Extraction, logistics, finance

Global crisis and the politics of operations

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Now that the global crisis of capitalism is entering its fifth year, it is possible to discern the contours of its unfolding. No New Deal or world war is emerging to save the day. The ritual purification of austerity has not cleansed the global sewer of finance despite the harsh and unequal punishments it has delivered. From the fall of Lehman Brothers to the protests in Syntagma Square, from the stalled development in Indian 'new towns' to the refusal of migrant workers to return to non-existent jobs in China's production belts or the Gulf states, the elusive temporality of the crisis does not deliver the sense of an ending. In its classical meaning, the notion of crisis sets the stage for a decision.[1]

What seems to be at stake at the present time is not decision as such but rather the indefinite prolongation of the time in which any decision might be made. The rhetoric surrounding austerity programmes is an example in this regard. Austerity is never enough. The myriad decisions it involves seem an expansion of micromanagement practices to ever-higher scales of governance, testing the rationality and flexibility of governance to the point that its boundary with sovereignty is blurred.

Meanwhile the roots of the current economic and social turbulence remain unaddressed. The defining logics of contemporary capitalism – from the pervasiveness of debt to financialization, from the precarization of work to the penetration of entrepreneurial rationality into the institutional management of welfare and migration – are far from being challenged. On the contrary, they are being intensified and entrenched. In this article we highlight some of the main aspects of these logics, examining the intersection of finance, extraction and logistics. These three sectors of economic activity play a central role in shaping contemporary capitalism and therefore are important sites for the analysis of more general tendencies in its development.

Global operations

These tendencies are shifting the analytical as well as the political ground on which the crisis is being addressed. If we think about the 'flash crash' of 6 May 2010, for example – when the Dow Jones Industrial Average plunged by around a thousand points within minutes and then recovered equally quickly – we understand something about the peculiar temporal scrambling of crisis and recovery that permeates financial capital markets in an age of algorithmic trading and fiscal cliffs. This pattern of volatility has not only become a defining feature of finance; it also signals the acceleration and deepening of processes that disseminate uncertainty into the time and fabric of social life. The very idea of a 'recovery' seems to be shattered when the rationality of capitalism is dominated by financial instability and the attempt to make it productive.[2]

When the history of these shifts is written, it is likely that they will appear as neither linear nor cyclical because the temporality of finance, distinctly oriented to the future, exists in discrepant and arrhythmic relation not only within itself but also to the temporalities of other economic and social orders. The struggles and revolts born of the social unsustainability of the crisis and its austere response will doubtless inform this historiography. We turn to these struggles and revolts to situate the continued stakes of subjectivity involved in the operations of capital, in its networks, assemblages, codes and algorithms.

In our forthcoming book, *Border as Method, or, the Multiplication of Labor*,[3] we argue that borders remain central to the heterogeneous organization of space and time under global capital. Understanding the border in a wide sense, by no means limited to the conventional geopolitical line, including for instance urban divides and the limits surrounding 'special economic zones', provides a means of grasping the changing composition and diversification of labour. Although in this

book migration and border struggles are the focus, the approach we develop to issues of accumulation, dispossession and exploitation has a more general field of application. The current proliferation of borders appears as intimately related to the expansion of what we call the 'frontiers of capital'. This term, used by the anthropologists Melissa S. Fisher and Greg Downey,[4] registers capital's drive to continuously open up new territories (in both the literal and the figurative sense) to re-establish the conditions for accumulation. It is precisely this moment of 'opening up' that interrupts the linear temporality of transition or development and calls for the repetition of 'so-called' primitive or originary accumulation,[5] challenging existing boundaries and disrupting established social relationships. Such an opening cannot be separated from new bordering processes, from the differentiating and hierarchizing effects of borders, and from the articulation of heterogeneous spaces and regimes that borders facilitate.

A political analysis of the global crisis and the struggles that have emerged within it must take account of the unevenness and patchwork character of its effects and dynamics. Among the tendencies underlying the crisis are the shattering of old spatial hierarchies, the reshuffling of geographies of development, and the emergence of new regionalisms and patterns of multilateralism. In many parts of the world, in China no less than in Latin America, official rhetoric presented the crisis as an historical 'opportunity', at least until it had to confront the 'reality check' of slowing growth rates, impending real-estate crisis, monetary turmoil and mounting social struggles. The 'Arab Spring', the *indignados* and the Occupy movement have dominated headlines across the North Atlantic and Middle East. But it is important not to forget the resistance of peasants and indigenous groups against dispossession of land in the wake of the spread of soy, palm oil, shrimp farming, mining, industrial development and 'new towns'. Equally we must remember the resistance of the poor against the economies of urban extraction surrounding slums and the many struggles, both spontaneous and organized, which have sprung up in the world's factories and sweatshops over the past five years. If these dispersed and often localized struggles lack the iconic status of Zuccotti Park or the Kasr Al Nile Bridge in Cairo, they nonetheless supply important coordinates on the map from which we can begin to read the spatial economy of the crisis. Needless to say, this is an economy of shifting scales and proliferating borders. New kinds of 'global territory' such as free zones and corridors are springing up.[6] Meanwhile, as anthropologist Anna Tsing argues, the presence of 'nonscalable' elements, such as resource patches that cannot be torn from their locations, means that capital must continue to wind in and out of scalable relations.[7]

For over thirty years Deleuze and Guattari's trope of 'deterritorialization' has been central to critical discussions of global space and its capitalist axiomatic. Recently, however, there has emerged a tendency to focus attention once again on the question of territory.[8] As understood in these discussions, territory is not necessarily or not only associated with the sovereign space of the state. Rather, it is seen as a political technology for organizing social and economic relations that has both spatial and non-spatial elements. We want not so much to participate in this return to territory as to ask, of what it is symptomatic? Clearly financialization is relevant here. There is a materiality of finance that escapes attempts to describe it with abstract metaphors such as flows and volatility. The global city and the offshore banking zone are two very obvious instances of how finance hits the ground. But it is also possible to foreground some less obvious cases of finance's entanglement with territory which begin to expose the limits of financialization as a self-sustaining movement.

One has only to consider the strategic link between financial capital and global economies of extraction to understand how the political technology of territory is no longer driven solely by sovereign imperatives. The legal unity of territory is challenged and exploded by not only the multiplication of resource extraction 'enclaves'[9] but also the proliferation of partial legal regimes, technical standards, 'best practices' and sectorally limited normative arrangements.[10] In the mining industry, the relations of transnational companies with indigenous and other local populations are filtered by protocols of corporate responsibility that stipulate the parameters within which the place-bound business of mineral extraction can deal with environmental, cultural and even religious contestations. This is often not sufficient to eliminate the production of violent struggles on the ground, but it means that corporate entities have to enter into unstable alliances and often negotiations with public institutions and other actors to adapt to contingencies to enable the resource extraction to go ahead. Power is not merely channelled into territory from above but assembled in haphazard and often enduring ways. A prevalent means of theorizing such power relations draws on network models that emphasize non-totalizing and relational aspects of the social.

We are not without sympathy for these network and assemblage approaches that insist upon tracing the multiple and shifting relations that compose any social entity or form.[11] But we are wary when such approaches are marshalled in ways that deny analytical validity to the category of capital. It does not take much to realize that capital itself functions in processual ways. Capital is not a thing but 'a social relation between persons which is mediated by things'.[12] Speaking of the continuous repetition of 'so-called primitive accumulation' leads us to posit the question of the production of the subjects that enter into the social relation that capital is. The production of subjectivity is a terrain of struggle in the actual workings of capitalism. Fear of falling into the subject–object relationship tends to blind some network and assemblage theorists to these dynamics. The subject disappears, to be replaced by the actor or the agent, and the interplay of material forces that make assemblages and networks productive tends to be overlooked. The object emerges as the ontological orientation of the moment and the rupture of social relations and established forms of subjectivity connected with the operations of capital are obscured by a logic that turns the subject into just another thing. However, the reproduction of capital as a social relation is predicated upon profound, violent and contested dynamics that reshape the subjectivity of the dominated and exploited. Fundamental dissymmetry and antagonism are factors in the material constitution of any network or assemblage. Attention to the subjectivity of labour is crucial in this regard.

Stefano Harney has described recent developments of network and assemblage theory as a 'becoming logistical of philosophy'.[13] Such theoretical approaches have come to the fore at precisely the moment in which capital's building of global connections has assumed a new salience. What Marx called the mediation of social relations 'by things' is nowadays the object of the flourishing management science of logistics. Seeking to introduce efficiencies into transport and communication practices, logistics involves the algorithmic coordination of productive processes in space and time. Recognizing the increasing role of logistics in the organization of global circuits of accumulation need not lead to being hypnotized by its magic of connecting and generating networks. Assembly and supply chains provide a strategic empirical focus for studies that seek to unearth the unbalanced and contentious relations that animate networked processes of production and the logistical operations that sustain them. However, gleaning logistics handbooks and exploring the software codes that drive logistical transactions do not supply a ready-made theoretical framework for the political interpretation of the operations at stake. We do not know what an operation can do, we might ironically say. Producing such a theoretical framework is one of the most urgent intellectual tasks of the day.

Tales of extraction

Let us move to an example that lays bare the relation between extraction, finance and logistics. Australia is a nation whose government likes to boast that it managed to avoid the worst of the global economic crisis due to its fiscal policies and booming export of primary materials, primarily to China. Now that resource commodity prices are falling with the slowdown in China, there is a search for new mineral wealth that might sustain the economy in the uncertain times ahead. Among the most hyped of the new resource commodities are so-called 'rare earth' elements, such as Europium and Lanthanam. The Mount Weld mine, near Laverton in Western Australia, is a rich source for these minerals, which are used in the miniaturization of components for electronic goods and as phosphors to create colour in television, computer and mobile phone screens.[14] Although rare earth elements are relatively abundant in the earth's crust, they are rarely present in economic concentrations. They do not occur as free metals but as part of an ore that is always found alongside the radioactive elements uranium and thorium. This means that the process of separating rare earth elements for commercial use involves the production of radioactive tailings. Unsurprisingly, the disposal of this radioactive waste poses a threat to the long-term well-being of populations that live in the vicinity of sites where such operations are carried out. But the economic incentives for the extraction and processing of rare earth elements are high.

Given their essential role in the hardware that enables contemporary forms of digital capitalism, demand for these minerals is unlikely to decrease. Indeed there has been much public discussion, particularly in the United States, about a forecast shortage of these rare earth minerals. While China has been a major supplier, internal demand and price-setting manipulations have led to a decrease in Chinese exports. In 2011 a global supply deficiency of rare earth minerals led to a massive price hike, leaving manufacturers along the supply chains for computers and other electronic goods with depleted inventories. This price rise, amid the general downturn in the resource commodities market, is one reason why Lynas Corporation, the owners of the Mount Weld mine, have pushed aggressively to complete the construction of an Advanced Minerals

Plant for the processing of rare earth elements near the port of Kuantan in Pahang, Malaysia.

We can see here the emergence of a tight series of relations between extraction, logistics and financialization within the ruptured time and space of the global crisis. The financial manipulation of the rare earth commodity price drives new processes of mineral extraction. In turn, there is a need for the logistical coordination of the rare earth supply chain, which in turn feeds into the supply chain for electronic goods, between Australia and Malaysia. Areas such as Pahang set themselves up as logistics hubs, placing themselves on the map of global production by building tight networks of transport and communication between modern port facilities and special economic zones where the dangerous business of processing the rare earth elements, as well as their efficient transfer to electronics manufacturing facilities, can be accomplished. But, as we shall see, these processes of logistical coordination also place Pahang on the map of global struggles.

The building of the Lynas Advanced Minerals Plant in the Gebeng Industrial Estate near Kuantan has prompted myriad social conflicts, especially in the wake of a Malaysian High Court decision allowing the import of rare earths and their processing to go ahead. Protestors have conducted a 300-kilometre walk between Kuantan and Kuala Lumpur, staging a rally of 20,000 people in the capital city at the end of this journey. Furthermore, the resonances of the Stop Lynas campaign have spread across the Asian region, with solidarity movements operating in Australia and Taiwan. In this instance, as in the others we will discuss shortly, the cocktail of extraction, logistics and financialization gives rise to social antagonism within the networked systems of global capitalist production. Such conflict has been pronounced in Latin America, where the intensification of economies of extraction has been central to the development of capitalism in recent years.

Mapping the global landscape of extraction confronts us with a wide array of peculiarities and changing economic as well as political circumstances. What makes the Latin American instance particularly instructive is the connection between the stretching and intensification of extractive dynamics and the presence of a series of 'progressive' governments that have associated these dynamics with the need to use resources for new social policies that address the needs of the most vulnerable and poor sectors of society. While this has prompted the continuity of a developmental pattern rooted in the colonial history of the region, according to which 'progress' is only accessible through the 'selling of natural resources', some major shifts have occurred. Argentina, once 'the world's granary', is today a major exporter of commodities (soy and minerals). Ecuador has moved from cocoa to oil as its main economic resource. Bolivia, in the past a global hub for the extraction of silver and tin, is today primarily exporting natural gas.[15]

Perhaps more importantly, the prominence of indigenous movements and struggles in the multifarious contestations of neoliberalism that laid the basis for the formation of 'progressive' governments in several Latin American countries is reflected in the acknowledgement of the principle of *buen vivir* ('living well') in the new constitutions of Ecuador (2008) and Bolivia (2009). This is only the most visible sign of the influence of discourses of 'post-development' in contemporary Latin America. In such a situation, the recent radicalization of extractive tendencies can be seen as a kind of detachment of the imperatives of 'development' from the principle of *buen vivir*, which had been widely understood (not only within indigenous movements) as a critical spur to the search for alternatives.[16]

One has only to think of recent conflicts surrounding the cultivation of soy in the north-western Argentine province of Santiago del Estero or the extraction of oil in the Peruvian Amazon to get a sense of the violence and processes of dispossession at stake here. At the same time there is a need to stress that the nature of the political conjuncture in Latin America opens up spaces of legitimacy and recognition for struggles against extraction and the contestation of big 'developmental' and infrastructural projects. New alliances and convergences are in the making,

connecting remote sites in the country or the forest with metropolitan spaces and articulating resistance on transnational scales. The state itself, whose 'return' is celebrated by the official rhetoric of 'progressive' governments,[17] has recuperated old tasks it had been stripped of in the age of the 'Washington Consensus' and developed new institutional capacities of regulation and even, in certain cases, of distribution. But as one of the keenest critical analysts of extraction in the region has maintained,

> the return of the state as regulator installs itself within a space of variable geometry, which means within a multi-actor scheme (marked by a complexification of civil society through social movements, NGOs and other actors), but at the same time in tight association with multinational private capitals, whose weight in national economies is growing more and more.[18]

All these tendencies are clear both in the case of extraction in the narrow sense of the word and in instances of the expansion of the frontiers of capital correlated with more elusive but no less intrusive means of extraction. In the case of the attempt to open up *favelas* and slums to the combined intervention of finance capital and real-estate investment, particularly evident for instance in Rio de Janeiro on the eve of the 2014 World Cup and the 2016 Olympics, the resistance to the 'removal' of the poor can mobilize the political legitimacy acquired in the years of the Lula governments and the social power manifest in an unprecedented access to consumer opportunities. It can also play within and against the 'space of variable geometry', to recall Svampa's phrase, in which the state is enmeshed.[19] Nevertheless it is necessary to emphasize that this space is also a space of capital. Finance, in particular, is not only involved in this dense materiality of struggle in so far as its role is pivotal to the 'valorization' of urban spaces inhabited by the poor. A boom of consumer credit is already evident in several Latin American countries as a trend accompanying social policies that do not seem to point towards a diminution of the high degrees of informality and precarity that shape working lives. In the case of the subprime crisis of 2007–08 in the USA we became aware, Saskia Sassen writes, that 'the financial sector invented some of its most complicated financial instruments to extract the meager savings of modest households in order to produce an "asset" – the mortgage on a house.'[20]

It is likely that the 2 billion modest-income households worldwide charted by Sassen will constitute 'one of the new global frontiers for finance'[21] and that subprime mortgages and other technical innovations will spur the extractive dimension of finance worldwide. The apparatus of student debt is another of these frontiers.[22] Does this mean that the global crisis will merely create the conditions for the global extension of the same trends that have been widely recognized as its trigger? And, as far as Latin America is concerned, will 'post-neoliberalism' simply coincide with the age of a 'disciplinary democracy',[23] with an internalization of the economy of debt and a synchronization of the return of the state with the new pace and needs of capitalist accumulation? While we need to stress these elements of continuity and the ongoing pressure of capital, we must also be attentive to the continuous if fragmented generation of struggles, which are particularly intense on the frontiers of its expansion.

Differential accumulation

Given their pervasiveness and prevalence in the global present, extraction, logistics and finance provide strategic points of focus. Finance permeates the rationality of capitalism as a whole, linking abstract processes of control and manipulation to changing forms of production, to the life of entire populations, and to the formalization of anthropological relations into monetary standards and conventions. Extraction provides the raw materials that drive capital's creative destruction, whether it involves mining, land grabbing, extensive cultivation of cash crops, gentrification of urban neighbourhoods, or the continuous pressure placed on human activity and life to transform it into a source of value. Logistics is the art and science of building networked relations in ways that promote transport, communication and economic efficiencies. Stemming from military practices, it organizes capital in technical ways that aim to make every step of its 'turnover' productive.

These practices provide different sets of empirical and conceptual tools for investigating the operations of global capital. The debate about capitalism's forms of systemic unity and differentiation has been particularly redolent in the last twenty years. Michael Albert's distinction between 'American' and 'Rhinish' capitalisms opened a rich discussion on 'varieties of capitalism'.[24] While there is a long history of controversies about the differences between 'stages' of capitalist development and their spatial arrangements, this more recent series of interventions focuses on the institutional and regulatory frameworks that shape the relations between economy and society according to different models of capitalism and geographical frames. In the influential version of Hall and Soskice, the 'varieties

of capitalism' approach takes the nation as an analytical unity and comparative tool.[25] Moreover, this version of the argument is characterized by an opposition between US/American and continental European models of capitalist development and regulation which cannot fully account for the shifting geographies of economic power that have reconfigured world capitalism. The important contribution of Peck and Theodore seeks to correct these tendencies by pointing to the emergence of 'variegated capitalism'. For these critical geographers, the spaces and scales of contemporary economic activity cannot be immediately correlated with official political boundaries. Rather than pursuing a comparative approach, Peck and Theodore emphasize more dynamic and relational 'principles, sources, and dimensions of *capitalist variegation*'.[26] The resulting 'dynamic polymorphism' has to be analysed by combining a focus on the heterogeneity of capitalism with an attempt to grasp the '*systemic* production of geo-institutional differentiation'.[27]

Peck and Theodore's argument resonates with the discussion of 'transitions of capitalism' we offer in our own work.[28] Their emphasis on polymorphism, multiscalar relations and the systemic nature of capitalism squares nicely with our own attempt to stress both the heterogeneity and the common logics of global capitalism in a way that brings into relief the subjective stakes that invest these tensions. The life-and-death struggles

that unfold along the world's borders draw attention to the implications of capitalism's variegations for labour, changing assemblages of power and law, and shifting regimes of inclusion and exclusion. The perspective of the border highlights the tense and destabilizing processes that constitute labour forces. With the variegation of capitalism also comes a variegation of labour, which runs parallel to its intensification, to its explosion of established legal and social statuses, and to the multiplication of forms of subordinated labour well beyond the classical wage relation.

Tracing these processes takes the debate about 'variegated capitalism' well beyond questions of institutional and regulatory arrangements to the material fabric of subjective antagonisms that shape contemporary capitalism's regime of 'differential accumulation'. As Aníbal Quijano contends, this spatial heterogeneity is crossed and intensified by a temporal heterogeneity, which means that 'all the stages and historic forms of the production of value and the appropriation of surplus value are simultaneously active and work together in a complex network for transferring value and surplus value.'[29] Logistics, finance and extraction are not only economic activities. The labour they demand is not limited to transport workers, financial traders or miners. It spreads across wide vistas, pulling intellectual as well as manual workers into its domain and trickling down into the interstices and activities of collective life. In these processes new spaces and even polities are produced, often with a force and rapidity that outstrip official scripts of governance and the maps and timelines they generate. In different ways and with varying degrees of intensity, finance, extraction and logistics thus also penetrate the state, hybridizing and transforming its rationality. This is true even in the case of those emerging economic powers whose official rhetoric celebrates the 'return of the state' or its capacity to 'drive' economic development. Financial calculations, extractive logics and logistical parameters for the construction of new infrastructures quite often converge to define the schemes of action to which states become committed. In a more theoretical frame, we can say that politics itself is made less and less 'pure' and autonomous in its formal institutional manifestations by these processes.

These political effects come into sharp relief on the frontiers of capital. Recently, there has been a focus on processes of financialization that blur the boundary between finance proper and the world of capitalist production.[30] As far as extraction is concerned, the concept of *extractivismo* has emerged in the Latin American context as a privileged theoretical tool for critical discussion of the capitalist developmental path prompted in the last decade by 'progressive' governments in the region.[31] These discussions are shifting and extending the sense in which concepts such as dependence and coloniality are being deployed in the political discourses of the Latin American laboratory.[32] At the same time, the notion of 'supply-chain capitalism' has emerged to describe the practices of

production and distribution that have arisen with the logistical coordination of transport and communication across wide global landscapes since the 1970s.[33] Reaching beyond arguments about commodity chains and global production networks, this new series of writings on logistics emphasize its role in establishing worldwide infrastructural formats and producing labour forces that provide various degrees of lubrication and friction to capitalism's smooth functioning.[34]

The commonalities and divergences between discussions of financialization, *extractivismo* and supply-chain capitalism register the workings of differential accumulation. Tsing explicitly stresses the role of finance in the logistical arrangements of supply-chain capitalism, while the link between extraction and financial markets emerges when the question of commodity prices and their influence on projects of extraction comes into view. At the same time, logistics and extraction are integral to the operations of finance. This is evident in the forms of logistical coordination that animate algorithmic trading and the infrastructural embedding of financial markets in electronic circuits that require the ongoing extraction of mineral goods. Once extraction is understood in more general terms than its association with mining suggests, other implications become evident. In processes of gentrification and extraction of value from urban spaces, for instance, financial capital enters into strategic alliances with real-estate agencies and construction companies, prompting dynamics of dispossession and displacement.

By speaking of differential accumulation, we seek to do more than track the processes of scaling, rescaling and even descaling that connect different spaces of capital. We aim to come to terms with the multiplication of the forms of work, human activity and life that are involved, combined and exploited by capital in any specific and putatively bounded space: new territories of accumulation that violently invest space, social relations and the bodies and souls of living subjects. Here we see how the moment of opening emphasized by many versions of network and assemblage theory, which describe important aspects of the workings of contemporary capitalism, is continuously met by moments of partial closure that are no less essential to the expansion of the frontiers of capital. The notion of differential accumulation makes us confront the continuous pull between and entangling of closure and opening that often assumes explosive and disruptive forms in labour and social struggles. It is precisely in such moments of clash and entanglement that the production of subjectivity becomes evident, both in processes of subjugation and in the generative claims and actions of subjects positioned on the borders between capital's prospecting and restricting tendencies.

Finance, extraction and logistics are all areas crossed by lines of struggle. To get the sense of the subjective stakes and tensions surrounding these sectors, one has only to think of some prominent recent flashpoints: violent conflicts surrounding austerity programmes and student debt in Southern Europe and the USA; indigenous and peasants resistance against mining projects in Latin America as well as the dramatic miners' strikes in South Africa (involving the death of forty-seven people in the so-called Marikana massacre of August 2012); wildcat struggles that have interrupted the supply chain of distribution giants such as Walmart (for instance, in New Jersey) and Ikea (for instance, in the Italian region of Emilia Romagna) and the ongoing and increasingly connected strikes of maritime workers around the world (including the strike at the Port of Los Angeles in November/December 2012, when 10,000 dockworkers walked out in support of female 'no collar' workers whose data management jobs were threatened by outsourcing). None of these struggles can be deemed marginal, even in cases when resistance seems to come from 'outside', as in the case of peasants and indigenous groups opposing mining projects. Capital attempts to route around these disturbances by building resilience and 'fault tolerance' into its financial, logistical and extractive systems. The operative dimensions of capital are crisscrossed by contestations that occur at several different levels and many different sites. Identifying the right level and site on which to train the disruptive energies of struggle has become a key political task of the moment.

The politics of operations

What is an operation? In our understanding an operation is something more than a relation of cause and effect or a model driven by linear processes of input and output. Throughout this article we have utilized the concept to name and analyse the syncopated pace of opening and closure that gives texture to and counterpoints the heterogeneity of space and time under global capitalism. In elaborating her famous distinction between labour and work, in *The Human Condition*, Hannah Arendt was well aware of the etymological nexus associated with the Latin *opus*. For Arendt 'labour' relates to the life or biologically necessitated dimensions of the human metabolism and reproduction. By contrast 'work' is inherently connected with the fabrication of an '"artificial" world of things' that

endures beyond the act of creation.[35] While Arendt associates the rise of industrial modernity with the encroachment of labour over work and its consequent effects of alienation, we wish to register the continuing role of the operation in the global present. But while for us an operation is connected with the fabrication of an 'artificial' world, it does not necessarily produce a 'work', a material 'thing'. Operations also play a role in activities of finance and extraction.

Think of the crane that lifts a container full of soy from a ship to a truck, the software-driven coordination of forklift vehicles in a fully wired warehouse, or the transmission of financial data through electronic networks by means of packet switching technologies. What is produced in these operations is not a 'thing' but rather a set of links or relations between things, which is to say the framework or skeleton of a world. In our use of the term, an operation refers primarily to this fabrication of the world, to the production of the connections, chains and networks that materially envelop the planet enabling and framing the labour and action of subjects well beyond those directly involved in the execution of the operation itself.

In observing the ways in which such linkages are made we are observing the operations of capital. Aside from the material infrastructures required to establish such articulations, there is a need for rules, instructions and standards that guide and frame the operative principles at stake in these dynamics. Increasingly the frameworks and processes that enable the deployment of these operative principles are organized by means of computer code. More than a set of executable instructions or a means of information exchange, code alters conditions of perception, communication and representation. It participates heavily in the economic, political, military and governmental domains, organizing and disrupting relations of power and collective life. The code that governs activities of finance, extraction and logistics introduces the social relation of capital into the most minute and detailed of operations. Capital's code, we might say, insinuates itself into the world of operations, embedding itself as a kind of organizing element or blueprint. Returning to the terminology of Arendt, the boundary between 'labour' and 'work' appears blurred in the operations of capital. At the same time, we have to recognize that some of the key features of 'action', the third concept discussed by Arendt, play an important role in the operations of capital, making them politically pregnant. This is to say that these operations are increasingly confronting the elusiveness, plurality, relationality and unpredictability of the 'human condition', which comprised for Arendt the domain of 'action'. It thus makes sense to speak of a politics of the operation, taking into account both its structuring effect on human relations and the ways in which work, labour and action are combined both in the execution of specific tasks and in the articulation of different subjects that make operations possible.

What we are calling operations of capital are a privileged field of surveillance and control. The rise of sophisticated performance measurement techniques makes it possible to monitor labour in real time. Data produced on the basis of such measurement can be fed back into production systems in order to adjust them accordingly. Traditional forms of workplace action are thus disrupted. Consider the worker who deliberately slows down. Not only can she be easily identified, but the effects of her foot-dragging can be minimized through computerized processes of system adaptation. Performance measurement is increasingly tied to algorithmic patterns and processes that give the operation a life of its own. We need to ask how the operation relates to performance and what the significance of this relation is in a situation where the operation threatens to detach itself from its performer. Is the operation a kind of paradigm of pure performativity? The concept of performativity has been at the centre of many recent debates about and approaches to the political. An important feature of the performative is its self-referring function – it constitutes that which it enunciates. The operation, by contrast, connects. It fabricates a world but does not do so only in relation to its own premisses. Its ontological moment is thus quite different to that of the performative, even if it retains a performative dimension. The operation has an outside, albeit constrained by parameters of connection and adaptation. The performative is self-contained, even if its affective dimension can trouble this containment. In the case of the operation, its politics registers the interaction between its inside and outside, between the protocols and standards that allow it to build connections across different situations and the heterogeneity of space and time in which it subsists. Only by thinking through these dynamics, which it is important to insist are productive of struggles and subjectivity, can we begin to understand how the Arendtian realm of action is increasingly folded into the worlds of work and labour.

There is another sense in which the operation differs from its performance. This is the sense in which the operation is effectual rather than performative, the sense in which it is productive of something other than itself. We can think of the operation as a kind of interval: at one end lies that which initiates or triggers

it, and at the other end lies that which it creates. While in reality these two aspects of the operation concatenate, in so far as one operation spurs another, it is instructive to consider the situation in this way to shed light on what unfolds between these moments of concatenation, which is to say on the time and space of the operation itself. We have already stressed the nonlinear and uneven nature of the operation. What we now want to emphasize is how thinking through these knotted relations gives us a different perspective on the theorization question of politics today. If the operation's trigger or spur recalls a performative approach to politics, its creative capacities can be correlated with a version of politics that centres on the event. There is a temporality to the operation that cannot be separated from the temporality of politics. There is also a striking parallel between a politics of the event and the image of an operation that stresses only its generative outcome, particularly as regards the punctuated nature of time characteristic of both. While a focus on the performative aspects of the operation obscures the moment of connection, disconnection and friction generated through the articulation with its 'outside', a focus on its outcome does not shed light on the complex materiality of the operation, on the internal as well as external conditions of its effectiveness.

Thinking of the operation in terms of its interval, which it is important to stress is only a heuristic approach, allows us to begin to specify in more philosophical terms what we mean by the politics of operation. We do not equate a causal notion of the operation with the moments of performance and event. The politics of performativity can never be correlated with the linearity of a cause; nor can the event be reduced to an effect. But once we begin to understand the workings of the operation beyond the mechanism of cause and effect, we enter an ontological and epistemological domain in which the questions of performativity and event become relevant. For now we limit ourselves to some brief comments on how such a politics diverges from what Giorgio Agamben, following Jean-Luc Nancy, terms an ethics of 'inoperativity'.[36] Such an ethics is supposed to signal a radical deactivation of the operation that is held in the tension between potentiality and activity. Inoperativity corresponds to the possibility inherent in potentiality that an activity has not realized. For Agamben, this suggests a way of living 'without purpose' since it refuses an orientation towards ends or outcomes.[37] This is not the occasion to explore Agamben's theological derivation of the concept of inoperativity.[38] Suffice it to say that it suggests a style of politics that seems rather contemplative. Agamben explicitly contrasts a politics based on inoperativity with 'the ingenuous emphasis on productivity and labour that has long prevented modernity from accessing politics as man's most proper dimension'.[39] Arguing that subjectivity 'opens itself as a central inoperativity in every operation', he develops what one of us has previously described as a 'politics without action' and an 'economy without labour'.[40] By contrast, what we are calling the politics of operation involves the coalescing of action, labour and work and attempts to imagine processes of antagonism rooted in the production of subjectivity, implied by such coalescing. The interval of the operation not only separates it from the moments of performance and event; it also establishes a mesh of connections that challenge boundaries between ways of living, ways of earning a living and the fabricating of worlds.

Considering the operation from the point of view of its interval operates like a freeze-frame that brings into relief the combination of social activities, technical codes and devices that make an operation possible, while at the same time it allows us to look at the outcome of the operation without taking it for granted. This means that there is a need analytically to suspend the role played by the operation in the fabrication of the world in order to grasp the tensions and conflicts produced by the encounter of the operation with its 'outside'. It is through this suspension that other ways of fabricating the world become theoretically visible and the politics of operation can give way to the forging of 'counter-operations'. These differ fundamentally from an ethics of inoperativity. While inoperativity implies a withdrawal from productivity and a gestural ethos of play, counter-operations involve targeted action within existing networks of production. Crucial to their effectiveness, which is to say to their ability to fabricate a world, is the political task we have already mentioned of determining the time and space in which to focus the organization of struggles.

In this regard, knowledge of the interlinked operations of logistics, finance and extraction is decisive. Between the expansion of capital's frontiers and its drive to closure, the workings of differential accumulation produce an excess of labour that can no longer be contained by traditional models of technical or political division. Here the production of subjectivity meets what we earlier described as the intensification of labour, its multiplication beyond the wage relation and its explosion of established legal and social statuses. Under these conditions, political organization must establish forms of coordination and solidarity that reach across these multiple lines of division, ranging across borders

at different geographical scales and keeping in view the way supply chains, financialization and extractive economies overlap. A movement like Occupy Wall Street, which boldly challenged finance capital by taking hold of its territorial and symbolic heartland, is probably not enough. It needs to connect to struggles that confront capital's logistical and extractive logics, such as those conducted in ports and mines that we discussed earlier. This is not to valorize horizontal, networked or communicative modes of organization at the expense of vertical structures that can help ensure discipline and continuity. There are still lessons to be learned from historical episodes of party, trade-union and internationalist organization. Elsewhere, we have argued that contemporary efforts of political organization need to grapple with what, following Gramsci's interpretation of a famous speech by Lenin, we call the question of 'translatability'.[41] This means these efforts need to come to terms with the deep rooting of struggles in material networks and settings. It also means they have to devise strategies for dealing with the untranslatable aspects of struggles, which expose the limits of communication, tear established political subjectivities away from themselves, and provide an unstable ground on which to open new horizons of organization. We have in mind a similar process of politicization when discussing counter-operations.

In this sense, the counter-operation is something more than an act of sabotage. Undoubtedly, sabotage remains one of the primary ways in which the generative claims and actions of subjects within and against the social relation of capital can be realized. To be sure, sabotage has a long history, within which the activities of early-twentieth-century dockworkers, miners and railwaymen documented by Émile Pouget figure prominently.[42] What has become more pronounced within current systems of extraction, financialization and logistics is the capacity for capital to route around episodes of disruption. Although we still might assert with Antonio Negri that 'self-valorization is sabotage',[43] it has become more urgent to coordinate struggles across the heterogeneity of global time and space. Isolated conflicts may register subjectivity's excess over the networks of subordination within which they are situated, but their ability to 'leap vertically' and challenge capital on the global level (as Hardt and Negri wrote over a decade ago now)[44] has been curtailed. What is needed are new models of solidarity that can negotiate difference across the fractured geographies of globalization, taking into account and finding alternative paths to the socio-technical systems and assemblages that enable current processes of financialization, extraction and logistics. We thus speak of counter-operations both as a way of registering the constitutive moment of struggles, which can easily get lost if one focuses only on the 'negative' moment of sabotage, and as a thread along which the vested question of organization can be tested and rethought.

It is important to stress that speaking of counter-operations does not imply a simply reactive use of 'the master's tools' in order to prompt practices of resistance. It involves an accurate analysis of the processes of dispossession and exploitation that crisscross the operations of capital and an attempt to build new forms of political organization capable of combining struggles and multiplying their affirmative aspects. This is the chance that exists within the moment, the political decision that would make the crisis worthy of its name.

Notes

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3. Sandro Mezzadra and Brett Neilson, *Border as Method, or, the Multiplication of Labor*, Duke University Press, Durham NC and London, 2013.
4. See Melissa Fisher and Greg Downey, eds, *Frontiers of Capital: Ethnographic Reflections on the New Economy*, Duke University Press, Durham NC and London, 2006.
5. See Sandro Mezzadra, 'The Topicality of Prehistory: A New Reading of Marx's Analysis of "So-called Primitive Accumulation"', *Rethinking Marxism*, vol. 23, no. 3, 2011, pp. 302–21.
6. See Sven Opitz and Ute Tellmann, 'Global Territories: Zones of Economic and Legal Dis/connectivity', *Distinktion: Scandinavian Journal of Social Theory*, vol. 13, no. 3, 2012, pp. 261–82.
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8. See, for instance, James D. Sidaway, 'Spaces of Postdevelopment', *Progress in Human Geography*, vol. 31, 3, 2007, pp. 345–61; and Stuart Elden, 'Land, Terrain, Territory', *Progress in Human Geography*, vol. 34, no. 6, 2010, pp. 799–817.
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14. See Anna Reading and Colin Harvey, 'The Digital Skin and the Upturned Planet: Memory as (De)territorialized Material and Energetic Political Economies of Data', paper presented at 'Data, Memory, Territory', School of Humanities and Communication Arts, University of Western Sydney, 27 November 2012.
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16. See, for instance, Arturo Escobar, 'Latin America at a Crossroads: Alternative Modernizations, Post-Liberalism or Post-Development?', *Cultural Studies*, vol. 24, no. 1, 2010, pp. 1–65.
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