

New Interpretations of Value

transcending 'arbitrary economics' through game design

Games Philosophy Conference Submission

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With an estimated global audience of 1.9 billion* and revenues expected to exceed over \$100 billion in 2017*, the popularity, reach and influence of video games in the 21st century is hard to ignore. In 1938, Dutch historian and cultural theorist Johan Huizinga wrote "In play there is something "at play" which transcends the immediate needs of life".

The cognitive and cultural impact of games for the *internet generation* is happening – right now. Young people are choosing to spend their time and money on video games. Games industry professionals are now required to address the challenge of how to make games culturally and socially accessible to a truly global audience, with Asia, where half of the world's video gamers reside, experiencing +15% year-on-year growth in 2015*.

Games represent a unique proposition, not only as a tool to facilitate play among a diverse range of people, but also as a way to challenge the way *value* is perceived and dealt with in *economic theory*. Regardless of whether players are engaging in a *real-world* sport, a *physical* card-game or a *digital* experience, games are unique in the sense that the *value* generated within exists only in the minds of the players, and is wholly non-material.

The transcendence described by Huizinga is perhaps why Albert Einstein, an avid chess player, claimed that "games are the most elevated form of investigation".

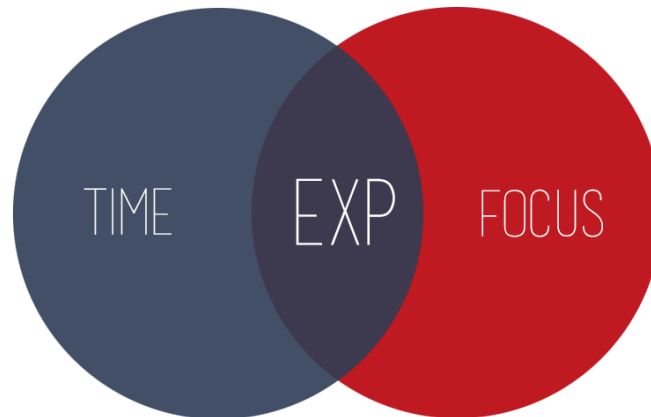
The wholly-non material value which games so effectively illuminate, is now poised to form the basis of a broader and less arbitrary approach to *economic theory* and *value generation*. Once players begin to appreciate the value of their time, other, more *qualitative values* begin to emerge based on an individual's particular approach to problem-solving - such as experience, focus and social interaction.

Value	Category
Numerical Currency	Quantitative
Time	Quantitative
Information	Quantitative
Experience	Qualitative
Focus / Engagement	Qualitative
Social Interaction	Qualitative

While *quantitative value* forms the basis for *money* and *time*, it is *qualitative value* that forms the basis for fluid, non-arbitrary currencies, such as *focus* and *experience*.

In the *internet era*, information is no longer a qualitative value, but quantitative. The scale of information available, its accessibility and ubiquity, means that 'knowing' something no longer holds the same value as it did in the past. Students no longer carry dictionaries or encyclopedias to school. The 'memory model' of education is rapidly fading. It's no longer *what* you know that is valuable (anyone can know anything at any time), but how you choose to cognitively process that information, and turn it into action.

Games are, by their very nature, experiential. Players learn by *doing*. It is their combination of TIME and FOCUS that results in their EXPERIENCE, helping them to tackle greater and greater challenges within any given game.



*Fig 1: The qualitative value of **EXP** (experience) is the result of an individual's subjective **time** (quantitative) and **focus** (qualitative).*

Mathematician John Nash (1928–2015) was keenly aware of the potential for *game theory* to be applied within the field of economics. His Ph.D. dissertation published in 1950, contained the 'Nash equilibrium', a *non-cooperative* model of human behavior, in which players are always assumed to act in their own self-interest.

It was Nash's 'prisoner's dilemma' that was applied throughout the Cold War by the United States, helping to guide nuclear strategy, arms acquisition and communication with the Soviet Union. In Adam Curtis' documentary, 'The Lonely Robot' (BBC, aired 18 March 2007), Curtis concluded that the only people who behaved according to Nash's models were economists themselves - and psychopaths.

The scope of games - their capacity for freedom and their limitations - form the basis for human behavior within any particular system - be it social, economic, psychological or political. Systems that fail to recognize emotional or social value create a mechanical basis for human interaction.

The root of challenges facing the world today stem from a view of human nature in which monetary value forms the basis for human action, and where competition is regarded as most natural state of human existence.

'New Interpretations of Value' will attempt to address these challenges - with applicable ideas of how games can provide new models of interaction - transcending *arbitrary economics* - and providing a broader understanding of value - both on an individual and collective level.