

Perceptive Media

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„It could transform TV forever“ (Bryant, 2012). Expectations were high, when Ian Forrester of BBC R&D first discussed early-stage experiments of the concept of *Perceptive Media* in public. From his own words, “Perceptive Media takes narrative back to something more aligned to a storyteller and a audience around a campfire using internet technologies and sensibility to create something closer to a personal theatre experience in your living room.” (Forrester, 2012)

In a nutshell, *Perceptive Media* adapts video or audio content itself based on information it has gathered on an individual user and the context. According to Gradinar, it is „... a new type of broadcast media, which makes use of contextual information provided through a range of different physical and digital sensors, to create a more engaging experience for the listeners by simply varying some of the ambient parts of the narrative.“ (Gradinar et al., 2015)

It is a subtle adaptation of the narrative without direct interaction of the audience: e.g. a radio play, in which the narrative adapts to the physical and social context of the listeners in terms of location, number of people in the room, time of day and weather data (see *Perceptive Radio*, Gradinar et al., 2015). The story arc does not change, but is shaped within a predefined scope (unlike interactive narrative, in which the user’s action influences the storyline).

Visual Perceptive Media takes the concept one step further: „Imagine a world where the narrative, background music, colour grading and general feel of a drama is shaped in real time to suit your personality.“ (Visual Perceptive Media - BBC R&D, n.d.) The BBC’s R&D team created a film that is largely personalized for each unique viewer. Data from a mobile app are used to build a profile of the user regarding music listening habits and some personal preferences. „Paired with age and gender info, the resulting personal profile automatically tailors the short film to the perceived preferences of the viewer. The action may be different in some scenes, one character may get more screen time than another, and certain scenes may be cut altogether, for example. Storyline and direction aside, the whole appearance of a shot can be altered with different color grading, and the film’s score takes cues from your music tastes.“ (Rigg, 2015)

This is made possible by object-based broadcasting (see Churnside, 2015). Traditionally, a programme is a piece of linear media which is broadcasted to everyone. Object-based broadcasting turns the programme into a collection of media objects along with metadata. The user’s device reassembles the media objects according to the metadata and thus allows adaptation to suit the environment or the person.

„It is still early days, and there are hard research questions that we need to answer. Questions such as: How much can these adaptations really improve the overall quality of experience? How do we limit these adaptations to retain creative control of a shared experience? How do we deal with phenomena like media bubbles and confirmation bias? What are implications of this for the writing and production process?“ (Churnside, 2015)

Only little initial research has been done so far, and there is little direct experience of creating such media as well. Building on concepts like Personalization (see Stockleben and De Abreu Pereira, 2011) and Database Storytelling (see Manovich, 2001), *Perceptive Media* is an innovative new form of media.

This Master Thesis proposes the concept of *Perceptive Media* from a storytelling perspective:

1. (Literature) Research:

What is *Perceptive Media*? Characteristics and limitations, strengths and weaknesses of this new type of broadcasting media.

Lead questions:

Levels of Adaptivity: Which ambient parts of a narrative can be varied to contextual information? Which audiovisual elements can be tailored to its viewer?

Genres: *Perceptive Media* gives content creators the opportunity to create new experiences, but it places new requirements as well. In which fields can *Perceptive Media* play to its strengths?

2. Perceptive Storytelling Framework and Theoretical Model:

To what extent does *Perceptive Media* infringe some basic principles of storytelling because of its adaptivity? On the other hand, in which way does it foster other principles of storytelling?

What is the implication for storytelling? Do we need new rules for designing *perceptive* stories?

3. Apply the principles of *perceptive* storytelling to develop and produce a prototype:

Create content that adapts to its audience. The media content is broken into objects, which are played based on the context.

Bibliography (for the time being)

Key words: perceptive media, object-based broadcasting, adaptive storytelling, personalization, context-aware media, targeted media, semantic publishing

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