



From autonomous to autonomist geographies

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Abstract

Autonomist Marxist ideas and concepts are resurgent and, with their latent spatiality, are well placed to contribute to radical geographical debates. In particular, the methodology of ‘class composition’ analysis provides a rigorous, materialist critique of transforming capitalist social relations. This paper first provides vital historical–theoretical context from the milieu of Italian Operaismo, before emphasising the value of autonomist Marxist analyses of three contemporary geographical frontiers: labour process, migration, and social reproduction. It ultimately argues that the laudable motivations of the autonomous geographies project, explored in this very journal, would be better served through an explicitly materialist autonomist geography.

Keywords

autonomist Marxism, autonomous geographies, autonomy of migration, class composition, labour geographies, social reproduction, spatial composition

Geography witnessed an *autonomous* turn in the mid-to-late 2000’s. Following Hardt and Negri’s best-selling *Empire* (2000) and *Multitude* (2006), the English-speaking academy was introduced to other Italian thinkers (Berardi, 2011; Lazarato, 1996; Virmo and Hardt, 1996; Virmo, 2004) and radical political theorists taking inspiration from the same rich seam of praxis (Cleaver, 1979; Holloway, 2002, 2010). For geographers this provocative work spoke against ‘capital-centric’ analyses of social relations, and to the seemingly multitudinous forms of agency and resistance emerging in the contemporary alter-globalisation movement (Cunningham, 2010). The triad of Hardt/Negri, Cleaver and Holloway became key reference points for an emergent ‘autonomous

geographies’ literature (Chatterton and Pickerill, 2010; Hodkinson and Chatterton, 2006; Pickerill and Chatterton, 2006) and other agency-oriented critical geographical approaches (Cumbers et al., 2010; Clough and Blumberg, 2012; Marks, 2012). Yet strikingly, this work tends to obviate the category of class and rarely mobilises the key theorists and categories of Operaismo (which translates as ‘workerism’ and has latterly become known under

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the ‘autonomist Marxism’ umbrella term, a lineage we unpack below), instead drawing on more diffuse post-autonomous currents. For us, this is a critical lacuna, because careful scrutiny of Operaismo’s powerful conceptual lexicon can help re-invigorate geographical debates around class and activism as well as autonomous-inspired political praxis more generally.

Definitionally, we distinguish between what we refer to as *autonomous* geographies, which embraces an expansive notion of autonomy, from *autonomist* geographies, which suggests a closer link to Operaismo’s materialist theoretical categories and class perspective (often elided in *autonomous* geographies). In a paper in this journal, the autonomous geographies collective derives a definition of autonomy from the Greek *autos-nomos* (‘self-legislation’), noting how this broad, inclusive definition helpfully generates synergies with numerous heterodox political trajectories including: autonomist Marxism, anarcho-syndicalism, regional separatism, anarcho-primitivism, Zapatismo, ecologism and anti-capitalism. They also acknowledge that this broad definition potentially presents ‘autonomy’ as a ‘dangerously fuzzy concept’ (Pickerill and Chatterton, 2006: 732). We share certain reference points/emphases with the autonomous geographies collective, including a stress on collective agency, a critique of capital-centrism (albeit with different emphases)¹ and the conviction that academic research cannot claim a position of neutral objectivity. Yet, we believe that closer attention to the conceptual insights of Operaismo, can help address some of the issues observed by the collective.

In an admirably self-reflexive discussion, Chatterton and Pickerill (2010: 487) identify an important limitation in autonomous practices in the UK as they define them: ‘political visions and values were often implicit or taken for granted rather than rigorously interrogated. This often led to a neglect of discussions of the wider social-institutional arrangements or political contexts groups find themselves in’. We argue that reference to the core categories of Operaismo, and especially the concept of *class composition*, can help remedy this. With its acute understanding of the close relationship between forms of struggle and forms of production

(Battaglia, 2018; Kolinko, 2001; Mohandesi, 2013), class composition provides an eminently materialist methodology for understanding the relationship between autonomist agency and the social institutions of capital and the state. We address the concept of class composition more fully in the next section. ‘Autonomy’, within Operaismo, means autonomy from capital and autonomy of the waged and unwaged to define their own interests and organise autonomously from official organisations (often but not always including Leftist political parties and trade unions), and it sometimes means autonomy from other groups within the movement (e.g. women from men). Although much, if not all, of Operaismo was ‘autonomous’ from the ‘official labour movement’ (Negri, 2005), it was not from Marx’s categories and his critique of political economy, to which it returned to renew and develop (Wright, 2017). The critique of ‘capital-centrism’ in Operaismo thus does not mean *less* focus on capitalist relations, but a partisan perspective placing workers’ recalcitrance at the centre of the analysis of class relations and capitalism as a social form (Cleaver, 1979; Tronti, 2019).

‘Autonomy’ is a contested term containing divergent strands of praxis with origins in Operaismo (Wright, 2008). Within this milieu, distinctions can be made between Operaismo, *autonomia* (post-Operaismo), post-autonomy and autonomist Marxism. Operaismo (c. 1960–1973) refers to the original phase of Italian autonomy and primarily, but not exclusively, to the worker-student struggles associated with the concept of the ‘mass worker’ (the relatively undifferentiated, unskilled assembly line worker of Taylorism-Fordism) from the early 1960’s until economic recession and industrial restructuring in the early-to-mid-1970’s. The ‘autonomist Marxism’ of *Zerowork*, *Midnight Notes*, *Big Flame*, *Wildcat*, *Notes from Below*, and other groups retaining and modifying Operaismo’s categories, in our view continues this lineage. *Autonomia* (post-Operaismo) (c. 1973–1980) refers to the wider diffusion of struggles in the ‘area of *Autonomia*’ during the 1970’s and the emergence of marginalised ‘new social subjects’ (women, migrants, the unwaged, youth) in the wider ‘social factory,’ culminating in the pro-revolutionary ‘Movement of 1977’

(Berardi, 2007; Cuninghame, 2005). Post-autonomy (1980–present) succeeds from post-Operaismo’s engagement with poststructuralism, via Foucault, Deleuze and Guattari (Lotringer and Marazzi, 2007; Thoburn, 2003), breaking from Operaismo’s antagonistic class position for a more affirmationist, non-dialectical perspective (Noys, 2010). Post-autonomy is evident in contemporary theory developing Negri’s 1970’s conception of the ‘socialised worker’ for studies based on the ‘cognitive,’ ‘immaterial’ and ‘affective’ labourer (see Berardi, 2011; Lazzarato, 1996; Marazzi, 2008; Virno and Hardt, 1996), and this is perhaps the most well-known and most used iteration of autonomy in geography.

The limits to such schematic periodisation must be acknowledged (Wright, 2008), since historical demarcation tends to obscure continuities, eclipse alternative histories and homogenise internal differentiation within and across temporal periods (Tomba 2013). Yet, it retains heuristic value, not least for showing divergences between Operaismo and post-autonomy, which are often carelessly collapsed. Indeed, post-autonomous theory has long been criticised for a tendency to abandon the grounded, materialist, historically conjunctural analysis – class composition – so characteristic of Operaismo, for alluring yet imprecise and totalising concepts that tend to flatten out class reality and erase important internal differences, contradictions and divisions within social formations (Battaglia, 2018; Federici, 2004; Wright, 2017). The fuzzy concept of ‘the multitude’ (Hardt and Negri, 2006) is perhaps the most exemplary iteration of this problem. We apply here a grounded, materialist reading of ‘autonomist Marxism’, stressing the centrality and importance of the *class composition* methodology to geography and the social sciences, conveying how a spatialised autonomist class composition perspective can provide a more rigorous materialist basis for critical geographical thinking (cf. Clare, 2019, 2020; Gray, 2018a, 2022; Toscano, 2004).

This project is part of a diverse, ongoing research agenda re-engaging with the underexplored current of Operaismo, including recent high-profile translations of classic work from Mario Tronti (Anastasi, 2020; Tronti, 2019), Balestrini and Moroni (2021), and a second edition of Steve Wright’s (2017)

seminal movement history. Long before ‘autonomist’ thought was belatedly introduced to academia, activists in search of *practical* insights were busy scouring translations and interpretations of Operaismo from radical magazines and journals, some representing political organisational structures themselves. From the early 1970’s onward, these include but are not limited to: *Zerowork*, *Midnight Notes*, *Radical America* and *Telos* (US); *Red Notes*, *Common Sense*, *Big Flame* and *Aufheben* (UK); *Camarades*, *Futur Antérieur* (France); and *Wildcat* (Germany). And from the 2000’s, *Multitudes* (France), *Colectivo Situaciones* (Argentina), *Precarias a la Deriva* (Spain), *GurgaonWorkersNews* (India), *Gongchao* (China), *Viewpoint* (US) and *Ephemera*, *Notes from Below* and *Angry Workers of the World* (UK). Such groups have applied Operaismo’s innovative conceptual lexicon in updated forms to their own particular circumstances. More recently, autonomist Marxist inspired theory has proven itself very pertinent in the current conjuncture – both within and outside of the academy – providing politically engaged analyses of call centre work (Woodcock, 2017), the commons (De Angelis, 2017; Huron, 2018), platform capitalism (Cant, 2019), women’s social-reproductive struggles (Mason-Deese, 2016; Norton and Katz, 2017; Toupin, 2018), migrant activism and resistance (Mezzadra and Neilson, 2013; Scheel, 2019), urban unrest (Gray, 2018b; Mason-Deese, 2012, 2016; Risager, 2021; Vasudevan, 2015, 2017), new municipalism (Thompson, 2020), distribution and logistics (Curcio, 2014; *Angry Workers*, 2020a), and resistance to racial capitalism (Baker, 2020; Ekers and Loftus, 2020; Olmos, 2019). Italian autonomist Marxism speaks, therefore, not only to an innovative lineage of radical praxis but to crucial political issues in our own time and to a range of key contemporary debates within geography.

It is our contention that class composition analysis addresses a number of vexed and long-standing issues in contemporary human geography: the relation of (heterogenous) class analysis to contemporary struggle; internal differentiation *within* movements; the construction of agency-oriented approaches that neither forsake determinate analysis nor romanticise resistance; a focus on social reproduction that is not

removed from class and class struggle; and the relation between particular and universal forms of struggle. Class composition is of course not the *only* approach addressing such critical questions, but we argue that it is well-placed to comprehend and act upon such concerns within a single analytical framework. To fully explore the potential of an *autonomist* geography, we must necessarily briefly return to Operaismo, whose principal works have not been widely translated and therefore remain somewhat opaque outside of Italy. We then expand on the movement's core theoretical category, class composition, which must be understood within its historical emergence in movement praxis for its full meaning to emerge. This is crucial, for when severed from this context and its militant perspective there is a tendency for a rather loose usage of key categories and ideas originating from Operaismo. Following this brief outline, we then explore how class composition analysis speaks to three interrelated themes: (1) *labour process*, (2) *migration* and (3) *social reproduction*.² In conclusion, we summarise the benefits of a renewed *autonomist* Marxist class composition perspective to geographical thinking.

I Operaismo and Class Composition

Operaismo emerged in the early 1960's when young dissidents in the Italian Communist Party (PCI) and Italian Socialist Party (PSI) applied Marx's critique of political economy against both capitalism and the social democratic Left (Wright, 2017). Operaismo formed a recalcitrant 'workerist' response to the planned integration of workers within a popular-front programme of rapid industrial development, 'unitary' national economic reconstruction, managerial prerogatives in the factories and a notion of 'neutral' technology eliding antagonistic class relations at the point of production (Panzieri, 1964, 1976; Tronti, 2019). In *Quaderni Rossi*, the first Operaist journal in 1961, Raniero Panzieri advocated for a renewed investigation of working-class reality 'from below and in forms of total democracy', as a means to challenge the PSI's 'dogmatic conception of socialism' (cited in Wright, 2017: 16). The *Classe Operaia* journal, founded by Mario Tronti, emerged from *Quaderni Rossi* in 1964 and a spate of

extra-parliamentary autonomist journals and groups followed, including: *Contropiano*, *La Classe*, *Lotta Continua*, *Lotta Femminista*, *Potero Operaia*, *Lavoro Zero*, *ROSSO*, *Primo Maggio* and *Autonomia Operaia* (Bologna, 2007b; Wright, 2008). The common 'theoretical matrix' of Italian autonomist Marxism (Borio et al., 2005), derives from core conceptual innovations established in *Quaderni Rossi* and *Classe Operaia*.

Important strikes at the Olivetti and Fiat auto-plants in the early 1960s forged an autonomist workers' path, where the first 'workers' inquiries' were conducted by Operaists and assembly-line workers as 'co-research' (Alquati, 2013a, 2013b, 2013c; Wright, 2021). These 'non-collaborationist' workers' inquiries inaugurated an investigative, militant co-research tendency (Wright, 2021) which challenged prevailing idealist notions of class identity and broke down the researcher-researched dichotomies of Taylorism and much sociological inquiry (Mohandesi, 2013). The inquiries marked a radical disruption of the Fordist compact between capital, unions and labour in Italy, underpinning Operaismo's emerging notions of 'class composition' and the 'mass worker' during the 1960's (Wright, 2017). The development of widespread worker-student agitations in 1968 produced a new composition of struggle in the 'Hot Autumn' of 1969, when five and half million workers (25% of the labour force) went on strike (Brodhead 1984; Lumley, 1990; Wright, 2017). The 'mass worker' generated an array of rebellious strategies to gain massive wage increases and reduced hours, including wildcat, checkerboard and hiccup strikes (short heavily disruptive strikes at sporadic intervals in and between plants), sabotage, 'working to rule', base committees, occupations and internal factory demonstrations (Brodhead 1984; Lumley, 1990; Wright, 2017).

From the late 1960's, antagonism shifted beyond the factory walls to the education sector, urban struggles at the level of consumption (housing, transport and utilities), and feminist struggles in the arena of social reproduction (Dalla Costa and James, 1972; Gray, 2022; Lotta Continua, 1973). These struggles rejected a politics of liberal rights discourse, for an antagonistic politics of appropriation

and social force (Gray, 2018a). ‘Autonomia’ emerged as a mass movement in the 1970’s – uniting women, young people, cultural workers, migrants, the unwaged, students, and others living on the margins of society – and coming to a head in the ‘Movement of ‘77’ (Cunningham, 2005, 2007). The Operaist project was significantly undermined between 1979 and 1983 by sweeping state repression, with a crackdown on the *Brigate Rosse* (‘Red Brigades’) acting as an alibi for the exceptionalist imprisonment of 15,000 movement activists in ‘special prisons’ (Cunningham, 2005: 79; Lotringer and Marazzi, 2007). The defeat of the workers at Fiat in 1980 popularly dates Operaismo’s demise in its original Italian phase (Revelli, 1996; Virno, 2004).

Beyond this brief historical reconstruction, our main concern is developing the concept of class composition, which in our view is Operaismo’s most important and enduring category (see also Gray, 2022; Toscano, 2004; Wright, 2017). An expanded and spatialised form of class composition analysis retains the exemplary form of autonomist praxis – partisan, seeking after commonality, non-presumptive, investigative – while guarding against some of the limits of post-autonomist thinking, including conceptual over-determination. For Operaismo, class struggle is immanent to capitalist relations and the working class ‘should materially discover itself to be a part of capital if it wants then to oppose the whole of capital to itself’ (Tronti, 2019: 31). If capital is understood to be both dependent on, and a consequence of, labour-power – ‘that unique particular commodity which is the condition of all other conditions of production’ (Tronti, 2007: 30) – then the capitalist class can be conceived as subordinate to the working class (Tronti, 2007: 31). Labour-power within the ‘organic composition of capital’ – the relationship between ‘constant capital’ (the value invested in the means of production) and ‘variable capital’ (the value invested in labour-power) – is thus understood as the ‘material lever of the dissolution of capital, rooted in the decisive point of its system’ (Tronti, 2019: 13). Thus, ‘the struggle against work’ or ‘the strategy of refusal’ became primary objectives for Operaismo (Tronti, 2007, 2019), generating a distinctive break from the orthodox labour movement (Cleaver, 1979).

In a militant and partisan historiographical endeavour (Bellofiore and Tomba, 2011), Operaismo sought to grasp a trajectory of autonomist struggle by and for the working class, which required capital to contend with the working class as an immanent driver of development and workers’ recomposition: a higher unification, massification and diffusion of workers’ organisation. This famous ‘Copernican revolution’ of class perspectives – which articulated the workers’ movement as the driver of capitalist development (Cleaver, 1979) – was premised on a reading of Marx’s historical investigations into workers’ demands for the reduction of the working day in the mid-nineteenth century, which forced capital to develop its technological basis and further concentrate capital in the factory system, thus inadvertently creating the conditions for the massification of workers’ struggles (Tronti, 2019: 21–23). Likewise, Sergio Bologna saw the development of the ‘mass worker’, who laid waste to workers’ councils and the skilled ‘professional worker’ of the 1920’s, as a shifting hegemonic tendency in the changing structures of capitalist development that would ultimately generalise the potential for immanent revolt within and against developing cycles of capital accumulation (Bologna, 1976). The mass worker (Baldi, 1972; Bologna, 1991, 1992) became the key figure of struggle in classical Operaismo. But this social figure was not merely a gift from mass industry but instead was actively created by Operaisti to collapse divisions and hierarchies within industry and conceptualise new forms of antagonism with the new class composition of capital and labour (Gray, 2022).

Class composition theory is an immanent method of inquiry and praxis that aims to negotiate internal differentiation and help generalise self-conscious, reflexive movements which are the antagonistic social expression of general tendencies in new class formations (Bologna, 2007a). Suturing stubbornly schematic universal-particular, vertical-horizontal and subject-object dichotomies in academia and Left activism (Nunes, 2021), class composition is premised on a ‘theory of praxis or subjectivation’, on the one hand, and ‘a theory of historical change’ on the other (Toscano 2004: 198). This is reflected in the two main aspects of class composition: ‘technical

composition', the technological and supervisory means by which capital and state control and divide workers in the workplace and in the community; and 'political composition', which refers to how workers and the unwaged seek to overcome these divisions through processes of unification, massification and recombination (Midnight Notes, 1992). As such, it makes a powerful link between the forms of struggle and changing forms of production (Kolinko, 2001; Toscano, 2004; Battaglia, 2018), class composition's signature contribution. The poles of 'technical' and 'political' composition merge two, often separated understandings of class in Marxist thought. 'Technical' relates to *class as an economic category*, defined by structural position in historically specific production processes (*class-in-itself*). 'Political' refers to *class as a political subject*, which refers to how a class constitutes or composes itself in a historically specific conjuncture (*class-for-itself*) (Mohandesi, 2013). In emphasising the 'strict bond between subjectivity and objectivity, between mode of production and mode of rebellion' (Battaglia, 2018), the methodology of class composition guards against both capital-centrism and notions of 'autonomous' agency without reference to prevailing socio-economic institutions (cf. Chatterton and Pickerill, 2010). It also avoids anachronism with an emphatic insistence on the historical (and, as we explore below, geographical) specificity of all struggles. With each shift of class composition engendered by class struggle and structural changes in production, the appropriate form of counter-organisation must change in continual processes of composition (unification, massification and collectivity), decomposition (division and fragmentation) and recomposition (re-unification and re-massification) (Mohandesi, 2013).

The US journal, *Zerowork*, provides an exemplary four-fold framework for addressing the relations between labour, capital and socio-economic institutions. First, and primarily, comes the analysis of the struggles themselves: their content, their direction, how they develop and how they circulate. Second, the study of the dynamics of the different sectors of the working class: the way these sectors divide and affect each other and thus the relation of the working class with capital. Third, the relation between the

working class and 'official' organisations: trade unions, 'workers' parties' welfare organisations etc., never identifying the working class solely with these organisations. Fourth, all these aspects related to the capitalist initiative in terms of general social planning, investment, technological innovations, employment and to the institutional setting of capitalist society (Midnight Notes, 1992: 111–122). Here, we see a distinction between class composition and other forms of workers' organisation such as associational power and community unionism, since the autonomy of workers' struggle is considered primary over 'official' workers' organisations, including unions (though this does not preclude working in and with unions and alliances between unions and non-labour groups). Hence, the frequent use of 'wildcat' strikes and innovative workers' tactics beyond the control of bosses and unions (Wright, 2017). Additionally, autonomist Marxism's 'refusal of work' strategy (Tronti, 2007, 2019) – borne from Marx's fundamental critique of the wage labour relation – distinguishes autonomist Marxist approaches from typical union practices predicated *only* on achieving better conditions *within* work (see Holloway, 2010; Federici, 2012). Zerowork's 'model' necessarily requires renewal for contemporary production conditions and local specificities (see Dyer-Witheford, 2008), yet remains highly suggestive for a renewed class composition methodology.

If Tronti's 'Copernican revolution' has sometimes led to a rather invariant, tautological vision of autonomist praxis as a driver of capitalist development (Mezzadra, 2013), we caution that the problem of decomposition is 'every bit as real as that of re-composition' and that compositional analysis should be just as attentive to processes of fragmentation, division and particularisation as it is to processes of unification, socialisation and generalisation within class formation (see Wright, 2017: 208). Capital will always seek to decompose workers' collectivity. Yet, decomposition always offers the potential for political recomposition in new conditions (Bologna, 2007b). However, it would be a mistake to view this as some simple ping-pong process or perennial swing between a 'balance of forces.' Processes of de- and re-composition were understood within Operaismo as configured within the internal contradictions of

capitalism, class struggle, and the ‘tendency’ of capital towards crisis (Gray, 2022). The contemporary geographical utility of Operaist praxis will only be evident with careful attention to the mutable relationship between ‘subjective forms of political action and the shifting configurations of space’ (Toscano, 2004: 197–198). In the following sections, we show how autonomist thought and a class composition framework has been and can be applied to develop research and practice in three broad overlapping areas in the geographies of labour, migration and social reproduction.

II Labour process

Labour geography aims to exist in-and-beyond economic geography, attempting to counter a latent ‘capital-centricity’ through a focus on worker agency (see, Coe, 2013; Coe and Jordhus-Lier, 2011; Hastings, 2016; Lier, 2007; Strauss, 2018, 2020a, 2020b). But despite functioning as an important corrective, autocritiques of labour geography have long highlighted the overwhelming focus on the official labour movement (Rutherford, 2010), white male workers (McDowell, 2015), and struggles in the global North (Bergene and Endresen, 2010), while often overlooking the role of migrants and migration in labour struggles (Buckley et al., 2017). Overcoming such lacunae, we argue that the fundamental motivations of the autonomist project – in particular the Copernican inversion, class composition analysis, and workers’ inquiry – reveal autonomist geography as a labour geography par excellence. Emphasising how an autonomist approach confronts critiques of labour geography, we then introduce how contemporary autonomist work approaches questions of precarity and logistics, key horizons in labour geography.

As noted, class composition analysis is central to autonomist Marxism, providing not only a detailed reading of the expanded labour process (technical composition) but also the class struggles these processes enable and constrain (political composition). The inverted, dialectical relationship between these two concepts is crucial, with the latter privileged as the ‘basis of analysis and political strategy’ (Shukaitis, 2013: 56). It is therefore an unashamedly

one-sided yet rigorous ‘working-class science’ (Ciccariello-Maher, 2006; Tronti, 2019). Similarly, labour geography has played an important role in emphasising workers’ agency in global production networks (Coe and Hess, 2013; Cumbers et al., 2008; Rainnie et al., 2011) and in shaping multi-scalar economic landscapes (Herod, 1997, 2005, 2008). This tendency has, however, been accused of overplaying and, counter-productively, romanticising what is typically a ‘constrained’ agency (Hastings, 2016; cf. Coe and Jordhus-Lier, 2011). By privileging political composition, always framed in-against-and-beyond technical composition, autonomist analyses focus closely on how different methods of struggle are immanent to modes of production (Battaglia, 2018). But the commitment to detailed consideration of *de-* and not just *re-*composition (see Wright, 2017; Clare, 2020) means that an autonomist labour geography, though brazenly partisan, evades romanticism. Relatedly, despite its purported focus on working-class activity, labour geography has been criticised for lacking a robust class analysis, fetishising ‘success,’ and displaying an aversion to analyses of failure (Das, 2012). Discussion of class in geography, while valuable and important, is often relegated to an identity rather than a dialectical relationship (see Dowling, 2009), blunting the force of much labour geography (Das, 2012). Yet, class composition analysis addresses these issues, with a robust, non-teleological form of class analysis that prioritises working class activity and, as explored in the following sections, is highly attuned to informal and wage-less labour.

Despite important contributions, much labour geography has been criticised by feminist scholars for a latent ‘Fordist Marxism’ (Smith, 2016), prioritising white, male and unionised labour. This fails to speak to the reality of the majority of the global working class, both currently and historically (Neilson and Rossiter, 2008), and so it is vital that a critical labour geography engages with this much more fragmented and precarious reality. There is much here to learn from autonomist Marxism, which, from its inception, has been hyper-alert to transformations in the labour process and whose very name emerged from the idea that labour struggles can be, and often are, autonomous from, and even

antagonistic to, formal labour movements. With class composition analysis, Operaismo provides a conceptual framework and methodology for uncovering commonality within heterogeneity and complexity. Primary attention on ‘the struggles themselves’ (Midnight Notes, 1992) provides an awareness that the most important developments in class composition may come from (seemingly) unexpected sources – migrants, the unwaged, students and the feminist movement, for example – an understanding which labour geography is becoming increasingly attuned to (Griffin, 2021a; 2021b; Strauss, 2018). It is no surprise that we have witnessed a resurgence of autonomist thinking in a period increasingly defined by precarity, since the concept was first developed within the Italian autonomist Marxist milieu. This framework and methodology have proved insightful for thinking about self-employed labour (Bologna, 2018), zero-hour contracts (Hastings and Cumbers, 2019; Woodcock, 2017), the gig economy (Cant, 2019) and ‘digital workerism’ (Englert et al., 2020; Woodcock, 2021). Detailed compositional analysis emphasises agency and strategies of anti-capitalist refusal (Tronti, 2007, 2019) often overlooked by more traditional labour geography, yet it does this by foregrounding not romanticising worker agency, and with close attention to the prevailing, yet constantly shifting, social-institutional context of capitalist relations.

Another key site of analysis and struggle over the last decade is logistics. In this ‘little-known and much discussed (almost always inappropriately) sector’ (Bologna, 2014), Italian autonomist praxis has been pivotal, with the autonomist rank-and-file trade unions, Adl Cobas and Si Cobas, engaging with the low-skilled, migrant workers typically left behind by the major traditional unions (Benvegnù et al., 2018). Meanwhile, autonomist workers, scholars and activists have undertaken detailed investigative studies of the sector (Bologna, 2014; Curcio, 2014). Recognising that ‘logistics is the logic of capital’ (Curcio and Roggero, 2018), more recent autonomist work beyond Italy has explicitly adopted workers’ inquiry and class composition as methodologies to investigate contemporary logistical struggles (AngryWorkers, 2020a; Notes from Below, 2020; Ovetz, 2020; Workers Inquiry Network, 2020). An

autonomist geography also has great promise for speaking to geography’s ‘logistical turn’ (Coe, 2020), with classic historical-geographical materialist (Swyngedouw, 1999) interpretations of circulation and the spatial configurations of capital – ‘capital switching’, the ‘annihilation of space by time’, the ‘spatial fix’ and ‘necessary turnover time’ (Harvey, 2006) – providing essential generative material for grasping the ‘lineaments of the logistical state’ from more antagonistic perspectives (see Toscano, 2011, 2014). If capital’s ‘logistical fix’ (Danyluk, 2018), consolidated by market authority and violent forms of securitisation (Cowen, 2010, 2014a), has had disastrous effects for the environment and working conditions, geographers have stressed the potential for a critical oppositional engagement with logistics (Chua et al., 2018) and potential new avenues for workers’ disruption, resistance and translocal solidarity in the ‘global social factory’ (Cowen, 2014b). In a review of contemporary logistical geographies, Coe (2020) observes a seeming paradox – namely the relative lack of successful logistical worker struggle given their strategic power and importance in the contemporary economy. When we are witnessing an increase in such resistance, he argues, more research is needed into logistical ‘choke points’ (Alimahomed-Wilson and Ness, 2018), focussing on the areas where capital (technical composition) is at its most vulnerable and where labour (political composition) has most traction. Yet, for a truly autonomist geography, the matter is not merely technical and objective, it can only be tackled once workers are in actual and contradictory movement (AngryWorkers, 2020b).

The rigorous yet unromantic working-class perspective that comes from class composition analysis has clear synergies with labour geography, speaking to contemporary geographical debates and responding to a series of important critiques, including, as we explore below, the need for labour geography to have a robust engagement with social reproduction (see Strauss, 2020a). An autonomist geography, stressing worker agency and detailed analysis of the dialectical relationship between mode of production and mode of rebellion (Battaglia, 2018) can, therefore, be understood as an exemplary labour geography. It can also be understood as an

exceptionally powerful tool in the much-needed re-animation and radicalisation of working-class geographies (see [Emery, 2019](#); [Stenning, 2008](#); [Strangleman, 2008](#)), not least around issues of migration and labour mobility, one of the most pressing challenges facing (labour) geography today. The next section explores the relevance of autonomist praxis in this area.

III Migration

Autonomist geography's compositional perspective contributes to key debates in this journal emphasising the importance of: migrant-focussed activism ([Ehrkamp, 2019a](#)), migration's politicisation and contestation ([Smith, 2019](#)), 'autonomous solidarity' and migrant resistance ([Bauder, 2019](#)); moving beyond state-centric analyses ([Ehrkamp, 2019b](#)), and foregrounding the links between migration and carceral geographies ([Martin, 2020](#)). This section focuses on the links between autonomist thinking, migration and race, with a particular focus on the 'autonomy of migration' current, before ending with an emergent body of work that productively develops autonomist ideas beyond their original Italian context.

Operaismo's praxis emerged in a close relationship with migration and the 'Southern Question'. Ferruccio Gambino, a crucial vector between Operaismo and autonomist organisations in the UK and the U.S., notes how approximately half of the Italian population (25 m of 50 m) moved their place of residence between 1955 and 1975, with most movement from South to North ([Gambino and Ruckus, 2018](#)). If trades unions in the Northern factories viewed these migrants with suspicion and even hostility ([Bologna, 1977](#)), arguing that they lacked organisational discipline and work ethic, Operaisti recognised that their tendency towards unruly mass refusal formed an antagonistic expression of political recomposition ([Wright, 2017](#)). Indeed, by the 1970's, the term 'migrant worker' and 'mass worker' became virtually synonymous within Operaismo ([Wright 2008](#): 125). This was crucial for political organisation since Southern migrants comprised almost 60% of such strategically

important workforces as Fiat Mirafiori in Turin ([Vasudevan, 2017](#)).

From its inception then, Operaismo was sensitive to internal migration and race *within* Italy. But the issue of international in-migration became more pressing from the mid-to-late 1970's when a shift from internal-to cross-border migration began for the first time in Italy's history ([Gambino and Davis, 2019](#)). Reflecting on experience developed from international engagement with racial struggles in the U.S. (with the Facing Reality group, Zerowork and the Sojourner Truth Organisation) and in the UK (with CLR James and Selma James), Gambino has observed that migration remained a blindspot in the 1970's for much of the Operaist milieu. As such, within Operaismo, the *Italian* working class was often problematically elided with the working class *in* Italy, obscuring essential tendencies and differences within the new working-class composition ([Gambino and Davis, 2019](#)).

Beyond the likes of Gambino, Sergio Bologna and Lapo Berti within Operaismo, critical engagement with migration also came from the autonomist feminist movement, with *Lotta Femminista* (1973: 18–19) arguing that anti-racist, anti-nationalist and anti-sexist struggles were concerned with discovering the organisational weakness that permits division within the working class – Selma James' classic 1975 text, *Sex, Race and Class* (see [James, 2012](#)), made very similar arguments. Meanwhile, Mariarosa Dalla Costa wrote presciently on 'Emigration and Reproduction' in 1974 and, in 1980, on 'Emigration, Immigration and Class Composition in Italy in the 1970s' (see [Dalla Costa, 2019](#)), while Sylvia Federici undertook detailed work on migration and class composition with the Operaismo-influenced Zerowork collective in the US (cf. [Ramirez, 1977](#)) and the New York City Wages for Housework (WfH) chapter, which helped birth black autonomist feminism ([Ekers and Loftus, 2020](#); [Federici and Austin, 2017](#)). Operaismo's incipient relationship with migration as a political concern ([Gambino and Davis, 2019](#)) has since been developed more robustly through a growing body of work focussing on the role of migration in changing class composition ([Cleverly, 2004](#); [Mezzadra, 2005](#); [Marks, 2012](#); [Pizzolato, 2013](#); [Zanini, 2010](#)).

The autonomy of migration approach (AoM) is arguably the most evolved synthesis of autonomist ideas and migration. Scheel (2019: 44–47) picks out six key features: (1) migration's socio-subjective dimension; (2) migration as constituent force, changing things 'from below'; (3) migrations temporally precede attempts to control and valorise them; (4) state-centred perspectives are inverted; (5) borders are key sites of struggle and contestation; and (6) borders cause differential inclusion and the 'multiplication of labour' (see Mezzadra and Neilson, 2013). Extending Tronti's 'Copernican inversion', AoM focusses on the dialectical relationship between migrants and borders, arguing that the latter emerge as responses to migrant's autonomous movements (Casas-Cortes et al., 2015). Migration is thus a refusal that destabilises methodological nationalism (Mezzadra, 2004). By privileging migrants' subjectivities, rather than focusing on the supposed omnipotence of states, two further key elements of autonomist thinking are transposed to analyses of migration: the immanence of *political* to *technical* composition, and the former's tactical privilege (Roggero, 2010; Tronti, 2019). AoM work has explored migrant struggles in the UK (Alberti, 2014), Latin America (Casas-Cortes et al., 2015) and across Europe (Papadopolous et al., 2008), introducing and developing key concepts like the 'mobile commons' (Papadopolous and Tsianos, 2013), the 'deportability of everyday life' (De Genova, 2002), and 'borderscapes' (Altenried et al., 2018). AoM recognises migrants' key role in labour movement renewal (Alberti, 2016) and combats agency-stripping narratives in asylum discourse (De Genova et al., 2018), thus functioning as an important primer for autonomist thinking, while expanding the subjects of struggle that drive recomposition.

AoM has, however, received criticism. It seemingly romanticises migration's revolutionary potential (Lan, 2015), promoting affirmative agency while downplaying the power of borders and flattening heterogeneous processes (Scheel, 2019). These plangent critiques are arguably targeted at a *post-autonomous* AoM (cf. Leonardi, 2016). An explicitly compositional AoM, on the other hand, enables detailed structural analysis that is equally attuned to

recomposition *and* decomposition (Clare, 2020). Far from romanticising, a compositional focus on migration's 'subjective dimensions' provides a critical position from which to launch revolutionary structural analyses, while a focus on migration and 'the production and reproduction of labour power' helps rethink and revive class composition analysis (Altenried et al., 2018: 292–298) in the context of migration's centrality to global (labour) struggles (Choudry and Hlatshwayo, 2016). A compositional AoM is thus central to the enrichment of autonomist ideas through engagement with race, class, gender and national identities (Camfield, 2004; Thorburn, 2017).

To avoid 'ossification' (Shukaitis, 2014) autonomist thinking should remain 'heretical' (Tronti, 2019). Focusing on migration helps avoid any provincial (re)production of autonomist thinking. A range of work has applied autonomist ideas in non-Western contexts, exploring changing class composition in, for example, Laos (Brown, 2019), China (Marks, 2012), Thailand (Campbell, 2016, 2018a) and Hong Kong (Wong and Au-Yeung, 2019). But arguably the synthesis of autonomist praxis with Latin American decolonial thinking – 'two of the most intriguing trends in social and political theory' (Luisetti et al., 2015: 1) – has the richest rewards. Latin American struggles have had a lasting influence on (post)autonomist thinking (see Eden, 2012), with 'societies in movement' such as the Zapatistas, Argentina's unemployed workers' movements and Brazil's landless workers' movement providing sterling examples of politics from 'below and to the left' (Mason-Deese, 2016; Vergara-Camus, 2014; Zibechi, 2012). This engagement is reciprocal. Autonomist ideas have been applied to localised struggles (Fishwick, 2019) and continent-wide waves of re- and de-composition (Webber, 2019), but perhaps more importantly, autonomist concepts have been challenged, interrogated and revised. In particular, detailed focus on indigenous struggles has added important nuance to class composition analysis (Neill, 2001), and urban migrants' social-reproductive struggles (Gago, 2017) have reinvigorated key autonomist themes.

The dynamic synergy of autonomist and (Latin American) decolonial thinking illustrates that

compositional analyses can travel and adapt. Exploring migration forces class composition analyses to engage with race and national identities as evidenced in geographically diffuse work beyond Italian borders. Such engagement is nascent, yet it provides some of the most exciting and engrossing contemporary autonomist work. A re-engagement with radical class politics is needed in geography, and a truly intersectional and decolonial class composition analysis (that does not forsake the relationship of class to race and gender) is an ideal tool to respond to the complexity and heterogeneity of contemporary class formations. As the next section shows, autonomist class composition analysis also provides crucial tools for radical praxis at the level of social reproduction and expanded urban contestation.

IV Social reproduction

Another enduring conceptual tool derived from Operaismo is the ‘social factory’ (Pizzolato, 2013; Thoburn, 2003), first developed in Tronti’s ‘Factory and Society’, 1962, and ‘The Plan of Capital’, 1963, collected in *Workers and Capital* (Tronti, 2019). Drawing on Marx’s concepts of absolute and relative surplus value, on the total process of capitalist reproduction in Capital Volume II, and implicitly on Marx’s theory of subsumption (Gray, forthcoming), Tronti attempted to grasp – two decades before neoliberalism gained traction in the US and the UK – the ways in which the post-war state capitalist form of production was penetrating ‘all the other spheres of society, invading the whole network of social relations’ (Tronti, 2019: 12). The social factory thesis seemingly offered profound potential for conceptualising diffuse class composition beyond the factory walls (Cleaver, 1979), yet in practice Operaismo focused almost exclusively on the industrial workplace (Wright, 2017). However, recent work in the social sciences has attempted to bring the social factory to bear on architecture and urban development (Aureli, 2012), platform capitalism (Muldoon, 2022), warehousing (Delfanti, 2021), and communicative capitalism (Mumby, 2020).

Within geography, the social factory thesis is most renowned through the work of Hardt and Negri (2000, 2006), where the term is closely aligned

with the post-autonomous concepts of ‘immaterial labour’ and the ‘multitude’ (Gill and Pratt, 2008), drawing on Negri’s long-term engagement with the thesis (Negri, 1987, 1991, 2005). Yet, Negri’s use of the term has been challenged for its totalising conception of real subsumption (Gray, forthcoming), its Euro-centric, teleological conception of capitalist development (Campbell, 2018b; Tomba, 2013) and its neglect of the material ‘affective’ and gendered nature of labour in the domestic sphere (Dalla Costa, 2012; Federici, 2004, 2012). Nevertheless, the concept’s innate spatiality (Toscano, 2004) and potential to diversify the anti-capitalist front in the sphere of social reproduction (Dalla Costa, 2012) remains tantalising for geographers (Clare, 2019; Gray, 2022, forthcoming; Vasudevan, 2017). As Cleaver (1979: 58–59) has observed, autonomist groups like Lotta Continua – operating at the intersection of the factory, the university and the metropolis – utilised the concept to initiate a wide range of struggles in the education, housing, transport, welfare, health and leisure sectors (Gray, 2018a, 2022; Lotta Continua, 1973; Quirico, 2021). Meanwhile, Italian autonomist-feminists, ‘grasped not only the theoretical concept of the social factory but also the key role of the struggle of non-factory workers—most of whom are women’ (Cleaver, 1979: 59). The thesis was central to autonomist-feminist theories of domestic labour and social reproduction (Dalla Costa and James, 1972; Fortunati, 1995; Federici, 2012), and to the conceptual lexicon of Lotta Femminista (LF) and the international WfH network, formed in 1972 (Dalla Costa, 2012; Toupin, 2018). In turn, LF and WfH were seminal protagonists in the broader domestic labour debate, as recognised in key geographical surveys of feminism and social reproduction (Mitchell et al., 2003; Norton and Katz, 2017; Winders and Smith, 2019).

The founding work of autonomist-feminism precedes recent feminist scholarship on the inextricable relation between production and social reproduction (Strauss and Meehan, 2015; Schling, 2018; Winders and Smith, 2019) and studies in social reproduction theory (SRT) (Bhattacharya, 2017; Ferguson, 2019). Yet, the influence of Operaismo’s categories is often excised in contemporary references to autonomist-feminism. Although important

to acknowledge the feminist ‘rupture’ from Operaismo for a lack of action on the social condition and roles of women (Curcio, 2020), it is also crucial to recognise the self-acknowledged influence of Operaismo’s categories within the radical anti-capitalist milieu of autonomist-feminism (see Dalla Costa, 2012; Fortunati, 2013; Federici, 2018 for personal accounts). Such work loses much of its distinctive meaning when this influence is redacted. Indeed, SRT arguably attempts to recuperate autonomist-feminism into a broader socialist-feminist remit in ways that diminish the radical anti-capitalist, anti-statist perspective of autonomist-feminism (Mezzadri, 2019, 2020). For instance, Federici’s (2012) slogan: ‘Wages *against* Housework’ – borrowed heavily from Operaismo’s ‘refusal of work’ strategy – simultaneously formed a critique of unwaged domestic labour, waged labour and the concept of emancipation through paid work in general (see Dalla Costa and James, 1972; Federici, 2012; James, 2012). This position went much further than most socialists and feminists would accept in the 1970’s (Federici, 1984).

The social factory thesis was evident in the formation of Lotta Femminista, which was borne from the Potere Operaia branch in the Veneto region, home to the Porto Marghera petro-chemical complex, where Maria Dalla Costa, Alisa Del Re and other female activist-intellectuals presciently conceptualised ‘capitalist noxiousness’ beyond the factory walls and into the neighbourhood (Feltrin and Sacchetto, 2021). With reproductive labour, the community and the home, recognised as part of the social factory, the entire sphere of social reproduction was recognised as a potential arena of political contestation (Dalla Costa and James 1972: 38). Yet, in practice, the potential for generalised struggle in the social factory, was understandably sidelined by the milieu behind a primary focus on establishing women’s social reproductive labour as pivotal to the reproduction of labour-power (Fortunati, 1995; Mezzadri, 2020). Additionally, there was resistance to political strategies that might re-entrench the family form and state power over women in the area of social services. Indeed, Dalla Costa (2019: 25) considered women’s defence of the working-class wage in the early 1970’s – living costs, utility tariffs,

social services and rent – as ‘struggles in defence of a family structure’ rather than struggles addressed to ‘winning back and redefining one’s own individuality, space and levels of wealth’. Despite such reservations, Dalla Costa also acknowledged the importance of social security provision for opening up a degree of autonomy for women and a new terrain of confrontation with the state (see Federici, 2015).

The tension between ‘restoring or defending the welfare state, or constructing more autonomous forms of reproduction’ (Federici, 2015: vii) remains highly pertinent in contemporary struggles over the ‘urban commons’ (Cumbers, 2015; Harvey, 2012; Huron, 2018; Joubert and Hodkinson, 2018), the ‘new municipalism’ (Janoschka and Mota, 2021; Thompson, 2020; Russell, 2019) and other areas of radical urban contestation (Mayer et al., 2016; Vasudevan, 2015, 2017). Autonomist-feminist work on this issue remains tremendously productive for the contemporary era. For instance, Federici provides an incisive take on the problematic, advocating the appropriation and self-organisation of communal services before demanding the state pay for it, rather than letting the state organise communal consumption on its own terms: ‘In one case we regain some control over our lives, in the other we extend the State’s control over us’ (Federici 2012: 21).

If not always directly involved in urban and social service struggles, autonomist-feminist theorising around the social factory was influential in the wave of often women-led urban struggles across Italy in the 1970’s (Gray, 2018a, 2022; Lotta Continua, 1973; Quirico, 2021; Vasudevan, 2017). A potent geographical perspective can be brought to bear here since such struggles can be seen as an immanent response to the contradictions of tumultuous post-war migration and urbanisation (Ginatempo, 1979; Gray, 2022; Marcelloni, 1979). New fronts and subjects of anti-capitalist urban struggle – epitomised by rent strikes, squatting and innovative autor-eduction (‘self-reduction’) strategies – were often led by women (Cherki and Wievorka, 2007; Lotta Continua, 1973; Ramirez, 1992; Quirico, 2021) and addressed key elements of the gendered ‘social infrastructure’ of social reproduction: housing, social services, utilities and transport (cf. Gray, 2022;

Hall, 2020). As such, they provide heuristic concrete examples for geographical debates elaborating the links between feminist social reproductive thought and urban form (Katz, 2008; McDowell, 1983). Adapting the crucial class composition concept from a geographical perspective, such struggles have been identified as emerging from a new urbanised *spatial composition* of capital (see Clare, 2019, 2020; Gray, 2015, 2018a, 2022), and here we see significant opportunities to develop closer bonds between urban-geographical theory and autonomist theory and practice.

The theoretical tools of the social factory and class composition analysis, and the lessons from Operaismo-influenced urban and social reproductive struggles, provide a rich resource for geographers elaborating a radical geographical anti-capitalist praxis between urban space and social reproduction across the globe (Brown, 2019; Campbell, 2018a; Gray, 2018b; Mason-Deese, 2012, 2016; Risager, 2021). Operaismo's focus on the industrial labour process remains essential (AngryWorkers, 2020a; Silver, 2003), yet thinking through the concept of class composition, Operaismo's innate spatialities, and the work of autonomist-feminists, offers significant potential for contemporary radical geographical praxis in the sphere of social reproduction and at the intersection of formal/informal labour.

V Conclusion

Over a decade ago the *autonomous* geographies project helped reinvigorate radical, agency-oriented thought in the discipline (Chatterton and Pickerill, 2010; Hodkinson and Chatterton, 2006; Pickerill and Chatterton, 2006). We suggest it is possible to develop this perspective further through an explicitly *autonomist* geography, that addresses some of the limits we perceive in autonomous geographies and in the wider post-autonomous literature that is better known in geographical circles. With its precise and grounded conceptual lexicon, there is significant value in a spatialised autonomist (re)turn (see Clare, 2020; Gray, 2018a; Risager, 2021). In particular, we have argued that class composition provides a persuasively practical materialist framework and methodology for carrying out radical autonomist

geographical research (Gray, 2022), but this time with a closer understanding of the relationship between mode of production and mode of struggle (see Battaglia, 2018; Mohandesi, 2013). In geography, the class composition concept is already being enriched through a focus on both *social* (Castellini, 2021) and *spatial* (Clare, 2019, 2020; Gray, 2018a, 2018b, 2022) compositional analysis. Here, there lies great potential to radicalise geography through autonomist praxis, and to further develop the innate spatialities of autonomist praxis through geographical thought.

We have argued that an autonomist geography speaks directly to three key overlapping areas in geographical research: (I) labour, (II) migration and (III) social reproduction. In section I, we argued that autonomist geography is labour geography *par excellence*, that its commitment to detailed and nuanced class composition analysis helps develop debates on labour agency (Coe and Jordhus-Lier, 2011), capital-centricity (Hastings, 2016), precarity (Strauss, 2018) and logistics (Coe, 2020), and can help in the necessary task of renewing working-class geography (see Emery, 2019; Stenning, 2008; Strangleman, 2008). Furthermore, in autonomist Marxism's sustained focus on migration (section II) and social reproduction (section III), we see important overlaps with contemporary theory-building in geography. Too many papers have shown that radical geographies often fail to engage properly with gender, race, migratory status and class in a truly meaningful way (Das, 2012; Smith, 2016; Werner et al., 2017). Some of the most exciting and important work in geography pushes against this with a clear recognition of explicitly feminist, anti-racist and decolonial *class* struggles (see Coulthard, 2014; Gidwani, 2015; Hart, 2018; see also Strauss 2020a, 2020b for overviews). This is again where the benefit of an autonomist geography is clear. Operaismo was forged from active struggle, with inquiries and compositional analyses keeping concepts and conclusions firmly grounded in the industrial workplace. Meanwhile, the autonomist-inflected social-reproductive urban movements of the 1970's were immensely generative for expanding the anti-capitalist front beyond factory walls and national borders. It is crucial therefore to continue expanding

the scope of autonomist inquiry into new geographies that reflect the changing material conditions of capitalist relations, strengthening, sharpening, and where necessary revising, its core concepts – something that is especially important as we confront the shifting configurations of global capitalism (Toscano, 2004).

A final word of caution, however. Academia can have sanitising tendencies. Workers' inquiry and class composition analysis are, and must remain, active practices if they are not to merely reproduce 'the detachment of revolutionary (or at least combative) theory from everyday working-class struggles' (AngryWorkers, 2020b). Although there is 'no politics without inquiry' (Emery, 2018), the act of inquiry must remain politicised through rigorous commitment to meaningful class composition analysis. By this we mean an immanent materialist method of social inquiry and analysis that aims to discover and help generalise self-conscious, reflexive movements which are the antagonistic social expression of general tendencies in the new class composition (see Bologna, 2007b). Moreover, there remains a need for a working-class geography that properly embraces and understands working-class heterogeneity, and this paper has argued that an autonomist geography is very well placed to fulfil this role. The autonomous geographies collective sought to imagine a life beyond capitalism, and to provide a toolkit for getting there. That task remains as important as ever, but we believe it is better suited to an autonomist geography.

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Notes

1. The position of the autonomous geographies collective was influenced by the notion of 'capitalocentrism' introduced by Gibson-Graham (2006), which in our view tends to disavow negation and antagonism in the name of researching 'diverse economies'. Our position is closer to that of the 'Open Marxist' critique of capital-centrism and their insistence on the openness of categories – an openness to practice – within and against capitalist relations. This immanent position has a starting point of class antagonism between capital and labour (Bonefeld et al., 1992).
2. Limited space necessitates the omission of key themes within the autonomist Marxist milieu. The commons and cognitive capitalism are two prime examples and we might also have considered the profusion of struggle and research in the platform and gig economies. But these themes, we believe, frame some of the most important autonomist theoretical currents today, while also corresponding with pressing contemporary geographical debates that have rarely been viewed through an autonomist class composition perspective.

References

- Alberti G (2014) Mobility strategies, 'mobility differentials' and 'transnational exit': the experiences of precarious migrants in London's hospitality jobs. *Work, Employment and Society* 28(6): 865–881.
- Alberti G (2016) Mobilizing and bargaining at the edge of informality: The "3 Cosas Campaign" by Outsourced Migrant Workers at the University of London. *Working USA* 19(1): 81–103.
- Alimahomed-Wilson J and Ness I (eds) (2018) *Choke Points: Logistics Workers Disrupting the Global Supply Chain*. London: Pluto Press.
- Alquati R (2013a) Organic composition of capital and labour-power at Olivetti. Viewpoint magazine. <https://viewpointmag.com/2013/09/27/organic-composition-of-capital-and-labor-power-at-olivetti-1961/>
- Alquati R (2013b) Struggle at Fiat. Viewpoint magazine. <http://viewpointmag.com/2013/09/26/struggle-at-fiat-1964/>
- Alquati R (2013c) Outline of a pamphlet on FIAT. Viewpoint magazine. <https://viewpointmag.com/2013/09/26/outline-of-a-pamphlet-on-fiat-1967/>

- Altenried M, Bojadžijev M, Höfler L, et al. (2018) Logistical borderscapes. *South Atlantic Quarterly* 117(2): 291–312.
- Anastasi A (2020) *The Weapon of Organization: Mario Tronti's Political Revolution in Marxism*. New York, NY: CommonNotions.
- AngryWorkers (2020a) *Class Power on Zero-Hours*. Sunderland: PM Press.
- AngryWorkers (2020b) *Thoughts on 'workers' Inquiry and Global Class Struggle—Strategies, tactics, objectives' edited by Robert Ovetz*. Available at: <https://www.angryworkers.org/2020/12/28/thoughts-on-workers-inquiry-and-global-class-struggle-strategies-tactics-objectives-edited-by-robert-ovetz/> (accessed 16 February 2021).
- Aureli PV (2012) *The Project of Autonomy: Politics and Architecture Within and Against Capitalism*. New York, NY: The Temple Hoyne Buell Center for the Study of American Architecture with Princeton Architectural Press.
- Baker R (2020) Racial capitalism and a tentative commons: Urban farming and claims to space in post-bankruptcy Detroit. In: Özkan D and Büyüksaraç GB (eds) *Commoning the City: Empirical Perspectives on Urban Ecology, Economics and Ethics*. Abingdon: Routledge.
- Baldi G (1972) Theses on the mass worker and social capital. *Radical America* 6(1): 3–21.
- Balestrini N and Moroni P (2021) *The Golden Horde: Revolutionary Italy, 1960-1977*. London: Seagull Books
- Battaglia A (2018) Mass worker and social worker: Reflections on the “new class composition”. <http://notesfrombelow.org/article/mass-worker-and-social-worker>
- Bauder H (2019) Migrant solidarities and the politics of place. *Progress in Human Geography* 44(6): 1066–1080.
- Bellofiore R and Tomba M (2011) On Italian workerism. Presented at the Fifth Historical Materialism Annual Conference “Many Marxisms” (7–9 November 2008). Trans. Steve Wright. Available at: <https://libcom.org/library/italian-workerism>
- Benvegnù C, Haidinger B and Sacchetto D (2018) Restructuring labour relations and employment in the European logistics sector. In: Doellgast V, Lillie N and Pulignano V (eds) *Reconstructing Solidarity: Labour Unions, Precarious Work, and the Politics of Institutional Change in Europe*. Oxford: Oxford University Press.
- Berardi F (2007) Anatomy of autonomy. In: Lotringer S and Marazzi C (eds) *Autonomia: Post-political Politics*. New York, NY: Semiotext(e).
- Berardi F (2011) *Precarious Rhapsody. Semio-Capitalism and the Pathologies of the Post-Alpha Generation*. London: Autonomedia.
- Bergene AC and Endresen SB (2010) *Missing Links in Labour Geography*. London: Routledge.
- Bhattacharya T (2017) *Social Reproduction Theory*. London: Pluto Press.
- Bologna S (1976) Class composition and the theory of the state at the origin of the workers council movement. In: CSE (eds) *The Labour Process and Class Strategies*. London: Stage.
- Bologna S (1977) The factory-society relationship as an historical category. Available at: <https://libcom.org/library/factory-society-relationship-historical-category>
- Bologna S (1991) The theory and history of the mass worker in Italy: Part One. *Common Sense* 11: 16–29.
- Bologna S (1992) The theory and history of the mass worker in Italy: Part two. *Common Sense* 11: 16–29.
- Bologna S (2007a) The Tribe of Moles. In: Lotringer S and Marazzi C (eds) *Autonomia: Post-political Politics*. New York, NY: Semiotext(e).
- Bologna S (2007b) Workerist publications and bios. In: Lotringer S and Marazzi C (eds) *Autonomia: Post-political Politics*. New York, NY: Semiotext(e).
- Bologna S (2014) *Inside Logistics: Organization, Work, Distinctions*. Viewpoint magazine. Available at: <https://viewpointmag.com/2014/10/29/inside-logistics-organization-work-distinctions/>
- Bologna S (2018) *The Rise of the European Self-Employed Workforce*. Milan: Mimesis International.
- Bonefeld W, Gunn R and Psychopedis K (1992) *Open Marxism, Volume II: Theory and Practice*. London: Pluto Press.
- Borio G, Pozzi P and Roggero G (eds) (2005) *Gli Operai*. Rome: Derive Approdi.
- Brodhead (1984) Strategy, compromise and revolt: Viewing the Italian workers' movement. *Radical America* 18(5): 52–57.
- Brown JA (2019) Territorial (in)coherence: Labour and special economic zones in Laos's border manufacturing. *Antipode* 51(2): 438–457.

- Buckley M, McPhee S, Rogaly B, et al. (2017) Labour geographies on the move: Migration, migrant status and work in the 21st century. *Geoforum* 78(1): 153–158.
- Camfield D (2004) Re-orienting class analysis: Working classes as historical formations. *Science and Society* 68(4): 421–446.
- Campbell S (2016) Everyday recomposition: Precarity and socialization in Thailand's migrant workforce. *American Ethnologist* 43(2): 258–269.
- Campbell S (2018a) *Border Capitalism, Disrupted: Precarity and Struggle in a Southeast Asian Industrial Zone*. Ithaca, NY: Cornell University Press.
- Campbell S (2018b) Anthropology and the social factory. *Dialectical Anthropology* 42(3): 227–239.
- Cant C (2019) *Riding for Deliveroo: Resistance in the New Economy*. London: Polity.
- Casas-Cortes M, Cobarrubias S, Pickles J, et al. (2015) Riding routes and itinerant Borders: Autonomy of migration and border externalization. *Antipode* 47(4): 894–914.
- Castellini V (2021) Spaces of social recomposition: Resisting meaningful work in social cooperatives in Italy. *Antipode* 53(6): 1661–1681.
- Chatterton P and Pickerill J (2010) Everyday activism and transitions towards post-capitalist worlds. *Transactions of the Institute of British Geographers* 35(4): 475–490.
- Cherki E and Wiewiorka M (2007) Autoreduction movements in Turin. In: Lotringer S and Marazzi C (eds) *Autonomia: Post-Political Writings*. Los Angeles, CA: Semiotext(e).
- Choudry A and Hlatshwayo M (eds) (2016) *Just Work? Migrant Workers' Struggles Today*. London: Pluto Press.
- Ciccariello-Maher G (2006) *Detached Irony Toward the Rest: Working-Class One-Sidedness From Sorel to Tronti*. The Commoner Spring.
- Clare N (2019) Composing the social factory: An autonomist urban geography of Buenos Aires. *Environment and Planning D: Society and Space* 37(2): 255–275.
- Clare N (2020) Multiplying labour, multiplying resistance: Class composition in Buenos Aires' clandestine textile workshops. *Antipode* 52(3): 742–763.
- Cleaver H (1979) *Reading Capital Politically*. Hertfordshire: Harvester Press.
- Cleaver H (2004) *From Operaismo to 'Autonomist Marxism': A Response*. Austin, TX: University of Texas.
- Clough N and Blumberg R (2012) Toward anarchist and autonomist Marxist geographies. *ACME: An International Journal for Critical Geographies* 11(3): 335–351.
- Coe NM (2013) Geographies of production III. *Progress in Human Geography* 37(2): 271–284.
- Coe NM (2020) Logistical geographies. *Geography Compass* 14(10): 1–16.
- Coe NM and Hess M (2013) Global production networks, labour and development. *Geoforum* 44: 4–9.
- Coe NM and Jordhus-Lier DC (2011) Constrained agency? Re-evaluating the geographies of labour. *Progress in Human Geography* 35(2): 211–233.
- Coulthard GS (2014) *Red Skin, White Masks: Rejecting the Colonial Politics of Recognition*. Minneapolis: University of Minnesota Press.
- Cowen D (2010) A geography of logistics: Market authority and the security of supply chains. *Annals of the Association of American Geographers* 100(3): 600–620.
- Cowen D (2014a) *The Deadly Life of Logistics: Mapping Violence in Global Trade*. Minnesota: University of Minnesota Press.
- Cowen D (2014b) Disrupting distribution: Subversion, the social factory, and the “state” of supply chains. *Viewpoint Magazine*. Available at: <https://viewpointmag.com/2014/10/29/disrupting-distribution-subversion-the-social-factory-and-the-state-of-supply-chains/>
- Chua C, Danyluk M, Cowen D, et al. (2018) Introduction: Turbulent circulation: Building a critical engagement with logistics. *Environment and Planning D: Society and Space* 36(4): 617–629.
- Cumbers A (2015) Constructing a global commons in, against and beyond the state. *Space and Polity* 19(1): 62–75.
- Cumbers A, Helms G, Swanson K, et al. (2010) Class, agency and resistance in the old industrial city. *Antipode* 42(1): 46–73.
- Cumbers A, Nativel C, Routledge P, et al. (2008) Labour agency and union positionalities in global production networks. *Journal of Economic Geography* 8(3): 369–387.

- Cunningham P (2005) Autonomia in the 1970's: the refusal of work, the party and power. *Cultural Studies Review* 11(2): 77–94.
- Cunningham PG (2007) “A laughter that will bury you all”: Irony as protest and language as struggle in the Italian 1977 movement. *International Review of Social History* 52(S15): 153–168.
- Cunningham P (2010) Autonomism as a global social movement. *Working USA* 13(4): 451–464.
- Curcio A (2014) Practicing militant inquiry: Composition, strike and betting in the logistics workers struggles in Italy. *Ephemera* 14(3): 375–390.
- Curcio A (2020) *Marxist Feminism of Rupture*. Viewpoint magazine. Available at: <https://viewpointmag.com/2020/01/14/marxist-feminism-of-rupture/>
- Curcio A and Roggero G (2018) *Logistics is the logic of capital*. Viewpoint magazine. Available at: <https://viewpointmag.com/2018/10/25/logistics-is-the-logic-of-capital/>
- Dalla Costa M (2012) Women's autonomy & remuneration of care work. *Commoner* 15: 198–234.
- Dalla Costa M (2019) *Women and the Subversion of the Community: A Mariarosa Dalla Costa Reader*. Oakland, CA: PM Press.
- Dalla Costa M and James S (1972) *The Power of Women and the Subversion of Community*. Bristol: Falling Wall Press Ltd.
- Danyluk M (2018) Capital's logistical fix: Accumulation, globalization, and the survival of capitalism. *Environment and Planning D: Society and Space* 36(4): 630–647.
- Das RJ (2012) From labor geography to class geography: Reasserting the Marxist theory of class. *Human Geography* 5(1): 19–35.
- De Angelis DM (2017) *Omnia Sunt Communia: On the Commons and the Transformation to Postcapitalism*. London: Zed Books.
- De Genova NP (2002) Migrant “illegality” and deportability in everyday life. *Annual Review of Anthropology* 31(1): 419–447.
- De Genova N, Garelli G and Tazzioli M (2018) Autonomy of asylum? *South Atlantic Quarterly* 117(2): 239–265.
- Delfanti A (2021) *The Warehouse: Workers and Robots at Amazon*. London: Pluto Press.
- Dowling R (2009) Geographies of identity: landscapes of class. *Progress in Human Geography* 33(6): 833–839.
- Dyer-Witford N (2008) For a compositional analysis of the multitude. In: Bonefeld W (ed) *Subverting the Present, Imagining the Future: Class, Struggle, Commons*. New York, NY: Autonomedia, 247–266.
- Eden D (2012) *Autonomy: Capitalism, Class and Politics*. London: Ashgate
- Ehrkamp P (2019a) Geographies of migration II: The racial-spatial politics of immigration. *Progress in Human Geography* 43(2): 363–375.
- Ehrkamp P (2019b) Geographies of migration III: Transit and transnationalism. *Progress in Human Geography* 44(6): 1202–1211.
- Ekers M and Loftus A (2020) On “the concrete”: Labour, difference and method. *Antipode* 52(1): 78–100.
- Emery E (2018) *No Politics Without Inquiry! 1995: A Proposal for a Class Composition Inquiry Project 1996-7*. Available at: <https://notesfrombelow.org/article/no-politics-without-inquiry>
- Emery J (2019) Geographies of deindustrialization and the working-class: Industrial ruination, legacies, and affect. *Geography Compass* 13(2): 1–14
- Englert S, Woodcock J, Cant C, et al. (2020) Digital workerism: technology, platforms, and the circulation of workers' struggles. *TripleC: Communication, Capitalism and Critique* 18(1): 132–145.
- Federici S (1984) Putting feminism back on its feet. *Social Text* 9/10: 338–346.
- Federici S (2004) *Caliban and the Witch: Women, the Body and Primitive Accumulation*. New York, NY: Autonomedia.
- Federici S (2012) *Revolution at Point Zero: Housework, Reproduction, and Feminist Struggle*. Oakland: PM Press.
- Federici S (2015) Preface. In: Dalla Costa M (ed) *Family, Welfare, and the State: Between Progressivism and the New Deal*. New York, NY: Common Notions, iv–vii.
- Federici S (2018) Marx and feminism TripleC: Communication. *Capitalism and Critique* 16(2): 468–475.
- Federici S and Austin A (2017) *Wages for Housework: The New York Committee 1972-1977: History, Theory, Documents*. New York, NY: Autonomedia.
- Feltrin L and Sacchetto D (2021) The work-technology nexus and working-class environmentalism: Workerism versus capitalist noxiousness in Italy's Long 1968. *Theory and Society* 50:815–835.

- Ferguson S (2019) *Women and Work: Feminism, Labour, and Social Reproduction*. London: Pluto Books.
- Fishwick A (2019) Workplace occupation and the possibilities of popular power in Chile and Argentina, 1972–6. *Globalizations* 16(4): 386–403.
- Fortunati L (1995) *The Arcane of Reproduction: Housework, Prostitution, Labour and Capital*. New York, NY: Autonomedia.
- Fortunati L (2013) *Learning to Struggle: My Story Between Workerism and Feminism*. Viewpoint magazine. Available at: <https://viewpointmag.com/2013/09/15/learning-to-struggle-my-story-between-workerism-and-feminism/>
- Gago V (2017) *Neoliberalism From Below: Popular Pragmatics and Baroque Economies*. Durham, NC: Duke University Press.
- Gambino F and Davis D (2019) *The revolt of living labor: An Interview With Ferruccio Gambino*. Viewpoint magazine. Available at: <https://viewpointmag.com/2019/11/05/the-revolt-of-living-labor-an-interview-with-ferruccio-gambino/>
- Gambino F and Ruckus R (2018) “The workers may have the last word, not those who are on the outside”. *Interview with Ferruccio Gambino by Ralf Ruckus*. Available at: <https://www.gongchao.org/2018/09/15/the-workers-may-have-the-last-word/>
- Gibson-Graham JK (2006) *The end of capitalism (as we knew it): a feminist critique of political economy*. Minneapolis: University of Minnesota Press.
- Gidwani V (2015) The work of waste: inside India’s infra-economy. *Transactions of the Institute of British Geographers* 40(4): 575–595.
- Gill N and Pratt A (2008) In the social factory?: Immaterial labour, precariousness and cultural work. *Theory, Culture and Society* 25(7–8): 1–30.
- Ginatempo N (1979) The structural contradictions of the building industry in Italy, and the significance of the new housing legislation. *International Journal of Urban and Regional Research* 3(1–4): 465–491.
- Gray N (2015) *Neoliberal urbanism and spatial composition in recessionary Glasgow*. PhD thesis, University of Glasgow.
- Gray N (2018a) Beyond the right to the city: Territorial autogestion and the take over the city movement in 1970s Italy. *Antipode* 50(2): 319–339.
- Gray N (2018b) Spatial composition and the urbanization of capital: the 1915 Glasgow rent strikes and the housing question reconsidered. In: Gray N (ed) *Rent and its Discontents: A Century of Housing Struggle*. London and New York, NY: Rowman & Littlefield International.
- Gray N (2022) Rethinking Italian autonomist Marxism: Spatial composition, urban contestation and the material geographies of social reproduction. *Antipode* 54(3): 800–824.
- Gray N (forthcoming) Differentiated spatialities of subsumption and the social factory as phantom thesis. In: Iles A and Mattin (eds) *What is to be Done Under Real Subsumption*.
- Griffin P (2021a) Expanding labour geographies: Resourcefulness and organising amongst ‘unemployed workers’. *Geoforum* 118: 159–168.
- Griffin P (2021b) Contemporary labour geographies within changing places. *Geography* 106(1): 25–31.
- Hall SM (2020) Social reproduction as social infrastructure. *Soundings: A Journal of Politics and Culture* 76(1):82–94.
- Hardt M and Negri A (2000) *Empire*. Cambridge, MA.: Harvard University Press.
- Hardt M and Negri A (2006) *Multitude: War and Democracy in the Age of Empire*. London: Penguin Books.
- Hart G (2018) Relational comparison revisited: Marxist postcolonial geographies in practice. *Progress in Human Geography* 42(3): 371–394.
- Harvey D (2006) *The Limits to Capital*. London: Verso.
- Hastings T (2016) Moral matters: de-romanticising worker agency and charting future directions for labour geography. *Geography Compass* 10(7): 307–318.
- Hastings T and Cumbers A (2019) “That type of thing does give you a boost”: Control, self-valorisation, and autonomist worker copings in call centres. *Antipode* 51(5): 1456–1473.
- Herod A (1997) From a geography of labor to a labor geography: Labor’s spatial fix and the geography of capitalism. *Antipode* 29(1): 1–31.
- Herod A (2005) Spaces of work: global capitalism and geographies of labour. *Environment and Planning A* 37(4): 751–752.
- Herod A (2008) Spaces of global capitalism: Towards a theory of uneven geographical development. *Labour-Le Travail* 61: 317–319.

- Hodkinson S and Chatterton P (2006) Autonomy in the city? Reflections on the social centres movement in the UK. *City* 10(3): 305–315.
- Holloway J (2002) *Change the World Without Taking Power*. London: Pluto Press.
- Holloway J (2010) *Crack Capitalism*. London: Pluto Press.
- Huron A (2018) *Carving out the Commons: Tenant Organizing and Housing Cooperatives in Washington*. Minneapolis: University of Minnesota Press.
- James S (2012) *Sex, Race and Class, the Perspective of Winning: A Selection of Writings 1952-2011*. Oakland, CA: PM Press.
- Janoschka M and Mota F (2021) New municipalism in action or urban neoliberalisation reloaded? An analysis of governance change, stability and path dependence in Madrid (2015–2019). *Urban Studies* 58(13): 2814–2830.
- Joubert T and Hodkinson SN (2018) Beyond the rent strike, towards the commons: Why the housing question requires activism that generates its own alternatives. In: Gray N (ed) *Rent and its Discontents: A Century of Housing Struggle*. London: Rowman & Littlefield, 185–200.
- Katz C (2008) Bad elements: Katrina and the scoured landscape of social reproduction. *Gender, Place and Culture* 15(1): 15–22.
- Kolinko (2001) *Class Composition*. Available at: https://www.nadir.org/nadir/initiativ/kolinko/eng/e_klazu.htm
- Lan T (2015) Industrial district and the multiplication of labour: The Chinese apparel industry in Prato, Italy. *Antipode* 47(1): 158–178.
- Lazzarato M (1996) Immaterial labour. In: Virno P and Hardt M (eds) *Radical Thought in Italy: A Potential Politics*. Minnesota: University of Minnesota Press, 133–147.
- Leonardi E (2016) Border struggles: Migration, subjectivity and the common. *Historical Materialism* 24(4): 244–256.
- Lier DC (2007) Places of work, scales of organising: A review of labour geography. *Geography Compass* 1(4): 814–833.
- Lotta Continua (1973) Take over the city—Community struggles in Italy. *Radical America* 7(2): 79–112.
- Lotringer S and Marazzi C (2007) *Autonomia: Post-Political Writings*. Los Angeles, CA: Semiotext(e).
- Luisetti F, Pickles J and Kaiser W (2015) Autonomy: Political theory/political anthropology. In: Luisetti F, Pickles J and Kaiser W (eds) *The Anomie of the Earth: Philosophy, Politics, and Autonomy in Europe and the Americas*. Durham & London: Duke University Press.
- Lumley R (1990) *States of Emergency: Cultures of Revolt in Italy From 1968 to 1978*. London: Verso.
- Marcelloni M (1979) Urban movements and political struggles in Italy. *International Journal of Urban and Regional Research* 3(1–4): 251–268.
- Marks B (2012) Autonomist Marxist theory and practice in the current crisis. *ACME: An International Journal for Critical Geographies* 11(3): 467–491.
- Mason-Deese L (2012) *The Neighbourhood is the New Factory*. Viewpoint Magazine. Available at: <https://www.viewpointmag.com/2012/09/10/the-neighborhood-is-the-new-factory/>
- Mason-Deese L (2016) Unemployed Workers' Movements and the Territory of Social Reproduction. *Journal of Resistance Studies* 2(2): 65–99.
- Martin L (2020) Carceral economies of migration control. *Progress in Human Geography* 45(4): 740–757.
- Mayer M, Thörn C and Thörn H (eds) (2016) *Urban uprisings: Challenging Neoliberal Urbanism in Europe*. London: Palgrave Macmillan.
- Marazzi C (2008) *Capital and Language: From the New Economy to the War Economy*. Los Angeles, CA: Semiotext(e).
- McDowell L (1983) Towards an understanding of the gender division of urban space. *Environment and Planning D: Society and Space* 1(1): 59–72.
- McDowell L (2015) Roepke lecture in economic geography—the lives of others: Body work, the production of difference, and labor geographies. *Economic Geography* 91(1): 1–23.
- Mezzadra S (2004) The right to escape. *Ephemera* 4(3): 267–275.
- Mezzadra S (2005) *Derecho de fuga: Migraciones, Ciudadanía y Globalización*. Madrid: Queimada Gráficas.
- Mezzadra S (2013) *The Multiplication of Labour: An Interview*. Viewpoint Magazine. Available at: <https://viewpointmag.com/2013/09/15/the-multiplication-of-labor-an-interview/>
- Mezzadra S and Neilson B (2013) *Border as Method, or, the Multiplication of Labor*. Durham, NC: Duke University Press.

- Mezzadri A (2019) On the value of social reproduction: Informal labour, the majority world and the need for inclusive theories and politics. *Radical Philosophy* 4: 33–41.
- Mezzadri A (2020) A value theory of inclusion: Informal labour, the homeworker and the social reproduction of value. *Antipode* 53(4): 1186–1205.
- Midnight Notes (1992) Introduction to Zerowork I. In Midnight Notes (eds) *Midnight Oil: Work, Energy, War, 1973-1992*. New York, NY: Autonomedia.
- Mitchell K, Marston SA, Katz C, et al. (2003) Life's work: An introduction, review and critique. *Antipode* 35(3): 415–442.
- Mohandesi S (2013) Class consciousness or class composition? *Science and Society* 77(1): 72–97.
- Mumby DK (2020) Theorizing struggle in the social factory. *Organization Theory* 1(2): 1–14.
- Muldoon J (2022) *Platform Socialism: How to Reclaim our Digital Future from Big Tech*. London: Pluto Press.
- Negri A (1987) Archaeology and project: The mass worker and the social worker. *Common Sense* 3: 43–71.
- Negri A (1991) *Marx Beyond Marx: Lessons on the Grundrisse*. New York/London: Autonomedia/Pluto Press.
- Negri A (2005) *Books for Burning*. London: Verso.
- Neilson B and Rossiter N (2008) Precarity as a political concept, or, Fordism as exception. *Theory, Culture and Society* 25(7–8): 51–72.
- Neill M (2001) Rethinking class composition analysis in light of the Zapatistas. In: Midnight Notes Collective (eds) *The Aurora of the Zapatistas: Local and Global Struggles of the Fourth World War*. Brooklyn, NY: Autonomedia, 119–143.
- Norton J and Katz C (2017) Social reproduction. In: Richardson D, Castree N, Goodchild MF, et al (eds) *The International Encyclopedia of Geography*. Chichester: John Wiley.
- Notes from Below (2020) *From the Workplace: A collection of Worker Writing*. London: Notes from Below.
- Noys B (2010) *Persistence of the Negative: A Critique of Contemporary Continental Theory*. Edinburgh: Edinburgh University Press.
- Nunes R (2021) *Neither Vertical nor Horizontal: A Theory of Political Organization*. London: Verso.
- Olmos D (2019) Racialized im/migration and autonomy of migration perspectives: New directions and opportunities. *Sociology Compass* 13(9), 1–14
- Ovetz R (ed) (2020) *Workers' Inquiry and Global Class Struggle: Strategies, Tactics, Objectives*. London: Pluto Press.
- Panzieri R (1964) The capitalist use of machinery: Marx versus the objectivists. Available at: <https://libcom.org/library/capalist-use-machinery-raniero-panzieri>
- Panzieri R (1976) Surplus value and planning: Notes on the reading of capital. In: Conference of Socialist Economists (ed) *The Labour Process & Class Strategies*. London: Stage.
- Papadopoulos D, Stephenson N and Tsianos V (2008) *Escape Routes: Control and Subversion in the Twenty-First Century*. London: Pluto Press.
- Papadopoulos D and Tsianos V (2013) After citizenship: autonomy of migration, organisational ontology and mobile commons. *Citizenship Studies* 17(2): 178–196.
- Pickerill J and Chatterton P (2006) Notes towards autonomous geographies: Creation, resistance and self-management as survival tactics. *Progress in Human Geography* 30(6): 730–746
- Pizzolato N (2013) *Challenging Global Capitalism: Labor Migration, Radical Struggle, and Urban Change in Detroit and Turin*. New York, NY: Palgrave.
- Quirico M (2021) Lotta Continua and the Italian housing movement in the 1970's: Ancient history or present challenges? *Radical Housing Journal* 3(1): 149–166.
- Rainnie A, Herod A, McGrath-Champ S, et al. (2011) Review and positions: global production networks and labour. *Competition and Change* 15(2): 155–169.
- Ramirez B (1977) Immigration, class composition, and the crisis of the labor market in Canada. Available at: <http://zerowork.org/Z3RamirezImmigration.html>
- Ramirez B (1992) Self-reduction of prices in Italy. In: Midnight Notes (ed) *Midnight Oil: Work, Energy, War, 1973-1992*. Brooklyn: Autonomedia.
- Revelli M (1996) Worker identity in the factory desert. In: Virno P and Hardt M (eds) *Radical Thought in Italy: A Potential Politics*. Minnesota: University of Minnesota Press.
- Risager BS (2021) Financialised gentrification and class composition in the post-industrial City: A rent strike against a real estate investment trust in Hamilton, Ontario. *International Journal of Urban and Regional Research* 45(2): 282–302.

- Roggero G (2010) Organized spontaneity: class struggle, workers' autonomy, and soviets in Italy. *Working USA* 13(2): 201–212.
- Rutherford T (2010) De/re-centring work and class? A review and critique of labour geography. *Geography Compass* 4(7): 768–777.
- Russell B (2019) Beyond the local trap: New municipalism and the rise of the Fearless Cities. *Antipode* 51(3): 989–1010.
- Scheel S (2019) *Autonomy of Migration? Appropriating Mobility within Biometric Border Regimes*. London: Routledge.
- Schling H (2018) *(Re)Production: Everyday life in the workers' dormitory*. Society and Space. Available at: <https://www.societyandspace.org/articles/re-production-everyday-life-in-the-workers-dormitory>
- Shukaitis S (2013) Recomposing precarity: Notes on the laboured politics of class composition. *Ephemera: Theory and Politics in Organization* 13(3): 641–658.
- Shukaitis S (2014) Learning not to labor. *Rethinking Marxism* 26(2): 193–205.
- Silver B (2003) *Forces of Labor: Workers' Movements and Globalization Since 1870*. Cambridge: Cambridge University Press.
- Smith BE (2016) Life with mother and Marx: Work, gender, and class revisited (again). *Environment and Planning A: Economy and Space* 48(10): 2085–2088.
- Smith DP (2019) Population geography II: the r/age of migration. *Progress in Human Geography* 43(4): 729–738.
- Stenning A (2008) For working class geographies. *Antipode* 40(1): 9–14.
- Strangleman T (2008) Sociology, social class and new working class studies. *Antipode* 40(1): 15–19.
- Strauss K (2018) Labour geography 1: towards a geography of precarity. *Progress in Human Geography* 42(4): 622–630.
- Strauss K (2020a) Labour geography II: being, knowledge and agency. *Progress in Human Geography* 44(1): 150–159.
- Strauss K (2020b) Labour geography III: precarity, racial capitalisms and infrastructure. *Progress in Human Geography* 44(6): 1212–1224.
- Strauss K and Meehan K (eds) (2015) *Precarious Worlds: Contested Geographies of Social Reproduction*. Georgia: University of Georgia Press.
- Swyngedouw EA (1999) Marxism and historical-geographical materialism: A spectre is haunting geography. *Scottish Geographical Journal* 115(2): 91–102.
- Thoburn N (2003) *Deleuze, Marx and Politics*. London: Routledge.
- Thompson M (2020) What's so new about New Municipalism? *Progress in Human Geography* 45(2): 317–342.
- Thorburn ED (2017) Cyborg witches: class composition and social reproduction in the GynePunk collective. *Feminist Media Studies* 17(2): 153–167.
- Tomba M (2013) *Marx's Temporalities*. Chicago: Haymarket Books.
- Toupin L (ed) (2018) *Wages for Housework: A History of an International Feminist Movement, 1972-77*. London: Pluto Press.
- Toscano A (2004) Factory, territory, metropolis, Empire. *Angelaki: Journal of the Theoretical Humanities* 9(2): 197–216.
- Toscano A (2011) *Logistics and Opposition*. Mute magazine. Available at: <https://www.metamute.org/editorial/articles/logistics-and-opposition>
- Toscano A (2014) *Lineaments of the Logistical State*. Viewpoint magazine. Available at: <https://viewpointmag.com/2014/09/28/lineaments-of-the-logistical-state/>
- Tronti M (2007) The refusal of work. In: Lotringer S and Marazzi C (eds) *Autonomia: Post-Political Writings*. Los Angeles, CA: Semiotext(e), 28–35.
- Tronti M (2019) *Workers and Capital*. London: Verso.
- Vasudevan A (2015) The autonomous city: Towards a critical geography of occupation. *Progress in Human Geography* 39(3): 316–337.
- Vasudevan A (2017) *The Autonomist City: A History of Urban Squatting*. London: Verso.
- Vergara-Camus L (2014) *Land and Freedom: The MST, the Zapatistas and Peasant Alternatives to Neoliberalism*. London: Zed Books.
- Virno P (2004) *A Grammar of the Multitude: For an Analysis of Contemporary Forms of Life*. Los Angeles, CA: Semiotext(e).
- Virno P and Hardt M (1996) *Radical Thought in Italy: A Potential Politics*. Minnesota: University of Minnesota Press.

- Webber JR (2019) Resurrection of the dead, exaltation of the new struggles. *Historical Materialism* 27(1): 5–54.
- Werner M, Strauss K, Parker B, et al. (2017) Feminist political economy in geography: Why now, what is different, and what for? *Geoforum* 79: 1–4.
- Winders J and Smith BE (2019) Social reproduction and capitalist production: A genealogy of dominant imaginaries. *Progress in Human Geography* 43(5): 871–889.
- Wong V and Au-Yeung T (2019) Autonomous precarity or precarious autonomy? Dilemmas of young workers in Hong Kong. *The Economic and Labour Relations Review* 30(2): 241–261.
- Woodcock (2017) *Working the Phones: Control and Resistance in Call Centres*. London: Pluto Press.
- Woodcock J (2021) Towards a digital workerism: Workers' inquiry, methods, and technologies. *NanoEthics* 15: 87–98.
- Workers Inquiry Network (2020) *Struggle in a Pandemic: A Collection of Contributions on the Covid-19 Crisis*. London: Workers' Inquiry Network.
- Wright S (2008) Mapping pathways within Italian autonomist marxism: A preliminary survey. *Historical Materialism* 16(4): 111–140.
- Wright S (2017) *Storming Heaven: Class Composition and Struggle in Italian Autonomist Marxism*. London: Pluto Press.
- Wright S (2021) *The Weight of the Printed Word: Text, Context and Militancy in Operaismo*. Leiden/Boston, MA: Brill.
- Zanini A (2010) On the 'philosophical foundations' of Italian workerism: A conceptual approach. *Historical Materialism* 18(4): 39–63.
- Zibechi R (2012) *Territories in Resistance: A Cartography of Latin American Social Movements*. Oakland, CA: AK Press.

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