



CHILD SCRIBBLING: A SENSORY MOTOR ACTIVITY AND REPRESENTATIONAL ABILITY

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ABSTRACT

Children usually begin producing scribbles around their second year of life. As representative activity is already acquired at this age, the graphic act can be rightly considered more than a mere motor activity: it is, without a doubt, one of the most relevant factors involved in the graphic process, but it is the educator's duty to discern its intentional-therefore representative- aspect.

Our study's goal is a detailed examination of the scribbles produced by children between two and three years of age, whose given subjects are the child him/herself, the child engaged in any given playful or sportive activity, and the figures of the mother and the father: any possible difference emerging from such graphic paths, will be investigated and analyzed.

This study is part of a much wider project, which would like to emphasize the emotive traits found in a child's graphic activity, traits which could be used as means of exploration of the child's own interiority, an inner world in full development.

Keywords: child scribbling, representational ability, spontaneous graphic productions, kindergarten, emotive traits.

INTRODUCTION

A child starts producing scrawls with the acquisition of representational ability, which is considered, by most theorists, a plain motor activity. This process begins in the second year of a child's life, during passage from the motor-sensory phase to that of pre-activity.

However, the value of such moment of "passage" has been questioned: is it correct to consider scribbling as a kind of transition or is it opportune to reconsider its value as a gauge of the child's representational ability?

Child scribbling has been analysed under many a perspective, by many an author: some focused on the act of scribbling only marginally, by considering it a simple preparatory moment to the actual production of a drawing – that is, a graphic production of a given subject, recognizable by a third party – lacking any representative intentionality. Great part of the studies related to children early graphic representations did, in fact, reach this very same conclusions, which are well described by



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Arnheim: "The earliest scribbling of a child cannot be seen as *representation*: they are a form of motor activity, through which the child exercises the limbs, with the additional pleasure of producing visible signs" (Arnheim, 1954, 150).

In other words, the casual meeting between a child's scribbling act and any given surface able to record it (Widlöcher, 1965) is the beginning of a phase in which the child produces signs for the sheer pleasure of the movement involved in it. He/she finds a way to address energy constructively and is gratified by the visible sign resulting from such physical activity.

Scribbling is not, then, a drawing: Luquet first (1927), followed by Gardner (1980) and Freeman (1980) all emphasized how a drawing is defined by the formal possibility to recognize in it what it is supposed to represent; such recognition is stabilized, according to Malchiodi (1998) only in between 4 and 6 years of age.

When a child observes a given behaviour and he/she is able to reproduce it subsequently, (after a few hours or days), he/she demonstrates to possess imagination, an internal representation of that behaviour. A child who uses an object as if it were something else during play (for example, using a comb as if it were a telephone), must necessarily be able to distinguish between significance and expressiveness. A child uses a language to refer to objects, people and situations which are not present, able to use verbal patterns to refer to a reality which is not momentarily present.

A child who scribbles is a child who imitates his parents (Quaglia, 1976), and experiences playful pleasure in doing so (Luquet, 1927), and accompanies his gesture with language (onomatopoeic scribbling, Quaglia 2004).

Though considering scribbling as activity-source of motor-sensory pleasure for the child, Georges-Henri Luquet, proposed a ludic perspective to infants' graphic expressions. According to his theory, a child starts scribbling out of playfulness, and is not only guided by motor-sensory pleasure, but also by the discovery of his own creative power, as well as environmental factors. This particular period is defined, by Luquet, as the period of *fortuitous realism*: in it, the child begins to seek a similarity between his/her graphic production and object existing in reality.

The following study fits into the *aesthico-dynamic perspective* (Quaglia, 2003). According to it, scribbling must not be considered mere motor activity, but has the full value of a pleasurable ludic activity, which challenges the child physically, emotionally, mentally and psychologically. At the root of Quaglia's theory is the attribution to a scribble of real representative intention, founded itself on the various theories demonstrating how a child possesses representative capabilities as early as the second year of life. Since 1976, Quaglia and his collaborators have carried out several studies, all with the aim of deciphering the child perspective on the scribble, that is, if the child did mean to represent something actual by it and if so, what in particular. Results have proven that a large majority of children (variable between the 70 and 90%) was still able to recognize their own scribble among others, and would still interpret it the same way as the day it was created.

The *aesthetic-dynamic perspective* identifies 5 phases, based on the different representative intention of the child.

The first phase is characterized by the child scribbling to imitate: if the child sees an adult acting in a determined way, he/she will be prone to imitate. Quaglia and Saglione conducted a study in 1976 in which it was proven that the first scribbles were made by children not for the pleasure of scribbling, but for the pleasure of imitating the adult who scribbles, parents and teachers in particular. Children imitate the act, not the final product of the act itself. *Acting like a grown up* is the most primitive and intense source of pleasure for a child.

In the second phase the child turns his/her attention to his/her personal production and passes from imitating the action of the adult to imitating the sign produced by the action. At this stage, there are two, clearly different scribble typologies: the *writing scribble* where the line follows an horizon-



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tal and wave-like pattern. In the *writing scribble* the child imitates the adults writing, often maintaining to have written a specific phrase or word.

In the *expressive scribble*, the line mirrors the emotional attitude of the child and his/her emotional state at the moment of production: an angry child, for instance, produces chopped, rugged lines, often intersecting one over the other that he/she defines as "bad". A quiet, happy child produces round, curved lines which he/she defines as "good".

In the third phase, the *symbolic phase*, the child transmits, through the sign, the nature of his/her relationship with the object represented. The symbolic phase develops with the child's ability to walk and to explore the world around. This age is characterised by recognition of "dangers" in the surrounding world and the scribbling becomes "good" or "bad".

The fourth phase is that of the *onomatopoeic scribble*: here, the child is only interested in the dynamic and sound characteristics of the object he/she represents and not in its physical details. Movement is considered a full characteristic of the object, whereas the line represents what the objects can do while moving. Usually this representation is accompanied by a vocal sound the child associates with the movement. With the *onomatopoeic scribble* the child completes an essential passage of his/her graphical development, the association of the graphic line to the shape of the objects it represents.

The child progressively abandons scribbling and embraces drawing, passing through the phase of the figurative scribble (also named phase of the *topographic drawing*), in which graphic representation and reality are associated by special organization and dimensions of each scribble on the paper.

Studies on graphic behaviour carried out within this perspective have already evidenced the representational aspect of scribbling: Quaglia (1976) identified the representational function of *onomatopoeic scribbling* though referring to the kinetic and not to the formal aspects of objects.

According to Quaglia, in fact, the representation of the action of objects precedes their visual image, through their schematic reproduction. A line therefore, acquires the meaning of an imagined reality.

On the basis of such postulates, this study aims to demonstrate that also non onomatopoeic scribble could represent some form of reality as seen by a child.

METHOD

This study has the objective of analysing the graphic productions of children attending the first two years of kindergarten, in order to evaluate the possibility of using scribbling to evoke familiar situations or loved objects.

The subjects' selection have been carried out in two kindergarten schools in the Piemonte territory, attended by 64 children from two to four years of age.

The study was conducted in various phases; the researcher became gradually part of the educational reality of the children. She participated in the various activities proposed, focusing in particular on spontaneous graphic productions.

The researcher actively interacted with 15 children, aged between 27 and 46 months of age, seven boys and eight girls. If children did not show interest in scribbling or already used figurative drawing have been left out of the study.

We concentrated our attention on the eight children who showed interest in graphic activity, without being particularly encouraged by the researcher.

On the days of research, individual sessions were held, without a pre-established time limit, taking into consideration the length of the session and the kind of attention given to each child. An adaptable research area was reserved for the study, where paper, colouring pastels and coloured



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pencils were available. The researcher's first effort was to create, above all, a non-restrictive atmosphere, so that each child was comfortable and at ease, and free to express himself/herself through drawing and dialogue.

Once the research area and facilities were ready, and the ideal moments for research were identified along with the environment where there were no distractive elements, the research began, with the following procedure:

The child and the researcher chose an animal considered to be good and capable and the child is asked to draw it. The same procedure was applied for an animal that, on the contrary, was fearsome and dreary to the child. After each drawing was finished, the child was asked to describe verbally what he/she had represented.

After a few days, the drawings, along with those of other children, were presented to their author, who was asked to individuate his/her own drawings and to describe them.

RESULTS

The following criteria were used in the analysis of the drawings: dimension, localization, typology and density of the lines. The two latter criteria proved to be particularly meaningful: our analysis therefore refers to the characteristics of the line (*good – bad*) and also to density.

Through the analysis of the drawings it was possible to observe that all children involved in the research, recognized, even after a lapse of a few days (from 2 to 5), their own productions, identifying the original attributes of what they drew.

Various important differences emerged, especially at the level of graphic structure and, above all, in reference to the assignment. In drawing the good animal the lines showed the characteristics typical of the *good* line, while the bad animals showed the characteristics of the *bad* lines.

An example of this is seen in the drawings of two girls.

Eleonora (3 years and 5 months old), when asked to draw a good animal, chose a cat and drew it with an airy and spacious brown line, while imitating the cat's 'miaow'. When asked to explain what she had drawn, she pointed out the orange line similar to the long whiskers of a cat. After identifying a snake as a bad animal, she filled the sheet with jagged lines with acute angles characterized by rapid changes in directions.

sketch 1: Cat with long whiskers





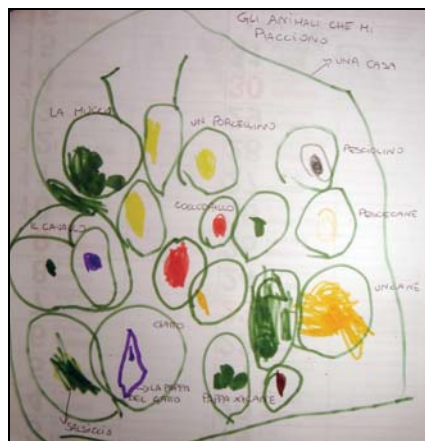
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sketch 2: The bad snake



Valentina (2 years and 10 months) scribbled many coloured marks on the sheet, which she later identified to be animals she likes. (sketch 3). A great difference can be noted compared to that of the bad animal; in this case (sketch 4), there are no circles, but short lines, jagged and decisively more prominent. In the second drawing, Valentina specifies that she drew a monster on the left, a scratching cat in the centre and a shark on the right.

sketch 3 Animals I like





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sketch 4: Animals that frighten me



In reference to the two sets of drawings discussed above, and also to all the productions analyzed, we can observe that the density of the lines on the sheet do not seem to be traceable to the classification of *good or bad* lines; the differences in density seen among the two drawings produced by each child, is not used in the identification of a specific emotional quality of the lines, though it appears to be used by the child as a distinctive criteria to differentiate the two kind of drawings, independently from their emotional quality.

CONCLUSIONS

The data show scribbling cannot be reduced neither to the mere product of a motor activity, nor to an unconscious expression human evolutionary stereotypes (Kellogg,1969).

The era of scribbling seems to inaugurate, on the same level as other behaviors, the child's entry into a new period of his/her development, the phase dominated by mental representation.

Scribbling, above all, represent either good or bad qualities. The ability to comprehend external realities in a physiognomic way, soon gives life to lines of intent and emotional states. The passing from the quality of lines to the representation of the quality of objects and events is an imperceptible consequence.

It is not similarity, but the possibility of assigning the same symbol to different objects that motivates scribbling. The child, in fact, first evokes realities which are absent, through the use of symbols; then he/she creates such symbols, by using objects as representations of his internal world.

Characteristics, rather than similarities, tie the objects among themselves and turn scribbling into proper representation.

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