Paper as a flexible alternative applied to the Dom-Ino System: from Le Corbusier to Shigeru Ban

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Abstract

Modern Architecture has as one of its assumptions the independence between the structural and wall systems. This independence combined with the contemporary needs of space flexibility, for diverse reasons, leads us to investigate two distinct phenomena, first the Dom-ino Structural System, proposed by Le Corbusier (1887-1965) between 1914 and 1917, and later the innovative and questioning experiences conducted by the architect Shigeru Ban, including the use of unconventional materials such as paper. From this encounter of experiences emerge some fundamental questions for this work, to wit: to what extent the autonomy achieved with the structural independence, here symbolised by the Dom-ino System, has been appreciated? Is paper an element capable of materialising a creative response to the challenge of flexibility in wall systems (both façades and internal walls)? Based on the supporting bibliography and the analytical approach found in the work of the aforementioned architects, we briefly sought to contextualize, interpret, and later to conceive a preliminary proposal for a new flexible wall system based on paper usage to be applied in the centenary structure Dom-ino (symbolically and as an example), in order to illustrate new possibilities of applications using paper and thus seek to instigate their greater employability in works that aim flexibility, creativity, quickness, simplicity, lightness and sustainability as part of their programs.

Keywords: Dom-ino System; Flexibility; Paper; Architecture.