Evaluation of graphic-pictorial characteristics and contents in the representation of legality

Francesca Baralla, Anna Maria Giannini, Roberto Sgalla

Department of Psychology, “Sapienza” University of Rome
Via dei Marsi, 78 - 00185 Rome, Italy
Telefax: +39.06.4991.7631 E-mail: francesca.baralla@uniroma1.it

Abstract

The present study examines how child drawers selectively use a set of potential expressive strategies in accordance with the nature of the topic being depicted. People leave in a world of signs and symbols that are verbal or gestural or, of a variety of other modalities, graphic. Through drawing, it is possible to represent memories, events, propositions, ideas, plans and also properties of the habitus or of the ethos. Several authors [1, 2, 3] have proposed that children’s drawings are often based on schemata, which seem to relate to the typical representation of the topic in question. This study lies within broader research into the perception of legality and into the relative effective communication modalities. Primary school pupils, aged 7-9 years, took part in the study to assess the graphic style, quality of shapes and colours, and the graphic accuracy of drawings focusing on the representation of legality.

Keywords: Expressive strategies; drawings; graphic style; emotion; legality

1. Introduction

Right from the early days of psychology, drawing has always been considered a useful tool in understanding intellectual maturity [4] and other characteristics of personality [5, 6, 7]. Drawing, as an early human activity, is a powerful nonverbal tool for conveying emotions or psychological moods observed in humans and “is not a mere representation of reality but a symbolic system” [8]. The deliberate production of graphic signs begins very early in childhood and develops constantly, following the developmental stages of cognitive maturation [9]. Despite cultural and individual differences, all children love to scribble from an early age and then later start drawing. As they develop the necessary drawing skills and techniques, drawing itself may be used as a means of expression of mental content, sometimes more effectively than verbal accounts. Their drawings can act as indicators to re-evoke contents they wish to express and thus may contain features which, when properly interpreted, can help to understand the children’s intentions, emotions and other psychological processes.

This study lies within broader research into the perception of legality and into the relative effective communication modalities. The term ‘legality’ (from the Latin word legalis) means that which is legal and implies “the individual’s compliance with the norms that attribute rights and establish duties”. Human behaviour satisfies the principle of legality if it involves the exercising of a right and the fulfilment of an obligation in the manner and forms established by law. The pictorial representations produced constitute precious material for interpretation in order to investigate the specific experiential contingencies and means of expression that occur more frequently within a specific condition. Knowledge of these elements is considered to provide useful indications, also with a view to planning actions geared to awareness-raising and the promotion of a culture of legality.
2. Phenomenological analyses of affective processes involved in the representation of legality and purposes of the studies

This research contribution aims to assess how child drawers use a set of expressive strategies in accordance with the nature of the topic being depicted. To this end, the study assessed the drawings of 372 primary school pupils (194 males and 178 females), aged 8-10 years (average age 9.63, s.d. 0.72). They were asked to depict situations connected to scenarios of legality and of respect for rules and regulations. The pupils were contacted during lesson time, with the school head’s permission, and received the following instructions: “Draw whatever comes into mind when you think of legality”. Each pupil was provided with an A4-format sheet of paper, a HB pencil, an eraser, a pencil sharpener and a box of 24 coloured pencils, and they were told they could freely use the materials provided. They were also given a description sheet on which to write their age and sex along with a short description of their drawing.

The aim of this study is mainly to assess the graphic style of the children’s drawings in order to verify the various ways of representation and the relative modifications in relation to the kind of theme deal with. Starting with the works of Vygotsky [10] and Arnheim [11], drawing was recognized as a precursor of verbal expression. Some general rules can be applied to graphic representation and these allow establishing links between meanings and signifiers. One principle that can inspire the drawer is isomorphism [12], because the image produced contains aspects that can be traced back to psychic contents through relations of similarity. At present, the ever greater use made of images in communication has changed the relations of reference between meaning and signifier, and there is an isomorphism between iconic symbol and object that makes the image more easily understandable (at least, at a superficial level) and that gives it a prototypical feature [13]. The evaluation of drawing activity may thus be a particularly appropriate way of providing a concrete depiction of what we know and to evaluate how we think it is. The phenomenological evaluation of the graphic style was of particular interest in accordance with the model proposed by Biasi and Bonaiuto [14]. Various counterposed variables were thus evaluated that act as category indicators and which concern the evaluation of shape, colour, graphic accuracy, etc. The knowledge and evaluation of this set of indicators enables us to assess not only the contents but also the emotional direction that the subject’s drawing activity moves in (pleasantness, comfort vs. unpleasantness, stress).

3. Analysis of experimental data

In our experiment the results showed a preference for depicting illegal actions (60%; Fig. 1) rather than legal ones (27%; Fig. 2). Thirteen percent of the drawings instead depicted scenes with both legal and illegal behaviours.

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Fig. 1. Depiction of a scene of illegality: “Robbery in a jewelers”.

Fig. 2. Depiction of a scene of legality: “Respect for the environment”.

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This indicates a tendency to more frequently represent improper and illicit behaviour, thereby depicting legality "by contrast". Moreover, the disadvantages linked to not respecting rules and regulations are mostly depicted (62%) compared to the advantages (38%). From the speculative perspective of this study, it is also interesting to note how the directionality of the message used by the children is the same one as the ones proposed by most campaigns on legality and security. It could thus be argued that children of this age consider a message identifying the risks linked to non-compliance with a social rule as more effective and they understand it more easily. It was considered worth evaluating the specific contents the children used in order to depict contexts linked to legality. Content analysis thus examined the figures chosen with more frequency to guarantee respect for legality and security. In order to depict rules, 39% of the children in the sample chose prohibition signs, while 30% of the drawings showed police officers as guarantors of legality and security. It is also worth noting the result of the importance given to the peer group (13%), which the children referred to in order to depict figures that could provide warnings, suggestions and exhortations not to break the rules (more than to adults, 5.4%, the family, 2.5%, or school, 1.4%). The figure of the judge is depicted in only 1.1% of the cases. In the drawings, the police force plays an active role, ready to combat illegality and the non-respect of rules, while prohibition signs and the advice of peers and adults is more frequently linked to communication geared to the learning and internalising of proper behaviour.

The graphic style appears to be characterised by a clear differentiation of the two typologies of drawings produced, where the signifiers (shape, colour, position) are able to reveal specific meanings [14]. Various opposite variables are assessed, which act as category indicators and concern the evaluation of shapes, colours, graphic accuracy, etc. (Figs 3, 4). Accurate analysis of the graphic aspects of the drawings was carried out by two independent judges after proper training. Cohen’s K test was used in order to measure the degree of agreement between the two judges, with a value between .82 and 1.00 showing good agreement. Graphic style, considered to be a useful indicator of cognitive and emotional aspects, was assessed by bearing in mind the content depicted. Data analysis revealed no significant gender differences.

![Fig. 3. Characteristics of the graphic style used in depicting the scenes of illegality.](image)

![Fig. 4. Characteristics of the graphic style used in depicting the scenes of legality.](image)
The knowledge and evaluation of this set of indicators enables us to assess not only the contents, but also the direction that the subject’s drawing activity develops in. All the drawings presented a figurative style, a good formal quality and great care in execution. The degree of complexity of the drawings, given by the number of details depicted, accuracy, balance and by the elements of action and movement, etc., showed significant differences in favour of depictions of scenes of legality ($\chi^2 = 11.596; p<0.01$).

Phenomenological analysis of the graphic content showed that the drawings significantly differed as regards, firstly, their overall content of agreement and conflict: in scenes depicting legality, 81% of the cases showed scenes corresponding to a condition of agreement between the parties involved; in the case of illegality, instead, over 75% of the drawings depicted scenes of open conflict ($\chi^2 = 28.184; p<0.001$). The scenes of illegality were more frequently depicted with the personages in action and in the foreground compared to personages depicted in scenes of legality, where the personages are depicted within broader overall views – actual landscapes ($\chi^2 = 24.957; p<0.001$).

The formal indices highlight a style characterised by more frequent use of straight lines and angular surfaces when depicting scenes of illegality. Evaluation of the colours used underlines also the presence of alarming hues (black, grey, purple, olive green, red and yellow stripes). On the other hand, in scenes of legality there is more frequent use of curved lines and rounded surfaces as well as reassuring colours (pink, sky blue, green and other pastel hues).

4. Comments and conclusion

This study enabled us to assess how children’s drawings can be used in order to investigate the theme of legality and respect for rules, as well as to highlight the reverberations of affective processes on other psychological processes. This investigation shows how, by using appropriate methodologies as well as systematic phenomenological analyses, it is possible to obtain useful indications also for planning actions of awareness-raising and the promotion of a culture of legality. As we already stressed, the variations in graphic content (shape, colour, etc.) can be related to the nature of the topic being depicted. The modifications of formal aspects and the choice of colourings, as described above, allows us to hypothesise the presence of specific emotional processes linked to the depiction of legality. It must be noted that, to describe legality, themes connected to criminal behaviour are more frequently evoked. Exceptional scenes are depicted such as punishments, robberies, arrests and killings, where the police actively and promptly intervene to safeguard the respect for the law. The depiction of these contents is linked to the triggering of negative emotions and of conflictual themes.

The psychological literature has always stressed the importance of conscious verbal reasoning in relation to the respect for laws and to moral behaviour, defining the characteristics of morally mature subjects and the developmental stages marked by experience [15, 16, 17]. Morality was thus considered as a system of principles that can be grasped by analysing reasoning, where the emotions were assessed as elements that could favour or hinder the decision to act in compliance with these principles. Emotions should instead be considered as a constitutive part of the ethical and moral reasoning system [18]. The modern socio-intuitionist theory [19] is an alternative to rationalist models and it places an emotion as the basis of ethical judgement: disgust [20]. Moral judgments are therefore defined as evaluations (good vs. bad) of the actions or character of a person that are made with respect to a set of virtues held to be obligatory by a culture or subculture [19]. Moral judgment is thus finally considered like other kinds of judgments (e.g., aesthetics, skill or personal taste), unlike what was the case in psychology in the past.
By considering emotional reactions as key elements in ethical decisions and judgements on what is considered good and proper, we could better understand this complex phenomenon.

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References