
**Child builds up values through FINE arts:
an exploratory study on Mauritian children**

Johnny Guedes de Lima FAVRE¹Emilie CAROSIN²**Abstract**

This socio-constructivist research aims at enlightening the relationship between fine arts and the building up of values. Based on the theory of "child build up values" elaborated by Johnny Favre (1997), stipulating that values are built up through a structural-isomorphism in relation with the cognitive development and the moral development, we organized an art workshop in Mauritius, for seven children, aged 10 to 11 years old, coming from a deprived environment. With the help of systematic observation, we have been able to show that there is a relationship between the children's participation in the art workshop and the building up of values.

Keywords: Art, cooperation, development, child, education, values, citizenship.

A Criança construindo valores através das Belas Artes: um estudo exploratório sobre crianças mauricianas**Resumo**

Esta investigação sócio-construtivista tem por objetivo colocar em evidência a relação entre artes plásticas e a construção de valores. Baseia-se na teoria da "construção dos valores na criança", elaborada por Johnny Favre (1997), que estipula que os valores são construídos através de um isomorfismo estruturo-funcional entre o desenvolvimento cognitivo e o desenvolvimento moral. As evidências foram observadas em uma oficina de artes plásticas, na Ilha Maurício, com sete sujeitos, com idades entre 10 e 11 anos, provenientes de um meio social carente. Com a ajuda da técnica de observação sistematizada, pudemos demonstrar que existe uma relação entre a participação das crianças nesta oficina de artes plásticas e a construção dos valores.

Palavras-chave: Arte, cooperação, desenvolvimento, criança, educação, valores, cidadania.

¹ Teacher-researcher at the Laboratory Health, Individual and Society (SIS - EA 4129), Research Unit, PSYEF, at the Institute of Psychology, University Lumière Lyon 2, responsible for the research center of "Construction of values, moral development, behaviour disorders and arts", Ph.D. in Psychology Genetic and Cognitive Development, Lyon 2, clinical psychologist (in acting) in Villefranche Sur Saone, France, ex-ad hoc consultant of the CNPq - Brazil - Email: johnny.favre@univ-lyon2.fr or favre.cabinet@psy-dev.fr.

² Ph.D. student in Psychology at the research center of "Construction of values, moral development, behaviour disorders and arts" at the Institute of Psychology, University Lumière Lyon 2, doctoral School: ED485 - EPIC, in Lyon, France, the thesis is supervised by the Professor and Ph.D. Jean-Marie Besse and co-supervised by the researcher, Ph.D Johnny Favre. Email: emcarosin@gmail.com

Research questions:

Can students with learning difficulties coming from a deprived environment develop values that lead to cooperation by participating in an art workshop every afternoon after school?

Does the participation in an art workshop help in developing critical thinking, self-esteem (characterized by discipline, organization, responsibility), mutual help and cooperation?

This research concerns one of studies of a greater project “citizenship and arts” (FAVRE, 2005, p.p.227-228) starting up in 2003 (FAVRE, 2003). The goal of this project is to study arts (fine arts, music - choral singing and dance) like *medium* to favour the construction of moral values through the relationships of co-operation between subjects. Our studies are based on Genetic Epistemology (Piaget) and Socio-Constructivists theories. This project does not have any ambition to give birth to artists, but rather to bring to consciousness the capacity that every individual has to create his place within a social group in which he can bring his own originality. That is, how they can be defined as subjects and individuals.

Theoretical background

At first sight, plastic arts and values seem to be opposite concepts. How can we think of art as being constructive when the art making process seems so random and different throughout periods and artists?

History showed that behind every artwork there is a process of creation, reflection and re-creation. In this research we aim at understanding how co-operation in art making can foster values such as “critical thinking” and “mutual respect” and how these values can favour the cognitive development of children.

To understand how art can influence the cognitive development, it is important to draw the different aspects and functions of art. According to Anderson (2004), we can identify two major currents: the essentialists and the contextualists.

From an essentialist point of view, “Art is to be made; viewed and valued for intrinsic, self-contained and self-explanatory purposes” (Anderson, 2004, p.31). Therefore art is judged according to the principles of design (ANDERSON and MCRORIE, 1997) based on the visual elements (line, colour, texture, form, mass and space) arranged using the visual principles (unity, variety, balance, rhythm, proportion and contrast); and how the artist can compose and create by integrating content and style.

Contextualists, on the opposite, think that content and value can be judged solely in the context where art is created and used. They require that artwork communicate something about the culture in which it was created; that “art should tell a story” (ANDERSON, 2004, p.32).

One of the main functions of art is to carry a message such as meaning as it is intended in the production of personal and/or cultural representations. Furthermore, we can think that all art is functional (contextualist) as it carries at least aesthetic pleasure, and likewise, all art is expressive (essentialist) as it is skilfully organised to show unity.

As mentioned above, meaning and aesthetics are the two concepts that encompass essentialism and contextualism. According to Locke (apud MARGOLIS, 1987, ANDERSON, 2004), we construct signs in order to understand things and transmit knowledge or, as Dissanayake (DISSANAYAKE, 1995; ANDERSON, 2004) thinks, to convey values, mores and ways of being that make us human. The process of elaborating symbols establishes a relationship between art and thought, imagination and logic (CROCE, 1923). Based on the idea that art conveys subjective information gathered during experience, (FELDMAN, 1980; GARDNER, 1994; ANDERSON, 2004) suggests that the elaboration and understanding of symbols depends upon “body consciousness”. An artist must be able to create and convey the affective values of an object when he uses symbols. The artwork is complete when unity is created within the symbols. This process brings together meaning and aesthetics.

“The artistic form, even in its eminently individual form, embraces the universe and reflects the world in itself [...]” (CROCE, 1923, p139). According

to Dewey (DEWEY, 1983; ANDERSON, 2004), the artistic process is an open-ended process where the artist goes through different stages: doing, reflecting, redoing and reflecting. This praxis between action and reflection is a fusion of the subjective and the objective, of the spirit and the emotion, expressed by what we see and what we compose in order for others to see it in a certain way.

The cognitive development

In the same way, we can consider Piaget's developmental theory (1936, 1977) particularly the centration/decentration³ process, which is central in the development of intelligence. Piaget defines intelligence as "adaptation" which is the perfect equilibrium between an organism and the environment. Two key concepts: assimilation⁴ and accommodation⁵ will help the child to move from one stage of the cognitive development to the other in a constructive manner. Piaget defines three principal stages in the theory of learning: the practical thought (from 0 to 2 years old), the symbolic preconceptual and conceptual thought (from 2 to 11/12 years old) and the proportional thought (from 11/12 years old). The system will use these two processes to re-establish regulation between the individual and the environment when there is a disturbance coming from the environment. The assimilation stage, characterised by the stability of the system, can be compared to the action "doing" stage of the artistic process. The perturbation can be seen as the "reflection" stage and we can establish a parallel between the "accommodation" and "redoing" stage.

³ One's capacity to come out from the centration on his body and actions to be able to change perspective or vision.

⁴ Integrating new schemes in the existing structures that is integrating what is external from one's own structures. This is what gives meaning of knowledges in the things.

⁵ Happens when there is a disturbance, in response: new coordinations are built by modifying the existing structures in order to attain a higher level of stability.

The moral development

Piaget's studies (1936) on the cognitive development led him to question himself on the moral development. He studied the capital role that social interactions play on the development of moral consciousness, intelligence and personality. Basing his study on the marbles game, Piaget studied how the kids in Geneva used and acquired the rules of the game; he established unilateral respect and mutual respect as the essential conditions to develop cooperation. According to Piaget, the thinking of the children is characterised by egocentrism. The anomy or pre-moral stage reflects this with the unilateral respect and the motor rule, which means neither internalisation nor appropriation of the rule but rather a sort of ritualisation of the rule. This ritualisation then evolves to a mutual engagement which will distinguish the heteronomy stage. The notion of cooperation then appears as the ideal equilibrium towards which will tend any relationship with constraint (Piaget, 1932). The rules then become factors and products of the personality and allow the development of autonomy. The "constitution" rules then permits cooperation and the "constituted" rules result from this cooperation. This will enable the constitution of rational rules, for example reciprocity in the groupwork. The child will be able to substitute the authority norms by sympathetic reciprocity.

Kohlberg (1958) followed the development of moral stages by Piaget and identified six stages of moral reasoning grouped into three major levels. The first one is the pre-moral or pre-conventional level characterised by the two first stages: heteronomy, where the child is oriented towards punishment and obedience; and exchange and instrumentalism, where the child is oriented towards an instrumental relativism with an early emergence of moral reciprocity. The second one, called the conventional morality level, is characterised by two other stages: Interpersonal expectations, where there is interpersonal concordance or the moral of the "good boy" and of the "good girl"; and social system, oriented towards "law" and "order". Finally, the third level is defined as "post-conventional", where there is personal acceptance of the moral principles. It is

characterised by the 5th and 6th stage: the social contract with morality of contract and democratic acceptance of the law; and universal principles of ethic where the child becomes aware of the principles.

In the moral development as described by Piaget and Kohlberg we can find the centration and decentration process as elaborated by Piaget in the cognitive development theory. This process, together with the notion that each stage is structured and used to build the next stage, constitutes the core of the constructivist perspective used by Favre in the elaboration of the theory on the development of values.

The building up values.

Favre conducted a study on kids and showed that the construction of values in kids followed a certain evolution. Her study is based on the classification of values established by Lavelle (LAVELLE, 1950-55, FAVRE, 1997), which is inspired by the rationalist Kant who states that values are complex and constituted in a permanent manner. The values act as finality as they provide means to acquire other values and so on. They develop in a stucturo-functional manner in the same way as thinking and moral development.

Lavelle classified the values into three couples. Firstly, economic and emotional values linked to body satisfaction. This relationship is object oriented; it brings satisfaction and guarantees life preservation. The affective values spring from the desire generated by the need and satisfaction. Their fundamental characteristics are "pleasure", "pain" and "desire". The second couple, intellectual and esthetical values, is linked to knowledge. They will introduce the concept of representation in the relationship that the subject has with the object so that the subject will be able to possess the object and master it through action. The fundamental characteristics are "truth", "beauty" and "imagination". The third couple comprises of the moral and spiritual values. The moral values present an idea of control in the relationship that the subject will have with the object or the representation of it, which will help in widening the relationship to other subjects. The fundamental characteristic is the intention

or will to build concrete relationships with other subjects and "vocation". According to Lavelle, the spirit life can be compared to a pyramid whose base is nature and whose peak is the spirit.

The study conducted by Favre (1997) showed that the values were developed in a structuro-functional way in action and relation with the object, the environment and the subject. It also demonstrated that values play an essential role in the regulation and organisation of social behaviours. The levels of construction of values undergo an evolution in complexity rather than chronological stages.

Art and citizenship

Studies carried out in the field of the developmental psychology concerning the moral development (data from various education research centres gathered by the CRESAS⁶ (Centre de recherche de l'éducation spécialisée et l'adaptation scolaire) (1999), showed the cultural and artistic discoveries as development factors of the child. These activities enrich and diversify the pallet of the emotive expressions of the young child by offering him new ways to explore the world; they facilitate the integration and the progressive control of emotions and first modes of relationship and exchange with the environment, within and through the higher psychic activities (draft-agreement to a research on the cultural and artistic awakening of the young child, 1989)⁷.

According to the former studies developed about the building up of values in children, we can distinguish two stages: the interdict (first moral values) and the co-operation (condition to reach to autonomy). All observations in Favre's research (FAVRE, 1997-2005) were realised in a school situation: how children build up spontaneous values and how the process of co-operation develops in children from six to eleven years old. It is important to remember that the school is the first social group of the child after the family.

⁶ Research center for special education.

⁷ This is a research. It's sponsored in 1989.

Our proposal here is to give the opportunities to the child to get know himself, the others and the various cultures that surround him while discovering fine arts. This is done by knowing and apprehending the painting styles, the means of plastic expression developed by the different cultures together with their history, so as to show the existence of diversity and its beauty. Our goal is to lead the children to situations of co-operation and respect of others by using fine arts. This is how plastic arts meet citizenship: to be citizen is above all to know one's place within a group, one's own limits, rights and duties within the society.

Here, the fine arts constitute the means of developing the spirit of citizenship in children, by favouring the building up of moral values in playing and through pleasure activities. Moral values, such as rules, discipline and respect, open perspectives to "*the possible*" rather than "the constraint".

Based on Favre's research, we classified the values that should be present and the values that could appear throughout an art workshop such as: critical thinking, discipline, mutual respect, and organization. The values were grouped into three levels representing the order in which they should appear and develop in an art workshop (Diagram 1.0). The kids' behaviours were then observed and the values recorded in order to see their advancement.

Context

The research was conducted in a PEA (Priority Education Area) school situated on the west coast of Mauritius in the Black River district. Statistics from the Mauritius Examination Syndicate (MES) showed that in 2004 half of the students failed in the Certificate of Primary Education (CPE) essential to enter secondary school. To deal with this low percentage of success rate (below 40 %) in PEA schools, a special class has been created for the "repeaters" of standard six. The poor success rate can be explained by the high percentage of absenteeism of the students and the private tuitions given by the school teachers that are often used to teach the rest of the syllabus. The poorest are therefore deprived from those private tuitions and from part of the syllabus.

The art workshop was dedicated to the kids that could not afford those private tuitions.

Methods

Fourteen kids aged 10 to 11 years old with learning difficulties in “repeaters class”, from Black River government school in Mauritius participated in an art workshop everyday after school hours (from 15h to 16h30). Seven of them were observed on a regular basis. The workshop lasted 10 weeks and a half and was set up by a student in educational psychology and a volunteer. The goal of this workshop was to show that kids with learning difficulties, coming from a deprived environment and lacking structures that foster personal development, are able to build the values required for autonomy and to coordinate their actions in the form of cooperation within an art workshop. The workshop started with fourteen kids who were chosen by the school director and the school mediator according to their academic difficulties.

Cognitive and moral development

According to Piaget’s theory on the cognitive development, the kids should be at the concrete operation stage where the child is capable of “interiorised actions” that can transform elements and can be reversible. It is the stage where the child will build the intra logical operation scheme and mathematics. Concerning the moral development, we can think that the child is at the heteronomy stage characterised by the moral realism and egocentrism (Kohlberg), his actions are evaluated by the immediate result and according to the rewards and punishments given by the adult. We assume that the children are not capable of critical thinking as they have not built the notion of justice. Concerning rule’s application, we assume that the kids are at the “beginning” stage of cooperation with the apparition of competition and the will to win around 7 to 8 years old. However, it is important to remind ourselves that the kids come from a deprived area and present a lack at different levels: affective,

social and cognitive due to events such as child abuse. Concerning the cognitive development, we can think that knowledge is incorporated as a copy of reality without true comprehension, which results in a delay when evolving from the figurative to the operative aspects. According to the observations, it also seems that, concerning the moral development, there is a domination of the egocentric stage on the heteronomy one as present the children aged from 6 to 8 years old.

Techniques used

The observation method seemed the more appropriate to record the evolution in the development of values. The kids' behaviours were noted during each workshop and the occurrence of the values recorded and confirmed with the video recordings. In addition to this observation, a technical observation was also elaborated to assess the art techniques used and mastered by the children. The idea was to see if there was a growth in the kids' behaviours as well as in their artwork.

Observation method (observation grid):

The seven kids were observed during the art workshops; the spontaneous values observed in the kids' behaviour during the first two weeks were recorded and used as a base for observation grid. Their frequency (never, rarely, frequently and regularly) was recorded for every workshop. The observation grids were confirmed and completed by 12 video recordings made throughout the workshops.

Values:

The values recorded during the first two weeks were classified into three groups representing the levels of occurrence in the art workshop according to the diagram 1.0 that was elaborated after the art workshop.

Level I: Sharing, Tasks, Attention, Curiosity, Denouncing, and Spirit of Initiative.

Level II: Beauty, Understanding, Creativity, Concentration, Application, Participation, Organisation, Critical thinking.

Level III: Responsibility, Mutual help, Discipline, Cooperation.

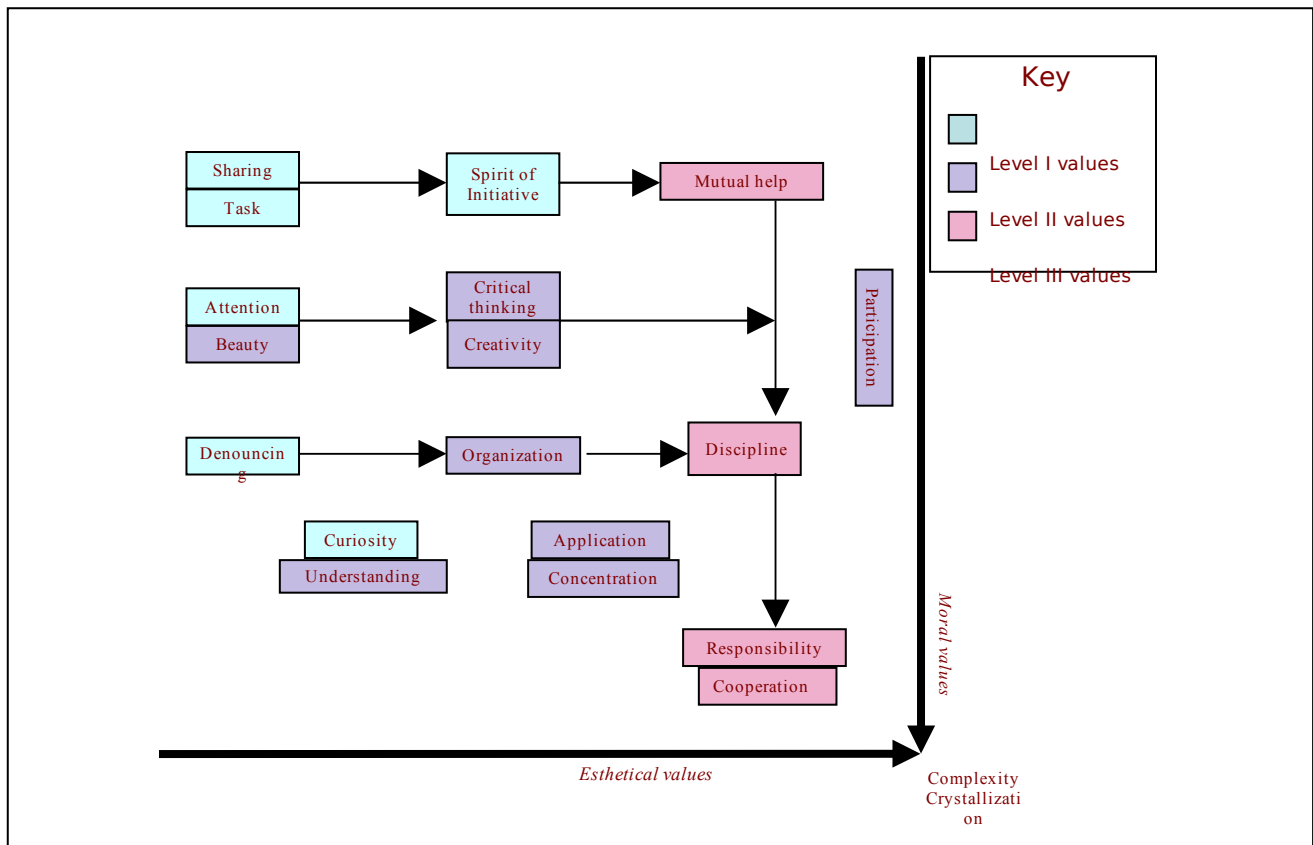


Diagram 1.0

The frequencies for each value were observed and compared on a three weeks basis. The frequencies of the three levels of values were observed as well.

Technical evaluation of the artworks produced by the kids:

Nine key productions were chosen amongst the ones produced during the 10 weeks. The artworks were evaluated on a scale of 1 to 4 on:

- The ability to listen to the instructions: Does the kid pay attention to the instructions, does he ask questions, and does he make sure he understands the question?

- The ability to understand the instructions: Does the artwork reflect a good understanding of the instruction? Did the kid process as indicated?
- The use of colours: How does the kid use colours, is there a variety and unity in the use of colours?
- The use of the whole medium: How does he make use of space, does he use the whole page?
- The details: Are there details in the production, that is, fine lines representing a specific form or figure?
- The contrast: Is there a distinction between the different elements, is there a depth?
- The use of other methods: Does the kid use the techniques learnt before or does he stick to the given example?
- Creativity (together with the use of other methods): Does the kid try to make something different than the given example? Does he capture the exercise and does he go beyond what is expected?
- Aesthetic: What does the artwork look like, is it coherent, is it nice to look at?
- Assistance: Does the child look for help, supervision, all along the artwork?

Data processing

The data was gathered and the evolution of the 10 criteria was observed chronologically. The global evolution of the results of the technical evaluation was observed as well. The data was analysed in the form of quantitative data using Microsoft Excel. A table was created for each kid with the values and frequencies for each week on 9-week groups (Merging week 9 and 10). Another table was then created to gather the data from the seven kids: the global value grid contains the frequency mean of the values for the 7 children on the 9-week groups.

A table was also created to record the grades of the 9 technical evaluations. There was also a table gathering the data for the 7 kids: global technical evaluation grid.

In order to compare the recorded data, the observations of the 9 weeks were separated into 3-week groups representing the 3 levels of evolution.

Table 1 - Observations of the 9 weeks separated into 3-week groups representing the 3 levels of evolution.

Week 1 to 3	Week 4 to 6	Week 7 to 10
Level I	Level II	Level III
Sharing Task Attention Curiosity Denouncing Spirit of Initiative	Beauty Understanding Creativity Concentration Application Participation Organisation Critical thinking	Responsibility Mutual help Discipline Cooperation

Working hypothesis

The study aimed at showing a progression in the moral development stages in the application of the rule as in the two morals: heteronomy and autonomy (with a tendency for autonomy and the notion of justice). Therefore:

- We expect that the participation in an art workshop can favour the building up of values leading to cooperation and to the autonomous moral consciousness (discipline and responsibility).
- We expect to observe the emergence of critical thinking (characterised by: beauty and critical thinking), and of self-esteem (characterised by discipline, organisation and responsibility, mutual help and cooperation reflecting the consciousness of one's capacities and limits).

Result expectations

For the working hypothesis "participation in an art workshop can favour the building up of values", we expect a regular occurrence for the values of level I over the level II and III during the first 3 weeks. We then expect a regular occurrence for the values of level II over the level I and III during the 4th to

6th week. Finally, we expect a regular occurrence for the values of level II over the level III then I during the last 4 weeks.

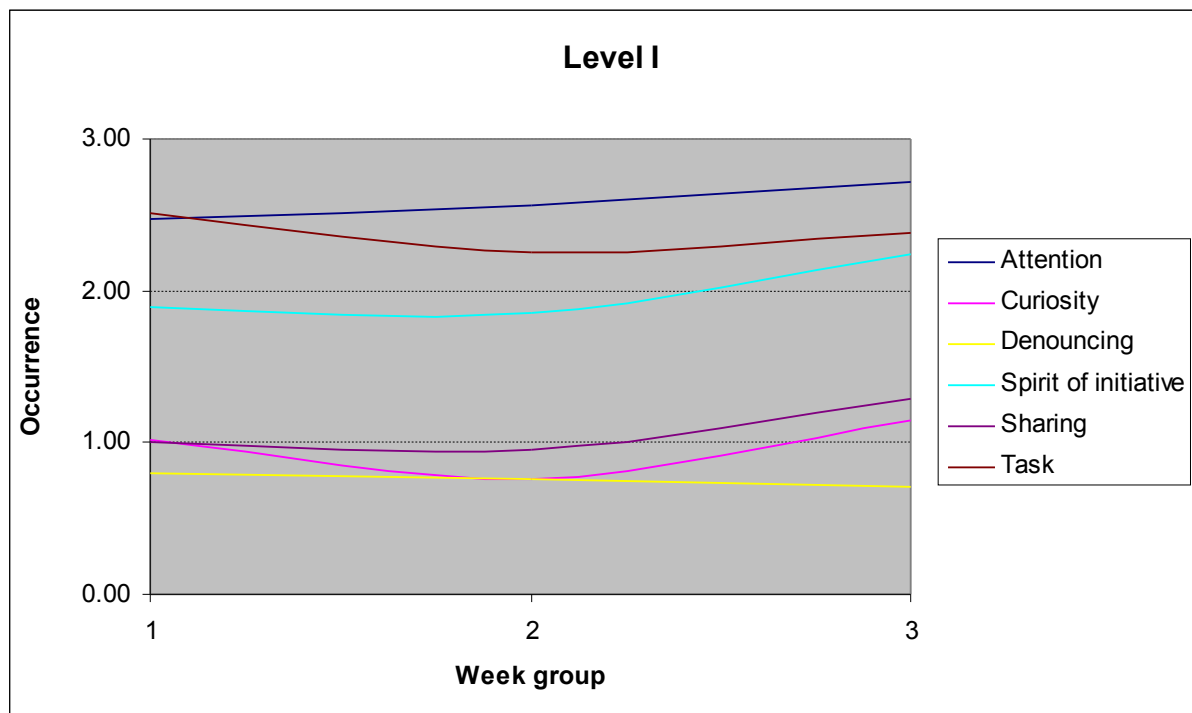
In parallel, we also expect an improvement in the grades of the technical evaluation.

Results and discussion

Global observation grids analysis

In order to gather data, a global observation grid was created with the mean occurrence of the seven kids. The occurrences (f) were graded from 0 to 3: $f=0$ meaning 0% of the value, $0 < f < 0.5$ meaning 100% of the value between never and rarely, $0.5 < f < 1.0$ meaning 100% of the value rarely, $1.0 < f < 1.5$ meaning 100% of the value rarely and frequently, $1.5 < f < 2$ meaning 100% of the value frequently, $2 < f < 2.5$ meaning 100% of the value frequently and regularly and $2.5 < f < 3$ meaning 100% of the value regularly.

The values were analysed by levels so as to have a better appreciation of the advancement of the curves.



Graph 1.1

Graph 1.1 shows the evolution of every 'level I value' on the 3-week groups. These curves helped us in understanding the tendency for each level I value on 10 weeks. We can see a distinction between 2 groups of values: a first group whose occurrence is superior to 1.5, that is, the occurrence of those values happens frequently to regularly, and a second group whose occurrence is between 0.5 and 1.5, which means that the values occur rarely to frequently. The occurrences of the values "attention" and "spirit of initiative" in the first group show a progression of 0.24 and 0.35 respectively, whereas there is a fall of 0.26 in the occurrence of the value "chores" for the weeks 4 to 6 followed by a rise of 0.13 at the end of the workshop. In the second group, the values "sharing" and "curiosity" show a light progression of 0.28 and 0.12 in their level of occurrence where as the value "denouncing" tends to fade.

Attention: "the process whereby a person concentrates on some features of the environment to the (relative) exclusion of others." This value was observed when the kids would stop doing something to focus on the given instructions. All through the workshop we have been able to observe a regular progression in the occurrence of this value, which means that the value tends to stabilize for all the kids.

Spirit of Initiative: "quality of someone who knows how to take the required decisions in order to provide for an individual so as to give him pleasure". This value goes together with the value "creativity" as it could be observed when the kid would ask permission to use some other art equipment that was not planned for the exercise. Any activity related to painting and drawing that was done in order to provide personal pleasure related to the need of recognition was considered as a manifestation of the value "spirit of initiative". We could observe a gradual growth in the occurrence of this value which tends to stabilise by the end of the workshop allowing the values "responsibility" and "mutual help" to rise.

Sharing and task:

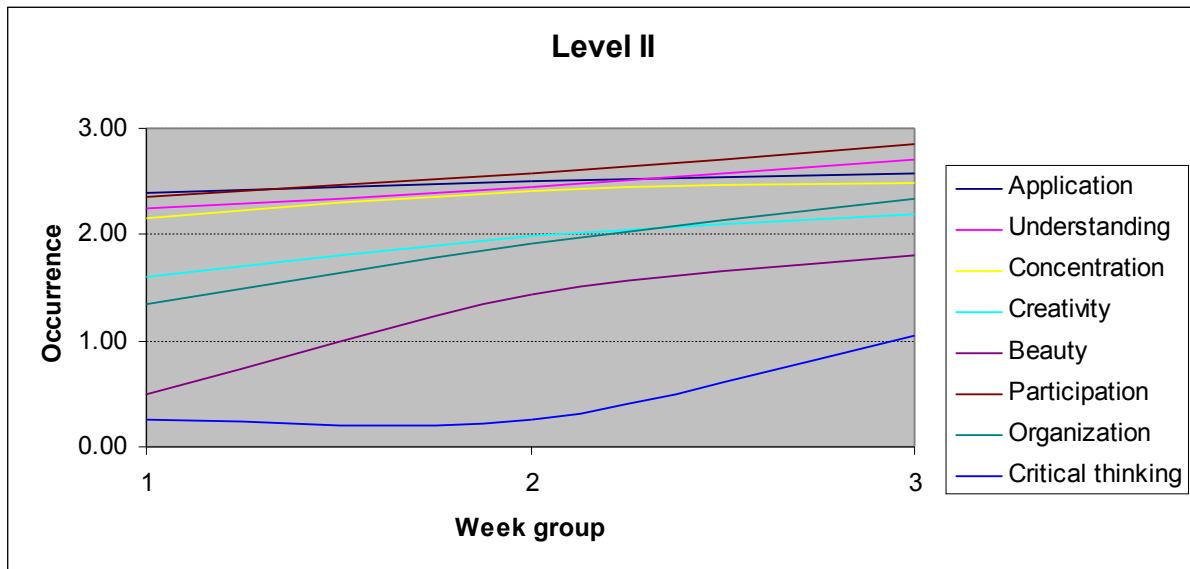
Sharing: "The result of parcelling out or sharing". **Task:** "any piece of work that is undertaken or attempted in order to please someone". Those val-

ues fundamental to community life were observed since the beginning of the workshop. The high occurrence of the value “task” could be due to the fact that in their everyday life they are often asked to do chores. Concerning the value “sharing”, it was limited to sharing food or water, as on the artistic side “sharing” was defined by the values “cooperation” and “mutual help” that can be seen as “sharing knowledge”.

Curiosity: “a state in which you want to learn more about something”. “Curiosity” is motivated by the satisfaction that is born from the desire and the pleasure to know something (FAVRE, 1997, p. 279). This value was observed when the kids would ask about the workshop, the planned activities or about our private life. The questions arose mainly at the beginning and the end of the workshop and also when visiting the galleries and artists.

Denouncing: “tell on, give away information about somebody in order to give the impression of being responsible and obedient” while being able to collaborate (FAVRE, 1997). This value was important at the beginning of the workshop particularly for the girls, which explains the low occurrence of the value. The fall of the occurrence of this value can indicate an evolution towards the autonomy stage characterised by the “mutual respect” and “cooperation”.

We can conclude that the values “attention”, “curiosity”, “spirit of initiative”, “sharing” and “task” are more important during the last weeks of the workshop whereas the value “denouncing” tends to fade away due to the building of the group life.



Graph 1.2

The graph 1.2 presents the progress in the occurrence of the values in the three-week groups. It is noted that there is a frequent to regular occurrence of the values “participation”, “understanding”, “concentration”, and “application” (2.36, 2.25, 2.16, and 2.40 respectively) since the first weeks of the workshop. These values will tend to stabilise towards the end of the workshop. We can see an important growth in the occurrence of the values “creativity” and “organisation” (from 1.60 to 2.19 and from 1.34 to 2.33 respectively) even if they continue to appear less regularly than the previous ones. Concerning the value “beauty”, we can see a rapid progression (of 0.95) at the beginning of the workshop, which then slows down (0.37) during the last 4 weeks. It seems that the value “critical thinking” appears after the third week and grows to reach a rare to frequent occurrence at the end of the workshop.

“Application” and “concentration”:

“Application”: “apply oneself to” or “the action of using something in order to achieve a goal”.

“Concentration”: “great and constant diligence and attention or complete attention; intense mental effort” The value “application” depends on the value “attention” (Level I) which goes together with the value “concentration”. The regular occurrence of the value “attention” and “concentration” will allow the

apparition of the value “application” as the latter requires the setting up of mechanisms in order to attain a concrete goal: the artwork. We can notice a similar progression of these values towards stabilisation all along the workshop ($f > 2.48$), which could be explained by the positive reinforcement coming from the feedback of the artwork. We assume that this stabilisation will sustain the development of “creativity”, essential in the creation or recreation as explained by Dewey (1983).

“Understanding”: “the cognitive condition of someone who understands; characterized by understanding based on comprehension and discernment and empathy.” We could observe this value mainly when the kids applied the given instructions to their artwork. The stabilisation of this value can be explained by the crystallisation of the previous values: “attention” and “concentration”. It is also confirmed by the value “application” which requires some understanding of the instructions. The progress in the occurrence of this value can also be analysed together with the global technical evaluation grid.

“Beauty”: “something having the qualities that give pleasure to the senses. An appreciation judgment, that means a mind operation concerning the value, the degree of perfection relative to a given objective” (FAVRE, 1997). According to Lavelle, “a manifestation of the infinite through the finite”. We can note a progression towards the occurrence “frequently” for the value beauty all along the workshop. In a sense we can think that this value reflects the fact that the kids did not have a high self-esteem at the beginning of the workshop and therefore did not think their artworks were “beautiful”. As they were mastering more and more the techniques learnt (global technical evaluation grid), we could observe how proud they were to realise beautiful artworks. The stabilisation of this value is essential to the development of the value “critical thinking”; this is why we asked them to assess their artwork and indicate what reflected “beauty” and why, and also what was missing in their artwork. We could also observe their “sense of beauty” when visiting galleries and artists as, even if the conception of beauty requires the presence of intellectual conceptions (FAVRE, 1997), it can be perceived through the senses, as believed by the essentialists.

Creativity: “the ability to create, imagine and realize something new” “creativity and imagination require the ability to question oneself”. At the beginning of the workshop, this value was observed in some kids that pushed themselves to be original and different in their productions. We can observe a stabilisation of this value throughout the workshop even if it was already crystallising for some kids.

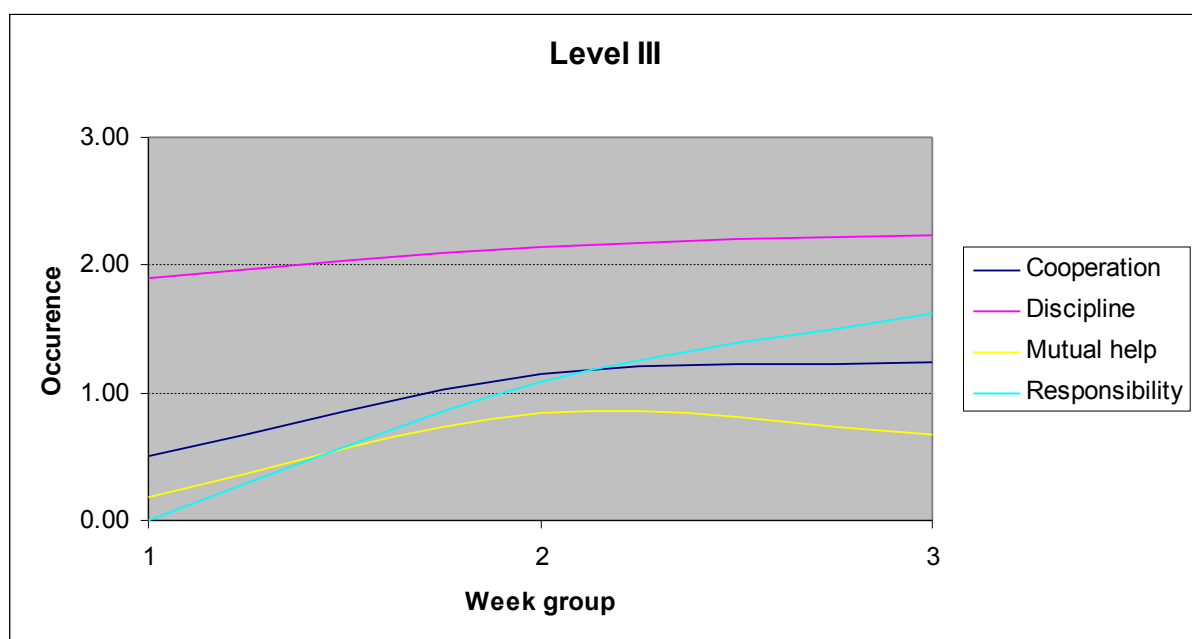
Participation: “the act of sharing in the activities of a group”. This value represents the kids’ attendance to the workshop plus their engagement in the conversations between the kids themselves and also between the kids and adults. Basically, it reflects the position of the kid in the group “art workshop”. This value seems to be more present than the other Level II values ($f=2.68$ for the last four weeks). The regularity in participation can be a sign of the apparition of “a sense of belonging” where every member has a function and is aware as he takes part in the proposed activities. The crystallisation of this value can be considered as the bud of the level III values leading to cooperation.

Organization: “the activity or result of distributing or disposing persons or things properly or methodically; an ordered manner; orderliness by virtue of being methodical and well organized”. The value “organisation” is essential to the birth of the value “discipline” as organisation requires discipline that would not exist per se. We can note a frequent occurrence at the beginning of the workshop (1.34), which will then tend to stabilise even more than the value “discipline” at the end of the workshop. We can interpret this as a crystallisation of the value “organization” therefore favouring the development of the value “discipline”.

Critical thinking: “the mental process of actively and skilfully conceptualizing, applying, analyzing, synthesizing, and evaluating information to reach an answer or conclusion” here “esthetical or artistic critical thinking more than logical critical thinking” (FAVRE, 1997). We can observe a growth in the occurrence of this value as from the second week to the last week ($f=1.05$). This can be explained by the fact that it relies on the crystallisation of the values “beauty”, “curiosity” and “understanding”. We could notice this value when vis-

iting artists and galleries, as the kids were able to identify different artworks. The progression of the occurrence of the value towards the end of the workshop appears as the sign of the rising up of “self-esteem” and “mutual respect”, which will allow the emergence of “cooperation”.

We can conclude that there is a sort of “crystallisation” of the values “application”, “understanding”, “concentration”, “creativity”, “beauty”, “participation” and “organization” marked by the presence of the values “beauty” and “critical thinking”.



Graph 1.3

The graph 1.3 presents the progress in the occurrence of the values of level III on the three-week groups. We can see that the value “discipline” occurs frequently ($f=1.90$) since the beginning of the workshop and grows to an occurrence of 2.24 during the last weeks, which means that this value tends to stabilize. We can also note the apparition of the values “cooperation”, “mutual help” and “responsibility” with a striking growth of the occurrence of the value “responsibility” since the beginning of the workshop ($f=1.09$ for weeks 4 to 6). Finally it seems that there is a stagnation of the value “cooperation” (1.15 for weeks 4 to 6 and 1.23 for weeks 7 to 10) and a light fall for the value “mutual help” as from the fourth week (from 0.84 to 0.67).

Responsibility: “the social force that binds you to your obligations and the courses of action demanded by that force; a form of trustworthiness; the trait of being answerable to someone for something or being responsible for one's conduct; the proper sphere or extent of your activities; “it was his province to take care of himself”. This value could be noted when the kids would inform us about the drawings they had made. We can see a neat progression in the occurrence of this value (1.62) even though it never occurred at the beginning of the workshop. This can be due to the fact that it depends on the crystallisation of the values “understanding” and “participation” but also on the disappearance of the value “denouncing”. We can think that the child will take responsibility for what he has done by “self denouncing”. This represents some evolution in the consciousness. The stabilisation of this value is linked to the crystallisation of the values “discipline” and “organisation” presented below.

Discipline: “the trait of being well behaved, of showing self-control by accepting and applying social rules”, here “the ability to organize oneself in order to create without restraint”. This value was observed frequently at the beginning of the workshop and tends to crystallise together with the value “organisation”. The value “discipline” can be the sign of “respect” towards the other artworks and therefore the other kids. It reflects the fact that the kids progress towards the autonomy stage, where will rise the values “mutual help” and “cooperation” by relying on values such as “organisation”, “critical thinking” and “responsibility”.

Mutual help and cooperation:

Mutual help: “helping each other in order to attain a common objective”

Cooperation: “the practice of cooperating; joint operation or action, collaboration in order to reach a common goal”. Relations based on cooperation will allow mutual respect. The occurrence of the value cooperation will tend to appear frequently by the end of the workshop. We can think that this is due to the fact that the value “mutual help” is barely present in some kids ($0.19 < f < 1.67$). During the first three weeks, cooperation was more egocentric as the kids would cooperate to fill in their lack of self-esteem. We can also

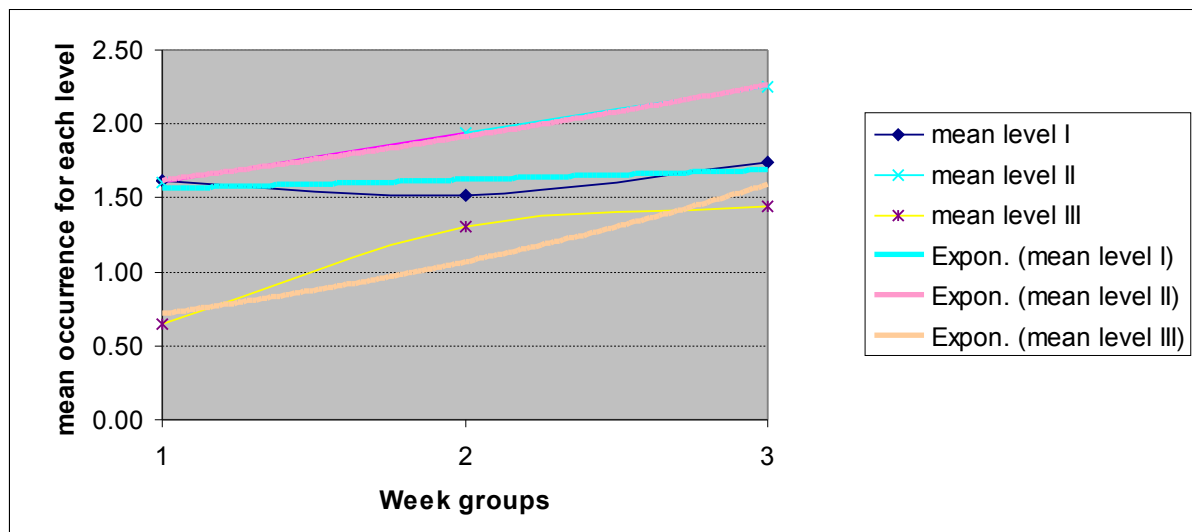
think that the progression of this value is slowed down in order to allow the crystallisation of “critical thinking”. The stabilisation of this value will then permit another kind of cooperation: peer-oriented with a common goal. It is manifest that the growth of this value depends on the crystallisation of the previous values.

We can conclude that the values tend to appear during the second week and that there is a noticeable improvement in the values of level III during the last four weeks. We can also note that the value “responsibility” was not observable during the first three weeks.

We notice a general growth in the values occurrence throughout the workshop (graph 1.4). The graphics show that the values from the level I and II appeared frequently during the first three weeks of the workshop with a light predominance of the values of level I, which would then tend to stabilise around the frequency “frequently”. The latter result validates our first result expectation stipulating that the values from the level I should appear more regularly than the ones from level II at the beginning of the workshop. Throughout the workshop, the values of the level II tend to appear more regularly than the values of Level I, which reflects a progression in the complexity of the values observed and validates the second result expectation, according to which the values from the level II should appear more frequently than the ones from level I. At the same time the graphics show a growth in the frequency of the values of Level III. By the end of the workshop we can see an important growth for the values of level II and a tendency for the values of level I and III to stabilise around a frequent occurrence. We can note a significant growth in the occurrence of the level III values that could be sign that the level III values would overtake the level I values, as expected, on a long term basis.

We can therefore see the important development of the values of Level II as well as the evolution of the values of Level III in the kids that participated in the art workshop. These results can be confirmed by the technical evaluation curve that shows a constant progress in the kids’ ability to use and apply the techniques learnt. Furthermore, the paintings and the mural made during the

last week of the workshop are also a sign of collaboration and cooperation within the kids.



Graph 1.4

Contributions to the Field

This study suggests that art education can favour the building up of intellectual and aesthetic values in kids, which will then allow the building up of moral and spiritual values, which lead to cooperation. From a constructivist point of view, where the building up of values is perceived as a construction process, we have been able to show how an art workshop can favour the development of aesthetical and intellectual values, which will foster the development of moral and religious values in order to reach the cooperation stage.

The report of these results reflected once again the complexity of the methods used to gather data in the arts education research field. A number of research have been made in this field, mainly analysing the effects of art instruction on the cognitive development such as the meta-analysis carried by K.Burger and E.Winner (2000). However, the method used in this research is new to the field and could represent a potential standardised research tool for the research to come on art and citizenship. Some important variables, such as the cognitive level and the cooperation level of the kids, are missing from this

study. Concerning the observations, it would be interesting to record the kids' behaviours outside the workshop that is during the recess or after school hours, to see if there is a generalization of the values developed within the workshop. These additional observations would make its contribution even more significant.



Black River Government School, Mural (2006)

Conclusion

This study argues that there are reliable and valid ways of assessing students' behaviours and ability to develop cooperation in a given context, in response to one of the primary obstacles to widespread use of alternative assessments: the researchers' difficulty to assign some sort of measurable value to behaviours rather than student artwork. Moreover, it raises several questions

concerning the education in Priority Area Schools, notably the question of culture transmission with art, education to values and critical thinking.

In order to validate the hypothesis, test, and standardise the methodology used in this research, a four-month research program will be carried from January to April 2007. Two workshops will be set up : Workshop I and Workshop II. Workshop I will take place once a week and will be dedicated to the kids that participated to the art workshop in 2006 (Group I). The aim of this workshop is to control the hypothesis presented in 2006, that is: Can we still observe and record the same values as in 2006, do they have the same occurrence, and therefore have they been preserved? Workshop II will take place five times a week during school hours and will be dedicated to ten kids (Group II) of the “repeaters class” for the year 2007. The objective is to complete and validate the methodology used in the previous research. In this aim, the observations of group II will be compared to a third group of children from the same class who will not be attending the art workshop (Group III). The kids’ cognitive development will be assessed with the “épreuves opératoires” at the beginning of the workshop. Their cooperation level will also be assessed using Favre’s research tool, the TCNV⁸ (No-Verbal cooperation technique), both at the beginning and at the end of the workshop to see if there is a significant progression in the level of cooperation. The refinement of the methodology will allow us to confirm our previous research question and will furthermore provide a standardised approach to evaluate the building up of values in art workshops dedicated to children with learning difficulties. On a long term scale we expect that this approach will be used in PEA teachers’ training in collaboration with the ministry of education and culture. We hope that art activities will be used to transmit part of the culture in which the children are born so as to foster critical thinking and respect of the others. Furthermore, we aim at anchoring a sense of belonging and citizenship which will encourage them to participate actively in the activities and life of the society in which they live: all

⁸ The manual of the TCNV is being published. Nowadays, our research unit, has already used this tool to assess the level of cooperation, nearly 400 children (French, Brazilian, Bulgarian Mauritian ...) from 6 to 14 years old.

children have rights and duties and we must all learn how to live together while respecting the freedom of each other in the society.

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