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Nelson Zagalo

Engagement Design

Designing for Interaction Motivations



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Dedicated to

Diana and Pedro

Foreword

Imagine yourself as a skilled skier, having come off the lift, now advancing to the beginning of the slope. You scan the slope ahead, knowing that in moments you will be speeding across the snow. Your body dodging and weaving, maintaining speed and posture, and your spirit soaring. You are both freed from your everyday existence yet tied to the world through the textures of the snow, some powdery, some packed and slick, as your feet glide over and through them, their familiar sounds and vibrations guiding you almost unawares.

People often say that such moments are among the best of their lives. Whether we participate in sports, play games, visit museums or take our families to the park or the beach, we go to great lengths to craft engaging experiences for ourselves. And designers of interactive technologies have heard the message.

For the past two decades, fields such as HCI, interaction design, video game design, digital media production and more have increasingly focused on designing engaging experiences. Recognizing that usability is not enough, and that good interaction is grounded in purpose, meaning and value—not features—developers of interactive communications have pushed for better experiences.

Yet, good experiences are not easy to design. They are ephemeral and intangible. They are difficult to define, let alone model—at least in a way that captures what really matters about them. Speaking as a professor of experience design, a designer and a consumer, great experiences all too often seem to slip out of my grasp, and design efforts too often come up short.

Academic efforts to understand *experience* have unfolded throughout the disciplinary spectrum. Engaging experiences have been variously framed as a scientific endeavor, an aesthetic practice and an outcome of art and design, and theorized in psychology, philosophy, media studies, cybernetics, design, literary criticism, anthropology, video games, information science, semiotics and more.

The result has been a bewildering proliferation of theoretical vocabularies, frameworks, systems, theories, methodologies and practices. Often apparently contradicting or incommensurate with one another, and lacking clear entry points and design implications, this body of interdisciplinary theory can be difficult to use for the practitioner.

viii Foreword

Nelson Zagalo's Engagement Design: Designing for Interaction Motivations is a welcome and timely response to this challenge. It offers a readable yet authoritative synthesis of the art, science and design of engaging experiences. It offers both the foundations of engagement design across a range of disciplines and a highly original synthesis of them. The book demonstrates that despite their vast terminological and methodological differences, the various theorizations of engagement can be integrated.

And like the best of such integrations, Zagalo's final framework is easy to learn and apply, while having an extraordinary depth. Zagalo proposes that engagement can be understood in relation to three "streams": progression, expression and relation. Progression captures the purpose of interactions—the temporal unfoldings of competencies into actions into realized goals. Expression captures the creative, playful and enacted dimensions of engagement. Relation captures the ways that artifacts, contexts, the concrete, our minds and our emotions are composed in engaging experiences.

I have introduced the core contribution in a few sentences, and yet each gracefully unfolds into a resource of tremendous depth. The game Othello was long marketed as "minutes to learn but a lifetime to master". Zagalo's book might be similarly described as fast to get into, but complex to savor and reflect—perhaps not surprising, given its author's career as a game researcher and designer himself.

As such, *Engagement Design* belongs on the bookshelf of every UX practitioner, video game designer and media artist. It will serve as an outstanding textbook for both undergraduate and graduate courses in interaction design.

This is a book with both science and soul. It is at once erudite and practical. I have no doubt that like me, you will find it thoroughly engaging.

IN, USA 2019 Jeffrey Bardzell

Acknowledgements

This book is the result of a collective adventure, involving not only dozens of fellow researchers and scholars, but various institutions that have backed me throughout this whole project, a project that took too much time to finish, for which I can only blame myself.

Therefore, I need to start by thanking my former colleagues, Adérito Marcos and Pedro Branco, who I met at the Computer Graphics Center at the University of Minho, where together we founded the laboratory engageLab. Their work and multidisciplinary approach were instrumental in creating a space for intellectual growth. With the departure of Adérito Marcos to the Open University, an even more intense period of collaboration with Pedro Branco began, which would dictate a strengthening of the domain of Human–Computer Interaction and would become one of the main foundations of this book.

With so much knowledge and material, I needed a push to force me to reflect on it all. This eventually arose from the need to confront these ideas, prompted by the invitations to present keynotes at conferences. In this way, this book is also the result of the people who invited me, instigated and led me in selecting the multiple paths possible. I would like to thank Guilhermina Miranda (TicEduca), Ana Amélia Carvalho (EJML), Ernesto Filgueiras (UBIGames), Álvaro Barbosa de Sousa (ErgoTrip), Iris Pereira and Altina Ramos (DigiLitEY) and Pilar Lacasa and Félix Ortega (AE-IC VI).

My passage through Communication Sciences at the University of Minho offered me a set of perspectives that eventually dictated much of what this book has become. Similarly, the return to my Multimedia cradle, at the University of Aveiro, would eventually create the final climate needed to finish this work. Thanks to all of my former colleagues from the Department of Communication Sciences at UM and all my current colleagues from UA at the Department of Communication and Art and the DigiMedia—Digital Media and Interaction.

This list would not be complete without the many students—Ph.D., Masters and Bachelors—whom I've met over the years and with whom I have discussed and challenged my concepts. All were very important because some were enthusiastic

x Acknowledgements

and offered me examples that I ended up using here, others who were less surprised by my approaches eventually forced me to go further.

Engagement Design has gone through a blind peer-review process that has ensured relevant feedback, but also in its final phase it has benefited immensely from the revisions and discussions with David Callahan and Jeffrey Bardzell, which have helped to complete it. To all, colleagues and academics, my great thanks, in particular, to Jeffrey for the kindness of writing the Foreword.

Finally, a great thank you for the affability of Helen Desmond, the Springer editor, who turned out to be a key player in this whole process, from my first contact to publication.

Of course, none of this would have been possible without a deeply friendly woman by my side, Filipa, and two magnificent children, Pedro and Diana.

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About the Author

Nelson Zagalo has a Ph.D. in Communication Technologies with a thesis on the convergence of cinema and virtual reality, for which he developed affective and interactive design experiments. When young, he studied in the areas of STEM and entered university to study engineering, because it was the best shot for future employment. But at the same time, and self-taught, he studied what he loved most: cinema and all its ramifications in philosophy and psychology. Eventually, he dropped out of engineering, seeking to follow cinema, but ultimately graduating with a Ph.D. about cinema and new technologies. He always believed that the ideal world rested in the fusion between art and technology, between science and humanities, but today he prefers to accept that there are different ways of being in life, and that if there is a fringe that loves to make these bridges, not everyone can, wants to or needs to do it.

In 2009, he created the engageLab Laboratory and the Portuguese Society of Videogame Sciences. In 2014 he invented the Bridging Book patent, and in 2018 he launched the open access *Journal of Digital Media & Interaction*. In between, he wrote two books—*Interactive Emotions* (2009) and *Videogames in Portugal* (2013); edited more than 20 books, proceedings and journal special issues; and published over a hundred peer-reviewed papers. He has always dedicated himself to multidisciplinary working, bringing together computing, design, communication, arts and psychology. He is Associate Professor at the University of Aveiro and Scientific Coordinator of DigiMedia—Digital Media and Interaction Research Centre.

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