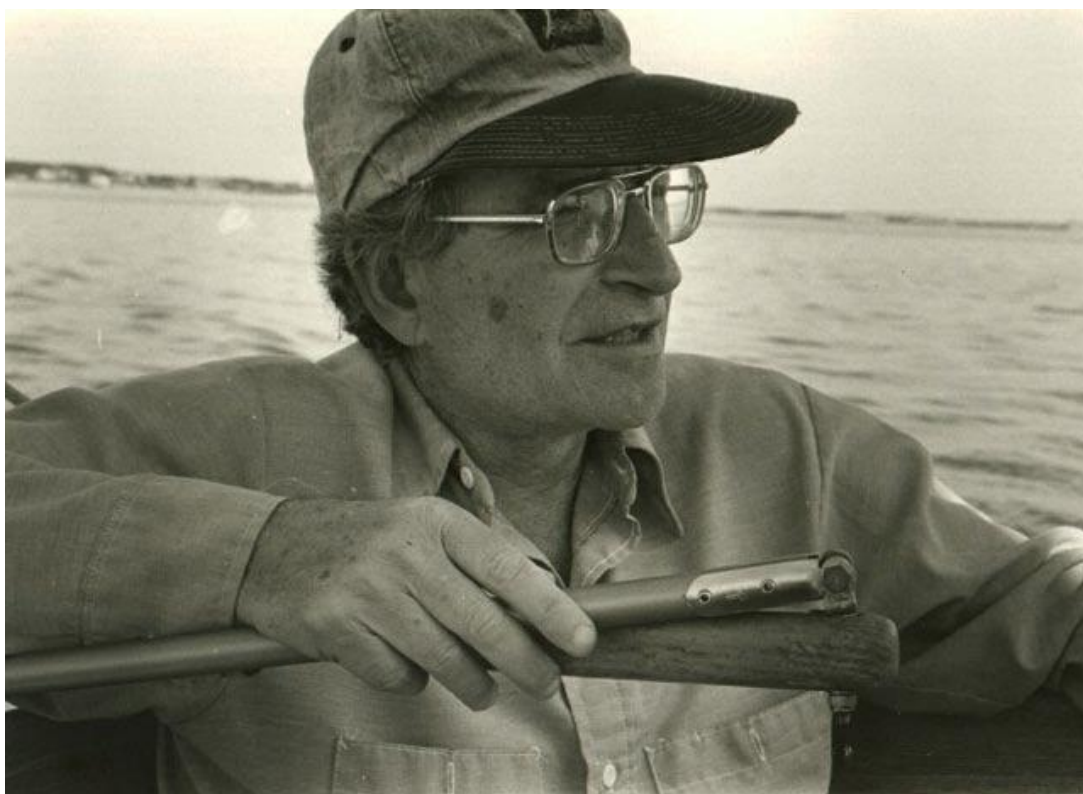
brate the golden anniversary of the article whose publication in *The New York Review of Books* established Chomsky on his career of activism. As one of the editors of this volume I am very aware of the complex collaboration with Chomsky that this involved: not merely setting up an audio-visual link between institutions seven hours apart, but also spending endless hours commenting on the varied contributions to the resulting vol-



ume; despite its containing intermittently obnoxious analyses. Now, approaching 90, he is still contributing across the spectrum with publications on birdsong, on language and evolution, on Donald Trump and the environmental dangers threatening humanity. And still on syntax, his favourite subject.

For fifty years Chomsky has been the dominant figure in linguistics, the philosophy of language, and the cognitive sciences more generally. Throughout this time he has always provided a rigorous and vigorous defence of truth and honesty. It has been a privilege to work in his shadow. More recently it has been an even greater privilege to count him and Valeria as friends.

The world has been a better place because of Chomsky.



**Ahoy, Noam the sailor**

now at 90

having weathered many a storm  
having charted the depths of language  
forever refusing to conform  
detailing the crimes of the high and mighty

**Viva Cape Cod Libertador!**

In 1991 I attended the 6th International Conference on Austro-  
nesian Linguistics in Honolulu, Hawai'i, presenting a paper on

Namakir Serial Verb Constructions. Hardly any of the presenters referred to Chomsky. Chomsky after all was anathema to the descriptivists that comprised the field of Austronesian Linguistics. Not that some of the prominent Austronesianists had not come across Chomsky: one of the leading Austronesianists (and one of my lecturers at the University of Auckland), Prof. Andrew Pawley (now Emeritus at ANU) had attended a Chomsky seminar in 1964 at Bloomington, Indiana, and came away with the conviction that Chomsky got it all wrong, composing a 'Song of Noam' with the revealing verse:

The speech of a man may be finite in span  
In performing he stutters and stammers  
But don't be misled, it's what's in his head  
that's the stuff of non-trivial grammars

By implication, descriptive linguistics is very much concerned with documenting the 'stutters and stammers' and then deriving presumably 'trivial' grammars from them, as opposed to Chomsky who looks inside the head and claims to be able to derive a 'non-trivial' grammar that might apply to all languages, hence making the work of descriptivists a waste of time and effort. At that stage I had an inkling that Chomsky might not be

altogether wrong since my description of a previously undescribed language in Vanuatu had yielded a grammar that looked perfectly accessible to me within the constraints of all the other grammars I had studied. Indeed the very exercise to figure out the syntax and phonology of a language unknown to me, within six months of fieldwork, seemed to support the contention by Chomsky that I did not have to ‘learn’ the language to become a fluent speaker at all, in order to determine its ‘internal’ rules. Even the fieldwork manual seemed to encourage me to elicit language data that did not include the ‘stutters and stammers’ of finite speech but idealized sentences that could be subjected to syntactic analysis. Sure, there were interesting deviations from English syntax such as the verb phrases having a first distinction between realis and irrealis – but note the very Chomskyian binary mode. Not that I made any such noises at the said conference lest my academic career in Austronesian Linguistics be stymied – which it was after all later on.

While in Honolulu I met up with my old friend from the University of Auckland, Franz Broschimmer (who had studied anthropology) who was now domiciled at the East-West Center, doing research for his forthcoming volume on *Ecocide: A Short History of the Mass Extinction of Species* (eventually published in 2002). Franz took me to see a movie that had just come out,

called *Manufacturing Consent: Noam Chomsky and the Media*. Not having read the book but having been aware and indeed having been generally very supportive of Chomsky's political activism, this documentary blew me away, making Chomsky my working class hero. Since my academic career did not prosper and having to support me and my family by becoming a high school teacher – and doing other odd jobs that remained at the periphery of academia – I devoured all the works by Chomsky that defined his political and philosophical endeavours, including of course a careful study of *Manufacturing Consent* which became a mantra in my own political thinking. I continued along this path until 1993 when having a position of HOD English at a remote Cook Islands high school, I got an unexpected call from another leading proponent of Austronesian Linguistics, the late Prof. Bruce Biggs who was also the leading lexicographer for Maori and other Polynesian languages. Having been introduced to lexicography while a student of Prof. Andrew Pawley, who also had a major interest in lexicography, the phone call from Prof. Biggs noted my previous interest and expertise in lexicography, offering me a 3-year job as lexicographer for the Niue Dictionary Project, funded by UNDP in association with the Niue Government, the University of Auckland and the University of Hawai'i. This promised to be an excellent

break from high school teaching and my family and I relocated to the remote island of Niue. While Prof. Biggs as the chief consultant had figured out the basic syntax of Niuean – sufficient for lexicography purposes – I delved into the remaining snippets of Niuean syntax, including the decidedly Chomskyan treatment by Seiter's (1980) *Studies in Niuean Syntax* which apart from nice tree structures involved the very Chomskyan idea that one could derive a grammar by studying texts (not that this idea is in itself novel as many classical or 'dead' languages have been subjected to such treatment before), i.e. Seiter had never set foot on Niue, had not done any fieldwork and yet managed to write a perfectly good grammar of Niuean. Then there was a Canadian linguist who kept citing Seiter and writing papers on Niuean syntax, especially on the noted feature that Niuean is an 'ergative' language, and citing Chomsky more like anyone else. I was intrigued enough to make contact with Diane Massam (now Prof. Emeritus at the University of Toronto) and eventually she came for a two-week visit to Niue. Her doctoral supervisor had been no other than Noam Chomsky, who to this day remembers Diane very fondly, and she encouraged me to contact Noam.

This being the emerging age of the email I was astounded – like so many others – that Noam answered any and all of my emails

without delay. On matters syntax the triangulation between me, Diane and Noam proved to be very fruitful, culminating in a 1994 paper entitled 'A theory of verb classes and case morphology in Niuean'. My close association with Diane Massam and Noam Chomsky from then on blossomed and when Noam and Carol came to Auckland in 1998 to receive a media award, I was given the opportunity to host them in Auckland. My Niuean dictionary project had by then been concluded and I was back teaching high school, hence me showing up with Noam at the University of Auckland caused a stir amongst the resident academic linguists who could not fathom how a very minor academic like myself could cozy up to the 'greatest intellectual of our time'. Noam and Carol were very gracious guests and it was certainly a memorable time to be face-to-face with both of them. Noam, no fan of small talk, shifted back and forth between linguistics and politics, illuminating both in his inimitable ways. We also met up with another American linguist domiciled in Auckland, Steven Fischer, who had also been in contact with Noam. Steven Fischer as a freelance academic and expert on Rapanui was also sidelined by the University of Auckland linguists and anthropologists but had written quite a number of academic books for the London based published Reaktion Books – unlike the paid professional academics at

university. In any case this proved to be another lucky connection as Reaktion Books wanted to publish a volume (in the series 'critical lives') on Noam Chomsky, and Steven Fischer recommended me as a writer, and I was accepted accordingly.

Noam on hearing about this was not overly enthusiastic as my writing brief included the provision of biographical data. Nevertheless, whilst not being appointed as his official biographer – an idea he did not like – he gave me the nod, encouraging me to also work with Carol who might be much more inclined to give away a bit of personal detail. Noam, despite his immense public profile, is an intensely private person who does not want his persona connected to his thinking output – a stance that confuses to this very day many a me-too critic who cannot conceive one without the other. When my little volume on Noam Chomsky was published in 2006, it was in the knowledge that Noam and Carol had vetted all my writing and had endorsed most of what I had to say. Carol was very forthcoming with personal photographs that are part of the highlights of the book (I have been asked many times to allow reproduction of these photos but have always declined as Carol had provided them with the understanding that the sole copy-right remains with her and Noam).

One of the interesting consequences of writing such a book were various reactionary reviews that I was a blind disciple of

Chomsky not daring to utter a word of criticism. This was to be expected but what was less expected were some reviews from left field that were envious of Noam's status, as if he had to constantly deny that he was the celebrated author of his linguistic, philosophical and political work. One left-wing workers paper in the UK noted that I was an idiot for asking Chomsky about Lula da Silva not yet having turned Brazil into a workers' paradise, when everybody knows that individuals like Lula and Chomsky cannot change the world – i.e. they all must submit to revolutionary collective action under the control of the UK Marxist-Leninist Workers Union. This put down was all the more ironic as this section in my book was actually my attempt at a critique of Chomsky, namely his support for left-wing politicians that fail to provide the goods when elected to high office. This is also a theme I want to conclude with, namely the endless in-fighting on the Left, including attacks on Chomsky, what with the current *Decoding Chomsky* volume by Knight as well as by others. Waging narrow ideological battles on the Left only gives comfort to the Right, whose proponents are always ready and prepared to act as agent-provocateurs to the point of eliminating those who pose the greatest threat to the capitalist status quo. Sometimes it is difficult to disentangle all the actors involved, especially if they claim to be holier than

the holiest. Take Knight who hosts a website called 'science and revolution' giving the impression he is a left-wing revolutionary character and yet goes after Chomsky like some mad dog, accusing him of shocking deceits, like accepting Pentagon funds for his linguistics work which he then obfuscates because he feels guilty. There are other academics that beat the same drum. Why - to paraphrase Hannah Arendt, a polymath like Chomsky - do people do what they do? Why are some so-called intellectuals as mean and nasty as can be? Part of the answer lies in being given a 'license to kill' by neo-fascist politicians that are on the rise in the US as in many other countries. Chomsky is old enough to have witnessed the rise of fascism in the 1930s, and as such is in the tragic position to witness a possible repeat of history. Mad hatters on all sides of the political spectrum feel encouraged to publish their insane ideas, including the expanding industry to deny Chomsky's dire warnings that our planet is thereby racing to extinction, be it by nuclear war or by catastrophic climate change, fuelled by corporate crimes. To try to ridicule Chomsky's biolinguistics is of course part of the scheme. The attacks on Chomsky from all sides are a sign of the desperate times. Whilst it is heartening to see that there are still some of us who defend and support Chomsky, as a linguist and political activist, there is the inevitable time

bomb ticking away. That a 90-year old Noam Chomsky is one of the very few beacons of hope, is a huge personal achievement for Noam but at the same time raises the question as to who will continue to RESIST now.

Wolfgang B. Sperlich

Author of *Noam Chomsky* (2006) Reaktion Books, London UK

## Who's on First? – for Noam's 90<sup>th</sup> Birthday

Beverly Stohl

I was thirty-nine years old in 1993 when I started working for my new boss, Noam Chomsky. I considered him an old guy at 64 – the age I am now. A year away from my fortieth birthday, I was



on the threshold of another, greater life change I couldn't have anticipated, that I didn't have the language for. I knew about Chomsky's language acquisition device only through my psychology undergrad studies. "He is an expert on the study of language, but he's also like Ralph Nader," my brother, an MIT physics graduate and my own personal *Google* before *Google* existed, told me. I knew that Nader focused more on consumer safety, and I came to learn that Noam was more concerned that people were dying unnecessarily from enemy bombs, internal warfare, and other modes of violence. I was relatively ignorant about the real workings of our government in those days; I knew little

about corporate bedfellows, or foreign policy, or the World Court, or the UN, or guerilla warfare.

On my first day of work, I couldn't identify Bertrand Russell, the man in the black and white poster on the wall between Noam's and Morris's offices. I would over time take thousands of photos of Noam with visitors in front of that poster – first in Building Twenty, then in our temporary offices in Kendall Square, and finally at the Stata Center. I remember seeing for the first time, and not quite understanding, the blue poster with a one-word address written across it: 'Palestine,' cancelled out with a long row of red stars. Seventeen years later, Laura and I sat with Noam, the keynote speaker at an event in Portland, Maine focusing on the Gaza strip, both of us sitting across from Noam in tears as a presenter related what the children in Gaza wished for most: fresh drinking water.

I had no idea what riches lay ahead of me before our doors opened to the amazing and unexpected - scientists, inventors, activists, actors, authors, Sufis, political prisoners, movie directors, comedians, political hopefuls, musicians, overwhelmed fans, international leaders, Cirque du Soleil clowns, brilliant thinkers, lost souls.

I met Noam before most of his grandchildren and their cousins were born. I saw how devoted he was to all of them, how much he thought about his family and mentioned and even cele-

brated them to both friends and strangers, encouraging others to bring their own families into conversations.

I knew so little about the world of Chomsky, or the world in general before I learned about East Timor, the Kurds, media control, Lies of our Times, Spare Change, CovertAction Quarterly. Before the Unabomber taped Noam's quotes on his cabin wall, which sparked a phone call to me – oddly, not to Noam – from an FBI agent. Before I listened to Noam's debates with BF Skinner, Jean Piaget, Alan Dershowitz, and William F. Buckley. Before I met, and learned about, and read people like Howard Zinn, Wallace Shawn, Amy Goodman, Arundhati Roy, Dori Ladner, and Angela Davis. Before Noam was duped by Ali G. Or was he?

I was thrilled at the opportunity to talk with some of my music heroes, like Yo-Yo Ma and Pete Seeger... although meeting Joan Baez, a place where Noam and my earlier lives intersected, would have knocked everything else out of the park.

That last phrase reminds me of some of our efforts at communication. I developed from Noam the habit of leaving out pronouns, so our sub-



sequent email messages often sounded like one of his favorite

skits, Abbott and Costello's "Who's on first," our clarifications sometimes followed by, "Clear as mud?"

I knew close to a decade later much more about my boss's life's work when he spent hundreds of hours giving interviews following 9-11. I experienced his world on a gut level ten years later, at Howard Zinn's memorial service.

I couldn't have imagined in those early years how my time with Noam, and our conversations about political climates, social injustice, family, illness, heartbreak, life, and death would open up my world in both exciting and alarming ways. Fortunately, he sometimes also brought me comfort, sometimes wordlessly, like the time he and Morris sneaked into the back row of my mother's funeral service just as I was taking the mic.

They were sneaky, or so they thought, on another day in the winter of 2010, less than two weeks after I suffered a concussion in a multi-car accident on icy Memorial Drive after work. Recuperating from that concussion, I felt what it must be like to suffer from dementia – that point when you know something is wrong and you try to hide it from others – even from yourself. I've wondered many times since whether this was how it felt to Morris during his last years. It wasn't as if I couldn't remember things as much as I had to literally retrieve my thoughts from somewhere inside my mind

when they should have been readily accessible and easily queued up on my tongue. Most disturbingly, but at the same time refreshing, my emotional and social filters were ripped away. Naughty or nice, I said what I felt. Working from home, Noam wrote praising my finesse in putting off one request in a “gentle yet persuasive manner.” I wrote back to him, “You make me sound like a laxative.” I’m not sure I would have written that under normal circumstances.

I vaguely sensed as I pulled out of a rental car lot to return to work at the end of the second week that I wasn’t ready to drive. I worked a few half days at our office over Noam’s protests: “Stay home and recover,” and Morris’s refrain: “You are not taking this head injury seriously enough.” When they observed that I wasn’t spinning my usual plates, and in fact a few of them were smashing to the floor, they had what they thought was a covert meeting in Noam’s office. I could see them talking through the open doorway, huddled together and glancing over their shoulders in my direction, shaking their heads. I can still remember Noam’s open hands flipping upward and to the side as they did when he lectured, and Morris retreating into his office. Noam approached me.

“Uh, Bev, Morris and I are still concerned that you’re not giving yourself enough time to heal.” They didn’t know that I had

just sent information to an organizer in Boston about Noam's flight plans for a different trip to Europe. "A flight to Boston?" the organizer had asked. "I'm confused." Smash...

"How can they confirm a concussion without a CT Scan? Morris is going to walk with you to MIT's urgent care to request another neurological exam. Roxy can say here with Glenn and me." Morris and I put on our heavy winter coats and walked to the medical department, where they again confirmed my concussion, and again declined my request for a CT Scan, citing unnecessary exposure to radiation.

I returned home for another week, and it was several more weeks before I was back to spinning all of my plates.

Morris Halle, the "old guy" who celebrated his 70<sup>th</sup> birthday around the time I was hired, interviewed me for the position as Noam's assistant, and he told me they chose me for two reasons. First, my fourteen years of experience working at MIT, and second, I wasn't a Chomsky fanatic. Twenty-four years later, when I told Morris I was retiring, he said, "You're quitting?" and went on to say, "You know, when you quit, Noam and I will probably wrap things up here." And I thought I was retiring *because* they had already begun wrapping things up at MIT.

Morris's days at the office were few and far between by then, but I never imagined that I would walk out of our office suite for the last time before they did.

This contradiction – or was it a paradox? - reminds me tangentially of conversations I'd had with Noam that went something like this:

Me: "Noam, which came first, the chicken or the egg?"

Noam: "Ahh, that's a pretty deep question. I think you should ask Morris. He may tell you a story about a chicken and the Wise Men of Chelm."

Me: "Morris, I asked Noam what came first, the chicken or the egg, and he told me you might tell me a story about a chicken and the Wise Men of Chelm."

Morris: "Yes, but it was not a chicken," he said, holding up his index finger. "It was a fish. A carp, to be specific..."

And in this way I learned a tiny bit more about the Wise Men of Chelm, and about a culture that Noam and Morris presented to me in such a fascinating way.

A very lapsed Catholic, I had always loved the few Yiddish words my mother, the granddaughter of a Russian Jew, remembered from her childhood. Noam and his long-time Wellfleet friend – and eventually Laura and my friend – Norma Simon, taught me many more Yiddish words and phrases over the years

as opportunities arose. Noam claimed I had made him a “schnorrer” by bringing him meals from home when Laura and I cooked more than we needed. Friends and strangers wrote Noam to say L’Shana Tova, Shalom, or mazel tov, and often referred to him as a mensch (I thought at first this was a bad thing). Because Noam and Norma took the time to share their culture with me, I bought Leo Roston’s *Joys of Yiddish* and learned to differentiate a kibbutz from kibitzing, a latke from kugel, kugel from rugelah. I asked Noam a dozen times whether matzo and matzah were the same thing, and which was the correct spelling, until he finally explained there were no correct spellings in Yiddish – let’s just say the spellings varied. And while this drove me crazy, I was sure it never bothered Noam in the least.

Noam and I compared and contrasted our mothers, and realized there was little difference between Catholic and Jewish guilt. I know his mother was formidable, and in fact never let his brother or father or him enter the kitchen, which likely posed a bit of a challenge when she died, right there in the kitchen, in the middle of a conversation.

As a kid, the Jewish families I knew seemed to have something on the Catholics – a stronger tradition, closer family ties, even, it seemed to my child self, more self-confidence. So I was completely

taken by surprise when Noam confessed to me one day that as a kid he was deathly afraid of Catholics. He'll have to explain that one.

Laura and I traveled to the Vatican with Noam in 2013, and just prior, Noam and I had this conversation:

"So this is how my story will start, if we actually do get in to see the Pope after your talk in the Vatican City next week," I said. "Two lesbians and a Jew walk into the Vatican..."

"You mean one divorced Catholic, a Protestant, and a Jew who was once baptized by his Catholic nanny walked into the Vatican."

"Well, two divorced Catholics, if you're counting Laura."

"Laura was married? I didn't know that," he said.

"Yes, she was married for eight years to a Catholic man. Their family traveled everywhere with a nun."

"And she's Catholic?" he asked.

"Oh, sorry, I take that back - she was brought up Protestant."

"And you were baptized by your Nanny?" I asked.

"Yes, she wanted to be sure I didn't go to hell."

I did confess to Noam that when I was little, when she thought we might be fibbing, my mother would say, "Stick out your tongue so I can see if there's a black cross on it." We believed her. After a few years of the occasional stretchings of truth necessary in managing Noam's schedule, I told him I had so many black crosses on my tongue that I should burn in hell. After a while, he would ask me to write someone, adding that I might end up with a black tongue for this one. But someone had to save his sanity

and make his life manageable, and very often that meant tactfully turning down an invitation.

Noam trusted me to open his mail, and I had only one transgression. Someone sent him a box of 6 Seder Table Matsohs. I was working through lunch the day they arrived, so I opened the box and had a half, then another half, and the next day, another half... I finally crossed out the six, and superimposed "3 1/2" over it in black marker. He forgave me, although I was spooked that I had eaten something that had been, as he later pointed out, "watched from the time of harvest." I would surely go to hell now. Unless what Noam told John Holder and Doug Morris in a 2010 interview balanced out my sins. He was answering a question from a fourteen-year-old.

When I was that age I was terrified of dying. What struck me as terrifying was not that I would die but that this point of consciousness would die so the whole world would disappear. Because, after all, there is nothing out there except what I perceive and if that consciousness disappears everything disappears. What happens then? Over time you get to recognize that it is just part of life. As you get older, at least to me, it seems less of a problem.

Actually, just to illustrate, dramatically, last night I came very close to dying, closer than I realized. There was carbon monoxide. I'd forgotten to turn the car off and closed the garage. The garage is under the house and carbon monoxide was seeping into the house, you can't smell it, it is odorless. Actually, I would have died except for the fact

that Bev Stohl had put a battery into an alarm that I didn't even know was there, and the alarm went off. And I managed to get the car off, but it was that close. So, if it had happened, it would have happened.

## The man who couldn't say No



"I don't know why people don't hear *no* when I write to them," was Noam's frequent lament, with slight variations, including: "Look at this e-mail, and tell me how they interpreted my *maybe* as a *yes*," and, "How much more clear can I be?"

I thought to myself, 'Let me count the ways.' While it is admittedly true that people hear what they want to hear, Noam was his own worst enemy when it came to saying *no* in a clear, concise way, especially when writing to colleagues, and even to strangers. For most of my time with him, Noam, the man who debated William F. Buckley, Jean Piaget, and Michel Foucault without breaking a discernable sweat, often asked me to be the bearer of bad news, the naysayer, the killjoy to the general inquiring public, not only because it was part of my job, but I think precisely because he was not good at it.

I don't think he shied away from sending regrets out of fear; I guessed it was his inability to disappoint people working for small schools, activist groups, and the countless NGO's who contacted him. For instance, responding to a request to give a major lecture for a small college's speaker series, which he was sure conveyed a *maybe*, and most definitely not a *yes*, Noam wrote the following:

"Would like to work something out if we can manage. What possibilities do you have in mind? Schedule is very intense, and we have few options."

Even while saying *No*, he held out hope. In fact, I thought his response looked very much like a *Maybe*, and could be interpreted as a *yes* for three reasons.

1. It began with the phrase, "I'd like to work something out." That's the only encouragement most people need when they're desperately hoping to add his presence to their project. They will never read as far as the requirement immediately following: "if we can manage."
2. He asked, "What possibilities do you have in mind?" Encouraging, right? And a real kiss of death if you're trying to say *No*.
3. They will also read "we have few options" as "we have A few options." The two phrases have an almost imperceptible grammatical difference, but their meaning differs greatly. Those whose first language is not English, and many hopefuls for whom it is, will probably not catch the caveat.

Noam, a human being who needed to sleep and eat, always stretched himself to the limit, and at one point he became overwhelmed with requests for documentaries, many of which, while certainly working to bring light to legitimate causes, were a far reach from the issues of his heart. He sat next to me and let out a big sigh one afternoon when bringing up the necessity of giving blanket regrets to documentary requests for a while, a year at most, to open up some time for other commitments. My baby finger was still curled in from our fresh pinkie promise when I saw he had sent an email agreeing to take part in a documentary the next month. He sometimes missed small details, like the word ‘documentary,’ so I decided to save the day by pointing out his oversight. “Noam – this is a *documentary* – I can send regrets for you.”

“Well, this is one I *should* do. They’ve been after me for a long time,” he said, which left me head-scratching with my other three fingers, because literally hundreds of producers had tried multiple times to secure an interview with him, many on issues close to Noam’s heart, with no luck. I know he had his reasons.

And like the guy selling Ginsu knives on the iconic TV commercial, let me just say, “But wait, there’s more.”

On the bulletin board down the hall Noam noticed a flyer with his photo on it, announcing him as keynote speaker at a Eu-

ropean conference on democracy the following summer, and he asked me to take a look at it. I did more than that – I took it down, and brought it back into our office to try and figure out how and why the organizers thought he had agreed to something that seemed completely alien to both of us.

There were two reasons why, in my mind, he was not going to this conference. The first was that Noam had a long-standing rule to never lecture during the summer, a sacred time for family, friends, and writing. This rule was broken twice up until that time, fifteen years apart, for various and sound personal reasons. The second problem was that a thorough search of our email turned up what we surmised – we had not given a definitive reply to the invitation.

With all of this said, Noam told me he felt there was no way to get out of it. I guessed something about this conference hit a nerve, filled a gap, or fit into his overall internal, private plan. At the end of the day, his thoughts, goals, and priorities were his own. He may even have had a verbal conversation with an organizer sometime before the keynote announcement, uttering a *maybe* that sounded to them a lot like a *yes*. And because he asserts that he has drawers, or buffers in his head where he stores ongoing conversations and other memories, he would remember this *may-*

*be/yes*. In the end, he attended the conference, gave his lecture, and met with small groups, bringing a relative along.

I was left musing that as a kid Noam must have loved the much-recited mnemonic rule of thumb that every English-speaking child learns by the second grade:

i before e,  
except after c,  
or when sounded as "a,"  
as in *neighbor* and *weigh*.



Just as some authorities deprecated the rule as having too many exceptions to be worth learning, I finally made my own compromise and conceded to *his* many exceptions, letting Noam be Noam. Not that I had a choice. He only pretended that I was his boss.

Over time, my intimidation of him faded, and our conversations flowed as if I were talking with an old friend, with no awareness that *this is Noam Chomsky*, with less of an impulse to self-edit. This was particularly easy when we shared stories. He shared many, as did I. One morning as he followed me to his small library to find a specific book, I leaned forward and said, “*walk this way.*” When he looked at me, curious, I explained that I was imitating the Igor character in *Young Frankenstein*. “We

heard a lot about that movie, and tried to watch it, but we just didn't get it," he said. I then acted out the scene where Dr. Frankenstein debates with a student, asserting passionately, "The only thing that concerns me is the preservation of life!" In the heat of this declaration, he accidentally thrusts a scalpel into his thigh, ending the argument with a shaky "Class...is...dismissed." When I finished my reenactment, Noam was literally shaking with laughter. "Well, if you had acted out the entire movie for us, we would have laughed." I was happy that my improv and stand-up stints hadn't gone to waste.

I noticed one morning that Noam had replied to e-mails at 4 am. "Did you sleep more than three hours?" I asked.

"I went to sleep around three, but just after I fell asleep one of the tall piles of books fell over in the office and woke me." I knew those piles. Any time I offered to move books, he told me to wait – til spring, til summer, til he was in the mood, til hell froze over. I finally realized he felt at home surrounded by books, and stopped asking. His daughter Diane had years before penciled a drawing of Noam in his study, smoking a pipe, surrounded by towers of papers and books, which I had made into a business card. His desk was like the belly of an octopus, its thick white paper arms reaching up from all around, piles of

manuscripts, journals, and books stretching up toward the ceiling, threatening to envelope and swallow up the chair, the desk, and the man.

I was Noam's scheduler, his arbitrator, his translator, his henchman, and his communicator, but sometimes *he* stretched the truth



himself, as below:

"If you see an extra black spot on my tongue tomorrow, this group invited me for dinner after my lecture, but I told them I had to run off afterwards."



His having to run off was generally actually true, but nonetheless, I welcomed his black crosses – they meant he was finally protecting himself from constant overwork. And now he has Valeria to help him with that.

As for my own black crosses, Noam came in one day after sending me one of those truth-stretching requests, and said, “I went to the dentist the other day, and they gave me a little brush that you can use to clean off your tongue. I’m going to buy you one for your birthday.” I’m still waiting, but honestly, my years in that office brought me more gifts than I could have imagined.

Happy 90<sup>th</sup> Birthday to you, dear Noam. Thank you for putting up with Roxy when she sneaked into your office during a serious filmed interview and clawed at your metal trashcan, and thank you for pretending not to notice me crawling in on all fours to get her out of there. But then again, your focus *is* that great, so maybe our commotion really didn’t register. I’ll never forget our time together, even if you did make me read *Miss Lonely Hearts*.

## Details of Execution

Juan Uriagereka

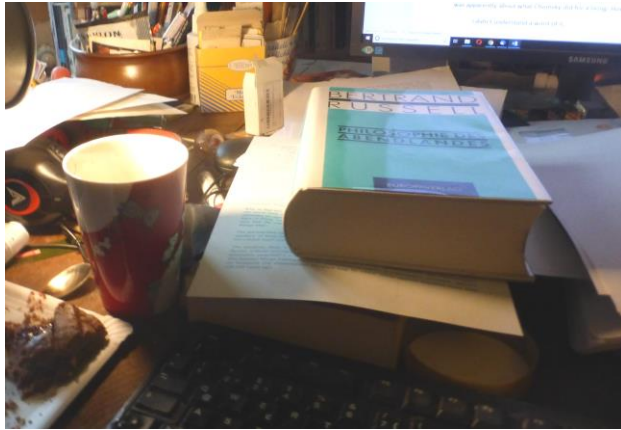
We have just celebrated my dad's 90'th birthday and, as we do whenever we go visit him in Spain for such occasions, we have also toasted to Noam's—they were both born in 1928. As I recall, my dad was the first to



talk to me about him, as he did of Che Guevara and Salvador Allende, for instance. In the context of Basqueland (where my family had returned in 1974, our home-searching trip coinciding with the assassination of Franco's right hand and prime minister), it was impossible not to live these matters the way one experienced the weather or the bar culture. So I don't take credit for growing from catholic, to socialist, then communist, and eventually to the anarchist I still feel I am: with just about the same ease with which I moved from one belt to the next in my karate club or from the youth soccer team in my village to the semi-pros, who paid actual bucks for winning games. It was just life.

When I went to university (one of the reasons the family had relocated from Galicia) I got to read some classic Chomsky texts that Carlos Otero had circulated from left field, in manuscript format. Much of those had been clandestine “details of execution”, at a time the phrase had a more sinister meaning than it does in science (the dictator sent five kids to the firing squad two months before expiring). One welcome difference was cost: “mimeographed” copies were free and commented on by fellow readers, while tangible magazines and books cost actual dough. That too was only a moderate obstacle: even the large department stores were beginning to sell such pieces, which in turn meant you could shoplift them. Aside from the obviously moral thing to do, theft from such capitalist pigs was less scary than running away from tear gas in the old part of town, though I’d been given two pieces of advice: a) Have a detention pitch ready, 50 words or less, on the evil nature of the capital and b) Never steal more than you can pay for, in case of getting caught in flagranti.

It wasn’t with Chomsky’s books that I was stopped in a department store that shall remain nameless (they may still have my name in their files). It was Bertrand Freaking Russell’s *History of Western Philosophy*. Stupider than the choice was that I didn’t have enough in my pocket to justify as an error my leaving the



store in haste; far from remembering Marx's analysis, I started babbling about it all being a mistake. The store dungeons (which still exist, now devoted to hiding key makers, shoe shiners, cleaning crews and other lesser trades) were pretty creepy. This was a time when they could "disappear" you, or at least beat the crap out of you. Eventually—after they took my name, address, finger prints and pocket change—it was all just embarrassing. It took me years to come back to Russell, after Noam spoke of his role not just in philosophy, but social change as well. He could have written shorter, cheaper books too.

I was destined to continue living in that world, which I now think of as one of the coolest environments one could experience if interested in the matters that still enthrall me. I worked odd jobs as I studied something or other (economics, then philosophy, literature, whatever I could read...), I worked for Youth for Understanding and the radio, selling ads for a commission, or anything to pay the bills. I was extremely curious about the observations I continued to read in Chomsky's political writings, for example about the hypocrisy of experts or the lies of the press. In

the world around me (a mixture of police brutality, sex, drugs, terrorism, alternative music and culture) it made as much sense, and I mean common sense, as it did not to align with any of the political parties battling it all out—or to dodge the military service. Then I came across a book called *Syntactic Structures*, which I swear I paid for with my own savings. It was apparently about what Chomsky did for a living. How did the man pay his bills anyway?

I didn't understand a word of it.

Thankfully I had patient teachers. Peter Lavery read *Syntactic Structures* line-by-line with me, while Manolo Breva took me jogging, to detoxify. Juan Villar and Deanie Johnson, often giving me lunch in their own home, filled up my ocean-wide intellectual lacunae. They also introduced me to Esther Torrego, who came lecture from the US. At the time, I collaborated on a cultural magazine that Radio Popular de Bilbao broadcasted from Café Iruña. A Saturday morning over coffee—musical interludes courtesy of Itoiz or other such rock bands, paid with free publicity and bad whiskey. Esther planted in me the idea of going to graduate school, offering to write a recommendation. So with the help of Dave Bartholomae, a visiting Fulbright scholar from Pittsburgh, I ended up in the Cathedral of Learning, teaching Spanish. There I

had the privilege of working with Sol Saporta, then on sabbatical, and was told about one Howard Lasnik, who asked me to visit him in Boston. My friend Ricardo Kaliman and I were taken by Howard to Noam's seminar, where we bumped into Carlos Otero and other famous linguists.

I got to personally meet Chomsky a couple of years later, in Princeton. By then I was already studying with Lasnik, including transcribing his lectures into class notes for our local gang. My intellectual father had shown them around, and Noam cited them – including me as a co-author! The first words the man said to me (in the urinary where we were stuck looking at the same brick wall) were: “Good to meet you if I’m going to be citing you – where’s the last-name from?” I suppose that, after experiencing the shock of attempting to pronounce it, it becomes hard to forget its bare essentials... Noam then proceeded to explain the purpose of the conference we were at, which is too personal to put in print now.

I still didn't know what to do with my life, though. By then, I was in my late twenties and the military service looming, as I'd been pushing it back as hard as I could. For perspective, there had been a military putsch in 1981, a dirty war in Basqueland soon after, the country had joined NATO... It would have been hard to hide my Basque last-name or ideas, just about anywhere I would

be sent, so I was ready to give up my passport and become stateless. I thought of myself as fairly cosmopolitan, so probably this wasn't a big deal, right? My friend David Michaels, then head of the linguistics department at UConn, thought otherwise, and he personally wrote to the Ambassador of Spain. It sounds hard to believe, but it is even harder to imagine how the pledge could have worked, as Spain decided to let me keep my passport so long as I didn't return for seven years, except with special permits.

Of course, that also meant I had to find a job, any job. And I mean something that wouldn't kick me out of the US after all those years and a mere student visa... Thinking of all of this in retrospect gives me the shivers, but again I got yet another lucky break. I suppose it was the book with Howard or working hard at keeping up with the changing field. Perhaps just that I run out of funding (another break: I had a three-year fellowship from the Basque government, or my family could not have afforded to send me abroad). Bottom line is I ended up in the job market, and it must have been a year with few candidates, since I landed the job that María Luisa Zubizarreta left vacant after she and Jean-Roger Vergnaud moved from College Park to LA. It was a 50/50 appointment in Linguistics and Spanish, which David Lightfoot and Saul Sosnowski offered me so enthusiastically that they even

waited for a year as I asked them to go to UMass as a postdoc. (Yes, that was a crazy request, but I wanted to learn some semantics and, in retrospect, that decision is what allowed me to prepare my record for early tenure.)

This is the house—the world really—that Noam built. I am proud of it, even if I haven't been a particularly good representative. I am too diffuse to focus on just syntax, which Howard trained me for. I can't help but try and connect it all to my interests in nature, politics, the arts and all that jazz. I suppose it all boils down to how I came to know and appreciate this crazy turf and its implications: as an attempt to take a stab at what it means to be human, from the perspective of the most human among our activities: language. I can't seem to let go of that hope, which in my father's humble example, as the working man that he was, meant Marx, Che, Allende... and Noam Chomsky. It has been an immense privilege to walk side-by-side with this caravan, which became larger and larger by the decades.

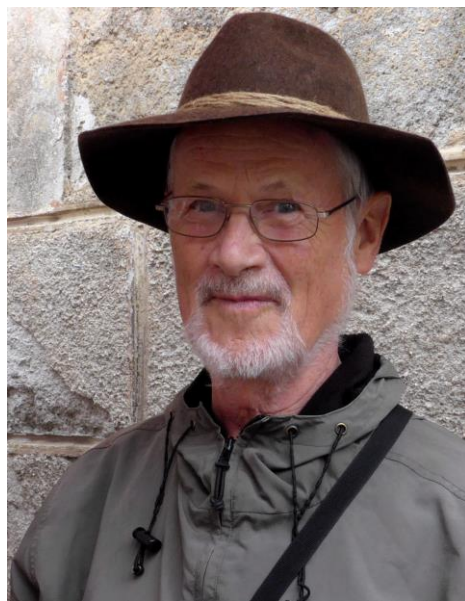
Noam: this is what we celebrate when we honor you. Sure, it's your genius, man; but above all, it's your human decency. So respect and enjoy life as you push your way to 100!

## Argument asymmetry and the status of morphological entities

Commentaries on the occasion of Noam Chomsky's 90<sup>th</sup> birthday\*

Dieter Wunderlich

In the age of 28, I left Nuclear Physics and looked for another intellectual challenge. Pretty soon I got acquainted with Manfred Bierwisch's *Grammatik des deutschen Verbs* (1963) and, stimulated by this book, with Noam Chomsky's *Syntactic Structures* (1956). So different these two books were,



both inspired me by their “generative” spirit. From this moment on, linguistics became a new fascinating home for me.

I met Noam first in the sixties, in a crowded Amsterdam lecture, lasting over more than 3 hours, in which he decomposed his ideas and argued case for case for or against a certain ordering of hypothetical structure building operations. When I first

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\* These commentaries extend and specify what I said in the symposium “Interfaces + Recursion = Language?”, held at the Berlin-Brandenburgische Akademie der Wissenschaften on 24. 03. 2005 in Berlin, as one of three commentators to Noam Chomsky's talk on “Single-Cycle Generation”.

had a conversation with him, some years later, I asked which role semantics should play within linguistic theorizing. He answered, a bit reserved, that it is not clear whether it plays any role at all. Let me note here that I was at least perplexed, because I thought that a linguistic expression usually serves to express certain meaning. My interest in linguistics was based on the idea of a sound-meaning mapping (including that both sound patterns and meanings are structured, mediated by grammar).

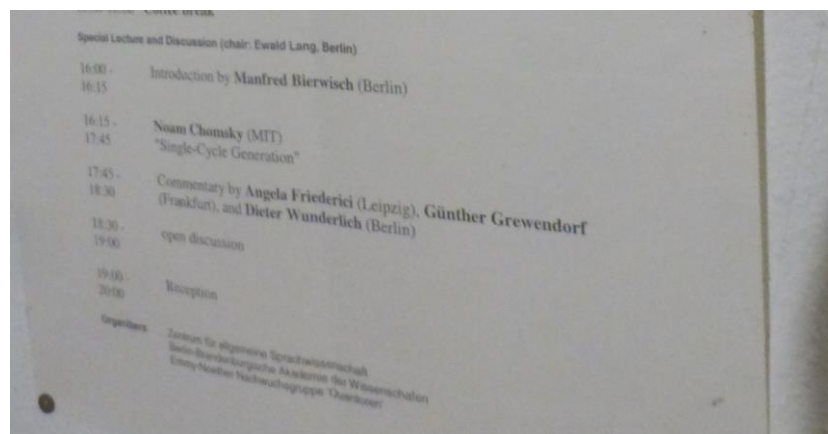
Later on, when I visited various US-American universities, I liked to make a stop at Boston to go for a Chomsky lecture at MIT. In 1974, Noam lectured from the long side of a small room giving place for about 15 listeners, and he incessantly gesticulated, wrote down words and graphs, overwrote or wiped off them along the lengthy blackboard. Later, in the eighties and nineties, the lecture room had shifted to the Great physics hall. People from Amherst organized a shuttle for visiting these lectures.

It is two things that, apart from the various contents, fascinated me here. First, it still was the whiteboard, along with Noam exercised his overwhelming suggesting-connecting-and-crossing-out attitude. Now and then the board looked like an Aztecs art-work. 1995, Noam's lecture was accompanied by a sign translator, who astonishingly accurately mastered it to

copy Noam's gesticulations in the same time scan when he translated his words – this itself was an art-work.

The other thing was that all this happened in the Great Physics Hall with a large picture of Mendeleyev's periodic system of elements on the wall. No one can deny that the defining features of this system is the number of protons in the nucleus together with the corresponding state of the electron shells, and that this was the minimalist program of physics for entering chemistry. And so (as a former physicist) I suddenly felt that what Noam was aiming at was a foundation of linguistics alongside with the minimal particles given by the large number of actual as well as hypothetical languages.

In studying, together with my students, various specialities of various, sometimes little and endan-



gered languages, I came to the conclusion that in some important structural aspects, the variation between languages seems to be greater than generative linguists usually assume. If this observation is correct, it should have influence on our conception of Universal Grammar (UG), and consequently on our

view of how the language faculty may have emerged. I will discuss two points: argument asymmetry and the status of complex morphological entities.

**Argument asymmetry.** As to the first point, I think there is good reason to conclude that syntactic subject-object asymmetry is not a universal property of language. If it is correct what Chomsky has tried to show us, namely that this kind of asymmetry follows from the assumption of a twofold Merge (external and internal) together with some further minimalist stipulations, including that transitive verbs have a lower and a higher argument, then some of these minimalist assumptions have to be amended.

It is reasonable to distinguish between lexical, morphological and syntactic argument asymmetry. All languages seem to show lexical asymmetry regarding transitive verbs, for instance, agents cross-linguistically outrank patients. Lexical asymmetry is what is preserved in the notion of abstract case, which, morphologically, is realized by suitable pronominal affixes on the head or by morphological case on the dependent. Either the lower argument is marked by accusative, or the higher argument is marked by ergative, and an experiencer being the higher argument could be even more marked by dative. Morpho-

logical asymmetry may lead to various forms of syntactic asymmetry, which can be observed also in English in which morphological asymmetry is nearly inexistent. I would like to stress here that the concept of abstract case, even if it holds for the majority of languages, is not exceptionless.

More specifically, I claim that inverse morphology as shown by the Algonquian languages cannot be captured by the notion of abstract case. In these languages, lexical asymmetry is out-balanced by the obviation scale, so that the morphological realization of arguments is symmetric, and, what is even more important, certain kinds of syntactic asymmetry do not arise.

The examples in (1) show that the direct marker *aa* applies if the subject (i.e. the higher argument) is more salient than the object (in terms of person, animacy or proximateness), whereas the inverse marker *ik* applies if in contrast the object is more salient. Except of these two markers, the (1a) and (1b) sentences are identical: there is nothing in the syntax that reflects asymmetry. There is only one set of person-number affixes, which are arranged in the same way, regardless of whether they identify the subject or object. Moreover, in principle there is free word order.

(1) Morphological subject-object symmetry in Plains Cree (Wolfart & Carroll 1981)

- |   |   |
|---|---|
| <p>a. <i>waapam-aa-w naapeew siisiip-a.</i><br/>         see- DIR- w man duck-OBV<br/>         'The man sees the duck.'</p> | <p><i>ni- waapam- aa-naan siisiip-a.</i><br/>         1- see- DIR-1pl<br/>         'We see the duck.'</p> |
|---|---|

- b. *waapam-ik naapeew siisiip-a. ni- waapam- iko-naan siisiip-a.*  
 see- INV man duck-OBV 1- see- INV-1pl  
 'The duck sees the man.' 'The duck sees us.'

The only morpheme that differs is the voice-suffix (direct or inverse). Note that in each single sentence with a transitive animate verb (a verb, in which both arguments are animate) there must be one argument that is less salient and therefore marked for obviation (which is 'duck' here because the other argument is a human being). It is this argument that interacts with voice. In the direct voice, it becomes object, and in the inverse voice, it becomes subject. The sentences above are in no way ambiguous, but do not express their asymmetry in the syntax.

This behavior of Algonquian grammars is even more spectacular, when one considers the examples in (2) and (3). Not only can the subject bind a possessor of the object (as in (2a)), which is similarly possible in case-marked languages, but also the object can bind a possessor of the subject (as in (2b)), which is not possible in case-marked languages or in the English SVO pattern.

(2) Syntactic subject-object symmetry in Plains Cree (Dahlstrom 1991: 99).

- a. *kahkiyaw iskweew-ak saakih-ee-w-ak o- taanis-iwaaw-a.*  
 all woman-pl love-DIR-3-pl 3POSS-daughter-3plP-OBV  
 'All<sub>i</sub> women love their<sub>i</sub> daughters.'  
 b. *kahkiyaw iskweew-ak saakih-ik-w-ak o- taanis-iwaaw-a.*  
 all woman-pl love-INV-3-pl 3POSS-daughter-3plP-OBV  
 'Their<sub>i</sub> daughters love all<sub>i</sub> women.' [≈ all women are loved by their daughters.]

(3) Another example of subject-object symmetry in Plains Cree:

- a. *namooya awiyak wanikiskisitotaw-ee-w o- tawaasimis-a*  
no one forget-DIR-3 3POSS-child-OBV  
'No one<sub>i</sub> forgets his<sub>i</sub> child.'
- b. *namooya awiyak wanikiskisitotawaa-k o- tawaasimis-a*  
no one forget-INV 3POSS-child-OBV  
'His<sub>i</sub> children forget no one<sub>i</sub>.' [≈ nobody is forgotten by his children]

Here, the interpretation of the (b) sentences is impossible for us (and most speakers of other languages), because binding requires structural c-command for us – thus, for grasping the intended interpretation we had to transform the sentences into passive. The actual interpretation proceeds as follows: first, a possessor is always more proximate than the possessed, and second, there can be only one proximate element in a sentence; therefore, “all women” must be identical with the possessor of “daughters”, and “(no) one” must be identical with the possessor of “child”. This makes that in the inverse voice the quantifier within the object gets scope over the subject. Everything is okay in these sentences, even if it contradicts the structural c-command relation.

Note that the ordering of constituents does not play a role; all positional alternatives get the same interpretation. One furthermore has to notice that the inverse morphology crucially differs from passive: there is no demotion of an argument, and moreo-

ver, the Algonquian languages independently have an impersonal passive in which the intransitive verb morphology applies.

Somewhat related to this issue of argument asymmetry is a particular difference between German and Icelandic. Both languages have dative-nominative experiencer verbs: German *gefallen* is similar to Icelandic *líkar* 'like'. But if these verbs are embedded in a control verb construction, they behave rather differently. In Icelandic, the construction is slightly acceptable only when the highest argument is controlled (and the dative on the experiencer is dropped), while it is strongly forbidden to control the nominative object – as shown by (4a, 4c). In contrast, German behaves to the opposite. It is not possible to control a dative argument, but a nominative argument can be controlled, even if it is the lower argument, see (4b, 4d).

(4) Control in Icelandic vs. German

- a. Ég vonast til að \_\_\_<sub>DAT</sub> líkathessi bók  
I hope for to \_\_\_<sub>DAT</sub> like this book.NOM  
'I hope to like this book.'
- b. \*Ich hoffe, \_\_\_<sub>DAT</sub> das Buch<sub>NOM</sub> zu gefallen.  
'I hope to like this book.'
- c. \*Ég vonast til að henni líka \_\_\_<sub>NOM</sub>.  
I hope for to she.DAT like \_\_\_<sub>NOM</sub>  
'I hope to be liked by her.'
- d. Ich hoffe, ihr \_\_\_<sub>NOM</sub> zu gefallen.  
I hope she.DAT \_\_\_<sub>NOM</sub> to like  
'I hope to be liked by her.'

These data show an interesting point. In Icelandic, lexical asymmetry is projected into syntax, even if lexical case is present, while in German it is counterbalanced by another morphological asymmetry. One therefore says that Icelandic has quirky subjects, while German only has nominative subjects. Here seems to work a parameter which makes German syntactically differ from Icelandic. Since this difference is rather subtle, but has consequences in other fields of syntax (raising to object, agreement etc.), one likes to know what the crucial point is. My proposal is that the constraint “Do not allow a nominative argument in the infinitive clause” ranks higher than the alternative constraint “Do not allow the highest argument in the infinitive clause” in German, while the opposite ranking holds in Icelandic (Wunderlich 2009). Note that all this is an effect of lexical dative in experiencer verbs, and as such certainly not part of Universal Grammar, but certainly a possible alternation within a particular niche of grammar.

**The theoretical status of morphological entities within grammar.** My second point concerns the status of morphological entities. Particularly interesting are adverbial operators which can either be an independent word or a verbal affix, as for instance *again* and the prefix *re-*, both having the meaning “a second time” operating over some event. Consider (5a, b),

which have clearly different meanings: *re-* within the word has scope just over the verb but not including the object (with an indefinite article, functioning as an existential quantifier), whereas *again* has scope over verb and object. A sloppy reading of (5b) including the reading of (5a) might be possible; in any case, adverbial operators within a word have a more restricted scope than those outside of a word.

(5) Word-internal vs. word-external operators in English

- a. *Alex reclimbed a hill*: (there is a hill) (a second time) (Alex climbed it)  
 ⇒ Alex climbed the same hill as before.
- b. *Alex again climbed a hill*: (a second time) (there is a hill) (Alex climbed it)  
 (preferred:) ⇒ Alex climbed a different hill than before.

This fact excludes the possibility of generating *reclimb* in the same way as *again climb* because something more is needed to generate suitable scopes than phonological spell-out. With other words, morphology of this kind has to be incorporated into grammar as a more principal stage of grammar than spell-out.

A similar example is shown in (6): (6a) contains a serial verb, which describes the complex situation of “returning, thereby having the bag with himself”, whereas (6b) describes two single situations, and it is not determined here whether Yoshi still has the bag, when he comes back at home.

(6) Serial verbs in Japanese (Gamerschlag 2005: 31)

- a. *Yoshi wa baggu o ie ni moti-kaet-ta.*  
 Yoshi TOP bag ACC house to have.return-PAST

- ⇒ 'Yoshi returned with the bag at home.'
- b. *Yoshi wa baggu o moti, ie ni kaet-ta.*  
 Yoshi TOP bag ACC have house to return-PAST  
 'Yoshi took the bag and went back to his home.'  
 ⇒ It is possible that Yoshi lost the bag on his way.

Serial verbs seem to be a borderline case between morphology and syntax. Semantically, they always behave like verbal compounds because they only can refer to a single coherent event, unlike coordination, which can refer to two independent events. Otherwise, the common argument in a serial verb construction is sometimes placed between the two verbs, which suggests a syntactic nature, but could also be interpreted as a kind of syntactic infix.

An example is shown in (7a), in which èwé 'goat' takes two different roles: it functions as the object of 'push' and similarly as the subject of 'enter', resulting in the literal interpretation 'Uyi pushed the goat, and the goat entered a hole'. Thus, the serial verb construction as a whole expresses here a ditransitive predicate, which single verbs of Edo do not allow to express. (This might motivate why these constructions evolved.) Furthermore, (7b) shows that an argument of the second verb can be extracted if it is focused upon. This indicates that the serial verb '*push enter*' clearly behaves differently from a syntactic coordination in which such an extraction would be impossible. It

seems that certain complex morphological objects do not obey syntactic constraints on movement.

(7) Extraction from serial verb construction in Edo (Baker & Stewart 1999)

- a. *Úyi sùá èwé lá ùvún*  
 Uyi *push* goat *enter* hole  
 'Uyi pushed the goat into a hole.'
- b. *Ùvún òré [Úyi sù!á èwé lá - ]*  
 hole FOC Uyi *push* goat *enter*  
 'It was a hole Uyi pushed the goat into.'

Another interesting piece of serial verbs is that in Akan, they have to be in concord with the subject of the construction, as shown in (8a). But this requirement can obviously violate a selection condition, as seen in (8b): it is not possible to use the verb 'flow' for an individuated subject. Moreover, the most certain interpretation of (8a) is that the corn flowed into water, and not the speaker who performed the action. Again, this kind of concordance can best be explained by the assumption that the serial verb '*take flow*' is a single morphological entity, and the subject of this entity has to be marked on each relevant part of it.

(8) Concord in a serial verb construction in Akan, violating the selection condition of the second verb (Schachter)

- a. *me-de aburow mi-gu nsum.*  
 I-*take* corn I-*flow* water-in  
 'I threw the corn into water.'
- b. \* *mi-gu nsum*  
 I-flow water-in; violates the selection condition [+mass noun] of *gu*
- c. *aburow gu nsum.*  
 corn flow water-in  
 'The corn flowed into water.'

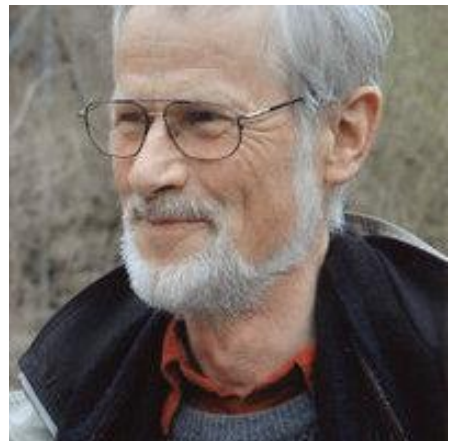
Summarizing, I find that there are good reasons to make a distinction between lexical, morphological and syntactic structures, and only in the ideal language all the interesting properties of these structures coincide. Note also that phonologists often claim the existence of more than one levels within morphology, such as root- and stem-level.

Recently, much descriptive technology has been developed to integrate morphology into generative syntax, but not always successful. One point is that the technology developed in enterprises such as distributive morphology is far from being due to minimalist standards. This might be justified by saying that spell-out often is a quite idiosyncratic mapping. However, if one considers languages with rich morphology, especially those showing some amount of compounding, noun-incorporation and serial verb formation, and especially polysynthetic languages, one has to conclude that morphology is on par with syntax, hierarchically organised and allowing iterative-recursive operations – it is therefore misleading to delegate morphology to some kind of spell-out. What one needs is minimalist morphology, based on a lexical inventory of morphemes which can freely be combined, and subjected to a few general constraints. It seems that in a way minimalist morphology is simpler than minimalist syntax.

Why is that so? If one looks at complex morphological, hierarchically organised entities, one never finds indication of extractions or movements: instead one finds strict positions of elements, no agreement between elements, and also no word-internal possibilities to express topic or focus. Thus, morphological entities are in a way simpler than syntactic ones because they lack the concept of movement. In Chomskyan terms, they are produced by external Merge only.

The documented narrative texts in many minor (and often endangered) languages show that speakers of these languages mainly work within the domain of morphology; these texts do not exhibit much syntactic structuring.

The question, then, is the following: Could morphology, defined as a full-fledged language faculty without movement, be a predecessor of the language faculty described by Chomsky's minimalist program? I would like to



entertain the idea that movement, and consequently also internal Merge together with the production of copies, is a secondary invention, and not the invention that characterizes the great leap by which homo sapiens departed about 200.000 years ago.

## **The Contributors, with One Main Work Each**

- Nicholas Allott – (with Neil Smith) *Chomsky: Ideas and Ideals*, 3<sup>rd</sup> edition
- Thomas Bever - *Sentence Comprehension – The Integration of Habits and Rules*
- Manfred Bierwisch – *Die Grammatik des deutschen Verbs*
- Akeel Bilgrami – *Belief and Meaning: The Unity and Locality of Mental Content*
- Zeljko Boskovic – (ed.) *Minimalist Syntax. The Essential Readings*
- John Collins – *Chomsky. A Guide for the Perplexed*
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- Robert Freidin – *Generative Grammar: Theory and Its History*
- Naoki Fukui – *The Generative Enterprise Revisited: Discussions with Riny Huybregts, Henk van Riemsdijk, Naoki Fukui and Mihoko Zushi*
- Angel Gallego – *Phase Theory*
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- Norbert Hornstein – *A Theory of Grammar*
- Ray Jackendoff – *Foundations of Language: Brain, Meaning, Grammar, Evolution*

- Samuel Jay Keyser – (with Kenneth Hale) *Prolegomenon to a Theory of Argument Structure*
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- David Lightfoot – (with Stephen R. Anderson) *The Language Organ: Linguistics as Cognitive Physiology*
- James McGilvray – *The Cambridge Companion to Chomsky*, 2<sup>nd</sup> edition
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- Neil Smith – *Chomsky. Ideas and Ideals*. 3<sup>rd</sup> edition (with Nicholas Allott)
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- Beverly Stohl – (forthcoming) *Stata Confusion*
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