Lecture 10: American Structuralism

In America, linguistics began as an offshoot of anthropology: at the beginning of the 20th century. Anthropologists were eager to record the culture of the fast-dying American Indian tribes, and their languages were, of course, a fundamental aspect of their cultures. A programme was undertaken to record the Amerindian languages, large number of which were in danger of extinction. Although quite interesting, the work of those early researchers was rather haphazard, and unsystematic. There were no firm guidelines or methodologies for linguists to follow in their attempt to describe unwritten languages.

Leonard Bloomfield (1887 – 1949) got interested in language from a scientific, descriptive viewpoint. He believed that linguistics, just like the natural sciences, should deal objectively and systematically with *observable* data.

In 1933 he published his masterpiece, called simply ***Language***, which attempted to lay down rigorous procedures for the description of any language. It had a profound influence on linguistics, for it was a clear statement of principles that soon became generally accepted, such as

- that language study must always be centred on the spoken language, as against written documents;
- that the definitions used in grammar should be based on the **forms** of the language, *not* on *the meanings* of the forms; and
- that a given language at a given time is a complete system of sounds and forms that exist independently of the past – so that the history of a form does not explain its actual meaning.

The Americans developed techniques for phonemic analysis, which they used to identify which sounds in a language were phonemic and which were allophonic. They would then identify which allophones belonged to which phonemes. The methods, which the American Structuralists developed, are still in use today by fieldworkers when they try to record unknown languages. For the American Structuralists, the **phoneme** was the most basic element.

Bloomfield and his followers were more interested in the *forms* of linguistic items, and in the way the items were arranged, than in meaning (semantics). Meaning, according to Bloomfield, was not *observable* using rigid methods of analysis, and it was therefore 'the weak point in language study.'

Bloomfield had immense influence – the so-called 'Bloomfieldian era' lasted for more than 20 years. During this time, linguists focused mostly on writing descriptive grammars of unwritten languages. This involved <u>first</u>, collecting sets of utterances from native speakers of these languages, and <u>second,</u> analysing the corpus of collected data by studying the phonological and syntactic patterns of the language concerned, <u>as far as possible without reference to meaning</u>. Items were (in theory) identified and classified solely on the basis of their distribution within the corpus.

In the course of writing such grammars, a number of problems arose, which could not be solved by the methods proposed by Bloomfield, so a lot of time was spent to refine the analytical techniques and methods. For American structuralists, the ultimate goal of linguistics was the perfection of the *discovery procedures* – a set of principles which would enable them to 'discover' in a foolproof way the linguistic units of an unwritten language. Because of their overriding interest in the internal patterns, or 'structures' of language, they are sometimes labelled 'structuralists.'

The Bloomfieldians laid down a valuable background of linguistic methodology for future generations. But linguistics also became very narrow. Trivial problems of analysis became major controversial issues, and no one who was not a linguist could understand the issues involved. By around 1950, linguistics had lost touch with other disciplines and became an abstract subject of little interest to anyone outside it. A radical change had to take place for linguistics to survive as a 'living' science.

From Encyclopaedia Britannica Deluxe edition 2004 CD-ROM
Bloomfield, Leonard ~   born April 1, 1887, Chicago, Ill., U.S.
                             died April 18, 1949, New Haven, Conn.

American linguist whose book Language (1933) was one of the most important general treatments of linguistic science in the first half of the20th century and almost alone determined the subsequent course of linguistics in the United States.

Bloomfield was educated at Harvard University and the universities of Wisconsin and Chicago. He taught from 1909 to 1927 at several universities before becoming professor of Germanic philology at the University of Chicago (1927–40) and professor of linguistics at Yale University (1940–49).

Concerned at first with the details of Indo-European—particularly Germanic—speech sounds and word formation, Bloomfield turned to larger, more general, and wider ranging considerations of language science in An Introduction to the Study of Language (1914). He then began (1917) pioneer studies of the Malayo-Polynesian (Austronesian) languages, especially Tagalog. In the early 1920s he began his classic work on North American Indian languages, contributing the first of many descriptive and comparative studies of the Algonquian family.

In the writing of Language, Bloomfield claimed that linguistic phenomena could properly and successfully be studied when isolated from their nonlinguistic environment. **Adhering to behaviourist principles, he avoided all but empirical description.**

Structural linguistics in America

American and European structuralism shared a number of features. In insisting upon the necessity of treating each language as a more or less coherent and integrated system, both European and American linguists of this period tended to emphasize the structural uniqueness of individual languages.
There was especially good reason to take this point of view given the conditions in which American linguistics developed from the end of the 19th century. There were hundreds of indigenous American Indian languages that had never been previously described. Many of these were spoken by only a handful of speakers and, if they were not recorded before they became extinct, would be permanently inaccessible. Under these circumstances, such linguists as **Franz Boas** (died 1942) were less concerned with the construction of a general theory of the structure of human language than they were with prescribing sound methodological principles for the analysis of unfamiliar languages. They were also fearful

that the description of these languages would be distorted by analyzing them in terms of categories derived from the analysis of the more familiar Indo-European languages. After Boas, the two most influential American linguists were **Edward Sapir** (died 1939) and **Leonard Bloomfield** (died 1949). Like his teacher Boas, Sapir was equally at home in anthropology and linguistics, the alliance of which disciplines has endured to the present day in many American universities. Boas and Sapir were both attracted by **Humboldt's** view of the relationship between language and thought, but it was left to one of Sapir's pupils, **Benjamin Lee Whorf**, to present it in a sufficiently challenging form to attract widespread scholarly attention. Since the republication of Whorf's more important papers in 1956, the thesis that language determines perception and thought has come to be known as the **Whorf hypothesis**.

Sapir's work has always held an attraction for the more anthropologically inclined American linguists. But it was Bloomfield who prepared the way for the later phase of what is now thought of as the most distinctive manifestation of American "structuralism." When he published his first book in 1914, Bloomfield was strongly influenced by Wundt's **psychology of language**. In **1933**, however, he published a drastically revised and expanded version with the new title **Language**; this book dominated the field for the next 30 years. In it Bloomfield explicitly adopted a behaviouristic approach to the study of language, eschewing, in the name of scientific objectivity, all reference to mental or conceptual categories. Of particular consequence was his adoption of the behaviouristic theory of semantics according to which meaning is simply the relationship between a stimulus and a verbal response. Because science was still a long way from being able to give a comprehensive account of most stimuli, no significant or interesting results could be expected from the study of meaning for some considerable time, and it was preferable, as far as possible, to avoid basing the grammatical analysis of a language on semantic considerations. Bloomfield's followers pushed even further the attempt to develop methods of linguistic analysis that were not based on meaning. One of the most characteristic features of "**post-Bloomfieldian" American structuralism, then, was its almost complete neglect of semantics**.

Another characteristic feature, one that was to be much criticized by Chomsky, was its attempt to formulate a set of **"discovery procedures"**—procedures that could be applied more or less **mechanically** to texts and could be guaranteed to yield an appropriate phonological and grammatical description of the language of the texts. Structuralism, in this narrower sense of the term, is represented, with differences of emphasis or detail, in the major American textbooks published during the 1950s.

Linguistic Relativism
If linguistic concepts do not exist to be discovered in the 'real world', do we construct/ create them? (*relativism*: 'Man is the measure of all things')

Are we all different in our construction of categories? (Example: *Guugu Timithirr* people of Cape York Peninsula in NE Australia do not have words for 'left' or 'right,' 'front' or 'back' – they use absolute, rather than relative directions, i.e., South, North, East, West, etc.)

This has serious implications for *translation*: Can we understand one another? Is it possible to *translate* an idea *exactly* from one language into another?

Ethnolinguistics is concerned with these sorts of questions. Anthropologists have found that learning about how people categorize things in their environment provides important insights into the interests and values of their culture. Field workers involved in this type of research call it ***ethnoscience**** (that is how you get these weird white guys in some remote villages of PNG, eager to undergo initiation! ☺)

Ethnoscientists have made a useful distinction in regard to ways of describing categories of reality. 'Outsiders' bring their own culture's categories and interpret everything through those terms/cultural filters/perceptions. An ethno-scientist tries to get the 'insider's look' at things:

Etic categories involve a classification according to some <u>external</u> system of analysis (it assumes that ultimately, there is an objective reality, and that it is more important than cultural perceptions of it) ['outside']

Emic categories involve a classification according to the way in which members of a society classify their own world. It may tell us little about objective reality, but it is very insightful in understanding how *other people* perceive that reality through the filter/prism of their language and culture ['inside' view].

In other words, *ethnoscientists* try to cast off the 'lens' of their own cultural perspective and experience another culture from 'inside'. Taken to extreme, this relativist approach denies our common humanity (those three principles of human understanding that David Hume described in his Enquiry) and looks for different type of logic in every culture. Ultimately, it provides a basis for racial discrimination, building ethnic walls to divide people.

The Sapir–Whorf 'Hypothesis'

Edward Sapir* (1884-1939) & Benjamin Whorf** (1897-1941) claimed that language influences our worldview. likening language to a polarizing lens on a camera, filtering reality.

* One of the foremost American linguists and anthropologists of his time, most widely known for his contributions to the study of North American Indian languages. A founder of ethnolinguistics, which considers the relationship of culture to language, he was also a principal developer of the American (descriptive) school of structural linguistics.
Sapir suggested that man perceives the world principally through language. He wrote many articles on the relationship of language to culture. A thorough description of a linguistic structure and its function in speech might, he wrote in 1931, provide insight into man's perceptive and cognitive faculties and help explain the diverse behaviour among peoples of different cultural backgrounds"(1).

** U.S. linguist noted for his hypotheses regarding the relation of language to thinking and cognition … .
Under the influence of Edward Sapir, … Whorf developed the concept of the equation of culture and language, which became known as the Whorf hypothesis, or the Sapir–Whorf hypothesis. Whorf maintained that the structure of a language tends to condition the ways in which a speaker of that language thinks. Hence, the structures of different languages lead the speakers of those languages to view the world in different ways. This hypothesis was originally put forward in the 18th century by the German scholars J.G.Herder and W. von Humboldt. It was espoused in the United States in the period preceding World War II by Sapir and then in the 1940s by Whorf. Whorf's formulation and illustration of the hypothesis excited considerable interest. On the basis of his research and fieldwork on American Indian languages, he suggested, for example, that the way

a people view time and punctuality may be influenced by the types of verbal tenses in their language. Whorf concluded that the formulation of ideas is part of (or influenced by) a particular grammar and differs as grammars differ. This position and its opposite, that culture shapes language, have been much debated (1).

'The fact of the matter is that the 'real world' is to a large extent unconsciously built up on the language habits of the group. No two languages are ever sufficiently similar to be considered as representing the same social reality. The worlds in which different societies live are distinct worlds, not merely the same world with different labels attached.' (Sapir, 1929).

'The linguistic relativity principle,' … means, in informal terms, that users of markedly different grammars are pointed by their grammars toward different types of observations and different evaluations of extremely similar acts of observation, and hence are not equivalent as observers, but must arrive at somewhat different views of the world' (Whorf quoted in 1952).

What did Sapir mean by 'language habit'? Or Whorf, for that matter, by being 'pointed by their grammars'?

Remember: Language involves the systematic organization of ideas – _categorisation of patterns_ in the world, whether these be patterns of concrete objects, or of abstract ideas. These patterns are the 'habits' Sapir described.

In short, the **'Whorf Hypothesis'** states that:

1. Linguistic structure and language habits shape perception
2. The structure of anyone's language determines/strongly influences the worldview they will acquire as they learn the language
3. Structural differences between language systems will, in general, be parallelled by non-linguistic cognitive differences in the native speakers of the languages (i.e., linguistic structures predetermine not only _how_, but also _what_ we think).

Since neither Sapir, nor Whorf ever formulated the hypothesis themselves, there is some controversy as to their actual views. Below is an example of the strong _deterministic_ reading of their ideas:

'The argument that language defines the way a person behaves and thinks has existed since the early 1900s when Edward Sapir first identified the concept. He believed that language and the thoughts that we have are somehow interwoven, and that all people are equally affected by the confines of their language. In short, he made all people out to be mental prisoners; unable to think freely because of the restrictions of their vocabularies.' Example: George Orwell's *1984*: **'newspeak'**

'… Whorf fully believed in linguistic determinism; that what one thinks is fully determined by their language. He also supported linguistic relativity, which states that the differences in language reflect the different views of different people. An example of this is the studies Whorf did on the Hopi language. He studied a Hopi speaker who lived in New York city near Whorf. He concluded that Hopi speakers do not include tense in their sentences, and therefore must have a different sense of time than other groups of people.

However, in recent years, the Hopi have been studied in order to further understand this issue, and it has been discovered that although the Hopi do not include references to the past, present, or future in their grammars, they do include two other tenses, 'manifested' and 'being manifested.' 'Manifested' includes all that is and has ever been, physically. This includes the senses and concrete items. 'Becoming manifested' includes anything which is not physical, has no definite origin and cannot be perceived with the senses. Verbs are always expressed within the terms of these two tenses. In this way, the Hopi do include some aspect of time, but in a different way than a native English speaker would recognize."

'If the world view and behaviour of people are affected so severely by the structure of their language, and languages have different structures, then is cross-cultural communication and understanding a realistic goal for the modern world? Whorf would have us believe that such barrier-free communication is almost impossible. However, does that explain current world trade agreements, joint business ventures with foreign companies or the emphasis on raising bilingual societies? Sure, not every word of communication between people of different language communities is expressed. But despite that fact, … the substance of messages are getting across.'

'… I believe that language users sort out and distinguish their experiences differently according to the categories provided by their languages. One culture could consider a tree to be an inanimate object. Another culture could consider it to be a living thing, just like a human. The grammar of each language would reflect this difference, and the idea of what a tree is to the two groups would be physically similar, but carry different connotations and emotional responses. … These grammatical distinctions may have an effect on the way the noun … is thought of. This is an aspect of language which has a direct effect on the **connotation** of the term.'

'… I believe that discussion about this topic is an important part of the globalisation and cultural education in the world today. Through theories like this one, we can identify ways in which all languages are universal, and how that universality in language is beneficial to us all. I think that when all people realize that no matter which language you speak or which cultural norms you are used to, everyone is capable of intellectual thoughts, poetic visions, technical jargon, and personal feelings – according to their own experiences, the world will be a much smaller place'(2).

As we can see from the above excerpts, the author strongly rejects the idea that language *determines* thought. But did Sapir & Whorf really claim that *all* thought is linguistic / *determined* by our language? Or did they simply point out the close interrelationship between our perceptions and thought (and therefore, language) that we have just finished talking about?
Many people believe that Sapir and Whorf had been misunderstood (see: below).

Appendix: Critique of the 'Hypothesis':
Source: Danny K. H. Alford: Part I: Demise of the Whorf Hypothesis.
Retrieved 17 April 2006 from: http://www.enformy.com/dma-dwh.htm

'A burning question for every aware individual at some point has to be: What power does language have to shape reality? … all true agreements between human beings must occur through the use of language—especially the vague agreements about what English words stand for, by which you are

able right now to read my thoughts. … how do the words you utter help create your own personal reality (e.g., neuroses and psychosomatic ailments)?
…
Benjamin Whorf wrote about this notion in the 1930s, but most of his articles were never printed in his lifetime…. Unfortunately for Whorf, the incredible amount of national attention focused on Noam Chomsky and his generative transformational grammar in the late '50s and early '60s resulted in resounding denunciations of Whorf by Chomskyan proponents—and in that highly negative atmosphere, it was not fashionable among linguists to read Whorf or discuss his ideas in public.'

'… Whorf never selected out of his vast number of provocative and intuitive insights into language, thinking, culture, behavior, psychology and consciousness, any specific few to be labelled "the Whorf Hypothesis." That such a narrowing of attention has taken place at all is … an injustice … since almost all references to the Whorf Hypothesis are negative. Who narrowed the attention in this way? Roger Brown seems to think Eric Lenneberg was responsible, … when he stated in 1953:

'Whorf appeared to put forward two hypotheses:

1. Structural differences between language systems will, in general, be paralleled by non-linguistic cognitive differences, of an unspecified sort, in the native speakers of the language.

2. The structure of anyone's native language strongly influences or fully determines the worldview he will acquire as he learns the language (4:158).'

The first hypothesis does loosely correspond to Whorf's linguistic relativity principle. The second, however, is the basis of what has come to be called linguistic determinism.'

Four major doctrines of the Whorf Hypothesis found in the critical literature:
- The first doctrine - linguistic determinism: language determines thought and behaviour patterns (causal determination)
- The second doctrine - perception shaping (i.e., 'language shapes colour perception'). Critics vehemently denounced Whorf's 'Hypothesis,' arguing that as a matter of fact, most of the evidence goes in the opposite direction, that linguistic skill depends very heavily upon a pre-existing perceptual capacity. According to them, Whorf claimed that perception is linguistically shaped:

'… the doctrine of extreme linguistic relativity holds that each language performs the coding of experience into sound in a unique manner. Hence, each language is semantically arbitrary relative to every other language. According to this view, the search for semantic universals is fruitless in principle. The doctrine is chiefly associated in America with the names of Edward Sapir and B. L. Whorf. Proponents of this view frequently offer as a paradigm example the alleged total semantic arbitrariness of the lexical coding of color' (Ibid., Berlin & Kay).

- The third doctrine of the Whorf Hypothesis - that of language nontranslatablity based on the lack of lexical distinctions (the absence or presence of a lexical distinction = an indicator of a corresponding perceptual or conceptual distinction). Critics argued that this is patently false as shown by Whorf's own linguistic behaviour in his ability to translate the many Eskimo terms for snow into English phrases.
  One of Whorf's chief topics concerned the phenomenon of ordinary or habitual thinking and consciousness (i.e., the way we are forced to conceive of a geocentric universe when we use frozen lexical idioms such as "sunrise" and "sunset"), Whorf felt there were certain ways of getting out of such language traps: by precise terminology ("earthturn" more

precisely describes what happens in a heliocentric solar system), and through the insights of comparative linguistics:

'It is the "plainest" English which contains the greatest number of unconscious assumptions about nature . . . We handle even our plain English with much greater effect if we direct it from a vantage point of multi-lingual awareness.' (Ibid., Whorf).
'The person most nearly free in such respects would be a linguist familiar with very many widely different systems.' (Ibid., Whorf).

- The fourth doctrine of the Whorf 'Hypothesis' concerns the charge that Whorf was guilty of <u>circularity of evidence</u>:
  'The problem with Whorf's data is simply that they are not entirely linguistic; he neither collected nor reported any non-linguistic data and yet all of his assertions . . . imply the existence of non-linguistic cognitive differences. As the case stands in Whorf's own writings, differences of linguistic structure are said to correspond with differences of a non-linguistic kind, but the only evidence for these latter is the linguistic evidence with which he began.' (Ibid., Roger Brown)

'We have seen that the four major objections encountered in the literature concerning the so-called Whorf Hypothesis are strawman arguments insofar as they pretend to represent the views of Benjamin Whorf. The objections reflect, indeed, the prejudices and misinterpretations of their authors, and perhaps should be named in honor of them instead.
I regret that I have not been able in this presentation to explicate the principle of relativity itself, showing how closely its wording corresponds to statements of Einsteinian relativity (which few critics have yet perceived), nor have I had time to explore what is probably by far the deepest reason for the rejection of Whorf during the Chomskyan era—the fundamental clash between notions of semantic relativity and the ethnocentric quest for semantic universals.

Linguistics … is in a period of confusion again: as it was in the early 1930s when Bloomfield battled Sapir for discipline supremacy, when structuralism won out over mentalism and semantics; as it was in the late 1950s when Whorf's semantic relativity momentum was broken by Chomsky's neo-structuralism and notions of universal grammar. Both Bloomfield and Chomsky believed that they could study language as an AUTONOMOUS creature apart from both semantics and culture—that a true split could be made between linguistics and anthropology; that linguistics was essentially the study of lifeless forms. Sapir and Whorf believed the opposite: that language and culture are two sides of a single coin; that, in Whorf's words, linguistics is essentially the quest of that "golden something" called meaning, and that its real concern is to light up the thick darkness of language and thereby much of the thought, culture, and outlook upon life of a given community. To do this requires a holistic, gestaltic approach rather than the linear approach more suited to studying decontextualized forms.
…
I've attempted here to clear away the profuse underbrush of fuzzy criticism which has distinctly tainted Whorf's reputation, in order to encourage linguists and others to examine Whorf in the original Whorf will probably not teach linguists to be better language technicians. But if one's goal as a student of language is to understand the larger issues of how human language, knowledge, culture, behavior, meaning, and consciousness interact: then I … refer you to his material.'