www.kerpic.org/2026-kibris
Kerpic'26 – Earth – Based Architecture
15th International Conference
N.Cyprus, 22-24 May / 2026

Playing with Earth: A Proposal for an Urban Play Element Made of Adobe

Assoc. Prof. Dr. Zafer Sağdıç
YTÜ, Faculty of Arch., Dept. of Arch.
zafersagdic@hotmail.com
M.Arch Student Saliha Zeynep Şahin
YTÜ, Faculty of Arch. szeynepsahin@hotmail.com

ABSTRACT

This study aims to reconsider adobe as a contemporary design material for children's play environments by moving it beyond its traditional association with vernacular housing and into the realm of urban public space. In many contemporary cities, playgrounds are largely composed of standardized plastic and metal equipment produced through industrial processes, which often limit children's direct physical and sensory engagement with natural materials. In contrast, adobe — a material deeply rooted in local building traditions — offers significant potential as an alternative urban design medium due to its low embodied energy, high thermal mass, recyclability, and capacity for local production.

Within this framework, the study introduces an urban play element titled "Earth Mound," conceived as a micro-topographic landscape intervention rather than a discrete object. The design takes the form of an organic adobe mass that allows children to climb, crawl through, sit on different levels, and occupy shaded niches. By merging with the ground plane, the intervention establishes a continuous relationship between material, terrain, and user, encouraging open-ended play experiences such as exploration, tactile interaction, hiding, and imaginative engagement instead of repetitive mechanical activities typically associated with conventional playground equipment.

The research also addresses the technical feasibility of using adobe in outdoor public settings. Structural and protective strategies — including a raised stone plinth to prevent moisture damage, generous roof overhangs or protective caps, lime-stabilized surface treatments, rounded edges, and impact-absorbing ground layers — are proposed to enhance durability and ensure child safety. Furthermore, the passive climatic performance of adobe is highlighted: its thermal mass helps maintain cooler interior spaces during hot periods while moderating surface temperatures throughout the day, contributing to thermal comfort within the play environment without reliance on mechanical systems.

From a theoretical perspective, the study situates the adobe play element within broader discussions on low-tech design approaches and the reintroduction of material intelligence into contemporary urban environments. Rather than viewing adobe as a nostalgic or purely vernacular material, the proposal frames it as a viable strategy for reconnecting children with the physicality of the ground and fostering a more intimate relationship between play, materiality, and place. In doing so, the project challenges the dominance of industrial standardization and highlights the potential of locally grounded construction knowledge to inform alternative models of public space production.
Ultimately, the study demonstrates that adobe can be reinterpreted at the scale of urban design as a material capable of generating ecologically responsive, socially engaging, and pedagogically meaningful play environments. By proposing a design that integrates environmental performance

with sensory richness, the research contributes to ongoing conversations about sustainable urbanism and advocates for the inclusion of natural materials in the creation of more resilient and experiential public spaces.

KEY WO RDS:

Adobe architecture, Urban play environments, Natural materials, Low-tech design, Sustainable urban design, Sensory experience, Public space