

## Unit 2 Language and thought Knowledge Organiser

Key terms		Language and thought		
Key Term	Definition			
Schema	A mental framework of beliefs and expectations that influence cognitive processing. We are born with some schemas but they develop in complexity with experience of the world.	<p><b>Piaget's theory</b> We learn through developing schemas (mental structures)</p> <p>Language depends on thought – thought and understanding comes first, then language</p> <p>Young children - can have language without understanding but they will not be able to use it effectively</p> <p>Development of language Sensorimotor 0-2 years – children start to speak Pre-operational stage 2-7years – they talk about things not present Concrete operational 7-11years – children develop their own ideas</p> <p><b>Evaluation</b> <b>Supporting evidence</b> – the order of children's two word phrases shows understanding</p> <p><b>Language comes first</b> - Sapir-Whorf hypothesis challenges Piaget suggesting that sometimes language comes first</p> <p><b>Schemas</b> – these cannot be scientifically measured</p>	<p><b>The Sapir-Whorf Hypothesis</b> It is not possible to think about something you have no words for</p> <p>Thinking depends on language – language comes first, thought afterwards</p> <p>Strong version – language determines thought – if you have no words for an object or idea then you can't think about it</p> <p>Weak version – language influences thought – words helps to 'carve up' the world. You can still imagine things with no words for them</p> <p>Which version is better? Weaker version is preferred; we have limited memory for things we have no words for</p> <p><b>Evaluation</b> <b>Differences are exaggerated</b> – Inuit culture may have only two words for snow not twenty-seven, English has four</p> <p><b>Thoughts come before language</b> – if there is lots of snow then this changes the way we perceive the environment</p> <p><b>Restricted and elaborated code</b> – working-class children use restricted language which affects their ability to think, explaining lowers intelligence (Bernstein)</p>	<p><b>Our view of the world</b></p> <p><b>1) Variations in recall of events</b> <b>Native Americans: The Hopi</b> Hopi don't distinguish past, present and future, which affects the way they think about time.</p> <p><b>Language affects recall of events</b> Memory for pictures is affected by labels given (Carmichael et al)</p> <p><b>Evaluation</b> <b>Limited sample</b> – only one individual from the Hopi studied <b>Ambiguous materials</b> – Carmichael's study not reflective of everyday life because less ambiguity</p> <p><b>2) Variations in recognition of colours</b> <b>Native Americans: The Zuni</b> Zuni have only one word for shades of orange and yellow and in a research study, had difficulty distinguishing them</p> <p><b>Language affects recall of colour</b> Berinmo people had difficulty recalling colours as they only have five words for colour (Robertson et al)</p> <p><b>Evaluation</b> <b>Difficulties with cross-cultural understanding</b> – participants from other cultures may misunderstand the task or fail to communicate their answers correctly</p> <p><b>Opposite results</b> – Dani people had no problem matching colour despite having only two words for colour (Rosch and Oliver)</p>
Sapir-Whorf hypothesis	This theory believes that the language a person speaks has a great influence on the way they think and perceive. The weak version says that language affects what we perceive and remember. The strong version says that language determines thought, and we are unable to think about things we do not have the words for.			
Animal communication	The exchange of information between animals within the same species using a variety of signals. Some of these signals are vocal (involve sound) but some are visual or involve smell.			
Language	A communication system unique to humans. It consists of a set of arbitrary conventional symbols through which meaning is conveyed. These symbols can be combined in such a way that an infinite number of novel messages can be produced.			
Eye contact	When two people look at each other's eyes at the same time. Eye contact has a number of roles in communication such as regulating the flow of conversation, signalling attraction and expressing emotion.			
Non-verbal communication	Exchanging information without using words. It includes eye contact and facial expression as well as more general body language.			
Verbal communication	The use of words as a way of expressing your thoughts and how you feel.			
Body language	The way in which attitudes and feelings are communicated to others through unspoken movements and gestures.			
Closed posture	Having arms and / or legs crossed is a closed posture which suggests that the person is in disagreement with what is being said, r is possibly annoyed.			
Open posture	A relaxed posture (without arms and / or legs being crossed) is an open posture which suggests someone is listening in a social interaction and is in agreement with what is being said.			
Postural echo	A similarity or mirroring of body positions by people in a social interaction. Postural echo tends to suggest that two people are getting on well and are friendly towards each other.			
Culture	Refers to the beliefs or expectations that surround us. We are not conscious of living in a culture, just as a fish is not aware that it lives in water, yet it powerfully influences us.			
Gender	A person's sense of male or femaleness, including attitudes and behaviour of that gender.			
Personal space	An invisible portable 'bubble' that surrounds each individual. The size of the bubble depends on who we are with.			
Status	Relating to the social or professional position. For example, a headteacher may have a higher status than a normal teacher in a school.			
Adaptive	Any physical or psychological characteristic that enhances an individual's survival and reproduction and is thus likely to be naturally selected. Such characteristics are passed on to future generations.			
Evolutionary theory	Explains how species have adapted to their environment over millions of years. Behaviours that increase chances of survival and most important, successful reproduction, are naturally selected and passed onto the next generation.			
Innate	Literally means 'inborn', a product of genetic factors.			
Neonates	The name given to new born babies.			
Sensory deprived	Describes an anima or human who does not have a particular sensory ability, such as hearing or seeing.			
Emoticon	This word is a combination of 'emotion' and 'icon'. It is a non-verbal way of expressing mood or emotion within written communication such as a text or an email.			

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Human and animal communication		Non-verbal communication		
<p><b>Von Frisch's bee study (key study)</b> Changed the way scientists thought about animal communication</p> <p><b>Aim</b> – to describe the dances of honey bees to understand their communication</p> <p><b>Method</b> – put food close to hive (10-20 metres) and far away (up to 300 metres). Observed bees 6000 times over 20 years</p> <p><b>Results</b> – Round dance – moving in a circle to show pollen less than 100 metres away Waggle dance – figure of eight shape points direction of food 60% of bees went to sources at the distance indicated by the dances</p> <p><b>Conclusion</b> – sophisticated communication system</p> <p><b>Evaluation</b> <b>Scientific value</b> – opened eyes to capabilities of animals</p> <p><b>Sounds matter too</b> – dances performed in silence ignored</p> <p><b>Other factors are important</b> – bees do not respond to waggle dance if they have to fly over water</p>	<p><b>Human versus animal communication</b></p> <p style="text-align: center;"><u><b>Functions of animal communication</b></u></p> <p><b>Survival (enhances survival of the individual and the group)</b> Vocal sounds – Vervet monkeys communicate danger with an alarm call Visual signs – rabbits lift tail, pin ears back and leap forward</p> <p><b>Reproduction</b> Peacocks stretch out their feathers like an umbrella to communicate genetic fitness</p> <p><b>Territory</b> Rhinos leave piles of dung to communicate territorial boundaries</p> <p><b>Food</b> Ants leave pheromone trail to communicate food source</p> <p style="text-align: center;"><u><b>Properties of human communications not present in animal communication</b></u></p> <p>(in other words, how animal and human communication differs)</p> <p><b>Plan ahead and discuss future events</b> Humans can discuss things that are not present or haven't happened yet (displacement) Animals are focussed on present e.g. food sources and predators</p> <p><b>Creativity</b> Humans have an open system combining many words together Animals have a closed system using communication for specific events</p> <p><b>Single versus multiple channels</b> Human language expressed using many channels – spoken, written, sign language, social media Animals tend to communicate with a single channel e.g. pheromones</p>	<p><b>Eye contact</b> When two people look at each other's eyes at the same time</p> <p><b>Function</b> 1)Regulate flow of conversation - participants look away when they are about to speak and have prolonged gaze when they are about to finish 2)Signalling attraction People who use eye contact are judged as more attractive 3)Expressing emotion Participants judged emotions as more intense if faces were looking straight at them</p> <p><b>Evaluation</b> <b>Real world application</b> People with autism could be taught to increase eye contact to improve social skills</p> <p><b>Use of rating scales</b> Rating attractiveness can lack objectivity</p> <p><b>Artificial studies</b> Studies of eye contact involve artificial tasks which lack validity</p>	<p><b>Body language</b> Communication through unspoken movements and gestures</p> <p><b>Open and closed posture</b> Closed – crossing arms/legs, shows disagreement Open – uncrossed, shows acceptance McGinley – arguments given by person with open posture led to greater opinion change than closed posture</p> <p><b>Postural echo</b> Copying each other's body position Tanner and Chartrand – participants rated new drink more highly when presented with postural echo</p> <p><b>Touch</b> Includes high fives, slapping etc Fisher – if librarian touched student on hand when returning books, the librarian was judged more positively</p> <p><b>Evaluation</b> <b>Real world application</b> – people can use body language to build good relationships</p> <p><b>Body language studies lack control</b> – could be other reasons (extraneous variables) why participants like or dislike confederates</p> <p><b>Body language studies are unethical</b> - lack of informed consent for being in field experiments, lowers trust in psychologists</p>	<p><b>Personal space</b> The distance we keep between ourselves and others</p> <p><b>Cultural differences</b> Sommer- English peoples personal space is 1-1.5m whereas Arabs' is less Arabs liked Englishmen better if they stood closer</p> <p><b>Gender differences</b> Fisher and Bryne – women feel most comfortable when personal space invaded from the side, for men it is from the front</p> <p><b>Status differences</b> Zahn – people with similar status stand closer than those of unequal status</p> <p><b>Evaluation</b> <b>Real-world application</b> Useful in everyday life such as doctors using knowledge about cultural differences</p> <p><b>Over simplistic</b> Research investigates one factor at a time and not the interaction between them</p> <p><b>Unrepresentative samples</b> Experiments use samples of people who may not represent all men or all people within a culture</p>

Explanations of non-verbal behaviour		
<p><b>Evolutionary theory of non-verbal behaviour</b></p> <p><b>Darwin and evolution</b> The theory of natural selection – genes for behaviours that promote survival are passed onto the next generation</p> <p><b>Non-verbal communication as evolved and adaptive</b> NVC evolved in animals to express emotion Baring teeth is adaptive as it reduces death in conflict and therefore protects the survival of the individual and the group</p> <p><b>Comparisons with human behaviour</b> In our distant ancestors opening eyes widely was adaptive because they could see route to safety more easily. This behaviour has been passed down to humans and continues to express surprise.</p> <p><b>Serviceable habits</b> Behaviours used by ancestors to promote survival. Still used by humans but may not serve same purpose</p> <p><b>Evaluation</b> <b>Research into facial expressions</b> – Ekman found six emotions in all cultures, so must be innate</p> <p><b>Research into newborns</b> – babies are born with ability to use eye contact and smile which suggests these NVCs are innate and evolved</p> <p><b>Cultural differences in NVC</b> – cultural differences in NVC such as personal space mean evolutionary theory cannot explain all NVC</p>	<p><b>Non-verbal behaviour – innate or learned?</b></p> <p style="text-align: center;"><u>Evidence that NVC is innate</u></p> <p><b>Neonate research</b> If NVCs displayed by newborn babies this suggests the behaviour is innate</p> <p><b>Social releasers</b> Certain neonate behaviours (e.g. smiling) makes others want to provide care, therefore they are adaptive</p> <p><b>Facial expressions</b> Neonates display an expression of disgust when given sour tastes (citric acid) suggesting it is innate</p> <p><b>Sensory deprived</b> Thompson found blind children show similar facial expressions to sighted children – suggesting NVC is innate as they will not have been able to see someone displaying these signs</p> <p style="text-align: center;"><u>Evidence that NVC is learned</u></p> <p><b>Cross-cultural research</b> Comparing behaviours from different cultures shows if they are learned</p> <p><b>Contact versus non-contact cultures</b> Contact countries: Mediterranean and Latin American prefer smaller personal space Non-contact cultures: UK and USA prefer larger space</p> <p><b>Gestures</b> Pointing index finger is offensive in Hindu culture</p> <p><b>Explaining cultural differences</b> Social learning theory – observe other people in your culture and imitate (people learn what gestures are ok)</p>	<p><b>Yuki’s study of emoticons (key study)</b> Comparing cultural understanding of non-verbal behaviours can show whether it is universal or learned</p> <p><b>Aims</b> – to find out if there is a difference in the interpretation of emoticons in Japan and America</p> <p><b>Method</b> – 6 emoticons shown with different combinations of eyes and mouths (sad, happy, neutral) Participants rated faces in terms of happiness expressed on a 9 point rating scale</p> <div style="text-align: center;">  <p style="font-size: small;">From left to right: (1) happy eyes + neutral mouth, (2) neutral eyes + sad mouth, (3) happy eyes + sad mouth, (4) neutral eyes + happy mouth, (5) sad eyes + neutral mouth, (6) sad eyes + happy mouth.</p> </div> <p><b>Results</b> – Japanese – higher happiness rating for happy eyes than Americans Americans – higher happiness rating when mouths were happy even with sad eyes</p> <p><b>Conclusions</b> – cultural differences in the way emotion is interpreted in facial expressions. Japanese may use eyes because cultural norms lead to hiding emotions but hard to control the expression from the eyes .</p> <p><b>Evaluation</b> <b>Artificial materials</b> – emoticons leave out features such as wrinkle lines which may be important when judging emotion However, follow up study found same results with real faces</p> <p><b>Only tested one emotion</b> In everyday life faces express a range of emotions not just happy and sad</p> <p><b>Using rating scales</b> Emotions are very complex and rating scales reduce emotions to a single score</p>