Ludonarrative in Game Design Education – Cornerstones of a Program

Hartmut Koenitz
HKU University of the Arts Utrecht
Postbox 1522
3500BM Utrecht, The Netherlands
Hartmut.koenitz@hku.nl

Teun Dubbelman, Christian Roth
HKU University of the Arts Utrecht
Postbox 1522
3500BM Utrecht, The Netherlands
{Teun.Dubbelman, Christian.roth}@hku.nl

ABSTRACT
In recent years, games with a focus on narrative have been a growing area. However, so far ludonarrative aspects have not been the focus of video game education (with the noted exception of a small number of programs in game writing) which indicates that many narrative designers are self-trained. The insular status means that individual designers use private vocabulary and conceptualizations which are not directly transferable. This state of affairs is an obstacle to a productive discourse and has negative consequences for the further development of the professional field. By starting an educational program we aim to address this problem using the opportunity to also include perspectives outside of games.

Keywords
Ludonarrative pedagogy, game design education, interactive digital narrative (IDN), interactive narrative design

INTRODUCTION
Ludonarrative aspects have not been the focus of video game studies and education. During the foundational phase of the discipline, the focus was placed on game mechanics and on understanding what distinguishes games from earlier forms like the movie or the novel. In recent years, however, the growing field of narrative-focused games (e.g. Dear Esther (The Chinese Room 2008), Gone Home (The Fullbright Company 2013), Telltale Games' productions like The Walking Dead (Telltale Games 2012), The Wolf Amongst Us (Telltale Games 2013), Firewatch (Campo Santo 2016)) and Detroit: Become Human (Quantic Dream 2018) have alerted us to the possibilities of narrative expressions that embrace the affordances and unique possibilities of digital interactivity. In other words – these games do not attempt to 'interactivize' print literature or the movie, but instead explore a different and so far largely unexplored space of interactive digital narration. This development needs to be reflected in video game teaching. Yet, so far, narrative has been a stepchild in games education. Most game design degree programs feature only a single course on the topic. Our approach instead is to offer a minor concentration within a game design program, which also integrates perspectives outside of games..

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MINOR INTERACTIVE NARRATIVE DESIGN

One reason for the development of the minor Interactive Narrative Design has been the expressed need of the game industry in the Netherlands for skilled interactive narrative designers. When developing the narrative content for games, such as dialogues or storylines, game studios often rely on scriptwriters. While these master the art of creating traditional, fixed forms of storytelling, and understand the appeal of narrative experiences, scriptwriters often cannot apply their mastery in an interactive context. In contrast, game designers understand the art of interaction design, and see the appeal of interactive experiences, but often lack a deep understanding of narrative. On this professional backdrop, the minor targets game design students with an interest in designing interactive narrative experiences.

As Koenitz et al. (2016) have pointed out earlier, the interactive narrative designer finds their craftsmanship in the ability to express narrative through interaction. In other words, an interactive narrative designer understands the appeal of characters, or the importance of conflict and then must be able to apply this narrative sensibility when designing engaging player interactions. The question thus is how to turn this sensibility into concrete designs.

Two Approaches: Unlearn and Reuse

The challenge for us as educators in the minor is to first help game design students "unlearn" linear and static ways of storytelling which still dominate school education and public discourse about narrative. We do this by expanding students' understanding of narrative and raising awareness for alternatives to the dominant euro-centric forms (e.g. multi-climactic and cyclical Africa oral storytelling forms or the 'conflict-less' Asian form of Kishetenketsu).

Secondly, we train students to "reuse" their game design skills for narrative purposes. Students first need to develop a new understanding of narrative; one that is not based on established notions of storytelling, but one that understands narrative as a cognitive meaning-making process (Herman 2002; Ryan 2006). When they have acquired this alternative understanding of narrative, they can start using their skillset in a new way. For example, we ask students to design interesting narrative game mechanics (Dubbelman 2016), which invite the player to perform actions that support the construction of engaging stories and fictional worlds in the mind of the player.

In this two-step process, we turn game designers into narrative game designers; students with the ability to design game systems in such a way that meaningful narratives emerge in the imagination of players when they interact with the designed interactive systems.

The Multiple Roles of the Designer

We train the students to be a narrative artist, an interactive system designer and a vision holder (Figure 1). The skillset interactive narrative designers need to master derive from these three essential components. First, we consider them to be artists, working with interactive technologies as their medium of (self-)expression. The skills pertaining to this narrative sensibility are, amongst others, the ability to imagine and express engaging and believable characters, worlds, events and conflicts. Although they do not necessarily have to been trained scriptwriters or visual artists, they do need to be able to understand and apply the basic principles of writing and visualizing for an interactive context. Secondly, they are system designers who need to be deeply aware that their creation is a dynamic artefact that already by itself at runtime can show intricate and even unintended behaviors. Once players/interactors enter the picture, the complexity only grows. The role of the designer is to plan for these effects and embrace a role of "narrative architect" (Jenkins 2009) who sets boundaries, and offers opportunities for

meaningful interaction – the quality Murray has deemed agency. Third, as vision holder, it is the responsibility of the interactive narrative designer to facilitate the vision of an interactive narrative project and communicate about it internally with clients. This is a considerable responsibility due to the lack of standardized procedures in ludonarrartive game production. Equally, interactive narrative is often little understood by clients and the lack of an established lingo means that a considerable effort is needed to prevent misunderstandings and ensure successful communication.

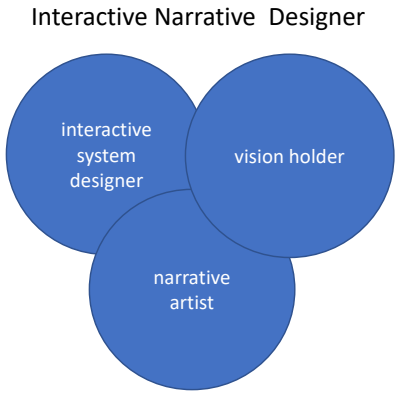

Figure 1: Triadic perspective on the interactive narrative designer

The multiple roles of the designer translate to an expanded skillset (Table 1) in eight areas: interactive narrative design principles and conventions, narrative sensibility, ideation and conception, testing, prototyping, writing (for interaction), Audio-visualizing (for interaction), communication, and dramaturgy. In each area we define three different skill levels with expected knowledge/abilities at that level. In this way both educators and students have a clear understanding where they stand and what they need to accomplish to reach the next level.

A Multidisciplinary Perspective

While our minor is located in a game design program, we do understand interactive narrative design as a cross-cutting perspective of which ludonarrative design is one variety. Consequently, we acknowledge additional forms, for instance interactive documentaries, non-game forms of VR and AR experiences, interactive art und museum installations and journalistic interactives. Our curriculum reflects this view by bringing students also in contact with these additional varieties and their design practice. For their projects, students can choose to also work on these forms, and thus work in an expanded design space. This multidisciplinary perspective also distinguishes our program from existing ones focused exclusively on game writing.

PROFESSIONAL TRAINING

Our conversation partners in the games industry are well aware of the limitations of auto-didactic knowledge in ludonarrative design, especially when it comes to recruitment, teamwork, professional development and communication with clients. Therefore, they see professional development programs as an important aspect for the development of the field, which should run parallel to the training of new recruits. Ideally, both kinds of programs would intersect at times to bring foundational education in contact with practitioners and their questions. We currently explore how to set up such a professional training program in consultation with industry partners.

Skills	Basic	Advanced	Expert
1) IDN design conventions	Student is able to recognize IDN design conventions in existing interactive narratives	Student is able to apply existing IDN design conventions in her own work	Student is able to develop new (potential) IDN design conventions
2) Narrative sensibility	Student understands the appeal of (interactive) narrative experiences and the basic components of (interactive) narrative	Student is able to apply her insight in the appeal of (interactive) narrative experiences in her own work	Student is able to apply her insight in the appeal of (interactive) narrative experiences in her own work, creating works with emotional impact
3) Ideation and concepting	Student has worked incidentally with existing tools and methods for ideation and concepting (e.g. IDN design canvas / IDN design lenses / IDN design branching cards)	Student has worked regularly with existing methods for ideation and concepting (e.g. IDN design canvas / IDN design lenses / IDN design branching cards)	Student develops new tools and methods for ideation and concepting Student develops unexpected ideas and concepts
4) Testing	Student is able to conduct existing user experience tests	Student is able to combine existing user experience tests	Student is able to develop new user experience tests
5) Prototyping	Student masters three methods for physical prototyping (e.g. paper prototyping, play prototyping, preja vu prototyping)	Student masters three tools for simple digital prototyping (e.g. Twine, Construct 3, Ren'Py)	Student masters three tools for complex digital prototyping (e.g. Unity, Unreal, Godot)
6) Writing (for interaction)	Student is able to recognize 'writing for interaction' techniques	Student is able to apply 'writing for interaction' techniques in her own work	Student is able to develop new 'writing for interaction' techniques
7) Audio-visualizing (for interaction)	Student is able to recognize the power of audiovisual (and haptic) stimulus for narrative expression	Student is able to design the audiovisual (and haptic) stimulus for narrative expression (in concept)	Student is able to develop the audiovisual (and haptic) stimulus (e.g. illustration, modelling, animation, UI, etc.)
8) Communication	Student is able to share ideas internally, supported by basic communication tools (e.g. pitch, slides)	Student is able to share ideas internally, supported by advanced communication tools (e.g. video, prototypes)	Student is able to share ideas externally (offline/online), supported by advanced communication tools (e.g. video, prototypes)
9) Dramaturgy	Student is able to keep ludonarrative coherence in the overall design of her own work	Student is able to keep ludonarrative coherence in the overall design of a small team production (as creative lead)	Student is able to keep ludonarrative coherence in the overall design of a large team production (as creative lead)

Table 1: Skillset on the interactive narrative designer

CONCLUSION

In this paper, we have described the context of our educational efforts in ludonarrative pedagogy and outlined our approach in creating a minor in interactive narrative design. We invite the community's feedback and plan to report on the results after the program has first run its course in early 2020.

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