

THE NARRATIVE METHOD IN PEDAGOGY, POTENTIAL FOR ENVIRONMENTAL EDUCATION

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ABSTRACT

The narrative method is based on education through stories and imagination. The aim of this paper is to draw the reader's attention to the potential of narrativity in environmental education and in sustainable education as a supplement to the traditional paradigmatic mode. Narratology is here discussed in its interdisciplinary overlap to pedagogy, namely to environmental education. The main research method is a survey of 100 respondents, mostly students of pedagogy and teachers and is supplemented by a synthetic-analytic research of relevant resource. Most respondents find storytelling a very useful and effective teaching method and remember information presented through a story better than information presented as "bare facts". In conclusion, storytelling is an effective method and should be used more in all stages of education.

KEYWORDS

narrativity, narrative pedagogy, narrative paradigm, storytelling, sustainable education, environmental narratology, narrative turn

Introduction

The relation "narrative – science" in cultural and historical context

In his work *The Process of Education* the educational psychologist J. S. Bruner (1960) defined the existence of two different cognitive modes, through which people get information about the world. The paradigmatic mode is based on analysis, deduction, on facts, on explicitly definable processes of enquiry; the narrative mode is based on intuition, stories, imagination and fiction. Both these cognitive modes are the means of getting to know the same thing and only a simultaneous development and use of both of these modes makes it possible to develop comprehensive and effective thinking. This Bruner's concept partially correlates with the so called narrative paradigm (Fisher, 1985), the assertion that most people remember information presented in the form of stories more and better than data and facts presented in their scientific contexts and that in fact (generally speaking): *all human communication has the form of narrative, of telling, sharing and listening to stories*. Exaggerating a little, Fisher refers to mankind as to "Homo narrans".

Western science distinguishes (or has always tried to distinguish) "science" from "narration", "objective" from "subjective", "possible" from "impossible", "existent" from "non-existent", and also "human" from "animal". However, thinking of many, perhaps even most nations is based on different grounds: on narration of stories and refusal of definitions and unequivocal statements about existence. It is a story that is often in the background of a scientific discovery or theory. H. Schliemann discovered Troy thanks to a story and his belief in it. J. Lovelock influenced by ancient Greek mythology called his theory "Gaia". Perhaps similar discoveries and names of theories or phenomena inspired by the Greek mythology (Oedipus Syndrome) foreshadowed the process that we have been able to observe over the past few years: remarkable reconciliation between science and narrative.

We are look for connections and relations between science and narration in the last 25 years. This reconciliation is a multi-level process and as a new paradigm (the narrative paradigm) influences or is beginning to influence the thinking of a majority of people, from university lecturers to nursery school pupils. This goes hand in hand with an increasing awareness of the value of the narrative. This phenomenon is called *the narrative turn* (McAdams et al., 2001). Narrativity ceases to be the subject of interest exclusively of literary theory where it was established and is gaining interdisciplinary nature. The width of contemporary narratological research can be documented for example by the international *Project Narrative* coordinated by University of Ohio. Interdisciplinary narratology also develops various methods of education, teaching and therapy based on storytelling (Martin, 2000). Narrativity is studied by social sciences, primarily by **narrative psychology** (therapy using narration of one's own, usually traumatic life story), or **narrative family therapy**; nowadays we can also see fast development of research of narrativity as a means of supporting peace process and conflict prevention, e.g. in Northern Ireland (Chaitin, 2003) or Israel (Bar-On and Kassem, 2004). The Blackwell Encyclopedia of Modern Christian Thought (Blevins, 2007) includes the entry **narrative theology**. **Narrative pedagogy** and also **narrative environmental education** use stories as the means of education (Harron, 2007, Jancarikova, 2009).

Narrative pedagogy – general contribution and objectives

Storytelling and collective reading of stories have positive impact on the audience's literacy, foster love for literature, improve quality of creative writing, and develop higher cognitive skills, imagination and creativity. The necessity to discriminate between fact and fiction in stories develops critical judgement. Even teachers of exact subjects regard narrative as *a convenient means of supporting understanding to complex scientific concepts* (Gilbert, Hipkins and Cooper, 2005) and make use of it for instance even when teaching mathematics (Cann and Gimenez, 2008 or Jancarik, 2009). Research clearly shows that children brought up on storytelling are better prepared when entering primary school (Novotna and Sarrazi, 2009). J.S. Bruner, who came back to stories and narrative in his research after a few decades, asks substantial questions, e.g. how does an event become a story with a capital S, a story known all over the world (Bruner, 2003)?

The narrative method in environmental education (econarratology)

The aim of this paper is to show how authentic and fictitious stories may build bridges between people and nature, between the animate and the inanimate. *Many storytellers, perfectly objective in the beginning, gradually come to realize that they are under the influence of their emotions more than they would expect and they feel deep "non-objective" and "irrational" relationship to the place where the story is set and feel the urge to look after it* (Nanson, 2005). Narrating and reading suitable stories and sharing experiences in the nature and with the nature are recommended as a method of development of environmental sensitivity in a number of publications (e.g. Wilke, 1993). For the purposes of environmental education and sustainable education are especially convenient stories about nations inhabiting the territory before us, stories of conservationists, and one's own stories and also (sic!) stories of non-human beings and inanimate systems. The semantics of a story has grown much wider: originally it was defined by classical narratologists as a purely anthropological entity. Econarratologists bring to our civilization the knowledge that even nature, animals and plants can tell their stories and teach us to listen to them. The change in the paradigm is documented by honouring a tree as *the Righteous Among the Nations* (Jancarikova, 2007). Stories suitable for environmental education

can be made up by the teacher or may be adapted from works of world literature or from notoriously well-known stories (fairy-tales, myths and legends, biblical stories etc.).

Material and Methods

Literature and resources were studied using the common analytical-synthetic methods. The analytical part of this paper is supplemented by a questionnaire survey. The survey included seven questions to find out whether teachers and students consider storytelling an effective method of instruction, and if so, in what settings. Those were followed by five demographical questions inquiring about age, profession, gender and other personal information. The questionnaire was constructed using the server anasune.com. The respondents were selected using the snowball method. 10 colleagues teaching at the Faculty of Education, Charles University in Prague and 5 groups of students (of five different subjects, different specializations, full-time and distance, 25 to 150 students in each group) were asked by e-mail to fill in the questionnaire or ask somebody else with similar qualification to do it.

Results

Do Czech pupils, students and teachers find storytelling important? (A questionnaire survey)

The questionnaire was answered by 100 out of the approximately 800 addressed respondents. Most respondents were women (81%). Most of them were secondary school graduates (60%), 30% university graduates, 9% graduates from higher university level (Ph.D., doc., prof.). Exactly one half of the respondents (50%) were students of pedagogy, 32% were teachers.

The following questions were asked and the following answers were marked.

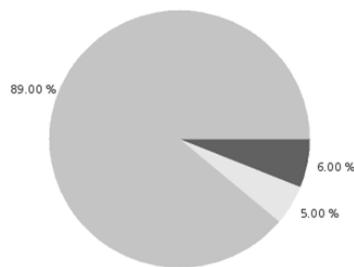


Fig. 1: Graph to question number 1

1. Do you agree with the statement “Education using storytelling is an effective teaching method. Pupils remember a lot of information.”? (See Fig. 1)
 - a) Agree (89.00 % - grey)
 - b) Cannot decide (6.00 % - black)
 - c) Disagree (5.00 % - light grey)



Fig. 2: Graph to question number 2

2. As a student, do you prefer learning many facts over narration (learning fewer facts in a story)? (See Fig. 2)
- Yes (56,00% - light grey)
 - No (44,00% - grey)

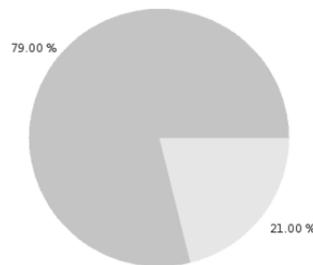


Fig. 3: Graph to question number 3

3. Try to remember a teacher you really liked. Was he/she popular because his/her explanations were supplemented by narration of gripping stories? (See Fig. 3)
- Yes (79.00 % - grey)
 - No (21.00 % - light grey)

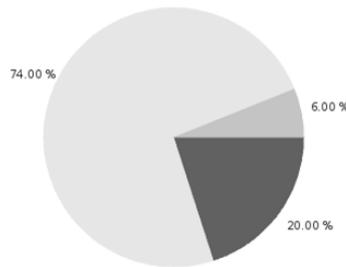


Fig. 4: Graph to question number 4

4. Do you agree with the statement: "Listening to stories confuses students. They do not learn to distinguish fact from fiction."? (See Fig. 4)
- Agree (6.00 % - grey)
 - Cannot decide (20.00 % - black)
 - Disagree (74.00 % - light grey)

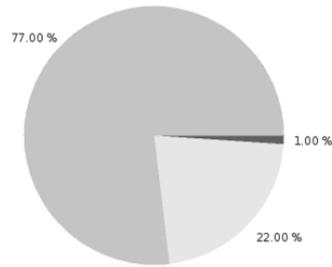


Fig. 5: Graph to question number 5

5. Do you remember information presented through a story (See Fig. 5)
- Better than information presented as "bare facts" (77.00 % - grey)
 - Just as well as information presented as "bare facts" (22.00 % - light grey)
 - Worse than information presented as "bare facts" (1.00 % - black)

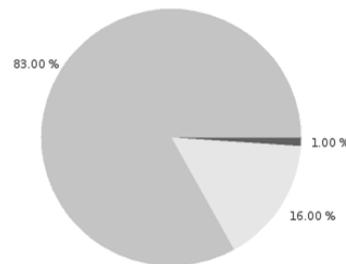


Fig. 6: Graph to question number 6

6. Where does storytelling belong? (See Fig. 6)
- into life-long education scheme – from nursery school to university level (83.00 % - grey)
 - to lower school levels (nursery and primary school) - (16.00 % - light grey)
 - only to informal education (within the family or in extracurricular clubs) - (1.00 % - black)

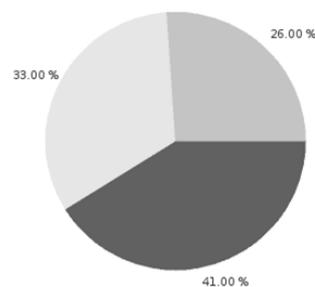


Fig. 7: Graph to question number 7

7. As a teacher, do you prefer teaching many facts over narration (teaching fewer facts in a story)? (See Fig. 7)
- Yes (26.00 % - grey)
 - No (33.00 % - light grey)
 - I have no experience with teaching (41.00 % - black)

Most respondents find storytelling a very useful and effective teaching method (see questions 1 and 2). And even if the question was construct so that the answer "agree" was against the narrative theory (question 4). Most respondents make a link between storytelling and the teacher's popularity – a popular teacher tells his/her pupils and students stories (see question 3). Most respondents remember information they heard incorporated in a story better. In contrast one respondent feels that narration makes him/her confused and hinders his/her memorization of facts (see question 5). Most respondents believe that storytelling has a place in the life-long education scheme (question 6). Interesting is the finding that the respondents (mostly teachers and future teachers) are using the narrative method in classrooms much less than they would from their previous answers expected (question 7).

Discussion of the questionnaire survey results

Seven general conclusions can be drawn from the results of this questionnaire survey because of the number of respondents (100) and unequal proportion of the sexes. The results may be taken as a mere illustration of the issue. However, the results suggest that the narrative paradigm (Fisher, 1985) holds also in the Czech Republic. We assume that teachers use the narrative principles intuitively. They don't know the theory of narativity (is the difference in the responses of the respondents in the position of the pupil or student, and in the position of teacher), but they are responsible for something like a "story-patterns" (com. Maciuszek and Martens, 2009) and reflected it. It is probably most striking that the majority of respondents find storytelling appropriate even at university level. It is an innovative solution correspondent with experiences from an interdisciplinary (between the Schools of Architecture, Fine Arts, and Computer Scie) graduate seminar taught at the University of Florida (Maze et al, 2006). A follow-up research should definitely focus on the respondents, who had answered outside the scheme of narrative paradigm. It is important to look for what they have in common and to look for the reasons why the narrative paradigm does not hold in their cases.

Conclusions

Storytelling is, or should be, an effective method of education, including university pedagogy. Its potential in Czech Republic must be subject to more detailed study and then made use of practically (purposefully). Storytelling is a method suitable in environmental education. However, there are not enough authors in the Czech Republic who would acknowledge environmental narratology (econarratology) and who would make use of the findings of the narrative theory in applications functionally. We also lack enough research papers focusing on environmental narratology. We hope that this paper will become the starting point for a number of new authors.

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