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Are we 'users' of interactive stories?

TURKU CENTRE *for* COMPUTER SCIENCE

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Abstract

We list and analyse the terms used in referring to the people to whom the interactive storytelling systems are intended. Although the most common term in the literature is 'user', we try to find alternatives by studying the terminology of other art forms and technologies. We also propose alternatives and discuss whether they capture the needed nuances.

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Algorithmics

1 Introduction

Interactive storytelling systems have three distinctive partakers:

1. an author who creates the story world,

2. characters who inhabit the story world, and

3. a user who interacts in the story world.

Whereas 'author' and 'character' are widely accepted terms in the literature, there is no such consensus about the term 'user'. This prompts the question are we really 'users' of interactive storytelling systems or is there a better term.

If we contrast interactive stories with other art forms, we notice that their terminology is much clearer. Usually, the name of the person perceiving the work is derived from the related verb. For example,

- 'to read' (a book, a poem etc.) ⇒ 'reader'

- 'to watch' (a film, a play etc.) ⇒ 'watcher'

- 'to listen' (music, a recital etc.) ⇒ 'listener'

- 'to play' (a game) ⇒ 'player'

Interactive stories seems to defy finding a good name for the third partaker. One reason could be that – unlike the previous examples (excluding games) – the 'user' is engaged in interaction and not being passive. Also, interactive stories being a young art form, an established verb and noun do not seem to exist yet.

In this paper, we will review and speculate possible alternatives for the term 'user' and discuss whether they are suitable to replace it. In Sect. 2. we review the papers published the conference proceedings of Technologies for Interactive Digital Storytelling and Entertainment (TIDSE) and International Conference on Virtual Storytelling (ICVS) during the last four years [1, 2, 3, 4] and analyse the terms used. We also include articles published in scientific magazines and doctoral theses. The selection is not exhaustive but tries to represent both the terminology chosen by the established authors as well as chart new ideas. In Sect. 3, we take a look at related art forms and review their terminology. Section 4 we discuss other ideas. Concluding remarks appear in Sect. 5.

Table 1: Terms used in the TIDSE conferences [1, 3] and ICVS conferences [2, 4] between 2004–2007.

Term	TIDSE 2004	ICVS 2005	TIDSE 2006	ICVS 2007	Total	%
'user'	27	18	17	12	74	56.1
'player'	5	8	10	6	29	22.0
'visitor'	3	1	1	1	6	4.5
'viewer'	1	0	3	0	4	3.0
'child'	1	1	0	1	3	2.3
'interactor'	0	1	0	1	2	1.5
'caller'	1	0	0	0	1	0.8
'story chaser'	1	0	0	0	1	0.8
'audience'	0	1	0	0	1	0.8
'experiencer'	0	1	0	0	1	0.8
'listener'	0	0	1	0	1	0.8
'participant'	0	0	0	1	1	0.8
N/A	2	2	4	0	8	6.1
Total	41	33	36	22	132	100.0

2 Terms used in the literature

Table 1 collects the terms used in the 132 papers published in the conference proceedings of TIDSE and ICVS between 2004–2007 [1, 2, 3, 4].[1] Over half of the papers refers to 'user' and almost a quarter refers to 'player'. The third clear group is application-specific terms like 'visitor' (tour guide systems) or 'child' (educational applications). Few papers used consistently domain-specific terms (e.g., 'interactor' or 'experiencer'), although they appeared parenthetically in other papers. In total 8 papers did not use any term (denoted N/A in the table).

2.1 'User'

Aylett and Louchart [5] define 'user' as someone who actively unfolds the narrative and experiences the story world "through interaction and actively participates in the building of the resulting experience". Apart from the 74 papers in TIDSE and ICVS, 'user' is the term of choice by many prominent authors in the field, and, for example, Osborn [6], Riedl [7], and Louchart [8] refer consistently to 'user' in their doctoral dissertations. The reason for the popularity of the term 'user' stems from general computer systems, which have traditionally called the operating person a 'user'.

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[1]A full list is available at ⟨http://www.iki.fi/smed/data/ICVS_TIDSE_terms.pdf⟩.

When we think about interactive storytelling, 'user' does not make difference between a user who creates the story world (i.e., the author) and a user who interacts in it. Sometimes the researchers, realizing this, add another noun and form a compound word like 'child user' [9], 'human user' [10], or 'end-user' [11]. From the point of generality, 'end-user' is the best candidate because it refers to "the final specific use to which a product is put" [12].

2.2   'Player'

The second popular term is 'player', especially when the system described is either part of a game or a game engine is used to run the interactive storytelling system. For example, even though Szilas refers consistently to 'user' in TIDSE and ICVS papers [13, 14], he and co-authors refer to 'player' when describing an implementation using the Unreal Tournament game engine [15]. Mateas [16] and Fairclough [17] favour the term 'player' in their doctoral dissertations. Although 'player' has also a connotation to theatre, it is rarely implied by the authors.

2.3   Application-specific terms

Apart from games, interactive storytelling is used in the context of tour guide systems ('visitor'), educational purposes ('child') or extending television programme ('viewer') or audio system ('caller', 'listener'). Within the given context, the terms have a clear meaning, but they cannot be used as a general term for interactive storytelling.

2.4   Domain-specific terms

Occasionally authors employ (or coin) a term that tries to catch the domain-specific aspects of interactive storytelling systems but avoid making it application specific. 'Experiencer' [18, 19] refers to the mood of interactive storytelling (and it gives us also the phrase "to experience an interactive story"). However, experiencing does not confine in interactive storytelling nor does it capture its human-in-the-loop nature. Likewise, 'interactor' [20, 21] addresses the operational essence but is not limited to interactive storytelling as many other applications need interaction (e.g., operating systems).

Hoffmann et al. [22] coined the term 'story chaser', who make decisions in the story world and "experience narratives by choosing individual story paths in story sites". This seems to imply that there is a specific story to caught, whereas the story can evolve organically like in 'implicit creation' proposed by Spierling [23].

3   Other sources

In search of a good term, we can turn to other interactive systems (e.g., virtual reality and world wide web) or similar art forms (e.g., role-playing games and Forum Theatre) and study their terminology.

3.1   Virtual reality

The Sanskrit word 'avatar' originally refers to a deity who has descended to the physical world taking an incarnate form. In virtual reality (or computer game) terminology, 'avatar' means the representation of the user (or player) in the virtual world (or game world). In this sense, we can think an avatar in a story world as the character inhabited by the end-user of interactive storytelling system. Avatar does not replace end-user, because there are interactive storytelling systems (e.g., I-Storytelling [24]), where the end-user does not have representation in the story world but affects and observes it from outside.

3.2   World wide web

The term 'surfer' is used to refer to a person browsing the World wide web. It could be employed in interactive storytelling, which would give us the phrase "to surf an interactive story". Surfing, however, does not reflect the structural aspect of interactive stories and could be associated to channel surfing rather than to a coherent narrative experience.

3.3   Role-playing games

In a role-playing game, each participating player has an own 'player character', which are opposed to 'non-player characters' controlled by the gamemaster. Also in a live action role-playing game, a player represents a 'character'. As the term 'character' in interactive storytelling usually refers to the computer-controlled actors, role-playing games do not seem to offer good candidates.

3.4   Forum Theatre

In improvisational theatre the actors perform spontaneously according to audience's suggestions. Especially interesting form to interactive storytelling is Forum Theatre, introduced by the Brazilian director Augusto Boal in *Theatre of the Oppressed* [25, pp. 139–142], where people come on stage and take over the personas of the actors. First the actors portray a dramatic everyday situation trying to find solution. After the scene has been played once, the

audience has a chance to change the play. The scene is played a second time and now a member of audience can stop the play at any point and replace an actor on stage thus becoming a 'spect-actor'.

The term 'spect-actor' conveys the idea of being a spectator and an actor at the same time. For practical use, it is cumbersome and too easy to confuse to spectator (even if spelt with a hyphen). Also spect-actor is an established theatrical term and could lead to misunderstandings when applied to interactive storytelling.

4   Discussion

Even if we agree that we are users when we talk about interactive storytelling *systems*, we can be something more specific when we talk about interactive stories. The basic question is whether we should extend the meaning of an existing term or coin a new word. To start this discussion here are five suggestions that we have come up with:

- 'Adventurer' would give us also the phrase "to adventure an interactive story". The downsides of the term are that it is already strongly associated to interactive fiction, and not every story is an adventure.

- 'Agonist' originally in Greek means 'a combatant in the games' [26] and it is the basis for the terms 'protagonist' and 'antagonist'. It would give us also the phrase "to agonize an interactive story", which, however, seems a bit off-putting.

- 'Consumer' reflects the corresponding role in the syndication model (the other roles being 'originator', 'syndicator', and 'distributor') [27]. However, the phrase "to consume an interactive story" can lead to think about an interactive story as a perishable product rather than a work of art.

- 'Embracer' tries to capture the sense of accepting or submitting to the story, hence the phrase "to embrace an interactive story". However, it can also be understood to mean that somebody just accepts the idea of interactive storytelling (without being engaged in it).

- 'Experactor' is a portmanteau word combining 'experiencer' and 'interactor'. It captures both the human-in-the-loop and operational aspects and gives us the phrase "to experact an interactive story". The terms could be also reversed to form the term 'interiencer'.

5 Conclusion

This paper looked at the terminology of interactive storytelling. The basic question is, whether it is too late to propagate a new term and we should just admit that 'user' is the *de facto* term. Even in that case it would be better to prefer 'end-user' to signify the difference from other users of the interactive storytelling system (such as the author).

Another question we can ponder now is that when interactive stories are everyday, off-the-shelf (or off-the-net) products, how they should be marketed to the buyers. Do they want to be 'users' of interactive stories or would another term appeal to them more? This paper should be seen as an opening for discussion. Naturally, we – as everybody else – welcome good suggestions. If we have not found a satisfactory term, maybe it is just waiting to be discovered.

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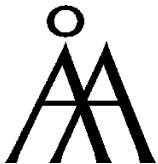
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