

CREATION OF AR OBJECTS AS ELEMENTS OF GAMIFIED ARTISTIC PROJECTS BASED ON ARCORE

The development of augmented reality (AR) technologies significantly transforms contemporary artistic practices by expanding the boundaries of traditional art and opening new modes of interaction between the viewer, physical space, and digital imagery. Particular attention in this context is drawn to the integration of augmented reality with principles of gamification, which gives rise to a qualitatively new type of artistic experience grounded in active user participation. Google ARCore, as one of the leading mobile augmented reality platforms, provides a technological framework for the creation of interactive AR objects that function not only as visual elements but also as integral components of game-based artistic scenarios.

AR objects in gamified artistic projects perform a dual function. On the one hand, they exist as autonomous digital artifacts possessing their own visual, symbolic, and aesthetic value. On the other hand, they operate as active elements within a game structure, capable of responding to user actions, evolving over time, and influencing the development of an artistic narrative. In this way, the AR object ceases to be a static image and is transformed into a procedural component of the artistic environment. The application of ARCore in this context is determined by its capabilities in spatial tracking, plane detection, lighting estimation, and the scaling of digital objects within real-world environments. These technological characteristics directly affect the artistic quality of gamified AR projects, as they ensure the stability of virtual elements in physical space and generate a sense of their “presence.” This sense of presence constitutes a key factor in the user’s emotional engagement in the game-based artistic process.

Gamification in AR art is often grounded in the principle of spatial exploration. The user does not merely observe AR objects but physically moves through space, changes points of view, and interacts with the surrounding environment, thereby transforming space itself into a component of the artistic composition. In this context, ARCore functions as a mediator between the embodied experience of the user and the digital artistic layer, enabling the formation of a hybrid aesthetic that emerges from the interaction between physical reality and virtual content.

An analysis of contemporary gamified AR projects indicates that AR objects are frequently employed as motivational tools. They may be gradually unlocked, alter their form or behavior in response to user actions, and create a sense of

achievement and reward. Within an artistic context, these mechanics acquire symbolic significance, transforming the concept of “reward” from a utilitarian function into an aesthetic or conceptual experience. Consequently, gamification becomes not only a method of sustaining user attention but also a means of artistic expression.

Particular attention should be given to the social dimension of gamified AR projects. AR objects can be integrated into public spaces, thereby shaping a shared game-based artistic experience for diverse groups of users. In such a context, gamification performs the function of a social catalyst, encouraging communication, collective exploration of space, and the shared interpretation of artistic ideas.

In conclusion, AR objects within gamified artistic projects based on ARCore serve as key elements in the formation of a new type of aesthetic experience grounded in interaction, participation, and processuality. The integration of augmented reality technologies with principles of gamification expands the expressive potential of digital art and creates conditions for rethinking the roles of the viewer, space, and the very concept of the artistic object in contemporary digital culture.

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