CommoningMathematics through Making Artifacts as 'Matters of Care' Across Education and Architecture

Chronaki Anna, Lykourioti Iris, SymeonidouIoanna, Lazaridou Eirini, Bicknell
Danae

with UThstudents:Alexaki Eleni, Kleisiari Katerina, KounavisIoannis , Lialiou Andriana, Markopoulou Anna, NikolakakouLoukia, Nikolopoulou Maria, PapaioannouLygia, Papounidou Chara, TsarouchasStergios Georgios, Tsiara Maria, Vacondiou Miranda ZingiridouAndromachi

University of Thessaly, Volos, GR

With Bruno Latour (2004) one could argue that mathematics tends to remain a 'matter of fact' that rarely becomes a 'matter of concern' for youth. Its fate as 'common knowledge' is trapped, by and large, within harsh enclosures of curricula, international assessments or high-stake exams, funneling its creative potential to gatekeeping practices for a dystopic societal progress and development that perpetuates epistemicides, injustices and alienation. How could we counter this deadening situation? And, how could we move toward commoning mathematics and modes of making artifacts for lay people? Taking into account that these processes are connected to wider concerns for the survival and sustainability of habitats (Højrup, 2003), this paper discusses the potential remaking of mathematics through a collective design process of making artifacts in reference to life-modes (insular, coastal) with preschool children and university students (i.e. Architecture, Education). A feminist epistemology of collective-making as 'matters of care' (see Puig de la Belacasa, 2017) is employed here to attend for a pedagogy of decentered power relations where "...the meanings and situated relevance of care cannot be taken for granted" (p. 11). Our study denotes that caring for commoning mathematics is engulfed when dialogic moves of transdisciplinary activity and transversal modes of thinking, feeling, and making are allowed to unfold. Two such moves will be specified: first, between preschool and university activity transversing the disciplinary areas of education, mathematics and architecture, and second, within the experimental co-making of artifacts intended as 'gift' for the children and through children's interactive encounters with that gift suggesting novel artifact-making.

Keywords: mathematics, artifact making, commons, matters of care, power relations, dialogic spaces, tertiary education, architecture, education

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