

## Genre transgression in interactive works

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### Method

The area of interest is genre transgression in interactive works. So far, this area of interest has been framed by the literature of Brenda Laurel (1991), Janet Murray (1997), Marie-Laure Ryan (2001), and Esben Aarseth (1997, 2005), whose important and well argued key premise is that the user is a participator of interactive works. Due to an apparent lack of scientific publication taking this key premise further into a genre discussion in more recent years, this article agrees with the above premise<sup>1</sup>.

However, in order to add a new perspective on interactive works, a new multidisciplinary framing is suggested; a disciplinary transgression between human computer interaction, scientific simulation theory, software system architecture, and basic genre theory.

The theoretical framing with academic disciplines independent of the area of interest involves lengthy explanations that go far beyond the scope of this article. Therefore, the different disciplines are introduced briefly in order to clarify the core points with regard to the area of interest and research question: What characterizes genre transgression in interactive works?

The work method of the article is to reintroduce an old established framing of basic genres (didactic, epic, and dramatic). Peter

Harms Larsen's (1990) framing is selected, briefly presented, and reframed according to the purpose of including interactive works (Rosenstand, 2002, pp. 101-108).

As it will be argued, the simulative genre can be understood as a basic genre in the same framework as a didactic, epic, and dramatic genre. Genre transgression in interactive works is discussed and exemplified, followed by a conclusion.

### **Genre framework I: Didactic, epic, and dramatic**

Peter Harms Larsen is a former teacher at the education department of the Danish National Broadcasting Company DR. In the late nineties, he developed the theory presented in the following (Larsen, 1990).

Naturally, Larsen's primary focus was on the production of TV content. However, his perspective on the production of TV content reflects a rather broad view where "somebody creates something for somebody" (translated by author) (Larsen, 1990, p. 91).

Larsen focuses on three basic genres: The dramatic, the epic and the didactic, and he terms the "somebody who creates" something the 1<sup>st</sup> person, the "somebody" who imagines something the 2<sup>nd</sup> person, and "what is put forward" the 3<sup>rd</sup> person.

In order to include a user perspective, and to bridge the gap to human computer interaction, the 1<sup>st</sup> person is termed the communicator, the 2<sup>nd</sup> person is termed situated user role, and the 3<sup>rd</sup> person is termed communicated. As it will be argued, the situated user role is a function of the relationship between the communicator and the communicated.

When defining the three basic genres, Larsen is systematic in his work about the communicator and the situated user role. However, he is less systematic in defining the communicated (Larsen, 1990, p. 92-95). In the following, as many as possible of Larsen's terms are used. The "empty" fields, however, are a contribution by the author of this article. In some cases, Larsen uses at least two terms for the same notion. For the sake of accuracy, one term is chosen for one notion in the following.

In the didactic genre, the communicator is presented as a teacher, the communicated is the matter mentioned, and the user is situated in a learner role. This article, for instance, belongs to the didactic genre.

In the epic genre, the communicator is presented as a narrator, the communicated is the told, and the user is situated in a listener role. The fairy tale “The Ugly duckling”, by Hans Christian Andersen (Andersen, 1843), serves as an example of the epic genre, when the story is told.

In the dramatic genre, the communicator is dissolved into the dramatic construction. Larsen’s solution to this is not to specify the communicator and the communicated of the dramatic genre. However, inspired by scientific simulation theory (elaborated later), the communicator is presented as dissolved into a model and the communicated is what is being modelled. As Larsen points out, the user of the dramatic genre is situated in the role of spectator. For instance, “The Ugly Duckling” staged as a play in a theatre is an example of the dramatic genre. The communicator is presented in a dissolved form as a model that consists of actors and scenography. The communicated is the play, which is modelled by a director, and the user is situated in the role of spectator.

Table 1 summarizes the genre framework inspired by Larsen. The terms marked with asterisk (\*) are by the author of this article.

Table : Larsen’s framework, where the blanks (\*) are filled in by the author of this article

Genre	The communicator*	The communicated*	Situated user role*
Didactic	Teacher	Matter mentioned	Learner*
Epic	Narrator	The told	Listener
Dramatic	Model*	The modelled*	Spectator

### Simulator and system architecture

Before characterizing the simulative genre, the core theory of scientific simulator systems is presented. Moreover, this is related to the general architecture of computer systems and its related components.

A simulator consists of a model of a bounded part of reality. The model can be influenced from the outside (input), and it will react (output) in a way that is similar to the way it is expected to react in reality (Rosenstand, 2002). This means that the model, which is the

core of a simulator, is dynamic, and the state of the simulator can change due to external influences. A model of a simulator might also change due to internal dynamics – for instance the dynamics of time, which is a special case, where steps in time are events in an “event driven simulation” (Rasmussen et al., 1995, p. 3).

A formal definition of a simulator is given by Rasmussen and Barret in their Lecture Notes “Elements of Theory of Simulation”: “A simulator is an emergence engine. It is a representational mechanism that is distinguished by its capacity to generate relations that are not explicitly encoded.” (Rasmussen et al., 1995, p. 14)

The focus is on simulators where the external influence is provided by a user; this means simulation should be framed within Human Computer Interaction (HCI). In the field of HCI, the input and output to and from a simulator is termed interactivity, where interactivity is defined as “... a measure of a media’s potential ability to let the user exert an influence on the content and /or the form of the mediated communication” (Jensen, 1998, p. 201).

The architecture of a computer system can be understood as three system components: model, interface, and functions (Mathiassen et al., 1998, pp. 13-14). The model component is a dynamic model of the problem area of the computer system; with regard to a simulator, the problem area is the bounded part of reality that is put into a model. The interface component connects the computer system to its surroundings through different interface devices. Other technical systems can be part of the surroundings also; however, this technical issue is beyond the scope of this article. The functions components represent the facilities that can be used by the surroundings

through the interface to influence the model (input), as well as the facilities that the model can use to update the interface (output). From an output perspective, the interface represents the state of the model, and from an input perspective, the state of the model is a function of the interactivity performed by the user.

Combining the core components of a computer system with scientific simulation theory results in Figure 1: Simulator.

Figure : Simulator

Simulator (The communicator)		
Interface	Functions	Model
<p>Input devices</p> <hr/> <p>output devices</p>	<p>Input facilities</p> <hr/> <p>output facilities</p>	<p>Event driven dynamics</p>

In a broader perspective, with regard to an interactive work, an event driven dynamic model of a simulator can both refer to reality – the real world – and to fiction (Rosenstand, 2002). When applying this broader perspective, we get what we term a narrative simulator.

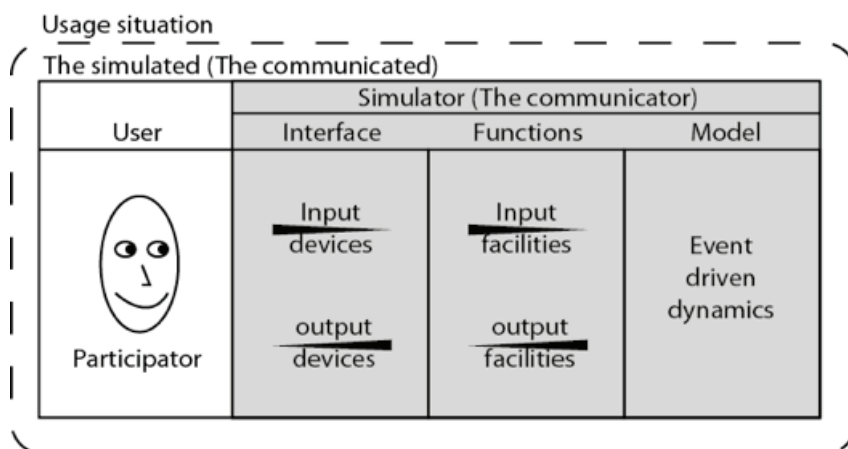
It is important that the output of a narrative simulator is similar to what is expectable in the narrative universe (the model component); but the output does not necessarily have to be similar to what is expected beforehand. In first person shooter games, such as Doom (1993), Half-Life (1998), and Damnation (2009), it is expectable to meet a monster; but the user does not know when and where to meet monsters beforehand. Actually, the expected and the expectable must differ in order to build narrative suspense in a narrative simulator. This is significant compared to simulators in general, where the model is built on a constructed reality.

To conclude, a narrative simulator is communicating a narrative of an interactive work, and according to Larsen’s framework (cf. Table 1) the simulator is the communicator. The communicator is dissolved into a simulator.

### Genre framework II: Didactic, epic, dramatic, and simulative

After characterizing the communicator as a simulator in interactive works, the next step is to characterize the communicated and the situated user role within the genre framework. This is done simply by adding the human computer interaction perspective (HCI) to Figure 1: Simulator resulting in Figure 2: The simulated.

Figure : The simulated



A user using a simulator constitutes a user experience, where the simulator is the communicator. The simulated is the communicated; and the user is a participator – the user is situated in a participant user role (cf. Method).

In Figure 2, the usage situation is marked with a dotted square with rounded corners. It is dotted to show that the boundaries of the usage situation are not distinct and usually cannot be controlled by the simulator.

The relation between simulator and the simulated leads to an extension of the genre framework (cf. Table 1), with the addition of the simulative genre. This is presented in Table 2: The simulative genre.

Table : Simulative genre

Genre	The communicator*	The communicated*	Situated user role*
Didactic	Teacher	Matters mentioned	Learner*
Epic	Narrator	The told	Listener
Dramatic	Model*	The modelled*	Spectator
Simulative	Smulator	The simulated	Participant

It is a precondition of the simulative genre that the usage situation, in relation to the simulative genre compared to the didactic, epic, and dramatic genre, involves circumstances that allow the user to interact with the system.

### Genre transgression in interactive works

As mentioned in the abstract, genre transgression between basic genres (didactic, epic and dramatic) is not a new phenomenon. For instance, it is quite common in dramatic movies with an epic voiceover – beginning and ending with the didactic credits. But as stated in the research question: What characterizes genre transgression in interactive works?

Genre transgression occurs in interactive works: Take for instance an e-learning system with interactive video, such as video sequences followed by interactive choices leading to other video sequences. An example of such an interactive video is SWIM2<sup>2</sup> developed by Aalborg University Library, where the user participates as a group

member of a study group at Aalborg University (Rosenstand et al., 2004). The plot is about making interactive choices in selecting information strategies based on discussions among the members of the study group. The premise is that the better you are at using the library's resources correctly, according to the different phases of project work, the higher mark will you get at the examination. The structure is video sequences followed by three interactive choices, where a choice leads to a new video sequence and so on.

The interactive video SWIM2 is clearly a narrative simulator and belongs to the simulative genre. However, the narrative simulator is preceded by a long introduction that establishes the narrative situation – the communicated is modelled. This is done with video without the possibility of interactivity with plot, premise, or structure. In this situation it is a dramatic genre, where the user is situated as a spectator. Furthermore, it is possible to get a short introduction to each of the group members, before the long dramatic introduction. These introductions belong to the epic genre, where a voice-over is supported with pictures. Moreover, there is an explanation of how to use SWIM2, which fits the didactic genre.



Picture : The three members of the study group in SWIM2 apart from the user as the fourth participant

From a user perspective, there is a meaningful transgression of genres in SWIM2. The user of SWIM2 is taken gently through the four basic genre formats as follows:

1. The didactic genre as a learner of the purpose of SWIM2.
2. The epic genre as a listener to a voice over about the characters of the study group.
3. The dramatic genre as a spectator to an introduction to the whole study group.
4. The simulative genre as a participator of the study group.

SWIM is clearly a hybrid genre format drawing on genre transgression, where all four basic genre formats are included. The same genre progression is also often seen in other interactive works such as games that include a didactic “how to play”, an epic “introduction”, a dramatic “start”, and then the simulative “play”. Furthermore, a dramatic “outro scene” at the end of each level is quite common, just like an epic “end” at the end of the game, ending with a didactic “list of credits”.

Sometimes the genre transgression is intervened by e.g. a didactic explanation of which button to press on the joy-pad all the while the simulative interactive work is running.

Genre transgression is as mentioned not a new phenomenon. What is new is the simulative genre, framed in the same manner as the didactic, the epic, and the dramatic genre – as a relationship between the communicator, the communicated, and the situated user role. Hence, the simulative genre reflects a genre evolution, not a genre revolution. The simulative genre is added to the other basic genres presented in this article. When viewed from a user perspective, the simulative genre can transgress seamlessly with the other genre formats, without destroying or radically changing their respective frameworks.

This genre evolution is a distinct quality of the simulative genre as it is defined in this article, because the concept of the simulative genre consequently does not presuppose a reframing of the didactic, the epic, and the dramatic genre formats.

## Conclusion

So what characterizes genre transgression in interactive works? The answer is: A situated user role shifts from participant to learner, listener or spectator, including a shift in the relationship between the communicator and the communicated – that is all! The “that is all” is actually the important point in the conclusion, because it means that the simulative genre is a basic genre on a par with the didactic, epic, and dramatic basic genres.

From a practical perspective, it means that genre transgression can be used and understood in interactive works in the same manner as in linear works such as films.

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Using a multidisciplinary transgression, including the perspectives of human computer interaction, scientific simulation theory, software system architecture, and basic genre theory, the simulative genre has been framed with regard to the didactic, the epic, and the dramatic genres.

This is done without radically changing the respective frameworks of the didactic, the epic, and the dramatic genres. Hence, the simulative genre is an example of genre evolution as opposed to a genre revolution that presupposes a reframing of how conventional genres are understood. Finally, it was concluded that seamless transgression, from one basic genre to another, remained intact when the simulative genre was added to the didactic, the epic, and the dramatic genre frameworks.

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### Notes

- 1 When searching for “genre(s)” and “interactive” / “interactivities” the result is 45 peer reviewed articles. However none of them are about the transgression across the basic genres – most of the results are about e.g. E-learning, games, and interactive music as genres.  
When searching for “genre(s)” and “transgression” the result is 9 peer reviewed articles, however none of them are about interactivity.  
When searching for “genre(s)” and “participator” the result is 27 peer reviewed articles, however none of them are about interactivity.  
All the abstracts (“descriptions” in databases) have been studied, and only 3 of the 81 articles were identified as being of possible interest (Ciarlini et. al, 2009; Marian et al., 2008; Segel, 2010). However, they did not provide knowledge regarding the problem area, research question, framing, contribution, or method of this article.  
Searching for “participator” and “interactivity” results in too many search results (+ 200 peer-review articles), because the term “participator” is used in many different ways, and most articles in this search seem to be related to medical studies.
- 2 SWIM2: Stream Web-based Information Module 2:

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