

# Exploring Videogame Design in Aca Contexts

## A Research-Creation Approach to Ideation



**Alexis Messina** - technopedagogical advisor and researcher in game studies

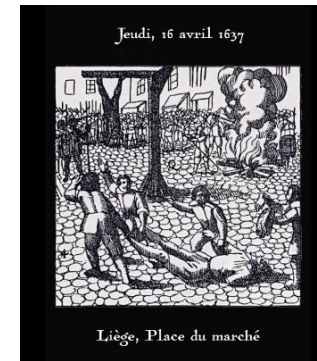
“An epistemological approach to institutional video game creation. Game ideation in an academic context as a space for negotiation.”

Supervised by Björn-Olav Dozo, ULiège; co-supervised by Sébastien Genvo, University of Lorraine. Thesis supervised at the University of Liège, Belgium.

Member of the **Liège Game Lab** (ULiège), the **Expressive Gamelab** (University of Lorraine) and the **International Association for Research in Popular and Media Cultures** (LPCM)

Coordinator of the Cytomine and Oliver.uliege.be platforms at the University of Liège, coordinator of the **Science w/ Games** unit





Established in January 2016, the Liège Game Lab brings together researchers from the University of Liège working on video games as a cultural phenomenon.



# Sars Wars, 2020-2022



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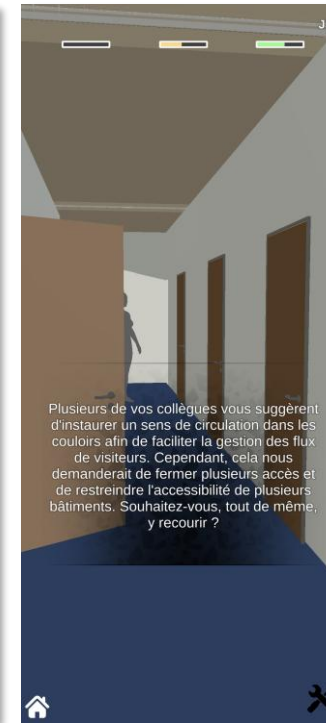
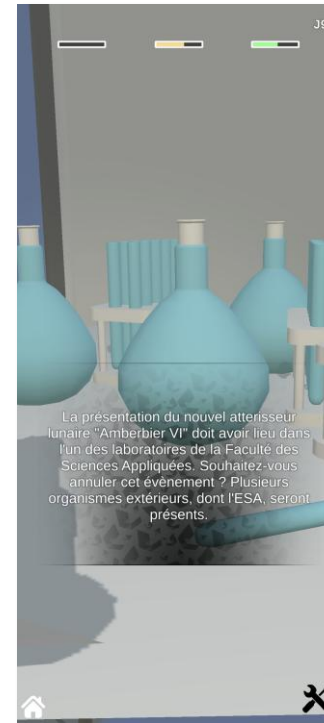
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









## Research Article | Open Access

Volume 2023 | Article ID 8205408 | <https://doi.org/10.1155/2023/8205408>

Show citation

## Developing a Video Game as an Awareness and Research Tool Based on SARS-CoV-2 Epidemiological Dynamics and Motivational Perspectives

Alexis Messina <sup>1</sup>, Michael Schyns <sup>2</sup>, Björn-Olav Dozo <sup>1</sup>, Vincent Denoël <sup>3</sup>, Romain Van Hulle <sup>4</sup>, Anne-Marie Etienne <sup>5</sup>, Stéphanie Delroisse <sup>5</sup>, Olivier Bruyère <sup>6</sup>, Vincent D'Orio <sup>6</sup>, Sébastien Fontaine <sup>7</sup>, Michèle Guillaume <sup>6</sup> and Anne-Catherine Lange <sup>6</sup> et al.

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Academic Editor: Theodore J. D. Knight-Jones

# In the footsteps of Georges Simenon, 2022-2023



**« CIRCULER » DANS LA JEUNESSE LIÉGEOISE DE SIMENON  
ENJEUX DE CRÉATION ET DE RÉCEPTION D'UN DISPOSITIF  
DE MÉDIATION, MUSÉALISATION ET PATRIMONIALISATION  
DU LITTÉRAIRE PAR LE BIAIS DE LA RÉALITÉ AUGMENTÉE**

**Alexis Messina, Sarah Radicchi  
Björn-Olav Dozo, Michaël Schyns & Benoît Denis  
Université de Liège**

[...] la littérature connaît mille et une métamorphoses quand elle sort des sentiers battus et qu'elle devient un objet culturel que d'autres espaces et institutions s'approprient. Son exposition la fait ainsi connaître à un public surpris de la trouver là où on doit désormais s'attendre à la voir. (Régnier, 2015 : 20)



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SIG Lab @ HEC**

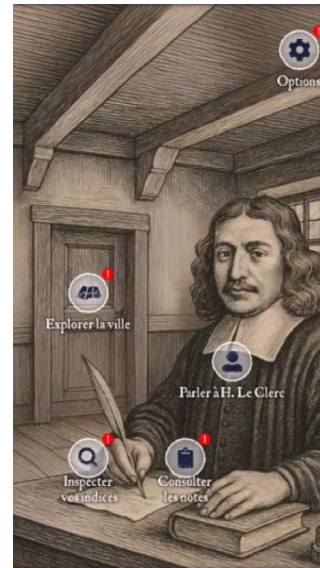
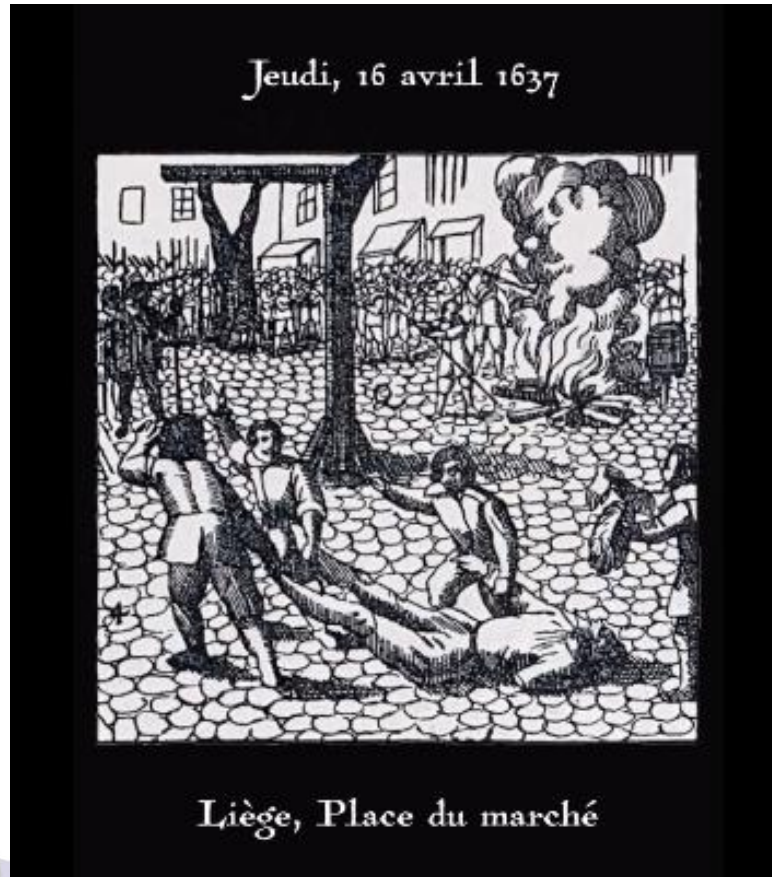
**Globule  
bleu.**

**LIÈGE GAME LAB**

**LES-VISIONS**

**Liège**

# Urban TEXTure, 2025-still in progress



## Replaying the Urban Past Cross-Disciplinary Approaches to Critically Mediating Liège's Heritage

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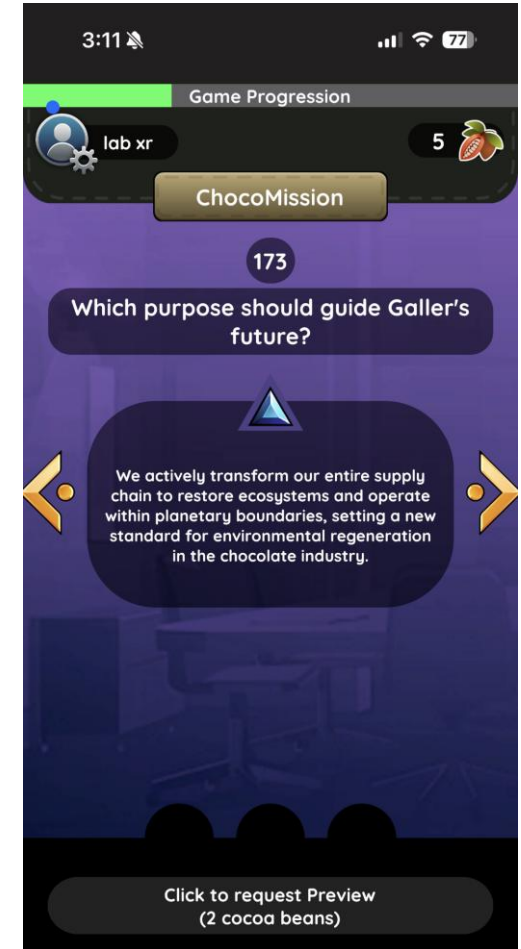
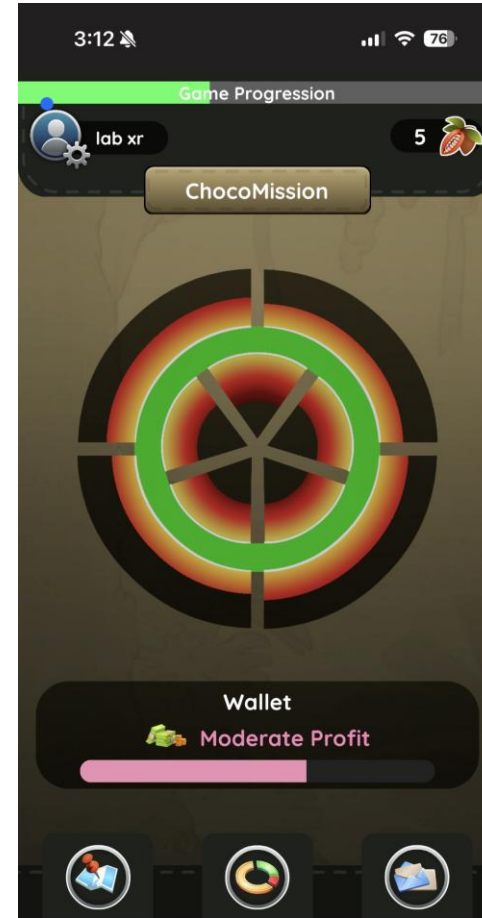
Julien Régibeau  
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This paper examines the research-creation project *TEXTure urbaine*, which aims to develop an academic video game focused on the civil conflicts in Liège during the seventeenth century, designed at the University of Liège. At the intersection of history, game studies, and knowledge mediation, it explores the video game as a tool for the production and reflexive transmission of the urban past. Drawing on the case of a real and violent political event (the so-called "assassination of Sébastien La Ruelle"), the project combines historical investigation, heritage valorisation, and game design within a collaborative framework involving researchers, students, and developers.

The study shows that the creation of the game operates through a series of translations between heterogeneous epistemologies, in which technical constraints, scientific requirements, and ludic logics jointly reshape the initial objectives. The resulting game is neither a simple act of popularization nor a direct application of historical knowledge, but a hybrid object emerging from an interdisciplinary negotiation process.



# Chocomission, 2025-still in progress



ningwithvr.uliege.be

ningwithvr.uliege.be

***Personnal approach: Game design as a situated practice***

1. Contribution to four video game projects through game design, project coordination, and consultancy, combining academic game studies expertise and specific literature with practical gaming experience

2. Collaborative game development across different expertise, requiring coordination and negotiation among contributors (and stakeholders)

3. Took place in an academic environment, which shaped the project's constraints in terms of time, resources, institutional values, and missions such as teaching and research

4. Commission to the Liège Game Lab and public funds, positioning the lab as an expert and coordinator due to the commissioners' limited videogame expertise.

5. Game development follows a specific trajectory that differs from the industry.

6. Serious games (applied games) using data and scientific literature, through simulation



# Double diachronic approach with local sub-questions



**Materials:** diagrams, game design documents, cosigned scientific articles providing a snapshot of the project at a given point in time, contracts, and scattered notes.

**No structured field diary**



# Methodology: following DiGAP + artefacts analysis



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**Maarten Denoo**

Maarten Denoo, MA in History and Communication Sciences at the KU Leuven, is a PhD Researcher at the KU Leuven (Institute for Media Studies Meaningful Interactions Lab) as of October 2020. His research focuses on the blurring boundaries between gaming and gambling in terms of design, ethicality and reception. He is also editor-in-chief at [Eurogamer Benelux](#).

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**Alexander Vandewalle**

Alexander Vandewalle is a Postdoctoral

**The Digital Game Analysis Protocol (DiGAP): Introducing a Guide for Reflexive and Transparent Game Analyses**

by Rowan Daneels, Maarten Denoo, Alexander Vandewalle, Bruno Dupont, Steven Malliet

**Abstract**

The analysis of digital games is a widely used method in the field of game studies and an important instrument to study games and game-related topics. However, existing methodological work showcases a divergency of perspectives on game analyses, hindering the development of clear guidelines on how to actually conduct them. This lack of methodological consensus is fueled further by several complexities when analyzing games, such as the active participation that is required on the part of the researchers. Therefore, the current paper proposes the Digital Game Analysis Protocol (DiGAP), a methodological toolkit that, compared to existing methodological frameworks, provides researchers with sufficient flexibility and adaptability in order to cater to a game analysis' specific focus and needs. DiGAP's goal is twofold: to make researchers reflect on the potential impact of their methodological choices on the analysis and interpretation of game content, and to promote the transparent reporting of game analyses in academic manuscripts. Based on previous methodological scholarship, the authors' prior game analysis experience and brainstorm meetings between members of our interdisciplinary author team, DiGAP consists of 31 items categorized in seven sections: (1) Rationale & objectives, (2) Researcher background, (3) Game selection, (4) Boundaries, (5) Analysis approach, (6) Coding techniques & data extraction and (7) Reporting & transparency. Due to its comprehensive setup and its reflexive nature, DiGAP may be used as a (didactic) checklist to make insights from the field of game studies regarding game analyses accessible to a broader range of research fields (e.g., communication and human-computer interaction). This, in turn, makes it equally valuable for (student) researchers unfamiliar with the method of game analysis as well as more experienced game scholars.

**Keywords:** DiGAP, game analysis, Guidelines, Methodology, Protocol, Reporting, Transparency

**Authors' Note**

Maarten Denoo (author 2) and Alexander Vandewalle (author 3) contributed equally to the realization of this paper, and are therefore shared second author.



- 1. Rationale
- 2. Objective(s)
- 3. Research question(s)
- 4. Hypotheses
- 5. Orientation/Motivation
- 6. Prior game experience
- 7. Socio-demographic background
- 8. Multiple researchers
- 9. Chosen game(s)
- 10. Rationale for game selection
- 11. Sample type
- 12. Date and place
- 13. Software version
- 14. Platform
- 15. Difficulty level
- 16. Mode(s) played
- 17. Engagement level
- 18. Mode of completion
- 19. In-game choices
- 20. Unitizing
- 21. Use of meta-ludic texts
- 22. Qualitative or quantitative
- 23. Analytical framework
- 24. Analyzed dimensions
- 25. Analysis example
- 26. Type of data
- 27. Coding method
- 28. Method of data extraction
- 29. Software for data extraction
- 30. Intercoder reliability
- 31. Open science transparency





Literature review: dense, with only few specific works addressing « uni-made games »

Game design and gamification of scientific matters

Uni-made and aca games

 **Innovate: Journal of Online Education**

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Volume 1 Article 2  
 Issue 6 August/September 2005

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9-1-2005

**Epistemic Games**

David Williamson Shaffer

Academic Games - Mapping the Use of Video Games in Research Contexts

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**frontiers in PSYCHOLOGY**

**REVIEW ARTICLE**  
 published: 09 September 2013  
 doi: 10.3389/fpsyg.2013.00607 

**Gaming science: the “Gamification” of scientific thinking**

**Bradley J. Morris<sup>1\*</sup>, Steve Croker<sup>2</sup>, Corinne Zimmerman<sup>2</sup>, Devin Gill<sup>2</sup> and Connie Romig<sup>1</sup>**

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Mapping Practices of Academic Game Development

Authors:  Tim Yeung,  Maximilian A. Friehs,  Marcello A. Gómez-Maureira | [Authors Info & Claims](#)

FDG '25: Proceedings of the 20th International Conference on the Foundations of Digital Games • Article No.: 42, Pages 1 - 11  
<https://doi.org/10.1145/3723498.3723799>

Published: 09 May 2025 [Publication History](#) 



**Literature review:** dense, with only few specific works adressing « uni-made games »

Philosophy of games

1 | 2013

30 ans de Sciences du jeu à Villetaneuse. Hommage à Jacques Henriot

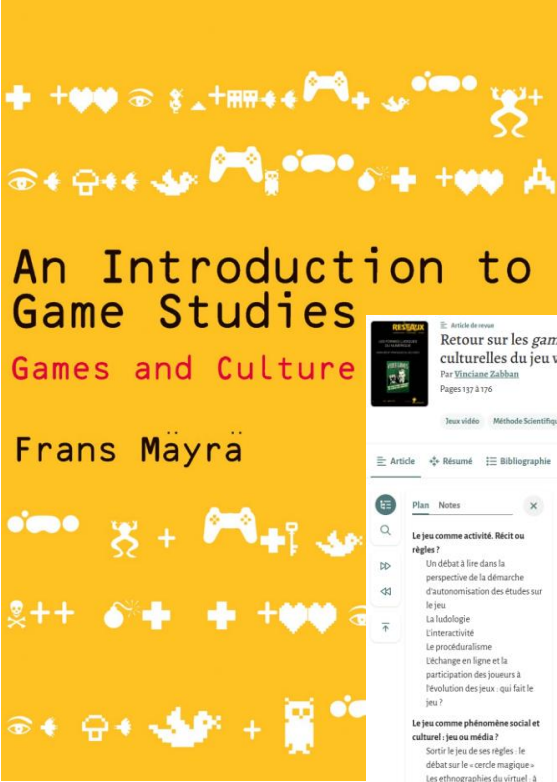


**Penser les phénomènes de ludicisation à partir de Jacques Henriot**

Sébastien Genvo

<https://doi.org/10.4000/sdj.251>

**Manifesto for a Ludic Century**  
Eric Zimmerman



Retour sur les *game studies*. Comprendre et dépasser les approches formelles et culturelles du jeu vidéo

Par Sébastien Genvo  
Pages 137 à 170

Jeu vidéo Méthode Scientifique

Article Résumé Bibliographie Auteurs/els Cité par Sur un sujet proche PDF

Plan Notes

**Le jeu comme activité. Récit ou règles ?**  
Un débat à lire dans la perspective de la démarche d'autonomisation des études sur le jeu

**La ludologie**  
L'interactivité  
Le procéduralisme  
L'échange en ligne et la participation des joueurs à l'évolution des jeux : qui fait le jeu ?

**Le jeu comme phénomène social et culturel : jeu ou média ?**  
Sortir le jeu de ses règles : le débat sur le « cercle magique »  
Les ethnographies du virtuel : à chacun son monde

**Les jeux comme dispositifs sociotechniques**  
Questionner les publics de joueurs, leurs dispositions à jouer et leurs pratiques du dispositif de jeu  
Interroger les dynamiques d'élaboration du dispositif de jeu

**Conclusion**

Si l'orgie destructrice du Shoot'em up retranscrivait l'essence de la compétition homme-contre-machine, le jeu de course était la plus pure expression de la compétition humain-contre-humain médiatisée par la machine. Impossible de discuter la victoire ou la défaite. Vous étiez simplement trop lent.

Stevens Poole, 2004, notre traduction

Les *game studies* anglo-saxonnes et les études sur le jeu francophones ont commencé à se développer en tant que champs d'études alimentés par des approches disciplinaires variées (sciences informatiques, psychologie, économie, sociologie, anthropologie, philosophie, etc.) autour des années 1990. Cette littérature est particulièrement abondante en langue anglaise, et connaît également un développement récent important dans les espaces académiques francophones. Ces travaux, qui oscillent entre l'affirmation de la constitution d'une discipline propre et le maintien d'une dynamique interdisciplinaire (Malaby & Burke, 2009), sont relativement méconnus et parviennent assez difficilement à dialoguer avec des domaines d'études qui leur sont proches. Vis-à-vis des différents champs investis par les études culturelles (*cultural studies*) par exemple, le repli excessif des *game studies* sur leur objet d'étude est critiquable. Le caractère essentialiste, confinant à un certain formalisme, des travaux qui émanent de ce champ a été souligné comme présentant un obstacle à son développement (Maigret, Glevarec, & Macé, 2008 ; Shaw, 2010). Malgré les critiques dont il est l'objet, ce champ a produit une somme conséquente de travaux, de discussions et de concepts. Les recherches actuelles en sciences humaines sur le jeu vidéo et en particulier celles qui sont présentées dans ce numéro, s'inscrivent ainsi dans un espace académique qui est peut-être imparfait, mais ne peut certainement pas être considéré comme vide, ni être négligé. Nous pensons en effet que les travaux produits dans le champ des *game studies* constituent à la fois une ressource et un cadre pour les recherches futures.

Besoin d'aide ?



## **Preliminary conclusions and trends**

Specific modalities of academic games (project design, reception)

### **Game co-creation as a site/space of negotiation, or translation (Actor-Network Theory perspective)**

Multiple forms of expertise, involving different knowledges, literacies, and epistemic frameworks

### **Simulation as axiology**

### **Ludo-utilitarian dissonance and balancing**



# Thank you for your attention!



## Contributions:

- Messina, A., Schyns, M., Dozo, B. O., Denoël, V., Van Hulle, R., Etienne, A. M., ... & Saegerman, C. (2023). Developing a Video Game as an Awareness and Research Tool Based on SARS-CoV-2 Epidemiological Dynamics and Motivational Perspectives. *Transboundary and Emerging Diseases*, 2023(1), 8205408.
- Messina, A., Radicchi, S., Dozo, B. O., Schyns, M., & Denis, B. (2024). " Circuler" dans la jeunesse liégeoise de Simenon. Enjeux de création et de réception d'un dispositif de médiation, muséalisation et patrimonialisation du littéraire par le biais de la réalité augmentée. *Traces*, 26.
- Régibeau, J. & Messina, A. Replaying the Urban Past (in press). *Cross-Disciplinary Approaches to Critically Mediating Liège's Heritage*. Actes du colloque «Respecting the Past, Conserving the Future. Metodologie, narrazioni e prospettive per la restituzione del patrimonio culturale». <https://hdl.handle.net/2268/335733>

**DIGAP:** Daneels, R., Denoo, M., Vandewalle, A., Dupont, B., & Malliet, S. (2022). The Digital Game Analysis Protocol (DiGAP): Introducing a guide for reflexive and transparent game analyses. *Game Studies*, 22(2)

**Ludo-utilitarian dissonance:** Yeung, T., Friehs, M. A., & Gómez-Maureira, M. A. (2025, April). Mapping practices of academic game development. In *Proceedings of the 20th International Conference on the Foundations of Digital Games* (pp. 1-11).

