



HAL
open science

A new display inspired by games to show what you like or don't like in PDT

Valérie Anne, C. Boninsegna, C. Frochot, Stéphane Goria, J. Landon, Serge
Mordon, C. Vicentini

► To cite this version:

Valérie Anne, C. Boninsegna, C. Frochot, Stéphane Goria, J. Landon, et al.. A new display inspired by games to show what you like or don't like in PDT. Congress Photodynamic Therapy and Photodiagnosis update, CNRS - Laboratoire Réactions et Génie des Procédés (Céline Frochot); Institut national de la santé et de la recherche médicale (Inserm) (Serge Mordon); Université de Lorraine (Muriel Barberi-Heyob), Oct 2016, Nancy, France. pp.A34-A35, 10.1016/j.pdpdt.2017.01.078 . hal-01715201

HAL Id: hal-01715201

<https://hal.science/hal-01715201>

Submitted on 26 Feb 2018

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

A new display inspired by games to show what you like or don't like in PDT

V. Anne ^{1,*}, C. Boninsegna ², C. Frochot ³, S. Gorla ⁴, J. Landon ⁵, S. Mordon ⁶, C. Vicentini ⁶

¹ Hôpitaux privés de Metz, Metz, France

² Université de Lorraine, Nancy, France

³ LRGP CNRS-UMR7274, Université de Lorraine, Nancy, France

⁴ Laboratoire CREM – Université de Lorraine, France

⁵ Université de Nice Sophia-Antipolis, France

⁶ ONCOTHA1, INSERM U1189, Lille, France

The data visualization is a research area both old and growing [1–3]. For a long time it has played an important role in decision support [4]. Thus, many techniques have been developed to help identify, sort and analyze information in a decision-making [5]. The potential of games for non-fun activities, including data visualization, has been neglected for many years. But since the 2000s and the development of serious games [6], new kinds of communication tools such as the advergaming [7], newsgames [8] and political games [9] have been proposed. Similarly, another design approach, inspired by the game, outcome areas of Computer Science and Management science, emerged in the mid-2000s. It refers to the idea of a transformation process of activities or tools by an addition of elements used in game design [10,11]. These changes of thought for the design of some communication tools have enabled the development of new mediums including for data collection. Nevertheless, this kind of information visualization for the purpose of communication in contexts of strategic thinking and scientific and technical information is still little used.

In order to understand the weak and strong points of PDT, we want to address in this presentation two new data display inspired by the game. Through these, we propose to look differently the PDT positioning by comparing the treatment by PDT to a reference treatment, for mesothelioma and actinic keratosis. Surveys have been elaborated and sent to clinicians. The results will be presented using one mapping inspired by a video game and another inspired by a board game. They allow thinking differently the strengths and

weaknesses of the PDT from its perception among its current and potential practitioners.

References

- [1] J. Bertin, *Sémiologie graphique - Les Diagrammes, Les Réseaux, Les Cartes*, Editions Gauthiers-Villars, Paris, 1967.
- [2] S.K. Card, J.D. Mackinlay, B. Scheinerman, *Readings in Information Visualization: Using Vision to Think*, Morgan Kaufman Publishers, San Diego, 1999.
- [3] A. Carusi, A. Sissel Hoel, *Visualization in the Age of Computerization*, Routledge,
- [4] S. Chauvin, *Information and Visualisation: Enjeux, recherches et applications*, Cépaduès, Toulouse, 2008.
- [5] M. Ward, G. Grinstein, D. Keim, *Interactive Data Visualization: Foundations, Techniques, and Applications*, A.K. Peters Ltd., 2010.
- [6] J. Alvarez, D. Djaouti, *Introduction au Serious Game, Questions Théoriques*, Quercy, 2014.
- [7] S. Santiwongkarn, *Advergame: Advertising Through the Online Game*, Faculty of Journalism and Mass Communication, Thammasat University, 2011.
- [8] G.A. Seabra, L.A. Santos, *NewsGames-Applied General Theory of Games Based News: Creating the Foundations Narratives of a New Online Journalism Model*, Geraldo A. Seabra, 2015.
- [9] J. Neys, J. Jansz, *Political Internet games: engaging an audience*, *Eur. J. Commun.* 25 (3) (2010) 227–241.
- [10] K. Kapp, L. Blair, R. Mesch, *The Gamification of Learning and Instruction Fieldbook: Ideas to Practice*, Wiley Editions, San Francisco, 2014.
- [11] G. Zichermann, J. Linder, *The Gamification Revolution: How Leaders Leverage Game Mechanics to Crush the Competition*, McGraw-Hill, New York, 2013.

<http://dx.doi.org/10.1016/j.pdpdt.2017.01.078>