## Language development within infants and young children

Linguistics, Language Acquisition



Outline some of the theories which seek to explain an area of development in the child. Drawing upon observations that you have made in schools, discuss the significance and evaluate these theories for the teacher in planning effective learning situations. Justify your answer with specific examples from your own experience and your reading. Theories surrounding language development within infants and young children and how these theories differ in their ideas. Language is a systematic means of communicating through the use of sounds or conventional symbols. Without language there would be no way of communicating with others. To allow us to be able to use recognisable sounds and symbols to express ourselves, they first have to be taught before humans can utilize them and are continually built upon through ongoing language development. Currently, language development includes a sizeable amount of theory, research, and debate from a variety of fields which include linguistics, psychology, philosophy, sociology, medicine, computers, biology, neurology, speech and language pathology, and education to name but a few. More recently, due to a sudden occurrence of activity in the aforementioned disciplines, there has been a huge leap as far as what is known about language and as a result of the interdisciplinary sharing of information between these groups the quantity of language development theories has increased tenfold. Theorists and researchers have lined up to either support the more traditional theories or to develop more diverse and unique descriptions of language which may provide insightful clues into answering some of the existing questions. The number of language development theories is extensive in number and range from Chomsky's nativist theories (universal grammar, principles and

parameters, minimalism, etc.), connectionism, optimality theory, Vygotsky's social interactionism, Piaget's cognitive constructivism, information processing theory, neural network models, interactionist approaches such as Bruner's LASS and Bates and MacWhinney's functionalism, and models that stress pragmatics, such as speech acts theory and Grice's conversational maxims. There are then the more philosophical models such as structuralism, semiotics, logical positivism, Frege's direct reference theory, or Wittgenstein's picture theory, waning models (such as case grammar, pivot grammar, and the semantic relations approach). There are also many, more recent theories being promoted and debated in specific circles which include Ullman's dual system's model, Fodor's language of thought, Tomasello's usage based grammar, Jackendoff's conceptual semantics, and Sperber and Wilson's relevance theory. All these go to make up a fraction of the theorists database available to the average language student. When thinking in a teaching context it is clear that owing to the copious amount of theories available how, when attempting to use current research and theory in functional practice, any language or class teacher could easily become baffled by the intensity and sometimes complexities contained within the above in addition to the obvious drawback of there being just too vast a number from which to make a decision. Moreover, how one then manages to deliver a single, clearly defined system or theory within their classroom is a task that is far beyond the reach of any typical primary school teacher. However, through personal experiences in addition to past and current teaching trends it is possible to see how language development techniques have progressed from the earliest theories to the most popular and

productive techniques in use today. The earliest theory concerning language development assumed that children acquired language through imitation alone as stated by Edward Thorndike (1911) in his connectionism theory which was the original stimulus-response-consequence psychology of learning which has influenced so psychologists today. It is also plainly visible within any nursery or early years setting where by children as young as six months begin to vocalization with intonation in addition to responding to their name, other human voices without visual cues by turning their head and eyes and responding appropriately to friendly and angry tones, this has also been noted through personal parental experiences as well as teaching. However, whilst research has shown that children who imitate the actions of those around them during their first year of life are, generally speaking, those who also learn to talk more quickly; there is also evidence that imitation alone cannot explain how children become talkers. An example from the English language is the simple expression of "We goed to the Shops" — it is evident here that the child is very cleverly inventing the past tense of 'go' based on the rules they have absorbed from their surrounding ' teachers'. B. F Skinner, the Behaviourist theorist argued that adults shape the speech of children by reinforcing the babbling of infants that sound most like words. (Skinner 1957). In other words, when a parent, carer or teacher shows enthusiasm for something a child tries to say, this should encourage the child to repeat the utterance. In spite of this, even though reinforcement may help, this theory cannot account for children's inventions of language. Some argue that it is not just hearing language around them that is important; it is the kind of language and whether it is used responsively

through following a baby's input, such as making a noise or gesture. Also, it is clear that babies need to hear language to develop these responses. This point is of great importance in relation to young children with impoverished language experience as it can be a contributing factor as to why so many reception year children are entering the schooling system with an inadequate grasp of the English language. Through personal experience it is evident that young children become amazingly proficient communicators during the first three years of life through the use of noises which only their parents can comprehend. This evolves into simple sign language which again only baby and parent understands; whilst all the time parents, siblings, grandparents, carers and any other significant person within an infants' scope is constantly reinforcing these movements with their verbal equivalents. Once more this is stated within official documentation within schools in the Birth to Three Matters framework which points out, that babies and infants alike use 'the hundred languages of children' - body language (including facial expressions and dance); sign language (their own and family inventions as well as an officially recognised sign language); painting, drawing and mark-making; and oral expression. They have been acutely active listeners since their days in the womb, where they learned to recognise the speech patterns, tunes and tones of the languages used in their home contexts. Again, language development research informs us that young children's language is influenced by many factors, including having sensitive adults and older children around them who will listen and attend to their expressions and who will use and model appropriate language themselves. This has been called Motherese by researchers and theories led

by Cathy Snow. The idea of Motherese (Snow and Ferguson 1977; Trevarthen 1995) the accentuated, tuneful speech from mothers to their babies has been used to explain how aspects of a child's environment can help or hinder them from talking; however it does not explain the underlying causes of language acquisition. Nevertheless, Motherese does play an important part in the development of conversation with infants and young children as it attracts and holds the attention of babies' as well as allowing them to participate in enjoyable turn taking exchanges — the beginnings of conversation. Nativist theorists such as Chomsky (1965; 1975) argue that humans are born with an inbuilt Language Acquisition Device (LAD) and are biologically programmed to gain knowledge; he goes onto to state that language then simply emerges as a child matures. He goes onto maintain that 'the LAD contains knowledge of grammatical rules common to all languages' (Shaffer et al, 2002). He also proposes the LAD allows children to understand the rules of any language which is native to their existence. He also developed the concepts of 'transformational grammar, surface structure and deep structure (Matlin, 2005) — transformation grammar is grammar which transforms a sentence; surface structure refers to written words; and deep structure is the underlying message or meaning of a particular sentence'. Slobin (Ferguson and Slobin 1973; Slobin 1985) continued this premise, suggesting that just as newborns come into the world 'programmed' to look at interesting, especially moving, objects, so babies are pre-programmed to pay attention to language. Nevertheless, this theory has its inadequacies in that children seem to have great proficiency in acquiring whichever language surrounds them and throughout their first year

of life they will gradually discard from their repertoire of vocalisations sounds which they do not hear in the speech of those with whom they spend their lives — but of course the pre-programming does not need to be thought of as tied to a specific language. Like Trevarthen and others, Chomsky indicated the centrality of interactions with familiar adults and older children from the earliest days of life. Parents and practitioners needed time to enjoy 'protoconversations', supporting research has shown that treating babies as if they understand talk and involving them in conversational exchanges are essential experiences on which later abilities are founded. This 'in-built' ability is currently being built upon within the National Curriculum through the introduction of French into earlier key Stages (KS) such as KS1 and KS2. It has been shown that the nativist theory, to some extent, holds true in that children are more capable of acquiring multiple languages in their earlier years compared to when they being to mature. This is not to say that once children reach a particular age however, that humans can no longer learn a language which is non-native, quite the contrary. In contrast, theorists such as Piaget, Nelson and Sinclair focus more on the behaviour surrounding children and the effects of it. When compared to Chomsky, Slobin and Trevarthen; Piaget argued that language was an example of symbolic behaviour and therefore no different to other learning. A colleague of Piaget: Hermine Sinclair (1971) went onto propose that a child's ability to nest a set of Russian dolls uses the same cognitive processes involved in the understanding of how sentences come to be embedded within one another. Using this cognitive processing explanation, Nelson (1985) produced theories based on the thinking that language is an extension of the child's existing

meaning making capacity. This seems to fit with the notion that children will generally begin to engage in pretend play at about the same time as their first words are expressed, indicating that they are using symbols in the form of words and also symbolic pretend objects; for example using a block as a pretend cake. This type of learning is clearly evident within the primary classroom especially within literacy and in particular reading when children use pictures within their books to decipher difficult words which are maybe too problematical to make out through phonetical sounding. In addition to this powerful alteration from the biologically-based understanding of human behaviour to the social/cultural explanation of human activity is Vygotsky's social learning tradition which stressed the importance of opportunities for babies and children to interact with, and observe interactions between, others. This idea is supported by research showing that mothers who behave as if their babies and young children understand language right from the start, make eye contact with them and engage in dialogue, responding to their babies' reactions (kicking, waving arms, smiling, etc) are laying the foundations of conversation. This progresses as children grow to verbal praises, however, it is again evident within the classroom the children who receive positive physical reinforcement for their achievements through embraces, reward charts and even basic reactions such as looking at a piece of work which the child is proud of, questioning them on their days activities and so. Through this continual interaction, parents retain a constant, everprogressing dialogue with their child; whilst all the time that child is developing their language skills. In spite of this, having such a wide selection of options often obscures the availability of the best option. As well as this,

there are so many theories in existence which offer explanations of hidden processes, that they tend to be so general that teaching assumptions cannot apply across categories of language or from individual to individual. Connectionist ideas may inspire treatment relevant to semantics, such as graphs and webs. An instructor could teach implications and sarcasm as implied in pragmatic theories. Or one may use underpinnings from theory of mind explanations to inspire joint attention and reciprocal turn taking. While these explanations apply to specific parts of language, others do not apply to instruction at all. How for example, could one teach optimality theory to a preschooler? And beyond futuristic gene manipulation, improving universal grammar is impossible. The time and resource limitations involved in using evidence based practice in language therapy have been eloquently discussed in Brackenberry, Burroughs, and Hewitt (2008). Compounding difficulties greatly is the predominance of some theories (nativist) that work from the assumption that because grammar is analogous to an organ that grows, it therefore cannot be taught (Chomsky, 1980). That no one language acquisition theory has been settled upon indicates that no one method of language teaching can currently be deemed the best. Despite this and when considering language development within the classroom it is important to consider as many ideas as possible; as researchers and educational theorists alike have still not decided on an unambiguous form of language development that encompasses how humans develop language. Nevertheless, that is not to say that we, as teachers should therefore ignore what is in front of our eyes, but rather embrace what we have and attempt to create a learning environment which stimulates and captivates the children we teach.