Materialist dialogues and the granular

Peter Forman
Northumbria University, UK

Abstract
This commentary reflects upon the utility of the granular for bringing new materialists’ concerns for materiality into dialogue with historical materialists’ concerns for the historical power relations through which social phenomena emerge. I argue that the granular offers a promising vocabulary for bridging these interests, but suggest that further work is now needed to demonstrate how the granular can reconcile new materialists’ insistence on creative vitality with Marxian historical materialism.

Keywords
granular, historical materialism, materiality, new materialism, vitality

Materialist impasse?
Geographical research that explores the connections between matter and culture continues to flourish. Much of this work has been influenced by, and forms part of, the transdisciplinary ‘new materialisms’ movement: a corpus of research that developed out of frustrations with the backgrounding of matter and materiality during the cultural turn’s emphasis on discourse and culture. While new materialism’s diversity makes it difficult to speak of a singular agenda, its contributors have rejected the tendency of earlier materialisms to treat matter as an inert resource that can be humanly discovered and mastered, and have instead placed emphasis upon its vitality, described in terms of its creative roles in the formation of an always-becoming world and how it exceeds human abilities to comprehensively perceive, understand, anticipate, and control it (Dolphins and van der Tuin, 2013). Particular attention has been paid to its materialities: to the different ways in which it presses upon other bodies and things. Geographers have made significant contributions to this topic, offering rich vocabularies for describing matter’s material affects (Hitchen, 2019); its voluminous, mobile, and frictional qualities (Forman, 2017); and the relevance of different modes of material relation, including the elemental (O’Grady, 2018), the molecular (Braun, 2007), the atmospheric (Feigenbaum and Kanngieser, 2015), the geological (Bruun, 2018), and the planetary (Gabrys, 2019).

However, despite the prominence of new materialist research within human geography, these accounts have developed alongside (but largely removed from) a substantial body of research that employs alternative materialist perspectives.
Especially notable is the work oriented towards Marx’s historical materialism, which continues to thrive across the discipline, especially within the fields of economic geography (Ouma et al., 2018), resource geographies (Williams et al., 2019), and urban political ecology (Connolly, 2019). To date, this work has shared a somewhat fractious relationship with new materialism. By framing itself as ‘new’, new materialist scholarship has worked to obscure accounts that do not adhere to its vitalist orthodoxy and has depicted them as archaic (Forman, 2020). Historical materialist research has consequently often been excluded from new materialist conversations within and beyond geography (Choat, 2017; Lettow, 2016).

This marginalisation stems from an apparent conceptual impasse between how these two approaches treat material agency. While historical materialism does not deny the ability of materials to act surprisingly or to break down, clog up, or otherwise thwart human endeavours, matter is generally not viewed as being creative. Instead, material forms are seen to emerge through spatio-temporally specific (and ultimately anthropocentric) political-economic forces. It is these forces, the production of value, and the socio-material conditions that make possible the emergence of new kinds of societal ordering, that are of primary interest to historical materialists (rather than the specific forms that matter takes, or its materialities). As Choat (2017: 1033) argues, matter consequently appears ‘only as an index for some more fundamental and determinant reality (such as the economic relations of production), in the light of which “the specificity of material things” is obliterated’. In this manner, historical materialists tend to present material agency as derivative of human agency and only regard it as interesting when it affects human life. For many new materialists, this means that new materialism and historical materialism are unreconcilable, for historical materialism reifies the modernist separation of nature and society that new materialists critique (Latour et al., 1993).

On the other hand, historical materialism arguably provides a more robust conceptual framework for interrogating the asymmetrical power relations that constitute capitalist societies. Critics of new materialism have argued that its push to generalise agency, both in terms of its expansion of agency to all actors, and in its focus on forms of materiality that are more-or-less consistently reproduced across time and space, results in an incapacity to engage with questions of systemically unequal power relations, or with the historically specific contexts through which particular material forms and effects emerge (Cotter, 2016; Lettow, 2016).

In practice, the impasse between these two approaches is somewhat exaggerated. As Choat (2017) argues, the claim that historical materialism reproduces problematic modernist binaries is partly negated by the fact that few historical materialists would refute the problems with ontologically separating nature and society, but would instead assert the importance of describing the contexts through which these classifications emerge, rather than denying that they exist. Capitalism, nation-states, economies, commodities, and ‘natural’ resources all matter, but they are not pre-existing entities. Instead, they are contingent and volatile products of intrinsically precarious socio-material relations. Likewise, the complaints rallied against new materialism, that it ‘tends towards ahistorical analyses that ignore, or at least downplay, relations of power and ownership’ (Choat, 2017: 1040) also discount a substantial body of new materialist research that carefully examines questions of power and politics across different spaces and scales (e.g. Fullagar and Pavlidis, 2020; Saldanha, 2012; Sharp, 2020). It is in the context of this impasse that Jamieson proposes dialogue around the concept of the granular.

**Granular materialities**

In ‘For Granular Geographies’, Jamieson (2021) seeks to make an ‘intervention into materialist geography’ that brings into conversation these two opposing strands of materialist thought. Rather than create a comprehensive conceptual framework for fixing these tensions, he posits the concept of the granular as a means of drawing into dialogue new materialists’ interests in materialities with historical materialists’ concerns for the social, political, and
economic conditions through which societal phenomena emerge.

Deriving from physics, granularity describes a unique form of materiality through which matter can shift between states, at different times and under specific conditions displaying the qualities of a liquid or solid. Sand (Jamieson’s material of focus) is the example par excellence of such a material. Under certain circumstances, sand can move fluidly, like water, or it can express forms of rigidity and durability, stabilising in piles or masses, or solidifying as concrete.

Like other materialities, granularity extends beyond the specific qualities of single materials to describe modes of socio-material relation between constellations of actants. This is useful, because when viewed purely in literal terms, its applications can appear somewhat limited. To express granular behaviours, matter must consist of precisely sized macroscopic particulates that transition between phases under highly specific environmental conditions. Few materials will express these behaviours (examples listed by Jamieson include grains, soils, particulate foodstuffs, pharmaceuticals, and certain chemicals).

As such, while valuable work might arise from the analysis of such materials (indeed, it is clear from Jamieson’s account that the geographies of sand require further investigation), a literal reading of the granular might deem it as an interesting, but ultimately niche, form of material expression.

Instead, the value of the granular stems from its emphasis on the contingent interplay of force and friction across constellations of actants, resulting in material transformations that have socially significant effects (in this case, forms of ecological destruction, urbanisation, and territorial expansion/contraction). With reference to the concepts of force chains, friction, and phase transitions, Jamieson describes in detail the historically and spatially specific power relations through which different manifestations of sand emerge and have effects (sand as geophysical relation, resource, matter of national security, engineering material, and territory).

Throughout the article, he insists upon the distributed, heterogeneous, and contingent forces through which sand’s extraction, circulation, and use is facilitated and resisted, and thereby largely avoids the determinism that has been accused of much historical materialist research.

This description of granular materialities resonates with much new materialist scholarship, particularly with accounts of relatively durable/fluid materialities (Steinberg and Peters, 2015); the particulate relations of the molecular (Braun, 2007); the work on mutability (DeSilvey, 2006; Mol, 2002); and the materialist research on circulation, (im)mobilities, and frictions (Forman, 2017; Gregson et al., 2016). The granular contributes an additional material vocabulary to this work, one that is specifically focused on the interplay between forces and frictions.

In this manner, Jamieson largely succeeds in mobilising the granular as a form of ‘connective wiring’ (Lorimer, 2007: 97, cited by Jamieson, 2021) that brings together key ideas from both fields of materialist research around a pressing global issue. However, further work is now needed to show how the granular can help challenge anthropocentric narratives. Sand’s material qualities – including its relative ease of extraction, weight and bulkiness, the opacity of the river waters from which it is dredged, and how its consumption typically requires low-skilled labour – are shown here to contribute to the conditions for its extraction, transport, exchange, and consumption, but they still largely feature ‘as structural constraints that limit or determine human action’ (Choat, 2017: 1032): there is limited sense of matter’s self-organising creativity. The granular provides a promising concept that can help advance these conversations, but given the centrality of vitalism to new materialism’s anti-modernist political project, more work is needed to demonstrate how it can help reconcile new materialisms’ insistence on vitality with Marxian historical materialist concerns.

Declaration of conflicting interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) received no financial support for the research, authorship, and/or publication of this article.
References

Braun B (2007) Biopolitics and the molecularization of life. Cultural Geographies 14: 22.

Bruun JM (2018) Enacting the substrata: scientific practice and the political life of uraniferous rocks in Cold War Greenland. The Extractive Industries and Society 5: 28–35.

Choat S (2017) Science, agency and ontology: a historical-materialist response to new materialism. Political Studies 66: 1027–1042.

Connolly C (2019) Urban political economy beyond methodological cityism. International Journal of Urban and Regional Research 43: 21.

DeSilvey C (2006) Observed decay: telling stories with mutable things. Journal of Material Culture 11: 318–338.

Dolphins R and van der Tuin I (2013) New Materialism: Interviews and Cartographies. Ann Arbor, MI: Open Humanities Press.

Feigenbaum A and Kanngieser A (2015) For a politics of atmospheric governance. Dialogues in Human Geography 5: 80–84.

Forman PJ (2017) Circulations beyond nodes: (in)securities along the pipeline. Mobilities 13: 231–245.

Forman PJ (2020) Materiality; new materialism. In: Kobayashi A (Eds) International Encyclopedia of Human Geography. Elsevier: Oxford, pp. 449–455.

Fullagar S and Pavlidis A (2020) Thinking through the disruptive effects and affects of the coronavirus with feminist new materialism. Leisure Sciences 1–8. DOI: 10.1080/01490400.2020.1773996.

Gabrys J (2019) Sensing a planet in crisis. Media and Environment 1(1). DOI: 10.1525/001c.10036.

Gregson N, Crang M and Antonopoulos CN (2016) Holding together logistical worlds: friction, seams and circulation in the emerging ‘global warehouse’. Environment and Planning D: Society and Space 35: 381–398.

Hitchen E (2019) The affective life of austerity: uncanny atmospheres and paranoid temporalities. Social & Cultural Geography 22: 1–24.

Jamieson W (2021) For granular geography. Dialogues in Human Geography. DOI: 10.1177/2043820620950053.

Latour B, Porter C and Press HU (1993) We Have Never Been Modern. Cambridge, MA: Harvard University Press.

Lettow S (2016) Turning the turn: new materialism, historical materialism and critical theory. Thesis Eleven 140: 106–121.

Lorimer H (2007) Cultural geography: worldly shapes, differently arranged. Progress in Human Geography 31: 89–100.

Mol A (2002) The Body Multiple: Ontology in Medical Practice. Durham, NC: Duke University Press.

O’Grady N (2018) Communication and the elemental: capacities, force and excess in emergency information sharing. Environment and Planning D: Society and Space 37: 158–176.

Ouma S, Johnson L and Bigger P (2018) Rethinking the financialization of ‘nature’. Environment and Planning A: Economy and Space 50: 500–511.

Saldanha A (2012) Assemblage, materiality, race, capital. Dialogues in Human Geography 2: 194–197.

Sharp J (2020) Materials, forensics and feminist geopolitics. Progress in Human Geography. Epub ahead of print 1 March 2020. DOI: 10.1177/0309132520905653.

Steinberg P and Peters K (2015) Wet ontologies, fluid spaces: giving depth to volume through oceanic thinking. Environment and Planning D: Society and Space 33: 247–264.

Williams J, Swyngedouw E and Bouzarovski S (2019) The urban resource nexus: on the politics of relationality, water–energy infrastructure and the fallacy of integration. Environment and Planning C: Politics and Space 37: 17.