

(Part – I – Memory, Language Acquisition and
Language Production)

:: STRUCTURE ::

8.0 Objectives

8.1 Introduction

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8.0 OBJECTIVES

- To make the learners understand the Role of Memory in Language Learning and Acquisition
- To help students comprehend the types of memory

- To develop the understanding of Memory in Infancy, Aging as well as Language and Memory
- To assist the learners in understanding language comprehension and production

8.1 INTRODUCTION TO ROLE OF MEMORY IN LANGUAGE LEARNING AND ACQUISITION

In psychology, memory is the process in which information is encoded, stored, and retrieved. Encoding allows information that is received from the outside world to reach our senses in the forms of chemical and physical stimuli. In this first stage we must change the information so that we may put the memory into the encoding process. Storage is the second memory stage or process where the received information is retained. This entails that we maintain information over periods of time. Finally, the third process is the retrieval of information that we have stored. We must locate it and return it to our consciousness. From the information processing perspective, there are three main stages in the formation and retrieval of memory:

- Encoding or registration: receiving, processing and combining of received information
- Storage: creation of a permanent record of the encoded information
- Retrieval, recall or recollection: calling back the stored information in response to some cue for use in a process or activity.

The loss of memory is described as forgetfulness, or as a medical disorder, amnesia

8.2 TYPES OF MEMORY

There are many theories about the types of memory within the human brain. Most scientists believe there are at least 03 general types of memory: (ref : Wikipedia)

8.2.1 Sensory Memory:

Sensory memory holds sensory information for less than one second, after an item is perceived. The ability to look at an item, and remember what it looked like with just a split second of observation, or memorization, is an example of sensory memory. It is out of cognitive control and is an automatic response.

8.2.2 Short-term Memory:

Short-term memory allows recall for a period of several seconds to a minute without rehearsal. Short-term memory is believed to rely mostly

on an acoustic code for storing information, and to a lesser extent a visual code. The storage in sensory memory and short-term memory generally has a strictly limited capacity and duration, which means that information is not retained indefinitely.

8.2.3 Long-term Memory:

Long-term memory can store much larger quantities of information for potentially unlimited duration (sometimes a whole life span). Its capacity is immeasurably large. For example, given a random seven-digit number we may remember it for only a few seconds but we can remember telephone numbers for many years through repetition; this information is said to be stored in long-term memory.

Check Your Progress – I

1 What is Memory?

2 Explain the Types of Memory in detail.

8.3 MEMORY IN INFANCY

Up until the middle of the 1980s it was assumed that infants could not encode, retain, and retrieve information. A growing body of research now indicates that infants as young as 6-months can recall information after a 24-hour delay. Furthermore, research has revealed that as infants grow older they can store information for longer periods of time; 6-month-olds can recall information after a 24-hour period, 9-month-olds after up to 5 weeks, and 20-month-olds after as long as 12 months. In addition, studies have shown that with age, infants can store information faster.

8.4 MEMORY AND AGING

One of the key concerns of older adults is the experience of memory loss, especially as it is one of the hallmark symptoms of Alzheimer's disease. However, memory loss is qualitatively different in normal aging from the kind of memory loss associated with a diagnosis of Alzheimer's. Research has revealed that individuals' performance on memory tasks that rely on frontal regions declines with age. Older adults tend to exhibit deficits on tasks that involve knowing the temporal order in which they learned information; source memory tasks that require them to remember the specific circumstances or context in which they learned information;

and prospective memory tasks that involve remembering to perform an act at a future time.

8.5 LANGUAGE AND MEMORY

We need memory to keep track of the flow of conversation. Maybe the interaction between memory and language does not seem very obvious at first, but this interaction is necessary when trying to lead a conversation properly. Memory is the component for storing and retrieving information. So, to remember both things just said and information heard before which might be important for the conversation. This is not a simple process which can be learned within days. In childhood everybody learns to communicate, a process lasting for years.

Memory is the ability of the nervous system to receive and keep information. Language is an essential system for communication which highly influences our life. This system uses sounds, symbols and gestures for the purpose of communication. Visual and auditory systems of a human body are the entrance-pathway for language to enter the brain.

- **Check Your Progress – II**

1 How does memory in infancy work?

2 What is the relationship of Memory and Aging?

8.6 ACQUISITION OF LANGUAGE

A phenomenon which occurs daily and in everybody's life is the acquisition of language. Theorists like Catherine Snow and Michael Tomasello think that the acquisition of language skills begins at birth. Others claim, it already commences in the womb. Newborns are not able to speak, even if babbling activates the brain regions later involved in speech production.

The ability to understand the meaning of words already begins before the first birthday, even if they cannot be pronounced till then. The phonological representation of words in the memory changes between the stage of repetitive syllable-babbling and the one-word stage. At first children associate words with concrete objects, followed by an extension to the class of objects. After a period of overgeneralization, the children's system of concept approaches to the adults' one.

8.7 THE ROLE OF MEMORY IN LEARNING A LANGUAGE

Broadly describing, we can bifurcate language that human beings generally learn or perceive in their life in two types. We can term them as the first language (L1) and the second language (L2) for our understanding. The first language is human's mother tongue, the language when they firstly hear and try to acquire after they were born. While second language is the language that they learn after they have mastered their first language. Usually they learn the second language in the formal school or by putting in more careful and conscious efforts. The most important thing that we should notice is that we acquire rather than learn the first language. Whereas when we learn the second language, memory plays very imperative role. Memory is one of factors which can be used to predict the performance of a student's learning foreign language.

There are two kinds of memories in our mind, short term memory and long-term memory. Short term memory/working memory plays three important roles before the messages are being transferred to the long-term memory or permanent memory. There are 03 important roles of working memory in learning language i.e. 1) language comprehension, 2) language production, and 3) vocabulary acquisition.

8.8 LANGUAGE COMPREHENSION

In language comprehension, working memory provides the temporary storage space for the information before it is sent on in a recorded form to the long-term memory. When comprehending the speaker's messages, a person must do more than retrieving the meanings of the individual words. Moreover, a person must determine the relations among the word meanings, based on the syntactic structure of the sentence. We also need the temporal storage to store the string of the words and then process it so that we can comprehend the sentences of the language that is being uttered by the speaker including foreign language or utterances.

According to George Miller (psycholinguist), when people hear someone speaking they can recall five to nine blocks of information in short period of time. These blocks of information must be reordered into analysis unit before it held in working memory. In this case, when we learn language we try to remember a chunk of the words that is being uttered by our teacher or native speaker. These words are stored in our working memory. Then, we ought to retrieve the meaning of the individual words but also to determine the relations among the word meanings, based on the syntactic structure of the sentence.

8.9 LANGUAGE PRODUCTION

In language production, working memory becomes the place where the pronunciations of the words are put in linear order on the basis of the syntactic and semantic relations in the intended utterance before the construction of a motor program that produces the utterance. When we try to say something or produce the utterance from the foreign language, certain sounds (phonemes) surface in working memory so that we will not make error in speech.

Lashley (1951) gives us an example that to be able to pronounce the sentence “Consider Reverend Spooner's our queer old dean in place of our dear old queen” correctly, the /kw /sound to be inserted in the intended word dear, must already be obtainable in working memory, waiting its turn for phonological integration. This means that speech cannot be produced by simple chaining of words one to another; rather some overall planning must be going on in advance.

In acquiring the new vocabulary, working memory has a limited-capacity that is called “phonological loop” in which phonological material is stored, maintained in sequence, and rehearsed. Neuropsychological studies have provided strong evidence suggesting that the phonological loop plays a critical role in vocabulary acquisition.

The phonological loop system is specialized in storing verbal material and is composed of two subsystems: a phonological store and an articulatory rehearsal process. The phonological store receives directly and unavoidably any information auditorily presented and stores it in terms of a sound-based code.

Although material in this store is subject to decay and interference, it can be maintained and reinforced through the articulatory rehearsal mechanism. The phonological store is also able to receive visually presented items but these must first be converted into an articulatory form before gaining access to the store. These items are conveyed to the store by the articulatory rehearsal process.

- **Check Your Progress – III**

- 1 What is the role of memory in learning a language?**

- 2 Explain Language Comprehension.**

3 Elucidate Language Production.

8.10 LET US SUM UP

Memory has three important roles in learning a language: namely language comprehension, language production, and vocabulary acquisition. Working memory is the place where language is being processed. Working memory provides the temporary storage that is very useful in language comprehension process and acquisition.

In language production, working memory becomes the place where the pronunciations of the words are put in linear order on the basis of the syntactic and semantic relations in the intended utterance before the construction of a motor program that produces the utterance. Moreover through phonological loop the new vocabulary is being stored and rehearsed in working memory before it transfer to the long term memory. This information is very useful not only the teacher who teaches the second language in formal class but also for the independent learner who tries to learn language. In this case they can maximize the function of memory in learning language.

8.11 KEY WORDS

Psychology	the scientific study of the human mind and its functions,
Memory	the faculty by which the mind stores and remembers information
Encoding	receiving, processing and combining of received information
Storage	creation of a permanent record of the encoded information
Retrieval	calling back the stored information
Infancy	the state or period of babyhood or early childhood.
Aging	Aging can be defined as the time-related deterioration of the physiological functions necessary for survival and fertility.
Language Acquisition	the process by which humans acquire the capacity to perceive and comprehend language, as well as to produce and use words and sentences to communicate.
Language Comprehension	Language comprehension is the ability to understand the different elements of spoken or written language, like the meaning of words and how words are put together to form sentences
Language Production	is the production of spoken or written language

8.12 BOOKS SUGGESTED

1. Cairns, Helen & Fernandez, Eva. (2011), *Fundamentals of Psycholinguistics*, West Sussex:Wiley-Blackwell
2. Jackendoff, Ray. (2003), *Foundations of language*, New York: Oxford University Press.
3. Learning,memory,andlanguage, (online),
(www.sfn.org/skins/main/pdf/.../learning_memory_language.pdf,
accessed on May, 112011)
3. Whitaker, A. Harry. (1998), *Handbook of Neurolinguistics*, California: Academic Press
4. https://www.academia.edu/7167650/Role_of_Memory_in_Language_Learning

❖ Answers

Check Your Progress – I

Answer: 1

Memory is the process in which information is encoded, stored, and retrieved.

Answer: 2

There are many theories about the types of memory within the human brain. 1) Sensory memory holds sensory information for less than one second, after an item is perceived. 2) Short-term memory allows recall for a period of several seconds to a minute without rehearsal. 3) Long-term memory can store much larger quantities of information for potentially unlimited duration (sometimes a whole life span).

Check Your Progress – II

Answer: 1

Infants as young as 6-months can recall information after a 24-hour delay. As infants grow older they can store information for longer periods of time; 6-month-olds can recall information after a 24-hour period, 9-month-olds after up to 5 weeks, and 20-month-olds after as long as 12 months.

Answer: 2

Memory loss is qualitatively different in normal aging from the kind of memory loss associated with a diagnosis of Alzheimer's. Research has revealed that individuals' performance on memory tasks that rely on frontal regions declines with age.

Check Your Progress – III

Answer: 1

Basically, there are two kinds of languages that human learned in their life, the first language(L1) and the second language (L2). The first language is human's mother tongue, the language when they firstly hear

and try to acquire after they were born. While second language is the language that they learn after they have mastered their first language. When we learn the second language, memory plays the important role.

Answer: 2

In language comprehension, working memory provides the temporary storage space for the information before it is sent on in a recorded form to the long-term memory. We also need the temporal storage to store the string of the words and then process it so that we can comprehend the language that is being uttered by the speaker including foreign language or utterances.

Answer: 3

In language production, working memory becomes the place where the pronunciations of the words are put in linear order on the basis of the syntactic and semantic relations in the intended utterance before the construction of a motor program that produces the utterance. When we try to say something or produce the utterance from the foreign language, certain sound must be presented in working memory so that we will not make error in speech.

(Part – II – Discourse Processes in Language & Acquisition)

:: STRUCTURE ::

8.00 Objectives

8.13 Introduction

8.14 Definition of Deconstruction

Check Your Progress – I

8.15 The Nature of Discourse Processing

8.16 Discourse Content

- **Check Your Progress – II**

8.17 Memory for Discourse Contents

8.17.1 Tri-Partite Model

- **Check Your Progress – III**

8.18 Theories/Models of Discourse Processes

8.18.1 Information Retrieval Model (Memory-based)

8.18.2 Constructionist Approach/Model

8.18.3 Promising Model (Blend of Memory-based & Constructionist Model)

- **Check Your Progress – IV**

8.19 Let Us Sum Up

8.20 Key Words

8.21 Books Suggested

- ❖ **Answers**

8.00 OBJECTIVES

- To make the learners understand the nature of discourse processing
- To get acquainted with Discourse Content and Memory
- To help students comprehend the theories/models of discourse processes

8.13 INTRODUCTION

Discourse processing emphasizes on the ways in which readers and listeners comprehend language. The linguistic segments of discourse processing are larger than sound, word, or sentence-level units. They include conversational communications that comprise our everyday cognitive and social interactions. This unit focuses on discourse comprehension and highlights 03 core issues. (1) To outline the particular elements that make up naturalistic discourse activity. (2) To identify potential interactions among the elements, and how investigations of these interactions have resulted in influential frameworks for the field. (3) To examine contemporary work (both theoretical and applied) that might further enhance current accounts of discourse processing.

Language comprehension involves several core processes, including letter and sound identification, the binding of those elements into words and sentences, the assignment of meaning to those constituents, and the potential encoding of some of that information into memory. A variety of fields focus on the components that under lie language comprehension, investigating the perception and retrieval of the most basic units of language (e.g., phonemes, morphemes), along with the ways in which those units are combined in organized sequences that become associated with well-formed words and sentences. Such work has considered language processing as a ‘deconstructionist’ activity, examining how comprehension necessitates the integration of linguistic building blocks into larger speech and text elements.

8.14 DEFINITION OF DECONSTRUCTION

What is deconstruction? The word "deconstruction" literally means to break something down into parts in order to better understand its meaning. In the philosophical context, deconstruction refers to the process of dismantling language to discover what is really being said beneath the surface; usually, this will be different from what is already considered to be known about the text. The deconstructionist examines not only what the text says but also what it doesn't say in order to ultimately conclude that no text has one fixed meaning and that if one can break down language enough, they will discover that it can mean anything to anyone. For example, consider the culinary industry. A recent trend in the food world is deconstructed dishes, or food that has been broken down into its most significant parts and served dismantled. Chefs who serve deconstructed dishes believe that by breaking down a popular dish into parts and serving it in an alternative way, they are reintroducing people to the dish and giving them an opportunity to experience it in a new way. This use of deconstruction is similar to the deconstruction definition as applied to literature.

Deconstructionism argues that logical structures based on binaries, or binary pairs, are the bones of society and language. A binary consists of two concepts that are presented as being at odds with each other. Examples include life/death, mind/body, and masculine/feminine. However, in analyzing these binaries, deconstructionists have found that the line separating these opposing terms actually connects them, making them interdependent. Life means nothing without the contrasting concept of death to compare it to, for example. So, when practicing deconstruction, one is trying to understand a term or concept by looking to what it is not. To understand life, one must study death. The goal of deconstruction is to become aware of the binary pairs that comprise our thinking and relationships and recognize their instability in relation to one another.

Jacques Derrida and Deconstruction

Jacques Derrida is the founder of deconstruction. His goal was to disrupt metaphysical thought built upon binary oppositions. A key aspect of Derrida's thinking is his concept of differ'ance, a play on the French verb "differer" which means both "to defer" and "to differ." In practice, this means that words are incomplete in meaning unless supported by other chosen words, and that the goal of specificity in language is to differentiate meaning. For example, if someone said the word "flower" to a room full of people, it is likely that every person in the room would conjure a picture of a different flower in their minds. If the speaker clarified by saying "single red rose" then the audience would be more united on their understanding of the concept being presented. Furthermore, in using more specific language, the speaker is causing the audience's original understanding "to differ" from the speaker's intended meaning, their new understanding is clarified by more specific language. However, even with more specific descriptors, it is unlikely that that every person in the room thought of the exact same rose. According to Derrida, all interpretations of language are valid, but this also means that nobody can ever understand exactly what another person is speaking or writing about. Language is only an approximation of what we know, but true definitions of terms are unattainable because it is all relative to individual experience. As in the example with the rose, we tend to describe things by what they are not. This connects directly to Derrida's theory of deconstruction and the concept of the binary. To deconstruct is to bypass all preconceived notions of the binary oppositions underlaying our understanding of society and language, and to not treat concepts as if some were different from others. This becomes possible with **"differ'ance"**, because society is built on the understanding that we do know some things to be true, such as that life is the opposite of death, but Derrida's theory disrupts all of that by pointing out that we don't even have complete definitions of the words we use, and that these binary pairs aren't actually so opposite. This becomes especially relevant when breaking down a literary text.

- **Check Your Progress – I**

1 What is Discourse Processing?

2 What is Deconstructionist Activity?

3. Explain about notion of Deconstruction given by Jacques Derrida in brief

8.15 THE NATURE OF DISCOURSE PROCESSING

Discourse processing has been particularly concerned with identifying and describing the basic components of a discourse experience. It also explains the types of experiences that occur during everyday reading activities.

Consider, for example, the following excerpt from the novel *“Kafka on the Shore”*, by Japanese author Haruki Murakami in which a woman named ‘Sakura’ describes her attempt to run away from home:

I got as far as Abashiri, up in Hokkaido. I stopped by a farm I happened to see and asked them to let me work there. I’ll do anything, I told them, and I’ll work hard. I don’t need any pay as long as there’s a roof over my head and you feed me. The lady there was nice to me, had me sit down and have some tea. Just wait here, she said. The next thing I knew a patrol car pulled up outside and the police were hauling me back home. (p. 75)

Readers can engage in a variety of activities as they process this text. Knowledge that this story is a fictional narrative, likely to be read for entertainment purposes, might encourage attention to different concepts or different rereading behaviors than if the text were read for the purpose of studying story structure for a literature class assignment. Readers must resolve anaphors (e.g., inferring that ‘them’ in the second sentence refers to people who reside at the farm) as they attempt to build coherence within and between sentences in the text. Presumably, readers with greater knowledge of Japan might construct specific inferences about the distance Sakura traveled, as compared to readers with little knowledge of Japan. These activities, all in the service of building an understanding of

the information described in the text, exemplify the types of processing phenomena that discourse researchers investigate.

Let's understand the factors that contribute to processing and memory for discourse, referring back to this excerpt to provide concrete examples where appropriate.

8.16 DISCOURSE CONTENT

Investigations of discourse comprehension often focus on how text content influences reader comprehension and memory. The findings, taken together, generally suggest that language provides a set of processing cues to the reader that guide the construction of memory for the discourse. These cues indicate what warrants attention and what can be ignored or deemphasized. In fact, as individuals process unfolding text, discourse concepts (e.g., character and events) fluctuate in activation over time, based on both their mention within the actual discourse and in reader's memory. Outlining the dynamic activation and deactivation of concepts over the course of a discourse experience has been incredibly useful in identifying the moment-by-moment activities that accompany language understanding, as well as predicting the final products of those activities (e.g., what readers remember from the text).

Examination of these content-driven fluctuations has focused on **Linguistic Cues** that are lexical, structural, and genre-based in form. Lexical cues include connectives that help provide relational information between concepts. Words that are included in larger discourse segments, such as 'because,' 'and,' 'not,' and so on, indicate causal logic, conceptual associations, and coherence relations between linguistic segments. These types of relations help determine the elements of a discourse that remain in reader focus. The activation and continued maintenance of concepts in memory during unfolding discourse depends upon the types of relations that are established within sets of sentences. For example, anaphor resolution (e.g., from our opening example, finding the referent for 'she' in the two-sentence sequence, 'The lady there was nice to me.... Just wait here, she said.') impacts processing activity by encouraging the maintenance of important concepts previously introduced in the discourse. Both explicit connectives (such as 'because') and inferred connections (such as resolved anaphors) can establish coherence across texts, which is particularly important with longer texts that include multiple characters and plotlines.

Structural cues serve a similar purpose; but rather than employing specific lexical tokens or relations among tokens, they involve organizational features that guide reader attention to discourse elements. For instance, syntax can highlight the subject or objects of linguistic input (e.g., nouns specify concepts of interest whereas verbs specify how those nouns interact). In addition, pragmatic structural cues based on expectations for how text typically functions can help guide focus: Consider that the earliest described detail in a text often helps guide

comprehension of later information. Titles, for example, enhance understanding of the relationships among sentences. Readers tend to recall more text content after reading titles that disambiguate important topic information than after reading texts lacking those titles. Additionally, readers' self-reported comprehension is higher for texts with titles and organizational cues than texts without them.

A third, specifically discourse-level cue is genre. Genre serves as a macro-level structural cue by helping to outline the kinds of information that might be included in a discourse, the ways in which that information might be presented, and the intended purpose of the material. Narratives, such as novels, historical tales, and gossip, include story driven fictional or nonfictional accounts that focus on characters and events. Narratives usually include an obvious chronological and causal structure that can encourage expectations for how stories might unfold; for example, tragedies often end with unfortunate conclusions for main characters, whereas comedies tend to include unexpected confluences of events. Expository materials (e.g., textbooks, newspaper columns, and scientific articles) consist of explanatory or persuasive descriptions that are intended to provide details and insight with respect to concepts or facts, including the antecedents and consequences of processes. Procedural materials (e.g., furniture construction manuals, software installation guides, and prescription labels) include directions that indicate the components and steps necessary to complete an activity.

Knowledge that Kafka on the Shore is a fictional narrative should lead readers to have different expectations for the unfolding of Sakura's story than if this excerpt were taken from a newspaper account of teenage runaways. Violations of genre expectations, as well as violations of expectations established by lexical or structural organizations, can lead to processing difficulty and potential attempts by readers to reconcile any comprehension problems.

Check Your Progress – II

1 What is Discourse Content?

2 Explain Linguistic Cues, Structural cues and Genre in Discourse Processing in detail

8.17 MEMORY FOR DISCOURSE CONTENTS

Interactions between content and reader characteristics are responsible for determining what might be encoded and stored in long-term memory. The goal of many discourse experiences (but not all) is to acquire information that can be used later. Therefore, it proves crucial to not only understand the types of processes that people utilize to comprehend language, but also to evaluate the products that remain in memory after the discourse concludes. Such products are examined by considering the nature of mental representations for discourse, and how content and reader variables influence the strength of those memories.

8.17.1 Tri-Partite Model

Generally, much of the work in discourse processing has considered mental representations by appealing to the tri-partite model. This model outlines three different levels or types of representations that can result from linguistic input.

- 1) **The most basic level is the surface level**, which includes memory for the exact words experienced. This level contains the form of what has been read, rather than the meanings underlying those linguistic constituents. Surface level representations are short-lived; without continued rehearsal, they can be displaced from memory by other information.
- 2) **The next level of representation is the propositional or text base.** At this level, individuals encode the underlying meanings of language. This involves understanding the specific idea units conveyed within a discourse. Text base representations are crucial for recall and comprehension of discourse content. However, text base representations contain only the meanings conveyed within a particular text, and do not include information beyond that content.
- 3) **The third level of representation**, which is the focus of many investigations of discourse processing, is the situation or mental model. At this level, comprehenders represent the information described by but not necessarily contained within the text. This involves connecting prior knowledge with linguistic content to build inferences about the discourse. For instance, a situation model might contain information about a character's appearance, whether information is being presented sarcastically or sincerely, the relationships between concepts that have been mentioned but remain unconnected within the text, and other types of constructions that necessitate going beyond the material explicitly described. From our opening example, situation models might contain inferences about why Sakura ran away, how old she is, and even what she looks like. Situation models are often associated with successful comprehension and long-term memory for discourse material.

The tri-partite model has informed theoretical accounts of comprehension. In addition, the model provides insights relevant to applied work. (Source : van Dijk TA, Kintsch W. Strategies of Discourse Comprehension. New York: Academic Press; 1983)

Check Your Progress – III

1 What is **Tri-Partite Model**? Explain in detail.

8.18 THEORIES/MODELS OF DISCOURSE PROCESSES

Much of the work on this issue has focused on the notion of knowledge activation; that is, 1) how discourse contexts influence information retrieval from memory, and 2) how retrieved information influences comprehension. These two approaches unite themselves into a single, powerful model.

8.18.1 Information Retrieval Model (Memory-based)

Knowledge activation in memory can occur relatively quickly and without strategic control. Consider that participants' processing of lexical items is facilitated when those items are related (e.g., semantically, phonologically) to previously presented items, in contrast to unrelated items. For example, if participants are asked to decide whether a letter string is a real word or not, they are faster to say 'bread' is a word if it is immediately preceded by a semantically related word such as 'butter'. Based on this classic work, the memory-based or resonance view of memory activation describes a process in which any information in memory that matches the current text input becomes activated quickly and automatically.

For example, the concept 'garage' might activate notions of cars, bands, buildings, other words that phonetically overlap with garage, and so on. This broad-based activation leads to multiple concepts being activated simultaneously but is passive and unrestricted. The memory-based view relies on the types of general cognitive processes (e.g., priming) that have been articulated in existing models of memory, thus requiring no special processing architectures.

8.18.2 Constructionist Approach/Model

In contrast to the automatic retrieval described by the memory-based view, the constructionist approach emphasizes the importance of directed, strategic searches of memory. For example, a student might actively search memory for details about particular historical events while attempting to complete an assignment. This type of processing involves a targeted search for meaning from memories related to the concepts

presented in a text. Several researchers have identified conditions under which such a search-after-meaning might play an important role in comprehension.⁴⁶ According to this view, reading can involve goal-driven considerations of prior knowledge in the service of constructing relevant inferences and enhancing understandings.

The accumulated evidence from inference studies suggests that both memory-based and constructionist frameworks are necessary to account for the range of inferential activities that individuals can engage in during discourse processing.

8.18.3 Promising Model (Blend of Memory-based and Constructionist Model)

In line with this work, Information Retrieval Model (Memory-based) and Constructionist Approach/Model have integrated the two frameworks into a single, particularly promising model. In this model, text content and prior knowledge interact in a relatively stage-like manner. In the first stage, linguistic input broadly activates concepts in memory. In the second stage, the reader can search these activated concepts with the goal of selecting the most appropriate information for further processing. This type of model integrates the memory-based view as the first step in reading activity, with the constructionist view as the second step, identifying both components as necessary for discourse comprehension. (Source: Kintsch W, van Dijk TA. Toward a model of text comprehension and production. *Psychol Rev* 1978, 85:363–394)

- **Check Your Progress – IV**

1 Elucidate the **Theories/Models of Discourse Processes** in detail.

8.19 LET US SUM UP

In conclusion, to advance both theoretical and applied interests, discourse processing research seeks to explain how discourse input and the characteristics of particular readers interact to yield meaningful memory for the books, newspapers, and blogs we peruse everyday. What do readers ultimately take away from their experiences with texts like “Kafka on the Shore”? We hope that our brief review of the field suggests that they might learn and remember discourse information by generating connections between the events described in the text and their own prior experiences. We might also ask what readers will take away from the excerpt we specifically presented earlier. They may generate expectations

for what might happen next in the story, make inferences about why ‘Sakura’ might have been sharing this anecdote, or (potentially) develop an interest in reading the rest of the novel. Understanding both the processes that underlie these experiences, and the consequences of those processes on our understanding and appreciation for texts are important elements in building (and testing) models of discourse processing.

8.20 KEY WORDS

Discourse	spoken or written communication between people, especially serious discussion of a particular subject
Cognitive	involving conscious intellectual activity
Deconstruction	refers to approaches to understanding the relationship between text and meaning. It was introduced by the philosopher Jacques Derrida
Fictional Narrative	a story that you write from your imagination.
Anaphor	a word or phrase that refers back to an earlier word or phrase
Coherence	the quality of being logical and consistent
Excerpt	a short extract from a film, broadcast, or piece of music or writing
Linguistic Cues	linguistic components from all linguistic levels. They can be morphological cues, word order or semantic knowledge about the relations between objects in a sentence.
Lexical	relating to the words or vocabulary of a language.
Logic	the study of correct reasoning
Structural Cues	self-contained information used to figure out identity and meaning of a given word
Genre	a style or category of art, music, or literature
Narratives	a spoken or written account of connected events; a story
Chronological	record of events following the order in which they occurred
Propositional	relating to
Retrieval	the process of getting something back from somewhere
Semantically	in a way that is connected with the meaning of words
Phonologically	relating to the sounds in a particular language
Constructionist Approach	is the creation by learners of mental models to understand the world around them

8.21 BOOKS SUGGESTED

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3. Clancy, P., Thompson, S., Suzuki, R., & Tao, H. (1996). The conversational use of reactive tokens in English, Japanese, and Mandarin. "Journal of Pragmatics, 26," 355-387.
4. Hatch, E. (1992). "Discourse and language education." New York: Cambridge University Press.
5. Johnson, K. (1995). "Understanding communication in second language classrooms." New York: Cambridge University Press.
6. McCarthy, M. (1992). "Discourse analysis for language teachers." New York: Cambridge University Press.
7. McCarthy, M., & Carter, R. (1994). "Language as discourse: Perspectives for language teachers." New York: Longman.
8. Rigganbach, H. (1999). "Discourse analysis in the language classroom: Volume 1. The spoken language." Ann Arbor, MI: University of Michigan Press.
9. Schiffrin, D. (1994). "Approaches to discourse." Oxford: Blackwell.
10. Young, R., & He, A. (1998). "Talking and testing: Discourse approaches to the assessment of oral proficiency." Philadelphia: John Benjamins.
11. van Dijk TA, Kintsch W. Strategies of Discourse Comprehension. New York: Academic Press; 1983
12. Kintsch W, van Dijk TA. Toward a model of text comprehension and production. Psychol Rev 1978, 85:363–394.

Answers

Check Your Progress – I

Answer: 1

Discourse processing focus on the ways in which readers and listeners comprehend language. The linguistic segments of discourse processing are larger than sound, word, or sentence-level units.

Answer: 2

Deconstructionist' activity examines how comprehension necessitates the integration of linguistic building blocks into larger speech and text elements.

Check Your Progress – II

Answer: 1

The findings, taken together, generally suggest that language provides a set of processing cues to the reader that guide the construction of memory for the discourse.

Answer: 2

Linguistic Cues are lexical, structural, and genre-based in form. Lexical cues include connectives that help provide relational information between concepts. Structural cues involve organizational features that guide reader attention to discourse elements. Discourse-level cue is genre. Genre serves as a macro-level structural cue by helping to outline the kinds of information that might be included in a discourse.

Check Your Progress – III**Answer**

much of the work in discourse processing has considered mental representations by appealing to the tri-partite model. This model outlines three different levels or types of representations that can result from linguistic input. The most basic level is the surface level, The next level of representation is the propositional or text base. The third level of representation. The tri-partite model has informed theoretical accounts of comprehension. In addition, the model provides insights relevant to applied work.

Check Your Progress – IV**Answer**

Much of the work on this issue has focused on the notion of knowledge activation; that is, 1) how discourse contexts influence information retrieval from memory, and 2) how retrieved information influences comprehension. These two approaches unite themselves into a single, powerful model. In line with this work, contemporary theoretical and computational accounts of discourse processing have integrated the two frameworks into a single, particularly promising model.