Using image in the narrative activity

Anne Bationo Tillon
Orange Labs
4 rue du Clos Courtel 35510 Sévigné
France
anne.bationo@orange-ftgroup.com

Françoise Decortis
C3U/ Laboratoire Paragraphe/Université Paris 8
2 rue de la Liberté 93526 Saint Denis cedex 02
France
Françoise.decortis@univ-paris8.fr

ABSTRACT
In this paper, we propose to discuss the different status and role of images in narrative activities. How the image could mediate the relationship of the narrator to his/her experience? How can children use the image in their narrative activity? First, we expose our theoretical framework. Then through two studies, we examine the status and roles of images in different contexts of production: photographs produced with low technology and short movie created with a mobile phone.

General Terms
Experimentation, Human Factors

Keywords
Narrative activity, images,

INTRODUCTION
While most narrative activities, especially in school, are focused on written and verbal productions, teachers also know that stories can be told in many media, including images like drawings, videos, photography [1][7]. Children "speak in a hundred languages" [8]. Initiation to narrative composition provides children with the means to express themselves, and to convey their intentions successfully. One of the criteria for evaluating these skills is the capacity to combine and prioritize their experience. Images creating during experience produce crystallization, a sort of externalization, an outsourcing of a work even minor, which produces a pride to the one who realized it [4]. This material can be used in narrative activity.

THEORETICAL FRAMEWORK
By narrative activity, we mean the activity by which the child gives meaning and reports his/her experience in a creative way. This perspective refers to stories or narratives produced and told by narrators, in this particular case by children but, not only, by using diverse means and resources such as language, sounds, music, games, scene played by children. By contrast with [6], our attention goes thus towards the production of stories and narrative rather than towards their understanding. Children can collectively create these stories. They can also be produced collectively by groups of different generations (children and adults). In most of the situations, the narrators use multiple languages: drawings, photos, music, etc. The reality, the environment, supply materials which will be used by the narrators in their production. Finally, we believe that creativity can be an essential constituent of the construction of the narrative activity. Our perspective is therefore grounded in a sociocultural perspective, which implies that through narrative children learn to give a meaning to their experiences [4],[12]. Children use stories to represent the world to themselves as well as to each other [9]. In constructing their stories, children draw on images and resources present in their cultural environment, which shape their imagination and sensibility in profound and subtle ways [9],[12]. Thus, the understanding of these processes requires relating the child narrative activity to the sociocultural context of daily interactions, communities and the cultural world.

Vygotsky [12] considers the centrality of the psychological processes of creativity and imagination in the educational process. For Vygotsky, imagination is present in all aspects of the cultural life and makes the artistic, scientific and technical creativity possible. Reality and imagination are correlated according to Vygotsky by at least four relations: 1) Imagination is built starting from reality. The richer the experience, the more the individual will have materials to build his imagination. 2) The social practices and experiences exchange with our pairs. 3) Emotions, the feelings influence imagination and vice versa. 4) The crystallization of imagination in external and shared objects. Moreover, Vygotsky identifies the mechanisms of imagination and creativity: the experience and the re-elaboration of experience through disassociation, association and mutation. In a previous research [5], we found empirical evidence that the cycle of creative imagination proposed by Vygotsky as a psychological process could be used to inform the design of narrative technology-enhanced learning. The model, NAMC++, that emerges from this perspective has four phases namely, exploration, inspiration, production and sharing (figure 1).

It describes how the individual experiences the external world, elaborates the impressions received, assembles them in a novel way and shares this production with others [5].

First International Workshop on Interactive Storytelling for Children.
Copyright held by the authors/owners.
Exploration consists of the interactions with the real world, which can be either direct or mediated by social relations. The sensory experiences constitute the starting point for the theme and for the ideas, what the child has seen, heard, touched or encountered in various experiences (museum, forest) or even in the classroom with the support of objects and people. At this stage, the child uses instruments appropriate for exploration (e.g., microscope, points of view, etc.) and handles various materials (e.g., earth, shells, sand, photos, objects, etc.).

Inspiration is a phase of reflection and analysis on the experience during the exploration. The child is encouraged to think about the previous experience, discuss it and sort out the elements they gathered. Individual writing, drawing or group discussion usually supports this phase.

Production corresponds to the recombination of the elements dissociated and transformed during the previous phase. It is the moment where children, based on selections and choices of elements, produce new content usually through a great variety of media. During this phase, the children mainly use their notebooks, pens and pencils for illustrations, cardboards, puppets, posters and bricolage sets.

Sharing is the phase in which children's externalised productions start to exist in their social world. Children present the result of their production and verify the effects of this production on the others (e.g., children, teachers, parents). Sharing can be supported by instruments such as notebook or it is a full-scale performance of groups of children or of the whole class.

Vignette 1 – Pinholes
This project reunites participants from different generations and socio-cultural backgrounds where children, teenagers, adults and elders are invited to individually and collectively discover and tell stories about their quarter, neighbourhood, habits, living space, cultural differences by producing pinhole images and narratives [7]. Different steps compose the joint creative activities. Participants are invited to build their camera, observe their environments, explore their ideas, shoot, develop the photographs and create narratives on the issue of Territory.

What kind of technology?
The pinhole is a low technology. Pinholes are rudimentary camera following the principle of a camera obscura: small boxes pierced by a very little hole that allows light to come inside, they capture the reality just like the eyes do. On the surface that is opposed to the hole, an inverted image of the subject is formed and captured by a photo-sensible paper (such as photographic paper). It is an “open” artefact: participants are physically involved in the different steps of the process leading from the camera to the photography. Each step, to be successfully completed, implies a reflection before to act.

Figure 1. NAMC++ Model
Our objectives here are to question NAM++ model. Indeed, the model appears to us as being useful at the same time to understand the underlying instrumental mediations in the narrative activity, to think of instruments and to conceive these instruments. We examine the influence of two very different technologies of image creation to understand how children could use them in their narrative activity. Even if the sample population of our studies were not uniquely children, we present the principal results of each study in order to compare the status and roles of images in narrative activity.

CASE STUDIES
We draw from 2 case studies to shed light into narrative competences and creative contributions to create images, and to gauge the potential of different technologies to support narrators’ expressivity in informal, community bases setting. Case studies are presented in 2 vignettes: PINHOLES, and video mobile—all of which blend traditional and digital media. We assert that the context in which images are produced (situations, tools, etc) is important and influence the characteristics of images. And this distinction is important teachers and pupils engaged in narrative and creative activity can use images in different way at school.

Methodology
The case study involved an analysis of four workshops with a total of 62 participants. Data collection relied on observations and interviews with participants and animators.

Description of the narrative activity with model NAM++
Exploration. The exploration phase takes place from the building of the pinhole to the first picture obtained. The participants discover their environment but also how the pinhole mediates their relationship to the environment. They appreciate its physical and sensorial properties and discover their surroundings. They figure out how the things they see can be transformed by the action of taking picture: they take a castle in picture but the photo obtained look like a firefly.

Inspiration. Thanks to their first picture, they can reflect on, and share with other, the feelings and meanings related...
to this first experience. As participants explained, it is like if they had “new eyeglasses”. The dissociation is mediated and facilitated by objects. The image, the photograph obtained, and the "ceremony" which surrounds the discovery of the image (developing photos in the darkroom, to put the photograph to be dried, act as many moments of exchanges with the others) makes it possible to reconsider the feelings, the impressions related to the use of the pinhole.

Production The production phase really arises through the iteration of the loop: Through multiple experiences of the environment and of the pictures obtained, they plan their production. They choose to use the pinhole differently (e.g. superposing images), and to express particular things through their photo (e.g. how I feel today). The activity provides opportunities for the participants to express themselves and give value to their opinions and feelings. Moreover, we have observed that the shooting step could lead to rich interactions and collaborative behaviours.

Sharing. The moments when the photos are shared represent great opportunities to interact. Participants discuss about their respective pictures, give their opinion, congratulate each other, and ask questions about how the picture was taken, where it was taken. It favours the improvement of the pinhole camera’s use and helps each participant to increase his/her knowledge of the pinhole technique. The pinhole, as an externalizable tool [6], favours learning because it provides external results that can be shared and discussed among the participants.

Vignette 2 – Video phone mobile
This project was an ethnographic inquiry into the use of the video function in mobile phone [2] in daily life. Although the study concentrated on young adults, we think nevertheless that our results are interesting to investigate the potential of the mobile video in connection with the NAM++ model.

What kind of technology? The video phone mobile has two characteristics: It is a rudimentary tool because there is no basic functions like (zoom, …). It is a light handled device which is always with the owner, it is easy to use, and available anywhere, anytime. In our study, several children's participants used to borrow their parents' mobile phone for filming some scenes.

Methodology
19 participants were recruited for the ethnographic study. Some were young adults (15-25 ans) and some others were adults (25-40 ans). We collected video recorded by participants the last months before the interview. They transfer us their own video. We supplemented these videos with narrator's interviews supported by videotapes. All interviews were recorded and later transcribed. This is the agent contribution to the analysis of their activity.

Description of the narrative activity with model NAM++ Exploration. Videos taken by the participant group were short (2-3 minutes) and of many different situations: ceremonies (birthdays, weddings etc.), day-to-day life (meals, parties, children, etc.), holidays, concerts, sporting events, and less frequently landscapes and places. The videos were taken mostly spontaneously. Most often during a moment emotional, funny, or aesthetic significance for the person capturing the event. The participants produced blurred images, poorly framed. The visual quality of the video presented on the screen is inferior. What counts the most is not the image but what it allows them to tell.

Extract: "I film the baby. My 2 big daughters also film situations where there is their sister" (F, 35 y)

Figure 3: Video of a daily event made by mother and daughters

Inspiration – Production. Videos filmed on cameras usually require substantial editing, which correspond to the narrative activity [10]. The mobile phone has broken this model of video production: both in filming and in narrative development. Most of the participant group did not edit. The videos were shared just after they were taken.

Sharing. Sharing is crucial in video mobile practice. Video are often taken in the idea of sharing. The sharing is nearly instantaneous with the taken of the videos. It is the idea developed by Tisseron [11] of manipulated mirror. Most videos do not have narrative structure. They are showed immediately after the taken on the same device which permit to create them (the mobile phone).

Sometimes, video taken with mobile phone is a communication act. Videos are a stock of resources available and accessible anywhere, anytime to feed or provoke social interactions thanks to the possibility to visualize the videos on the mobile phone. For example to initiate a discussion about a hobby or a common activity like dance, music, sport...

Extract: "I record musicians band and then I can show to my friends who play music with me " (H, 15 y.)

Some videos are used to illustrate his/her own interests, his/her friends or his/her family and their particularities. Videos are used (mobilised) as a self presentation. This absence of narrative structure grants them a polysemous character as far as they can feed and illustrate speeches at will recomposables.

What can we observe about children? Children are actors during exploration, sometimes they are authors of mobile videos when they borrow their parent's mobile phone and they are often spectators during sharing. Extract: "when my daughters film themselves, they show me then what they filmed by saying "mom looks "!" (F, 35 y).

As the adults, children do few editing. Sometimes they rename their videos files.
Extract. "Then they upload videos on computers they name files " TANA angry, TANA happy "

DISCUSSION
First, we can enumerate the characteristics of the experience conveyed by photos or videos in our two studies.

In his studies on the practices of the photography, Bourdieu [3] explained that the photo is a means to select pieces of past time, to fix extraordinary moment. It is a sort of voluntary memory. In our studies, pinholes reveal poetic aspects of environment. It is a singular and creative work about the usual environment. Images produced by pinhole permit users to revisit their familiar environment, to choose and to develop a singular point of view. The individual elaboration is important. In this case, time, quality and selection are important. Videos are most focalised on persons (my children, my friends…), and individual or collective activities (sport, music). The images are imbricated with the daily life. There is not an individual elaboration. There is a lot of diversity. Feelings and emotions are important.

Second, we can confront our results with the NAM model. Concerning the first study, pinholes do not permit to take a lot of photos. Participants have to choose a point of view. This necessary selection provides opportunity to be attentive, to revisit their environment. Elaboration is omnipresent during exploration, inspiration and production. Sharing is crucial for participants for expressing their own and singular point of view. Pinholes represent a good way to deploy the singularity of the person, to fix its, to work its and to confront it with other participants.

Video phone mobile enhance the taken of a lot of videos images during the exploration. It is a spontaneous attitude. During the exploration, it is a mean to capture feelings, and to cumulate a lot of sequences of daily life. Before the sharing, there is no inspiration and production, these videos are not really material to work with, to be edited. But sharing is important, and it is during this phase that inspiration and oral production occurs.

We think that these techniques present two different logics. 1) Develop a singular glance on shared spaces and experiences. Take self confidences. Pinholes could be used to develop imagination, to help children to revisit their habitual and common environment, to have a subjective and singular point of view and to work it, transform it and to be able to discuss, and confront it to the other persons. In short, it seems to us that pinhole an interesting tool for developing his/her imagining since exploration and during inspiration, production and sharing. It is a good mean to enliven children's imagination, as Vygotsky said emotion and feelings influence imagination.

2) Develop a common glance on singular spaces and experiences. Video mobiles are another status; they could be materials to collect the diversity of the children experience on a theme. These videos could be the starting point for a collective re-elaboration of experiences. In short, it seems to us that video mobile is an interesting tool for helping children to perform an active visual survey and to appropriate relevant points for understanding a theme, collecting experience materials relevant for this theme, as well as sharing and developing his/her imagination thanks to the diversity of the materials collected by other children.

Our challenge as designers, researchers, and educators, is to provide children with environments that enhance their desire to actively engage in the production of narratives that is to provide an enjoyable and enriching narrative experience. But the experience can be captured with different tools, and it is important to understand how these crystallizations of experiences can be worked in class individually, collectively, and their status in the narrative activity. It is a way to integrate children's experience in education.

REFERENCES