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DEPICTING THE HUMAN RELATIONSHIP TO NATURE AND CULTURE: TRANSACTIONALITY AND THE *HOMO ECONOMICUS*

V.P.J. Arponen

Abstract

This article examines the issue of the depiction of the human relationship to culture and nature in games via a philosophical exploration of how similar issues have been depicted and debated in anthropology and archaeology as well as in environmental history. In recent years, parallel investigations of the representation of colonialist themes, and along with that the representation or indeed misrepresentation of race, traditional societies and other cultures more generally, have been much discussed in the tabletop and other games media and scholarship. This article contends that, while games scholarship has rightly recognized and documented the reproduction of colonialism in particular in tabletop games, there appears to be no comparable level of awareness that games typically cast the human relationship to anything in the game environment—other players, nature—as a transactional, means-ends relationship, which can have harmful effects and represent peculiarly modern rather than universal human preoccupations. A philosophical exploration of the history of such transactional depictions in the so-called *homo economicus* conception, social Darwinism, as well the examples from environmental history, will be offered to illustrate the arguments.

Keywords

board games, digital games, decolonial games, environmental games, transactionality, nature, homo economicus, colonization, philosophy

This article examines the issue of the depiction of the human relationship to culture and nature in games via a philosophical exploration of how similar issues have been depicted and debated in anthropology and archaeology as well as in environmental history. In recent years, parallel investigations of the representation of colonialist themes, and along with that the representation or indeed misrepresentation of race, traditional societies and other cultures more generally, have been

much discussed in the tabletop and other games media and scholarship.¹ Alongside colonialism and race, reflective, self-critical engagement with the representation of any number of topics from gender to brutality, conflict, and war in (war)games have been receiving increasing coverage.²

These debates may be an expression of something of a counterculture of national and international cultural self-examination responding to resurgent nationalist, populist, racist, and bigoted rhetoric that is currently audible and visible in European and Anglo-American politics and media in a manner perhaps not seen in generations. Be that as it may, probing into representation, misrepresentation, and under-representation can be beneficial in many different ways. Most obviously and importantly, such probing can foster fairness and equality, a more welcoming gaming community. It can also foster more reflective and creative game design. The present article hopes to contribute to the discussion by an examination of selected topics from anthropology, archaeology, and environmental history.

As disciplines, anthropology, archaeology, and environmental history have a longer history of wrestling with their treatment of other, pre-modern, traditional cultures and groups as well as their relationship to the environment. Anthropology studies the development of human culture in different times and places and archaeology is the science of the study of societies and groups of which no written evidence remains. Environmental history studies the historically changing forms of the human relationship to nature. Each discipline is, therefore, essentially concerned with the representation of other cultures, peoples and places than those known to the modern observer in their relationship to other cultures and peoples and to the environment. The history of that representation bears witness to a number of interesting debates that have a relevance for the game design community today.

My perhaps somewhat provocative contention will be that, while games scholarship has rightly recognized and documented the reproduction of colonialism in particular in tabletop games, there appears to be no comparable level of awareness that games typically cast the human relationship to anything in the game environment—other players, nature—as a *transactional, means-ends relationship*. Such a portrayal, however, has consequences for pretty much analogous reasons to why reproduction of colonialism has consequences: it normalizes and universalizes conceptions and attitudes about these relationships that can have harmful effects and that arguably represent peculiarly modern rather than universal human preoccupations. A philosophical exploration of the history of such transactional depictions in the so-called *homo economicus* conception, social Darwinism, as well the examples from environmental history, will be offered to illustrate the point. In

¹ E.g., Aaron Trammell, *Repairing Play: A Black Phenomenology* (MIT Press, forthcoming in 2023); "Colonialism: The Board Game Struggle," *No Pun Included*, 2021, <https://www.youtube.com/watch?v=VQuFSxs9VXA>; Luke Winkie, "The Board Games That Ask You to Reenact Colonialism," *The Atlantic*, 2021, <https://www.theatlantic.com/culture/archive/2021/07/board-games-have-colonialism-problem/619518/>; Cornel Borit, Melania Borit, & Petter Olsen, "Representations of Colonialism in Three Popular, Modern Board Games: *Puerto Rico*, *Struggle of Empires*, and *Archipelago*," *Open Library of Humanities* 4, no. 1 (2018); Bruno Faidutti, "Postcolonial Catan," *Faidutti.com*, 2017, <https://faidutti.com/blog/blog/2017/06/02/postcolonial-catan/>; Nancy Foasberg, "The Problematic Pleasures of Productivity and Efficiency in *Goa* and *Navegador*," *Analog Game Studies* 8, no. 2 (2016), <https://analoggamestudies.org/2016/01/the-problematic-pleasures-of-productivity-and-efficiency-in-go-and-navegador/>; Greg Loring-Albright, "The First Nations of *Catan*: Practices in Critical Modification," *Analog Game Studies* 8, no. 2 (2015), <https://analoggamestudies.org/2015/11/the-first-nations-of-catan-practices-in-critical-modification/>; and Mary Flanagan, *Critical Play: Radical Game Design* (MIT Press, 2009).

² Liz Davidson & Patrick Rael, "Episode 64: Patrick Rael on Gaming Difficult History," *Beyond Solitaire*, 2022, <https://beyondsolitaire.buzzsprout.com/1091807/9894117-episode-64-patrick-rael-on-gaming-difficult-history>; Giame Alonge, "Playing the Nazis: Political Implications in Analog Wargames," *Analog Game Studies* 9, no. 3 (2019), <https://analoggamestudies.org/2019/09/playing-the-nazis-political-implications-in-analog-wargames/>; Rob Zacny, "Games Have Always Tried to Whitewash Nazis as Just 'German Soldiers,'" *Vice.com*, 2019, <https://www.vice.com/en/article/games-have-always-tried-to-whitewash-nazis-as-just-german-soldiers/>; Devin Wilson, "The Eurogame as Heterotopia," *Analog Game Studies* 8, no. 2 (2015), <https://analoggamestudies.org/2015/11/the-eurogame-as-heterotopia/>

the examples covered, contrary to the depiction in games, transactionality cannot be thought of as a universal human stance to our surroundings but, once again, must be seen to reflect certain historically situated conceptions that games, perhaps unwittingly, transmit to new generations of gamers.

The transactional depiction of human relationships in games can also have implications for sexual relationships, particularly in terms of how they frame and normalize certain attitudes and behaviors related to sexuality. Additionally, if games frame sexual relationships as primarily focused on physical pleasure and gratification, this can reinforce narrow and limited conceptions of sexuality and intimacy and is when the use of toys such as dildos and others are used often in intimacy. It can also contribute to the stigmatization of certain sexual preferences or identities and reinforce negative stereotypes or biases.

However, drawing partly from the work of the philosopher of games C. Thi Nguyen, and partly from anecdotal evidence from the hobby, the paper concludes that the situation is nevertheless “half as bad” given that there is scope and manifest desire to explore alternatives transactionality in game design and that gamers, arguably, typically play games, both, following hard as well as soft incentives as players play games for the sake of the activity itself rather than to strictly adapt the ends the game worlds posit.



Figure 1: Ralph Albert Blakelock. Public Domain image courtesy of The Met.

The “Economic Man”

Let us begin with a look at the concept of *homo economicus* and the surrounding conceptual landscape, then investigate its appearance in games.

One of the foundational modern philosophers, John Stuart Mill (1806-1873), famously put forward a view of the human being as an “economic man”, that is, “a being who desires to possess wealth, and who is capable of judging the comparative efficacy of means for obtaining that end.”³ This concept of the human being became to be referred to as *homo economicus* and has informed, among others, economists’ thinking about and modelling of human economic behavior.⁴

In archaeology and anthropology, the concept of the *homo economicus* made sense to, and informed, a number of research traditions.⁵ One tradition viewed the human being in biological and social evolutionary terms as an organism that was naturally—biologically—driven to seek a maximum adaptation to its environment which would enhance its reproductive success.⁶ Early social evolutionarism equated higher level of energy extraction and use—a larger overall energy budget—with higher levels of adaptation devising a three-stage scheme of adaptation from primitive hunting and gathering, via herding and pastoralism, to sedentary civilizations. Being a *homo economicus*, and being orientated to the maximum or optimal adaptation to the environment, was thereby cast as a natural human drive. Not just hard biological drives, but also human culture and political strategies, and the traits they implied, could be conceived as socio-cultural traits that promoted evolutionary fitness—that is, culture was defined as “extrasomatic means of adaptation” as one of the most influential American archaeologists of the 20th century, Lewis Binford, put it.⁷ Classically, this scheme was implemented in the now-rejected cultural evolution theory of stages of development, yet it is a scheme that, however, continues to be replicated in contemporary civilization building games almost one to one.

The evolutionary stages model is reproduced in civilization games in the depiction of human cultures as processing from simpler, lower economic complexity forms towards more and more complex ‘engines’ with an intensifying resource throughput as the game progresses—this corresponds one to one to the cultural evolutionary model in archaeology.⁸ It is, after all, a classic game trope that games involve the gradual building up of the economic engine through the in-game acquisition of technologies and other advances. Games like *Through the Ages*⁹ sets up the player on a trajectory from humble beginnings towards a complex society, increasing their productivity through technological and other advances as they go. In actual history, of course, that concept of being more advanced, having reached a higher stage, would be used to justify the mistreatment of “primitive” peoples thought not to have yet reached higher stages of evolutionary development.

In digital games, the classic *Civilization* franchise, and others that followed, made the concept of the “tech tree” second nature to millions of players in our thinking about human civilization.¹⁰ Similar trees, whether abstract or concrete, can be found in most economic tabletop games. In the cultural

³ John Stuart Mill, *Essays on Some Unsettled Questions of Political Economy* (John W. Parker, 1844).

⁴ Joseph Persky, “The Ethology of Homo Economicus,” *Journal of Economic Perspectives* 9, no. 2 (1995): 221–231.

⁵ Richard Blanton & Lane Fargher, *Collective Action in the Formation of Pre-Modern States* (Springer, 2008). See Chapter 2.

⁶ Elman Service & Marshall Sahlins, *Evolution and Culture* (University of Michigan Press, 1960).

⁷ Lewis Binford, “Archaeology as Anthropology,” *American Antiquity* 28, no. 2 (1962): 217–225.

⁸ Michael Rosenberg, “Pattern, Process, and Hierarchy in the Evolution of Culture,” *Journal of Anthropological Archaeology* 13, no. 4 (2009): 307–340.

⁹ Vlaada Chvátil, *Through the Ages* (Czech Games Edition, 2006).

¹⁰ Tuur Ghys, “Technology Trees: Freedom and Determinism in Historical Strategy Games,” *Game Studies* 12, no. 1 (2012), https://www.gamestudies.org/1201/articles/tuur_ghys.

evolutionary literature, the parallel is how evolution would be thought of “in the shape of a climbing vine—not a tree, for there is no trunk, no ‘main line.’”¹¹ With a vine, you can have horizontal development of a multitude of forms, and parallel to that, the growth of some of those forms vertically to new heights. For the 1960s cultural evolutionarists, vertical growth was defined by increasing energy throughput equated with more complicated organization and specialization in society. This is a concept that we can, I think, readily recognize in our civ game tech trees: each higher level achieved requires a progressively higher level of expenditure, but unlocks more and more capable units and other developments such that, overall, the energy throughput increases.

Related to this is the concept of the so-called 4X-games, the eXplore, eXpand, eXploit, and eXterminate framework.¹² Again, as noted above, in the 1960s literature, evolutionary advancement was described in terms of the cultural system’s increasing energy extraction and expenditure. A part of this would be the geographic expansion of human activity. In 4X-games, that idea is realized in the drive to explore and expand to then build up controlled areas to produce more effectively, such as one might, say, deforest, irrigate, and build roads and railways onto land tiles surrounding your city in a civilization game.

While this sort of expansionism and endless accumulation is perhaps most intuitively associated with Capitalism, also the Marxist tradition and critical theory could make sense of the homo economicus, but this from the points of view of enduring class conflict and power relations. Historical materialism viewed the human being as essentially a productive being (not unlike in the social evolutionary tradition), but emphasized that the productive activity would always need to be a social activity and thus reflect the prevailing mode of sociopolitical organization of production.¹³ By the 1970s, Marxism had come to be considered too ‘economically deterministic’ in how it portrayed the driving forces of historical change.¹⁴ As such, Marxism had no particular disagreement with Max Weber’s account of early capitalism and the ‘protestant ethic’ focused upon accumulation for the purposes of a reward *in the life after*—which, in the course of secularization, elevated accumulation-for-its-own-sake as the greatest good as the religious background waned.¹⁵ This accorded very well with how Marx defined capitalism as essentially a system of private property and showed, how profit interest and accumulation practices would snowball, both conceptually and as a historical matter of fact, from that basic premise.¹⁶

Marx-inspired theorists, such as the influential social theorist Pierre Bourdieu,¹⁷ proposed that the human being could be understood, not merely as an accumulator and user of *economic* capital, but also as that of *cultural and social* capital. Around the same time, one of the leading archaeologists of Europe, Kristian Kristiansen, proposed a model of Neolithic and Bronze Age power structures as focused on the accumulation and use of *prestige* to gain and use *power*.¹⁸ In a similar manner, in anthropology, the concept of ‘social signaling’ has been used to designate the deployment of social

¹¹ Service & Sahlins, *Evolution and Culture*, 16.

¹² Dom Ford, “‘eXplore, eXpand, eXploit, eXterminate’: Affective Writing of Postcolonial History and Education in *Civilization V*,” *Game Studies* 16, no. 2 (2016), <https://gamestudies.org/1602/articles/ford>.

¹³ Karl Marx & Friedrich Engels, *The German Ideology* (International Publishers, 2007).

¹⁴ Richard D. Wolff & Stephen A. Resnic, *New Departures in Marxian Theory* (Routledge, 2006); Louis Althusser, *For Marx*, translated by Ben Brewster (NLB, 1977).

¹⁵ Max Weber, *Die protestantische Ethik und der Geist des Kapitalismus* (1905).

¹⁶ Jonathan Rey Lee, “Capitalism and Unfairness in *Catan: Oil Springs*,” *Analog Game Studies* 4, no. 2 (2017), <https://analoggamestudies.org/2017/03/capitalism-and-unfairness-in-catan-oil-springs/>.

¹⁷ Pierre Bourdieu, *Outline of a Theory of Practice* (Cambridge University Press, 1977).

¹⁸ Kristian Kristiansen, “Ideology and Material Culture: An Archaeological Perspective,” in *Marxist Perspectives in Archaeology*, edited by Matthew Spriggs (Cambridge University Press, 1977). See also Kristian Kristiansen, “Decentralized Complexity: The Case of Bronze Age Northern Europe,” in *Pathways to Power: New Perspectives on the Emergence of Inequality*, edited by T. Douglas Price, & Gary M. Feinman (Springer, 2010).

and cultural force to steer and manage communal affairs.¹⁹ In contemporary sociology, the status construction theory is based on similar principles.²⁰ In our recent intellectual history, we find influential applications of parallel ideas in accounts of personal identity as involving shifting projections of such immaterial forms of capital.²¹ Arguably, what was achieved in these conceptions was not the abolition of the *homo economicus* as much as that the 'currency' or 'currencies' with which the *homo economicus* operated shifted from pure material and economic accumulation to, so to speak, *immaterial* accumulation of cultural and social capital, power and prestige. Post-modern theory would adopt this modified but originally Marxian view arguing that reality is essentially shaped by "regimes of truth" (Foucault), that is, linguistic, conceptual, and other "discursive constructs" that dictate what is possible to say and think.

While the conception of the currency involved may have changed from economic to social and cultural capital,²² the basic concept of transactionality of human relationships remained arguably untouched. Perhaps accordingly, the gamification of human social relations in games like *Obsession* (Dan Hallagan, Kayenta Games 2018) has been able to use familiar mechanical forms. That said, we can find ambitious thematic and mechanical hooks in games with implicit Marxian social constructivist leanings in games, as Dan Thurot (2021) has recently demonstrated in a series of article on the game Root (Cole Wehrle, Leder Games 2018).²³

What other critiques of the "economic man" do we find in the academic literature? In anthropology, an early reaction to the *homo economicus* concept came from the famous anthropologist Bronislaw Malinowski (1884-1942). From 1914, Malinowski conducted anthropological fieldwork in the Trobrian Islands, in Melanesia, and published the results in his acclaimed *Argonauts of the Western Pacific*.²⁴ In the book, Malinowski argued that "[a]nother notion which must be exploded, once and for ever, is that of the Primitive Economic Man of some current economic textbooks". Describing this hypothetical being as "prompted in all his actions by a rationalistic conception of self-interest, and achieving his aims directly and with the minimum of effort", Malinowski argued in contrast that the peoples he studied work from "motives of a highly complex, social and traditional nature."²⁵

Similarly, in his classic *The Gift*, the French anthropologist Marcel Mauss stated that "[i]n the economic and legal systems that have preceded our own, one hardly ever finds a simple exchange of goods, wealth, and products in transactions concluded by individuals"—rather, an exchange occurs between collectives of various kinds ("clans, tribes, and families"), and "what they exchange is not solely property and wealth" but what Mauss described as "acts of politeness."²⁶

Another classic critique of the *homo economicus* was put forward by the modern classic anthropologist Marshall Sahlins in the 1970s (yes, the same Sahlins who in the 60s had been a key

¹⁹ Paul Roscoe, "Social Signaling and the Organization of Small-Scale Society," *Journal for the Archaeological Method and Theory* 16, no. 2 (2009): 69–116; H. Gintis, S. Bowles, R. Boyd, & E. Fehr, eds., *Moral Sentiments and Material Interests: The Foundations of Cooperation in Economic Life* (MIT Press, 2005).

²⁰ Cecilia L. Ridgeway, *Status: Why Is It Everywhere? Why Does It Matter?* (Russel Sage, 2019).

²¹ See Zygmunt Bauman, *Liquid Modernity* (Polity Press, 1999) for one of the most influential theorists.

²² Compare with Farah Qureshi, "Simulating the Community Bank: Postcolonial Capital, ROSCAs, and Game Design," *Analog Game Studies* 9, no. 3 (2018), <https://analoggamestudies.org/2018/03/simulating-the-community-bank2892/>.

²³ Dan Thurot, "Foucault in the Woodland, Part One: The Small Folk," *Spacebiff.com*, 2021, <https://spacebiff.com/2021/11/04/foucault-in-the-woodland-1/>.

²⁴ Bronislaw Malinowski, *Argonauts of the Western Pacific: An Account of Native Enterprise and Adventures in the Archipelagoes of Melanesian New Guinea* (George Routledge & Sons, 1922).

²⁵ Malinowski, *Argonauts*, 60.

²⁶ Marcel Mauss, *The Gift: Forms and Functions of Exchange in Archaic Societies*, translated by Ian Cunnison (Cohen & West, 1966), 6. Originally published in 1925. For an interpretation along these lines, see David Graeber, *Toward an Anthropological Theory of Value: The False Coin of Our Own Dreams* (Palgrave, 2001), particularly Chapter 3.

figure of the social evolutionary literature). Sahlins²⁷ contrasts modern and pre-modern societies arguing that, despite its unparalleled productivity, the modern “market-industrial system institutes scarcity, in a manner completely unparalleled and to a degree nowhere else approximated” in which, despite astonishing productivity, “every acquisition is simultaneously a deprivation, for every purchase of something is a foregoing of something else”, Sahlins wrote.²⁸ For Sahlins, it was “the axiom of our Economics” that we seek “the application of scarce means against alternative ends to derive the most satisfaction possible under the circumstances.”²⁹ Sahlins argued that this portrayal of the essential scarcity of means, in comparison to the potential infinity of ends one might pursue, meant that generations of anthropologists had cast pre-modern societies as poor and primitive on the account of the primitiveness of their productive technologies—a conception “endemic in anthropological theory and ethnographic practice”, Sahlins added.³⁰ This portrayal, however, was merely a result of anthropologists projecting a modern conception upon groups and societies that it did not necessarily apply to. Sahlins’ simple proposition was that perhaps pre-modern beings simply did not obsess about infinite accumulation but were “in business for their health, a finite objective, and that bow and arrow [were] adequate to that end.”³¹ A parallel critique was put forward by one of the chief advocates of interpretive anthropology, the modern classic American anthropologist Clifford Geertz (1973). With some level of an existence minimum provided, the peoples Sahlins investigated would spend time “visiting other camps”³² and “enjoy life.”³³

A common denominator in these critiques arguably is the idea that social life is, or can be, about celebrating and reaffirming that life itself. Towards the end of this paper we will consider anecdotal evidence and philosophical argumentation that something very similar may be true of playing games, even if not of games as transactional systems. We will return to this topic in the closing section.

While the critique of the homo economicus concept, and the associated social Darwinian concept of evolution, have long and prominent roots, they nonetheless remain a lasting theme in anthropology and archaeology.³⁴ In this sense, behavioral ecology represents a powerful, well-articulated and natural scientific, and wide-spread methodology for conceptualizing human-environmental relations.³⁵ As explained by Ready and Holton Price, human behavioral ecology “generally begins by specifying a model of behavior that describes the problem faced by an organism (e.g., getting food to eat) and derives predictions for behavior by assuming that organisms should attempt to solve this problem as efficiently as possible given a defined set of available options and constraints.”³⁶ Enjoying a similarly popular place in the pantheon of human scientific theory, game theory as a study of

²⁷ Marshall Sahlins, *Stone Age Economics* (de Gruyter, 1972), 4.

²⁸ Sahlins, *Stone Age*, 4.

²⁹ Sahlins, *Stone Age*, 4.

³⁰ Sahlins, *Stone Age*, 5.

³¹ Sahlins, *Stone Age*, 5.

³² Sahlins, *Stone Age*, 23.

³³ Sahlins, *Stone Age*, 14.

³⁴ Domenec Mele & César Gonzalez-Cantón, *Human Foundations of Management: Understanding the Homo Humanus* (Springer, 2014).

³⁵ Elspeth Ready & Michael Holton Price, “Human Behavioral Ecology and Niche Construction,” *Evolutionary Anthropology* 30 (2021): 71–83; B. Winterhalder & E.A. Smith, “Analyzing Adaptive Strategies: Human Behavioral Ecology at Twenty-Five,” *Evolutionary Anthropology* 9, no. 2 (2000): 51–72; J.F. O’Connell, “Ethnoarchaeology Needs a General Theory of Behavior,” *Journal of Archaeological Research* 3, no. 3 (1995): 205–255.

³⁶ Ready & Holton Price, “Human Behavioral Ecology,” 72.

strategic decision making incorporates an imagery of human nature similar to human behavioral ecology and has been widely applied, among others in archaeology.³⁷

The Human Relationship to Nature

A second facet of the transactional relationship concerns the question of the human relationship to nature.

In this regard, environmental history has long argued that, while the modern human relationship to nature may be characterized by what the early modern classic of environmental historians Carolyn Merchant called the *mechanical* and Donald Worster the *imperial worldview*, the pre-modern societies might have held an *organic worldview* of the natural environment.³⁸ That is to say, according to Merchant, the mechanical worldview emerged with the development of natural sciences and views nature as a mechanical systems of laws that govern the behavior of intrinsic elements as revealed to us in theories of physics, chemistry, biology, and beyond. Historically, the argument goes, the mechanical worldview joined forces with the imperial worldview that set civilized societies upon economically exploiting the natural systems they understood and knew how to manipulate with the knowledge from their mechanical worldview—this can be described as the union of the mechanical worldview with the “spirit of capitalism and the protestant ethic”, as described by the seminal sociologist Max Weber.³⁹ Here the Christian view of nature was classically implicated by the environmental historian Lynn White as sanctioning the human conquest and stewardship of nature for human ends:⁴⁰ “The victory of Christianity over paganism was the greatest psychic revolution in the history of our culture”, White wrote. The pre-modern organic world view, by contrast, has been argued to be based on ideas about brethernship of humans and nature that demands respectful and conserving, rather than extractive and exploitative, attitude and behavior in and towards nature. In this sense, non-Western ecological thinking has been characterized as “kincentric”, focused on the idea of the unity and fundamental embeddedness of the human being in the natural environment.⁴¹

Once again, if we turn to games, what we are seeing are representations of the mechanical and imperial worldviews. The classic farming games are a case in point in how they cast the player in the role of the steward of their farm, putting the land to productive use, improving and modernizing the production and management processes, joining the farm to the broader markets and feeding it with produce. More generally still, typically games are about building up and improving “virgin” game board landscapes, realizing and maximizing their potential. Conceptually, there is little here in terms of preservation and respect of existing natural systems.

³⁷ M.T. Bonhagen-Freund, & J.A. Kurland, “Tit-for-Tat among the Iroquois: A Game Theoretic Perspective on Inter-Tribal Political Organization,” *Journal of Anthropological Archaeology* 13 (1994): 278-305.

³⁸ Donal Worster, *Nature's Economy: A History of Ecological Ideas, 2nd Edition* (Cambridge University Press, 1994); Carolyn Merchant, *The Death of Nature: Women, Ecology and the Scientific Revolution* (Harper & Row, 1980); V.P.J. Arponen, “The Cultural Causes of Environmental Problems,” *Environmental Ethics* 36, no. 2 (2014): 131-147.

³⁹ Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, translated by Talcott Parsons (George Allen & Unwin, 1930).

⁴⁰ Lynn Townsend White, Jr., “The Historical Roots of Our Ecologic Crisis,” *Science* 155, no. 3767 (1967): 1203-1207; Robin Attfield, “Social History, Religion, and Technology: An Interdisciplinary Investigation into Lynn White's ‘Roots,’” *Environmental Ethics* 31, no. 1 (2009): 31-50.

⁴¹ Enrique Salmon, “Kincentric Ecology: Indigenous Perceptions of the Human-Nature Relationship,” *Ecological Applications* 10, no. 5 (2000): 1327-1332.



Figure 2: Catan game board. Photo by dograapps @ Pixabay. CC BY.

Beyond the “Economic Man”

How, then, might game design be able to move beyond transactionality?

On a fundamental level, games are systems.⁴² As systems, games involve action economies of one or more currencies that players may spend to pursue various goals as defined in the game—think e.g. a hand of cards as a currency one can spend to conduct actions in a tabletop game. In tabletop design, game systems are tested and balanced specifically with an eye on ensuring that no particular focus in the way the game currencies are deployed is more efficient at achieving the goals than any other strategy (known as ‘multiple pathways to victory’). Game systems are also tested to ensure that players are equally incentivized to pursue various strategies of expending currencies to reach goals. In other words, paraphrasing the Mill quote above, games typically ask us to be ‘economic men’ who desire to possess currencies and deploy them in the most efficient ways possible. In the game speak, we talk of ‘min-maxing’, of games as optimization puzzles, we speak of optimal and suboptimal decisions, and so forth.

Now, based on the foregoing, the big question and worry for tabletop gaming is that, if the homo economicus concept cannot be said to reflect human nature universally in all times and places, then

⁴² Katie Salen Tekinbaş & Eric Zimmerman, *Rules of Play: Game Design Fundamentals* (MIT Press, 2003), see Chapter 5.

what hope do our games have of fairly or accurately depicting human cultures in games? Do games as transactional, means-to-ends systems of currencies, actions, and pathways to victory fundamentally misconstrue the manner humans actually conceive of their relationships to other humans, groups and societies, and the environment? Do games, inevitably and simply by virtue of their form, do violence to how they depict the human relationship to *anything*?

I consider these quite important, though open, questions about games and for game design. For one, as noted above, while the critique of the homo economicus is widespread in anthropology and archaeology, disciplines such as human behavioral ecology, economics, and others continue to view the human being as exactly in those terms. So, it is not that everybody *but* the tabletop gaming world has rejected that concept of the human being. In fact, quite the contrary may be the case.

Even if we regard such philosophical questions about the fundamental nature of human being as just that, abstract philosophical questions, the question of the underlying concept of the human being in games is arguably important from the perspective of the question of *innovation* in game design. Games, like many other branches of culture, tend to take what might be called the *dialogical* or *dialectic* form in which new designs partly borrow and imitate established techniques and genres but might also seek to expand, reimagine and critique what has gone before.

A fundamental difficulty in over-coming the transactional structure seemingly inherent to so many games is that, as soon as the game sets up objectives or win conditions for the players to pursue, everything else in the game automatically become mere transactional instruments for attaining the goals. And more, what is a transactional instrument to something, cannot in the game structure have inherent value other than as an instrument. In this sense, games as systems structured around win conditions cannot even in principle portray, for example, the natural environment depicted in the game as anything but standing in an instrumental relationship to the win conditions. As a result, we must look for non-transactional values in elements external to the game structure itself. Let us investigate this idea.

In an article some years ago in this journal, Elizabeth LaPensée⁴³ reported of a game design project titled *The Gift of Food* she conducted in collaboration with the Northwest Indian College, a public tribal community college in Bellingham, Washington state, USA. As LaPensée explains, the game is focused on the concepts of passing on cultural teachings, among others, about the human-environment relationship. The account given of game play is somewhat condensed and copies of the game were only in circulation among the Pacific Northwest communities. However, it seems that, mechanically, the passing on of teachings is achieved by players being challenged to remember and reproduce parts of traditional stories read out during the game. The players also build up and retain associations between available resources and different game map locations. It appears that the game also involves a competitive element in that, as LaPensée tells us, each game is always won by individual players based on the diversity of the resources they have accumulated. As such, the game play would seem to involve transactionality—within the scarcity of availability actions in the game, each player is challenged to optimally enrich the diversity of their resources collection, including through trading with others. Yet, the game also offers a medium in and through which to celebrate and reproduce a shared tradition. The celebration of tradition, however, is an objective external to the game itself even while playing of the game might evoke it.

⁴³ Elizabeth LaPensée, "Indigenous Board Game Design in the Gift of Food," *Analog Game Studies* 3, no. 2 (2016), <https://analoggamestudies.org/2016/03/indigenous-board-game-design-in-the-gift-of-food/>. See also Elizabeth LaPensée, "Relationality in Indigenous Food and Medicine Games," *Resilience: A Journal of the Environmental Humanities* 4, no. 2-3 (2017): 191–200.

Collaborative games represent an interesting option for designs that, while preserving transactionality, generate a rich, collaborative experience. In recent years, collaborative game designs have explored the collaborative interaction mechanisms based on hidden information. Games like *Hanabi* (Antoine Bauza, Abacusspiele 2010), *The Crew* (Thomas Sing, Kosmos 2019), and *Regicide* (Paul Abrahams, Luke Badger, and Andy Richdale, Badgers From Mars 2020) are examples of games in which players collectively manipulate the game system in the context of asymmetric hidden information and limited communication situation. In *Hanabi*, for example, each player has their own hand of cards but they are to be held such the player themselves only see the *backs* of their own cards and only see the contents of the hands of the *other* players. To compound on the challenge, communication about the contents of the hands of cards is limited in certain ways. In such an asymmetric information context and limited communication, the players are individually and collaboratively challenged to work out a way of playing their cards to achieve their collective objective. Again, the game surely produces a transactional challenge pertaining on particular to how the limited forms of communication permitted between the players can best be leveraged for a winning outcome. Again, as with *The Gift of Food*, at the same time, given the collaborative quality of the transactional effort, the game can be seen as a medium for a collective experience that is facilitated by game play but strictly speaking transcends the transactional structures of the game itself.

Based on the foregoing, we can arrive at a hopeful thought. While games arguably often and centrally incorporate a homo economicus conception in their fundamental portrayal of the transactional human relationships to basically anything in the game environment, *it is not necessary that gamers adopt that stance while playing games*.

The philosopher of games C. Thi Nguyen⁴⁴ has argued that playing games typically involves a curious and wonderful reversal of means and ends. That is, we typically take interest in games as systems that allow us to struggle in certain ways: we are challenged to adopt the game world of actions and interactions and have fun executing those means of play. The reversal involved here is that we play games for the sake of getting to execute the means. The ends, the win conditions, come in secondarily as something we buy into for the sake of getting to execute the means, that is, for the sake of getting to play the game. The point is primarily the journey, not the destination, if you like.

Consider these circumstantial examples that players often indeed, as Nguyen has explained, play games for the sake of the activity itself, rather than for the sake of the goals, the victory posts, that the game sets up. For example, in an episode of the Ludology podcast, the then-hosts Geoff Engelstein and Gil Hova discussed what they termed soft and hard incentives.⁴⁵ Hard incentives refer to the calculative means-end processes that inform the gamers-as-homo-economicus as they pursue the optimal course to their objectives in the game. Soft incentives, however, refer to the myriad, as it were auxiliary incentives that players might pursue in a game, comprising things like aesthetic and emotional objectives. In a tabletop game, a player may be "soft incentivized" to acquire a particular card or a tile because it depicts a particularly aesthetically pleasing looking building, for example. Depending on the group, it may not be untypical in a game of *Wingspan* (Elizabeth Hargrave, Stonemaier Games 2019), that a player acquires a particular bird card at least in part because of how the board looks like regardless of what it *does* in the player's tableau. Thus, a player might derive suboptimal or even no game utility at all from taking a particular action in a game, yet they

⁴⁴ C. Thi. Nguyen, *Games: Agency As Art* (Oxford University Press, 2020) and C. Thi Nguyen, "Games and the Art of Agency," *The Philosophical Review* 128, no.4 (2019): 423–462.

⁴⁵ Erica Bouyouris, Gil Hova, Scott Rogers, & Sen-Foong Lim, "Episode 185: Soft Boiled," *Ludology*, 2018, <https://ludology.libsyn.com/ludology-episode-185-soft-boiled>.

may derive a great deal of satisfaction from doing so. That satisfaction can be one kind of a “soft incentive.”



Figure 3: Cards in Wingspan. Photo by Matias Amor @ BoardGameGeek. CC BY-NC.

Consider another example. In an episode of the *Shut Up & Sit Down* podcast, the host Quintin Smith and the guest Rodney Smith had a retrospective discussion of their relationships to tabletop games over the past decade.⁴⁶ At one point, Rodney Smith describes his enjoyment of games as at its height when “it is not fixated so much on who is going to win, but that we just care about the journey of the thing” (21 minutes). This phrase ‘caring about the journey’ may sound flat on the one hand, but on the other, it describes a certain non-transactional attitude that gamers often adopt to the game they are playing, just as theorized by Nguyen, as we saw above. Caring about the journey is centrally enabled by game play, but it is strictly speaking outside of the game—it is not part of the incentive structure that the game formally provides. Based on this concept of games as a journey,

⁴⁶ Quintin Smith & Rodney Smith, “Rodney & Quinns - 10 Years In Board Games!,” *Shut Up & Sit Down*, January 14, 2022, <https://www.shutupandsitdown.com/podcast/rodney-quinns-10-years-in-board-games/>.

one could argue that Dungeons and Dragons style narrative role-playing games as focused on the collective production of a narrative might be the clearest examples of non-transactional games we have.

In games like *Oath* (Cole Wehrle, Leder Games 2021), and to some extent in the so-called legacy games (see e.g. *Risk Legacy*, Rob Daviau and Chris Dupuis, Hasbro 2011), contemporary tabletop game design has been expanding beyond concepts that perhaps at first seemed to constitute hard, unsurpassable limits, such as that games have to have an end. Expanding the game incentive space from solely transactional hard incentives to soft incentive spaces might constitute an interesting innovation. At the same time, arguably, soft incentives are highly subjective and it remains to be seen how designers may be able to negotiate the challenge of building a game around at least in part subjectively defined goals. There may be other such ways of “pushing the envelope” in game design that explore non-transactional framings of the human relationship to nature and culture in games.

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