Approach to a Scientific Design Method for Programmable Schools towards ‘NeuroArchitecture’.

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ABSTRACT

Programmable Architecture, grounded on the logic of semiotics, towards the design of programmable schools throughout Brazilian diverse territories, interacting with the particularities of every home and every pupil. A so-called ‘Programmable Architecture’ or ‘NeuroArchitecture’ would be that emerged from this project method integrating convergent techno-sciences (NBIC: Nano, Bio, Information, Cogno) throughout every architectural process to deliver school facilities: the project (from ideation to simulation through digital fabrication) could enable modifying spatial and neurocognitive parameters in real-time to check interdisciplinary correlations.

FUTURE IMPLICATIONS

Nowadays, immersive technologies are mostly used for virtually experiencing already built architectures, the approach illustrated here takes advantage of the generative features of algorithmic and parametric design and computer graphics, to test a bunch of possible future school designs (the candidate ‘offspring’) before a single atom is manufactured. In this way, programmable architectures could enable modifying spatial and neurocognitive parameters in real-time to check interdisciplinary correlations.

RELEVANT BIBLIOGRAPHY

Relevant bibliography is compiled among Spanish, Portuguese and English literature for the groundings of such an epistemological framework for programmable architecture that could inform a synthetic diagram representing a future schools design, manufacturing and performance scientific methodology and its practical consequences, relating concepts and theoretical approaches to specific, real problems.

2. REFERENCES


3. AUTHOR BIO

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