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Growing-making mathematics: a dynamic perspective on people, materials, and movement in classrooms.

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Summary: Recent theoretical advances on learning (mathematics) emphasize the fact that what results from engagement with curriculum materials is not entirely in the control of the students in the way classical theories of knowing and learning suggest. These new theories distinguish themselves by either invoking distributed agency, some of which is attributed to non-human aspects of the environment, or by emphasizing the essential (radical) passivity that characterizes coming to know. In this study, an alternative is offered: making as a modality of growing. This move allows us to capture theoretically that both growers-makers and their materials grow (old) together. The proposed approach troubles existing ones because it shifts our perspective from a transitive relation between students and the curricular objects to an intransitive one, where the becoming of each is described in terms of Deleuzian lines of flight. A case study involving two girls and tangram pieces is described in terms of growing together and becoming-hexagon. Implications are discussed for how researchers can capture the non-agential, non-causal dimensions of coming to know.

Classification: C30 D40 U60 C70

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