University of Batna 2
Department of English Language and Literature
Module: **Linguistics**
Second-Year BA/ Groups **6** & **7**
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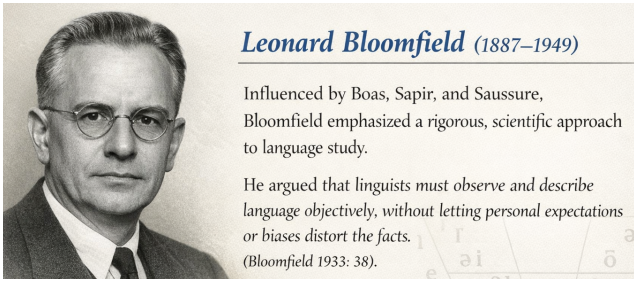
Structural Linguistics in America (American Structuralism)

Introduction: The Rise of a Scientific Linguistics in America



The intellectual movement known as American Structuralism represents a pivotal moment in the history of linguistics. Largely shaped by the work of *Leonard Bloomfield*, this school of thought sought to establish linguistics as a **rigorous**, **objective science**, fundamentally shifting its focus away from its earlier anthropological roots. The goal was to **develop methodical, systematic, and formal procedures for analysing language based exclusively on observable data**, a stark departure from previous approaches that grappled with the more **abstract** relationship between language and culture.

The foundations of American linguistics were laid by scholars working at the intersection of language and anthropology. Their work provided the initial impetus for the field, but it was Bloomfield who charted its new, scientific course.

- **Franz Boas & Edward Sapir:** These figures represent the anthropological foundation of American linguistics. Their primary concern was the description of endangered American Indian languages, a task that required developing sound methodologies for analysing unfamiliar linguistic systems. Crucially, they were fearful that the description of these languages would be distorted by analysing them in terms of categories derived from the analysis of more familiar Indo-European languages. This concern for objective description, free from preconceived grammatical notions, created the intellectual space for a new methodology. Their work also led them to explore the intricate relationship between language and thought, an area of inquiry that culminated in the "Whorfian hypothesis."

- **Leonard Bloomfield:** As the central figure of American Structuralism, Bloomfield (April 1, 1887 – April 18, 1949) pivoted the field in a new direction. He argued for a linguistics grounded in scientific objectivity, moving the discipline away from what he considered the unscientific and mentalistic concerns of his predecessors.

Bloomfield's 1933 textbook, *Language*, became the defining text for the field, dominating linguistic thought for over 30 years. In it, he presented a comprehensive vision for a new American structural linguistics, attempting to lay down rigorous procedures for the description of any language. The book's influence was so profound that it established the core principles that would guide a generation of linguists.

The Bloomfieldian approach rested on a clear set of tenets. It emphasised the scientific basis of linguistics, demanding that analysis be restricted to observable, physical data (speech). Adhering to the psychological theory of behaviourism, Bloomfield eschewed all reference to mental or conceptual categories, such as "meaning," which he believed could not be scientifically verified. Consequently, his work is characterised by its focus on developing formal procedures for the methodical analysis of linguistic structure.

1. Language Description: Immediate Constituent Analysis (ICA)

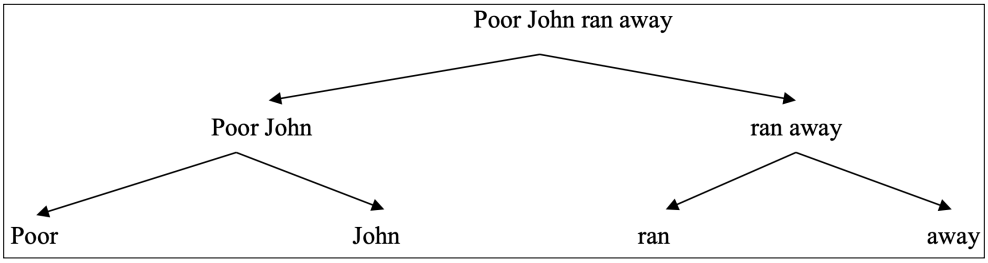
A central component of Bloomfield's effort to create an objective science of language was his development of formal, replicable procedures for language description. He believed that linguistics should deal systematically with observable data, which meant focusing on the arrangement of linguistic items rather than their meaning. His primary goal was to create a method for analysing sentences based on their physical structure, a procedure that could be applied consistently by any linguist to any language. This led to the technique known as **Immediate Constituent Analysis (ICA).**

The core concepts of ICA involve the progressive division of a sentence into its component parts until the smallest meaningful units are isolated.

Term	Definition
Immediate Constituents	The two primary parts into which a sentence or phrase can be divided at any given stage of analysis.
Ultimate Constituents	The final, indivisible units of a sentence, such as morphemes or words, that result from the complete ICA process.

To illustrate this process, Bloomfield used his famous example sentence, *poor John ran away*. The analysis of *poor John ran away* proceeds as follows:

- Initial Cut (Immediate Constituents): (poor John) and (ran away)
- Final Breakdown (Ultimate Constituents): poor, John, ran, away



This hierarchical breakdown can be represented in different ways, such as through tree diagrams, Chinese Boxes, or bracketing: [[poor] [John]] [[ran] [away]].

While ICA provided a systematic and seemingly objective procedure for dissecting sentence structure, it was soon recognised that this technique was fraught with significant analytical problems that limited its utility.

Critical Evaluation of ICA

The method's claim to scientific objectivity was immediately challenged by two significant weaknesses: ambiguity in analysis and an inability to account for sentence relationships.

1. **Ambiguity of Analysis:** A fundamental problem with ICA is that it is not always clear where to make the "cut" between constituents. While intuition might guide the analysis of a simple sentence, more complex structures can be divided in multiple, equally plausible ways.

For example, consider the sentence *that nice, efficient, old-fashioned secretary is here*.
Should the primary cut be between *that* and *nice, efficient, old-fashioned secretary*? Or perhaps between *that nice, efficient, old-fashioned* and *secretary*? The existence of such alternative analyses creates a major problem, undermining the method's claim to scientific objectivity and replicability.

2. **Obscured Sentence Relationships:** A more profound failure of ICA is its inability to reveal the underlying grammatical relationships between different types of sentences. Because the analysis proceeds one sentence at a time, it can describe the structure of individual sentences but cannot explain how they relate to one another. This limitation, which meant that grammar could only be taught as a set of

disconnected sentence patterns to be memorised rather than as a system of interconnected rules, is evident in several key areas:

- **Active vs. Passive:** ICA can provide separate analyses for *that man saw Jones's mother* and *Jones's mother was seen by that man*, but it cannot show that one is the passive form of the other.
- **Statements vs. Questions:** The relationship between *John is here* and *is John here?* is not captured by ICA.
- **Positive vs. Negative:** Similarly, the connection between *John is here* and *John is not here* is obscured.
- **Attributive vs. Predicative Adjectives:** The method fails to relate the structure of *the nice girl* to that of *the girl is nice*.

In conclusion, ICA is now considered only a starting point for sentence analysis. It represents a very small part of what a comprehensive grammar must accomplish. The method's inability to handle ambiguity and reveal deeper grammatical relationships highlighted the limitations of a purely structural approach, a problem that was even more pronounced when Bloomfield confronted the challenge of analysing meaning.

2. Language Meaning

Bloomfield held a deeply skeptical and pessimistic view on the study of meaning (semantics). He considered meaning the "weak point" in language study precisely because it involved concepts that could not be observed or measured with the scientific rigour he demanded for linguistics. In his view, to define the meaning of a speech form accurately, a linguist would need scientifically accurate knowledge of everything in the speaker's world (which is an impossible standard).

Bloomfield's proposed solution was to define words using the precise and authoritative language of science. He argued that we can define the names of minerals, for example, by stating that the meaning of *salt* is "sodium chloride" (NaCl). However, he recognised that for the vast majority of words, such as *love* or *hate*, no such precise scientific classification exists. This led him to a famously pessimistic conclusion: "***The statement of meaning is therefore the weak point in language study and will remain so until human knowledge advances very far beyond its present state***." (Language, p: 140)

However, this approach was itself deeply flawed, suffering from at least three critical issues that rendered it unworkable.

1. **Competing Scientific Accounts:** At any given time, there are often competing scientific theories for the same phenomenon. In such cases, it is unclear which scientific definition should be chosen as the authoritative one for a word.
2. **Provisional Nature of Science:** Scientific knowledge is, by its nature, provisional and constantly subject to revision. It is difficult to imagine a time when scientific understanding would be so final that linguists could safely begin defining words without fear of future reformulations.
3. **Infinite Regression:** Defining a word with a scientific formula, such as *salt = NaCl*, does not solve the problem of meaning; it simply exchanges one set of linguistic symbols for another. One is then faced with the new problem of defining the meaning of NaCl. This recipe for discovering meaning leads to a path of infinite regression, ultimately turning out to be a "dead end."

Lacking a viable scientific approach to semantics, Bloomfield turned to ***behaviourist psychology***. He defined meaning as the relationship between a stimulus and a verbal response. In his model, an external **Stimulus (S)** leads someone to speak, producing a **verbal response (R)**. This speech **(S)** then acts as a stimulus for a hearer, who produces a **Response (R)**. This can be diagrammed as: S => R ... S => R. This framework allowed him to discuss meaning without resorting to "mentalistic" concepts, but it deferred the core problem of semantics to other scientific disciplines. This behaviourist framework also formed the basis of his understanding of how language is acquired.

3. Language Acquisition

The behaviourist model was of strategic importance to Bloomfieldian linguistics because it provided a "scientific" explanation for language acquisition that avoided any mention of innate cognitive processes. Within this framework, language is not an instinct or a product of the mind, but a learned behaviour shaped entirely by environmental factors. Behaviourists drew a key distinction between two types of language development:

- **Acquisition:** A subconscious process, like the way a child develops ability in their mother tongue through natural interaction and communication.
- **Learning:** A conscious process that involves studying and knowing the rules of a language.

The behaviourist explanation for language acquisition is built on several core tenets/ principles. The theory assumes that at birth, the human mind is a ***tabula rasa*** **(blank slate)**, waiting for experiences to make their impression. A child learns their mother tongue simply by imitating the people around them through a process of **"trial and errors."**

The crucial mechanism in this process is **selective reinforcement**. When a child produces a grammatically correct utterance that is understood by their parents or caregivers, the resulting approval serves as a positive reinforcement. This encouragement makes the child more likely to produce other correct utterances in the future. This theory, most famously associated with B.F. Skinner, viewed language as nothing more than a set of habits or a "verbal behaviour" established through a Stimulus-Response (S-R model). In this view, language is an association between external stimuli and rewarded responses. This purely mechanistic view of language learning had a direct and powerful impact on classroom teaching methodologies.

4. Impact on Language Teaching

The theories of Bloomfieldian structuralism and behaviourist psychology translated directly into a specific and widely adopted pedagogical method for second language instruction. This practical application demonstrates the profound influence these ideas had beyond the confines of theoretical linguistics.

The primary pedagogical outcome was the **Audio-lingual Method**, which rose to prominence in the 1950s and 1960s. This method was the direct application of behaviourist S-R theory to the classroom, treating language learning as a process of habit formation through conditioning. Its classroom principles were derived directly from this theoretical foundation:

- **Sequence:** New language material must be presented in the strict order of hear→speak→read and → write to mimic the assumed natural process of first language acquisition.
- **Repetition:** Frequent repetition and drilling of grammatical patterns were considered essential for forming correct linguistic habits.
- **Error Correction:** All errors made by a student must be corrected immediately to prevent the formation of "bad habits."

Although popular for a time, this behaviourist, corpus-based approach ultimately revealed several significant drawbacks. Its *rigid*, *mechanistic* nature failed to account for the *true complexity of language use*.

- It was criticised for lacking **natural creativity**, as students were trained to reproduce patterns rather than generate novel sentences.
- Learners who were successful in the classroom were often **unable to express themselves** or communicate effectively in new, real-world situations.
- The method was seen as **overly mechanistic and rigidly distributional**, focusing on surface forms while ignoring the deeper cognitive aspects of language.

Ultimately, the practical failures of the Audio-lingual Method cast serious doubt on the validity of its theoretical underpinnings, prompting a wholesale reassessment of the Bloomfieldian paradigm.

Conclusion: A Critical Assessment of American Structuralism

Bloomfieldian structuralism stands as a foundational but ultimately flawed paradigm in the history of linguistics. Its core contribution was the drive to establish linguistics as an objective science, introducing a level of analytical rigour and a focus on formal methodology that were influential for decades.

However, its self-imposed limitations and theoretical shortcomings eventually led to its decline. The major criticisms of the school can be summarised as follows:

- **Methodological Issues:** The primary analytical tool, ICA, was plagued by problems of ambiguity and an inability to prove the underlying relationships between sentences (e.g., active and passive forms), revealing it as an insufficient method for comprehensive grammatical analysis.
- **Neglect of Meaning:** The explicit decision to sideline semantics because it could not be analysed with scientific precision left a massive gap in the theory. By neglecting meaning, structuralism failed to address a central component of human language.
- **Taxonomic Focus:** The approach was heavily criticised for being too taxonomic. Its focus on "discovery procedures" (methodologies for discovering, classifying, and labelling the parts of sentences) was seen as mere data collection rather than a true explanation of the principles governing language.
- **Mechanistic Nature:** The overall view of language as a set of mechanically acquired habits failed to account for the creative aspect of language, the ability of speakers to produce and understand an infinite number of novel sentences.

The influence of Bloomfieldian structuralism began to wane in the late 1950s and 1960s. Its decline coincided with the rise of Noam Chomsky's theory of Generative Grammar, which would offer a radically different, cognitively-focused approach that directly challenged the behaviourist and taxonomic foundations of American Structuralism.