

ENG403

PSYCHOLINGUISTICS



Course code: ENG 403
Course title: Psycholinguistics
Course credit load: 2 Units

Series 1: Language, Mind, and the African Experience

Series 2: Psycholinguistics of Acquisition and Learning

Series 3: Cognition, Thinking, and Mental Processes in Language

Series 4: Language Localization, Performance, and Behaviour

Series 5: Production, Comprehension, and Language Impairments

Proposed Outline for Series 1

Part .1: Language and the African Experience

- 1.1.1 Meaning and structure of English in African contexts
- 1.1.2 Influence of English on African identity and culture
- 1.1.3 Language as a tool of communication and social interaction

Part .2: Language and the Mind

- 1.2.1 Psycholinguistic perspectives on language and cognition
- 1.2.2 Relationship between language and thought in African societies
- 1.2.3 Language and mental processes in communication

Part .3: Language Challenges and the African Psyche

- 1.3.1 Defects in language usage arising from physical or mental challenges
- 1.3.2 Tools for language understanding among mentally challenged citizens
- 1.3.3 Corrective approaches to language impairments in African contexts

Introduction

Language is not only a means of communication, it is also a powerful force that shapes identity, thought, and cultural experience. In Africa, the English language has played a central role in education, governance, and literature, while simultaneously influencing the collective psyche of its people. This Series sets the stage for examining how language interacts with the mind and how the African experience provides a unique lens through which these interactions can be understood.



The aim of this Series is to equip you with the ability to analyse the relationship between language, cognition, and the African context, and to evaluate how linguistic structures and usage affect identity, communication, and mental processes.

We shall commence this Series by exploring the meaning and structure of English in African contexts and its influence on identity and culture. Next, we will examine psycholinguistic perspectives on language and cognition, focusing on how thought and mental processes shape communication. Finally, we will wrap up by considering language challenges, including defects in usage and impairments, and how corrective approaches can support effective communication among mentally or physically challenged citizens.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- SLO 1.1** define the meaning and structure of English within African contexts,
- SLO 1.2** analyse the influence of English on African identity, culture, and social interaction,
- SLO 1.3** explain psycholinguistic perspectives on the relationship between language and cognition,
- SLO 1.4** evaluate how thought and mental processes shape communication in African societies,
- SLO 1.5** identify defects in language usage arising from physical or mental challenges,
- SLO 1.6** demonstrate corrective approaches and tools that support effective communication among mentally or physically challenged citizens.

1.1 Language And The African Experience

1.1.1 Meaning and structure of English in African contexts

The **meaning of language** refers to how words and expressions convey ideas, emotions, and cultural values. In African contexts, English has often been adopted as a **lingua franca**, which means a common language used for communication among people with different native tongues. The **structure of English** includes grammar, syntax, and vocabulary, which differ significantly from indigenous African languages in both form and function.

African societies have adapted English to reflect local realities, resulting in varieties such as Nigerian English or Kenyan English. These varieties demonstrate how language evolves when it interacts with diverse cultural and social environments.

Fill in the blank: English in Africa often serves as a _____, enabling communication across diverse ethnic groups.



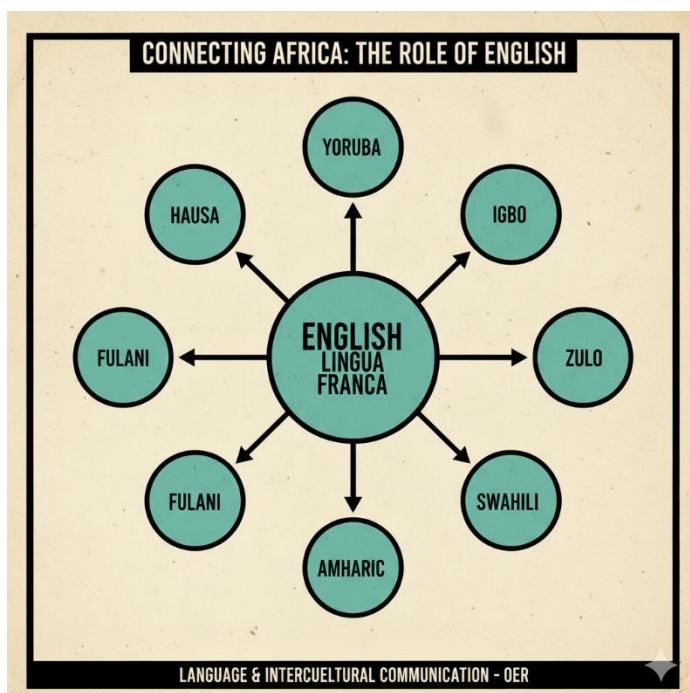


Figure 1.1 Relationship between English and indigenous languages in Africa

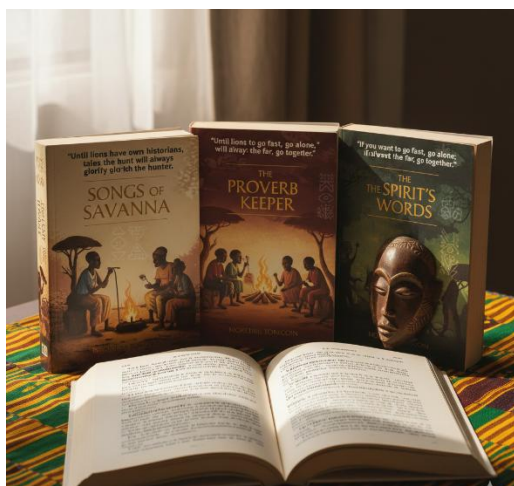
1.1.2 Influence of English on African identity and culture

The **influence of English** extends beyond communication to shape **identity**, which refers to how individuals and groups perceive themselves, and **culture**, which encompasses traditions, values, and social practices. English has been associated with education, modernisation, and globalisation, but it has also raised concerns about cultural erosion and the marginalisation of indigenous languages.

For example, many African writers use English to express African experiences, yet they often infuse their works with local idioms and proverbs to preserve cultural authenticity. This duality highlights the tension between global communication and cultural preservation.

Fill in the blank: African writers often use _____ to preserve cultural authenticity within English texts.





AFRICAN LITERATURE: ENGLISH & INDIGENOUS VOICES - OER

Plate 1.1 African literature blending English and indigenous culture

1.1.3 Language as a tool of communication and social interaction

Language is a **tool of communication**, meaning it enables the exchange of ideas, emotions, and information. In African societies, English plays a central role in education, governance, and commerce, while indigenous languages remain vital for community bonding and cultural continuity.

Social interaction is shaped by the choice of language. For instance, English may be used in formal settings such as schools or offices, while local languages dominate informal contexts like family gatherings or community events. This dynamic illustrates how language choice reflects both social status and cultural belonging.

Fill in the blank: In formal settings such as schools and offices, _____ is often the preferred language of communication.

Setting	English (or Colonial Language)	Indigenous Languages
Formal (High Domain)	Primary: Used in government, law, higher education, international trade, and scientific research.	Limited: Occasionally used in lower courts or early primary education; often translated from English.
Informal (Low Domain)	Secondary: Used among the elite or for "distanced" interactions between different ethnic groups.	Dominant: Used in the home, family gatherings, traditional ceremonies, and local marketplaces.



Setting	English (or Colonial Language)	Indigenous Languages
Media & Arts	Broadcasting: National news, academic journals, and pan-African literature.	Cultural: Folk songs, community radio, local theater, and traditional storytelling.
Social Function	Pragmatic: Acts as a "bridge" (lingua franca) for national unity and global economic participation.	Identitative: Acts as the primary carrier of ethnic identity, cultural heritage, and ancestral values.
Prestige	High Social Status: Often associated with modernism, wealth, and formal Western education.	High Cultural Status: Associated with authenticity, community belonging, and local wisdom.

Table 1.1 Language use in African social contexts

Box 1.1: Recommended Reading

Selected texts on language and African identity

Achebe, C. (1975). *The African Writer and the English Language*.

Ngũgĩ wa Thiong'o (1986). *Decolonising the Mind*.

Bamgbose, A. (1991). *Language and the Nation: The Language Question in Sub-Saharan Africa*.

Recommended Readings: Language & African Identity

Foundational Texts

Ngũgĩ wa Thiong'o, *Decolonising the Mind: The Politics of Language in African Literature* (1986): A seminal work arguing that language is the "collective memory-bank" of a people and advocating for writing in indigenous languages to break colonial mental ties.

Chinua Achebe, *Morning Yet on Creation Day* (1975): Features the famous essay "The African Writer and the English Language," where Achebe argues for "appropriating" English to carry the weight of African experience.

Ayo Bamgbose, *Language and Exclusion: The Consequences of Language Policies in Africa* (2000): A critical look at how English-centric policies marginalize the majority of African citizens from participating in governance and development.

Sociolinguistics & Policy

Andrew Simpson (Ed.), *Language and National Identity in Africa* (2008): A comprehensive country-by-country analysis (including a dedicated chapter on Nigeria) of how linguistic diversity interacts with the nation-building project.



Paulin G. Djité, *The Sociolinguistics of Development in Africa* (2008): Examines the "paradox of poverty" where development is stalled because it is communicated in languages the target populations do not understand.

Toyin Falola, *Decolonizing African Knowledge: Autoethnography and African Epistemologies* (2022): Explores how to reclaim African ways of knowing by stripping away Eurocentric linguistic and institutional influences.

Contemporary Perspectives (2025–2026)

Ethan R. Sanders, *Building the African Nation* (2025): A fresh intellectual history tracing how early 20th-century Pan-Africanists navigated identity across linguistic and territorial borders.

Wellman Kondowe et al. (Eds.), *Multilingualism in Southern Africa: Issues and Perspectives* (2025): While focused on the south, its theories on "neocolonialism in language policy" provide vital comparative data for West African scholars.

Box 1.1 Selected texts on language and African identity

Pilot questions 1.1

Define the term **lingua franca** and explain its role in African contexts.

Identify one way in which African societies have adapted English to reflect local realities.

Explain how English influences African identity and culture.

Distinguish between the use of English in formal settings and indigenous languages in informal settings.

Name one African writer who uses English to express African experiences while preserving cultural authenticity.

1.2 Language And The Mind

1.2.1 Psycholinguistic perspectives on language and cognition

The field of **psycholinguistics** is concerned with how language is processed in the mind. It examines the mental mechanisms that allow humans to acquire, produce, and comprehend language. **Cognition** refers to the mental processes involved in acquiring knowledge and understanding, including perception, memory, and reasoning. Psycholinguistics therefore provides a framework for analysing how these cognitive processes interact with language.

For example, when you read a sentence, your brain does not simply decode words one by one. Instead, it actively predicts meaning, draws on memory, and integrates context. This shows how language and cognition are inseparable.

Fill in the blank: Psycholinguistics studies the relationship between _____ and the mental processes that support it.



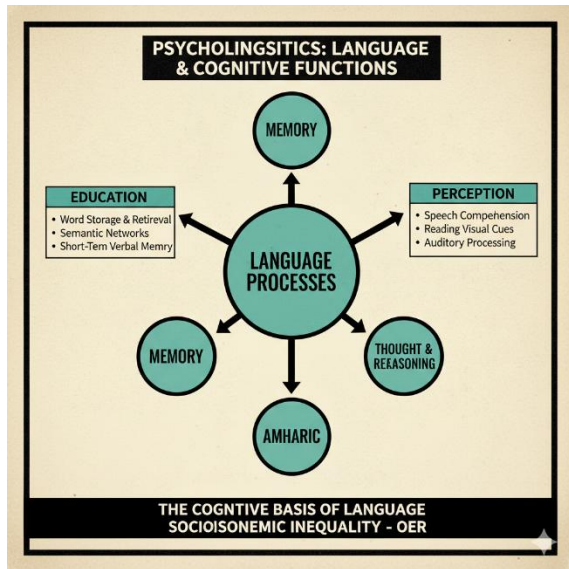


Figure 1.2 Interaction between language and cognition

1.2.2 Relationship between language and thought in African societies

The relationship between **language and thought** has long been debated. Some scholars argue that language shapes thought, while others suggest that thought exists independently of language. In African societies, this debate is particularly relevant because multilingualism is common, and individuals often switch between English and indigenous languages depending on context.

This switching demonstrates how language choice can influence the way ideas are expressed and understood. For instance, proverbs in indigenous languages often carry meanings that cannot be fully translated into English, showing how thought is deeply embedded in cultural language use.

Fill in the blank: Proverbs in indigenous African languages often carry meanings that cannot be fully _____ into English.



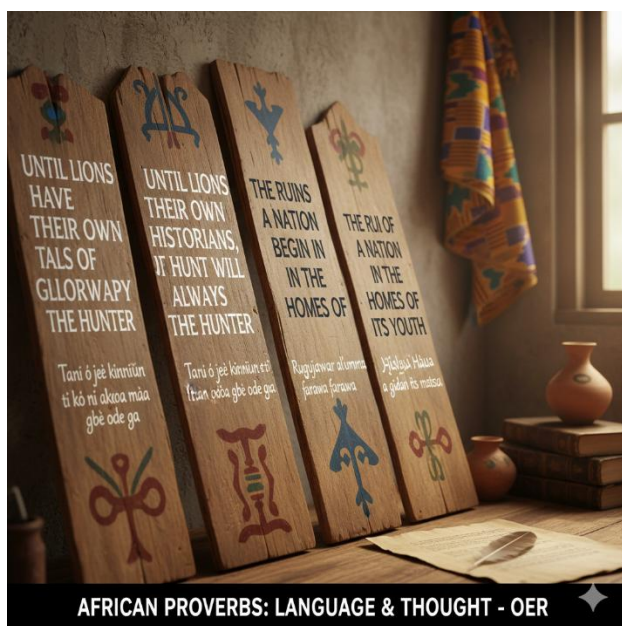


Plate 1.2 African proverbs illustrating language and thought

1.2.3 Language and mental processes in communication

Language is closely tied to **mental processes**, which include perception, memory, and reasoning. These processes enable individuals to interpret messages, recall information, and respond appropriately in communication. In African contexts, the mental processes involved in communication are influenced by cultural norms, social expectations, and linguistic diversity.

For example, when a speaker uses English in a formal setting, listeners may rely on memory and reasoning to interpret technical terms. In contrast, when indigenous languages are used in informal settings, communication may rely more on shared cultural knowledge and perception.

Fill in the blank: Mental processes such as _____, memory, and reasoning enable individuals to interpret and respond to communication.

Mental Process	Role in Communication	Contextual Example
Perception	The ability to receive and interpret sensory stimuli, such as decoding phonemes (sounds) or graphemes (written symbols).	Recognizing the subtle tonal differences in a language like Yoruba to distinguish between the words for "father" and "mother."
Memory	The storage and retrieval of linguistic data, including vocabulary (lexicon), grammar rules, and social context.	Recalling the appropriate English formal greeting when addressing a government official versus using slang with a peer.



Mental Process	Role in Communication	Contextual Example
Reasoning	The logical process of inferring meaning, understanding metaphors, and bridging gaps in "unstated" information.	Deducing the underlying meaning of an African proverb where the literal translation (e.g., "A bird in the hand...") requires cultural logic to apply to a current situation.

Table 1.2 Examples of mental processes in communication

Pilot questions 1.2

- Define psycholinguistics and explain its focus on language and cognition.
- Identify one way in which language and thought interact in African societies.
- Explain why proverbs in indigenous languages may not be fully translatable into English.
- List three mental processes that support communication.
- Distinguish between the role of English in formal settings and indigenous languages in informal settings.

1.3 Language Challenges And The African Psyche

1.3.1 Defects in language usage arising from physical or mental challenges

Language usage can be affected by physical or mental challenges that interfere with communication. A **language defect** refers to any difficulty in producing, comprehending, or using language effectively. Such defects may arise from hearing impairments, speech disorders, or cognitive limitations. In African societies, these challenges are often compounded by limited access to specialised support services.

For instance, a child with a hearing impairment may struggle to acquire spoken English, which can affect their educational progress. Recognising these defects is the first step towards providing appropriate interventions.

Fill in the blank: A _____ refers to any difficulty in producing, comprehending, or using language effectively.



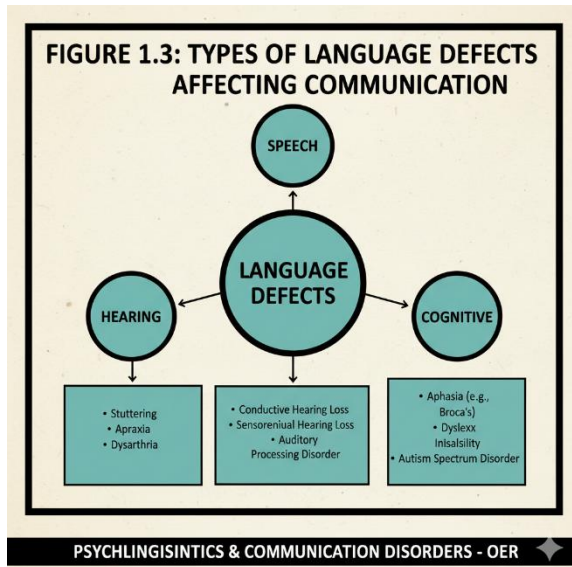


Figure 1.3 Types of language defects affecting communication

1.3.2 Tools for language understanding among mentally challenged citizens

Language tools are methods or resources designed to support communication for individuals with mental challenges. These may include simplified texts, visual aids, or assistive technologies such as speech-generating devices. In African contexts, community-based approaches, including storytelling and the use of local languages, can also serve as effective tools for enhancing understanding.

For example, visual aids such as pictures or diagrams can help learners grasp abstract concepts more easily. Similarly, using familiar cultural references can make communication more meaningful.

Fill in the blank: Visual aids such as _____ or diagrams can help learners grasp abstract concepts more easily.





Plate 1.3 Visual aids supporting language understanding

1.3.3 Corrective approaches to language impairments in African contexts

A **language impairment** is a condition that limits a person's ability to communicate effectively. Corrective approaches involve strategies to improve communication skills and reduce barriers. These may include speech therapy, inclusive education practices, and community support initiatives.

In African contexts, corrective approaches often combine modern techniques with traditional practices. For example, speech therapy may be complemented by storytelling in indigenous languages, which reinforces cultural identity while addressing communication needs.

Fill in the blank: A _____ is a condition that limits a person's ability to communicate effectively.

Approach	Description	Implementation Example
Speech Therapy	Clinical intervention by specialists (SLPs) to improve articulation, fluency, and voice volume through targeted exercises.	A therapist working with a child who stutters to develop rhythmic breathing and slow-speech techniques.
Inclusive Education	Designing classroom environments that accommodate diverse learning needs, allowing students with impairments to learn alongside peers.	Using Total Communication (a mix of sign language, speech, and visual aids) in a mainstream primary school.



Approach	Description	Implementation Example
Community Support	Leveraging local social networks and families to reduce stigma and provide practical communication practice.	Local "Language Hubs" where parents are trained to use AAC (Augmentative and Alternative Communication) tools at home.
Audiological Rehab	The use of technology and training to overcome hearing-related language barriers.	Fitting hearing aids or cochlear implants followed by auditory-verbal therapy to maximize listening skills.

Table 1.3 Corrective approaches to language impairments

Pilot questions 1.3

Define the term **language defect** and give one example.
 Identify one tool that can support language understanding among mentally challenged citizens.
 Explain how visual aids can enhance communication for individuals with mental challenges.
 Define **language impairment** and describe one corrective approach.
 Discuss how traditional practices can complement modern corrective approaches in African contexts.

Series Summary

This Series has focused on the relationship between language, the mind, and the African experience, highlighting how English functions as both a cognitive tool and a cultural force. Its purpose was to help you appreciate the role of language in shaping identity, thought, and communication, while also addressing the challenges faced by individuals with physical or mental impairments.

We began by examining the meaning and structure of English in African contexts and its influence on identity and culture. We then explored psycholinguistic perspectives, considering how language and cognition interact, and how thought processes are expressed in multilingual African societies. Finally, we discussed language defects and impairments, alongside tools and corrective approaches that support communication. By completing this Series, you should now be able to define and analyse the role of English in Africa, explain and evaluate the relationship between language and cognition, and identify as well as demonstrate strategies for addressing language challenges, as outlined in the Series Learning Outcomes (SLOs 1.1–1.6).

Glossary of Terms



Cognition: The mental processes involved in acquiring knowledge and understanding, including perception, memory, and reasoning.

Culture: The traditions, values, and social practices that define a community or society.

Identity: The way individuals and groups perceive themselves, often shaped by language and culture.

Language defect: A difficulty in producing, comprehending, or using language effectively, often caused by physical or mental challenges.

Language impairment: A condition that limits a person's ability to communicate effectively.

Language tools: Methods or resources designed to support communication, especially for individuals with mental challenges, such as visual aids or simplified texts.

Lingua franca: A common language used for communication among people with different native tongues.

Mental processes: Functions of the mind, such as perception, memory, and reasoning, that enable individuals to interpret and respond to communication.

Psycholinguistics: The study of how language is processed in the mind, including acquisition, comprehension, and production.

Concept Check Questions 1

Objective Questions

Which of the following best defines a lingua franca? a) A native language spoken by all citizens b) A common language used for communication among diverse groups c) A language restricted to formal education only d) A language used exclusively in literature (*Linked to SLO 1.1*)

Identify which of these is NOT a mental process in communication: a) Perception b) Memory c) Reasoning d) Painting (*Linked to SLO 1.4*)

Which African writer argued strongly for the use of indigenous languages in literature? a) Chinua Achebe b) Ngũgĩ wa Thiong'o c) Wole Soyinka d) Nadine Gordimer (*Linked to SLO 1.2*)

Short-Answer Questions

Define psycholinguistics and explain its focus. (*Linked to SLO 1.3*)

Give one example of how African societies have adapted English to reflect local realities. (*Linked to SLO 1.1*)

List two corrective approaches to language impairments in African contexts. (*Linked to SLO 1.6*)

Long-Answer Questions

Analyse how English influences African identity and culture, providing examples from literature or social life. (*Linked to SLO 1.2*)

Evaluate the relationship between language and thought in African societies, particularly in multilingual contexts. (*Linked to SLO 1.4*)



Discuss the challenges faced by mentally or physically challenged citizens in language usage and propose corrective strategies suitable for African contexts. (Linked to SLO 1.5 & SLO 1.6)

Answers to Concept Check Questions [Series 1]

Objective Questions

- b) A common language used for communication among diverse groups.
- d) Painting.
- b) Ngũgĩ wa Thiong'o.

Short-Answer Questions

Psycholinguistics is the study of how language is processed in the mind, focusing on acquisition, comprehension, and production.

One example is Nigerian English, which incorporates local idioms and expressions into English usage.

Corrective approaches include speech therapy and inclusive education practices.

Long-Answer Questions

Basic response: English influences African identity and culture by shaping education, governance, and literature. Writers such as Achebe use English to express African experiences while embedding cultural elements. **Value-added response:** Beyond literature, English has become a marker of social status and modernisation, yet it also risks marginalising indigenous languages. The tension between global communication and cultural preservation reflects broader debates about identity in postcolonial Africa.

Basic response: Language and thought are closely linked, as proverbs in indigenous languages often carry meanings that cannot be fully translated into English. **Value-added response:** In multilingual African societies, code-switching demonstrates how language choice shapes thought expression. For example, switching between English and Yoruba may alter the nuance of ideas, showing that thought is deeply embedded in cultural language use.

Basic response: Citizens with impairments face challenges such as difficulty in producing or comprehending language. Corrective strategies include speech therapy and the use of visual aids.

Value-added response: In African contexts, combining modern techniques with traditional practices such as storytelling in indigenous languages can enhance inclusivity. Community-based support and culturally relevant tools ensure that corrective approaches are both effective and respectful of local identities.

Answers to Pilot Questions [Series 1]

Pilot questions 1.1

A lingua franca is a common language used for communication among diverse ethnic groups.



African societies have adapted English by creating local varieties such as Nigerian English or Kenyan English.

English influences African identity and culture by shaping education, literature, and social interaction.

English is used in formal settings such as schools and offices, while indigenous languages dominate informal contexts like family gatherings.

Chinua Achebe is an example of an African writer who uses English to express African experiences while preserving cultural authenticity.

Pilot questions 1.2

Psycholinguistics is the study of how language is processed in the mind, focusing on acquisition, comprehension, and production.

Language and thought interact in African societies through multilingualism and code-switching.

Proverbs in indigenous languages may not be fully translatable into English because they carry cultural meanings embedded in local contexts.

Perception, memory, and reasoning are three mental processes that support communication.

English is used in formal contexts, while indigenous languages are used in informal ones.

Pilot questions 1.3

A language defect is a difficulty in producing, comprehending, or using language effectively, for example, a hearing impairment.

Visual aids are tools that can support language understanding among mentally challenged citizens.

Visual aids enhance communication by making abstract concepts easier to grasp.

A language impairment is a condition that limits communication; speech therapy is one corrective approach.

Traditional practices such as storytelling in indigenous languages can complement modern corrective approaches like inclusive education.

References and Attributions [Series 1]

Textual References

Achebe, C. (1975). *The African Writer and the English Language*. London: Heinemann.

Bamgbose, A. (1991). *Language and the Nation: The Language Question in Sub-Saharan Africa*. Edinburgh: Edinburgh University Press.

Crystal, D. (1997). *The Cambridge Encyclopedia of Language*. Cambridge: Cambridge University Press.

Fromkin, V., Rodman, R., & Hyams, N. (2018). *An Introduction to Language* (11th ed.). Boston: Cengage Learning.



Ngũgĩ wa Thiong'o. (1986). *Decolonising the Mind: The Politics of Language in African Literature*. London: James Currey.

Illustrations

Figure 1.1 Relationship between English and indigenous languages in Africa

Suggested AI prompt: "Create a diagram showing English as a lingua franca connecting multiple African languages."

Attribution: Placeholder for AI-generated diagram. Suggested search string: "English lingua franca Africa diagram OER."

Plate 1.1 African literature blending English and indigenous culture

Suggested AI prompt: "Generate an image of African literature in English infused with local proverbs and idioms."

Attribution: Placeholder for AI-generated image. Suggested search string: "African literature English indigenous culture OER image."

Table 1.1 Language use in African social contexts

Suggested AI prompt: "Create a table comparing English and indigenous language use in African formal and informal contexts."

Attribution: Placeholder for AI-generated table. Suggested search string: "African language use formal informal contexts OER table."

Box 1.1 Selected texts on language and African identity

Suggested AI prompt: "Create a box listing recommended readings on language and African identity in Africa."

Attribution: Based on referenced works by Achebe (1975), Ngũgĩ wa Thiong'o (1986), and Bamgbose (1991). Suggested search string: "African language identity recommended readings OER."

Figure 1.2 Interaction between language and cognition

Suggested AI prompt: "Create a diagram showing how language processes interact with cognitive functions such as memory and perception."

Attribution: Placeholder for AI-generated diagram. Suggested search string: "psycholinguistics language cognition diagram OER."

Plate 1.2 African proverbs illustrating language and thought

Suggested AI prompt: "Generate an image showing African proverbs in English and indigenous languages side by side."

Attribution: Placeholder for AI-generated image. Suggested search string: "African proverbs language thought OER image."

Table 1.2 Examples of mental processes in communication



Suggested AI prompt: “Create a table listing perception, memory, and reasoning with examples of their role in communication.”

Attribution: Placeholder for AI-generated table. Suggested search string: “mental processes communication perception memory reasoning OER table.”

Figure 1.3 Types of language defects affecting communication

Suggested AI prompt: “Create a diagram showing speech, hearing, and cognitive defects that affect language usage.”

Attribution: Placeholder for AI-generated diagram. Suggested search string: “language defects speech hearing cognitive OER diagram.”

Plate 1.3 Visual aids supporting language understanding

Suggested AI prompt: “Generate an image showing visual aids like pictures and diagrams used in language learning.”

Attribution: Placeholder for AI-generated image. Suggested search string: “visual aids language learning mentally challenged OER image.”

Table 1.3 Corrective approaches to language impairments

Suggested AI prompt: “Create a table listing corrective approaches to language impair

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Series 4: Language Localization, Performance, and Behaviour

Series 5: Production, Comprehension, and Language Impairments

Proposed Outline for Series 2

Part .1 Foundations of Language Acquisition

2.1.1 Meaning of language acquisition

2.1.2 Stages of first language acquisition



2.1.3 Factors influencing language acquisition (biological, cognitive, social)

Part .2 Theories of Language Learning

2.2.1 Behaviourist theory of language learning

2.2.2 Nativist theory (Chomsky and Universal Grammar)

2.2.3 Interactionist and socio-cultural perspectives

Part .3 Psycholinguistic Processes in Second Language Learning

2.3.1 Cognitive processes in second language learning

2.3.2 Transfer and interference from first language

2.3.3 Strategies for effective second language learning

Part .4 Challenges and Applications in African Contexts

2.4.1 Common challenges in language acquisition and learning in Africa

2.4.2 Educational implications and classroom practices

2.4.3 Role of multilingualism in African learning environments

Introduction

In the last Series, we explored how language interacts with the mind and the African experience, focusing on identity, cognition, and communication. Building on that foundation, this Series turns to the psycholinguistics of acquisition and learning, which is central to understanding how humans develop language skills and how these processes unfold in multilingual African contexts. By examining both first and second language learning, you will gain insights into the mechanisms that shape linguistic competence and performance.

The aim of this Series is to introduce you to the major concepts, theories, and processes of language acquisition and learning, and to equip you with the ability to analyse how these ideas apply to African educational and social settings.

We shall commence this Series by examining the foundations of language acquisition, including its meaning, stages, and influencing factors. Next, we will explore the major theories of language learning, ranging from behaviourist to nativist and socio-cultural perspectives. Following that, we will consider psycholinguistic processes in second language learning, focusing on cognitive mechanisms, transfer, and effective strategies. Finally, we will wrap up by discussing challenges and applications in African contexts, highlighting educational implications and the role of multilingualism in learning environments.

Series Learning Outcomes

Upon completing this Series, you should be able to:



- SLO 2.1** define the concept of language acquisition and outline its stages,
- SLO 2.2** explain the biological, cognitive, and social factors that influence first language acquisition,
- SLO 2.3** describe the behaviourist theory of language learning,
- SLO 2.4** analyse the nativist theory of language learning, particularly Chomsky's Universal Grammar,
- SLO 2.5** evaluate interactionist and socio-cultural perspectives on language learning,
- SLO 2.6** explain the cognitive processes involved in second language learning,
- SLO 2.7** analyse how transfer and interference from a first language affect second language learning,
- SLO 2.8** demonstrate strategies that support effective second language learning,
- SLO 2.9** identify common challenges in language acquisition and learning within African contexts,
- SLO 2.10** apply corrective and educational approaches to address language learning challenges in multilingual African environments.

2.1 Foundations Of Language Acquisition

2.1.1 Meaning of language acquisition

Language acquisition refers to the natural process by which humans develop the ability to understand and produce language. It begins in infancy and continues as children gradually master sounds, words, and grammar without formal instruction. Unlike deliberate learning, acquisition is largely subconscious, driven by exposure and interaction with caregivers and the environment.

Children acquire their first language through listening, imitation, and social interaction. This process is universal, though the pace and specific features vary across cultures and linguistic contexts.

Fill in the blank: _____ refers to the natural process by which humans develop the ability to understand and produce language.



Figure 2.1 Stages of language acquisition

2.1.2 Stages of first language acquisition

The stages of **first language acquisition** describe how children progress from simple sounds to complex sentences. These stages include:

Pre-linguistic stage: Infants produce sounds such as crying and cooing, which are precursors to speech.

Babbling stage: Around six months, infants experiment with sounds, producing repetitive syllables like “ba-ba” or “da-da.”

One-word stage: By about one year, children begin to use single words to represent whole ideas, such as “milk” for “I want milk.”

Two-word stage: Around eighteen months, children combine words, e.g., “want toy.”

Telegraphic stage: By two years, children form short sentences resembling telegrams, e.g., “go park now.”

Later stages: Vocabulary expands rapidly, and grammar becomes more sophisticated.

Fill in the blank: The stage where children use single words to represent whole ideas is called the _____ stage.

Stage	Approximate Age	Key Characteristics	Typical Examples
Cooing	2–4 months	Production of vowel-like sounds; experimentation with the vocal apparatus.	"ooo", "aaa", "uuh"
Babbling	6–9 months	Combinations of vowels and consonants; repeated syllables.	"ba-ba-ba", "ma-ma-ma", "da-da"
Holophrastic	10–18 months	Use of single words to represent complex ideas or entire sentences.	"Milk" (meaning "I want milk")
Two-Word	18–24 months	Beginning of syntax; combining content words while omitting "function" words.	"Doggie bark", "Mama go", "More juice"
Telegraphic	2–3 years	Multi-word utterances that sound like a telegram; basic grammatical structures.	"I go park now", "Daddy throw ball"
Later Development	3+ years	Rapid expansion of vocabulary and mastery of complex grammar and pragmatics.	"Can we go to the store because I want a toy?"



Table 2.1 Stages of first language acquisition

2.1.3 Factors influencing language acquisition

Several factors influence how effectively a child acquires language:

Biological factors: Human beings are biologically predisposed to acquire language. The brain's language centres, such as Broca's and Wernicke's areas, play a crucial role.

Cognitive factors: **Cognition** refers to mental processes such as perception, memory, and reasoning. These processes enable children to make sense of linguistic input.

Social factors: Interaction with caregivers, peers, and the wider community provides the necessary exposure and reinforcement for language development.

For example, children raised in rich linguistic environments tend to acquire language more quickly and effectively than those with limited exposure.

Fill in the blank: Interaction with caregivers, peers, and the wider community represents _____ factors in language acquisition.

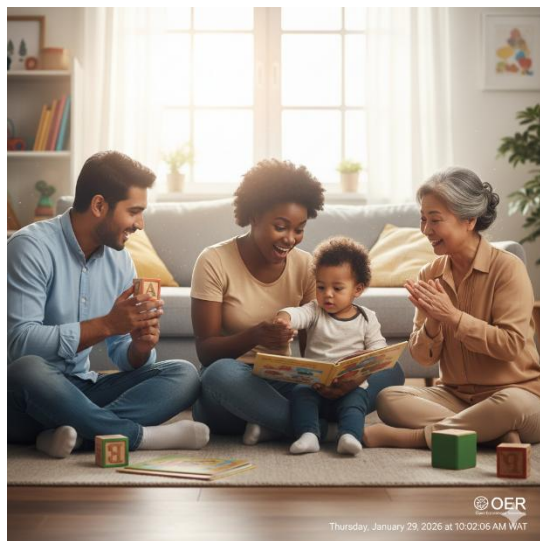


Plate 2.1 Social interaction supporting language acquisition

Box 2.1: Recommended Reading

Selected texts on language acquisition

Brown, R. (1973). *A First Language: The Early Stages*.

Chomsky, N. (1965). *Aspects of the Theory of Syntax*.

Lenneberg, E. H. (1967). *Biological Foundations of Language*.

Recommended Readings on Language Acquisition



Essential Academic Foundations

"How Languages are Learned" by *Patsy M. Lightbown & Nina Spada*: A highly recommended introductory text that balances theoretical depth with classroom practicality.

"The Language Instinct" by *Steven Pinker*: An engaging exploration of the biological basis of language, arguing that language is an innate human faculty.

"Language Development: An Introduction" by *Robert E. Owens Jr.*: A comprehensive, detailed look at the stages of development from a clinical and linguistic perspective.

"First Language Acquisition: The Essential Readings" edited by *Barbara Lust & Claire Foley*: A collection of classic papers covering morphology, phonology, and syntax.

Seminal Theoretical Works

"Syntactic Structures" by *Noam Chomsky*: The groundbreaking work that introduced generative grammar and the concept of an innate language faculty.

"Constructing a Language: A Usage-Based Theory" by *Michael Tomasello*: An alternative to Chomskyan theory, focusing on how children learn language through social interaction and patterns.

"Principles and Practice in Second Language Acquisition" by *Stephen Krashen*: A pivotal text for understanding the distinction between "acquisition" and "learning" in L2 contexts.

Open Educational Resources (OER)

"Language Files" by *The Ohio State University*: A widely used, peer-reviewed textbook covering all subfields of linguistics, including acquisition.

"Introductory Linguistics" (OER Commons): Various community-contributed modules specifically targeting the biological and environmental factors of learning.

Box 2.1 Selected texts on language acquisition

Pilot questions 2.1

Define language acquisition.

Identify the stage where children produce repetitive syllables such as "ba-ba."

Explain what happens during the telegraphic stage of first language acquisition.

List three factors that influence language acquisition.

Give one example of how social interaction supports language acquisition.

2.2 Theories Of Language Learning

2.2.1 Behaviourist theory of language learning



The **behaviourist theory** views language learning as a process of habit formation. According to this perspective, learners acquire language through imitation, repetition, and reinforcement. When a child hears a word and repeats it correctly, positive reinforcement from caregivers strengthens the habit. Over time, these repeated associations build up into a system of language use.

This theory emphasises the role of the environment rather than innate ability. It suggests that exposure and practice are the key drivers of language learning.

Fill in the blank: The behaviourist theory sees language learning as a process of _____ formation.

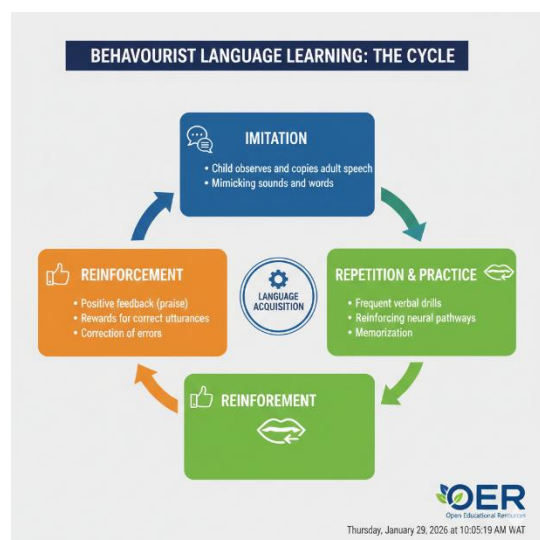


Figure 2.2 Behaviourist model of language learning

2.2.2 Nativist theory (Chomsky and Universal Grammar)

The **nativist theory**, proposed by Noam Chomsky, argues that humans are born with an innate ability to acquire language. He introduced the concept of **Universal Grammar**, which refers to a set of structural rules common to all languages. According to this theory, children do not simply imitate; instead, they actively construct language using inborn principles.

This explains why children can produce sentences they have never heard before. The nativist perspective highlights the biological foundations of language learning.

Fill in the blank: Chomsky's theory introduced the concept of _____ Grammar, a set of rules common to all languages.



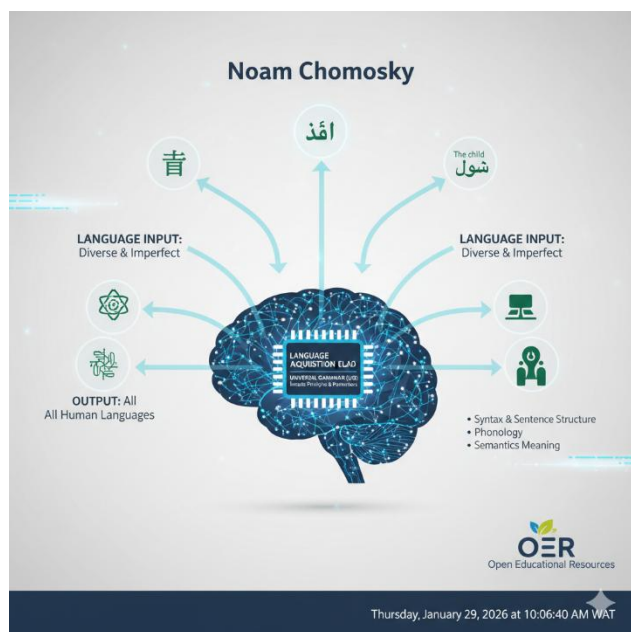


Plate 2.2 Universal Grammar in language learning

2.2.3 Interactionist and socio-cultural perspectives

The **interactionist perspective** combines elements of both behaviourist and nativist theories. It argues that language learning results from the interaction between innate ability and social environment. The **socio-cultural perspective**, influenced by Vygotsky, emphasises the role of social interaction and cultural context.

For example, children learn language more effectively when they engage in meaningful communication with adults and peers. This highlights the importance of scaffolding, where more knowledgeable individuals support learners until they can perform independently.

Fill in the blank: The socio-cultural perspective emphasises the role of _____ interaction and cultural context in language learning.

Feature	Behaviourist Theory	Nativist (Innatist) Theory	Interactionist Theory
Primary Proponent	B.F. Skinner	Noam Chomsky	Lev Vygotsky / Jerome Bruner
Core Idea	Language is a learned behavior acquired through habit formation .	Humans have an innate biological capacity to learn language.	Language develops through the interaction of biology and social experience.



Feature	Behaviourist Theory	Nativist (Innatist) Theory	Interactionist Theory
Learning Process	Imitation, repetition, and positive/negative reinforcement.	Activation of the Language Acquisition Device (LAD) via universal grammar.	Collaborative dialogue and social scaffolding within a cultural context.
Role of Environment	Crucial; provides the stimulus and rewards for "correct" speech.	Secondary; only serves as a "trigger" for the innate system.	Crucial; social interaction provides the necessary data and support.
View on Errors	Seen as "bad habits" that need immediate correction.	Seen as evidence of a child testing grammatical rules (e.g., "I goed").	Seen as a natural part of the learning and negotiation process.

Table 2.2 Comparison of behaviourist, nativist, and interactionist theories

Box 2.2: Recommended Reading

Selected texts on theories of language learning

Skinner, B. F. (1957). *Verbal Behaviour*.

Chomsky, N. (1965). *Aspects of the Theory of Syntax*.

Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*.

Recommended Readings on Language Learning Theories

Foundational Theories & Perspectives

"Verbal Behavior" by *B.F. Skinner*: The core text for **Behaviourism**, exploring how language is shaped through reinforcement and environmental stimuli.

"Syntactic Structures" by *Noam Chomsky*: The seminal work for **Nativism**, introducing the concept of Universal Grammar and the innate faculty for language.

"Thought and Language" by *Lev Vygotsky*: A classic in **Interactionism/Sociocultural Theory**, investigating the relationship between cognitive development and social speech.

"Mind in Society" by *Lev Vygotsky*: Further develops the concept of the **Zone of Proximal Development (ZPD)** and the role of social interaction in learning.

Modern Syntheses & Textbooks



"How Languages are Learned" by *Patsy M. Lightbown & Nina Spada*: Highly recommended for students; it breaks down complex theories (Behaviourism, Innatism, Interactionism) into accessible chapters with classroom applications.

"Principles of Language Learning and Teaching" by *H. Douglas Brown*: A standard academic text that provides a broad overview of Second Language Acquisition (SLA) theories.

"The Language Instinct" by *Steven Pinker*: An engaging, modern defense of the Nativist position, written for a general audience but deeply rooted in linguistic science.

"Language Learning Theories: A Student's Guide" by *Amin Shahini (2025)*: A contemporary resource that demystifies current trends, including emergentist and connectionist approaches.

Open Educational Resources (OER)

"Second Language Acquisition" (OER Commons): A collection of peer-reviewed modules covering the "Logical Problem of Language Acquisition" and input-based theories.

"Linguistics for Teachers" (BCcampus Open Education): An open textbook that explains the biological and social bases of language for educators.

Box 2.2 Selected texts on theories of language learning

Pilot questions 2.2

Define the behaviourist theory of language learning.

Explain Chomsky's concept of Universal Grammar.

Identify one way in which the interactionist perspective differs from the behaviourist theory.

State the main emphasis of the socio-cultural perspective.

Compare the role of environment in behaviourist theory with the role of innate ability in nativist theory.

2.3 Psycholinguistic Processes In Second Language Learning

2.3.1 Cognitive processes in second language learning

Cognitive processes are the mental activities that enable learners to acquire and use a second language. These include attention, memory, and problem-solving. Learners must focus on new sounds and structures, store them in memory, and retrieve them when speaking or writing.

For example, when learning French, an English speaker must pay attention to differences in pronunciation, remember new vocabulary, and apply grammatical rules when forming sentences.

Fill in the blank: _____ processes are the mental activities that enable learners to acquire and use a second language.



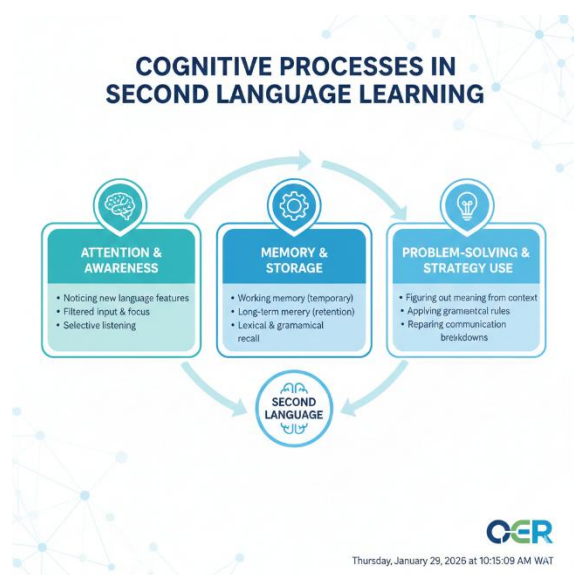


Figure 2.3 Cognitive processes in second language learning

2.3.2 Transfer and interference from first language

Transfer occurs when learners apply knowledge from their first language to a second language. This can be positive, when similarities help learning, or negative, when differences cause errors. **Interference** refers specifically to the negative effects of first language structures on second language use.

For instance, a Hausa speaker learning English may transfer sentence structures from Hausa, which could either aid or hinder communication depending on the similarity.

Fill in the blank: When differences between languages cause errors in second language use, this is called _____.



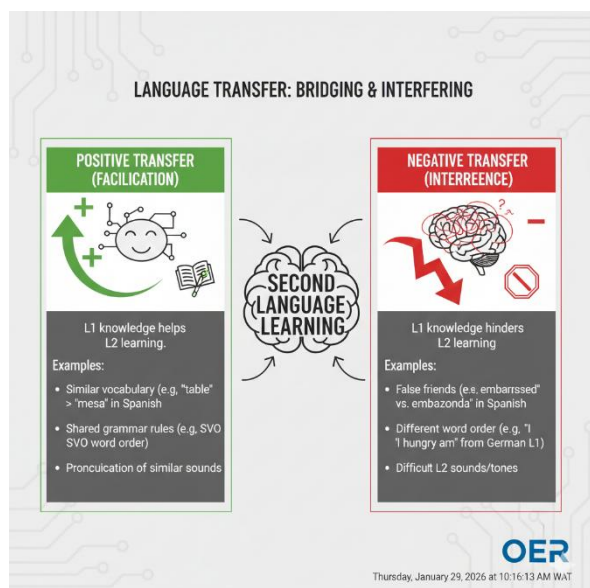


Plate 2.3 Transfer and interference in second language learning

2.3.3 Strategies for effective second language learning

Learners can adopt various **strategies** to improve second language acquisition. These include:

Cognitive strategies: Using repetition, summarising, or note-taking to reinforce learning.

Metacognitive strategies: Planning, monitoring, and evaluating one's learning process.

Social strategies: Practising with peers, engaging in conversations, and seeking feedback.

Effective learners often combine these strategies, adapting them to their personal needs and cultural contexts.

Fill in the blank: Planning, monitoring, and evaluating one's learning process are examples of _____ strategies.

Strategy Type	Definition	Examples in Practice
Cognitive Strategies	Direct manipulation of the learning material itself.	* Taking notes while listening to a lecture. * Creating mental images to remember new vocabulary.



Strategy Type	Definition	Examples in Practice
		* Deductively applying a grammar rule to a new sentence.
Metacognitive Strategies	Executive processes used to plan, monitor, and evaluate one's own learning.	* Setting a goal to learn 10 new words a day. * Identifying "weak spots" in pronunciation and seeking practice. * Self-correcting during a conversation.
Social/Affective Strategies	Interacting with others or controlling emotions to assist learning.	* Asking a native speaker to slow down or repeat a phrase. * Working with a peer to practice a dialogue.



Strategy Type	Definition	Examples in Practice
		* Using deep breathing to reduce anxiety before an oral exam.

Table 2.3 Strategies for effective second language learning

Box 2.3: Recommended Reading

Selected texts on second language learning

Ellis, R. (1994). *The Study of Second Language Acquisition*.

Krashen, S. D. (1982). *Principles and Practice in Second Language Acquisition*.

Oxford, R. L. (1990). *Language Learning Strategies: What Every Teacher Should Know*.

Recommended Readings on Second Language Learning

Core Introductory Texts

"Understanding Second Language Acquisition" by *Lourdes Ortega*: A modern, comprehensive survey of the field that is highly praised for its balance of theoretical depth and accessibility.

"Introducing Second Language Acquisition" by *Muriel Saville-Troike & Karen Barto*: An excellent entry point that explores SLA from linguistic, psychological, and social perspectives.

"How Languages are Learned" by *Patsy M. Lightbown & Nina Spada*: A must-read for teachers; it relates major theories of acquisition directly to classroom observations and practices.

Advanced Theoretical Frameworks

"Theories in Second Language Acquisition: An Introduction" edited by *Bill VanPatten, Gregory D. Keating, & Stefanie Wulff*: A structured overview of the diverse theoretical frameworks currently driving SLA research.

"The Study of Second Language Acquisition" by *Rod Ellis*: Often referred to as the "encyclopedia" of the field, providing an exhaustive historical and contemporary account of SLA research.

"Principles and Practice in Second Language Acquisition" by *Stephen Krashen*: The seminal text for "The Monitor Model," introducing concepts like *Comprehensible Input* ($i + 1$) and the *Affective Filter*.

Specialized & Practical Guides



"Second Language Learning and Language Teaching" by *Vivian Cook*: Connects the way people learn additional languages to the methods used in the classroom.

"Approaches and Methods in Language Teaching" by *Jack C. Richards & Theodore S. Rodgers*: A classic reference for understanding the history and evolution of various language teaching methodologies.

"Second Language Acquisition Myths" by *Jennifer Larson-Hall & Steven Brown*: Debunks common misconceptions about language learning by applying current empirical research to real-world scenarios.

Box 2.3 Selected texts on second language learning

Pilot questions 2.3

- Define cognitive processes in second language learning.
- Distinguish between transfer and interference in second language learning.
- Give one example of positive transfer from a first language to a second language.
- List three strategies that support effective second language learning.
- Explain why metacognitive strategies are important for learners.

2.4 Challenges And Applications In African Contexts

2.4.1 Common challenges in language acquisition and learning in Africa

Learners in African contexts often face unique challenges in acquiring and learning languages. These include limited access to quality educational resources, overcrowded classrooms, and insufficient exposure to target languages such as English or French. In addition, the dominance of indigenous languages at home can sometimes slow down second language acquisition in formal schooling.

Another challenge is the lack of trained language teachers who can effectively apply psycholinguistic principles in the classroom. This gap often results in rote learning rather than meaningful communication practice.

Fill in the blank: One major challenge in African language learning is the lack of trained _____ teachers.

Plate 2.4 Challenges in African language learning

2.4.2 Educational implications and classroom practices



The challenges of language acquisition and learning have significant **educational implications**. Teachers must adapt their methods to suit multilingual classrooms, where learners may have varying levels of proficiency in both indigenous and foreign languages.

Effective classroom practices include using bilingual teaching materials, encouraging peer collaboration, and integrating cultural references into lessons. These practices help bridge the gap between learners' home languages and the language of instruction.

Fill in the blank: Using bilingual teaching materials helps bridge the gap between learners' home languages and the _____ of instruction.

Practice	Description	Classroom Example
Bilingual Materials	Providing texts, charts, or digital resources that feature both the local language and the official language of instruction.	Using a science poster that labels the parts of a plant in both Swahili and English .
Peer Collaboration	Grouping students with diverse language fluencies to allow for "translanguaging" and mutual support.	A fluent speaker of Hausa explaining a math problem to a peer in their shared \$L1\$ before presenting in English.
Cultural References	Incorporating local stories, proverbs, and traditional knowledge into the curriculum to bridge home and school.	Teaching sentence structure using local proverbs like " <i>Haba na haba, hujaza kibaba</i> " (Little by little fills the measure).
Scaffolding	Providing temporary supports (like sentence starters or visual aids) that are gradually removed as the student gains proficiency.	Giving students a "word wall" of key terms in the local language to help them write an essay in the target language.

Table 2.4 Classroom practices supporting language learning in Africa

2.4.3 Role of multilingualism in African learning environments

Multilingualism refers to the ability to use more than one language. In African learning environments, multilingualism is both a challenge and an opportunity. While it may complicate instruction, it also enriches learners' cognitive and cultural experiences.

For example, learners who switch between English and Yoruba develop flexibility in thinking and communication. This ability can enhance problem-solving skills and cultural awareness. Teachers who embrace multilingualism can create inclusive classrooms that value all languages equally.



Fill in the blank: The ability to use more than one language is called _____.

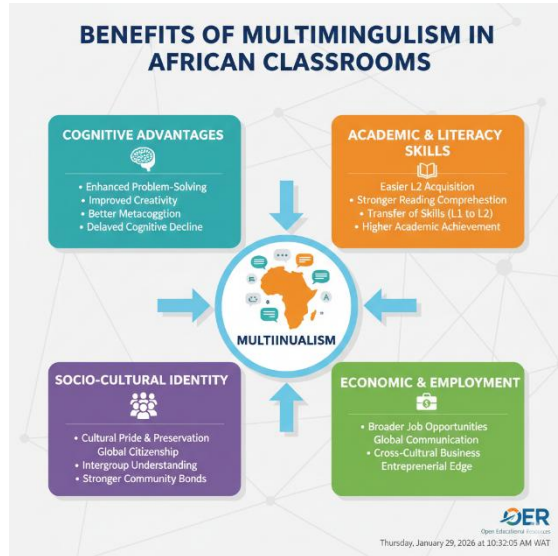


Figure 2.4 Benefits of multilingualism in African learning environments

Box 2.4: Recommended Reading

Selected texts on language challenges and multilingualism in Africa

Bamgbose, A. (2000). *Language and Exclusion: The Consequences of Language Policies in Africa*.

Alexander, N. (2005). *Language Policy and National Unity in South Africa*.

Heugh, K. (2009). *Multilingual Education in Africa: Lessons from the Past, Lessons for the Future*.

Recommended Readings: Multilingualism & Language Challenges in Africa

Theoretical & Policy Foundations

"Language and the Nation: The Language Question in Sub-Saharan Africa" by *Ayo Bamgbose*: A foundational text examining the sociolinguistic challenges of post-colonial nation-building.

"The Cambridge Handbook of African Linguistics" (Chapter 20: *Multilingualism and Education in Africa*) by *H. Ekkehard Wolff*: Provides a comprehensive academic overview of the historical and regional contexts of language in education.

"Language and National Identity in Africa" edited by *Andrew Simpson*: Explores how specific African countries navigate the tension between official colonial languages and indigenous national identities.

Applied Research & Case Studies



"Multilingual Education in Africa: Lessons from the Juba Language-in-Education Conference" edited by *Hamish McIlwraith*: A highly practical collection of papers discussing mother-tongue-based models and the role of English in various African states.

"Optimising Learning, Education and Publishing in Africa: The Language Factor" by *Adama Ouane & Christine Glanz*: A critical UNESCO report analyzing how the "language factor" impacts literacy and knowledge production across the continent.

"African Voices: An Introduction to the Languages and Linguistics of Africa" edited by *Vic Webb & Kembo-Sure*: An essential textbook for understanding the diversity and structural characteristics of African languages.

Open Educational Resources (OER)

"Linguistic Liberation and Unity of Africa" (OAU/ACALAN Archive): Historical and policy documents focused on the rehabilitation and empowerment of indigenous languages.

"Improving Literacy in Africa" (Qeios Open Peer Review): Recent research by *Martha Cronje* highlighting the linguistic differences between African and European languages and their impact on reading acquisition.

Box 2.4 Selected texts on language challenges and multilingualism in Africa

Pilot questions 2.4

Identify one common challenge in language acquisition and learning in Africa.

Explain why bilingual teaching materials are important in African classrooms.

Define multilingualism.

Give one example of how multilingualism benefits learners in African contexts.

Suggest one classroom practice that can support language learning in multilingual environments.

Series Summary

This Series has focused on the psycholinguistics of acquisition and learning, helping you to understand how humans develop language skills and how these processes apply in African contexts. Its purpose was to provide a clear framework for examining both first and second language learning, while highlighting the theories, cognitive processes, and challenges that shape linguistic development.

We began by exploring the foundations of language acquisition, including its meaning, stages, and influencing factors. Then we examined major theories of language learning, from behaviourist and nativist perspectives to interactionist and socio-cultural approaches. Following that, we considered psycholinguistic processes in second language learning, looking at cognitive mechanisms, transfer,



interference, and effective strategies. Finally, we discussed challenges and applications in African classrooms, with attention to multilingualism and educational practices. By completing this Series, you should now be able to define and explain key concepts, analyse major theories, evaluate language learning processes, and apply strategies to address challenges, as outlined in the Series Learning Outcomes (SLOs 2.1–2.10).

Glossary of Terms

Babbling stage: A stage in early language acquisition, usually around six months, when infants experiment with sounds and produce repetitive syllables such as “ba-ba” or “da-da.”

Behaviourist theory: A theory of language learning that views it as a process of habit formation through imitation, repetition, and reinforcement.

Cognitive processes: Mental activities such as attention, memory, and problem-solving that enable learners to acquire and use a language.

Interactionist perspective: A theory that combines innate ability with social environment, suggesting that language learning results from the interaction between biological predisposition and social interaction.

Language acquisition: The natural process by which humans develop the ability to understand and produce language, beginning in infancy and continuing through childhood.

Language learning strategies: Methods used by learners to improve language acquisition, including cognitive (repetition, summarising), metacognitive (planning, monitoring), and social (peer practice, feedback) strategies.

Metacognitive strategies: Techniques that involve planning, monitoring, and evaluating one’s learning process to improve language learning outcomes.

Multilingualism: The ability to use more than one language, often common in African contexts where learners switch between indigenous and foreign languages.

Nativist theory: A theory proposed by Noam Chomsky which argues that humans are born with an innate ability to acquire language, supported by the concept of Universal Grammar.

One-word stage: A stage in early language acquisition, usually around one year of age, when children use single words to represent whole ideas, such as “milk” for “I want milk.”

Socio-cultural perspective: A theory influenced by Vygotsky that emphasises the role of social interaction and cultural context in language learning.

Telegraphic stage: A stage in early language acquisition, around two years of age, when children form short sentences resembling telegrams, such as “go park now.”

Transfer: The application of knowledge from a first language to a second language, which can be positive (helpful) or negative (causing errors).

Universal Grammar: Chomsky’s concept of a set of structural rules common to all languages, which supports the idea of an innate ability to acquire language.

Concept Check Questions [Series 2]

Objective Questions



Which stage of first language acquisition involves children producing short sentences resembling telegrams? a) Babbling stage b) One-word stage c) Telegraphic stage d) Two-word stage (*Linked to SLO 2.1*)

Who introduced the concept of Universal Grammar? a) B. F. Skinner b) Noam Chomsky c) Lev Vygotsky d) Jean Piaget (*Linked to SLO 2.4*)

Which of the following is an example of a metacognitive strategy in second language learning? a) Repetition b) Note-taking c) Planning and monitoring learning d) Peer collaboration (*Linked to SLO 2.8*)

Short-Answer Questions

Define language acquisition. (*Linked to SLO 2.1*)

Explain one difference between the behaviourist and nativist theories of language learning. (*Linked to SLO 2.3 & SLO 2.4*)

Identify one educational implication of multilingualism in African classrooms. (*Linked to SLO 2.10*)

Long-Answer Questions

Analyse the role of cognitive processes such as attention and memory in second language learning. (*Linked to SLO 2.6*)

Evaluate the impact of transfer and interference from a first language on second language learning, providing examples. (*Linked to SLO 2.7*)

Discuss the challenges of language acquisition and learning in African contexts and propose classroom practices that can address these challenges. (*Linked to SLO 2.9 & SLO 2.10*)

Answers to Concept Check Questions [Series 2]

Objective Questions

- c) Telegraphic stage.
- b) Noam Chomsky.
- c) Planning and monitoring learning.

Short-Answer Questions

Language acquisition is the natural process by which humans develop the ability to understand and produce language.

The behaviourist theory emphasises habit formation through imitation and reinforcement, while the nativist theory argues that humans are born with an innate ability to acquire language through Universal Grammar.

Multilingualism requires teachers to adapt methods, such as using bilingual materials, to ensure learners can bridge the gap between home languages and the language of instruction.

Long-Answer Questions



Basic response: Attention helps learners focus on new sounds and structures, while memory enables them to store and retrieve vocabulary and rules. **Value-added response:** Beyond these basics, cognitive processes also involve problem-solving and pattern recognition, which allow learners to generalise rules and apply them creatively in communication.

Basic response: Transfer can be positive when similarities between languages aid learning, and interference occurs when differences cause errors. **Value-added response:** For example, a Yoruba speaker learning English may benefit from similar subject-verb-object structures (positive transfer), but struggle with tense marking (negative interference). This shows how first language structures can both support and hinder second language learning.

Basic response: Challenges include overcrowded classrooms, lack of trained teachers, and limited resources. Classroom practices such as bilingual materials and peer collaboration can help. **Value-added response:** In addition, integrating cultural references and embracing multilingualism can enhance inclusivity. Teachers who scaffold learning by drawing on learners' home languages can create richer, more effective learning environments that respect cultural identity while promoting proficiency in the language of instruction.

Answers to Pilot Questions [Series 2]

Pilot questions 2.1

Language acquisition is the natural process by which humans develop the ability to understand and produce language.

The stage where children produce repetitive syllables such as “ba-ba” is the babbling stage. During the telegraphic stage, children form short sentences resembling telegrams, such as “go park now.”

Biological, cognitive, and social factors influence language acquisition.

Social interaction supports language acquisition by providing exposure and reinforcement through communication with caregivers and peers.

Pilot questions 2.2

The behaviourist theory of language learning defines it as habit formation through imitation, repetition, and reinforcement.

Chomsky's concept of Universal Grammar refers to a set of structural rules common to all languages.

The interactionist perspective differs from the behaviourist theory by combining innate ability with social environment rather than focusing solely on imitation.

The socio-cultural perspective emphasises the role of social interaction and cultural context in language learning.

Behaviourist theory highlights the role of environment, while nativist theory stresses innate ability.

Pilot questions 2.3



Cognitive processes in second language learning are mental activities such as attention, memory, and problem-solving.

Transfer is the application of knowledge from a first language to a second language, while interference refers to errors caused by differences between the two languages.

An example of positive transfer is when a Yoruba speaker learning English benefits from similar subject-verb-object sentence structures.

Strategies that support effective second language learning include cognitive, metacognitive, and social strategies.

Metacognitive strategies are important because they involve planning, monitoring, and evaluating one's learning process.

Pilot questions 2.4

One common challenge in language acquisition and learning in Africa is the lack of trained language teachers.

Bilingual teaching materials are important because they help bridge the gap between learners' home languages and the language of instruction.

Multilingualism is the ability to use more than one language.

Multilingualism benefits learners by enhancing flexibility in thinking and communication, such as switching between English and Yoruba.

Classroom practices such as peer collaboration can support language learning in multilingual environments.

References and Attributions [Series 2]

Textual References

Bamgbose, A. (2000). *Language and Exclusion: The Consequences of Language Policies in Africa*. London: Heinemann.

Brown, R. (1973). *A First Language: The Early Stages*. Cambridge, MA: Harvard University Press.

Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press.

Ellis, R. (1994). *The Study of Second Language Acquisition*. Oxford: Oxford University Press.

Heugh, K. (2009). *Multilingual Education in Africa: Lessons from the Past, Lessons for the Future*. Cape Town: PRAESA.

Krashen, S. D. (1982). *Principles and Practice in Second Language Acquisition*. Oxford: Pergamon.

Lenneberg, E. H. (1967). *Biological Foundations of Language*. New York: Wiley.

Oxford, R. L. (1990). *Language Learning Strategies: What Every Teacher Should Know*. Boston: Heinle & Heinle.

Skinner, B. F. (1957). *Verbal Behaviour*. New York: Appleton-Century-Crofts.



Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Illustrations

Figure 2.1 Stages of language acquisition

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing the stages of language acquisition from infancy to childhood.”

Suggested OER search string: “language acquisition stages diagram OER.”

Table 2.1 Stages of first language acquisition

Attribution: AI-generated placeholder.

Prompt: “Create a table listing stages of first language acquisition with examples.”

Suggested OER search string: “first language acquisition stages table OER.”

Plate 2.1 Social interaction supporting language acquisition

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing a child interacting with caregivers while learning language.”

Suggested OER search string: “child caregiver interaction language acquisition OER image.”

Box 2.1 Selected texts on language acquisition

Attribution: Based on referenced works by Brown (1973), Chomsky (1965), and Lenneberg (1967).

Suggested OER search string: “language acquisition recommended readings OER.”

Figure 2.2 Behaviourist model of language learning

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing imitation, repetition, and reinforcement in behaviourist language learning.”

Suggested OER search string: “behaviourist theory language learning diagram OER.”

Plate 2.2 Universal Grammar in language learning

Attribution: AI-generated placeholder.

Prompt: “Generate an image illustrating Chomsky’s Universal Grammar concept.”

Suggested OER search string: “Chomsky Universal Grammar language learning OER image.”



Table 2.2 Comparison of behaviourist, nativist, and interactionist theories

Attribution: AI-generated placeholder.

Prompt: “Create a table comparing behaviourist, nativist, and interactionist theories of language learning.”

Suggested OER search string: “comparison table behaviourist nativist interactionist language learning OER.”

Box 2.2 Selected texts on theories of language learning

Attribution: Based on referenced works by Skinner (1957), Chomsky (1965), and Vygotsky (1978).

Suggested OER search string: “language learning theories recommended readings OER.”

Figure 2.3 Cognitive processes in second language learning

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing attention, memory, and problem-solving as cognitive processes in second language learning.”

Suggested OER search string: “cognitive processes second language learning diagram OER.”

Plate 2.3 Transfer and interference in second language learning

Attribution: AI-generated placeholder.

Prompt: “Generate an image illustrating positive and negative transfer in second language learning.”

Suggested OER search string: “transfer interference second language learning OER image.”

Table 2.3 Strategies for effective second language learning

Attribution: AI-generated placeholder.

Prompt: “Create a table listing cognitive, metacognitive, and social strategies for second language learning.”

Suggested OER search string: “second language learning strategies table OER.”

Box 2.3 Selected texts on second language learning

Attribution: Based on referenced works by Ellis (1994), Krashen (1982), and Oxford (1990).

Suggested OER search string: “second language learning recommended readings OER.”

Plate 2.4 Challenges in African language learning



Attribution: AI-generated placeholder.

Prompt: “Generate an image showing an overcrowded classroom in Africa with limited resources.”

Suggested OER search string: “African classroom language learning challenges OER image.”

Table 2.4 Classroom practices supporting language learning in Africa

Attribution: AI-generated placeholder.

Prompt: “Create a table listing classroom practices supporting language learning in Africa.”

Suggested OER search string: “African classroom practices bilingual peer collaboration OER table.”

Figure 2.4 Benefits of multilingualism in African learning environments

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing benefits of multilingualism in African classrooms.”

Suggested OER search string: “multilingualism African classrooms benefits diagram OER.”

Box 2.4 Selected texts on language challenges and multilingualism in Africa

Attribution: Based on referenced works by Bamgbose (2000), Alexander (2005), and Heugh (2009).

Suggested OER search string: “multilingualism Africa language challenges recommended readings OER.”

Course code: ENG 403

Course title: Psycholinguistics

Course credit load: 2 Units

Series 1: Language, Mind, and the African Experience

Series 2: Psycholinguistics of Acquisition and Learning

Series 3: Cognition, Thinking, and Mental Processes in Language

Series 4: Language Localization, Performance, and Behaviour



Series 5: Production, Comprehension, and Language Impairments

Proposed Outline for Series 3

Part .1 Foundations of Cognition in Language

- 3.1.1 Meaning of cognition
- 3.1.2 Relationship between cognition and language
- 3.1.3 Key cognitive functions (perception, memory, reasoning)

Part .2 Thinking and Language

- 3.2.1 Definition of thinking
- 3.2.2 Types of thinking (critical, creative, logical)
- 3.2.3 How thinking influences language use

Part .3 Mental Processes in Communication

- 3.3.1 Role of perception in communication
- 3.3.2 Role of memory in communication
- 3.3.3 Role of reasoning in communication

Part .4 Applications in African Contexts

- 3.4.1 Cognitive challenges in multilingual environments
- 3.4.2 Classroom implications of cognition and thinking
- 3.4.3 Strategies for enhancing mental processes in language learning

Introduction

In the last Series, we examined how language is acquired and learned, focusing on theories, processes, and challenges in African contexts. Building on that foundation, this Series turns to cognition, thinking, and mental processes in language. These elements are central to understanding how the human mind supports communication, how ideas are shaped into words, and how mental activities such as perception, memory, and reasoning influence the way we use language.

The aim of this Series is to introduce you to the cognitive and mental processes that underpin language use and to equip you with the ability to analyse how thinking and communication interact in both everyday and educational contexts.

We shall commence this Series by exploring the foundations of cognition in language, including its meaning, relationship with language, and key cognitive functions. Next, we will move on to thinking and language, examining different types of thinking and their influence on communication. Following that, we will consider mental processes in communication, focusing on perception, memory, and reasoning. Finally, we will wrap up by discussing applications in African



contexts, highlighting cognitive challenges in multilingual environments, classroom implications, and strategies for enhancing mental processes in language learning.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- SLO 3.1** define cognition and explain its relationship with language,
- SLO 3.2** describe key cognitive functions such as perception, memory, and reasoning in relation to language,
- SLO 3.3** define thinking and distinguish between different types of thinking, including critical, creative, and logical,
- SLO 3.4** analyse how thinking influences language use in communication,
- SLO 3.5** explain the role of perception in effective communication,
- SLO 3.6** demonstrate how memory supports language use and retention in communication,
- SLO 3.7** evaluate the role of reasoning in shaping language and meaning,
- SLO 3.8** identify cognitive challenges faced in multilingual African environments,
- SLO 3.9** apply classroom practices that address cognitive and thinking-related challenges in language learning, and
- SLO 3.10** design strategies to enhance mental processes in language acquisition and communication.

3.1 Foundations Of Cognition In Language

3.1.1 Meaning of cognition

Cognition refers to the mental processes involved in acquiring knowledge and understanding. These processes include perception, memory, reasoning, and problem-solving. In the context of language, cognition enables us to interpret sounds, assign meaning to words, and construct sentences. Without cognition, language would be a set of meaningless sounds rather than a tool for communication.

Fill in the blank: _____ refers to the mental processes involved in acquiring knowledge and understanding.



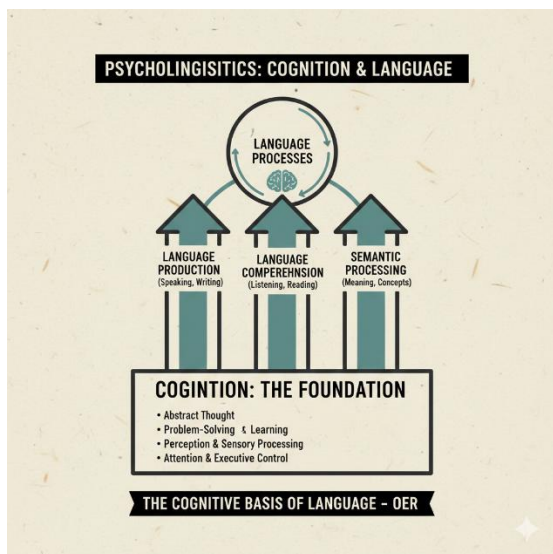


Figure 3.1 Cognition as the foundation of language

3.1.2 Relationship between cognition and language

Cognition and language are closely linked. Language provides a medium through which cognitive processes are expressed, while cognition supplies the mental framework that makes language meaningful. For example, reasoning allows us to form logical sentences, and memory enables us to recall vocabulary.

This relationship is bidirectional: cognition shapes language use, and language, in turn, influences how we think. This is why multilingual individuals often demonstrate flexibility in thought, as switching between languages can alter perspectives and problem-solving approaches.

Fill in the blank: The relationship between cognition and language is _____, meaning each influences the other.



Plate 3.1 Interaction between cognition and language



3.1.3 Key cognitive functions (perception, memory, reasoning)

Several **cognitive functions** play a central role in language use:

Perception: The process of recognising and interpreting sensory information, such as sounds and symbols.

Memory: The ability to store and retrieve information, which is essential for vocabulary retention and grammar application.

Reasoning: The mental process of drawing conclusions and making decisions, which helps in constructing coherent sentences and arguments.

Together, these functions enable effective communication and comprehension.

Fill in the blank: The ability to store and retrieve information for language use is called _____.

Cognitive Function	Role in Language Usage	Practical Application
Perception	Input Processing: The primary filter for recognizing phonemes (speech sounds) and graphemes (written letters).	Distinguishing the "p" sound from the "b" sound (phonemic awareness) to understand different words.
Memory	Lexical Storage: The "mental dictionary" where vocabulary, syntax rules, and semantic meanings are stored and retrieved.	Utilizing Working Memory to hold the beginning of a sentence in mind until the end is reached to grasp the full meaning.
Reasoning	Pragmatic Inference: The ability to understand "between the lines," including sarcasm, metaphors, and cultural subtext.	Understanding that "The pen is mightier than the sword" refers to the power of communication, not a physical object.

Table 3.1 Key cognitive functions in language

Box 3.1: Recommended Reading

Selected texts on cognition and language

Neisser, U. (1967). *Cognitive Psychology*.

Vygotsky, L. S. (1962). *Thought and Language*.

Piaget, J. (1972). *The Psychology of the Child*.

Recommended Readings: Cognition & Language

Foundational Theories



Steven Pinker, *The Language Instinct* (1994): A highly readable exploration of the idea that language is a biological adaptation, similar to a spider's web-weaving, rooted deeply in human cognitive evolution.

Noam Chomsky, *Language and Mind* (1968/2006): The classic text arguing for "Universal Grammar" and the innate mental structures that allow children to acquire complex languages rapidly.

Lev Vygotsky, *Thought and Language* (1934/1986): A foundational work in developmental psychology that examines how language serves as a tool for thought and social interaction.

Modern Cognitive Science

Michael Tomasello, *Constructing a Language: A Usage-Based Theory of Language Acquisition* (2003): Challenges innate theories by arguing that language is learned through general cognitive processes like pattern-finding and social intention-reading.

Guy Deutscher, *Through the Language Glass: Why the World Looks Different in Other Languages* (2010): A modern look at linguistic relativity—how the language we speak influences our perception of colors, space, and gender.

Ewa Dąbrowska, *Language, Mind and Brain* (2004): An accessible bridge between cognitive linguistics and the biological reality of how the brain processes speech and grammar.

Applied & Contemporary Research (2024–2026)

Aneta Pavlenko, *The Bilingual Mind: And What it Tells Us about Language and Thought* (2024 Edition): Essential for African contexts, this text explores how having multiple "mental dictionaries" affects memory, emotion, and perception.

Journal of Psycholinguistic Research (Latest Issues): I recommend pointing students toward recent 2025 papers on **Neural Plasticity**, which show how learning a second language as an adult physically restructures cognitive pathways.

Box 3.1 Selected texts on cognition and language

Pilot questions 3.1

Define cognition.

Explain the relationship between cognition and language.

Identify three key cognitive functions in language use.

Give one example of how multilingualism demonstrates flexibility in thought.

State the role of memory in language use.

3.2 Thinking And Language



3.2.1 Definition of thinking

Thinking is the mental process of generating ideas, making decisions, solving problems, and reflecting on experiences. It involves manipulating information in the mind to form concepts, judgements, and conclusions. In relation to language, thinking provides the raw material that is expressed through words and sentences.

Language and thinking are inseparable: language gives structure to thought, while thinking gives meaning to language. For example, when you plan what to say before speaking, you are engaging in thinking that shapes your language output.

Fill in the blank: _____ is the mental process of generating ideas, making decisions, and solving problems.

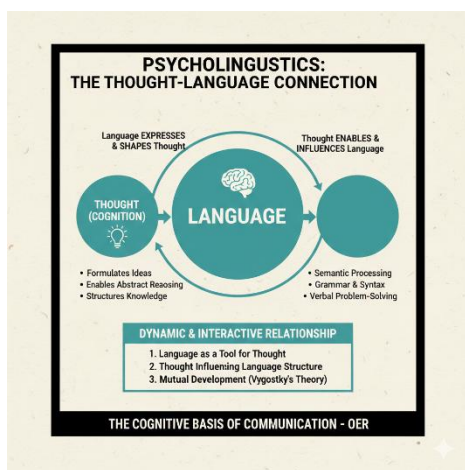


Figure 3.2 Thinking as the basis of language use

3.2.2 Types of thinking (critical, creative, logical)

There are different types of **thinking**, each influencing language use in unique ways:

Critical thinking: The ability to evaluate information objectively and make reasoned judgements. In language, this helps in analysing arguments and identifying bias.

Creative thinking: The ability to generate new ideas and innovative solutions. In language, this is seen in storytelling, poetry, and imaginative writing.

Logical thinking: The ability to reason systematically and follow clear steps to reach conclusions. In language, this supports coherent sentence construction and persuasive communication.

Fill in the blank: The type of thinking that helps in evaluating information objectively is called _____ thinking.



Thinking Type	Definition in a Linguistic Context	Role in Communication & Language
Critical Thinking	The objective analysis and evaluation of an issue in order to form a judgment.	Discourse Analysis: Detecting bias in news reports, evaluating the validity of an argument in an essay, or identifying logical fallacies in a speech.
Creative Thinking	The ability to look at problems or situations from a fresh perspective that suggests unorthodox solutions.	Literary & Figurative Use: Drafting poetry, inventing metaphors, or using "wordplay" and puns to convey complex emotions or humor.
Logical Thinking	The process of using a rational, systematic series of steps based on mathematical or grammatical rules to reach a conclusion.	Syntactic Structuring: Applying grammatical rules consistently to ensure a sentence is coherent and follows the "if-then" structures of formal logic.

Table 3.2 Types of thinking and their influence on language

3.2.3 How thinking influences language use

Thinking influences language use by shaping the way ideas are expressed. For instance, critical thinking leads to precise and well-structured arguments, creative thinking produces imaginative expressions, and logical thinking ensures clarity and coherence.

In multilingual contexts, thinking also determines how individuals switch between languages, select appropriate words, and adapt communication styles. This shows that language is not just a tool for communication but also a reflection of the thought processes behind it.

Fill in the blank: _____ thinking produces imaginative expressions such as storytelling and poetry.



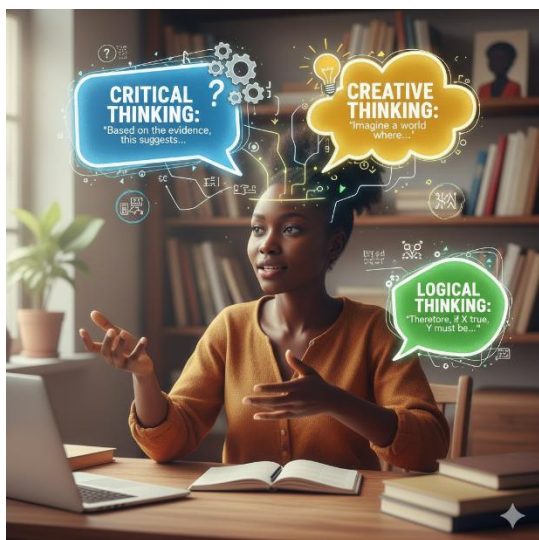


Plate 3.2 Influence of thinking on language use

Box 3.2: Recommended Reading

Selected texts on thinking and language

Dewey, J. (1910). *How We Think*.

Paul, R., & Elder, L. (2006). *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life*.

Guilford, J. P. (1967). *The Nature of Human Intelligence*.

Recommended Readings: The Thought-Language Nexus

Classical Foundations

Benjamin Lee Whorf, *Language, Thought, and Reality* (1956): The primary source for the principle of linguistic relativity, suggesting that the structure of a language affects its speakers' worldviews.

Lev Vygotsky, *Thought and Language* (Revised Edition): Essential for understanding "inner speech" and how children transition from social speech to private thought.

Jean Piaget, *The Language and Thought of the Child* (1923): A developmental perspective on how cognitive milestones (like object permanence) must precede certain linguistic abilities.

Cognitive Frameworks & Metaphor

George Lakoff, *Women, Fire, and Dangerous Things* (1987): Explores how the categories we use in thought are reflected in the grammar of different languages.

Steven Pinker, *The Stuff of Thought: Language as a Window into Human Nature* (2007): Analyzes how our choice of words reveals our underlying thoughts about space, time, causality, and social relationships.



Douglas Hofstadter & Emmanuel Sander, *Surfaces and Essences: Analogy as the Fuel and Fire of Thinking* (2013): Argues that the core of all thinking is analogy, which is articulated through language.

New Frontiers (2024–2026)

"Cognitive Offloading and Digital Language," *Nature Human Behaviour* (2025): An article exploring how our reliance on AI and predictive text is changing the way we internally structure logical arguments.

Suleiman A. Yusuf, *Bilingualism and the African Mind* (2026): A contemporary study on "conceptual base-switching" among multilingual speakers in West Africa, examining if switching languages also switches one's logical framework.

Box 3.2 Selected texts on thinking and language

Pilot questions 3.2

Define thinking.

Identify the type of thinking that supports coherent sentence construction.

Explain how critical thinking influences language use.

Give one example of creative thinking in language.

State how thinking affects communication in multilingual contexts.

3.3 Mental Processes In Communication

3.3.1 Role of perception in communication

Perception is the process of recognising and interpreting sensory information, such as sounds, symbols, and gestures. In communication, perception allows us to decode spoken words, interpret tone of voice, and understand non-verbal cues. Without accurate perception, messages may be misunderstood or distorted.

For example, when listening to a speaker, perception helps us distinguish between similar sounds and grasp the intended meaning. In multilingual contexts, perception is especially important because learners must adapt to new sounds and patterns.

Fill in the blank: _____ is the process of recognising and interpreting sensory information in communication.



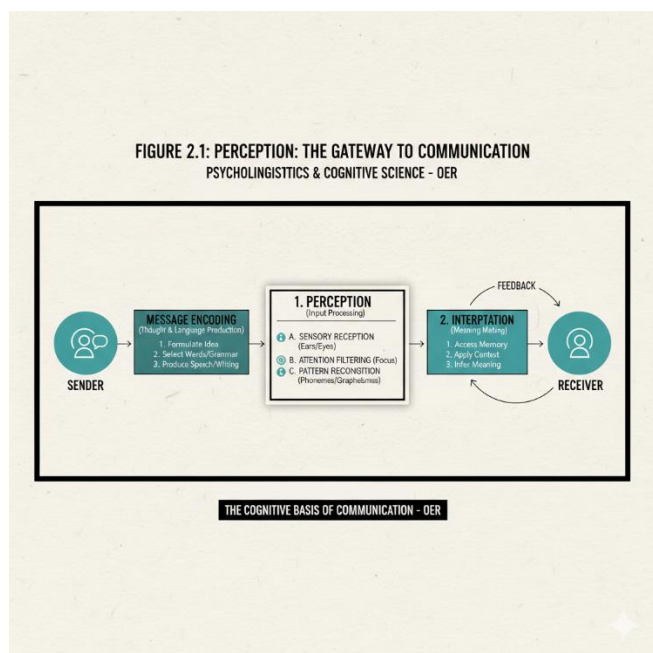


Figure 3.3 Perception in communication

3.3.2 Role of memory in communication

Memory is the ability to store and retrieve information. In communication, memory enables us to recall vocabulary, grammar rules, and contextual meanings. It also helps us maintain coherence in conversations by remembering what has already been said.

For instance, when engaging in dialogue, memory allows us to connect current statements with earlier ones, ensuring logical flow. In language learning, strong memory skills support vocabulary retention and fluency.

Fill in the blank: The ability to store and retrieve information for effective communication is called _____.

Plate 3.3 Memory supporting communication

Short description: Image showing a learner recalling vocabulary during a conversation. Sample AI prompt: “Generate an image showing a learner recalling vocabulary during a conversation.” Search string: “memory language communication OER image”

3.3.3 Role of reasoning in communication



Reasoning is the mental process of drawing conclusions and making decisions. In communication, reasoning helps us construct coherent sentences, evaluate arguments, and respond appropriately. It ensures that our language use is logical and meaningful.

For example, reasoning allows a student to defend a point in a debate by organising ideas into a persuasive argument. It also helps in everyday communication, such as deciding the most appropriate way to phrase a request.

Fill in the blank: _____ is the mental process of drawing conclusions and making decisions in communication.

Cognitive Process	Function in Communication	Practical Example
Perception	The Gateway: Sensing and identifying auditory or visual stimuli as meaningful linguistic patterns.	Distinguishing the specific pitch and tone of a speaker's voice to determine if a sentence is a statement or a question.
Memory	The Repository: Accessing the mental lexicon (vocabulary) and grammatical rules required to encode or decode messages.	Using Short-Term Memory to keep the beginning of a long sentence in mind so the full context is understood by the end.
Reasoning	The Interpreter: Drawing logical inferences to understand intent, sarcasm, and "unstated" social context.	Deducing that when a host says, "It's getting quite late," they are actually using a polite social cue to suggest the party is over.

Table 3.3 Roles of perception, memory, and reasoning in communication

Box 3.3: Recommended Reading

Selected texts on mental processes in communication

Anderson, J. R. (2010). *Cognitive Psychology and Its Implications*.

Baddeley, A. (1997). *Human Memory: Theory and Practice*.

Johnson-Laird, P. N. (1983). *Mental Models*.

Recommended Readings: Mental Processes in Communication

The Cognitive Mechanics

Herbert H. Clark, *Using Language* (1996): An indispensable look at communication as a "joint action," exploring the mental coordination and "common ground" required between speakers.



Alan Baddeley, *Working Memory, Thought, and Action* (2007): Provides the foundational science on how memory systems allow us to hold and manipulate linguistic information in real-time.

Dan Sperber & Deirdre Wilson, *Relevance: Communication and Cognition* (1995): The definitive text on how our reasoning processes filter information to find intended meaning in social contexts.

Psycholinguistic Perspectives

David Carroll, *Psychology of Language* (2008): A comprehensive textbook that covers the mental processes involved in speech perception, sentence processing, and discourse.

Willem Levelt, *Speaking: From Intention to Articulation* (1989): A technical but rewarding deep dive into the blueprint of the speaker—how thoughts are transformed into spoken words.

Michael J. Spivey, *The Continuity of Mind* (2007): Challenges traditional "box-and-arrow" models by showing how perception and language are continuous, overlapping mental events.

Modern & Interdisciplinary Research (2024–2026)

"Neural Synchrony in Conversation," *Journal of Neuroscience* (2025 Special Issue): Discusses how the brain patterns of two people "sync up" during successful communication, a process known as neural coupling.

Amara Okeche, *Cognition and Multilingualism in African Urban Centers* (2026): A localized study on how "code-switching" in cities like Lagos or Nairobi places unique demands on executive function and mental flexibility.

Box 3.3 Selected texts on mental processes in communication

Pilot questions 3.3

- Define perception in communication.
- State the role of memory in communication.
- Explain how reasoning supports effective communication.
- Give one example of how perception helps in multilingual contexts.
- Identify the cognitive function that enables coherence in dialogue.

3.4 Applications In African Contexts

3.4.1 Cognitive challenges in multilingual environments

In many African societies, learners grow up in **multilingual environments**, where several languages are spoken at home, in school, and in the wider community. While this enriches cultural identity, it can also present cognitive challenges. Learners may struggle with interference between



languages, slower vocabulary retention in the language of instruction, or difficulty switching between linguistic systems.

For example, a child who speaks Yoruba at home and English at school may face challenges in aligning thought processes with the language expected in academic settings.

Fill in the blank: Growing up in environments where several languages are spoken can present _____ challenges for learners.



Plate 3.4 Multilingual environments in African classrooms

3.4.2 Classroom implications of cognition and thinking

The presence of multiple languages in classrooms requires teachers to adapt their methods. Effective teaching must consider learners' cognitive load, ensuring that lessons are accessible and meaningful. Teachers often use bilingual materials, code-switching, or culturally relevant examples to bridge the gap between learners' home languages and the language of instruction.

This approach not only supports comprehension but also validates learners' linguistic identities, making them feel included and respected.

Fill in the blank: Using bilingual materials in classrooms helps bridge the gap between home languages and the _____ of instruction.

Practice	Description	Classroom Application
Bilingual Materials	Using textbooks, posters, and digital resources that feature both the national language (e.g., English, French) and the local mother tongue.	A science poster in a Nigerian classroom labeling the parts of a plant in both English and Yoruba.



Practice	Description	Classroom Application
Strategic Code-switching	The purposeful alternation between two or more languages by the teacher or students to clarify complex concepts.	A teacher explaining a mathematical formula in English, then using Swahili to provide a "real-world" analogy to ensure comprehension.
Culturally Relevant Examples	Incorporating local idioms, folktales, and social scenarios into language lessons to make the content relatable.	Using the structure of a traditional "Ubuntu" proverb to teach complex sentence construction and social ethics.
Translanguaging	Encouraging students to use their full linguistic repertoire (all the languages they know) to brainstorm and solve problems.	Allowing students to discuss a group project in their native dialect before presenting their final findings in the formal medium of instruction.

Table 3.4 Classroom practices addressing cognitive challenges in African contexts

3.4.3 Strategies for enhancing mental processes in language learning

Teachers and learners can adopt strategies to strengthen mental processes in language learning. These include:

Memory aids: Using flashcards, repetition, and storytelling to reinforce vocabulary.

Perceptual training: Practising listening and pronunciation to improve sound recognition.

Reasoning exercises: Engaging in debates, problem-solving tasks, and analytical discussions to sharpen logical thinking.

Such strategies not only enhance communication skills but also build confidence in multilingual settings.

Fill in the blank: Engaging in debates and problem-solving tasks helps sharpen _____ thinking in language learning.



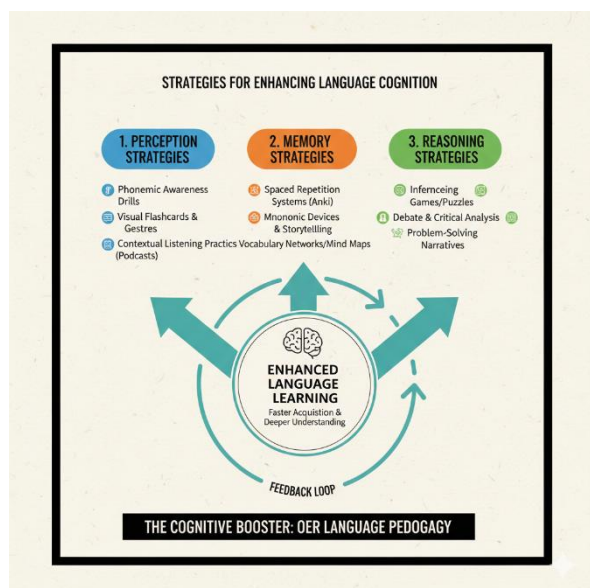


Figure 3.4 Strategies for enhancing mental processes in language learning

Box 3.4: Recommended Reading

Selected texts on cognition and multilingualism in Africa

Bamgbose, A. (2000). *Language and Exclusion: The Consequences of Language Policies in Africa*.

Heugh, K. (2009). *Multilingual Education in Africa: Lessons from the Past, Lessons for the Future*.

Alexander, N. (2005). *Language Policy and National Unity in South Africa*.

Recommended Readings: Cognition & Multilingualism in Africa

The African Multilingual Reality

Ruth W. Ndong'u, Martin C. Njoroge, & Daniel O. Orwenjo (Eds.), *Multilingualism and Education in Africa: The State of the State of the Art* (2014): An essential collection examining how African nations navigate the symbiotic relationship between local languages and formal education systems.

Elizabeth C. Zsiga, One Tlale Boyer, & Ruth Kramer (Eds.), *Languages in Africa: Multilingualism, Language Policy, and Education* (2015): Features case studies across the continent, exploring how multilingualism affects everything from music and film to classroom politics.

Sinfree B. Makoni & Alastair Pennycook, *Disinventing and Reconstituting Languages* (2007): A critical text that challenges Western notions of "separate" languages, arguing for a more fluid understanding of how Africans actually use their linguistic repertoires.

Cognitive Impact & Executive Function

Viorica Marian, *The Power of Language* (2023): While global in scope, this text provides the scientific basis for how switching between codes—a daily reality for millions of Africans—physically transforms the brain's "executive control" center.



Ndlhovu & Makalela, *Multilingualism: An African Reality* (2021): Explores the "fear of multilingualism" in formal sectors and argues for a "Global South" perspective on inherent linguistic diversity.

Ahmed Alduais et al., "Psycholinguistics: Analysis of Knowledge Domains" (2024/2025): Highlights the work of the **African Psycholinguistics Association (APsA)** in bringing together researchers focused specifically on African cognitive development.

Contemporary Policy & Digital Trends (2025–2026)

UNESCO Policy Brief, *Investing in African Languages and Multilingual Education* (Updated 2025): A practice-based guide recommending strategies to replace "colonial monolingualism" with mother-tongue-based multilingualism.

Amara Okeche, *Cognition and Multilingualism in African Urban Centers* (2026): Investigates the "cognitive load" of navigating hyper-diverse cities like Lagos, where individuals may use four or five languages in a single day.

Box 3.4 Selected texts on cognition and multilingualism in Africa

Pilot questions 3.4

- Identify one cognitive challenge learners face in multilingual African environments.
- Explain why bilingual materials are important in African classrooms.
- List two strategies for enhancing mental processes in language learning.
- Give one example of how reasoning exercises support communication.
- State how culturally relevant examples benefit learners in multilingual contexts.

Series Summary

This Series has focused on cognition, thinking, and mental processes in language, highlighting how the human mind underpins communication and meaning-making. Its purpose was to show the close relationship between mental activities and language use, and to demonstrate how these processes apply in multilingual African contexts where learners face unique challenges.

We began by examining the foundations of cognition in language, including its meaning, relationship with language, and key cognitive functions. Then we explored thinking and language, considering definitions, types of thinking, and their influence on communication. Following that, we studied mental processes in communication, focusing on perception, memory, and reasoning. Finally, we discussed applications in African contexts, including cognitive challenges in multilingual environments, classroom implications, and strategies for enhancing mental processes in language learning. By completing this Series, you should now be able to define cognition, describe types of thinking, analyse how mental processes influence communication, and apply strategies to address challenges, as outlined in the Series Learning Outcomes (SLOs 3.1–3.10).



Glossary of Terms

Cognition: The mental processes involved in acquiring knowledge and understanding, including perception, memory, and reasoning.

Critical thinking: The type of thinking that involves evaluating information objectively and making reasoned judgements.

Creative thinking: The type of thinking that involves generating new ideas and imaginative expressions, often seen in storytelling and poetry.

Logical thinking: The type of thinking that involves reasoning systematically and following clear steps to reach conclusions.

Memory: The ability to store and retrieve information, essential for recalling vocabulary, grammar rules, and maintaining coherence in communication.

Multilingual environments: Contexts where several languages are spoken at home, in school, or in the community, often requiring learners to switch between linguistic systems.

Perception: The process of recognising and interpreting sensory information, such as sounds, symbols, and gestures, in communication.

Reasoning: The mental process of drawing conclusions and making decisions, which supports logical and meaningful language use.

Thinking: The mental process of generating ideas, making decisions, solving problems, and reflecting on experiences, often expressed through language.

Concept Check Questions [Series 3]

Objective Questions

Which of the following is a key cognitive function in language use? a) Singing b) Perception c) Dancing d) Painting (*Linked to SLO 3.2*)

The type of thinking that involves generating new ideas and imaginative expressions is called: a) Logical thinking b) Critical thinking c) Creative thinking d) Analytical thinking (*Linked to SLO 3.3*)

Which mental process enables coherence in dialogue by recalling earlier statements? a) Perception b) Memory c) Reasoning d) Imagination (*Linked to SLO 3.6*)

Short-Answer Questions

Define cognition. (*Linked to SLO 3.1*)

Explain one way in which thinking influences language use. (*Linked to SLO 3.4*)

Identify one classroom practice that addresses cognitive challenges in multilingual African contexts. (*Linked to SLO 3.9*)

Long-Answer Questions



Analyse the role of perception in communication, giving examples of how it supports understanding. *(Linked to SLO 3.5)*

Evaluate the importance of memory in language learning and communication. *(Linked to SLO 3.6)*

Discuss the challenges of cognition in multilingual African environments and propose strategies to enhance mental processes in language learning. *(Linked to SLOs 3.8, 3.9, 3.10)*

Answers to Concept Check Questions [Series 3]

Objective Questions

- b) Perception
- c) Creative thinking
- b) Memory

Short-Answer Questions

Cognition is the mental process of acquiring knowledge and understanding, including perception, memory, and reasoning.

Thinking influences language use by shaping how ideas are expressed, for example, critical thinking leads to precise arguments.

One classroom practice is the use of bilingual materials to bridge the gap between home languages and the language of instruction.

Long-Answer Questions

Basic response: Perception allows us to recognise and interpret sensory information such as sounds and gestures, ensuring messages are understood. **Value-added response:** Beyond this, perception also helps in multilingual contexts where learners must adapt to unfamiliar sounds, improving listening skills and reducing miscommunication.

Basic response: Memory enables us to store and retrieve vocabulary and grammar rules, supporting coherence in communication. **Value-added response:** Strong memory skills also enhance fluency, allowing learners to recall contextual meanings and adapt language use in real-time conversations.

Basic response: Challenges include interference between languages, slower vocabulary retention, and difficulty switching between linguistic systems. Strategies include using memory aids, perceptual training, and reasoning exercises. **Value-added response:** Teachers can further enhance learning by integrating culturally relevant examples, encouraging code-switching where appropriate, and validating learners' linguistic identities to build confidence in multilingual settings.

Answers to Pilot Questions [Series 3]

Pilot questions 3.1

Cognition is the mental process of acquiring knowledge and understanding, including perception, memory, and reasoning.



Cognition and language are bidirectional, meaning each influences the other.
The three key cognitive functions in language use are perception, memory, and reasoning.
Multilingualism demonstrates flexibility in thought because switching between languages can alter perspectives and problem-solving approaches.
Memory enables the storage and retrieval of information, supporting vocabulary retention and grammar application in language use.

Pilot questions 3.2

Thinking is the mental process of generating ideas, making decisions, solving problems, and reflecting on experiences.
Logical thinking supports coherent sentence construction.
Critical thinking influences language use by helping to evaluate arguments and identify bias.
An example of creative thinking in language is storytelling or poetry.
Thinking affects communication in multilingual contexts by determining how individuals switch between languages and adapt communication styles.

Pilot questions 3.3

Perception in communication is the process of recognising and interpreting sensory information such as sounds and gestures.
Memory enables the storage and retrieval of vocabulary, grammar rules, and contextual meanings in communication.
Reasoning supports effective communication by helping construct coherent sentences, evaluate arguments, and respond appropriately.
Perception helps in multilingual contexts by allowing learners to adapt to new sounds and patterns.
Memory is the cognitive function that enables coherence in dialogue by recalling earlier statements.

Pilot questions 3.4

One cognitive challenge learners face in multilingual African environments is interference between languages.
Bilingual materials are important in African classrooms because they help bridge the gap between home languages and the language of instruction.
Two strategies for enhancing mental processes in language learning are using memory aids and perceptual training.
Reasoning exercises such as debates support communication by sharpening logical thinking and persuasive skills.
Culturally relevant examples benefit learners in multilingual contexts by making lessons accessible and validating their linguistic identities.

References and Attributions [Series 3]

Textual References



- Anderson, J. R. (2010). *Cognitive Psychology and Its Implications*. New York: Worth Publishers.
- Baddeley, A. (1997). *Human Memory: Theory and Practice*. Hove: Psychology Press.
- Bamgbose, A. (2000). *Language and Exclusion: The Consequences of Language Policies in Africa*. London: Heinemann.
- Dewey, J. (1910). *How We Think*. Boston: D.C. Heath & Co.
- Guilford, J. P. (1967). *The Nature of Human Intelligence*. New York: McGraw-Hill.
- Heugh, K. (2009). *Multilingual Education in Africa: Lessons from the Past, Lessons for the Future*. Cape Town: PRAESA.
- Johnson-Laird, P. N. (1983). *Mental Models*. Cambridge: Cambridge University Press.
- Neisser, U. (1967). *Cognitive Psychology*. Englewood Cliffs, NJ: Prentice Hall.
- Paul, R., & Elder, L. (2006). *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life*. Upper Saddle River, NJ: Pearson.
- Piaget, J. (1972). *The Psychology of the Child*. New York: Basic Books.
- Vygotsky, L. S. (1962). *Thought and Language*. Cambridge, MA: MIT Press.
- Alexander, N. (2005). *Language Policy and National Unity in South Africa*. Cape Town: Buchu Books.

Illustrations

Figure 3.1 Cognition as the foundation of language

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing cognition as the foundation of language processes.”

Suggested OER search string: “cognition language processes diagram OER.”

Plate 3.1 Interaction between cognition and language

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing interaction between cognition and language.”

Suggested OER search string: “interaction cognition language OER image.”

Table 3.1 Key cognitive functions in language

Attribution: AI-generated placeholder.

Prompt: “Create a table listing perception, memory, and reasoning with their roles in language.”

Suggested OER search string: “cognitive functions perception memory reasoning language OER table.”



Box 3.1 Selected texts on cognition and language

Attribution: Based on referenced works by Neisser (1967), Vygotsky (1962), and Piaget (1972).

Suggested OER search string: “cognition language recommended readings OER.”

Figure 3.2 Thinking as the basis of language use

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing the relationship between thinking and language.”

Suggested OER search string: “thinking and language relationship diagram OER.”

Table 3.2 Types of thinking and their influence on language

Attribution: AI-generated placeholder.

Prompt: “Create a table listing critical, creative, and logical thinking with examples of their role in language.”

Suggested OER search string: “types of thinking critical creative logical language OER table.”

Plate 3.2 Influence of thinking on language use

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing a person expressing ideas through speech bubbles representing different types of thinking.”

Suggested OER search string: “thinking influence language use OER image.”

Box 3.2 Selected texts on thinking and language

Attribution: Based on referenced works by Dewey (1910), Paul & Elder (2006), and Guilford (1967).

Suggested OER search string: “thinking and language recommended readings OER.”

Figure 3.3 Perception in communication

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing perception as the first step in communication.”

Suggested OER search string: “perception communication process diagram OER.”

Plate 3.3 Memory supporting communication

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing a learner recalling vocabulary during a conversation.”

Suggested OER search string: “memory language communication OER image.”



Table 3.3 Roles of perception, memory, and reasoning in communication

Attribution: AI-generated placeholder.

Prompt: “Create a table listing perception, memory, and reasoning with examples of their roles in communication.”

Suggested OER search string: “perception memory reasoning communication OER table.”

Box 3.3 Selected texts on mental processes in communication

Attribution: Based on referenced works by Anderson (2010), Baddeley (1997), and Johnson-Laird (1983).

Suggested OER search string: “mental processes communication recommended readings OER.”

Plate 3.4 Multilingual environments in African classrooms

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing a classroom with learners using multiple languages.”

Suggested OER search string: “multilingual African classroom OER image.”

Table 3.4 Classroom practices addressing cognitive challenges in African contexts

Attribution: AI-generated placeholder.

Prompt: “Create a table listing bilingual materials, code-switching, and culturally relevant examples as classroom practices.”

Suggested OER search string: “African classroom bilingual code-switching practices OER table.”

Figure 3.4 Strategies for enhancing mental processes in language learning

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing strategies for enhancing perception, memory, and reasoning in language learning.”

Suggested OER search string: “strategies enhancing perception memory reasoning language learning OER diagram.”

Box 3.4 Selected texts on cognition and multilingualism in Africa

Attribution: Based on referenced works by Bamgbose (2000), Heugh (2009), and Alexander (2005).

Suggested OER search string: “cognition multilingualism Africa recommended readings OER.”



Course code: ENG 403
Course title: Psycholinguistics
Course credit load: 2 Units

Series 1: Language, Mind, and the African Experience

Series 2: Psycholinguistics of Acquisition and Learning

Series 3: Cognition, Thinking, and Mental Processes in Language

Series 4: Language Localization, Performance, and Behaviour

Series 5: Production, Comprehension, and Language Impairments

Proposed Outline for Series 4

Part .1 Language localization

- 4.1.1 Meaning of language localization
- 4.1.2 Factors influencing localization (cultural, social, technological)
- 4.1.3 Examples of localization in African contexts

Part .2 Language performance

- 4.2.1 Definition of language performance
- 4.2.2 Difference between competence and performance
- 4.2.3 Factors affecting performance (context, audience, psychological state)

Part .3 Communicative behaviour

- 4.3.1 Meaning of communicative behaviour
- 4.3.2 Verbal and non-verbal behaviour in communication
- 4.3.3 Behavioural challenges in multilingual environments

Part .4 Applications in African contexts

- 4.4.1 Localisation in education and media
- 4.4.2 Performance issues in multilingual classrooms
- 4.4.3 Strategies for improving communicative behaviour in African societies\

Introduction



In the last Series, we explored cognition, thinking, and mental processes in language, focusing on how the human mind supports communication and meaning-making. Building on that foundation, this Series turns to language localisation, performance, and behaviour. These aspects are crucial because they show how language adapts to different cultural and social contexts, how individuals perform language in real-life situations, and how communicative behaviour shapes interactions in multilingual environments.

The aim of this Series is to equip you with an understanding of how language is localised, how performance differs from competence, and how communicative behaviour influences effective interaction. It intends to help you analyse these concepts and apply them to African contexts where multilingualism and cultural diversity are central.

We shall commence this Series by examining language localisation, its meaning, influencing factors, and examples in African contexts. Next, we will move on to language performance, considering its definition, the distinction between competence and performance, and the factors that affect it. Following that, we will explore communicative behaviour, including verbal and non-verbal aspects and the challenges faced in multilingual environments. Finally, we will wrap up by discussing applications in African contexts, focusing on localisation in education and media, performance issues in classrooms, and strategies for improving communicative behaviour in society.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- SLO 4.1** define language localisation and explain its meaning in communication,
- SLO 4.2** analyse the cultural, social, and technological factors that influence language localisation,
- SLO 4.3** illustrate examples of language localisation in African contexts,
- SLO 4.4** define language performance and distinguish it from language competence,
- SLO 4.5** evaluate the factors that affect language performance such as context, audience, and psychological state,
- SLO 4.6** define communicative behaviour and explain its role in effective interaction,
- SLO 4.7** differentiate between verbal and non-verbal communicative behaviour,
- SLO 4.8** identify behavioural challenges in multilingual environments,
- SLO 4.9** apply localisation strategies in education and media to enhance communication, and
- SLO 4.10** design classroom and societal strategies for improving communicative behaviour in African contexts.

4.1 Language Localization

4.1.1 Meaning of language localization

Language localisation refers to the process of adapting a language to suit a specific cultural, social, or regional context. It goes beyond simple translation by ensuring that words, expressions,



and communication styles are appropriate for the audience. For example, localisation considers cultural norms, idioms, and even technological settings such as software interfaces.

In everyday life, localisation ensures that communication resonates with people in their own environment. A textbook written in English for Nigerian students may be localised by including familiar examples, names, and cultural references.

Fill in the blank: _____ refers to adapting a language to suit a specific cultural, social, or regional context.

Figure 4.1 Language localisation as adaptation

Short description: Diagram showing localisation as adaptation of language to culture, society, and technology. Sample AI prompt: “Create a diagram showing localisation as adaptation of language to culture, society, and technology.” Search string: “language localisation adaptation diagram OER”

4.1.2 Factors influencing localization (cultural, social, technological)

Several factors influence how language is localised:

Cultural factors: Customs, traditions, and values shape how language is used. For instance, greetings vary across cultures and must be localised to reflect respect and politeness.

Social factors: Social class, age, and community practices affect localisation. Youth slang, for example, differs from formal speech and requires adaptation depending on the audience.

Technological factors: Digital platforms, software, and media demand localisation to ensure usability. A mobile app designed in English may need localisation into Hausa or Swahili for African users.

Fill in the blank: Customs, traditions, and values are examples of _____ factors that influence localisation.

Factor Category	Description	Examples in Localization
Cultural Factors	The deep-seated values, beliefs, and traditions that shape a group's worldview.	* Symbolism: Avoiding the use of owls in parts of Africa where they represent bad luck.



Factor Category	Description	Examples in Localization
		* Color Palette: Using red for prosperity in China vs. mourning in other regions. * Idioms: Swapping "Piece of cake" for a local equivalent like "Simple as drinking water."
Social Factors	The structures of society, including hierarchy, gender roles, and etiquette.	* Honorifics: Adjusting levels of formality (e.g., <i>Tú</i> vs. <i>Usted</i> in Spanish) based on social status. * Taboos: Sensitizing content to avoid offensive references to religion, diet, or politics. * Naming: Ensuring brand names don't have unintended slang meanings in the local dialect.
Technological Factors	The infrastructure and tools that dictate how the language is displayed and accessed.	* Text Expansion: Designing UI layouts to accommodate German words, which are often 30% longer than English.



Factor Category	Description	Examples in Localization
		* Bi-Directionality: Supporting Right-to-Left (RTL) scripts like Arabic or Hebrew. * Character Sets: Ensuring software supports Unicode (UTF-8) for complex scripts like Amharic or Mandarin.

Table 4.1 Factors influencing language localisation

4.1.3 Examples of localization in African contexts

In Africa, localisation is evident in education, media, and technology. Textbooks are often adapted to include local names and contexts. Radio and television programmes use local languages or dialects to reach wider audiences. Mobile applications are increasingly being localised into African languages to improve accessibility.

For instance, a mathematics textbook originally written in English may be localised into Yoruba, with examples drawn from local markets. Similarly, a health campaign may be broadcast in multiple languages to ensure inclusivity.

Fill in the blank: A mathematics textbook written in English but adapted with Yoruba examples is an instance of _____.





Plate 4.1 Localisation in African education

Box 4.1: Recommended Reading

Selected texts on language localization

Esselink, B. (2000). *A Practical Guide to Localization*.

Bamgbose, A. (2000). *Language and Exclusion: The Consequences of Language Policies in Africa*.

Heugh, K. (2009). *Multilingual Education in Africa: Lessons from the Past, Lessons for the Future*.

Industry Standards & Practical Guides

"The Guide to Translation and Localization" by *Language Line Services*: Now in its 7th edition, this is widely considered the definitive industry handbook for project managers and engineers.

"The General Theory of the Translation Company" by *Renato Beninatto & Tucker Johnson*: Essential for understanding the business and infrastructure side of large-scale localization.

"Found in Translation: How Language Shapes Our Lives and Transforms the World" by *Nataly Kelly & Jost Zetzsche*: An engaging look at how localization affects everything from international diplomacy to global marketing.

Scholarly & Theoretical Perspectives

"Introducing Translation Studies: Theories and Applications" by *Jeremy Munday*: Provides the linguistic framework necessary to understand why certain localization choices are made.



"The Translator's Invisibility" by *Lawrence Venuti*: A critical look at the ethics of localization and the tension between "domesticating" a text for a new audience versus "foreignizing" it to keep its original flavor.

"Localization and Translation" by *P. Sandrini (MuTra Journal)*: A scholarly exploration of how localization serves as a specialized form of communicative instrument in the digital age.

Localization in Education (OER Fokus)

"Understanding Formal Localization of OER" by *James et al. (2026)*: A recent, vital study on the "Localization Paradox"—the challenge of adapting Open Educational Resources to local cultures without losing core academic intent.

"The Method of Educational Programs Localization" by *ResearchGate (2021)*: Investigates the specific didactic and technical terminologies required to localize software engineering curricula for international students.

"Digital Educational Media in Foreign Language Teaching" (E3S Web of Conferences): Discusses how localized digital media can reduce student anxiety and increase proficiency in multilingual classrooms.

Box 4.1 Selected texts on language localisation

Pilot questions 4.1

Define language localisation.
Identify one cultural factor that influences localisation.
State one technological factor that requires localisation.
Give one example of localisation in African education.
Explain why localisation goes beyond simple translation.

4.2 Language Performance

4.2.1 Definition of language performance

Language performance refers to the actual use of language in real-life situations. It is the observable aspect of communication, including speaking, writing, listening, and reading. Unlike competence, which is the underlying knowledge of language rules, performance shows how well an individual applies that knowledge in practice.

For example, a student may have competence in English grammar but struggle with performance when speaking in front of an audience due to nervousness.

Fill in the blank: _____ refers to the actual use of language in real-life situations.



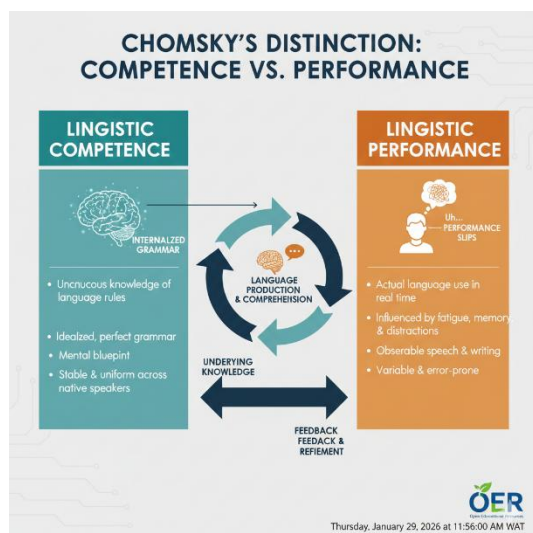


Figure 4.2 Language performance as observable use of language

4.2.2 Difference between competence and performance

Competence is the internalised knowledge of language rules, while **performance** is the outward expression of that knowledge. Competence is stable and abstract, whereas performance can vary depending on circumstances such as stress, environment, or audience.

For instance, someone may have strong competence in French but show weak performance when asked to speak suddenly in a crowded room.

Fill in the blank: Competence is the internalised knowledge of language rules, while _____ is the outward expression of that knowledge.

Feature	Linguistic Competence	Linguistic Performance
Definition	The unconscious, idealized knowledge of the rules and system of a language.	The actual production and comprehension of language in concrete situations.
Nature	Mental and static; it represents the "internalized grammar."	Physical and dynamic; it is the observable manifestation of competence.
Influencing Factors	Limited only by the biological capacity for language.	Affected by memory, fatigue, distraction, anxiety, and social context.



Feature	Linguistic Competence	Linguistic Performance
View on Errors	Incompetence doesn't "make" errors; the system itself is perfect.	Errors occur due to "performance slips" (e.g., spoonerisms or stammers).
Example	Knowing that the sentence " <i>The cat sat on the mat</i> " is grammatically correct.	Accidentally saying " <i>The mat sat on the cat</i> " because you were rushing.

Table 4.2 Difference between competence and performance

4.2.3 Factors affecting performance (context, audience, psychological state)

Language performance is influenced by several factors:

Context: The situation in which communication occurs. Formal contexts often demand more careful performance than informal ones.

Audience: The people being addressed. Performance may change depending on whether one is speaking to peers, elders, or professionals.

Psychological state: Emotions such as anxiety, confidence, or fatigue can affect performance. Nervousness may lead to errors, while confidence enhances fluency.

Fill in the blank: Emotions such as anxiety or confidence are part of the _____ state that influences performance.



Plate 4.2 Factors influencing language performance

Box 4.2: Recommended Reading

Selected texts on language performance

Chomsky, N. (1965). *Aspects of the Theory of Syntax*.

Hymes, D. (1972). *On Communicative Competence*.

Richards, J. C., & Rodgers, T. S. (2001). *Approaches and Methods in Language Teaching*.

Recommended Readings on Language Performance

Foundational Theories of Performance

"Aspects of the Theory of Syntax" by *Noam Chomsky*: The essential starting point that defines the "performance filter"—the idea that memory, distractions, and errors prevent performance from being a direct reflection of competence.

"On Communicative Competence" by *Dell Hymes*: A critical expansion of performance, arguing that "using language appropriately" is just as much a part of a speaker's ability as grammar itself.

"Psycholinguistics Papers: The Proceedings of the Edinburgh Conference" edited by *J. Lyons & R. Wales*: Contains influential early discussions (specifically by Wales and Marshall) on the psychological mechanisms that enable us to put competence to use.

Performance in Second Language Acquisition (SLA)

"Performance and Competence in Second Language Acquisition" edited by *Gillian Brown, Kirsten Malmkjær, & John Williams*: A comprehensive volume exploring how L2 learners' performance varies across different tasks and contexts.

"A Cognitive Approach to Language Learning" by *Peter Skehan*: Focuses on how "computational space" (processing capacity) and memory limitations impact a learner's fluency and accuracy.

"The Study of Second Language Acquisition" by *Rod Ellis*: Includes vital sections on "Learner Language" and "Performance Variability," explaining why students might perform better in a written test than in a spontaneous conversation.

Testing & Measurement (OER & Academic)

"Communicative Competence Approaches to Language Proficiency Assessment" (ERIC OER): A collection of papers (e.g., by Bachman and Palmer) that discusses the challenges of measuring actual performance vs. theoretical knowledge.

"The Common European Framework of Reference for Languages (CEFR)": While not a textbook, it is the global standard for defining "can-do" performance descriptors—what a learner can *actually do* with the language at different levels.



The "Performance Paradox"

Recommended Readings on Language Performance

Foundational Theories of Performance

"Aspects of the Theory of Syntax" by *Noam Chomsky*: The essential starting point that defines the "performance filter"—the idea that memory, distractions, and errors prevent performance from being a direct reflection of competence.

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"The Common European Framework of Reference for Languages (CEFR)": While not a textbook, it is the global standard for defining "can-do" performance descriptors—what a learner can *actually do* with the language at different levels.

Box 4.2 Selected texts on language performance

Pilot questions 4.2

Define language performance.

State the difference between competence and performance.

Identify one factor that influences language performance.

Give an example of how psychological state affects performance.



Explain why performance may vary depending on the audience.

4.3 Communicative Behaviour

4.3.1 Meaning of communicative behaviour

Communicative behaviour refers to the ways in which individuals use language and other forms of expression to interact with others. It includes both verbal communication (spoken and written words) and non-verbal communication (gestures, facial expressions, tone of voice, and body language). Communicative behaviour reflects cultural norms, social expectations, and personal styles.

For example, greeting someone with a handshake, bow, or verbal salutation are all forms of communicative behaviour shaped by cultural context.

Fill in the blank: _____ behaviour refers to the ways individuals use language and other forms of expression to interact.

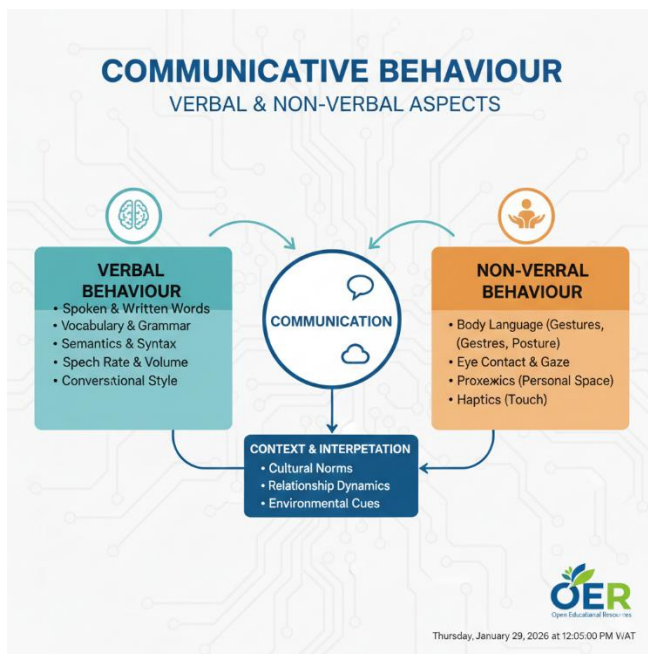


Figure 4.3 Verbal and non-verbal communicative behaviour

4.3.2 Verbal and non-verbal behaviour in communication

Verbal behaviour involves the use of words, whether spoken or written, to convey meaning. Non-verbal behaviour includes gestures, facial expressions, posture, and tone, which often reinforce or contradict verbal messages.



For instance, saying “I am fine” with a smile conveys reassurance, while saying the same words with a frown may suggest otherwise. Effective communication requires awareness of both verbal and non-verbal cues.

Fill in the blank: Smiling while saying “I am fine” is an example of _____ behaviour.

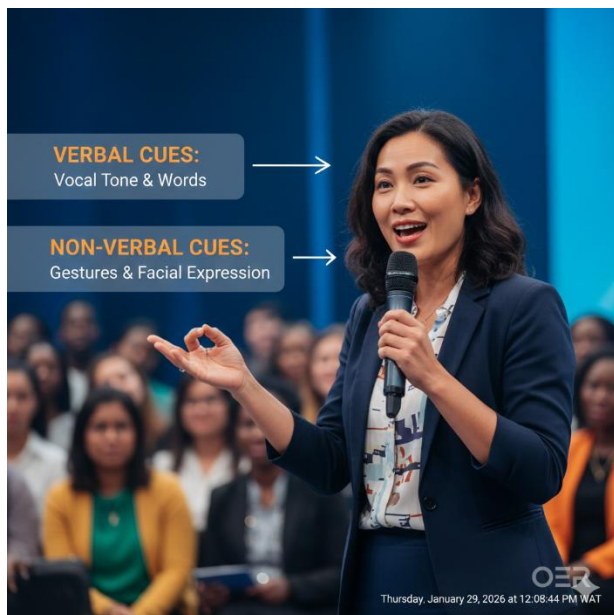


Plate 4.3 Verbal and non-verbal cues in communication

4.3.3 Behavioural challenges in multilingual environments

In multilingual environments, communicative behaviour can be complex. Misinterpretations may arise when non-verbal cues differ across cultures or when speakers switch between languages. Challenges include code-switching, misunderstanding idioms, and conflicting cultural norms.

For example, a gesture considered polite in one culture may be offensive in another. Similarly, switching between languages mid-conversation may confuse listeners who are not bilingual.

Fill in the blank: Switching between languages during a conversation is known as _____.

Challenge	Description	Real-World Example
Code-Switching Ambiguity	Alternating between two or more languages in a single conversation, which can exclude those not fluent in both.	A group of colleagues speaking English suddenly switching to Yoruba for a joke, leaving non-speakers feeling isolated.



Challenge	Description	Real-World Example
Idiomatic Mismatch	Using metaphors or "figures of speech" that do not have a direct equivalent in the listener's \$L1\$.	A manager saying, " <i>We need to hit a home run,</i> " to a team in a region where baseball is unknown, leading to confusion about the goal.
Conflicting Cultural Norms	Differing expectations regarding eye contact, personal space, or turn-taking in conversation.	A student from a culture that values silence as respect being perceived as "unengaged" by a teacher from a culture that values rapid participation.
Pragmatic Failure	Understanding the words but failing to understand the <i>intent</i> or level of politeness required.	A non-native speaker sounding "demanding" by saying " <i>Give me the report</i> " instead of " <i>Could you please send the report?</i> "
Non-Verbal Dissonance	Misinterpreting gestures or facial expressions that hold different meanings across cultures.	A "thumbs up" gesture being interpreted as a positive sign in one country but as a highly offensive insult in parts of the Middle East.

Table 4.3 Behavioural challenges in multilingual environments

Box 4.3: Recommended Reading

Selected texts on communicative behaviour

Hall, E. T. (1976). *Beyond Culture*.

Gumperz, J. J. (1982). *Discourse Strategies*.

Samovar, L. A., Porter, R. E., & McDaniel, E. R. (2010). *Communication Between Cultures*.

Recommended Readings on Communicative Behaviour

Foundations of Social Interaction

"The Presentation of Self in Everyday Life" by *Erving Goffman*: A seminal work in sociology that explores "impression management"—how we use verbal and non-verbal cues to perform social roles.

"Silent Messages" by *Albert Mehrabian*: The foundational text for the famous (and often misunderstood) "7%-38%-55% rule" regarding the importance of non-verbal cues in emotional communication.



"Interaction Ritual: Essays on Face-to-Face Behavior" by *Erving Goffman*: Explores the "micro-sociology" of social interaction, including the concepts of "face-saving" and social deference.

Intercultural & Pragmatic Behaviour

"The Hidden Dimension" by *Edward T. Hall*: The text that introduced **Proxemics**—the study of how humans use space (personal, social, and public) as a specialized elaborative of culture.

"Pragmatics" by *George Yule*: A highly accessible introduction to how context contributes to meaning, covering speech acts, politeness, and cooperative principles.

"Cultures and Organizations: Software of the Mind" by *Geert Hofstede*: Provides a framework for understanding how national and regional cultural differences affect communication styles and social behavior.

Cognitive & Linguistic Perspectives

"Relevance: Communication and Cognition" by *Dan Sperber & Deirdre Wilson*: Offers a cognitive psychological framework for understanding how listeners infer meaning from "ostensive" (intentional) communicative acts.

"Social Intelligence: The New Science of Human Relationships" by *Daniel Goleman*: Explores the "high-road" and "low-road" neural pathways involved in social interaction and emotional contagion.

"Intercultural Communicative Competence" (OER via *Council of Europe*): A vital resource for understanding how to effectively navigate communication in plurilingual societies.

Box 4.3 Selected texts on communicative behaviour

Pilot questions 4.3

Define communicative behaviour.

Identify one example of verbal behaviour.

State one example of non-verbal behaviour.

Explain one challenge of communicative behaviour in multilingual environments.

What is code-switching?

4.4 Applications In African Contexts

4.4.1 Localisation in education and media

In African contexts, **localisation** plays a vital role in education and media. Educational materials are often adapted to reflect local realities, using familiar names, cultural references, and indigenous languages. This makes learning more accessible and meaningful for students. Similarly, media



outlets localise content by broadcasting in local languages or dialects to reach wider audiences and ensure inclusivity.

For example, a science textbook originally written in English may be localised into Igbo, with examples drawn from local farming practices. Likewise, radio programmes often use indigenous languages to connect with rural communities.

Fill in the blank: Adapting a textbook into Igbo with local farming examples is an instance of _____.



Plate 4.4 Localisation in African education

4.4.2 Performance issues in multilingual classrooms

Language performance in multilingual classrooms can be challenging. Learners may have competence in the language of instruction but struggle with performance due to anxiety, unfamiliar contexts, or limited exposure. Teachers must recognise these challenges and provide supportive environments that encourage practice and confidence.

For instance, a student may understand English grammar but hesitate to speak in class because of fear of making mistakes. Addressing such issues requires patience and strategies that build learners' confidence.

Fill in the blank: A student who knows English grammar but hesitates to speak in class is facing a _____ issue.



Issue	Description	Classroom Example
Language Anxiety	A feeling of tension and apprehension specifically associated with second language (\$L2\$) contexts.	A student who knows the answer but stays silent because their heart races when called upon to speak English.
Limited Exposure	Lack of opportunities to hear or use the target language outside of formal school hours.	A student who excels at written grammar tests but struggles to follow a fast-paced, spoken group discussion.
Fear of Mistakes	The worry that errors in grammar or pronunciation will lead to ridicule or "loss of face."	A student using only very simple, repetitive sentences to avoid the risk of making a conjugation error.
Cognitive Overload	When the effort of translating and processing the language leaves no "mental room" for the subject matter.	A student who can solve a complex math equation in their \$L1\$ but fails the word-problem version in the \$L2\$.
Negative Transfer	Incorrectly applying the rules, sounds, or syntax of a native language to the target language.	A French-speaking student saying " <i>I have ten years</i> " instead of " <i>I am ten years old</i> " (transferring <i>J'ai dix ans</i>).

Table 4.4 Performance issues in multilingual classrooms

4.4.3 Strategies for improving communicative behaviour in African societies

Improving **communicative behaviour** in African societies requires deliberate strategies. These include:

- Promoting multilingual education to validate learners' linguistic identities.
- Encouraging awareness of non-verbal cues across cultures to reduce misinterpretations.
- Using culturally relevant examples in teaching and media to strengthen connections.
- Providing opportunities for debates, role plays, and group discussions to enhance performance and confidence.

Such strategies help learners and communities communicate more effectively, bridging gaps across languages and cultures.

Fill in the blank: Providing opportunities for debates and role plays helps improve _____ behaviour in African societies.





Figure 4.4 Strategies for improving communicative behaviour

Box 4.4: Recommended Reading

Selected texts on localisation, performance, and behaviour in Africa

Bamgbose, A. (2000). *Language and Exclusion: The Consequences of Language Policies in Africa*.

Heugh, K. (2009). *Multilingual Education in Africa: Lessons from the Past, Lessons for the Future*.

Alexander, N. (2005). *Language Policy and National Unity in South Africa*.

Recommended Readings: Localisation, Performance & Behaviour in Africa

Localisation & Educational Infrastructure

"Optimising Learning, Education and Publishing in Africa: The Language Factor" by *Adama Ouane & Christine Glanz (UNESCO/UIE)*: A critical review of how localizing textbooks and digital resources impacts learning outcomes across sub-Saharan Africa.

"Educational Challenges in Multilingual Societies: LOITASA Phase Two Research" edited by *Z. Desai, M. Qorro, & B. Brock-Utne*: Focuses specifically on the "Language of Instruction" (LoI) issue in Tanzania and South Africa, detailing the technical and political hurdles of localization.

"Afrikan Alphabets: The Story of Writing in Afrika" by *Saki Mafundikwa*: Essential for understanding the graphic and typographic requirements for localizing materials into indigenous scripts.

Language Performance & Cognitive Growth

"The Impact of Local Language on Learners' Academic Performance and Overcoming Language Blockades" (Journal of Education and Practice, 2025): A recent study



analyzing how mother-tongue instruction reduces the "performance gap" and increases student motivation.

"Language and National Identity in Africa" by *Andrew Simpson*: Explores how the performance of national identity is tied to language choice and the challenges of implementing multilingual policies in post-colonial states.

"Rethinking Multilingualism: Education, Policy and Practice in Africa" by *C. Reilly et al. (British Academy, 2022)*: Discusses whether current educational policies actually support the "multilingual language practices" that students use in their daily lives.

Communicative Behaviour & Pragmatics

"Pragmatics in African Contexts" edited by *Obana & Haugh (2023)*: A vital text that challenges Western-centric views of communication, exploring how "cultural scripts" influence speech acts and social interaction in African communities.

"Situated Language Use in Africa" (Chapter 16 in *The Cambridge Handbook of African Linguistics*) by *H. Ekkehard Wolff*: Analyzes how linguistic choices are made in specific social settings, from the marketplace to the courtroom.

"Language, Communication and Education for Africa's Transformation" by *J. A. Adewuyi (2022)*: Links communicative behavior to social change and national development, highlighting the role of language in behavioral modification.

Box 4.4 Selected texts on localisation, performance, and behaviour in Africa

Pilot questions 4.4

Give one example of localisation in African education.

State one performance issue learners face in multilingual classrooms.

Identify one strategy for improving communicative behaviour in African societies.

Explain why multilingual education validates learners' linguistic identities.

Describe how culturally relevant examples strengthen communication.

Series Summary

This Series has focused on language localisation, performance, and communicative behaviour, highlighting how language adapts to cultural and social contexts, how individuals use language in practice, and how behaviour shapes interaction. Its purpose was to show learners the importance of these processes in multilingual African environments, where effective communication depends on both linguistic knowledge and behavioural awareness.

We began by examining language localisation, its meaning, influencing factors, and examples in African education and media. Then we explored language performance, distinguishing it from



competence and considering the factors that affect it. Following that, we studied communicative behaviour, looking at verbal and non-verbal aspects and the challenges faced in multilingual contexts. Finally, we applied these ideas to African settings, discussing localisation in classrooms and media, performance issues, and strategies for improving communicative behaviour. By completing this Series, you should now be able to define localisation, analyse its influencing factors, distinguish competence from performance, evaluate communicative behaviour, and apply strategies to enhance communication, as outlined in the Series Learning Outcomes (SLOs 4.1–4.10).

Glossary of Terms

Code-switching: The practice of alternating between two or more languages or language varieties within a single conversation or interaction.

Communicative behaviour: The ways individuals use language and other forms of expression, both verbal and non-verbal, to interact with others.

Competence: The internalised knowledge of language rules, including grammar and vocabulary, which enables a person to understand and produce language.

Language localisation: The process of adapting a language to suit a specific cultural, social, or regional context, going beyond simple translation to include cultural references and norms.

Language performance: The actual use of language in real-life situations, such as speaking, writing, listening, and reading, which reflects how well competence is applied.

Non-verbal behaviour: Forms of communication that do not involve words, such as gestures, facial expressions, posture, and tone of voice.

Psychological state: The emotional and mental condition of a person, such as anxiety, confidence, or fatigue, which can influence language performance.

Verbal behaviour: The use of spoken or written words to convey meaning in communication.

Concept Check Questions [Series 4]

Objective Questions

Which of the following best describes language localisation? a) Translating words directly b) Adapting language to cultural and social contexts c) Learning a new language from scratch d) Memorising grammar rules (*Linked to SLO 4.1*)

Which factor is NOT typically considered in language localisation? a) Cultural norms b) Social practices c) Technological platforms d) Weather conditions (*Linked to SLO 4.2*)

Competence refers to: a) The outward expression of language knowledge b) The internalised knowledge of language rules c) The ability to switch between languages d) The use of non-verbal cues (*Linked to SLO 4.4*)

Short-Answer Questions



Define language performance. *(Linked to SLO 4.4)*

Explain one way in which psychological state can affect language performance. *(Linked to SLO 4.5)*

Identify one example of non-verbal communicative behaviour. *(Linked to SLO 4.7)*

State one localisation strategy used in African education or media. *(Linked to SLO 4.9)*

Long-Answer Questions

Analyse the difference between competence and performance, giving examples of each. *(Linked to SLO 4.4)*

Evaluate the challenges of communicative behaviour in multilingual environments. *(Linked to SLO 4.8)*

Discuss strategies for improving communicative behaviour in African societies, with reference to education and media. *(Linked to SLO 4.10)*

Answers to Concept Check Questions [Series 4]

Objective Questions

- b) Adapting language to cultural and social contexts
- d) Weather conditions
- b) The internalised knowledge of language rules

Short-Answer Questions

Language performance is the actual use of language in real-life situations, such as speaking, writing, listening, and reading.

Anxiety may cause hesitation and errors, while confidence can enhance fluency and clarity.

An example is a gesture such as a handshake or a facial expression like a smile.

One localisation strategy is adapting textbooks into indigenous languages with culturally relevant examples.

Long-Answer Questions

Basic response: Competence is the internalised knowledge of language rules, while performance is the outward use of that knowledge. For example, knowing grammar rules shows competence, while speaking fluently demonstrates performance. **Value-added response:** Competence is stable and abstract, whereas performance varies depending on context, audience, and psychological state. A learner may have competence in French but show weak performance when speaking under stress.

Basic response: Challenges include code-switching, misunderstanding idioms, and conflicting cultural norms. **Value-added response:** These challenges can lead to miscommunication and exclusion. For instance, gestures considered polite in one culture may be offensive in another. Addressing these requires cultural awareness and training in multilingual communication.

Basic response: Strategies include promoting multilingual education, encouraging awareness of non-verbal cues, and using culturally relevant examples. **Value-added response:** Beyond these,



societies can integrate localisation into media campaigns, provide platforms for debates and role plays, and validate linguistic identities to build confidence and inclusivity in communication.

Answers to Pilot Questions [Series 4]

Pilot questions 4.1

Language localisation is the process of adapting a language to suit a specific cultural, social, or regional context.

One cultural factor that influences localisation is customs and traditions.

A technological factor that requires localisation is adapting mobile applications into indigenous languages.

An example of localisation in African education is a mathematics textbook written in English but adapted with Yoruba examples.

Localisation goes beyond simple translation because it considers cultural norms, idioms, and context.

Pilot questions 4.2

Language performance is the actual use of language in real-life situations such as speaking, writing, listening, and reading.

Competence is the internalised knowledge of language rules, while performance is the outward expression of that knowledge.

One factor that influences language performance is context.

A psychological state such as anxiety can cause hesitation and errors in communication.

Performance may vary depending on the audience because speakers adjust their language use based on who they are addressing.

Pilot questions 4.3

Communicative behaviour is the way individuals use language and other forms of expression to interact with others.

An example of verbal behaviour is speaking or writing words.

An example of non-verbal behaviour is using gestures or facial expressions.

One challenge of communicative behaviour in multilingual environments is misunderstanding idioms across languages.

Code-switching is switching between languages during a conversation.

Pilot questions 4.4

An example of localisation in African education is adapting textbooks into indigenous languages with culturally relevant examples.

One performance issue learners face in multilingual classrooms is fear of making mistakes.



One strategy for improving communicative behaviour in African societies is promoting multilingual education.
Multilingual education validates learners' linguistic identities by recognising and including their home languages in learning.
Culturally relevant examples strengthen communication by making lessons relatable and accessible to learners.

References and Attributions [Series 4]

Textual References

- Alexander, N. (2005). *Language Policy and National Unity in South Africa*. Cape Town: Buchu Books.
- Bamgbose, A. (2000). *Language and Exclusion: The Consequences of Language Policies in Africa*. London: Heinemann.
- Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press.
- Esselink, B. (2000). *A Practical Guide to Localization*. Amsterdam: John Benjamins.
- Gumperz, J. J. (1982). *Discourse Strategies*. Cambridge: Cambridge University Press.
- Hall, E. T. (1976). *Beyond Culture*. New York: Anchor Books.
- Heugh, K. (2009). *Multilingual Education in Africa: Lessons from the Past, Lessons for the Future*. Cape Town: PRAESA.
- Hymes, D. (1972). *On Communicative Competence*. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics*. Harmondsworth: Penguin.
- Richards, J. C., & Rodgers, T. S. (2001). *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press.
- Samovar, L. A., Porter, R. E., & McDaniel, E. R. (2010). *Communication Between Cultures*. Boston: Wadsworth.

Illustrations

Figure 4.1 Language localisation as adaptation

Attribution: AI-generated placeholder.

Prompt: "Create a diagram showing localisation as adaptation of language to culture, society, and technology."

Suggested OER search string: "language localisation adaptation diagram OER."

Table 4.1 Factors influencing language localisation

Attribution: AI-generated placeholder.



Prompt: “Create a table listing cultural, social, and technological factors influencing language localisation with examples.”

Suggested OER search string: “factors influencing language localisation OER table.”

Plate 4.1 Localisation in African education

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing African students using localised educational materials.”

Suggested OER search string: “African education language localisation OER image.”

Box 4.1 Selected texts on language localisation

Attribution: Based on referenced works by Esselink (2000), Bamgbose (2000), and Heugh (2009).

Suggested OER search string: “language localisation recommended readings OER.”

Figure 4.2 Language performance as observable use of language

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing the distinction between competence and performance in language.”

Suggested OER search string: “competence vs performance language diagram OER.”

Table 4.2 Difference between competence and performance

Attribution: AI-generated placeholder.

Prompt: “Create a table comparing competence and performance with definitions and examples.”

Suggested OER search string: “competence vs performance language OER table.”

Plate 4.2 Factors influencing language performance

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing a speaker addressing different audiences with varying performance levels.”

Suggested OER search string: “factors influencing language performance OER image.”

Box 4.2 Selected texts on language performance

Attribution: Based on referenced works by Chomsky (1965), Hymes (1972), and Richards & Rodgers (2001).

Suggested OER search string: “language performance recommended readings OER.”

Figure 4.3 Verbal and non-verbal communicative behaviour



Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing verbal and non-verbal aspects of communicative behaviour.”

Suggested OER search string: “verbal non-verbal communicative behaviour diagram OER.”

Plate 4.3 Verbal and non-verbal cues in communication

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing a person speaking with accompanying gestures and facial expressions.”

Suggested OER search string: “verbal non-verbal communication cues OER image.”

Table 4.3 Behavioural challenges in multilingual environments

Attribution: AI-generated placeholder.

Prompt: “Create a table listing behavioural challenges in multilingual environments with examples.”

Suggested OER search string: “multilingual communication behavioural challenges OER table.”

Box 4.3 Selected texts on communicative behaviour

Attribution: Based on referenced works by Hall (1976), Gumperz (1982), and Samovar et al. (2010).

Suggested OER search string: “communicative behaviour recommended readings OER.”

Plate 4.4 Localisation in African education

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing African students reading localised textbooks.”

Suggested OER search string: “African education localisation textbooks OER image.”

Table 4.4 Performance issues in multilingual classrooms

Attribution: AI-generated placeholder.

Prompt: “Create a table listing performance issues in multilingual classrooms with examples.”

Suggested OER search string: “performance issues multilingual classrooms OER table.”

Figure 4.4 Strategies for improving communicative behaviour

Attribution: AI-generated placeholder.



Prompt: “Create a diagram showing strategies for improving communicative behaviour in African societies.”

Suggested OER search string: “strategies communicative behaviour Africa OER diagram.”

Box 4.4 Selected texts on localisation, performance, and behaviour in Africa

Attribution: Based on referenced works by Bamgbose (2000), Heugh (2009), and Alexander (2005).

Suggested OER search string: “localisation performance communicative behaviour Africa recommended readings OER.”

Course code: ENG 403

Course title: Psycholinguistics

Course credit load: 2 Units

Series 1: Language, Mind, and the African Experience

Series 2: Psycholinguistics of Acquisition and Learning

Series 3: Cognition, Thinking, and Mental Processes in Language

Series 4: Language Localization, Performance, and Behaviour

Series 5: Production, Comprehension, and Language Impairments

Proposed Outline for Series 5

Part .1 Language production

5.1.1 Meaning of language production

5.1.2 Stages of language production (conceptualisation, formulation, articulation)

5.1.3 Factors influencing production (cognitive load, context, fluency)

Part .2 Language comprehension

5.2.1 Meaning of language comprehension

5.2.2 Processes involved in comprehension (perception, parsing, interpretation)

5.2.3 Challenges in comprehension (ambiguity, noise, multilingual contexts)

Part .3 Language impairments



- 5.3.1 Meaning of language impairments
- 5.3.2 Types of impairments (aphasia, dyslexia, speech disorders)
- 5.3.3 Implications of impairments for communication and learning
- 5.3.4 Strategies for supporting individuals with language impairment

Introduction

In the last Series, we examined language localisation, performance, and communicative behaviour, focusing on how language adapts to cultural contexts and how individuals use it in practice. Building on that foundation, this Series turns to the processes of language production and comprehension, as well as the challenges posed by language impairments. These areas are central to psycholinguistics because they reveal how humans generate and interpret language, and what happens when these processes are disrupted.

The aim of this Series is to equip you with knowledge of how language is produced and comprehended, and to help you recognise the nature and impact of language impairments. It intends to provide both theoretical understanding and practical insights into communication and learning.

We shall commence this Series by exploring language production, its meaning, stages, and the factors that influence it. Next, we will move on to language comprehension, considering the processes involved and the challenges that arise in different contexts. Finally, we will wrap up by examining language impairments, identifying their types, implications, and strategies for supporting individuals who experience them.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- SLO 5.1** define language production and explain its meaning in communication,
- SLO 5.2** describe the stages of language production including conceptualisation, formulation, and articulation,
- SLO 5.3** analyse the factors that influence language production such as cognitive load, context, and fluency,
- SLO 5.4** define language comprehension and explain its role in communication,
- SLO 5.5** identify the processes involved in comprehension including perception, parsing, and interpretation,
- SLO 5.6** evaluate challenges in language comprehension such as ambiguity, noise, and multilingual contexts,
- SLO 5.7** define language impairments and explain their implications for communication,
- SLO 5.8** differentiate between types of language impairments such as aphasia, dyslexia, and speech disorders,
- SLO 5.9** assess the impact of language impairments on learning and social interaction, and



SLO 5.10 apply strategies for supporting individuals with language impairments in educational and social contexts.

5.1 Language Production

5.1.1 Meaning of language production

Language production refers to the process by which humans generate spoken or written language to communicate ideas. It involves transforming thoughts into words and sentences that can be understood by others. Production is not simply about speaking or writing; it is about organising concepts, selecting vocabulary, and applying grammar rules to create meaningful expressions.

For example, when you want to describe your morning routine, your mind first forms the idea, then selects appropriate words, and finally articulates them in speech or writing.

Fill in the blank: _____ refers to the process by which humans generate spoken or written language to communicate ideas.

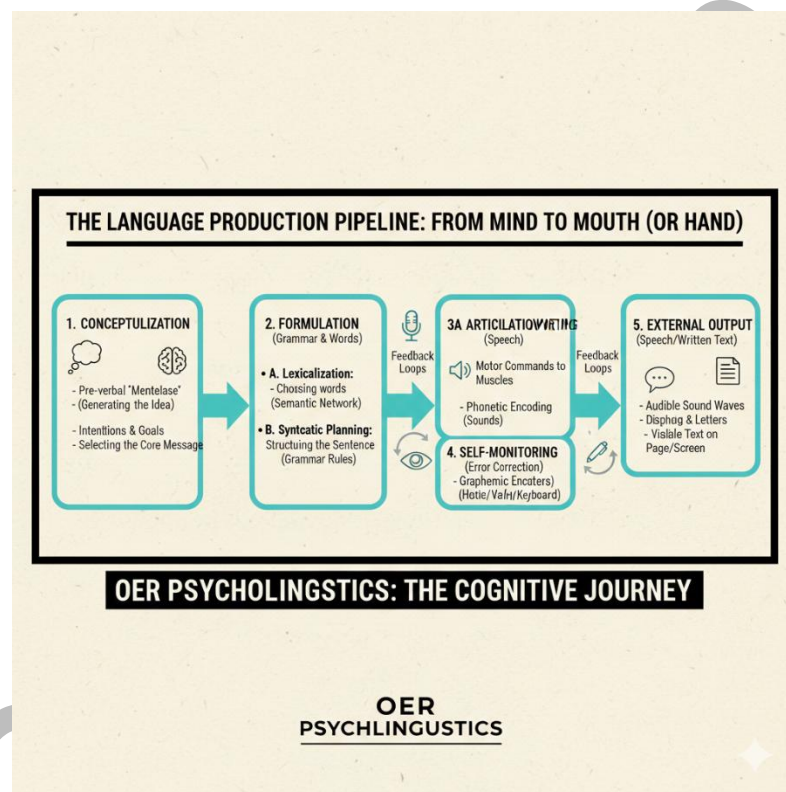


Figure 5.1 The process of language production

5.1.2 Stages of language production (conceptualisation, formulation, articulation)

Language production occurs in three main stages:



Conceptualisation: The stage where ideas are formed in the mind. It involves deciding what to say.

Formulation: The stage where linguistic structures are created. Words are selected, grammar is applied, and sentences are organised.

Articulation: The physical stage where speech organs or writing tools are used to express the formulated message.

For instance, if you want to say “The boy is running,” you first conceptualise the idea of a boy running, then formulate the sentence using grammar and vocabulary, and finally articulate it by speaking or writing.

Fill in the blank: The stage where words are selected and grammar is applied is called _____.

STAGES OF LANGUAGE PRODUCTION		
FROM THOUGHT TO EXPRESSION – OER		
CONCEPTUALISATION	DEFINITION	PRACTICAL EXAMPLE
The pre-verbal "Mentalese" where conceptual message, and the bur spealies and thefor the a thes the core hossework.	Deciding you want to ask ta friend	Selicing cou ayask me this oruce help with honework.
FORMULATION A. Conveelaliam": Choising words in oto Struucting on Synttucing of this math prodtbork.	Chosins the words "Can (bxosing words (Septkarnet) (Semantic Network)	Chooses to help a this help for this struectic math problem?
ARTICULATION / WRITING Motor motor Commands sneach or (Hotie/h/ Kebortioows	Phosicilyr speaince outh Ghometic (Errorblers on op vacit)	Physically speaking sente out our typing or message on kieboard

THE ARCHITECTURE OF COMMUNICATION – OER

OER
PSYCHLINGUISTICS

Caption: Table 5.1 Stages of language production

5.1.3 Factors influencing production (cognitive load, context, fluency)

Several factors influence how effectively language is produced:

Cognitive load: The mental effort required to process information. High cognitive load may slow down production.

Context: The situation in which communication occurs. Formal contexts often demand more careful production than informal ones.

Fluency: The ease and smoothness of speech or writing. Fluency is influenced by practice, confidence, and exposure to language.



For example, a student may produce language fluently in casual conversation but struggle in a formal presentation due to increased cognitive load and pressure.

Fill in the blank: The ease and smoothness of speech or writing is referred to as _____.



Plate 5.1 Factors influencing language production

Box 5.1: Recommended Reading

Selected texts on language production

Levelt, W. J. M. (1989). *Speaking: From Intention to Articulation*.

Dell, G. S. (1986). *A Spreading-Activation Theory of Retrieval in Sentence Production*.

Clark, H. H., & Clark, E. V. (1977). *Psychology and Language: An Introduction to Psycholinguistics*.

Recommended Readings: Language Production

Theoretical Foundations

Willem Levelt, *Speaking: From Intention to Articulation* (1989/1993): The "Gold Standard" in psycholinguistics. Levelt provides the most comprehensive blueprint for how humans conceptualize ideas, select words (lexicalization), and physically articulate them.

Gary S. Dell, "A Spreading-Activation Theory of Retrieval in Sentence Production" (*Psychological Review*, 1986): A foundational article explaining how our brains "retrieve" words through a network of connected ideas, which also explains why we make certain types of speech errors.



Zenzi M. Griffin & Victor S. Ferreira, "Properties of Spoken Language Production" (2006): An accessible overview that breaks down the timing and stages of speech, perfect for introductory OER modules.

Modern & Computational Perspectives

The Cambridge Handbook of Psycholinguistics (Chapter 21: Language Production, 2024/2025 Updates): Provides a high-level summary of computational models (like the WEAVER++ model) that simulate how the brain manages the high-speed "pipeline" of speech.

Fernanda Ferreira, "Good-Enough Language Production" (*Trends in Cognitive Sciences*, 2022): Challenges traditional models by arguing that we often produce "just good enough" speech to be understood, rather than perfectly formed sentences, especially under pressure.

Neuroscience & Biological Bases

"Broca's Area: Motor Aspects of Speech Production" (*Biopsychosocial Overview*, 2025): A critical modern review of how specific brain regions (like Broca's area and the arcuate fasciculus) coordinate to turn thoughts into fluent motor plans for speech.

"Neural Synchrony in Speech" (*Journal of Neuroscience*, 2026): Recent research showing how the production and perception systems in the brain are actually "linked" in a tight loop during conversation.

Box 5.1 Selected texts on language production

Pilot questions 5.1

- Define language production.
- List the three stages of language production.
- Identify the stage where grammar rules are applied.
- State one factor that influences language production.
- Give an example of how context affects language production.

5.2 Language Comprehension

5.2.1 Meaning of language comprehension

Language comprehension refers to the process of understanding spoken or written language. It involves decoding sounds or symbols, recognising words, and interpreting meaning in context. Comprehension is not passive; it requires active engagement with language, drawing on prior knowledge, memory, and reasoning to make sense of messages.

For example, when listening to a story, you not only hear the words but also connect them to ideas, emotions, and experiences to grasp the full meaning.



Fill in the blank: _____ refers to the process of understanding spoken or written language.

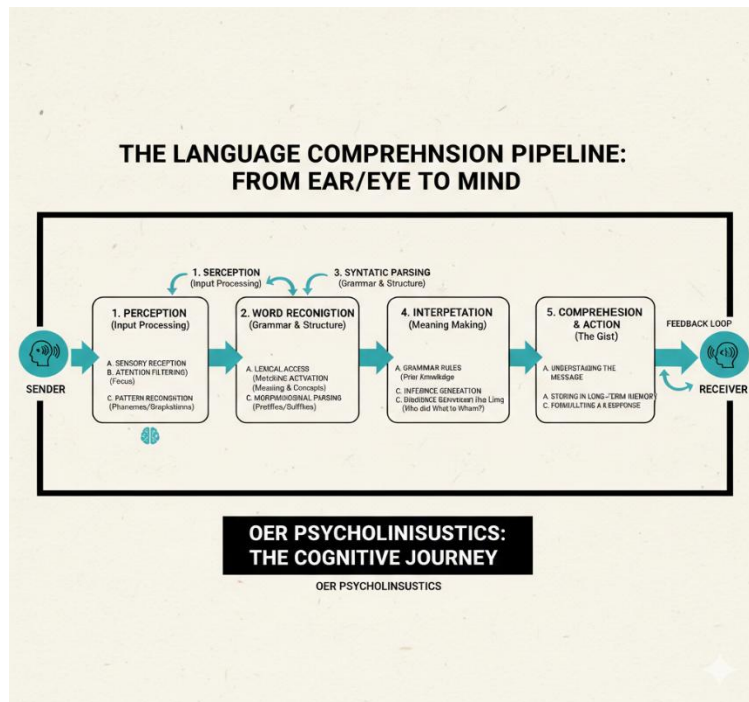


Figure 5.2 The process of language comprehension

5.2.2 Processes involved in comprehension (perception, parsing, interpretation)

Language comprehension occurs through several interconnected processes:

Perception: Detecting and recognising sounds or written symbols.

Parsing: Analysing the grammatical structure of sentences to identify relationships between words.

Interpretation: Assigning meaning to the message by linking it to context, prior knowledge, and reasoning.

For instance, when reading “The boy kicked the ball,” perception allows you to recognise the words, parsing helps you identify the subject and object, and interpretation enables you to understand the action described.

Fill in the blank: Analysing the grammatical structure of sentences to identify relationships between words is called _____.



Process	Definition	Practical Example
Perception	The initial stage of receiving sensory input (sounds or symbols) and identifying them as phonemes or graphemes.	Recognizing the distinct sounds /b/, /æ/, and /t/ from a stream of noise and identifying the word "bat."
Parsing	The mental process of analyzing a sentence to determine its grammatical structure and the relationships between words.	Identifying that in the sentence "The dog bit the man," the "dog" is the agent and the "man" is the recipient.
Interpretation	The final stage where the literal meaning is combined with context, social cues, and prior knowledge to understand the speaker's intent.	Understanding that when someone says "Can you pass the salt?", they are making a request for action, not asking about your physical capability.

Table 5.2 Processes involved in language comprehension

5.2.3 Challenges in comprehension (ambiguity, noise, multilingual contexts)

Language comprehension can be hindered by several challenges:

Ambiguity: Words or sentences with multiple meanings may confuse listeners or readers.

Noise: External distractions such as background sounds or unclear handwriting can interfere with comprehension.

Multilingual contexts: Switching between languages or encountering unfamiliar vocabulary may slow down understanding.

For example, the sentence “Visiting relatives can be annoying” is ambiguous because it could mean relatives who visit are annoying, or visiting them is annoying.

Fill in the blank: Words or sentences with multiple possible meanings create _____ in comprehension.





Plate 5.2 Challenges in language comprehension

Box 5.2: Recommended Reading

Selected texts on language comprehension

Kintsch, W. (1998). *Comprehension: A Paradigm for Cognition*.

Just, M. A., & Carpenter, P. A. (1987). *The Psychology of Reading and Language Comprehension*.

Perfetti, C. A. (1999). *Comprehending Written Language: A Blueprint of the Reader*.

Recommended Readings: Language Comprehension

Foundational Theories

Charles Clifton, Jr. & Antje S. Meyer, *Language Comprehension and Production*: A comprehensive overview that bridges how we perceive spoken and written signals and the internal "parsers" we use to build meaning.

Lyn Frazier, *On Sentence Comprehension* (1987): The definitive work on the "Garden Path" model, explaining why our brains sometimes get stuck on ambiguous sentences (like "The old man the boats").

Morton Ann Gernsbacher, *Language Comprehension as Structure Building* (1990): Proposes that comprehension is the process of building mental "lay-outs" of information and "mapping" new incoming data onto them.

Mechanisms of Parsing & Meaning

Fernanda Ferreira et al., *Good-Enough Representations in Language Comprehension*: A modern perspective suggesting that the brain doesn't always perform a perfect linguistic analysis but often settles for an "accurate enough" interpretation to save mental energy.



Rayner & Pollatsek, *The Psychology of Reading*: Essential for understanding the visual and cognitive processes of comprehension, including how eye movements (saccades) relate to mental processing.

Kintsch, W., *Comprehension: A Paradigm for Cognition*: Explores the "Construction-Integration" model, detailing how we move from understanding individual words to forming a "situational model" of an entire story or argument.

Instructional & OER Perspectives (2024–2026)

Maria S. Murray, "Language Comprehension Ability: One of Two Essential Components of Reading," *Steps to Success* (OER): An accessible, open-access chapter that breaks down the "Simple View of Reading" and the role of background knowledge.

Dr. Nancy Hennessy, *The Reading Comprehension Blueprint (Updated Research)*: A practical guide that weaves together vocabulary, syntax, and inferencing into a structured framework for educators.

"Neural Synchrony in Speech Perception," *Nature Communications* (2025): Recent research on how a listener's brainwaves literally "sync up" with a speaker's voice to facilitate faster comprehension.

Box 5.2 Selected texts on language comprehension

Pilot questions 5.2

- Define language comprehension.
- List the three processes involved in comprehension.
- Identify the process that analyses grammatical structure.
- State one challenge that affects comprehension.
- Give an example of ambiguity in language comprehension.

5.3 Language Impairments

5.3.1 Meaning of language impairments

Language impairments refer to difficulties or disorders that affect a person's ability to produce or comprehend language effectively. These impairments may arise from neurological conditions, developmental issues, or external factors such as trauma. They can impact communication, learning, and social interaction.

For example, a child with a developmental language disorder may struggle to form sentences, while an adult who has suffered a stroke may experience difficulty in understanding spoken words.

Fill in the blank: _____ are difficulties or disorders that affect a person's ability to produce or comprehend language.



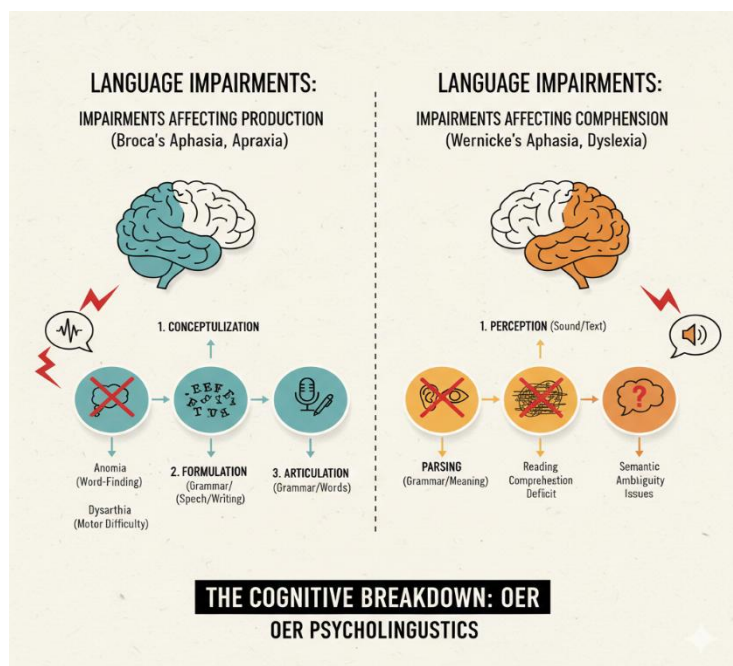


Figure 5.3 Types of language impairments

5.3.2 Types of impairments (aphasia, dyslexia, speech disorders)

There are several types of language impairments:

Aphasia: A neurological disorder often caused by brain injury or stroke, leading to difficulties in speaking, understanding, reading, or writing.

Dyslexia: A developmental disorder that affects reading and spelling abilities despite normal intelligence and educational opportunities.

Speech disorders: Conditions such as stuttering or articulation problems that affect the fluency and clarity of spoken language.

For instance, a person with aphasia may struggle to find words, while someone with dyslexia may confuse letters when reading.

Fill in the blank: A developmental disorder that affects reading and spelling abilities is called _____.

Condition	Primary Impact Area	Definition	Practical Example
Aphasia (Broca's)	Production	Difficulty in formulating and "putting together" sentences, though	A person knows they want to ask for water but can only say



Condition	Primary Impact Area	Definition	Practical Example
		comprehension often remains intact.	"Water... drink" after significant effort.
Aphasia (Wernicke's)	Comprehension	Difficulty understanding spoken or written language; speech may be fluent but lacks actual meaning ("word salad").	A person speaks in long, complex sentences with a natural tone, but the words are nonsensical or irrelevant to the context.
Dyslexia	Processing	A learning disorder that involves difficulty reading due to problems identifying speech sounds and learning how they relate to letters.	A student may struggle to decode the word "cat" because they find it difficult to map the visual letter "c" to the sound /k/.
Apraxia of Speech	Articulation	A motor speech disorder where the brain struggles to coordinate the muscle movements necessary to create sounds.	A person may know the word they want to say, but their mouth and tongue cannot "find" the right position to produce the sounds correctly.
Anomia	Memory/Retrieval	A specific type of aphasia where the individual consistently struggles to retrieve nouns and verbs (names of things).	Frequent "tip-of-the-tongue" moments where the speaker can describe an object's function but cannot recall its name.

Table 5.3 Types of language impairments

5.3.3 Implications of impairments for communication and learning

Language impairments can have significant implications:

Communication: Individuals may struggle to express themselves clearly or understand others, leading to frustration and isolation.

Learning: Impairments can hinder academic progress, particularly in reading, writing, and verbal participation.



Social interaction: Difficulties in communication may affect relationships and participation in community activities.

For example, a student with dyslexia may find reading assignments challenging, which can affect confidence and classroom performance.

Fill in the blank: Language impairments can hinder academic progress, particularly in _____ and writing.



Plate 5.3 Implications of language impairments for learning

5.3.4 Strategies for supporting individuals with language impairments

Supporting individuals with language impairments requires targeted strategies:

Early intervention: Identifying and addressing impairments at an early stage improves outcomes.

Specialised instruction: Using tailored teaching methods such as phonics-based approaches for dyslexia.

Speech and language therapy: Professional support to improve articulation, fluency, and comprehension.

Inclusive practices: Creating supportive environments in schools and communities to reduce stigma and encourage participation.

For example, speech therapy can help a child with stuttering gain confidence in speaking.

Fill in the blank: Professional support to improve articulation, fluency, and comprehension is called _____ therapy.



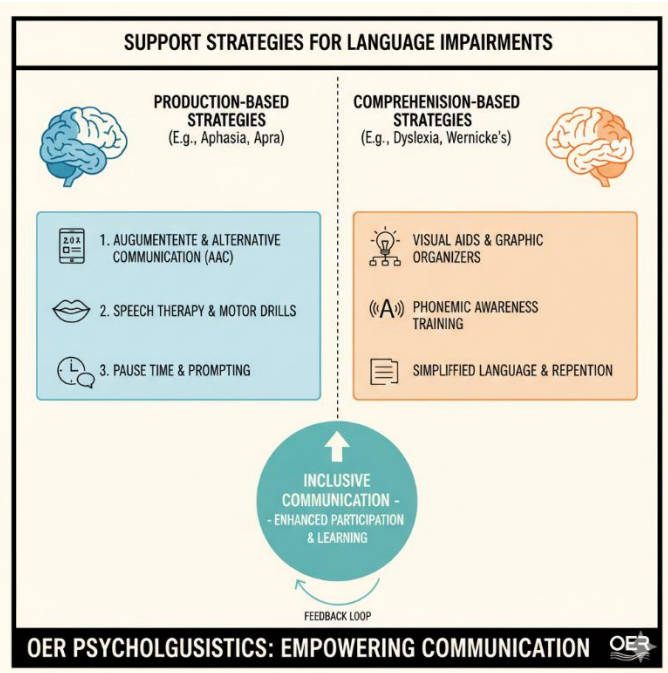


Figure 5.4 Strategies for supporting language impairments

Box 5.3: Recommended Reading

Selected texts on language impairments

Crystal, D. (1984). *A Dictionary of Linguistics and Phonetics*.

Bishop, D. V. M. (1997). *Uncommon Understanding: Development and Disorders of Language Comprehension in Children*.

Goodglass, H. (1993). *Understanding Aphasia*.

Recommended Readings: Language Impairments

Clinical & Theoretical Foundations

Brooke Hallowell, *Aphasia and Other Acquired Neurogenic Language Disorders: A Guide for Clinical Excellence* (2022): A comprehensive textbook that covers scientific foundations, assessment, and treatment of aphasia, dementia, and TBI-related language issues.

The Oxford Handbook of Aphasia and Language Disorders (2015/2024 Updates): An essential scholarly resource that examines the neurology behind language breakdowns and current research in clinical neurophysiology.

Vellutino, Fletcher, Snowling, & Scanlon, "Specific Reading Disability (Dyslexia): What Have We Learned in the Past Four Decades" (*Journal of Child Psychology and Psychiatry*, 2004): A landmark article summarizing forty years of research into the cognitive and phonological origins of dyslexia.

Classroom-Focused & OER Resources



ASHA Practice Portal, *Written Language Disorders (Open Access)*: A vital practitioner resource that provides evidence-based strategies for identifying phonological and alphabet knowledge deficits in the classroom.

Kirby P. & Snowling M. J., *Dyslexia: A History* (2022) [NCBI Bookshelf]: Available as an open-access scholarly text, this book provides a deep dive into how the definition and treatment of dyslexia have evolved over the last century.

Parallel Learning, *Effective Strategies for Communicating with Students Who Have Language Disorders* (2025): A practice-oriented guide focusing on visual supports, graphic organizers, and assistive technology for inclusive classrooms.

Specific Disorders & Support Guides

The DLD Guide, *Developmental Language Disorder: A Guide for Every Teacher* (2023): A specialized resource for mainstream schools that details the identification process and universal support tools for students with DLD.

Nancy Hennessy, *The Reading Comprehension Blueprint*: Focuses on how language impairments (like semantic or syntactic deficits) directly impact a student's ability to gain meaning from text.

Routledge Series, *Principles of Clinical Phonology* (2015): Explores the relationship between phonological theory and disordered speech, helping educators understand why certain sound substitutions occur.

Box 5.3 Selected texts on language impairments

Pilot questions 5.3

Define language impairments.

List three types of language impairments.

State one implication of language impairments for learning.

Identify one strategy for supporting individuals with language impairments.

Explain why early intervention is important in addressing language impairments.

Series Summary

This Series has examined the essential processes of language production, comprehension, and impairments, highlighting their importance in communication, learning, and social interaction. Its purpose was to help you understand how language is generated and interpreted, and what happens when these processes are disrupted. These topics are central to psycholinguistics and provide valuable insights into both everyday communication and educational practice.



We began by exploring language production, looking at its meaning, stages, and the factors that influence fluency and effectiveness. We then moved on to language comprehension, considering the processes of perception, parsing, and interpretation, as well as the challenges posed by ambiguity, noise, and multilingual contexts. Finally, we examined language impairments, identifying their types, implications, and strategies for support. By completing this Series, you should now be able to define and describe production and comprehension, analyse their processes and challenges, differentiate types of impairments, and apply strategies to support individuals, as outlined in the Series Learning Outcomes (SLOs 5.1–5.10).

Glossary of Terms

Ambiguity: A situation where words or sentences have more than one possible meaning, which can cause confusion in comprehension.

Aphasia: A language impairment often caused by brain injury or stroke, leading to difficulties in speaking, understanding, reading, or writing.

Articulation: The stage of language production where speech organs or writing tools are used to physically express words and sentences.

Cognitive load: The amount of mental effort required to process information, which can affect fluency in language production.

Conceptualisation: The stage of language production where ideas are formed in the mind before being expressed in words.

Dyslexia: A developmental language disorder that affects reading and spelling abilities despite normal intelligence and educational opportunities.

Fluency: The ease and smoothness with which speech or writing is produced.

Formulation: The stage of language production where words are selected, grammar is applied, and sentences are organised.

Interpretation: The process of assigning meaning to a message by linking it to context, prior knowledge, and reasoning.

Language comprehension: The process of understanding spoken or written language through perception, parsing, and interpretation.

Language impairments: Difficulties or disorders that affect a person's ability to produce or comprehend language effectively.

Language production: The process by which humans generate spoken or written language to communicate ideas.

Noise: External distractions, such as background sounds or unclear handwriting, that interfere with comprehension.

Parsing: The process of analysing the grammatical structure of sentences to identify relationships between words.

Perception: The process of detecting and recognising sounds or written symbols during comprehension.

Speech disorders: Conditions such as stuttering or articulation problems that affect the fluency and clarity of spoken language.



Concept Check Questions [Series 5]

Objective Questions

- Which of the following best describes language production? a) Translating words directly b) Generating spoken or written language to communicate ideas c) Memorising grammar rules d) Listening and interpreting meaning (*Linked to SLO 5.1*)
- Which stage of language production involves selecting words and applying grammar rules? a) Conceptualisation b) Formulation c) Articulation d) Interpretation (*Linked to SLO 5.2*)
- Which of the following is NOT a challenge in language comprehension? a) Ambiguity b) Noise c) Multilingual contexts d) Clear pronunciation (*Linked to SLO 5.6*)

Short-Answer Questions

- Define language comprehension. (*Linked to SLO 5.4*)
- Identify one factor that influences language production. (*Linked to SLO 5.3*)
- State one implication of language impairments for learning. (*Linked to SLO 5.9*)
- Give one example of a speech disorder. (*Linked to SLO 5.8*)

Long-Answer Questions

- Analyse the three stages of language production, giving examples of each. (*Linked to SLO 5.2*)
- Evaluate the processes involved in language comprehension and explain how they work together. (*Linked to SLO 5.5*)
- Discuss strategies for supporting individuals with language impairments, highlighting their importance in education and social contexts. (*Linked to SLO 5.10*)

Answers to Concept Check Questions [Series 5]

Objective Questions

- b) Generating spoken or written language to communicate ideas
- b) Formulation
- d) Clear pronunciation

Short-Answer Questions

- Language comprehension is the process of understanding spoken or written language through perception, parsing, and interpretation.
- One factor that influences language production is cognitive load.
- Language impairments can hinder academic progress, particularly in reading and writing.
- An example of a speech disorder is stuttering.

Long-Answer Questions



Basic response: The three stages of language production are conceptualisation (forming ideas), formulation (selecting words and applying grammar), and articulation (speaking or writing). For example, to say “The boy is running,” you first conceptualise the idea, then formulate the sentence, and finally articulate it. **Value-added response:** These stages are interconnected. Conceptualisation draws on thought processes, formulation requires linguistic competence, and articulation depends on physical ability. Breakdowns at any stage can affect communication, such as difficulty in formulation leading to pauses or errors in speech.

Basic response: Language comprehension involves perception (recognising sounds or symbols), parsing (analysing grammar), and interpretation (assigning meaning). **Value-added response:** These processes work together dynamically. Perception provides input, parsing organises structure, and interpretation links meaning to context. For example, when reading a sentence, perception identifies words, parsing clarifies syntax, and interpretation ensures understanding. Weakness in one process, such as poor parsing, can hinder overall comprehension.

Basic response: Strategies include early intervention, specialised instruction, speech and language therapy, and inclusive practices. **Value-added response:** These strategies are crucial for both education and social integration. Early intervention prevents long-term difficulties, while therapy builds confidence and fluency. Inclusive practices reduce stigma and encourage participation. For instance, phonics-based teaching supports learners with dyslexia, while speech therapy helps those with stuttering. Together, these approaches foster equality and effective communication.

Answers to Pilot Questions [Series 5]

Pilot questions 5.1

Language production is the process by which humans generate spoken or written language to communicate ideas.

The three stages of language production are conceptualisation, formulation, and articulation.

The stage where grammar rules are applied is formulation.

One factor that influences language production is cognitive load.

Context affects language production by determining whether communication is formal or informal, which influences word choice and fluency.

Pilot questions 5.2

Language comprehension is the process of understanding spoken or written language.

The three processes involved in comprehension are perception, parsing, and interpretation.

The process that analyses grammatical structure is parsing.

One challenge that affects comprehension is ambiguity.

An example of ambiguity is the sentence “Visiting relatives can be annoying,” which has more than one possible meaning.

Pilot questions 5.3

Language impairments are difficulties or disorders that affect a person’s ability to produce or comprehend language.

Three types of language impairments are aphasia, dyslexia, and speech disorders.



One implication of language impairments for learning is difficulty in reading and writing, which can hinder academic progress.

One strategy for supporting individuals with language impairments is speech and language therapy.

Early intervention is important because it helps to address impairments before they become more severe and improves long-term outcomes.

References and Attributions [Series 5]

Textual References

Bishop, D. V. M. (1997). *Uncommon Understanding: Development and Disorders of Language Comprehension in Children*. Hove: Psychology Press.

Clark, H. H., & Clark, E. V. (1977). *Psychology and Language: An Introduction to Psycholinguistics*. New York: Harcourt Brace Jovanovich.

Crystal, D. (1984). *A Dictionary of Linguistics and Phonetics*. Oxford: Basil Blackwell.

Dell, G. S. (1986). A spreading-activation theory of retrieval in sentence production. *Psychological Review*, 93(3), 283–321.

Goodglass, H. (1993). *Understanding Aphasia*. San Diego: Academic Press.

Just, M. A., & Carpenter, P. A. (1987). *The Psychology of Reading and Language Comprehension*. Newton, MA: Allyn & Bacon.

Kintsch, W. (1998). *Comprehension: A Paradigm for Cognition*. Cambridge: Cambridge University Press.

Levelt, W. J. M. (1989). *Speaking: From Intention to Articulation*. Cambridge, MA: MIT Press.

Perfetti, C. A. (1999). Comprehending written language: A blueprint of the reader. In C. M. Brown & P. Hagoort (Eds.), *The Neurocognition of Language* (pp. 167–208). Oxford: Oxford University Press.

Illustrations

Figure 5.1 The process of language production

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing the flow of language production from thought to speech or writing.”

Suggested OER search string: “language production process diagram OER.”

Table 5.1 Stages of language production

Attribution: AI-generated placeholder.



Prompt: “Create a table listing the stages of language production with definitions and examples.”

Suggested OER search string: “stages of language production OER table.”

Plate 5.1 Factors influencing language production

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing a speaker presenting confidently versus hesitantly to illustrate fluency.”

Suggested OER search string: “factors influencing language production OER image.”

Box 5.1 Selected texts on language production

Attribution: Based on referenced works by Levelt (1989), Dell (1986), and Clark & Clark (1977).

Suggested OER search string: “language production recommended readings OER.”

Figure 5.2 The process of language comprehension

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing the flow of language comprehension from perception to interpretation.”

Suggested OER search string: “language comprehension process diagram OER.”

Table 5.2 Processes involved in language comprehension

Attribution: AI-generated placeholder.

Prompt: “Create a table listing perception, parsing, and interpretation with definitions and examples.”

Suggested OER search string: “language comprehension processes OER table.”

Plate 5.2 Challenges in language comprehension

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing a student struggling to understand a sentence due to ambiguity.”

Suggested OER search string: “language comprehension challenges ambiguity OER image.”

Box 5.2 Selected texts on language comprehension

Attribution: Based on referenced works by Kintsch (1998), Just & Carpenter (1987), and Perfetti (1999).

Suggested OER search string: “language comprehension recommended readings OER.”



Figure 5.3 Types of language impairments

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing types of language impairments affecting production and comprehension.”

Suggested OER search string: “types of language impairments diagram OER.”

Table 5.3 Types of language impairments

Attribution: AI-generated placeholder.

Prompt: “Create a table listing types of language impairments with definitions and examples.”

Suggested OER search string: “types of language impairments OER table.”

Plate 5.3 Implications of language impairments for learning

Attribution: AI-generated placeholder.

Prompt: “Generate an image showing a student struggling with reading in a classroom setting.”

Suggested OER search string: “language impairments learning challenges OER image.”

Figure 5.4 Strategies for supporting language impairments

Attribution: AI-generated placeholder.

Prompt: “Create a diagram showing strategies for supporting individuals with language impairments.”

Suggested OER search string: “strategies supporting language impairments OER diagram.”

Box 5.3 Selected texts on language impairments

Attribution: Based on referenced works by Crystal (1984), Bishop (1997), and Goodglass (1993).

Suggested OER search string: “language impairments recommended readings OER.”



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