
An Interview with *Noam Chomsky*

HRP: How did you get started in academic work?

Chomsky: Well, I went to college like every good little boy, got into the Society of Fellows at Harvard, spent four years there; and then, getting professionally into academic work was kind of an accident. What I was doing was not a field; there was no professional route where you could do this, which is why I ended up in MIT in an electronics lab that didn't care if there was a profession or not; it was just interested in the work. But, the chances that I would have been appointed in an academic department were pretty slight.

HRP: What specifically about your work made it impossible for you to be appointed in a department?

Chomsky: There wasn't any such department around; I mean there were language departments, psychology departments, anthropology departments; there were scattered linguistics departments, maybe one that I knew of, but this kind of work had no niche. So, the first piece I submitted for publication in 1955 was turned down with a reasonable response—namely, the reviewers couldn't make head or tail of it. There were no reviewers in a field who could recognize this as in their field. In fact, it's kind of striking; what happened here was replicated around the world. Linguistics mostly appeared outside the major academic universities everywhere in the world, not just here.

HRP: Was that frustrating to you?

Chomsky: MIT was a fine place to be. I liked the environment; I was in an electronics department. There were no departments of linguistics or philosophy or in those days psychology, political science, economics. In fact, in those days, even math and physics were service departments for engineers at MIT.

HRP: How do you conceive of the relationship between linguistics and philosophy?

Chomsky: The status of philosophy as distinct from the sciences or history is artificial. Until the nineteenth century there was no such distinction. You can't answer the question whether Hume or Kant were philosophers or scientists—they were both. Kant was working on foundations of physics; Hume was studying what we would call psychology—whatever makes the mind work. The split between the

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fields developed later. Philosophy can be what it likes: it can be studying the conceptual foundations of some discipline; it can choose to study problems that are in one or another field; and it's traditionally studied problems that are in the field that later became linguistics. For example, when Descartes is talking about language, is he a linguist or a philosopher? The question has no particular meaning.

HRP: I'd like to hear more of your thoughts on the relationship between philosophy and linguistics. For instance, do you see philosophy of language as proto-linguistics? John Austin, for example, saw philosophy as the mother of sciences. His philosophy was going to lead to a study of language that he called linguistics.

Chomsky: I don't think the boundaries between disciplines mean very much. I don't think you can answer the questions whether the study of life belongs to chemistry or biology.... The study of sound and meaning and their connections: certainly there's a tradition in philosophy that says a lot about those things. For example, take the British Empiricist tradition from Hobbes through Hume. There was a lot of interesting study of what we would nowadays call lexical semantics and you can certainly draw from that. Linguistics as I see it at least is a part of cognitive psychology, which in turn is a part of biology. And that interacts in all sorts of ways with thinking about the nature of mind and the nature of mental processes, which have traditionally been core problems of philosophy. Philosophy has dealt with all kinds of questions. Here I think Austin's picture is correct. As particular disciplines have emerged with their own special techniques, understanding, theoretical structure and so on, philosophy has ended, pushed them off, and investigated their conceptual foundations, but not to do work right at the center of them.

HRP: In *New Horizons*, you lay forth a sort of semantic skepticism. What is the precise nature of the skepticism? The take I got is that there's no reason to expect natural language concepts to be subject to scientific inquiry.

Chomsky: They are subject to scientific inquiry, or they can be; but there's no reason to believe that there you'll discover anything like the Fregean or Peircean relation of reference or denotation. If semantics involves at least partially the study of the relationship between words and things, which has the properties of a Fregean meta-mathematics—theory of arithmetic, where a symbol denotes a thing—there's no reason to believe that natural language has that property. That's the only semantic skepticism: that words have meaning.

HRP: So, certainly you're not saying that our words don't pick out objects in some way, right?

Chomsky: Yeah, I am saying that. I'm saying that we pick out objects; we use words to pick out objects. And when we say that we use words to pick out objects, that's already getting us into a morass. I mean, we also use words to make sounds, but that doesn't mean that there's a relation between a word and a sound; nobody thinks that. We use words to make sounds and we use words to talk about the world. And in talking about the world we perceive it in certain ways and interpret it in certain words—which is given by the internal nature of the words, but the same

is true of the sounds we make. There's no word-sound relation; there are no sounds in the world.

HRP: So are you proposing some sort of error theory—that we're just widely mistaken about the relation between words and things?

Chomsky: I don't think there's any error theory. That's a specific philosophical doctrine that, in fact, is not part of common sense. As far as I know there's no natural language, certainly not English, that has any word with the meaning of "refer" in the technical sense of reference that is the relation between a word and an object. Words don't refer; English people refer; it's an act. And this is not a new observation.

HRP: So then the proper study of semantics would be not the relationship between words and things, but of the relationship between people and words and things?

Chomsky: Just like the proper study of phonetics is the relation between people and words and noises.

HRP: On this conception, how do you study semantics?

Chomsky: The same way you study phonetics. You look at what's inside: there's something inside the mind, inside the language faculty of the brain. That [faculty] includes entities, we think, like lexical entities that have phonetic properties and semantic properties; there are interesting operations that form internal expressions, symbolic expressions that we compute. And a person uses those to make sounds and to talk about the world. Every aspect of this process can be studied. But it's not going to lead you, as far as I know, to a relation between an internal object and a sound or between an internal object and a mind-independent thing.

HRP: How does this model deal with certain traditionally accepted ideas about language such as compositionality?

Chomsky: Well, actually, this is the source of the traditional notion of compositionality for language. The internal generative processes are the compositionality of language. There was no real theory of compositionality until this kind of thing came along.

HRP: What does the compositionality thesis become?

Chomsky: That internal to the mind-brain, there is a recursive procedure that constructs expressions; certain expressions that are internal are symbolic objects consisting of properties. The person uses the properties with the sensory motor system to make noises, and the person uses the properties with various conceptual systems to talk about the world. There's a certain degree of parallelism—in neither case is there any mind-independent entity that is associated with the internal object. So there's no mind-independent entity "motion of molecules" that is connected with the internal object, book, in my head. And there's also no mind-independent entity

that's associated with it by a relation of reference, as far as I know.

HRP: Would it be fair to say that the main concern about reference is that it postulates mind-independent entities—

Chomsky: No: it postulates mind-independent entities and relationships between them and mind-internal entities. I mean, there certainly are mind-independent entities—I'm sitting in one. But, what makes it a chair is not mind-independent.

HRP: More generally, what do you think are the most interesting contemporary questions about language?

Chomsky: There is a superficial paradox in the study of language. Traditional grammar was thought to describe languages, but it doesn't. Around fifty years ago, the concept of recursive generation, recursive procedure, became clarified. It became possible to ask for language, say my language, what is the recursive procedure that determines the sound, the meaning of an infinite array of expressions. Now, traditional grammar and dictionaries were thought to answer those questions. But a traditional dictionary barely gives the meaning of any word. It gives enough information so that being a human being who already has an internal linguistic capacity, you can use those hints to determine the meaning of the word. We have to add to the dictionary what's internal to the mind. Similarly, a traditional grammar gives you hints, examples, rough principles, which allow you to fill in your intrinsic knowledge to give you the full information about the language, at least in principle. That's very much like language acquisition. A child is presented with data and constructs from that data a full knowledge of language. That knowledge is at the very least a recursive procedure, which is enumerating the infinite set of expressions. What is the procedure? Here you begin to go off in two different directions.

First, if you try to describe the details of some language, say English or Swahili or whatever, you find extreme complexity, diversity among constructions, like rules for forming and interpreting a question. If you take a look at the next language over, it appears that there are totally different rules. So what you appear to see are tremendously diverse systems different from one another and complex internally. On the other hand, you know that can't be correct, because each child picks up that complex system on the basis of data that by no means determines—doesn't even come close to determining—just gives hints about it.

So the problem of language acquisition is very much like the problem of growth: an embryo gets external inputs—nutrition, experience later in life—but the course of its development is internally directed. There's no external experience that determines that one particular embryo will become a chicken and that another will become a wolf. There's no external data that determines that at a certain age you'll undergo puberty. The external experience will affect it, but it shapes an intrinsic course of development. Cognitive development is the same. There's an intrinsic course of development that's shaped by the environment. The task of the study of language is to try to show that you can account for the apparent diversity and complexity by attributing to the individual an intrinsic set of principles that can be shaped or modified to give one or another structure. And as I said, this is a paradox: looking at individual languages, they seem diverse and complex, but you know they basically have to be cast in the same mold, otherwise you could never acquire any of

them.

This paradox came to a tentative resolution about twenty years ago with a picture of language that looks plausible: that there are fixed principles, which are part of our innate structure, for all aspects of language—semantics, syntax, and phonology—and there are a set of options-parameters that can be fixed one way or another. And if you fix the options one way you get Japanese; if you fix them another way, you get Swahili, and so on. Presumably the same is true of lexical semantics, the same with phonology. That development led to a huge explosion in the field in every area.

The part that interests me specifically?... The preliminary problem is to describe the facts; the second, deeper problem is to try to find the intrinsic principles that yield the descriptive facts when options are set one way or another. But, there's a third problem. That is to ask why the principles are the way they are. Why do you have these principles and not other principles? Why does the internal computational system have the particular principles that it has? And a possible answer to that is that the principles that it has are a kind of an optimal solution to a sort of engineering problem.... Imagine a primate like us with a sensory motor system like ours and a conceptual system like ours, but no way of interlinking with a recursive procedure that will create an infinite array of expressions, each of which expresses a thought. Suppose you have that primate. If you're an engineer and you want to insert that system into an organism and you want to make it efficient, what system would you invent? The question is, how close does language come to being that system?

HRP: So you're looking at evolutionary explanations?

Chomsky: If you looked at this from an evolutionary point of view (this is way oversimplified) you would discover that large parts of the sensory-motor and conceptual systems are shared with other primates, but they lack the computational system that first generates an infinite array of internal expressions and secondly links conceptual systems to the sensory motor system. It would be delightful to show that what emerged, emerged because it is the simplest solution to the (engineering) problem.

HRP: Could I ask you briefly about some of your political involvement?

Chomsky: Uh-huh.

HRP: How do you conceive, or do you conceive of a relationship between your academic work and your more public, political work?

Chomsky: If you're a human being you're concerned about human problems. It's called political work if you like. It's just being a normal, moral, decent human being, concerned with the problems people face. And, if you're in a position to do anything about it....

HRP: So would you say that your position of prominence in the academy—

Chomsky: No, the so-called political interests were an important part of my life long before....

HRP: What's been the most interesting or pressing problem that you've worked on?

Chomsky: You're responsible for your actions and the anticipated consequences of your actions. So if there's some monstrous atrocity going on in Sri Lanka and I can't influence it, I can study it if I want, but it's like studying Ghengis Kahn—there's no moral value to it. On the other hand, if there's some monstrous atrocity going on and I can do something about it, because my own government is involved, that becomes a matter of prime concern. At some times that may be the war in Vietnam, at another, terrorist atrocities in Central America, the Middle East, or the form of economic integration being instituted by power centers and its effects on people's lives.

HRP: Can I ask you about Richard Posner?

Chomsky: Sure.

HRP: In his book [*Public Intellectuals: A Study of Decline*] he attacks your work as not being “accurate, meticulous, and responsible” and for lacking “a clear sense of difference between fact and fiction.”

Chomsky: He didn't even seem to be able to follow elementary arguments. He didn't give any evidence that anything was wrong. He just said it's wrong. What interested me was that he couldn't understand what I was discussing. For example, in the case of the war and the bombing of Serbia, I have a book called *The New Military Humanism*, which is about what the title says it's about: the idea that a new era has emerged in which the leaders of the enlightened states will follow principles and values for the first time in history and will open the way to a noble phase in international policy (this is all in quotes). And I asked the question—is this true? Has there been a “normative revolution,” in which principles and values guide states? And how do you study this? It's not enough when the leaders do something they say it's humanitarian; you have to assess humanitarian *intent*. In fact, there's a chapter called “Assessing Humanitarian Intent.” This is the chapter he discusses. This chapter runs through a series of actions that our leadership is involved in and asks whether in those particular actions we see humanitarian intent or old-fashioned power politics. He discusses that chapter and says that it evades the issue. What issue does it evade? Well, it evades the question that he has in mind—whether we should bomb Serbia. Now it's true that that chapter doesn't answer the question whether we should bomb Serbia, but it does answer the question I'm addressing: is there a normative revolution in international affairs? But he is so ideologically fanatic that he can only imagine that you're discussing somebody else's crimes. You can't be studying yourself. Now that's ideological fanaticism.

In fact, it's utterly explicit in the book. The book starts by saying there are two separate questions—one, is the bombing of Serbia justified and another, is there a new age of humanitarianism. And I'm gonna discuss the second question. Then at the end of the book, it says, well, this leaves the question of whether to bomb Serbia unanswered. In the course of this I've also asked whether the bombing of Serbia had a humanitarian intent and I looked through the record on that and it didn't; where's the evasion of the issue?

If you're so fanatic that the only topic that you can imagine discussing is whether Milosevic is a criminal...the rest of the book must seem like evading the issue. But that's just ideological fanaticism. And case by case, that's the way it goes. I mean I think it's one of the silliest books I've ever looked at. Also, kind of interesting is his attempt to explain why people become engaged in this activity. So, why do I spend a lot of my time doing this? It must be because I'm trying to gain fame or fortune or something like that. Is that the way a human being acts? If you see a hungry child in the street and you give him a piece of bread is it because you're trying to gain fame and fortune? If you are involved in certain actions because you are part of a state and you think those actions are wrong and want to change them, is that any different than trying to help a child? Why does that have to be accounted for in terms of the gain that you get from it in some crazed economic model? That's absurd.

HRP: Has your focus on doing this type of moral work led you to do work in moral philosophy?

Chomsky: Moral philosophy is interesting. Does it apply to real problems in the world? It's a huge gap. It's only, after all, pretty recently that even hard sciences have come to have influence on practice.... Thomas Edison could be a great inventor without knowing any science at all. And the gap between human practice and understanding of moral philosophy is a chasm as compared to that.