

Lesson-01 INTRODUCTION TO THE COURSE-I

- ❖ **UG refers** to the mentalist approach that supports nativism and cognitivism.
- ❖ The theory advocates that children are born with **Language Acquisition Device** (Hadley, 2001, p. 58) and are innately **programmed** to learn language.
- ❖ The presence of language universals is seen to be the key characteristic which contains **parameters** setting.
- ❖ **UG** emphasizes that biological mechanism determines the language learning process supported by the representation of **'core grammar.'**
- ❖ **Stephen Krashen's 'Monitor Model'** distinguishes acquisition (**subconscious learning**) and learning (**conscious learning**) as responsible factors for **developing competence** in the **second** language acquisition.
- ❖ The **monitor hypothesis** claims that the acquisition process is responsible for all second language **utterances and fluency**.
- ❖ On the contrary, learning is the **'editor' and 'monitor'** for the output (Hadley, 2001).
- ❖ The **input** hypothesis states that speaking fluency emerges over time and that **acquisition** process is subject to our exposure to the language, which is beyond our current level of **comprehension**.
- ❖ **Cognitive theory** has significant contribution in the area of **SLA** as it focuses on the internal **mental** process as the basis for language learning.
- ❖ According to **cognitive theory**, proficiency develops through practice and then it becomes **automatic**.
- ❖ The **mental processes** rely on the analysis where the **positive and negative** feedback play an important role for **reconstructing and meaningful** language learning.
- ❖ **Conversation** theory advocates participation process as useful mechanism for **language learning**.
- ❖ The **participation** encourages scaffolding and **corrective feedback**.
- ❖ The emphasis is on **initiating** conversations which do not require **speaking** full sentences.
- ❖ **Language** learning is seen to be a process of communication where through **suggestions and error** correction, learning is improved.
- ❖ The basis of **Schumann's 'Acculturation Theory'** is a **'social theory'** which considers social forces as the deriving factors that affect language learning and **acquisition** processes.
- ❖ It emphasizes that instead of **internal mental activities**, the external factors facilitate learning by providing the target language culture for specific language functions.
- ❖ Language being **social phenomena** does consider attitudes and **stereotypes** towards the **target** language as affective learning factors. Errors can be corrected.

Lesson-02 INTRODUCTION TO THE COURSE-II

- ❖ Edward Anthony proposed a **'three-level** framework' (1965) based on **'Approach, Methods, and Techniques.'**
- ❖ **'Approach'** is a set of principles or ideas about the nature of language learning;
- ❖ **'Method'** is an overall mechanism; **'Technique'** is a specific strategy/way.
- ❖ Researchers vary in terms of design, **procedure and approach**;
- ❖ **Anthony's** framework emphasized **'Approach,'** whereas

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- ❖ Richards and Rogers considered 'Method' as a broader term in comparison to approach.
- ❖ Repka and Stern claim that 'method or methodology' is a broader term that covers the rest.
- ❖ Goal orientation, organization, progressiveness, and linking of age to content and successiveness are the general characteristics of methods.
- ❖ However, methods and methodology are related to planning of a specific task, content, procedure, and assessment.
- ❖ Analysis of 'Language Learning Theories' requires understanding of the terms 'Technique, Activity and Procedure.' 'Technique' is a broader term for specific tasks and refers to Brown's taxonomy of techniques: controlled, semi-controlled and free techniques.
- ❖ However, 'Activity' and 'Procedure' deal with learner's performance and practices/behaviors in teaching respectively.

Lesson-03 INTRODUCTION TO KEY CONCEPTS IN LANGUAGE LEARNING

- ❖ Learning belongs to behaviorist approach and deals with a mechanical process of habit formation. As opposed to acquisition which is a subconscious process, learning involves both explicit (learner's is aware of modification of his/her knowledge base) as well as implicit (change in the learner's knowledge base but outside his/her conscious introspection) learning processes. Drill, imitation, and repetition are the basic elements of learning.
- ❖ Key features of learning (Behaviorist Approach) include:
 - Learning is entirely a product of experiences.
 - It is controlled by the conditions under which it takes place.
 - Variations in learning do exist.
 - Language learning is practice based.
 - Imitation, repetition, reinforcement and retention have significant roles in language learning.
- ❖ Competence is the 'mental reality' which is responsible for all those aspects of language use which can be characterized as 'linguistics.' Chomsky refers to it as a system of rules, mastered, and the ability to produce infinite number of sentences.
 - Competence is similar to the concepts of Langue and Parole discussed by Ferdinand de Saussure.
 - It is described as unconscious knowledge of grammar.
 - Knowledge of language is observed as implicit.
 - Chomsky (1965) likened competence to 'ideal' speaker-hearer knowledge of language.
 - Competence can be measured and assessed.
- ❖ Performance, according to Chomsky, is 'the actual use of language in concrete situations.' It focuses not only on the knowledge of the linguistic units but also the ability of the speaker to use appropriate language in a specific context.
 - Parole (Saussure) describes the physical manifestation of langue (competence).
 - Performance can be full of errors.

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- Performance and its products are complex phenomena due to **speaker-hearer's linguistic competence, speech production, memory, dialectical environment, idiolect and individual style, factual knowledge, health and emotional state, and other related factors.**
- ❖ **Deductive Learning**, being teacher centered approach, refers to providing learners with an understanding of the rules followed by **examples and practice**. The rules are of **primary** focus and the practice is encouraged through examples that inculcate rules.
- ❖ This type of learning is suitable for learners who:
 - need a clear base to begin with a new language item (**students of lower grades**).
 - are accustomed to a more **traditional** approach.
 - **lack** the training to find rules themselves.
- ❖ **Inductive Learning**, being **learner-centered**, begins with examples first and requires learner to determine rules relevant to the examples. Determining the relevancy of rules appropriate to examples is a challenging task for the learner. It equips **learners** with the knowledge of the concepts. Key Features
 - ❖ Enables learners to 'notice,' by way of the examples, how the concept works. It emphasizes learner's active involvement in the learning process.

Lesson-04 BEHAVIORISM-I

- ❖ The **behaviorist** movement began with John **Watson in 1913**.
- ❖ It is also known as a **psychological approach** which emphasizes scientific and objective methods of investigation.
- ❖ The **behaviorists claim** that knowledge is external, and humans are born with blank slate. Learning takes place through association between **stimuli-response** processes resulting into specific habit formation.
- ❖ **Critics** believe that it does not provide learners with the ability to solve problems and opportunities for improvement.
- ❖ Some examples of behaviorist theory are: **• Drill/ rote work • Repetitive practice • Bonus points (incentive to do more) • Participation points (incentive to participate) • Verbal reinforcement (such as 'well done') • Establishing rules**
- ❖ **Russian Physiologist, Ivan Pavlov is the founder of 'Pavlovian Conditioning'.**
- ❖ He discovered it accidentally during **1890s**. He conducted an experiment on a dog and learnt that a dog would **salivate** in response to the ringing of a bell.
- ❖ **The Pavlovian conditioning follows: Unconditioned Stimulus (food) > Unconditioned Response (Salivate)** It introduced the **Law of Temporal Contiguity**, whereby two stimuli were presented together to develop association.
- ❖ **Temporal Congruity** occurs when two stimuli are experienced close together in time and, as a result, an association may be formed.
- ❖ In **Pavlovian Conditioning**, the strength of the association between the **conditioned stimulus (CS)** and the **unconditioned stimulus (US)** is largely affected by the phenomenon of temporal congruity.

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- ❖ Key features of Pavlovian conditioning are: • Stimulus • Response • Unconditioned Stimulus • Conditioned Stimulus • Conditioned Response • Extinction • Spontaneous Recovery • Generalization • Discrimination
- ❖ John Watson (1913) took the lead from Pavlov's idea of conditioning that a neutral stimuli becomes conditioned due to specific response and proposed that process of learning may also be referred to as the process of classical conditioning (based on Pavlov's observations).
- ❖ Similar to the Pavlovian Conditioning, the Classical Conditioning supports the habit formation and opposes the idea of consciousness as responsible factors for learning.
- ❖ The theory of Classical Conditioning is a scientific theory that follows three stages: Before, During, and After Conditioning as the concrete processes of learning.
- ❖ The concept of Reciprocal Determinism was proposed by Albert Bandura in 1977.
- ❖ He introduced Social Learning Theory which advocated that behavior is not a single phenomenon, rather a result of the interaction between cognitive, behavioral, and environmental determinants.
- ❖ Since external and internal both factors were considered vital for developing a particular behavior; therefore, Mediating and Observational learning were emphasized by Bandura.
- ❖ Mediating processes occur between stimuli and responses.
- ❖ Behavior is learned from the environment through the process of observational learning.
- ❖ Bandura suggests that most of the human behavior is learned by observation. 1. Observing the behavior of others (models) 2. Using the information (imitate) as a guide for our own behavior 3. Reinforcement or punishment determines the behavior

Lesson-05 BEHAVIORISM-II

- ❖ B.F Skinner proposed the concept of 'Operant Conditioning.'
- ❖ He introduced the theory of Verbal Behavior in 1957.
- ❖ According to this theory, a person's behavior gets reinforced through the mediation of other persons.
- ❖ Any change that occurs in one's behavior is a result of others' reinforcement. Skinner identified following three types of responses that can follow behavior: 1. Neutral Operant 2. Reinforcer 3. Punisher
- ❖ Skinner emphasized that positive and/or negative reinforcement affects one's behavior.
- ❖ It leads to the development of a particular behavior.
- ❖ The concept of punishment is closely linked to the negative reinforcement, and scheduling of reinforcement determines the modification in a behavior.
- ❖ The 'Mediation Theory' was introduced by Charles Osgood (1953, 1957).
- ❖ It claims that the linguistic stimulus (a word or sentence) elicits a 'mediating' response that is self-stimulating.
- ❖ Mediation process is viewed as covert and invisible, acting within the learner.
- ❖ This makes it a cognitive theory which rationalizes internal and external processes for developing behavioral association.
- ❖ Physical stimulus: reaction of a body (hear, see, touch or smell causes us to feel something)
- ❖ Internal response: internalization

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- ❖ **Internal stimulus:** leads to internal stimulus – which is the thought in which you relate the stimulus to outward response
- ❖ **Outward response:** visible or physical response that takes place due to the first response
- ❖ **Sensational Level:** basic stimulus response reaction occurs
- ❖ **Perception Level:** input occurs relating it to the past experiences
- ❖ **Representational Level:** outward reaction, overt behavioral response to the word
- ❖ 'Law of Effect' was introduced by Edward Thorndike (1898).
- ❖ It proposed that pleasant feedback leads to the repetition of a particular behavior and unpleasant feedback ceases it.
- ❖ The theory views learning as a process of developing association between a certain situation and its resultant pleasant outcome.
- ❖ **Law of Readiness:** willingness is considered crucial for learning
- ❖ **Law of Exercise:** (a) the law of use and (b) the law of disuse
- ❖ **Law of Effect:** pleasant outcomes strengthen connections and unpleasant ones weaken them.
- ❖ Three laws were supplemented by five characteristics of learning: 1. Multiple or varied response 2. Set of behaviors or attitude 3. Partial activity or prepotency of elements 4. Assimilation 5. Associative shifting

Lesson-06 GENERATIVISM-1

- ❖ Chomsky's (1965) idea of innateness has been a hallmark of language learning mechanism.
- ❖ It attempts to explain the child's mastery of a native language in such a short time despite the highly abstract nature of the rules of language.
- ❖ He introduced language acquisition device (LAD) which, according to him, contains the innate knowledge, fundamental rules for language, similarity of language acquisition across humanity/cultures, and expected errors in children.
- ❖ MacNeill (1966) supported appropriateness of LAD and justified its existence based on the following: • The ability to distinguish speech sounds from other sounds in the environment • The ability to organize linguistic data into various classes that can later be refined • Knowledge that only a certain kind of linguistic system is possible • The ability to engage in constant evaluation of the developing linguistic system to construct the simplest possible system out of the available linguistic input
- ❖ Chomsky, in A Review of B F Skinner's Verbal Behavior (1959), used language as a tool for critique of Skinner's behaviorism. According to Chomsky, learning is not possible only through repetition and reinforcement as advocated by Skinner.
- ❖ Chomsky believes that a child has the ability to use finite set of rules to construct infinite sentences, and s/he can create phrases which they have never heard before.
- ❖ Not specifically a criticism of Skinner's speculations regarding language, but rather as a more general behaviorist critique of speculation regarding the nature of higher mental processes.
- ❖ Reason for discussing Skinner's book in such detail was that it was the most careful and thoroughgoing presentation of such speculations.
- ❖ Immanuel Kant was a German philosopher who is considered a central figure in modern philosophy.

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- ❖ He proposed theory of 'Transcendental Idealism' according to which human mind creates what an individual experiences, and the world in itself is independent of our individual perceptions.
- ❖ Key features of transcendental idealism include: • Concepts without perceptions are empty • Perceptions without concepts are blind • It is true that all knowledge begins with experience • It is not true that all knowledge arises from experience • Phenomenal realm and Noumenal realm • Categories of the understanding: causation/cause and effect • Synthetic a priori truths
- ❖ Competence: It is native speaker's knowledge of his language, system of rules mastered, and the ability to understand and produce infinite number of sentences.
- ❖ Performance: The concept is about 'the actual use of language in concrete situations' (Chomsky, 1965).
- ❖ Dell Hymes also supported Chomsky's concept of performance and further proposed:
- ❖ Language is but one mode of communication. 2. It varies from situation to situation. 3. Language acquisition of such competency is subject to social needs. 4. A model of language must design it with a face toward communicative conduct and social life (Hymes).

Lesson-07 GENERATIVISM-II

- ❖ Second language acquisition has a strong relevance in the understanding of critical period hypothesis as it highlights the age factor and the belief that children as L2 learners are 'superior' to adults (Scovel, 2000).
- ❖ LI acquisition takes place in childhood, whereas, SLA is both Childhood/adulthood specific.
- ❖ CPH has been dispelled as a myth to investigate first language acquisition and SLA.
- ❖ H. H. Stern (1970) gave the following arguments for better understanding:
 - Practice, repeat, and practice in childhood as well as learning a foreign language (L1 and SLA) • Language learning is mainly a matter of imitation (L1 and SLA) • Practice the separate sounds, then words, then sentences (L1 and SLA) • Understanding always precedes speaking (L1 and SLA) • Natural learning order of four skills (L1 and SLA) • Learning without translation (L1 and SLA) • No explicit grammar teaching (L1 and SLA)
- ❖ UG is defined by Chomsky as 'the system of principles, conditions, and rules that are elements or properties of all human languages.....the essence of human language (Chomsky, 1978).'
- ❖ Universal Grammar is usually defined as the 'system of categories, mechanisms, and constraints shared by all human languages, and is considered to be innate.'
- ❖ These are generally thought to include formal universals (e.g. principles and parameters) as well as substantive universals (e.g. lexical categories and features).
- ❖ The arguments in support of UG are primarily concerned with its universality, convergence, poverty of the stimulus, no negative evidence, child's easy acquisition, uniformity, maturational effects, dissociation between language and cognition, and neurological separation.
- ❖ Chomsky's UG attempts to explain what constitutes knowledge of language, how it is acquired, and put to use.
- ❖ Principles and Parameters are the key components of Universal Grammar.
- ❖ UG as the system of categories, mechanisms, and constraints shared by all humans is generally thought to include formal universals (e.g. principles and parameters) as well as substantive universals (e.g. lexical categories and features).

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- ❖ The concept of Principles and Parameters explains that principles are **universal**, i.e. they apply to all human languages, and parameters vary from one language to another, i.e. the **parameters** of the language vary according to the language input that they receive from the environment.
- ❖ **Principles** are structure dependent which means that knowledge of language relies on the structural relationship in the sentence such as words and **morphemes** rather than on the sequence of words.
- ❖ **Parameters**, as varied in nature, contain **Pro-Drop Parameter** (whether subject pronouns can be dropped in a language or not), **Binary Parameter**, **Head-Initial Parameter**, **Head Final Parameter**, and **Governing Parameters**.
- ❖ The focus of **UG** is native language and the way it is acquired. This is why, **UG** is of significance in the field of linguistics.
- ❖ **SLA's** importance as a study dealing with learning a second language after a first language is already established.
- ❖ Researchers have tried to find out whether **L2** learners have access to **UG** or not. **Three** models have been proposed:
 - ❖ **The direct access model**: looks into the availability of UG directly to the L2 learner.
 - ❖ **The indirect access model**: deals with availability of UG through L1 acquisition.
 - ❖ **No-access model**: Unavailability of UG to L2 learner.
- ❖ The Overall Model was proposed by **Felix (1985)**. It combined previous models (**Competition Model**, **Ellis (1994)** and **Dual Model**), **Towell and Hawkins (1994)** and claimed that **L2 learners have partial access to UG**.

Lesson-08 COGNITIVISM-I

- ❖ **Cognitivism** replaced behaviorism in 1960s as the dominant paradigm.
- ❖ It is the study in psychology that focuses on mental processes including how **people perceive, think, remember, learn, solve problems, and direct their attention to one stimulus rather than another**.
- ❖ It enables **psychologists** to understand cognition based on **cognitivist perspective**.
- ❖ The theory refers to mental processes and also the involvement of sensation, **perception, attention and encoding** as important factors in cognitive processes.
- ❖ **Mergel (1998)** views cognitivism as the thought process behind the behavior.
- ❖ The following **three** theories belong to the paradigm of cognitivism:
 - ❖ **Piaget's Cognitive Development (1896-1980)**: children actively construct their understanding of the world and go through stages of cognitive development.
 - ❖ **Vygotsky's Socio Cultural Theory (1896-1934)**: is based on the developmental analysis, the role of language, and the social relation.
- ❖ **The Information Processing Approach**: **Green (2003)** states that information processing approach involves three basic steps: **encoding, storage, and retrieval**.
- ❖ The relationship between **language and cognition** is of one of the important fields of study for researchers.
- ❖ It is challenging for the researchers to determine the relationship which is unresolved due to the complexity of the role of **language and cognition**.

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- ❖ **Vygotsky** believed that language is one of the most important psychological tools that effects children's cognitive development.
 - ❖ **Firstly**, language is an essential factor for communication (social speech). Next, children begin to use egocentric or private speech to control their own thinking. Furthermore, understanding of cognitive perceptual processes enables the learners to analyze the **mental processes** involved in learning process.
 - ❖ **Three-Stage Information Processing Model**: sensory register, short-term memory, long-term memory, and retrieval.
 - ❖ **Meaningful Effects**: Meaningful information is easier to learn and remember (Cofer, 1971, in Good and Brophy, 1990).
- Serial Position Effects • Practice Effects • Transfer Effects • Interference Effects • Organization Effects • Levels of Processing Effects**
- **State Dependent Effects • Mnemonic Effects • Advance Organizers**
- ❖ There are **specific** processes by which young children grow and change in their abilities; this is referred to as the process of **Cognitive Development**. The process calls for specific strategies for the enhancement of **cognitive skills** which include senses and relationship, exploring objects, and interaction with adults; all of these skills contribute to cognitive development. **Logical and reasoning** skills also fall within the domain of cognitive development.
- ❖ **Robert Gagne (1916 – 2002)**, an educational psychologist, introduced **nine** levels of learning events, and is widely encouraged for language teachers to specifically design activities for developing the **cognitive skills** of their students:

1. Gain attention 2. Inform of objectives 3. Stimulate prior knowledge recall 4. Present stimulus 5. Provide learning guideline 6. Elicit performance 7. Provide feedback 8. Assess performance 9. Enhance retention and transfer

Lesson-09 COGNITIVISM-II

- ❖ **Jean Piaget (1896 – 1980)** was a Swiss clinical psychologist, known for his pioneering work in child development.
- ❖ **Piaget** says, "Only education is capable of saving our societies from possible collapse, whether violent, or gradual." He contributed **immensely in child education**.
- ❖ **Schema**: the basic building block of intelligent behavior – a way of **organizing** knowledge.
- ❖ **Adaptation processes o Assimilation**: using an existing schema to deal with a new object or situation.
- ❖ **Accommodation**: existing schema needs to be changed to deal with a new object or situation.
- ❖ **Equilibrium**: Equilibrium occurs when a child's schemas deals with new information in Schema.
- ❖ **Stages of cognitive development**
- ❖ **Jean Piaget introduced the Stages of Cognitive Development**: • Sensorimotor (birth to age 2), object permanence • Preoperational (from age 2 to age 7), thinking symbolically • Concrete operational (from age 7 to age 11), operational thoughts • Formal operational (age 11+ - adolescence and adulthood), ability to think about abstract concepts

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- ❖ The Atkinson-Shiffrin model is a theory of human memory that was proposed by Richard Atkinson and Richard Shiffrin (1968) and explains how our senses experience different things in terms of sight, hearing, touch, feeling, and taste, but only a fraction of this is remembered. The model of AtkinsonShiffrin proposed that the human memory could be broken down into three different memory stores:
 - ❖ Sensory Memory
 - ❖ Duration: $\frac{1}{4}$ to $\frac{1}{2}$ second • Capacity: all sensory experience • Encoding: sense specific (e.g. different stores for each sense)
 - ❖ Short Term Memory
 - ❖ Duration: 0-18 seconds 2. Capacity: 7 +/-2 items 3. Encoding: mainly auditory
 - ❖ Long Term Memory
 - ❖ Duration: unlimited 2. Capacity: unlimited 3. Encoding: mainly semantic (but can be visual and auditory)
- ❖ The Model received the following criticism: • The sensory stores are sensory systems, not memory systems as most people think of the term 'memory'. • The model's claim, that there is nothing in between short-term and long-term memory is refuted by the evidence that information can reside somewhere between the extremes of active attention and long-term storage. • As opposed to the claim that there is just one short-term system and just one long-term system, the critics believe that in reality, there are many memory systems operating in parallel (for example, different systems for vision, language, and odor memory). Each has short-term and long-term operations. • The Atkinson-Shiffrin model does not give enough emphasis to unconscious processes.
- ❖ The Competition Model is a psycholinguistic theory of language acquisition and sentence processing developed by Elizabeth Bates and Brian MacWhinney which describes language development in formal and informal settings. It also looks into the role of cognitive mechanisms that occur in the learner's brain while processing language. MacWhinney (2002) considers the input, the learner, and the context as the three main components in the language learning process. Lexical Functionalism, Connectionism, Input-Driven Learning, and Capacity are the dominant features of the model.
- ❖ The Associative-Cognitive CREED Theory in SLA was introduced by Nick Ellis which claims that language is learned in the same way as any other human skill. This theory is based on both the behavioral (associations) and cognitivist (cognitive) traditions.
- ❖ Construction Grammar • Rational Language Processing • Exemplar-Based Abstraction and Attraction • Emergent Relations and Patterns • Dialectic
- ❖ Connectionism is an interdisciplinary approach to the study of cognition that integrates elements from Artificial Intelligence, Neuroscience, Cognitive Psychology, and Philosophy of Mind. As a theoretical movement in cognitive science, Connectionism suggests that cognitive phenomena can be explained with respect to a set of general information-processing principles, known as Parallel Distributed Processing (Rumelhart, Hinton, McClelland). PDP models are neurally inspired information processing models to explain the ways of information processing which actually takes place in the brain. Connectionist systems are also sometimes referred to as 'neural networks.'

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- ❖ Basic Components • A set of processing units • A set of modifiable connections between units • A learning procedure (optional)
- ❖ Connectionist models, cover a wide range of domains, are related to language processing and cognitive control. Rumelhart, Hinton, and McClelland (1986) state that there are 8 major components of the PDP model framework: 1) a set of processing units, 2) a state of activation, 3) an output function for each unit, 4) a pattern of connectivity among units, 5) a propagation rule for propagating patterns of activities through the network of connectivities, 6) an activation rule for combining the inputs impinging on a unit with the current state of that unit to produce a new level of activation for the unit, 7) a learning rule whereby patterns of connectivity are modified by experience, and 8) an environment within which the system must operate.
- ❖ Newell and Simon proposed Information Processing System for problem solving. It looks into how problem solving takes place in a problem space i.e., by considering one knowledge state after another until a desired knowledge state is reached. The search may involve backup (return to old knowledge states). The concept refers to the analysis of problem solving from an Information Processing perspective.
- ❖ Identifying the problem space • Identifying some of the intermediate states between the initial and goal state • Identifying what needs to be done; the 'moves,' which enable the problem solver to get from one state to another • Identifying the resources, e.g., knowledge, skills, materiel, personnel, and time, needed to execute each of the moves.
- ❖ An analysis follows what happens from the beginning of a task, such as being given a problem to solve to the end with the problem solved • Receptors – senses • Processors – transform, interpret, integrate, select--attention, set, automatic, and controlled processes • Memories – long term, short term, working • Effectors – muscles, glands