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Original article

Storytelling and telling history. Towards a grammar of narratives for Cultural Heritage dissemination in the Digital Era

Augusto Palombini*

Italian National Research Council, Institute for Technology Applied to Cultural Heritage, CNR-ITABC Via Salaria km. 29,300, Monterotondo Street, 00015 Rome, Italy

ARTICLE INFO

ABSTRACT

The paper represents an attempt to set up a theoretical framework for storytelling approach applied to Cultural Heritage. After a general analysis and a narrative theory review, the first topic addressed is the long-lasting problem of harmonizing freedom of narration (human creativity) and the constraints of scientific reliability: a debate which is at least 150 years old, but become particularly important in the digital era. Then, it will be set a classification of storytelling elements (arena, characters) inspired on similar ones shaped in the domain of semantics for literature, in order to create a working tool suitable for virtual museums and historical dissemination in a broad sense.

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1. Research aims

During the last decades, digital technology has significantly affected the evolution of Cultural Heritage dissemination, leading to the rise of new research branches.

Such a phenomenon also involved the use of storytelling techniques, which, on the one hand, had significant changes in the wide digital context, on the other, are today often discussed in relation to their specific use for Cultural Heritage applications.

Given such a situation, this work aims to set up a theory of storytelling applied to Cultural Heritage. Of course, storytelling is not a specific task neither of the digital applications nor of the Cultural Heritage domain: the difference between a merely information-based approach and a storytelling one, in cultural dissemination, could be recognized well before the digital era. At the same time, storytelling is certainly not mandatory in the creation of any so-called *virtual museum*, which may consist of simple (existing or reconstructed) scenarios, where the user is allowed to move, visit, reach contents and information in the environment without any narrative boost.

Nevertheless, the cross-impact of digital technology and storytelling techniques, where present, led to a huge transformation of cultural communicating tools, so that it seems useful to review the classical approaches to narrative theory in the light of the current situation.

2. Methodology and discussion

2.1. Introduction

Narrative approach to dissemination, in particular for historical and cultural contexts, is a powerful mean to improve learning potentiality through the emotional impact [1–3], and its relevance is likely to get ever higher, because of at least two factors:

- following a traditional information-based approach, the transmission of event-related historical data is as easy as the user has already an history knowledge mind-structure, that is to say: such a message will more probably fail to reach people who would need it more;
- the second reason is somehow implicitly connected to the nature of narration itself, which allows the suspension of doubt and the immersion into the narrative world. Such a phenomenon is even deeper and effective when the user knows to be dealing with a really occurred fact [1]. Thus, using narration to tell about historical events results in an improvement both of learning about those events and of boosting the natural narrative process.

Nevertheless, the concept of narration may represent a problem when dealing with scientific data: a narration is a free product of human creativity, and in this sense it is not submitted to any rule or limit, as scientific information is. A theory of narration applied to dissemination for Cultural Heritage (i.e. through digital devices) has to face this apparent contradiction, which can be synthesized in a few questions: how to harmonize narration freedom and scientific reliability? Is it necessary? What does it mean?

* Tel.: +39 0690672721.
  E-mail address: augusto.palombini@itabc.cnr.it

These questions are not new at all, but, despite of their implications and relevance, it has not been yet developed a theory of narration on Cultural Heritage dissemination. Such a theory would be important in itself, as dissemination strategies have ever been a relevant part of the history-related studies; but it is even more relevant in the digital era, as virtual museums, in a broad sense, enhance narrative strategies, and digital storytelling has become a specific branch of narrative theory [4].

An attempt in this direction should start from a review of the history of narrative thought.

2.2. Review: the narrative structure

It is well over the aims of this work to trace back the story of the act of narrating. Certainly, prehistoric paintings and engravings may be considered examples in such an act. Antinucci ([5] p. 3–36) dates back to the palaeolithic rock paintings and engravings the earliest examples of reality "reproduction" (intending that in such era there was probably no conceptual awareness of difference between the art as magic action to re-create real things, and as narrative representation of absent elements). Limiting the analysis to written texts, the most ancient examples of narratives (that is to say: texts not completely aimed to administrative or religious purposes, which is another arguable point) from the ancient world come from Sumerian and Egyptian literature of the second half of III millennium B.C. Nevertheless, the earliest attempt to formalize narrative basics is probably Aristotle's scheme on Greek tragedy (Aristotle, *Poetics* VII). Indeed, more than a rule definition, it is a description of the state of the art related to myth and tragedy, stressing the unity of action (a continuous plot development, focused on the same protagonist) as basic condition. In the Renaissance, such a simple observation was re-interpreted defining the theory of the three units (time, space and action), but it went well over Aristotle's vision, and today it seems not suitable at all for classifying modern storytelling. The unity of action and/or time and space was someway already overcome in Aristotle's time (The *Odyssea* lacks such a feature), and surely it is neglected by modern literature and movie industry. Non-linearity has even been considered one of the typical traits of storytelling in the digital era [4].

In modern times, many scholars faced the problem to give narration suitable definitions. A relevant analysis on the topic was performed by the structuralist approach. As Propp's [6] and Todorov's [7] formalizations are limited to particular categories of narrative world (the tale, the fantastic), other scholars [8,9] defined schemes still suitable for modern storytelling classification, but they are affected by a common problem of traditional analytical approaches: on the one hand, they mainly refer to narration as verbal phenomenon, which is a hard limit to our goals: even Aristotle (*Poetics* I) started his analysis from the consideration that narratives concept, in its broader sense, involves all non-verbal practices; on the other, they lack the non-linearity (or multi-linearity) dimension of storytelling. These problems lead to an apparently unsolvable situation, as there seems to be no way to formalize any scheme on a narrative dimension which may be, by definition, non-linear or multi-linear.

2.3. Discussion

Given such empasse, the only possible approach is to consider storytelling structures as variously shaped groups of elementary "units" of narration, and define such units as bits which can be arbitrarily assembled to create many different chains (multi-linear, non-linear, recursive, etc.). To shape such a definition of an "elementary narration unit" we must seek for a very light scheme among the ones available in literature. It is here well suitable the analysis of movie structure by Casetti and Di Chio [10], who defined

narrations as chains of situations in which events occur and where characters move in specific environments. Then, focusing three constant basic narration elements:

- somebody;
- who makes something happen (or: to whom something happens);
- which leads to a change of the situation.

A scheme that, in relation to our purposes, we draw as:

- agent;
- event;
- change.

This seems to be the basic "bit" of narration, as an elementary sequence of events. At the same time, such a simplest form is, in cognitive terms, the most basic narrative structure that can be managed since a 1–2-year child mind [11,12].

It seems then reasonable, for our goals, to define a narration as a chain variously shaped, in one or many possible linear dimensions, through the aggregation of elementary units, each defined as a whole of: agent, event, change.

Once defined the concept of narrative unit, we can attempt a more clear definition of the Cultural Heritage storytelling, setting its boundaries.

Digital storytelling domain has certainly drawn a new branch in the studies [4,13]. The most peculiar element introduced by the digital era into narrative structure is the interaction: the ability of user to influence and determine the evolution of narrative plot ([4] p. 56), despite a few examples of interactive narration came before the digital era (interactive books, role games, etc.).

Nevertheless, dealing with Cultural Heritage storytelling, the concept of interaction is someway misleading, and it has to be reconsidered taking into account two original aspects: the first connected to the simple user-plot relationship (user shapes narrative world), according to the rows above; the second in connection to the capacity of the tale to influence the user and his/her vision of the world (narrative world shapes user).

Usually, a story doesn't need the narrative world to have any effect on real (user) world, while Cultural Heritage storytelling is specifically conceived to change the real world (improving the user knowledge and making him/her somehow different). So, from a cognitive point of view, this kind of narration is always interactive, as the result of any action should lead to a change of the user's cultural dimension and is conceived to interact with it. It can be objected that this aspect is not exclusive of CH storytelling: many tales with a strong moral or political message tend to interact with user's culture and shape it. The subtle border to be stressed is connected to a very specific task of CH storytelling: the idea that the tale content is really happened leads to the attempt of exporting some traits from the tale dimension to the reality one, inside the user's cognitive world. Such an operation (creating the consciousness that some contents of the tale are going out of the box) is a peculiar trait of CH storytelling.

Following such an approach we can better define the agent concept in the elementary CH narrative unit as a whole made of three symbiotic elements:

- the user;
- the characters (all the virtually living elements of the narration, who/which are able to give a feedback to user's actions);
- the narrative environment, or arena.

We use here the concept of narrative arena according to Truby's definition [14], to indicate the environment where the action is