

Cognitive developmental approach to children's drawings



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Children's drawings have been used in psychology as a tool to measure several things, including intelligence, emotion and self-esteem, social roles and social identity. The focus of this essay is to critically analyse the cognitive development approach towards children's drawings.

As well as cognitive theories of drawing development, there are competing explanations for the development of drawing including Willats' (1977, 1997) perceptual theory. The theory was object centred and focused on children's changing solutions for presenting a 3D image in a 2D drawing. Kellogg's (1970) gestalt approach to children's drawings saw them as patterns that evolve through development. What start out as scribbles form different shapes which then combine to form people and objects.

Luquet (1927) believed that the study of children's drawings could be used to measure their stage of cognitive development because he theorised the drawings reflected the children's interpretation of the world. He identified three stages; scribbling (2-4 years), Pre-schematic (4-7 years) and schematic (7+ years). Luquet (1927) argued that in the scribbling stage there is no realism or representation made, however representation of movement has been found in children's drawings from the age of two (Matthews, 1984). Towards the end of the stage Luquet (1927) suggested that fortuitous realism can occur. This is when an accidental representation is made from the scribbles although none was intended. Following this realisation is the pre-schematic stage where the child is now attempting to draw a representation of real things, usually with a low degree of accuracy which Luquet described as failed realism e. g. drawing a person as a rough circle containing basic facial features, with straight lines representing limbs

emerging from this (Cox, 1992). The child's drawing then advances to intellectual realism, where the child draws what they know to be there, but not what they see. This leads to x-ray drawings where there is a lack of occlusion as well as mixed perspectives and canonical representations rather than a viewer's perspective of an individual object or person (Luquet, 1927, 2001). Silk and Thomas (1986) also found an increasing development of the use of canonical representations in 3 ½ to 6 ½ year olds. Gradually the child becomes concerned that their multi-perspective drawing is too different from real life. With this the child then enters into the schematic stage where more detail can be found as well as visual realism, which can be identified through several indicators. Canonical representations are substituted for drawings with a single viewpoint, occlusion is used as well as scale and an attempt at creating perceptions of depth is clear. The transition from intellectual to visual realism is supported by Taylor and Bacharach (1982) who found that drawings from older children of a cup with the image of a flower on it represented visual realism while younger children drew either a flower or a cup, displaying intellectual realism (Smith, 1999).

While these stages can be found in children's drawings, Luquet's theory has its limitations and possibly its greatest is that Luquet believed visual realism to be an advance of intellectual realism when in fact, intellectual realism simply shows the development of schemas while visual realism demonstrates an ability to draw with realism. Furthermore, according to Davis (1985) the use of intellectual or visual realism varied between situations and the individual's interpretation of the task (Smith, 1999).

Moreover this theory was first published in 1927 and has been advanced since then by other psychologists such as Piaget.

Piaget believed that the study of children's drawings could be used to measure a child's stage of development and adapted Luquet's (1927) in accordance with his stages of cognitive development. Once a child can picture things themselves; they hold the ability for perceptual activity and sensori-motor intelligence and begin to interact with their environment (Piaget & Inhelder, 1956). This is typically achieved between birth and two years of age. The child then progresses to the second stage; the pre-operational stage which continues to the age of 7. During this time the child develops a use of language and uses words and images to represent objects, which are categorised by single features. In the following stage, concrete-operational, the child thinks in a logical manner about objects and instances and learns the concept of conservatism. In addition, they also start to classify objects using multiple features and can sort them in single dimensions. In Piaget's final stage of child development; formal operational, the child can entertain abstract ideas and instances, as well as think about their actions and the consequences they could have. Piaget linked Luquet's theory of intellectual and visual realism to the transition from an egocentric to non-egocentric way of thinking. This development occurs with the progression from the pre-operational to the concrete-operational stage and involves a realisation that you are not the centre of the universe.

Luquet (1927) and Piaget (1956) both failed to take task variables into account when studying children's drawings. Furthermore they also omitted the importance of social interaction, despite the fact that according to <https://assignbuster.com/cognitive-developmental-approach-to-childrens-drawings/>

Luquet (1927) states that to understand a child's cognitive development one must be present while the child is drawing.

Karmiloff-Smith's (1990) cognitive approach of development in children's drawings suggest that while young children can depict various items they are unable to consciously recall or reflect on their drawing procedures, leading to canonical drawings reminiscent of drawings from Luquet's (1927) intellectual realism stage. At this stage the child is only able to make minor changes such as deletion or size adjustments (Karmiloff-Smith, 1990).

Karmiloff-Smith (1990) argues that at around age 8 children develop the cognitive ability to modify mental representations, which allow them to depart from stereotypical drawings and modify them more. This is similar to Luquet (1927) and Piaget's (1956) theories of intellectual to visual realism and departure from egocentrism. Later research suggests that Karmiloff-Smith's (1990) theory lacked the flexibility present in young children's drawings and this was noted by Karmiloff-Smith herself. Furthermore, Van Sommers (1984) suggested a conservative effect was present, whereby a drawing either partial or whole once successfully drawn is retained by the child to guide future drawings similar to the original (Morra, 2005). Van Sommers argued this incongruent with Karmiloff-Smith's work.

Kellogg (1970) suggests that children take pleasure in the drawing process and early drawings begin as scribbles with no representation, however Matthews (1984) found evidence to the contrary. From these scribbles certain shapes and objects develop which are then used to make representational drawings. These early drawings were also found to contain numerous circular features and radiating lines and Kellogg (1970) suggested <https://assignbuster.com/cognitive-developmental-approach-to-childrens-drawings/>

that these later form representations of humans in a basic ' tadpole' form. This is supported with longitudinal data which suggests that children seem to go through some sort of ' tadpole' phase (Cox & Parkin, Cited in Smith, 1999). Another focus of Kellogg (1970) is the child's attempt to produce aesthetically pleasing drawings and the way this is overlooked by adults looking for visual realism. In support of this, Winner (1996) suggests that children are more likely to be labelled as gifted with the production of visually realistic drawings as opposed to decorative examples (Smith, 1999). Golomb (1995) argues that gifted children still undergoes normal developmental stages but at an accelerated rate due to their enthusiasm for drawing (Smith, 1999). This suggests that with enthusiasm and talent drawing could develop quicker than other processes, indicating an independence from them. This can be seen in some autistic children whose drawing ability surpasses their language, motor and social skills; however this is not the norm. A limitation of Kellogg's theory is that her focus on children's drawing as pleasure over representation may have caused her to overlook what the child was attempting to represent. In addition there is little supporting evidence for her theory.

There are several limitations that apply to most research on children's drawings other than individual differences. Cultural differences affect the definition of development in children's drawing as visual realism is not a feature of many cultures. It also has an effect on how drawing is taught. In western society, writing is carefully taught whereas drawing is seen as an opportunity for creativity. In contrast,, the Chinese do not make this distinction and teach both skills in much the same way (Light & Barnes,

1995). Also, the education, experience and motor skills of the child will have an effect on their drawings, and motor skills in particular are not adequately researched. Other factors include the age and gender of the child as a study by Silk and Thomas (1986) of children between the ages of 3 ½ and 6 ½ years olds showed that girls tend to include more detail than boys.

Furthermore the nature of how the drawing was produced must be taken into consideration for example if the subject of the picture chosen freely or manipulated, and if so how did the instructions affect the outcome.