

Vol. 7, no. 1 (Spring-Summer 2008)

Second Transcultural Thematic Issue

“Transcultural Impacts and Perspectives on the Future”

Perspectives from Canada, Italy, South Africa, Southeast Asia, Southwest Asia (Middle East), the United Kingdom, and the United States of America.

Group Discussion and Images of the Future: a Pilot Study of a Classroom Setting

by *Simone Arnaldi*

Istituto Jacques Maritain, Via San Francesco 58, I-34133, Trieste, Italy
Tel.: + 39 040 36 50 17; fax: +39 040 36 44 09
E-mail address: s.arnaldi@maritain.eu



Abstract

Futures Studies express a deep concern for the negative effect school education has on young people's images of the future and their proactive attitude to the future. Here, images are regarded as cultural maps and the article attempts to outline a model of interaction in the classroom, which may be useful in understanding how school practices may affect images.

Given the cultural perspective on images, the analysis focuses on social processes, which organise the creation, negotiation, and distribution of cultural inventories in the classroom, of which the meanings and meaningful expressions about the future(s) are a part.

1. Introduction

Futures Research has dedicated considerable attention to school education and its role in shaping young people's images of the futures. The centrality of school in modern education systems and the dominance of the scholastic form of socialization, especially in European and Western culture [1], fully justifies futures researchers' concern for the effect of school on children's and young people's capacity to imagine positive and alternative futures and on their empowerment for shaping them. However, as stated by Gidley and Hampson [2], researchers appear not to have significantly addressed “the nature and dynamics of the relevant societal structure and systems – in this case, the *education system itself*,” which influence images of the future and the proactive attitudes of youth.

The article attempts to observe this aspect by adopting a micro-sociological stance, which focuses on the interaction processes between teachers and students occurring in classrooms.

Moreover, the interest here is descriptive, rather than critical. This is quite a difference from a majority of futures research, but the choice seems to be justified by the overall research goal, which is exploratory.

2. School and images of the future in Futures Research (FR)

Futures studies has constantly shared a concern for the negative impact of school on images of the future and on the proactivity of young people: poor self-confidence in the capacity of affecting the future (the school presents a negative framework that focuses on social, economic and environmental problems without dealing with possible solutions and the potential of individual action); lack of incentives for holistic thinking (e.g. sectoral and not interdisciplinary curricula); scarce promotion of imagination and creative thinking [3]. Moving from this assumption, futures research has identified the need for, and promoted, curriculum innovation to change “school systems [which] are still ‘quintessentially’ industrial era organisations,” as Slaughter influentially affirms (cited in Gidley and Hampson [2]).

This stream of research is complemented by a rich literature investigating young people’s images of the future. Firstly, literature investigated young people’s ‘feared and preferred futures’ [4], their differences by age [5-10], gender [5, 6, 9, 10], and education [9-13] (see also Gidley and Hampson for a wider review [2]). Moreover, futures research observed variations of images by children’s ‘intelligence’ [7], socio-economic status (to be understood both as the level of education of the parents [7, 14, 15] and as deprivation in living standards [14, 15]), family and community structure [13, 16], professional profiles [9, 11] and even mental health [11]. The literature also studies the discrepancy of images, i.e. how feared, expected and preferred futures differ from each other [5]. Secondly, an influential stream of research has emerged. In these studies, “there is a highlighting of the need to explore the notion of ‘futures’ and associated concepts such as ‘broadened social literacies,’ ‘resources of hope,’ and ‘young people’s empowerment,’ rather than focusing more narrowly on students’ attitudes via their concerns for the future. Epistemologically, there is a shift from an interest in ‘predictive or forecasting’ to ‘proactive or applied foresight values.’” [4] The main tool for matching this broad and radical research goal appears to be group-based processes for building alternative images of the future [5, 12, 17, 18] and the interaction processes are designed to create an ‘appropriately facilitative environment’ [17] to favour the production of alternative images and to stimulate the empowerment of participants.

However, both these streams of research say little about the social processes occurring in schools and classrooms and about the ways through which the impact of education on images occurs.

The following sections are an attempt to offer an insight on these aspects.

3. Two alternative perspectives on images of the future based on the notion of culture

The notion of culture is the beacon of this work.

The link between culture and images of the future is acknowledged by a significant part of the futures research community, with outstanding contributions by Eleonora Barberi Masini [19], Denis Goulet [20, 21], Sohayl Inayatullah [22], John McHale [23], Fred Polak [24], and Paul Schafer [25] among others.

A particular attention is deserved here to ‘Cultural Futures Research’ (CFR), which is the label that the American anthropologist Robert Textor assigns to Futures Research “in which the concept of culture (or ‘cultural system’ or ‘sociocultural system’) is employed with some measure of directness, explicitness, consistency, and sophistication.” CFR tries to frame anticipations of the future in actors’ cultural context [26].

Ethnography is one of the methods used by CFR. According to Textor, “as the cultural anthropologist conventionally uses ethnography to study an extant culture, so he or she can use Ethnographic Futures Research (EFR) to elicit from members of an extant social group their images and preferences (cognitions and values) with respect to possible or probable future cultures for their group.” [26].

The tool for EFR is either unstructured or semi-structured individual interview, which is maintained as much open, interactive, and flexible as possible [26, 27]. The key stages of the

ethnographic process are: (1) identification of a population and its corresponding culture; (2) identification of a time horizon; (3) identification of a key factor generating change; (4) selection of the dimensions of the socio-cultural system observed in the future; (5) the selection and elicitation of basic assumptions of research with regard to the change factor and the corresponding socio-cultural system [26]. Through the ethnographic interview and the interactive analysis of research protocols (transcripts of interviews, field notes and feedback of the interviewee) the ethnographer outlines scenarios of the future.

Textor's approach is here mentioned in some detail because our research shares this focus on culture and on fieldwork with EFR. However, though the object of observation (anticipations of the futures) and the interpretive perspective (culture) are common, the article does not aim at outlining alternative future scenarios; instead it focuses on social processes influencing images of the future.

The concept of **cultural map** is central to this approach. The use of this notion to describe images of the future is based on Hutchinson, who notices how 'metaphorically and genealogically speaking, our guiding images may be seen as forms of cultural maps' which are 'not just cultural and historical artefacts. They are also contemporary sites of cultural politics' [28]. In a second article, Hutchinson reviews some of the most important cultural artefacts, criticises the underlying political assumptions, and wishes for alternative mapping practices [29]. Hutchinson's maps can be regarded as an interconnected series of cultural objects, which I define according to Griswold [30] as 'a shared significance embodied in a form', but, from a process point of view, they include also the mapping itself, the poiesis which generates these objects.

Our argument moves from the distinction of these two dimensions of culture and the discussion is largely indebted to the work by Ulf Hannerz and Michel de Certeau [31, 32].

4. Culture, images of the future and social practices

The distinction of two levels of meanings and forms resounds in the differentiation proposed by Hannerz [31] between: (1) 'ideas and modes of thoughts, as entities and processes of the mind [...] as well as the various ways of handling ideas in characteristic modes of mental operations'; (2) 'forms of externalisation, as the different ways in which meaning is made accessible to the senses'. Moreover, the Author adds a third dimension, which is determinant in linking culture and society. This third dimension refers to: (3) 'social distributions, [as] the ways in which the collective cultural inventory of meanings and meaningful external forms [...] is spread over a population and its social relationships'.

According to this approach to culture, social relations frame cultural flows and distribute meanings, their overt forms, and the resources for individuals and social groups to affirm their own particular inventories of meanings. Hannerz lists four 'frameworks of flow' that socially organise cultural inventories: form of life, market, state (or regime), and movements.

The **form of life** framework is the place of everyday face-to-face interaction, of routines and habits. The flow of meanings and forms is relatively free and mutual and their distribution tends to be symmetrical among the participants to the framework. Cultural inventories are shared to a degree that is higher than in the other frameworks. The **market** is the institutional place for commodities exchange. They are considered 'cultural commodities' as they bear some meaning and their production and distribution are performed by specialists who receive for that a material reward. The **state** framework is an organisational form which involves a degree of control over activities within a territory (real or symbolic) on the basis of concentrated, publicly acknowledged power. The concentration of power makes the state able to accumulate material resources for long term cultural work, which is partly dedicated to generate and distribute legitimizing cultural inventories. Specialisation of knowledge is a condition for this action of legitimization. Hannerz proposes 'regime' as an alternative name of this framework. Whilst the Author prefers 'state' because of state's key role in contemporary cultural systems, 'regime' is hereafter used as its more general scope seems preferable for an analysis that is not focussed on the societal level. Eventually, **movements** are collective efforts to transform a more or less large part of the meanings and meaningful forms of a cultural systems, or to change the distribution of these meanings and forms. They emerge in a culture and act as a 'consciousness raising' collective actor. They are usually less centralised in their

management of cultural flows than regimes, and they concentrate less symbolic and material resources to carry on their cultural work.

Hannerz's institutional perspective on culture offers a general model for framing the social organisation of meanings. To better understand the complex interaction of these four frameworks, we rely on De Certeau's work to make 'explicit the systems of operational combinations (*les combinatoires d'opérations*)' which compose a culture [32].

Such practices are dependent on, and produce, the asymmetrical/symmetrical distribution of meaning inventories. Participants to social interactions in the case of an ideal-type symmetrical distribution may count on similar cultural inventories, resources, power: they move from near starting points. Asymmetric distributions see participants to meaningful social interaction starting from diverse inventories and diverse amounts of resources and power to affirm and expand their private array of cultural inventories.

In De Certeau's terms, we interpret asymmetric relations in terms of a duality between strategy and tactic. Strategic practice is 'the calculus of force-relationships which becomes possible when a subject of will and power [...] can be isolated from an environment. A strategy assumes a place that can be circumscribed as 'proper' (*propre*) and thus serve as the basis for generating relations with an exterior distinct from it' [32]. Tactical practice is instead 'a calculus which cannot count on a 'proper' (a spatial or institutional localization, nor thus on a borderline distinguishing the other as a visible totality)' [32]. The opposition of strategy and tactic is based on the asymmetry of power relations among different social actors. Strategic practice defines a distinct cultural space, whose meanings acquire a 'proper' interpretation through the process which produces them. Tactical practice is instead a form of cultural production that re-edits, negotiates, and creates new meanings by manipulating those produced in strategic practices, by insinuating itself in the spaces which are created and delimited by other social actors.

Each of the frames may be structured according to this binary partition, but – and this aspect is the most important here – we can assume that strategic practice is mainly associated to the organisation/institutional frames of the regime and the market, whilst the form of life may be mainly associated to tactical social practices, with the movements that may assume an intermediate position.

The crossing of Hannerz's and De Certeau's theories completes our interpretative frame of cultural dynamics. What is left, is to see how such a frame can be applied to study the social organisation of meanings and meaningful forms in classrooms.

5. A cultural approach to classroom dynamics

The previous sections of the article outlined an approach to social processes organising cultural inventories of meanings and meaningful forms. The current section applies this framework to the analysis of classroom dynamics and of the way classroom interaction affects images of the future.

The starting point is Herbert's classic definition of classroom as 'one adult who regularly interact with a group of youngsters whose presence is compulsory' (cited in Carli and Mosca [33]). This definition emphasises a triadic model of the educational situation, which is better conceived, rather than as a duality of teacher/individual students, as emerging by the interaction of teacher, students as individuals, and the peer group of students [34]. This triadic model also implies that the peer group acts as an interpretive community for negotiating and mediating the influence of the larger socio-cultural environment.

From this perspective, the study of classrooms is not a study of individuals, but a study of groups: an artificial group (the class itself), within which other subgroups emerge. Firstly, this partition is generated by the double dichotomy between childhood/adulthood, and between the opposite roles of the participants to the pedagogic relation (teacher/learner). Secondly, new partitions usually occur among the students with the emergence of natural subgroups of peers [35].

The set of cultural inventories emerging from classroom interaction is named 'lived culture' by Apple and Weiss: "lived culture refers to culture as it is produced in ongoing interactions and as a terrain in which class, race, and gender meanings and antagonisms are played out" (cited in Alton-Lee et al. [36]). Shifting the focus of our perspective, if we conceive images of the future as 'cultural maps' or 'cultural object,' it does not appear improper to consider also images about past, present, and alternative futures, as played out in classroom lived culture.

Lived culture is produced at the intersection of two ‘framework of flows’ which are central to classroom dynamics: form of life and regime. In fact, the ‘regular interaction’ is the explicit assumption of the form of life framework. Moreover, the adult (the teacher) may be assumed as she/he embodies the regime framework. The teacher is the acknowledged authority in the educational situation and defines the classroom as its proper organisational and social space.

The teacher/student relation is asymmetric and, in line with the socialisation project of the school, it is based on an implicit assumption: the construction of the student as incompetent, both in terms of curriculum contents and relational skills. As a consequence, the teacher has a (theoretically) exclusive role in defining the agenda and the rules of interaction in the classroom. The teacher, moreover, is officially acknowledged as the only actor entitled to assess other actors (students) performance in terms both of contents and behaviour [37]. Referring to De Certeau’s distinction between tactic and strategy, the teacher is the locus of strategic practice in classroom, while students are the locus of tactical practice. The strategic role of the teacher emerges fully when considering discursive practice in classroom, as teacher’s power is ‘enacted, embodied and may be observed in the structure of classroom conversation’ [37], thus justifying the attention to the discursive practices in classroom and, especially, the observation of the dynamics of access to public discourse in classroom, which communicates primarily the contents of public culture through teacher and children’s public talk. Public discourse is hence the locus of meanings that are considered relevant for the enactment of the curriculum and it is at the crossing of the two frameworks of regime and forms of life. Therefore, access to public discourse is a key resource in classroom interaction, as it is obviously necessary to teachers for conducting pedagogic activities. In classroom discourse, the teacher ‘strategically’ selects the contents which are allowed in the public discourse, both ex ante by defining the instructional units to be taught in line with the school socialisation project, and ex post by evaluating student performance and thus selecting the relevant meanings to be retained by the classroom. Furthermore, teacher’s questions and evaluative practices define the correct (or proper) meanings to be associated to the contents of the public discourse. The teacher, moreover, decides also the rules of interaction that structure conversation and, in particular, rules of turn-taking [38, 39].

If public discourse is the proper place of teacher’s strategy, children’s tactics insinuate themselves into it, they ‘constantly manipulate events in order to turn them into ‘opportunities’’ [32]. Children’s goal is two-fold. On the one hand, they search for opportunities to comply with the requirements of the publicly enacted curriculum and to compete for rewarding (or to avoid punishment) through correctly providing an answer to teacher’s questions and, in general, through successfully performing an assigned task. On the other, they look both for chances to contest and contrast the meanings distributed through the public discourse, and for performing task which they are not allowed to do (e.g. assessment of peer performance) [40]. Students perform tactics to grant for them or their peers a privileged access to public discourse both by violating the ‘rules of the game’ established by and negotiated with the teacher, and by exploiting rules themselves to gain access to public discourse beyond the will and programmes of the teacher (Tab. 1).

	Tactic (student)	Strategy (teacher)
Contents	- compliance/competition for rewarding - meaning interpretation - challenge to the teacher	- agenda setting - meaning definition - assessment
Forms	- violation of rules - exploitation of rules	- rules setting - turn allocation

Table 1. Strategic and tactical practices in classroom public discourse.

6. The pilot study: goals and research design

The research attempted to implement an empirical design to observe how discursive practices occurring in a classroom influence the construction of pupils' images of the future, with a specific attention to the strategies and tactics to have access to the public discourse, during a discussion of a future-oriented topic.

The data collection was realised in a primary school in the town of Trieste (Italy), in a fourth year class composed of 22 pupils between 8 and 9 years, of which 13 were male and 9 were female. All the pupils were Italian, except for a Chinese child.

The collection of data combines audio registration of classroom discussion, written texts, and silent observation by the researcher. The observation period lasted three months and the observer was allowed to enter classroom during the lessons of Italian language. The attendance of the researcher in the class had two functions: (1) a preliminary function as attendance was dedicated to silently observe the classroom dynamics during normal lessons and to make the researcher's presence more familiar to the children; (2) data collection on the last day of attendance.

The collection of data was realised according to a two step procedure. First of all, the researcher agreed with the teacher that children should write a short essay, without any pre-defined form or structure, on the image of how their own house, school and neighbourhood ('the street where you will live') when they are grown up. Secondly, children were asked to read and publicly discuss their essays.

The definition of the topics to discuss partly reproduces an unpublished work of Eleonora Barbieri Masini and Salvatore Rizza [41], is also based in part on the work of Pellizzoli et al. [14]. In these two reference works, the children were asked to draw and provide short written comments on the following three subjects:

- (1) "**Me in 2000**" – what the people think, in the first person, of the future: a projection of the chronological and experienced me;
- (2) "**The room in which you will eat in 2000**" – to show the environment, relations, perhaps the family's structural composition, style and level of life, including economic level;
- (3) "**School in 2000**" – to show how teaching and teacher–pupil relations are viewed.

The present study re-elaborated these models and was re-oriented in two directions: (1) the exploration of children's images of the future basically through the study of written essays; (2) the exploration of discursive practices in classroom, i.e. how images of the future are discussed and how discussion may change their content. The following section presents an analysis of the discussion on the topic of 'the house where you will live when you are grown-up'.

7. Discursive practices, social processes and images of the future in classroom

This section starts a second part of the article, which is focussed on the discursive practices in classroom, and presents some results of the analysis of an audio registration for a total length amounting to 36 minutes. A first subsection deals with the forms of conversational interaction in classroom. A second subsection is dedicated to analyse discursive tactics and strategies with respect to the contents of the public discourse.

The audio analysed here is divided in two parts: (1) assignment of the tasks and individual writing of the essays (about 12 minutes); (2) public reading and discussion of the essays on the house in the future (the remaining 24 minutes).

7.1. *Forms of interaction and negotiated order in the classroom*

We noticed in section 5 that the teacher has the primary task to maintain order in the classroom, as a condition for performing teaching activities themselves. However, order in the classroom is always a negotiated order, which teachers and children contribute to enact, as the power relations underlying such an orderⁱ.

The observed classroom was not a quiet one. If we consider requests by the teacher to children to be silent, we count 21 interruptions by the pupils in 24 minutes of registration. There were an additional 19 interruptions when children laughed while classmates were reading or answering the

teacher. This climate is well described by the following episode. The teacher is compelled to recall to all the pupils the rules governing the collective practice of the discussion:

Teacher: Shush! well no no no. listen to me. now I am asking seriously. I am very serious about this. we cannot tell things to each other with this noise because I do not hear you don't... in my opinion it was very interesting to listen each other but if there's continuously a talk we really cannot. we bother we bug. do you understand? let us attempt to self-control a bit (lines 530-540)

The teacher's monologue recalls one of the basic rules established for the discussion, which is a classic rule of classroom activities: turn-taking is organised to minimise speakers' overlap and, in this case, it implies that no children are allowed to speak except the one who is reading her/his essay. There is also another fundamental rule for this discussion: everybody has to read, and each house described in the essay must be read and discussed publicly. This rule guides us to consider children's knowledge of interaction rules, specifically turn-allocation procedures. First of all, pupils know such rules and paradoxically such rules may also create contrasts with the teacher who established them. The following excerpt, which concerns the end of the discussion, highlights peer behaviour when the rule stating that every text should be read, is not respected by the teacher. The conversational sequence is opened by a boy (registration is not enough clear to assign individual pupils), who reminds to the teacher that the texts of two classmates were not yet read. Other boys and girls enter the sequence to support his point of view.

Boy 1: the both of them too
Teacher: also the two of them should, since everybody has spoken
Boy 2: Gesualdo too
Teacher: Gesualdo too
Chorus: What?
Girl 1: Teacher also Pia
Teacher: Arcibaldo?
Boy 3: Ronaldo too! (lines 977-992)

This knowledge is exploited by children to grant for themselves a privileged access to public discourse, as in the following case. In fact, Mia wrote the following essay:

Super-hot house! with four floors + huge garden + one swimming pool with a donut-shaped slide and a fountain in the middle and whirlpool bath + a wood and a camping for me alone! + a big bathtub + 7 cats and 9 dogs + 7 water carrier + bedrooms with bunk beds + cleaning woman + TVs and 9 campers + another small wooden house in the mountains.

The girl mentions two houses: the first enormous and the second small. In the discussion, the teacher asks to read only to those children who described in their text a small house:

Teacher: big or small Mia?
Mia: both... small
Teacher: small. regular. tell us
Mia: a small house in the mountains (lines 455-459)

After a first uncertainty, the girl answers that, yes, she spoke of a small house and she describes it, thus acquiring again access to public discourse. Later in the discussion, The teacher forgets that Mia has already read her essay and asks Mia to read again:

Teacher: Mia go on
Mia: a big house with four floors enormous garden
Teacher: no no sorry sorry
Boy 1: it is not fair she already read

Teacher: (to Mia) excuse me I do not understand. didn't you have a house in the mountains?
 Mia: yes but also another one
 Teacher: another one? Let's listen to the other one! (lines 702-706)

After Mia starts reading, the teacher remembers that her house of the future was already publicly presented and asks her for a confirmation, backed by a boy who reminds that Mia already had her chance to read. Then, Mia exploits the ambiguity of the rule established by the teacher (every house is to be publicly discussed) and presents the big one, thus granting twice her access to public discourse.

In general, the turn-taking system of the classroom is based on the direct designation of the speaker by the teacher. This type of selection of speakers recurs 25 times and implies the verbal designation of the speakers in 22 cases and in three cases the non verbal designation of the speaker, i.e. through a gesture or through body language. Only twice the teacher addresses a question to the whole classroom and asks all the children to speak. In this case, the selection process is rather chaotic and again it is closed by a direct choice of the teacher among the children who self-selected:

Teacher: all these houses are big, enormous! Is there anybody who will have a small house?
 Chorus: me!
 Teacher: (to one of the children) you? tell us! (lines 418-420)

or:

Teacher: stop. who thinks of being single as well?
 Chorus: me!
 Teacher: So all of you! *Mamma mia!* (lines 368-371)

The picture emerging in this subsection is that of a classroom in which the order and rules of interaction imposed by the teacher are frequently breached by the children both collectively and individually (utterances pronounced aloud by single children when not requested or when not allowed according to the rules of interaction in force). For the latter, 51 occurrences are counted.

In the two following cases, children appeal to the rules (i.e. everybody has to read) to select a peer for accessing public discourse. In the following case, Arcibaldo is selected by the teacher for reading his text, but he does not answer and hides his head between his hands, as he is shy and he is embarrassed by the content of his essay. The teacher seems to decide to select another pupil, but she has to struggle for a while with the other children, who want the rule to be respected:

Teacher: and you, Arcibaldo?
 Arcibaldo: (does not answer, moans)
 Eraldo: he was engaged with Jessica
 Teacher: excuse me you know that or he told you?
 Eraldo: no, we know that. listen if you like I tell you how the text is done
 Teacher: shush! shush! not now not this!
 Eraldo: but everybody has to read!
 Teacher: well, yes, we must listen to everybody. shush then. shush!
 (Voices)
 Lucia: he told that he still loves Jessica
 Teacher: no! then Lucia did you forget? Mia go on (lines 683-697)

The second case concerns a confused sequence with voices overlapping and attempting to select peers as speakers for the next turn in conversation. The teacher asks to the children who is yet to read (it is not a question from the grammatical point of view, but it is from a pragmatic perspective), and then children start naming peers. The first to be named is selected by the teacher to speak, but she does not answer. Then the sequence is repeated, till the second to be named starts reading after the teacher's request.

Teacher: wait there's still somebody who did not tell anything
 Boy 1: Pia
 Teacher: oh, let's go Pia, tell us how your house will be
 Pia: (does not answer)
 Boy 2: neither Geraldo
 Boy 3: nor Rosalia and...
 Boy 4: and Eugenia either
 Boy 5: and Lucia either
 Boy 2: and Arcibaldo either
 Teacher: shush! Pia let's go. what would you like to tell us? Different stuff from what you wrote?...
 Pia: (does not answer)
 Teacher: nothing? let's go no. Geraldo you house (lines 757-772)

7.2. Contents of interaction and images in classroom

Children know which topics are admitted to be discussed publicly and which are allowed as peers' private talk. The following excerpt is taken from the first part of the registration, i.e. the period of time dedicated to the writing of essays. Three children have finished writing their texts and then start a play. The play consists in writing a list of events on paper and in asking a peer to choose number. Then, all the events corresponding to the number and to its multipliers are selected. The events selected are told to happen to the boy who chose the number.

Boy 1: lucky bastard Arcibaldo. You marry Jessica! Lucky bastard lucky bastard lucky bastard!
 Eraldo: you named Pia (laughing). one two three four five you won't make it on the table. one two three four five you marry Jessica. one two three four five you will never have Pia. one two three and... yes wait. one two three four five you won't be gay. one two three four five you won't be poor but you will be gay (laughing). you will millionaire
 Arcibaldo: it's better
 Eraldo: one two three...
 Arcibaldo: what does it mean 'motorbike'?
 Eraldo: on the motorbike
 Arcibaldo: cool!
 Eraldo: one two three four... and... yes one two three four five. then you will be millionaire you will have one hundred children you will make them on the motorbike and you will love
 Teacher: well no stop it! one cannot speak like that!
 Arcibaldo: but it's a play!
 Teacher: yes but you cannot talk like that. you disturb others (lines 47-78)

The play, which would have been probably continued, is stopped by the teacher, who brings children back to the tasks assigned and to the rules of interaction. It is interesting to notice how the justification of Arcibaldo ('but it's a play!') is exactly aimed to shift the contents from the public to the private sphere. In this case, the tactic is not successful, probably as the children introduce some topics (sexual identity, sex relations) and use a code that are not allowed among the meanings of the classroom.

Public discussion is of course much more oriented by the teacher through her/his activity of defining the meanings introduced in the discourse and through her/his assessment of the children's performance. The structure of conversation reflects the centrality of the teacher in discussion and has a ternary structure: Question (Q), Answer (A) and Evaluation (E). Teacher's question opens a conversational sequence, which closes after children's answers and only if these answers are evaluated as correct by the teacher. A clear example of this structure is provided by the following excerpt:

Teacher: and... let's say that Aldo will be enough well-done when he will be grown-up won't be? then your future is not the future of a eleven year old child is it? it's a bit older
 Aldo: seventeen

Chorus: seventeen

Teacher: good let's see these distant futures. Ronaldo how will be your house? (lines 214-221)

The sequence is closed by the positive evaluation by the teacher ('Good'). The teacher's evaluation opens a new sequence and the teacher selects a new speaker.

The following sequence confirms again the QAE structure of the conversation. Osvaldo reads that nothing will change in his future house but his and his brother's room. Then the teacher asks what will be different and the child offers a contradictory answer ('Nothing'). Thus, the sequence is not closed and the teacher opens a long procedure for jointly producing with the children a non-contradictory answer to her original question.

Osvaldo: the house won't change. Only my brother's room and mine.

Teacher: and what will be different? [Question 1]

Osvaldo: nothing [Answer 1]

(Pupils laugh)

Teacher: let me understand. the house won't change and that's fine. your and your brother's rooms will change [Formulation]

Osvaldo: apart from games there is...

Boy 1: the carpets

Boy 2: everything

(Voices)

Girl 1: furniture

Teacher: there will not be windows any longer... Yes the windows. You mean furniture...

[Question 3]

Boy 1: singers will replace Mickey Mouse pictures

Teacher: What?

Boy 1: music stars will replace Mickey Mouse pictures

Teacher: there will be music stars pictures he says

Boy 2: his girlfriend's

Teacher: the pictures of his girlfriend

(Pupils laugh)

Teacher: Eh maybe he suggested Eraldo who has older brothers and he knows what happens. there won't be games not any longer. there will be other stuff that you do when you are thirteen. there won't be any longer... I don't know perhaps the Playstation ® yes there will be still

Eraldo: yes certainly the Playstation ®. my brother always plays with it (lines 653-682)

After receiving the first contradictory answer, the teacher firstly reformulates Osvaldo's utterance to stimulate a new answer which is ready to come. Then other children self-select to join the discussion and to picture Osvaldo's house of the future. Despite this, the speakers do not respect the rules of turn-taking, the teacher does not sanction them but lets them bring their opinions to the discussion. After collecting some opinions, then the teacher closes the sequence by presenting a final answer that corrects the initial answer of Osvaldo: when you grow up, you don't have games any longer.

The excerpt also demonstrates the importance of children's experience and prior knowledge as a source of information for assessing statements about the future, basically through comparing past experience with projected images. In the episode, the teacher herself introduces such experience ('Eraldo, who has an older brother') in order to validate her statements about Osvaldo's future house.

8. Conclusions

Though it is a first step, this study appears to offer useful indications for the study of classroom interaction and the futures. The application of the theoretical framework outlined in the first sections (the two 'frameworks of flow' of form of life and regime, and the distinction between tactic and strategy) provides a valuable tool for approaching classroom as a social space of distribution and creation of cultural meanings, which can relate to images of the future considered as cultural objects.

The empirical part offers a first picture of the discursive practices that may occur during a classroom discussion and how such practices are used to construct the future-oriented object of the discussion.

This first attempt paves the way to two synergetic research programmes.

The first deals with the deepening of the discursive practices in classroom during future-oriented conversation. This first approach is mainly descriptive and may adopt the same design proposed by this article, i.e. the discussion of written text and artworks on the future made by the children. The second programme is far more ambitious and implies some longitudinal research work to assess the influence of curriculum instructional units on students' images of the future.

The overall goal of both of them could be to better our knowledge of social processes in classroom in order to empirically support futures research claims to change the educational system.

References

- [1] L. Fischer, *Sociologia Della Scuola*, Il Mulino, Bologna, 2003.
- [2] J.M. Gidley, G.P. Hampson, "The Evolution of Futures in School Education," *Futures* 37 (2005) 255-271.
- [3] J. Page, *Reframing the Early Childhood Curriculum: Educational Imperatives for the Future*, Routledge, London, 2001.
- [4] F. Hutchinson, "Valuing Young People's Voices on the Future as If They Really Mattered, *Journal of Futures Studies* 3 (1999) 43-52.
- [5] R. Eckersley, "Dreams and Expectations: Young People's Expected and Preferred Futures and Their Significance for Education," *Futures* 31 (1999) 73-90.
- [6] D. Hicks, "A Lesson for the Future. Young People's Hopes and Fears for Tomorrow," *Futures* 28 (1996) 1-13.
- [7] E. Landau, "The Questions Children Ask," *Futures* 8 (1976) 154-162.
- [8] J. Page, "The Four and Five Year Old's Understanding of the Future. A Preliminary Study," *Futures* 30 (1998). 913-922.
- [9] E. Novaky, E. Hideg, "Factual and Methodological Experience Probing Future Orientation in Modern and Late Modern Societies, Especially the Case of Hungary," in: E. Novaky, T. Kristoff (Eds.), *Papers of the Budapest Futures Course*. BUES, Budapest, 2000, pp. 13-41.
- [10] A. Rubin, "In Search for a Late Modern Identity. Factual and Methodological Experience Probing Future Orientation in Modern and Late Modern Societies, Especially the Case of Finland," in: E. Novaky, T. Kristoff (Eds.), *Papers of the Budapest Futures Course*. BUES, Budapest, 2000, pp. 42-58.
- [11] E. Novaky, E. Hideg, I. Kappeter, "Future Orientation in Hungarian Society," *Futures* 26 (1994) 759-770.
- [12] J.M. Gidley, "Prospective Youth Visions Through Imaginative Education," *Futures* 30 (1998) 395-408.
- [13] R. Ono, "Societal Factors Impacting on Images of the Future of Youth in Japan," *Journal of Futures Studies* 9 (2005) 61-74.
- [14] L. Pellizzoli, M. C. Lombardini, A. Dini Martino, "Images From School: the Views of Italian Teachers and Pupils," *Futures* 9 (1977) 160-167.
- [15] Masini E., "Les Infants et Leurs images du Futur," *Temps libre*, (n.a.), 71-84.
- [16] E. Boulding, "How Children See Their World and Make Their Futures," in: E. Boulding, K.E. Boulding, *The Future: Images and Processes*, Sage Publications, London, 1994, pp. 137-157.
- [17] E. Boulding, "Image and Action in Peace Building," in: E. Boulding, K.E. Boulding, *The Future: Images and Processes*, Sage Publications, London, 1994, pp. 93-116.
- [18] D. Hicks, "Retrieving the Dream. How Students Envision Their Preferable Futures," *Futures* 28 (1996) 741-749.
- [19] E. Barbieri Masini, *La previsione umana e sociale*, 2nd ed., Editrice Pontificia Università Gregoriana, Rome, 2001.
- [20] D. Goulet, *Development ethics. A guide to theory and practice*, The Apex Press, New York, 1995.

- [21] D. Goulet, "Cultural resistance in Latin America," in: E. Barbieri Masini, *The futures of culture*, UNESCO, Paris, 1995, pp. 100-111.
- [22] S. Inayatullah, "Beyond the Postmodern: Any Futures Possible?", *Periodica Islamica* 5 (1995) 2-3.
- [23] J. McHale, "Il tempo e il senso del futuro," *Il Vetro* 30 (1976) 423-440.
- [24] F. Polak, *The image of the future*, Elsevier, Amsterdam, 1973.
- [25] P. Schafer, *Culture: beacon of the future*, Adamantine Press, London, 1998.
- [26] S. Ketudat, R. Textor, *The middle path for the future of Thailand: technology in harmony with culture and environment*, East-West Center, Honolulu, 1990 [Electronic edition, 2004].
- [27] R. Textor, *Austria 2005: projected sociocultural effects of the microelectronic revolution*, Otto Piesch, Vienna, 1983 [Electronic edition, 2004].
- [28] F. Hutchinson, "Mapping and Imagined Futures: Beyond Colonising Cartography," *Journal of Futures Studies* 9 (2005) 1-14.
- [29] F. Hutchinson, "Maps, Metaphors and Myths: Beyond Impoverished Imagination About Peace, Development and the Future," *Journal of Futures Studies* 10 (2005) 63-82.
- [30] W. Griswold, *Cultures and Societies in a Changing World*, second edition, Pine Forge, Thousand Oaks, 1994.
- [31] U. Hannerz, *Cultural Complexity. Studies in the Social Organization of Meanings*, Columbia University Press, New York, 1992.
- [32] M. de Certeau, *The Practice of Everyday Life*, University of California Press, Berkeley, 1984.
- [33] R. Carli, A. Mosca, *Gruppo e Istituzione a Scuola*, Bollati Boringhieri, Torino, 1988.
- [34] G. Mialaret, *Introduzione Alle Scienze dell'Educazione*, Laterza, Bari, 1998.
- [35] L. Amovilli, Noi e loro. *Gruppi di Lavoro Nelle Organizzazioni*, Raffaello Cortina, Milano, 2006.
- [36] A. Alton-Lee, G. Nuthall, J. Patrick, "Reframing Classroom Research: A Lesson From the Private World of Children," *Harvard Educational Review* 63 (1993) 50-84.
- [37] G. Fele, I. Paoletti, *L'interazione in Classe*, Il Mulino, Bologna, 2003.
- [38] D.A. McFarland, "Student resistance: how the formal and informal organisation of classrooms facilitate everyday forms of student defiance," *American Journal of Sociology* 107 (2001) 612-678.
- [39] J.M. Mahan, M. Stanard, "Classroom management concerns among young teachers in cross-cultural settings," *Ethnic Forum* 7 (1987) 36-48.
- [40] M.T. Hallinan, S.S. Smith, "Classroom characteristics and student friendship cliques," *Social Forces* 67 (1989) 898-919.
- [41] E. Barbieri Masini, S. Rizza, *Il futuro visto dai bambini*, Unpublished manuscript, 1981.

Simone Arnaldi has a PhD from the Pontifical Gregorian University in Rome, where he has been trained in Human and Social Futures Studies. He currently serves as the Director of the Jacques Maritain Foundation, a non profit research institute based in the Italian town of Trieste. In addition, he is a researcher at the Interdepartmental Research Centre on Environmental Law Decisions and Corporate Ethical Certification of the University of Padua (Italy). He is lecturer of sociology at the University of Trieste (Italy) and he has been teaching social foresight at the Universities of Padua and Trieste, and at the School for Advanced Studies of the Italian Ministry of Home Affairs. His major research interests are the social construction of future(s), the theory and practice of foresight, and the relation between science, technology and society, with specific focus on the social construction of expectations about S&T through communication and public engagement. His Websites include: <http://www.maritain.eu>, and <http://www.ciga.unipd.it>

POINTS FOR THE CLASSROOM (*send comments to forum@futuretakes.org*):

- *Albert Einstein once said that “imagination is more important than knowledge.” How can our schools balance more effectively the pursuit of the transmission of knowledge with a quest for the pursuit of imagination?*
- *Imaging the future is an important process that contributes towards students’ motivation to reach desired goals. What other skills may be necessary for students to develop in order to actualize their dreams?*
- *In what ways do school curricula influence students’ maps of the future? In addition to the ways identified by Arnaldi, in what other ways do discussion practices influence students’ maps of the future?*
- *Characterize classroom discussion practices in 2018.*
- *Arnaldi cites Richard Slaughter’s observation that school systems “... are still ‘quintessentially’ industrial era organisations.” Other authors have observed that education prepares people for the world that is now and/or the world that was, not for the world that will be. Considering the ephemeral, transitory nature of the world that is, how will educational institutions, and education itself, change during the next decade?*
- *How will changes in working patterns, including the demise of the “career for life” (at least for some) impact whether education will be primarily utilitarian or whether learning will be valued as an end unto itself – and in turn, with what impact on curricula?*

ⁱ Classroom conversations are translated from Italian. For the purposes of this article, we provide very simple notations of the transcripts, which include only the following signs:

- (a.) text in round brackets describe non verbal interaction during the classroom conversation;
- (b.) a dot marks a short pause in the talk;
- (c.) suspension points mark a longer pause in the talk.

Each new speaker is indicated by the corresponding name. Students are marked by fictitious names to guarantee their privacy. Males’ names end with “o”, females’ ones with “a”. When they cannot be clearly identified, male speakers are marked with Boy 1, 2, 3, etc., while female speakers are marked with Girl 1, 2, 3, etc. Two or more pupils pronouncing simultaneously (chorally) the same words are marked as “Chorus”, while two or more pupils talking simultaneously are marked as “Voices”.