

Development and Implementation of Virtue-Oriented Design Inspired by Buddhism

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Abstract

Contemporary product design primarily focuses on fulfilling users' material needs, with relatively few efforts directed toward incorporating positive or virtuous ideologies. Buddhism is one of the world's major religions and offers profound philosophical insights through its teachings on impermanence, cause and effect, reincarnation and karma. These concepts embody the wisdom of compassion, concentration (samadhi), insight and liberation. This study seeks to integrate Buddhist virtues into the design of a tabletop game, shifting the conventional design emphasis from "competition and self-interest" to "mutual assistance and cooperation." By employing the principles of karma, along with scenario-guided methods inspired by Buddhist reincarnation, the game offers an alternative approach to game design. Unlike traditional tabletop games, which usually use printed cards, this study uses three-dimensional physical models to increase visual engagement. The game narrative is structured to generate a sense of excitement and urgency, encouraging players to experience the joy of altruism by rescuing sentient beings from the three lower realms of existence: hell-beings, hungry ghosts, and animals. Through repeated gameplay in this interactive format, which is grounded in Buddhist wisdom, players are gradually encouraged to cultivate a virtuous mindset, ultimately promoting the development of compassion.

Keywords: Buddhism, Dharma, Bodhisattva Ksitigarbha, virtue-oriented design, three lower realms

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Introduction

In today's era of highly developed internet media, many young people spend extended periods immersed in the online world. A considerable portion of the available content involves gore, violence, pornography, and even gambling, all of which can exert negative influences on an individual's physical and mental well-being as well as their real-world behavior. The Dalai Lama, the Tibetan spiritual leader, has stated that compassion and loving-kindness are the essence of human nature.

From the perspective of human civilization, the period around 500 years before and after the Common Era, spanning roughly a millennium, represented a flourishing era of spiritual culture. Although technological and material conditions were far inferior to those of today, people regarded the faithful observance of their respective orthodox religions as an honorable mission in life, and adhered to appropriate virtues and moral teachings as guiding principles. After the Second World War, however, the mass-production model brought about by the Industrial Revolution led people to increasingly emphasize material satisfaction while gradually neglecting the cultivation of moral values and benevolent intentions. Consequently, mainstream product design during this period also centered on fulfilling material desires.

In recent years, a significant number of young people have become engrossed in mobile and tabletop games, many of which contain competitive violence or sensual temptations. Therefore, this study incorporates benevolent values into tabletop game design, guiding users to gradually strengthen their sense of compassion and goodwill through interactive gameplay. The intention is to cultivate and enhance players' benevolent intentions and compassionate awareness over time.

Literature Review

The origins of board games can be traced back to more than a thousand years before the Common Era, and their forms have varied across different historical periods. In addition to providing fun and excitement, many modern board games have begun to incorporate diverse elements of knowledge. However, in recent years, tabletop games have still largely centered on competitive or strategy-based formats, in which players must fight relentlessly, through deception, rivalry, and confrontation, until opponents surrender or are defeated. This trend also reflects the utilitarianism and short-sighted competitive mentality prevalent among today's younger generations.

In the field of education, an increasing number of board games in recent years have adopted a "play first, learn afterward" approach, integrating gameplay with learning (Taspinara et al., 2016). For example, in the area of ecological conservation, Illingworth and Wake (2019) designed a board game titled *Catan: Global*, which centers on the contemporary issue of global warming, allowing players to understand the importance of nature, resources, and biodiversity through the gaming experience. In addition, Robinson and Turner (2019) created a board game called *Park Life*, themed around the conservation of wildlife parks. Players must use limited funds to invest in and construct a complete wildlife sanctuary, learning the importance of protecting various species in a timely manner to prevent them from facing extinction.

Furthermore, Berge et al. (2019) designed a tabletop game centered on learning the appropriate daily caloric intake. Through a board-based game format, players actively participate in managing and controlling their total daily food consumption, helping them understand how to avoid obesity-related health risks.

In the context of active aging, Al Mahmud et al. (2008) evaluated elderly players' experiences with board games and found that although older adults generally enjoy playing card-based games, the formats of contemporary board games differ significantly from the types of games they are familiar with. Moreover, existing board games often fail to sufficiently accommodate the actual needs and preferred modes of interaction among older adults. In a subsequent study, Al Mahmud et al. (2010) designed a board game aimed at enhancing interaction between elderly individuals and children. During gameplay, players must communicate messages to one another through physical gestures, thereby fostering greater intergenerational engagement and strengthening familial bonds.

From the above literature, it is evident that board games can serve as effective tools for conveying correct concepts and educational knowledge. However, such games often become constrained by the need to deliver educational content, which diminishes the potential for exciting and engaging gameplay. This limitation frequently prevents these games from being successfully commercialized or achieving strong sales performance. At present, there remains a lack of board game designs centered on benevolent intentions. Most existing games still emphasize competitive formats focused on defeating opponents. This study seeks to transform the prevailing "competitive/self-serving" design paradigm into a "cooperative/mutual-aid" approach grounded in benevolence and the Buddhist principle of impermanence, cause and effect, reincarnation and karma. The goal is to inspire players to cultivate benevolent motivations internally and translate them into socially beneficial actions.

Design and Prototyping

The framework of this board game is centered on the Buddhist ideals of saving all sentient beings and performing benevolent deeds through teamwork. Guided by the four steps of the scenario-based design method, i.e., user stories, conceptual scenarios, concrete scenarios, and use cases, the gameplay structure was systematically developed. The objective of the game is to encourage players to experience the value of mutual assistance and virtuous actions during gameplay, with the hope that the intention to cultivate benevolence will become increasingly strong and eventually be reflected in their contributions to society.

To develop a benevolence-oriented board game emphasizing team cooperation, and to ensure that players engage in thoughtful discussion and problem-solving during gameplay, it was necessary to establish key elements grounded in Buddhist concepts. These include defining the hierarchical roles of players, identifying the sentient beings in the three lower realms required rescue, and designing the processes involved in their salvation. The details are introduced as follows.

Hierarchy of Player Roles

In the game, players assume one of four roles within the human realm of the six realms of rebirth, i.e., arhats, monks, practitioners, and common people, each entrusted with the mission of rescuing suffering beings in the three lower realms. Due to their differing hierarchical statuses, each role possesses distinct spiritual capacities and abilities. As the

game progresses, these characters accumulate merit, which enhances their power to deliver beings from the lower realms. The character designs are illustrated in Figure 1.

Figure 1

Player Characters, Arranged from Left to Right and Top to Bottom: Arhats, Monks, Practitioners, and Common People



Three Lower Realms

In Buddhist teachings on the six realms of rebirth, the three lower realms consist of the animal Realm, the ghost realm, and the hell realm. Sentient beings who commit unwholesome deeds may, after death, be drawn by karma forces into these suffering realms. However, the Buddha firmly believed that all beings possess Buddha-nature and could not bear to see any sentient being suffer in the lower realms. Accordingly, the game is designed to encourage players to emulate the compassionate spirit of Bodhisattva Ksitigarbha, entering these three lower realms to rescue suffering beings.

Salvation Process

In the game, the capacity for delivering sentient beings varies according to the player's hierarchical role, ranked from highest to lowest as follows: arhats, monks, practitioners, and common people. Each role must accumulate a certain amount of merit energy before being

able to enter any of the lower realms to rescue suffering beings. The amount of merit required to rescue beings in the three lower realms also differs, increasing in the following order: animal realm, ghost realm, and hell realm. This is because, within the six realms of rebirth, the hell realm is the lowest realm, where beings endure the most severe suffering, followed by the ghost realm and the animal realm.

Experiment and Results

After completing the production of the board-game prototype, this study invited 20 university students (10 male and 10 female), divided into five groups of four, to participate in gameplay testing. Upon completing the game session, participants were asked to fill out a questionnaire.

Using the first group of participants as an example, the game lasted one hour, during which they successfully delivered all sentient beings. As shown in Figure 2, the gameplay involved active discussion, with participants collaboratively deciding on each subsequent action needed to rescue suffering beings. The group ultimately completed the mission successfully. All participants reported that the board game helped enhance their intention to perform benevolent actions, explaining that discussing strategies with teammates on how to rescue suffering beings stimulated a sense of compassion among them.

Figure 2

The First Group of Participants Collaboratively Engaging in the Board Game



After the game session, each participant from all groups was invited to complete a questionnaire regarding their gameplay experience. The results are summarized in Table 1. According to the findings, while the board game was less effective in directly stimulating participants' motivation to perform benevolent actions, it clearly enhanced awareness of benevolence and promoted teamwork.

Table 1
Questionnaire Regarding Subjects' Gameplay Experience

Questions	Average scores
Is the gameplay experience of this board game unique and interesting?	4.5
Does this board game enhance your awareness of benevolence?	3.7
Does this board game stimulate your motivation to perform benevolent actions?	3.4
Does this board game help you feel that benevolence and teamwork can be applied in daily life?	4.25
Does this board game help you fully understand the importance of teamwork?	4.8
Does this board game help you feel that your communication skills have improved?	4.05
Is this board game design humane/satisfactory?	4.3

Response options: Very satisfied (5), Satisfied (4), Neutral (3), Dissatisfied (2), and Very dissatisfied (1).

Conclusion

This board game was designed with the primary aim of enhancing awareness of benevolent intentions and fostering communication and mutual assistance. For this reason, the game adopts a team-based cooperative format combined with a board-type structure. This combination creates new forms of enjoyment, and after multiple rounds of testing, the game demonstrated unexpectedly high levels of excitement and engagement, with each playthrough yielding different outcomes.

During the design process, careful consideration was given to how benevolent awareness could be conveyed while maintaining playfulness. The conceptual scenario development served as a creative guide, and Buddhist thought was used as the foundation to develop a tabletop game that avoids violence, bloodshed, erotic content, and gambling elements. The characters were selected from different levels within the Buddhist hierarchy - arhats, monks, practitioners, and common people. Ultimately, players must work together to rescue all sentient beings, symbolizing the completion of the game and the achievement of collective victory.

Throughout the experimentation phase, it was observed that participants were highly engaged while playing the game, with each group actively discussing strategies to decide their next moves. However, the deeper wisdom of Buddhist teachings has not yet been fully integrated into the game mechanics. It is hoped that future iterations will allow for more extensive development and deeper conceptual integration.

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Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The author declares that Grammarly, an AI-assisted writing software, was used in proofreading and refining the language used in the manuscript. The usage was limited to correcting grammatical and spelling errors and rephrasing statements for accuracy and clarity. The author further declares that, apart from Grammarly, no other AI or AI-assisted technologies have been used to generate content in writing the manuscript. The ideas, design, procedures, findings, analyses, and discussion are originally written and derived from careful and systematic conduct of the research.

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