

The history of linguistics

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Origins of linguistics In several cases, the roots of linguistics lies in the wish to maintain sacred texts.

Most notably in the preservation of the Vedas, and the tradition in India of which Panini's work (c. 6th century BC) is the pinnacle.

Islamic tradition began a century after the writing of the Koran, to counter the evolution of Arabic dialects. (Sibawayhi)

Medieval Hebrew grammarians (heavily influenced by Arabic tradition).

Linguistics in the classical world

Dionysius Thrax (2nd century BC) Greek linguist of great influence. Provides an analysis of Greek parts of speech (categories of words).

Linguistics?

Systematic (or, scientific) treatment of the structure of language.

The search for an explanation of aspects of language.

Ah—but what is an explanation? In the late Middle Ages, it involved the study of the writings of the scholars from the Classical period (Roman, Greek)...

1 19 century

A major component of the 19th century's understanding of an explanation was a precise account of the historical origin of whatever it is we are studying: a people, a word, a language, a nation.

The search for the history of European languages, especially insofar as this bears on what the peoples of Europe are.

- Etymologies
- Law of (exceptionless) sound change: sounds change in mechanical ways over time.
- The discovery of Indo-European

IndoEuropean

Indo-Iranian languages

Italic languages (including Latin and its descendants, the Romance languages)

Germanic languages

Celtic languages

Baltic languages

Slavic languages

Albanian language (and extinct cousins)

Anatolian languages (extinct, most notable was Hittite)

Tocharian languages (extinct, Chinese Turkestan):

Greek

Armenian

20th century (Extending from the 19th century:) the discovery of the vastness of the non-Western world: in this case, of the thousands of non-European languages. What can they tell us about Language?

Especially in the United States: the desire to understand the (largely unwritten) languages of non-European peoples (Native American, in the North American tradition). Rise of field of anthropology.

Linguistics Departments arose from either Classics departments or Anthropology departments

2 *Algorithm as mode of explanation*

An algorithm is a completely explicit procedure that could be performed and accomplished by a finite digital device.

The notion has antecedents before the 20th century (especially in development of logic), but it became important in the development of the philosophy of mathematics, and then the development of the computer (1940s – 1950s).

Linguistics Abu Ja'far Mohammed ibn Musa Al-Khowarizmi
Hisab al-jabr w'Al-muqabala Liber Algorismi de numero Indorum

Explanation...

Psychological (functional) explanation: something about language is explained if it can be shown to follow from psychological principles.

Sociological explanation: something is explained if we can place it in a sociological context. How do languages change? What groups of people are linguistically innovative, which ones are conservative?

3 *Fields of linguistics*

Historical linguistics (one sense of explanation). – "Theoretical linguistics": algorithmic explanation; influence of Noam Chomsky. Syntax: algorithmic, functional/cognitive Phonology: American and European structuralism; Generative phonology (1965-1975?)...

3.1 *Phonology*

- Structuralism 1920-1965
- Generative phonology 1965-1975
- Representation-based phonology
- (autosegmental, metrical phonology)
- 1975-1990
- Lexical phonology (1980s)

- Optimality theory (1990s)

4 *Jehovah's problem*

4.1 *John B. Watson and the origin of behaviorism*

Wilhelm Wundt(1832-1920) German

- Established the first psychology laboratory
- Early study of the mind by psychologists
- "Prolegomena to a study of introspection"
- Edward Titchener, who viewed himself as a student of Wundt.
- The American Journal of Psychology 23(3) July 1912 427-448
- The focus was Mind #1: consciousness or awareness.

[T]hose who remember the psychological laboratories of twenty years ago can hardly escape an occasional shock of contrast which, for the moment, throws into vivid relief the difference between the old order and the new. The experimenter of the early nineties [1890s! JG] trusted, first of all, in his instruments; chronoscope and kymograph and tachistoscope were... of more importance than the observer; and the observer had nothing more difficult to do than to analyse a chord, or to report the 'fluctuation of attention,' or to trace schematically the course of successive association.

There were still vast reaches of the mental life which experiment had not touched; we believed, at least the enthusiasts among us, that the method would some day carry us to them; meanwhile, certain chapters of psychology were written rather in the light of 'system' than by the aid of fact. Now, twenty years after, we have changed all that. The movement towards qualitative analysis has culminated in what is called, with a certain redundancy of expression, the method of 'systematic experimental introspection.'

Our graduate students—far better trained, it is true, than we were in our generation—sit down cheerfully to introspective tasks such as we had not dreamed of. And it is when some second-year graduate brings in a sheaf of reports upon Understanding or Belief, upon Recognition or Judgment, that the director of a laboratory [obviously, this is Titchener!] has his historic sense aroused, and wonders what he, at the same age, could have made of a similar problem.

But if the individual is thus disposed to take for granted the development of the science, it is true, on the other hand, that his indifference is offset by a kind of self-consciousness on the part the science itself. A great change has taken place, intensively and extensively, in the conduct of the introspective method

Stumpf affirms that experimental psychology is "in the main nothing else than a method for inciting, systematically and with objective control of conditions, to introspection." William James

Introspective observation is what we have to rely on first and foremost and always. Behaviorism An American movement (responding in part to Russian work: Pavlov). Two most influential

spokesmen: John B. Watson (invented "behaviorism") B. F. Skinner
 Behaviorism (1913): JB Watson

It has been maintained by its followers generally that psychology is a study of the science of the phenomena of consciousness. It has taken as its problem, on the one hand, the analysis of complex mental states (or processes) into simple elementary constituents, and on the other the construction of complex states when the elementary constituents are given. Behaviorism (1913): JB Watson The world of physical objects (stimuli, including here anything which may excite activity in a receptor), which forms the total phenomena of the natural scientist, is looked upon merely as means to an end. That end is the production of mental states that may be 'inspected' or 'observed'.

It is agreed that introspection is the method par excellence by means of which mental states may be manipulated for purposes of psychology. On this assumption, behavior data (including under this term everything which goes under the name of comparative psychology) have no value per se. They possess significance only in so far as they may throw light upon conscious states.

Indeed, at times, one finds psychologists who are sceptical of even this analogical reference. Such scepticism is often shown by the question which is put to the student of behavior, 'what is the bearing of animal work upon human psychology?'

The enormous number of experiments which we have carried out upon learning have likewise contributed little to human psychology. It seems reasonably clear that some kind of compromise must be affected: either psychology must change its viewpoint so as to take in facts of behavior, whether or not they have bearings upon the problems of 'consciousness'; or else behavior must stand alone as a wholly separate and independent science.

This attempt to reason by analogy from human conscious processes to the conscious processes in animals, and vice versa: to make consciousness, as the human being knows it, the center of reference of all behavior, forces us into a situation similar to that which existed in biology in Darwin's time. The whole Darwinian movement was judged by the bearing it had upon the origin and development of the human race.

The wealth of material collected at this time was considered valuable largely in so far as it tended to develop the concept of evolution in man. It is strange that this situation should have remained the dominant one in biology for so many years. The moment zoology undertook the experimental study of evolution and descent, the situation immediately changed. Man ceased to be the center of reference.

I do not wish unduly to criticize psychology. It has failed signally, I believe, during the fifty-odd years of its existence as an experimental discipline to make its place in the world as an undisputed natural science. Psychology, as it is generally thought of, has something esoteric in its methods. If you fail to reproduce my findings, it is not due to some fault in your apparatus or in the control of your stimulus, but it is due to the fact that your introspection is untrained.²

Titchener, who has fought the most valiant fight in this country for a psychology based upon introspection, feels that these differences of opinion as to the number of sensations and their attributes; as to whether there are relations (in the sense of elements) and on the many others which seem to be fundamental in every attempt at analysis, are perfectly natural in the present undeveloped state of

psychology.

While it is admitted that every growing science is full of unanswered questions, surely only those who are wedded to the system as we now have it, who have fought and suffered for it, can confidently believe that there will ever be any greater uniformity than there is now in the answers we have to such questions.

I firmly believe that two hundred years from now, unless the introspective method is discarded, psychology will still be divided on the question as to whether auditory sensations have the quality of 'extension', whether intensity is an attribute which can be applied to color, whether there is a difference in 'texture' between image and sensation and upon many hundreds of others of like character.

4.2 *BF Skinner as a graduate advisor*

Mandler: on Skinner

Herb Jenkins once explained to me the attraction of Skinnerian psychology to a graduate student. He said, "You know, you can learn Skinnerian psychology very quickly: The first day you're there, you learn that statistics is no damn good. Bang! like that. I don't have to worry about that. The next day you learn physiological psychology is no damn good. Bang! just like that. You don't have to worry about it. The third day you learn that the history of psychology is no damn good. Bang! just like that, you've handled that. You go down any road until you come to Fred Skinner, and that's where psychology starts. It's really like that!"

Levitt, on early cognitive psychology at Harvard:

Watson's 1913 manifesto was "in part a defense of his own work, a way of making it acceptable and respectable. Watson's preoccupation with marking his place in American psychology was also noticeable in his treatment of his intellectual predecessors. He referred to "behaviorists," i.e., his colleagues in work on animal behavior, but there was no acknowledgement that animal researchers as G. J. Romanes, C. Lloyd Morgan, or Jacques Loeb are his conceptual predecessors and pathfinders.

The approach of the Center, focused as it was on doing new things, things thought never to have been done before, led to insularity and arrogance. Insularity in that, since it was assumed that nobody in psychology had ever had these ideas before, we could afford to ignore all else that was going on. Arrogance in part because we assumed that these were the only ways to approach psychological issues and in part because this was a long-established Harvard tradition.

4.3 *Linguistics*

Bloomfield's students thought "it" all started with Bloomfield. . .

4.4 *Hockett on Jehovah's problem*

Remember that I cut my professional eye teeth on Bloomfield's book back in 1933. Bloomfield himself assumed no "eclipsing

stance”:[1] the very opposite, for his respect for his predecessors was profound and he tried to inculcate the same attitude in his students. But I found Bloomfield’s synthesis so satisfying (except in some minor technical details) that for a long time I simply couldn’t bring myself to read much of the work of those predecessors. That was the price I paid for my largely superb induction into our discipline. Then, just a few months ago, I finally had reason to undertake a serious study of William Dwight Whitney’s general writings. I knew that Bloomfield had overtly acknowledged his debt to Whitney; nevertheless, I was overwhelmed to discover the extent of that debt (and thus of our own), and amazed at the variety of topics on which Whitney’s remarks, allowing for a difference of terminology and style, are as valid and profound now as a century ago.[2]

“Should my mentors, back in the 1930s, have insisted that I work my way through Whitney? Perhaps so, and perhaps that would have made me a better scholar. On the other hand, possibly I would not yet have been mature enough to tune my twentieth-century ears to his nineteenth-century voice. Our receptivities really do change. I’m sure you won’t think me facetious if I offer, as another example, the fact that when I tried Milne’s *Winnie the Pooh* first, during my adolescence, it was unspeakably dull, but when later I picked it up to read to my own children it had become poignant magic.”

[To JG:] I began my training in the spring of 1933, the third quarter of my freshman year at Ohio State, under the Homeric scholar George Melville Bolling, using Leonard Bloomfield’s new book, hot off the press. I was very young (17) and the experience was very powerful: for a long time I simply assumed (I guess) that Bloomfield had successfully absorbed and integrated all earlier findings, so that it would just be a waste of time to attempt any independent reading of his predecessors.

A weird thing about that is that Bloomfield himself preached the very opposite. He revered his predecessors for their accomplishments, even when critical of them for what he saw as their mistakes (or, more often, the mistakes of their times), and insisted that science must be cumulative. This was obvious both in his writings and in his comportment as teacher and colleague. Once, in 1939 or 1940, I said to him that it seemed to me we had managed to learn an amazing lot about language in the last decade or so. He replied that he didn’t think we knew anything of importance that hadn’t been known to his masters thirty years earlier. He meant Wackernagel, Leskien, Prokosch, and so on. His comment was partly a put-down aimed at my brashness, but it also accurately reflected his attitude.

4.5 *Robert Hall*

Linguistics itself was changing, in the meanwhile, and not necessarily for the better. A trainee of Zellig Harris’s, one Avram Noam Chomsky, had published a book entitled *Syntactic Structure* in 1957. It embodied a reaction against certain excesses of certain people who came later to be lumped together with many others under the vague

term of “post-Bloomfieldians.” As I pointed out in a lecture which I gave in 1966 at Helsinki... there were really four distinct groups of American scholars who were active in the decades following the publication of Leonard Bloomfield’s book *Language* in 1933. Of these, only one group deserved any of the criticism and obloquy that were heaped indiscriminately on all “post-Bloomfieldians” in the 1960’s and 1970’s. This was the narrow, closely-knit coterie centred around Bernard Bloch, George Trager, and Zellig Harris.

Their approach tended towards excessive formalism, linearity, and “separation of levels.” Trager, especially, insisted that phonological analysis had to be entirely completed before morphology was tackled, and that the morphological structure had to be wholly analysed before syntax was even considered. Chomsky turned this approach upside-down, insisting on the absolute priority of syntax, and on the “generation” of syntactic structures out of a sentence-“kernel”. In expounding his type of analysis, Chomsky denigrated his predecessors by giving only a caricature of the Trager-Smith type of linguistic description, to which he applied the misleading term “phrase-structure-grammar.” This was only the beginning of the series of misrepresentations of his predecessors’ work which became Chomsky’s stock method of persuading his disciplines that his work was superior to and replaced all other preceding linguistics. This exclusionary attitude—or, as Carl and Flo Voegelin termed it, “eclipsing stance”—was animadverted on by many, but most cogently by Sydney Lamb, but such criticisms never made any dent on Chomsky or his followers. (9)

... [F]rom about 1965 on, there was a huge influx of (often) quite bright but linguistically unsophisticated beginners into the field, easy victors of [Chomsky’s] “eclipsing stance,” and ready to believe the claims that he and he alone had rescued linguistics from the clutches of a pack of old fools. (11-12). Robert Hall

4.6 Chomsky 1997

It was the first genuine theory of language that had ever been produced in 2500 years because it showed how you could, in principle and to some extent even in practice, overcome the conflict between descriptive and explanatory adequacy... Probably more was learned about language in the 1980s than in the entire preceding 2500 years.

The direction in which this is heading

4.7 John Dewey

... Philosopher:

Thus their work was conditioned by the nature of science itself, and by the age in which they lived. This work they did, and left to us a heritage of problems, of terminology, and of principles which we are to solve, reject, or employ as best we may. And the best we can do is to thank them, and then go about our own work; the worst is to make them the dividing lines of schools, or settle in hostile camps according to their banners. We are not called upon to defend them, for their work is in the past; we are not called upon to attack them, for our work is in the future. John Dewey: “The New Psychology.” 1884.

4.8

Sociologist:

Intellectual life is first of all conflict and disagreement. Teaching may give the opposite impression, when initiates relate to novices what we claim to know; but the forefront where ideas are created has always been a discussion among oppositions. This heartland of disagreement is difficult to avoid; to deny it is to exemplify it. ... Intellectual conflict is always limited by focus on certain topics, and by the search for allies. Not warring individuals but a small number of warring camps is the pattern of intellectual history. Conflict is the energy source of intellectual life, and conflict is limited by itself.

Randall Collins, *A Global Theory of Intellectual Change*, p. 1.

4.9 Bourdieu

Nous naissons déterminés et nous avons une petite chance de finir libres. Nous naissons dans l'impensé et nous avons une toute petite chance de devenir des sujets. Et ce que je reproche à ceux qui invoquent à tout va la liberté, le sujet, la personne, etc., c'est d'enfermer les agents sociaux dans l'illusion de la liberté qui est une des voies à travers lesquelles s'exerce le déterminisme. De toutes les catégories sociales, la plus inclinée à l'illusion de la liberté est la catégorie des intellectuels.

C'est en ce sens que Sartre a été l'idéologue des intellectuels, c'est à dire celui qui a entretenu l'illusion de l'intellectuel "Âsans attaches, ni racines", comme disait Mannheim, l'illusion de l'auto-conscience, l'illusion que l'intellectuel peut maîtriser sa propre vérité.

Et je pense que dans le refus forcené que certains opposent à la philosophie, dans la haine qu'ils opposent à la sociologie, il y a ce refus de découvrir l'intellectuel enchaîné dans des déterminismesÂ: ceux qui tiennent aux catégories de pensée, aux structures mentales, aux adhésions et aux adhésions universitaires qui sont d'ailleurs beaucoup plus déformatrices que les adhésions politiques.

Je pense que les universitaires sont beaucoup plus menés par les intérêts académiques que par les intérêts politiques, etc. Autrement dit, je pense que c'est à condition de s'approprier les instruments de pensée et aussi les objets de pensée que l'on re coit que l'on peut devenir un petit peu le sujet de ses pensées; c'est à dire on ne naît pas le sujet de ses pensées, on devient le sujet à condition, entre autres choses—je pense qu'il y a d'autres instrumentsÂ; il y a aussi la psychanalyse, etc. — de se réapproprier la connaissance des déterminismes. Je pense que je fais exactement le contraire de ce qu'on me fait dire.