

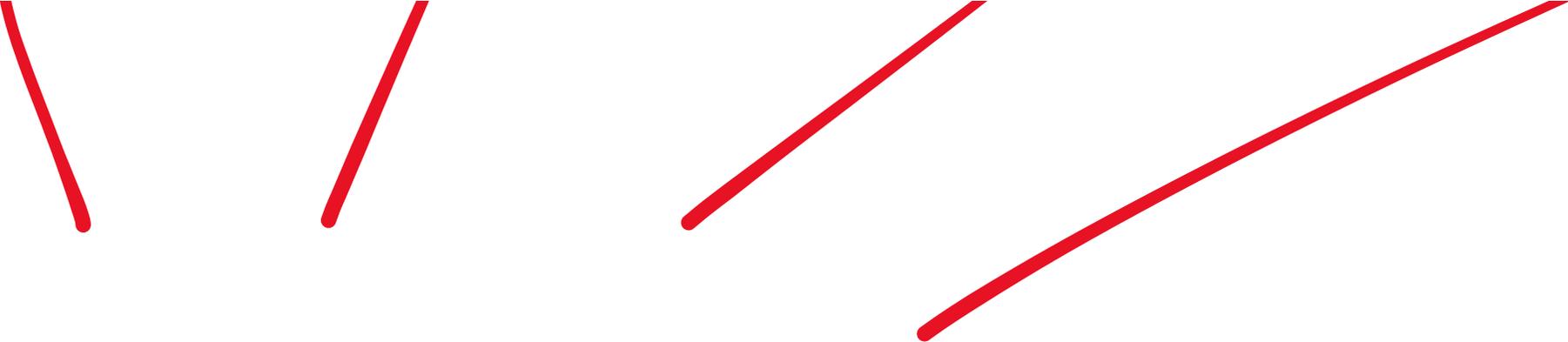
Transforming mathematics through an ungrounded locality: Imagining mathematical ‘abclusion’

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In the dizzying context of post-Brexit isolationism and global climate apocalypse, the Union Jacks adorning UK-sourced supermarket produce conflate the “local” and the “national”, invoking, in one iconic gesture, both climate consciousness and national pride. This conflation reflects the ways mathematics is too often positioned as neutral and universal while simultaneously reinforcing fixed, exclusionary and monocultural notions of locality. The Manchester-based Very Local Maths project (VLM) challenges the assumption that mathematics is apolitical, culturally neutral and universally accessible by mobilising the concept of ‘locality’ to rethink mathematical practices as both grounded in and ungrounded by “very local” activities.

Framing our work as a feminist intervention, this paper examines how locality can operate as a site of pluralistic potential that unsettles boundaries of (in/ex)clusion, disrupting colonial logics and fostering new mathematical imaginaries. Inspired by Massey’s (2005) reframing of space as dynamic, relational, and always under construction, we propose the concept of mathematical “abclusion” as a perspective that resists both exclusionary gatekeeping and enclosing assimilation. Our abclusive approach reimagines the local as fluid, generative, and permeable, using it to “intensify the possible” (Debaise & Stengers, 2017), in ways that challenge its historically gendered, racialised and classed mathematical marginalisation. Telling the story from the perspective of our youth-led and arts-engaged workshops at the Moss Side Millenium Powerhouse, we explore how the project’s “locus” serves as a catalyst for new forms of mathematical engagement and possibilities.

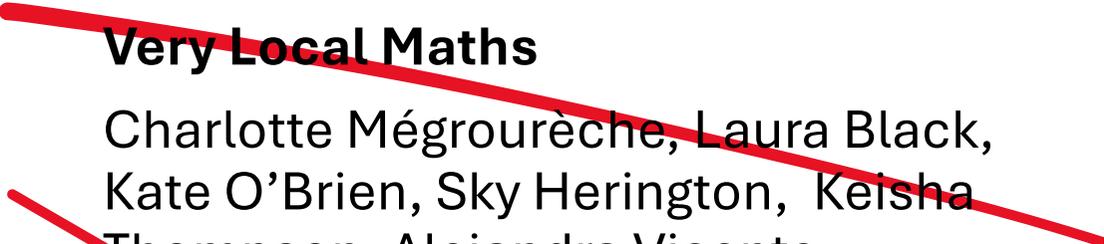
Key words: Abclusion, Feminist Mathematics, Spatiality, Locality, Decolonial



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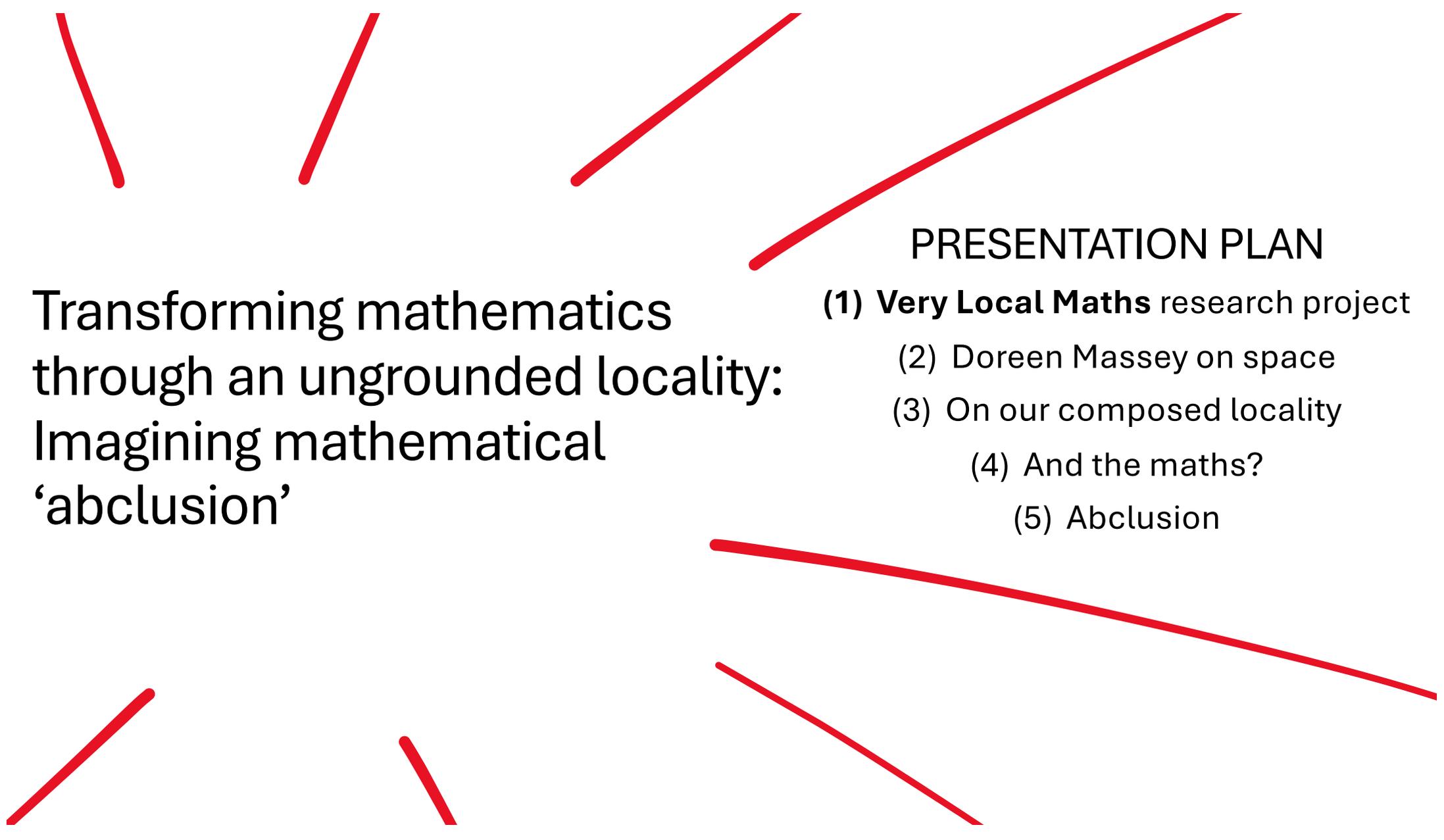
Presentation by:

Very Local Maths



Charlotte Mégrouèche, Laura Black,
Kate O'Brien, Sky Herington, Keisha
Thompson, Alejandra Vicente
Colmenares, Edda Sant



The slide features several thick red lines of varying lengths and orientations scattered across the background. Some lines are straight, while others are slightly curved. They appear to be decorative elements.

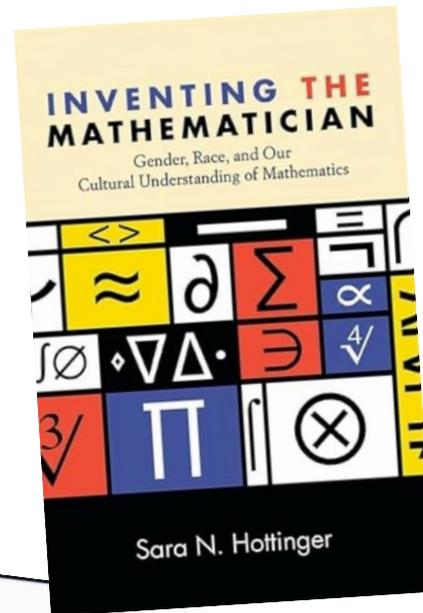
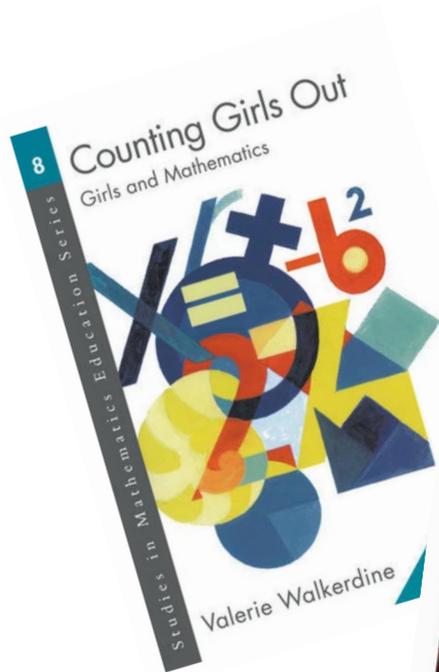
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PRESENTATION PLAN

- (1) **Very Local Maths** research project
- (2) Doreen Massey on space
- (3) On our composed locality
- (4) And the maths?
- (5) Abclusion

(1) Very Local Maths:

What do we do?



Responding to exclusion

A project developed in response to the ongoing exclusions that structure mathematics education.

Challenging neutrality

Questioning the idea of mathematics as neutral and universal - and attending to whose knowledge, thinking, and participation are valued.

Taking mathematics politically

Engaging with the political dimensions of mathematics, and the forms of participation that have long been marginalised.

<https://verylocalmaths.org.uk>

(1) Very Local Maths:

Who are we?



Keisha Thompson



Kate O'Brien



Laura Black



Sky Herington



Edda Sant



Alejandra Vicente Colmenares



Charlotte Mégrourèche



(1) Very Local Maths: Working with young people

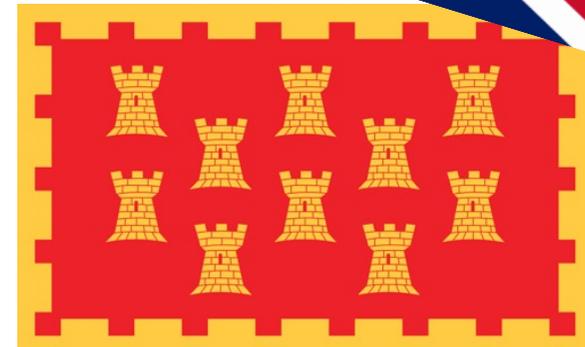
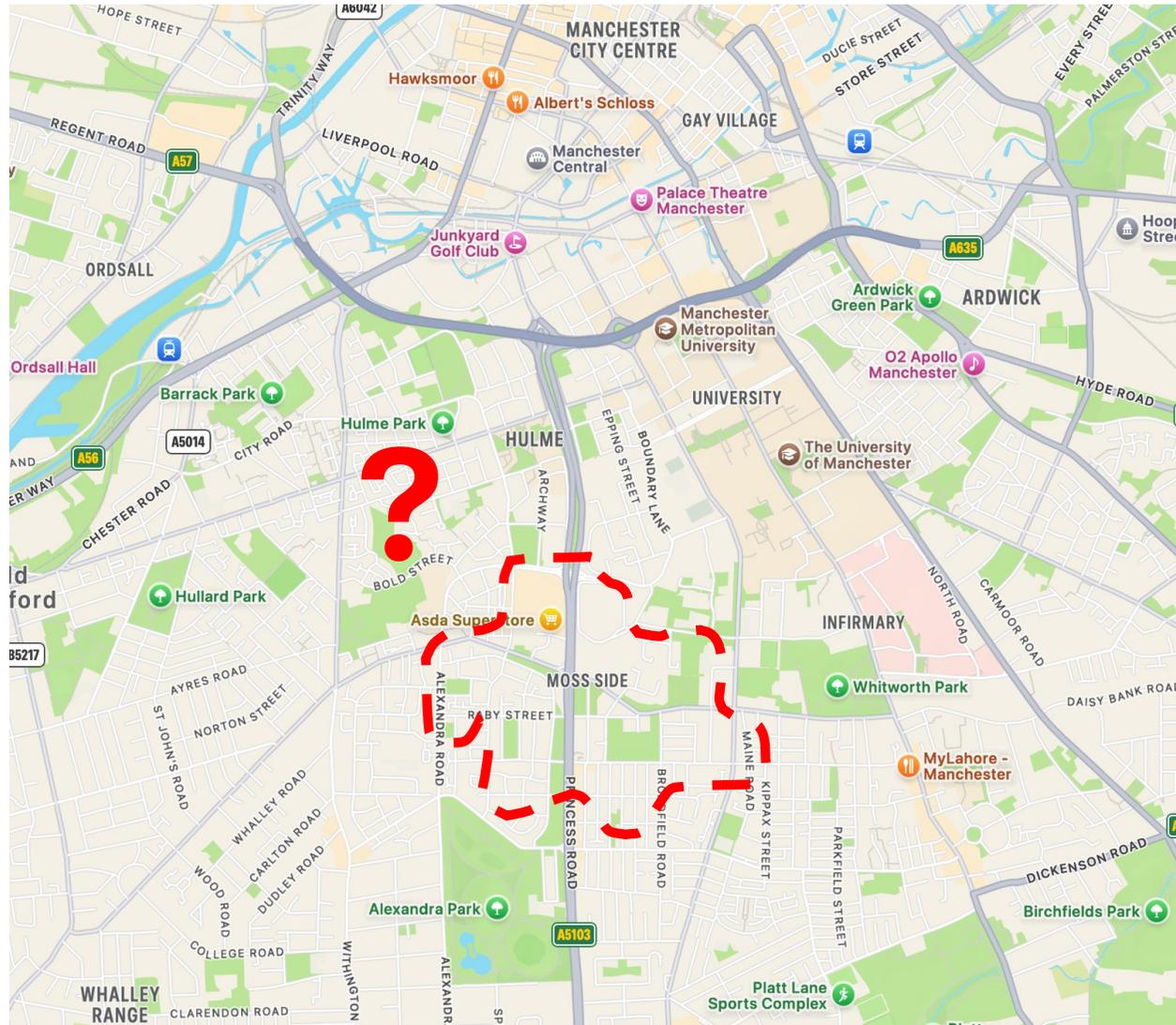
Monthly workshops in Moss Side
7 young people (13-16)

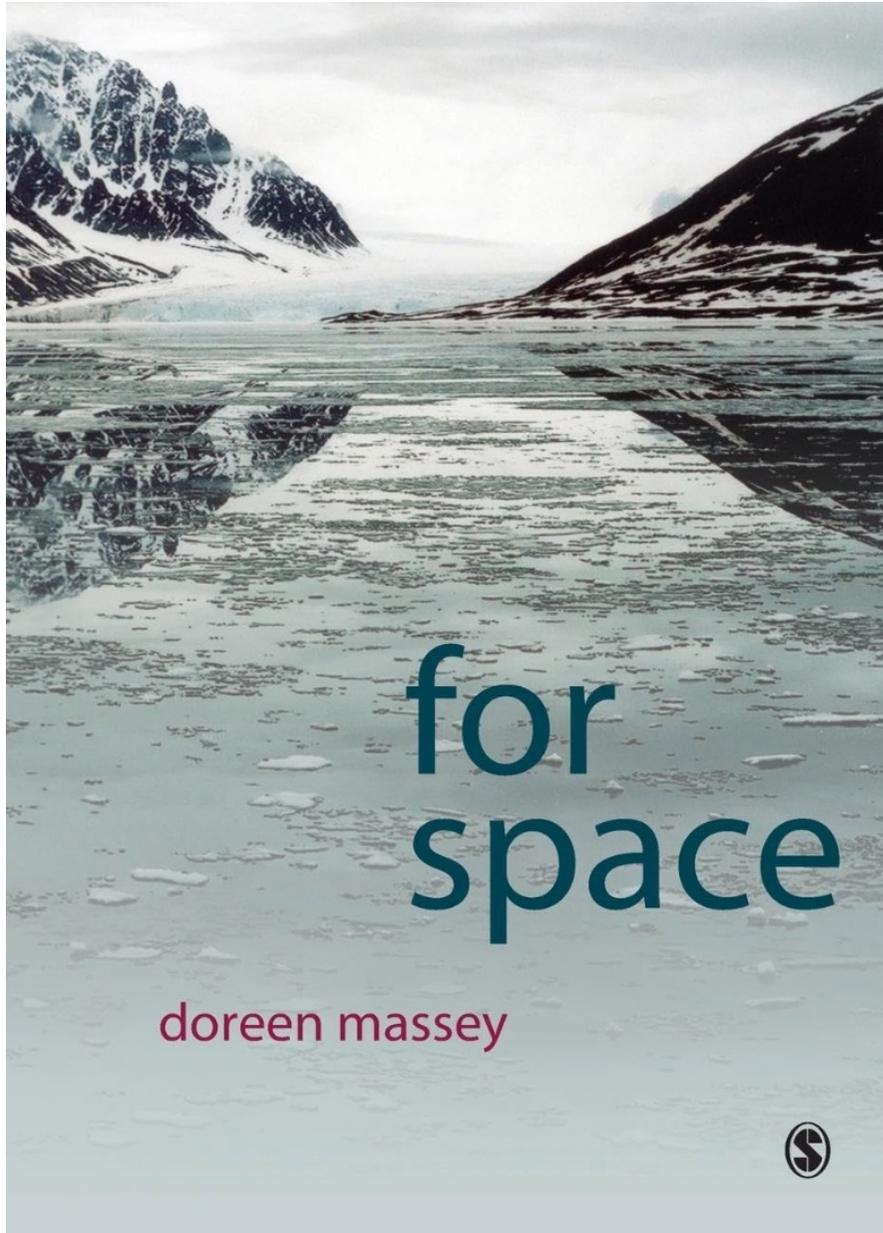
Supporting maths outside of schools

Interdisciplinary



(2) Very Local Maths: What do we mean by local?

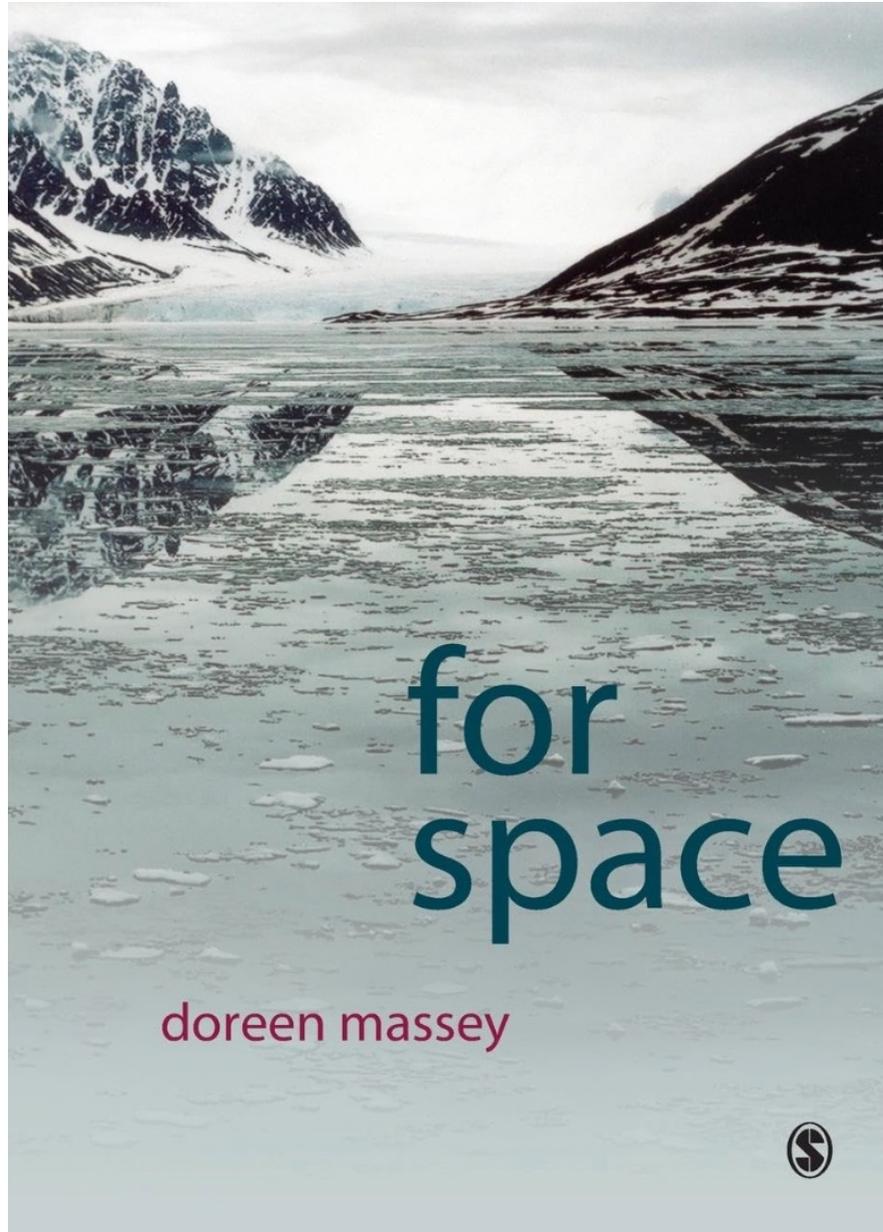




(2) Very **Local** Maths: What do we mean by local?

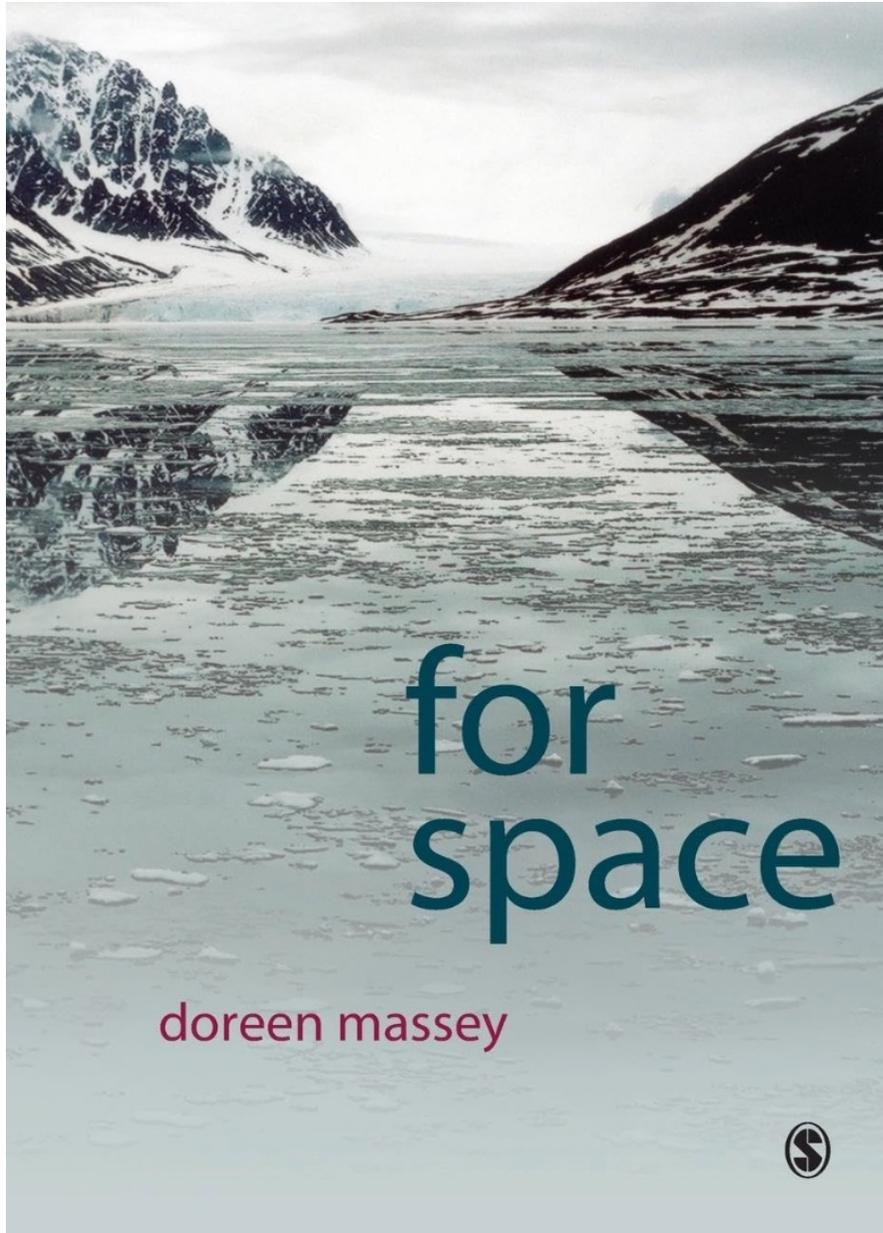
Doreen Massey's Space as relational

- **Space \neq passive backdrop**
challenges the idea of space as inert
- **Space as composition of trajectories**
A throwntogetherness with no pre-existing harmony, just coexistence and negotiation.
- **Space as political**
Its political potential emerges from holding together difference without unity.



(2) Very **Local** Maths: What do we mean by local?

« Reconceptualising place in this way puts on the agenda a different set of political questions. There can be no assumption of pre-given coherence, or of community or collective identity. Rather the throwntogetherness of place demands negotiation. » (Massey, 2005, p.141)



(2) Very **Local** Maths:
What do we mean by local?

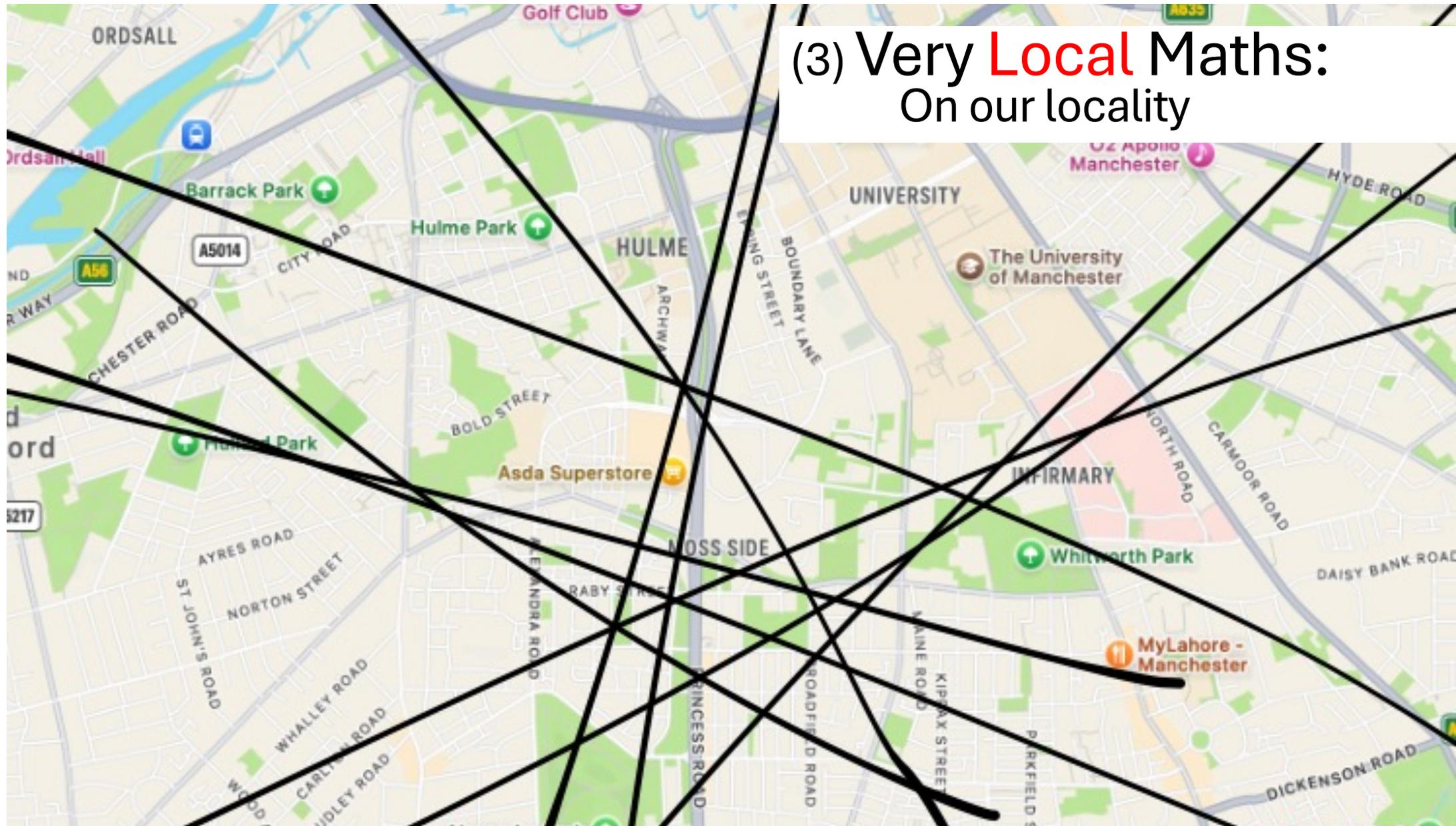
local/global binary

Local and global are not separate scales

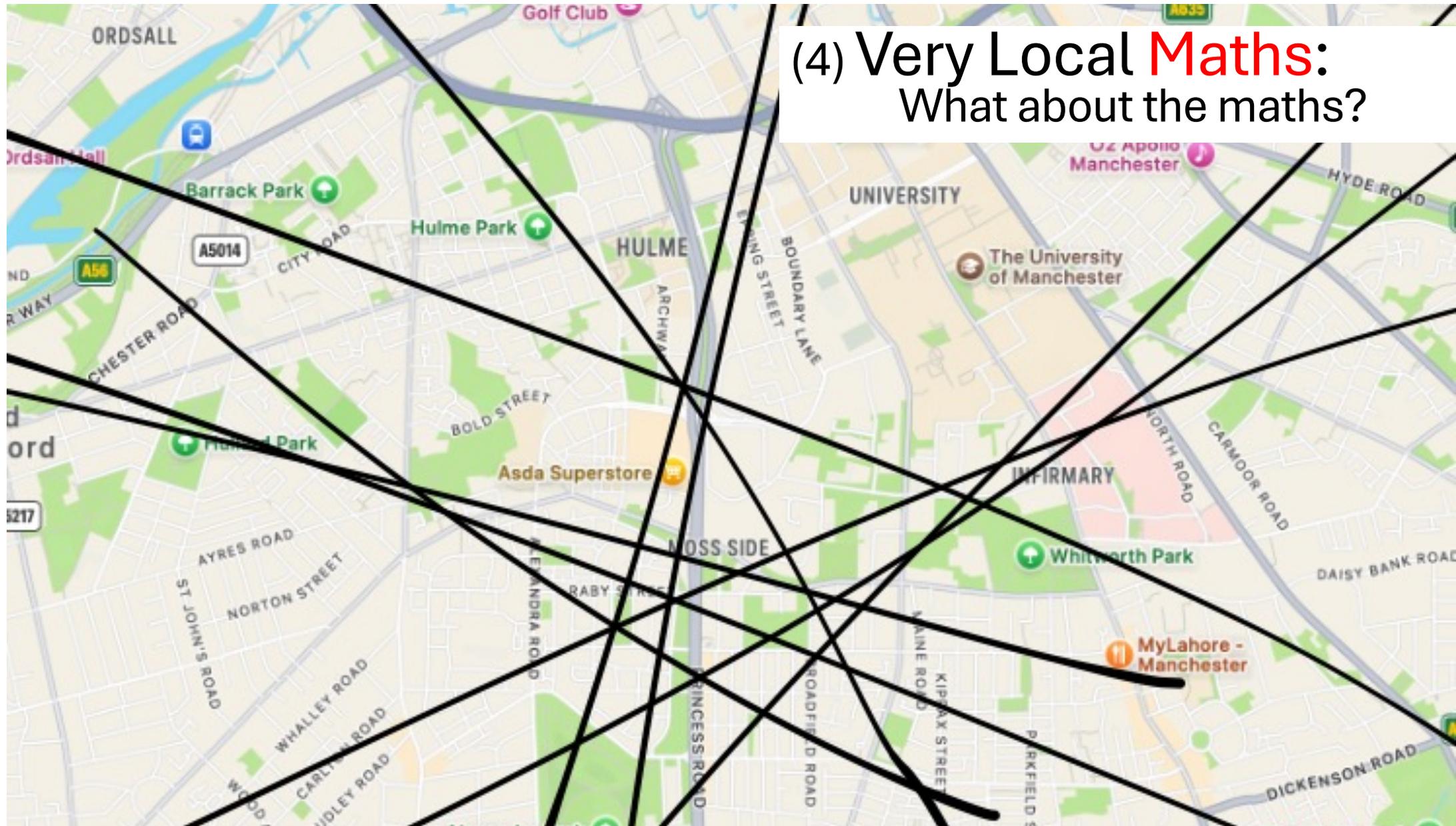
The global is made through the local

Local not as fixed or pure
shaped by wider forces and ongoing negotiations

(3) Very **Local** Maths:
On our locality



(4) Very Local **Maths**:
What about the maths?



(4) Very Local Maths: Money



Thinking about value

what does it mean to be paid? how much? and why?

Everyday economics

wages, bus fares.. Often dismissed in classrooms. Is this real mathematics?

Paying for participation

£20/hour as recognition of time, presence, and contribution - and a way to address accessibility.

(5) Very Local Maths: Mathematical abclusion

What can abclusion do?

Other spatial logic

« *Clusion* » - a boundary that separates inside from outside.

Abclusion as a speculative gesture

Not a fixed concept, but a way to imagine space (and maths) without enclosing lines...