Editorial: Interactive digital narratives representing complexity

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Editorial on the Research Topic
Interactive digital narratives representing complexity

This Research Topic provides a slice of current research on Interactive Digital Narrative (IDN), a growing field of study and a design discipline with roots going back to Buckles (1985); Laurel (1986) early PhD research in the 1980s and work on text adventures in the 1970s. The seminal work by Murray (1997) initiated continuous development in both theory and design (c.f. (Aylett, 2000; Montfort, 2003; Jenkins, 2004; Louchart and Aylett, 2004; Pearce, 2004; Louchart et al., 2008; Koenitz, 2010; Fernández-Vara, 2011; Koenitz, 2015; Koenitz et al., 2015; Dubbelman, 2016; Eladhari, 2018). IDN works manifest in different forms, with narrative-focused video games being the most well-known form to general audiences. At the same time, virtual reality/augmented reality/mixed reality works as well as interactive documentaries, and journalistic interactives are reaching increased audiences.

The most prominent outlet for IDN research is the International Conference on Interactive Digital Storytelling (ICIDS[1]) which is now in its 15th year, organized by the Association for Research in Digital Interactive Narratives (ARDIN[2]). The Research Topic is also discussed in many other places including AI-focused conferences such as the Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE[3]), the Workshop on Intelligent Narrative Technologies (INT), the Foundations of Digital Games conference series (FDG[4]), and the conference of the Digital Games Research Association (DIGRA[5]) as well as ZIPScene[6]. Variants of IDN have been discussed in the long-running conference of the Electronic Literature organization (ELO[7]), but also in the context of cinema and VR at places such as the DocLab at the International Documentary Film Festival Amsterdam (IDFA[8]), the Sundance and Tribeca Festivals and many others.

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1 https://ardin.online/conferences/icids-interactive-storytelling/.

2 https://ardin.online.

3 https://aaai.org/Conferences/AIIDE/aiide.php.

4 http://www.foundationsofdigitalgames.org/.

5 http://www.digra.org/.

6 https://zip-scene.mome.hu/#programs.

7 https://eliterature.org/.

8 https://www.idfa.nl/en/info/about-idfa-doclab.

Given the status of IND research as an interdisciplinary field of study, the questions of adequate frameworks (Koenitz and Eladhari, 2019; Koenitz, 2021), design conventions (Murray, 2011; Koenitz et al., 2018a), transhistorical approaches (Rouse and Holloway-Attaway, 2020; Holloway-Attaway and Rouse, 2022) and evaluation (Roth, 2016; Steinemann et al., 2017) are ongoing concerns. Lately, the question of ethics in the creation process (Fisher and Schoemann, 2018; Barbara et al., 2021) and of decolonialization of underlying narrative structures and other assumptions (Koenitz et al., 2018b; Silva et al., 2022) have found increased attention in part inspired by similar developments in game studies (Mukherjee, 2018; de Paula, 2021; Trammell, 2022).

The editors of this Research Topic are leading members of a network of scholars–the EU COST action INDCOR (Interactive Narrative Design for COmplexity Representations, https://indcor.eu)—that positions IDN as a means to communicate complex topics. Due to its systemic, procedural and participatory nature, IDNs have several advantages for representing and facilitating the understanding of complex phenomena. IDNs allow audiences to experience the consequences of a series of choices (e.g. in terms of environmental impact) and then to reconsider these choices through replay. In addition, IDNs can contain multiple competing perspectives that enable audiences to experience them within a single comprehensive space. With a focus on participatory forms (e.g. integrated discussion fora, organized co-creative activities, or multiple authorship), IDNs can also coordinate and organize the discourse on a complex Research Topic to accommodate many voices and perspectives.

INDCOR connects over 200 scholars from more than 40 countries and is a coordinated effort in establishing a shared conceptual framework and vocabulary (Koenitz et al., 2020), an understanding of societal impact (Silva et al., 2022), empirical evaluation methods, as well as generalized design and production methods (Perkis and Taveter, 2022). The members of INDCOR are driven by the conviction that the present challenges facing the global community including climate change, economic inequality, migration, oppression and armed conflict require novel approaches to create understanding of these highly complex topics and to foster discourse. In this sense, INDCOR positions IDN works as a countermeasure against the overly simplistic messages of populism.

The Research Topic highlights contributions to the study of IDNs as a means to address complexity as a societal challenge. The articles included in this Research Topic are described below:

In "*Epistemic rhetoric in Virtual Reality interactive factual narratives*," Fisher examines how interactive narrative, in particular using VR, can create knowledge about a non-fiction subject. Drawing attention to the inherent epistemic rhetorical aspect inherent in knowledge production, he grounds his discussion in Sophist rhetorical tactics of antithesis, enargeia, kairos, and mêtis. Fisher applies this framework to discuss the design of an IDN focused on racial injustice in the United States.

In "*Using Self-Determination Theory to Explore Enjoyment of Educational Interactive Narrative Games: A Case Study of Academical*," Grasse et al. present a study of Academical, an education-focused narrative game aimed at teaching responsible conduct in research. The authors apply Self-Determination Theory (SDT) as a means to evaluate this IDN and find that the participants of their study deemed the experience enjoyable. They discuss design

consideration and identify relatedness as a particular factor warranting further work.

In "*Interactive digital narratives as complex expression means.*" Bellini discusses IDN as complex systems and what such an understanding entails in terms of sense-making, including sensorimotor experiences. By improving knowledge about the representational capabilities and affordances of IDN, the article lays foundations for the creation of more engaging and impactful experiences.

In "*Breaking immersion: A theoretical framework of alienated play to facilitate critical reflection on interactive media*" Aeschbach et al. explore IDNs from the perspectives of player engagement, exploring how IDNS may offer unique opportunities for critical reflection for players in terms of complex representations and forms of alienated play.

In "*Narrative Self-Recreation in Virtual Reality*", Georgieva and Georgiev offer an exploration of VR and storytelling in healthcare contexts. Their research provides a theoretical proposal for playful self-construction mechanisms in immersive VR environments to create opportunities that can change one's narrative and, hence, one's real-life story.

In "*Representing Mental Disorders with Virtual Reality Applications: Designing for Multimodality and Complex Participation*" Bakk, examines VR narratives in mental health contexts and offers strategies to identify representational complexity in artistic, interactive VR experiences exploring various mental health conditions.

Author contributions

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

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