



When all that is theory melts into (hot) air: Contrasts and parallels between actor network theory, autonomist Marxism, and open Marxism*

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abstract

This article compares Autonomous Marxism, Open Marxism and Actor Network Theory (ANT) through examining how they treat the sticking point of contingency. These schools of thought share a common enemy in perspectives stressing structural factors. The first two stress the subjective standpoint of class struggle, whereas ANT emphasises agency. The Open Marxists and the ANT scholars typically make their case by arguing against dichotomous modes of thinking in other strands of Marxism or sociology. However, the former draws upon Hegelian philosophy and its attempt to transcend the subject-object polarity, while the latter builds on post-structuralism and espouses an immanent ontology. Here, ANT share a common ground with parts of Autonomous Marxism. Despite these different points of departure, critics of respective theory have reached similar conclusions. If an awareness of objective causes and/or structures is removed from the analysis, the risk of voluntarism or quietism looms large. Although we share this critique, we would like to heed the warning against reified categories and dichotomous thinking raised by the three traditions above. Our argument is that resources for solving this dilemma between contingency and stability can be found in a more historicist way of thinking which all three have failed to utilise.

Introduction

This paper investigates the theoretical similarities and differences between, on the one hand, Autonomist Marxism and Open Marxism, and, on the other hand, Actor Network Theory (ANT) and related tendencies within constructivist Science and Technology Studies (STS). Briefly put, Autonomist Marxism is distinguished by its advocacy for struggles which take place outside political parties and labour unions, and, correspondingly, its inclusion of groups other than the archetypic, blue-collar worker. Theoretically it offers an innovative reading of Karl Marx where the class struggle stands at the centre of the analysis, as opposed to, for instance, the economic-political side of Karl Marx (Dyer-Witheford, 1994; Bowing, 2004). There are many different

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positions which sort under the epithet 'Autonomist Marxism'. Here we will focus on the version associated with Michael Hardt and Antonio Negri (2000; 2004). The group gathering around the label 'Open Marxism' is a smaller and more uniform stream of thought. The Open Marxists are closely related to the Autonomist Marxist tradition, but they depart from Antonio Negri's version of it in significant ways that will become clear later in the article. Finally, a very large and heterogeneous number of scholars count themselves as 'constructivist STS'. We will not give an account of the complex relations within this discipline, a task which has been eminently done elsewhere (Hacking, 1999; Zammito, 2004). For the most part, we will speak about the ANT tendency within constructivist STS, chiefly represented by Bruno Latour, John Law, and Michel Callon. However, some of our arguments could apply equally well to Donna Haraway's cyber-feminism (1991) and some related sub-divisions within the STS discipline (Pickering, 1999; Jasanoff, 2004; Mol, 2002)¹. Although their terminologies differ, one thing these authors have in common is their ambition to overcome dichotomous modes of thinking. Some polarities typically challenged by them are agency/structure, mind/body, society/nature, human/machine and micro/macro. They try to develop alternatives to these polarities through concepts such as 'network', 'hybrid', 'cyborg', 'mangle', 'co-production' etc. This strategy is invariably pursued through a 'flat ontology'. This means they refute any division between surface phenomena and the essential in their accounts of reality. Open Marxism also strives to overcome dichotomous thinking, here spoken of as a duality between the object and the subject. The crucial difference is that this line of thought rejects the kind of flat ontology espoused by constructivist STS thinkers.

Our study will focus on these common interests and points of divergence. Unfortunately, these traditions cannot be compared in a neat, schematic order since their ideas criss-cross each other on multiple planes. For instance, many constructivist STS researchers and Open Marxists are preoccupied with questions about epistemology. This is less of a concern in the version of Autonomist Marxism developed by Hardt and Negri. At the same time, however, the latter two authors and constructivist STS scholars share a common heritage in a post-1968, post-structuralist current of thought. Pride of place is here given to philosophers like Gilles Deleuze, Michel Serres and Michel Foucault. A common denominator of this current of thought is its hostility towards Hegelian philosophy (Descombes, 1980). Consequently, it is no surprise to find

1 Constructivist STS is a very rich tapestry, and never more so than when constructivist writers are confronted with criticism from their opponents. A case in point is Sheila Jasanoff's response to Harry Collins' and Robert Evans' negative assessment of the legacy of constructivist STS theory. They have, in her opinion, collapsed distinct positions into a single, straw-man target (Jasanoff, 2003: 393). The argument we are trying to pull off here is a sitting duck for the same kind of objection. It should therefore be stated from the outset that we are aware that there are important variations within the field. For instance, some of the authors listed above have made reservations against ANT on key points (Haraway, 1997; Pickering, 1999: 18-19). Even among the core ANT authors there are divergences. For instance, John Law has recently expressed concerns that Bruno Latour is lapsing from the micro-sociological approach prescribed by ANT (Law, 2008: 642). These quibbles aside, Sheila Jasanoff herself has pleaded for a single heading with which the family resemblance of various constructivist STS positions can be addressed. She has proposed the idiom of 'co-production' as a catch-all term (Jasanoff, 2004: 18). It is this commonality which we are interested in here. Finally, it should be clear that we are not concerned with *social* constructivism, that is to say, those writers who still find it meaningful to distinguish between society and nature.

assertions in Hardt and Negri such as: ‘In short, Hegel’s history is not only a powerful attack on the revolutionary plane of immanence but also a negation of non-European desire.’ (Hardt and Negri, 2000: 82). Likewise, the rejection of Hegel’s dialectics is a given when ANT scholars set out to deconstruct the dichotomy between agency and structure. This bi-polarity is instead “flattened” into a single plane of immanence, here known as a ‘network of actants’.²

The Open Marxists, in contrast, are no less hostile towards the intellectual trend of post-structuralism. Their strategy to overcome the duality between object and subject is grounded in Hegelian dialectics (Psychopedis, 1992; Holloway, Matamoros and Tischler, 2009). Open Marxists have thus placed themselves in continuity with an older lineage of Hegel-inspired readings of Karl Marx (Avineri, 1968; Hyppolite, 1969). In spite of this fundamental difference, there are also times when the boundary between constructivist STS and Open Marxism blurs. In this article we will focus on their respective critiques against allegedly untenable dichotomies between structure and agency. Leading on from this, their epistemological critiques have been used as springboards for attacking a common enemy of theirs, i.e. traditional sociology. In the case of the Open Marxists, the direct target of their critique is structuralist tendencies within other Marxist traditions. Although structuralist Marxism is primarily associated with Louis Althusser and his disciples, the inclination to refer to structures has spread much further afield. Every account of capitalism which tends towards a structural explanation is considered a legitimate target for the Open Marxists (Bonefeld, Gunn and Psychopedis, 1992). The structuralist tradition in mainstream sociology goes back to Talcott Parsons and Émile Durkheim. These two founding figures have, however, been made to stand in for the discipline as a whole in Bruno Latour’s charge against sociology (Latour, 2005; Law, 2008).³

2 In this way, ANT has launched its own branch of post-humanism where humans and things are treated ‘symmetrically’. Post-humanism has accentuated the normative quagmire already latent in the broader, post-structuralist current of thought. Numerous critics have stressed that these ideas cannot support normative standpoints without implying assumptions which are external to the anti-foundationalist epistemology (Rose, 1979; Anderson, 1992; Fraser, 1989). This has not, however, discouraged proponents of post-humanism from attributing an emancipatory potential to their critique of liberal-humanist narratives. Such claims have most candidly been put forward by adherers to ‘cyber-feminism’. In more subdued forms, however, the same undertones can be traced in the ANT-and-after literature as well. In hindsight, it is evident that post-humanism can do as good a job as humanism in bracketing up the powers-that-be (Hayles, 1999; Feenberg, 2000, Bartlett and Byers, 2003; Wajcman, 2004). Indeed, what could better exemplify the post-human subject than the modern corporation who has been entitled legal status as a juridical person (Rowland, 2005)?

3 The legitimacy of the social-natural divide, and, by extension, of sociology as such, was the central issue of contestation in the so-called ‘Chicken Debate’. The chief defenders of the methods of sociology were Harry Collins and Steven Yearley, while Steve Woolgar and Bruno Latour led the charge. The articles in this exchange can be found in an anthology edited by Andrew Pickering (1992). Many more STS scholar have offered their commentaries on the Chicken debate (de Vries, 1995; Shapin, 1995). As concerns Latour’s *et. al.* refusal to acknowledge anything that can be called ‘social’, Philip Mirowski and Edward Nik-Khah have drawn a parallel between ANT and ‘operational research’. Operational research grew out of the efforts of the American army in the aftermath of the Second World War to improve the capabilities of the soldiers by incorporating ideas from group psychology. Mirowski and Nik-Khah demonstrate that there are many common ideas in ANT and

We remain unconvinced that either group has been successful in their striving to dissolve dichotomous thinking and fixed categories. Here we find ourselves in agreement with the critique raised against Open Marxism by more traditionally oriented Marxists. The refusal to make analytical distinctions between agency and structure has resulted in little more than a one-sided bias towards agency. Furthermore, this failure has often been covered up behind a writing style bordering on the hyperbolic (Callinicos, 2005). Interestingly, similar charges have been made against ANT by some of its critics (Amsterdamska, 1990; Gingras, 1995). In order to avoid misunderstandings, we should immediately clarify our own standpoint. We agree with ANT and Open Marxists that ‘social facts’ and categorisations are historically developed, and thus subject to continuous transformations. However, by stressing the radical *historicity* of the world, we do not merely acknowledge that everything is in a state of flux, but also that the pace of change is differentiated. In fact, the same argument can be extrapolated from the key tenet in ANT that entities are radically heterogeneous. This would seem to imply that it takes different time to re-construct different things. In other words, there are variations in temporality which in turn compels social theory to take account of ‘processes of structuration’.⁴

Our point of departure is historicist, which leads us to stress the double character of the world - flux *and* relative stability. It is from this perspective that we will scrutinise the claim about contingency made by ANT scholars and Open Marxists, as well as the epistemological conclusions they draw from this claim. In short, both of these theories interpret the world as constituted by the perpetual unfolding of networks of actants/class struggle. Subsequently, they insist that this contingent process undermines all stable, ‘social facts’ by which society could be explained and ordered. It is a matter of some irony that this claim about contingency is passed off as ahistorically and universally valid. In the second half of the article, we will historicise their argument. We attribute the surging popularity of what we elect to call ‘Constructivist Marxism’ and ‘Bourgeois Autonomism’ to their attempts at theorising capitalism at a point when Marx’s prophecy ‘all that is solid melts into air’ has, in a fashion, been fulfilled. Our counter-argument is that this historical situation requires of us, as activists and/or politically engaged scholars, to move in the opposite direction. That is to say, we need to think carefully about what it is that stays the same in the perpetual flow of change and newness.

Two insurgencies against (Marxist) sociology

In this section, we will argue that the genesis of Autonomist Marxism, and, by extension, Open Marxism, is similar to the one of ANT. The common point is that both traditions emerged against a background setting dominated by Marxism or Marxist-

operational research. In particular, both collapse the distinction between man and machine and they share a hostility towards sociology (2008: 95).

- 4 The term ‘structuration’ originates from Anthony Giddens’ proposed ‘theory of structuration’. His book provides a well-judged account of the ‘agency versus structure’ dilemma in social theory (1979). Another resourceful overview of this thorny issue, posted from within a Marxist tradition, has been provided by Alex Callinicos (2004). In the context of the present discussion, we wish to highlight one point made by both of these authors and which we are in accord with. It is of utmost importance that temporality is at the heart of any reflection on agency and structure.

inspired sociology. Autonomist Marxist thought was strongly influenced by the struggles in Italy in the 1970s (Wright, 2002). In those days, the ‘scientific’ branch of Marxism was still a dominant current (Gouldner, 1980). Opposition against this orthodoxy was a crucial component in the intellectual maturation of key Autonomist Marxist thinkers. One of their targets were those Marxists who elaborated on the political-economical writings of the mature Karl Marx. This branch of mainstream Marxism sought to lay bare the economic laws of capitalism. If the hypothesis about the ‘falling rate of profit’ could be proven to be correct, these writers hoped to strengthen the claim that the internal contradictions of capitalism would make a crisis and a final showdown between capitalists and workers inevitable (Mandel, 1978). Another target of the Autonomist Marxist critique was a tendency in orthodox Marxism to periodize capitalism according to a schematic understanding of historical materialism. This line of thought took foothold in some ambiguities in Marx’s writings, although the more rigid versions of historical materialist thinking are nowadays commonly attributed to Friedrich Engel’s editing of Marx’s texts (Levine, 1973). Here the termination of capitalism was thought to have been laid down by the continuous, incremental development of the ‘forces of production’ which caused a growing mismatch with outdated ‘relations of production’ (Cohen, 2000).

These two strains were challenged by people who objected to the inclination in orthodox Marxism to stress ‘objectivist’ factors for explaining capitalism. A key text was Mario Tronti’s ‘Lenin in England’, originally published in 1964. Tronti complained that Marxists tended to start their reflections with capital instead of with the workers. It led to a bias towards explaining everything with the internal laws of capitalist development. Tronti asserted that the development of capitalism was determined by class struggle: ‘At the level of socially developed capital, capitalist development becomes subordinated to working class struggles; it follows behind them, and they set the pace to which the political mechanisms of capital’s own reproduction must be tuned’ (Tronti, 1979: 1). Tronti’s article contains the seeds of what Yann Moulier considers to have been the two major discoveries of the Autonomist Marxist tradition. Firstly, the priority assigned to class relations as opposed to the forces of production. Secondly, the elaboration on Marx’s idea of the real subsumption of labour under capital as a process which is not restricted to the factory but has come to encompass the whole of society (Moulier, 1989). These insights led on to an imaginative re-reading of Marx where the limelight was put on the contingency and the open-endedness of class struggle. It was from the vantage point of contingent class struggle that the rigidity of the categories deployed by orthodox Marxists could be attacked (Dyer-Witford, 1994; Bowring, 2004). Harry Cleaver took the bull by the horns by studying Marx’s *Capital* in the light of this new insight. Instead of looking for a matrix of economic laws in the book, he interpreted it as a tactical guide for political struggles. The constructivist implications of his argument is evident from how Cleaver turns the table on objectivist explanations for capitalism: ‘There are certainly regularities, or “laws”, of commodity exchange just as there is a logic to the commodity-form itself, but that logic and those laws are only those which capital succeeds in imposing.’ (Cleaver, 2000: 77).

Now turning to the ANT tendency and related currents of constructivist STS, it too begun as a tiny insurgency against an intellectual milieu permeated by Marxist-inspired sociology. As a nascent discipline STS had several roots going back to Marxism

(Werskey, 2007). Most important perhaps is the Frankfurt school and its critique of positivism and empiricism as reflections of capitalist ideology. Such assertions were later backed up by more historically oriented works. The beginning of the scientific revolution was anchored in the upsurge of a market economy, first in ancient Greece (Sohn-Rethel, 1978) and then in the Renaissance (Zilsel, 2000). These critiques of science, ultimately stemming from a Marxist analysis, influenced one of the founding traditions of the STS discipline, the Edinburgh School. Members of the Edinburgh School tried to relativise the truth-claims of science by demonstrating the class background of scientists and how the organisation of science was tied up with larger, socio-economic structures and interests (Barnes, 1977). In parallel with the critique launched against natural science and its truth claims, another branch of the STS discipline was scrutinising how the development of technology was tied up with capitalist organisation and hierarchies. One important source of inspiration was the environmental movement and its call for a small, alternative technology to replace industrial mass production (Slack, 1984). Another influence was Harry Braverman's portal work on how machinery is deployed in the factory to deskill workers and put trade unions on the defensive (Braverman, 1974). Several sub-disciplines grew from this exchange, such as labour process theory and Computer-Supported Cooperative Work, in addition to concrete attempts at reforming the shopfloor, out of which The Scandinavian School was the most radical expression (Ehn, 1992).

Bruno Latour and Steve Woolgar made their names by breaking free from these openly leftist, partisan traditions within the early STS discipline. Their iconic laboratory study was an eye-opener in that they stoutly refused to take account of any larger, socio-economical structures for explaining science (Latour and Woolgar, 1979). In hindsight, this omission can be interpreted as a reaction to the dominant approach at the time of explaining science by studying its 'external' conditions (Shapin, 1992). This was the method of choice of the Marxist critics, of course, who were bent on revealing the origin of Big Science in the military-industrial complex. But it was equally the standard procedure of a more conformist wing of sociology of science led by Robert Merton. A defining trait of early laboratory studies, out of which ANT emerged, was the exclusive focus on the micro-sociological case study. This approach has sometimes been termed 'methodological internalism' (Knorr-Cetina and Mulkay, 1983). The appeal of methodological internalism might consist in that it takes the consequences of the sociologist's critique against the scientific method to its logical conclusion. If STS researchers question the practices of natural scientists, i.e. to postulate general laws based on individual observations, then there can be no safe haven for social scientists doing the same thing (Latour, 1999a). Following from this basic insight, a row of STS scholars influenced by the early laboratory studies have eschewed macro-sociological terminology and explanations.⁵ Their approach consists of a strong emphasis on the

5 The far-reaching consequences of this rebuttal of larger, socio-economic structures has been a central point of contestation (Aronowitz, 1988; Amsterdamska, 1990). In a widely read response to his critics, Bruno Latour asserted that his method could be used for analysing the same topics otherwise spoken of with macro-sociological terminology. He argued that there are no limits to how far the local network can be stretched. Subsequently, by extending the analysis of the network outwards, the local study can be made to cover circumstances normally categorised as 'macro' (Latour, 1983). Even though this might be true in theory, such an undertaking would be very cumbersome. Indeed, a glance at the record of the last three decades of constructivist STS research shows that some topics have been

local, the emergent and the multiple (Mol, 2002). In his review of the relation between ANT and mainstream sociology, John Law upholds that a deep-seated scepticism towards macro-sociological explanations is the chief strength of ANT (Law, 2008). This attitude is not as exceptional to ANT as John Law makes it out to be. His standpoint sits very well with the larger, intellectual trend which has dominated the social sciences for the last three decades and where ideas about transcendence, grand narratives, totalising visions, universal truth claims etc. are repeatedly denounced (Webster, 2005). We stress this point because the sharp end of that argument used to be pointing at the critical and/or emancipatory claims of leftist Hegelianism and its modern off-spring, Marxism (Jameson, 2002).

Two paths beyond the structure/agency dilemma

In this section, we will make a more direct comparison between Autonomist Marxism, Open Marxism and ANT. The first observation which jumps out when these traditions are set next to each other are their deep-seated, political differences. It is noteworthy that the most fierce critics of ANT are found in the leftist and activist wing of the STS discipline. The bottom line of this critique is that ANT, and, sometimes, constructivist STS in general, has resulted in political quietism. Defenders of the theory have consistently denied this accusation and countered that they offer a new way of thinking where everything is political: ‘ontological politics’. (Law, 1986; Law, 2009).⁶ Be that as

disproportionately under-researched, such as military technology (Woodhouse, Hess, Breyerman, Martin, 2002) or technology at the point of production (Oudshoorn and Pinch, 2008). Hence, there are good reasons to suspect that things like geopolitics and political economy are systematically misrepresented when the method of choice is methodological internalism.

- 6 The iconic reference here is Langdon Winner’s attack on the ‘political emptiness’ of the epistemological radicalism of the academic STS discipline. Basically the same charges have been made repeatedly by many other leftist, activist STS researchers (Woodhouse, 1991; Martin, 1993; Winner, 1993; Radder, 1998). Some critics believe that this apolitical bias could be amended if constructivist STS scholars applied their theory to different, politically more engaged, topics (Woodhouse, Hess, Breyman and Martin, 2002). Others think that quietism is inscribed in the basic assumption of these theories, out of which ANT is held to be particularly problematic. This point is developed by Philip Mirowski and Edward Nik-Khah in their assessment of Michel Callon’s attempt to apply ANT to the economy. Callon’s attempt, they argue, has made manifest how the underlying assumptions of ANT resonates with the premises of mainstream economic theory (Callon, 1998: 50-51; Callon, 2002; Mirowski and Nik-Khah, 2007). Mirowski and Nik-Khah are not the first critics to see an affinity between the network metaphor of ANT and the way liberal economists look at the world through the lens of free markets. Focus is exclusively placed on the exchanges between individual actors while the theory is indifferent towards inherent qualities of the actors and/or levels of meaning (McClellan, 1996; Vandenberghe, 2002). The drastic move of purging macro-sociological concepts from ANT has, according to the same critics, resulted in little more than new clothes for a tried-and-tested, methodological individualism (Mirowski and Sent, 2008; Kirkpatrick, 2008). As is known from classical liberalism, atomistic worldviews of the sort renders the world in a Machiavellian or Hobbesian light where everyone-fights-everyone. Indeed, this is another critique which has frequently been levelled against ANT (Shapin, 1995). Olga Amsterdamska remarks: ‘[E]quipped with this Machiavellian view of the world around him [...] Latour’s outsider sees only attempts to dominate, strategies for winning battles, means of attack, trials of strength, and other forms of violence’ (1990: 496). This reminds us of what Marshall Sahlins described as ‘the current obsession with “power” among social scientists and cult studs, a kind of *power functionalism* that likewise dissolves the most diverse cultural forms in an acid bath of domination-effects’ (Sahlins

it may, it is clear that the new take on politics offered by ANT scholars has not calmed their left-leaning critics. Reversely, in texts by key ANT thinkers the activist wing of STS tend to be summarily dismissed. Bruno Latour would probably be the first one to protest against an attempt at linking ANT with Marxism. Among other things, he has expressed his thankfulness that the fall of the Berlin Wall and related events '[...] are burying the old critical mole in its own burrows.' (Latour, 1993: 8). In his polemic against mainstream sociology, he has been particularly unforgiving towards 'critical sociologists' who believe themselves to be doing ideology critique (Latour, 2004a; 2005). Latour's aversion towards critical standpoints in general, and Marxism in particular, is echoed by many of his followers (Whatmore, 1999; Lepinay, 2007). Noel Castree has complained that ANT scholars tend to dismiss Marxism without having engaged seriously with the texts of Karl Marx or acknowledging the existence of sophisticated Marxist traditions. Nevertheless, Castree believes that a weak version of ANT could benefit from and contribute to the development of Marxist theory (Castree, 2002). We are not convinced by Castree's proposal. However, if such an attempt were made, then the best chances for a dialogue would be between ANT and the Negri-tendency of Autonomist Marxism. Michael Hardt and Antonio Negri are sometimes called 'post-structuralist Marxists' (Morris, 2004). They have earned that epithet due to their attempt to synthesise Karl Marx with the writings of Michel Foucault and Gilles Deleuze (Hardt and Negri, 2000). The same two philosophers have been no less influential on the intellectual development of ANT (Law, 2004).

Indeed, many of the statements of Hardt and Negri correspond with ideas in ANT and related constructivist schools of thought. One of the cornerstones of ANT is its commitment to the principle of treating humans and non-humans symmetrically. The same idea resonates in Hardt and Negri's endorsement of Spinoza. They cherish the old philosopher precisely for his refusal: '[...] to accord any laws to human nature that were different from the laws of nature as a whole' (2000: 91). In spite of this shared, philosophical heritage, the overlapping between ANT and Autonomist Marxism is far from perfect. As regards the main concern of this paper, namely, the relation between agency/structure or class struggle/laws of capitalist development, Hardt and Negri have a mixed record. Rhetorically, at least, they want to position themselves close to the agency-end of the spectrum. Or, in a more Marxist-sounding jargon, Hardt and Negri stress the subjective standpoint of the proletariat as the motor of history. They contrast that position with the aspiration of orthodox Marxism to unravel the objective laws of capitalism. However, Hardt and Negri's affirmation of class struggle leads on to a periodization of capitalism which culminates in post-Fordism. The idea of a transition from Fordism to neo/post-Fordism builds on work first done in the so-called Regulation School (Aglietta, 1987). Concurrently, the Regulation School is one of the primary targets of writers associated with Open Marxism (Bonfeld, and Holloway, 1991). In this strain of thought, as well as in some versions of Autonomist Marxism which reject Hardt's and Negri's position, any attempt at periodising capitalism according to some 'objective' criteria, such as Fordism/post-Fordism, is looked upon with suspicion. Such an endeavour results in the class struggle ending up playing second fiddle: 'In short, the

2008: 12). Hence, when John Law and others defend themselves against accusations about quietism by arguing that in their 'ontological politics' *everything* is political, they have in fact conceded very little. At least not more than Hobbes did.

regulation school stresses the permanence of structures, and tends to overlook human subjects, their changes and what is happening with the disorganisation and reorganisation of social relations' (Gambino, 2003: 91).

Subsequently, the baggage of the Regulation School in the writings of Hardt and Negri has been taken to task. Werner Bonefield protests that Hardt and Negri's insistence on class struggle falls short because they tend to externalise subject from structure and juxtapose the two as opposing contrahents. For this reason, he says, Autonomist Marxists tend to reproduce the dualism between voluntarism and structuralism. They differ from the Regulation school only in so far that emphasis is placed on the first instead of the second pole. Bonefield believes the dualism between subject and object, agency and structure, etc. can be overcome through a dialectical movement where labour exists *in and against* capital (Bonefield, 2003). In a similar vein, John Holloway reproaches Negri and Hardt for their (mis)interpretation of Hegel's dialectic as a philosophy of order and synthesis (2005: 172). Echoing Bonefield's argument outlined above, Holloway declares that their rejection of dialectical thinking is consistent with their inclination to periodise capitalism in a rigid fashion.⁷ The risk with such an approach is that reified categories are taken at face value and theory and observations are built around these erroneous assumptions. Social change will then appear as something chiefly happening in the transition from one paradigm to the next: 'Society is painted as being relatively stable during a certain period, and in this period we can recognise certain solid parameters' (2005: 170). Hardt and Negri's affirmation of post-structuralist theory seems to place them closer to cyber-feminism and related, ANT-and-after styles of thinking. Even so, we believe that anyone from the latter tradition could subscribe to the critical remark made above by John Holloway.

We suspect that the rhetorical opposition between, on the one hand, Open Marxism, and, on the other hand, the post-structuralist theories which autonomist Marxism and constructivist STS build upon, invites to an overstatement of their differences. It is true that the Open Marxists are eager to denounce Foucauldian and Deleuzian influences and foreground dialectical thinking instead. However, everything hinges on what kind of dialectics we are speaking of. John Holloway is anxious to portray dialectics as an open-ended movement of negation. Correspondingly, he downplays the role of synthesis in Hegel's thought (Holloway, 2005; for a critique, see McNaughton, 2008). This particular reading of dialectics is heavily influenced by the thinking of Theodor Adorno. The 'negative dialectics' of Adorno was recently endorsed in an edited volume by key Open Marxist authors (Holloway, Matamoros and Tischler, 2009). It is noteworthy that Adorno developed these ideas when he had grown dismayed about the ability of the working class to withstand the persuasive powers of the administrated world. Consequently, any foothold from which resistance could be mounted against capitalism seemed to have been lost (Adorno, 2000: 41). Corresponding with this

7 At closer inspection, however, it turns out that the vigilance of John Holloway against periodisations is not as unconditional as it first seems. In a passing note, he refers to the different qualities of class struggle in slave societies and feudalism as opposed to those in capitalism. He sees no need to problematise this partitioning of history into distinct episodes (Holloway, 2005: 30). Presumably, Holloway thinks that this allows him to speak with more precision about present-day class struggle as an antagonism between capital and labour. One might then wonder why the same does not count for periodisations within capitalism, for instance, between Fordism and post-Fordism?

political assessment, he became increasingly suspicious of a key postulate of Hegelian Marxism, namely its investment in Totality as the privileged point of view for unravelling Truth. The totality was now on the side of the totally administrated world, hence, truth could at best be glanced in the fragmentary (Jay, 1984). Adorno came to stress nonconceptuality, individuality and particularity. In this way, he ended up with an approach which in many ways resembles latter-day, post-structuralist theories about *différance* (Adorno, 2000: 8; Vogel, 1996: 95). John Grumely points at such an rapprochement between the thinking of Adorno and Michel Foucault and concludes that, in both cases, the political outcome has been disappointing:

Negative dialectics arrived at a theoretical and political *cul-de-sac*. Unable to provide a positive account of emancipatory possibilities, it ceased to seriously grapple with the practical problems of the immanent contradictory dynamics of modernity. (Grumley, 1989: 210)

Of course, the positions of Adorno and Foucault cannot be collapsed. Open Marxists are attracted to Adorno's negative dialectics because it provides them with a counter-position to the Deleuzian notion about non-antagonistic multiplicities. The Open Marxists believe, not without reason, that the latter idea is complicit with a liberal, pluralistic, and appeasing worldview (Bonnet, 2009). Still, our reasoning above indicates that, in spite of their endorsement of dialectics, the Open Marxists are closer to their intellectual adversaries in the post-structuralist camp than they want to let on.

As for ANT, it unmistakably stems from an anti-Hegelian current within French philosophy. This circumstance is underlined by Bruno Latour's summary dismissals of the dialectical method (Latour, 1993: 57). Again, however, this rhetorical posturing might lead to an overestimation of the differences between the positions under examination. Going against the grain of the self-accounts of the ANT scholars, John Zammito has pointed out subdued traces of dialectic thought in ANT. Among other things, he notices that the goal of ANT scholars to overcome dualistic and *a priori* approaches to epistemology mirrors Hegel's aspiration to resolve the limitations of Kantian thinking (Zammito, 2004). One can also find commonalities between Hegelian Marxism and ANT, for instance, in the stress which both traditions place on relational properties as opposed to inherent properties of things. This similarity should not be overstated, however. In ANT, the argument has been pushed to the point where everything is rendered as networks of relations, which leads to some troublesome, normative implications (Kirsch and Mitchell, 2004). Nevertheless, as Reijo Miettinen has underscored, the STS field as a whole wrestles with much the same problematic as Hegelian Marxism. Science and technology could, in a more Marxist-sounding terminology, be described as the process by which the subject creates herself by creating the world of objects through her labour:

The concept of science and technology making is, in my opinion, parallel to the concepts of object-oriented, environment-transforming human activity developed by materialistic dialectics and AT [Activity Theory]. ANT raises the challenge of studying reality as transitional in its becoming and as trajectories of creation. This idea of becoming and change is one of the central methodological ideals of dialectics as well. (Miettinen, 1999: 174-175)

All of this goes to suggest that there are some deep-running similarities which the proponents of respective school are unaware of or do not want to address. Another indication of the same thing is that the two schools have run into similar kind of

objections from their critics. Much of the reservations against ANT boil down to its claim of having overcome the agency/structure dichotomy by treating humans and things symmetrically. Sceptics have protested that this manoeuvre results in little more than a strong bias towards agency (Kleinman, 1998; McLean and Hassard, 2004). In the same vein, opponents of Open Marxism have taken issue with what they perceive to be a flaunting disregard of structural constraints. This point was forcefully made by Alex Callinicos in a review of John Holloway's book *Changing the world without taking power*. He reacted to Holloway's assertion that power rests exclusively in Doing (living labour) as opposed to Done (dead labour/capital). Such a proposition, Callinicos countered, begs the question how capital stays 'in power' (Callinicos, 2005).

This point is analogous with one common objection against ANT, namely, that its rejection of structure has left a blind spot when it comes to explaining stability over time. Of particular concern is the failure of ANT to give an account of the stability of power structures (Barnes, 1981; Bromley, 2004). It might seem as if this objection has already been gainsaid by Bruno Latour's assertion that things are needed to make agreements durable. A case in point is Bruno Latour's well-known argument that even something as seemingly innocuous as hotel keys or speed bumps have 'programs of action' built into their very design (Latour, 1992). When the matter is framed accordingly, however, very little can be said about the *systematic* way in which asymmetrical power relations are upheld by artifacts.⁸ It is partly for this reason that some critics of ANT are convinced that the theory is fundamentally apologetic for the *status quo* (Mirowski and Nik-Khah, 2007). John Holloway and his fellow Marxists can hardly be accused of that. Uncharitable readers have nonetheless suggested that Holloway's scream against capitalism is rather inconsequential. His refusal to concede any ground to structural explanations results in an abstract endorsement of class antagonism which overlooks the historical situatedness of real, social struggles.⁹ As a

8 In addition to the hotel keys (Latour, 1991) and speed bumps (Latour, 1999b: 186) discussed by Bruno Latour, it might seem as if Langdon Winner's well-known example about the low bridges hanging over the motorway between New York and Long Island could make it to the same list. Winner's tale is centred on how those bridges reinforced class- and race structures at the time of their construction. He argued that the city architect, Robert Moses, had specified the height of the bridges with the aim of preventing buses from passing under, thus blocking access to Long Island for those people who depended on public transport (Winner, 1980). Winner's critical intent has not been well received and his case study has been taken to task by numerous constructivist STS writers. Their counter-arguments have hinged on the primacy which ANT and related styles of thought assign to the contingency of interests and the malleability of artifacts. Winner was wrong in assuming, according to his detractors, that the discriminating intent of the designer was successfully embodied in the artifact. Instead Winner ought to have given precedence to the multiple ways in which the bridges could be reinterpreted (Woolgar and Cooper, 1999) or circumvented (Bernward, 1999; Latour, 2004b). This suggests a tension in ANT between its claim about the materiality of things and its stress on contingency. Our conclusion is that the first tends to loose out against the second, at least when the inquiry is concerned with how antagonistic relations, such as 'class' and 'race', are made durable.

9 It can here be illustrative to point at the conclusion which George Katsiaficas draws from his careful, ethnographical study of the autonomist movement:

Although it is extremely problematic to treat social movements as simply conditioned by the form and circulation of capital and the structure of social relations, my analysis suggests that the autonomous movements discussed in the book were partially conditioned by impersonal economic forces and political dynamics. Postmodernists generally sever analysis of social movements from

consequence, Open Marxism fails to give any direction on how capitalism can be resisted in its concrete particularities (Ghigliani, 2005; Callinicos, 2005). This can probably be explained by the animosity of Open Marxists towards empirically oriented sociology. By foregrounding the collection of data and statistics, the latter approach tend to fail to look beyond what already exists. The remedy of the Open Marxists is to advance their arguments from a high theoretical altitude. This strategy miscarries, however, when they reduce every aspect of life to the abstract principle of antagonism at the point of production (Roberts, 2002; Bieller and Morton, 2003; Camfield, 2004). At first, this objection does not seem to touch ANT at all. The hallmark of that theory is the privileged role which it assigns to the individual case study (Law, 2008). Then again, one criticism directed against ANT is that its bold theoretical claims are disconnected from its empirical research (Collins, 1994). Yves Gingras notes that ANT studies typically make strong claims about having overcome dichotomous modes of thinking in the introduction and in the concluding section. In the main body of the text, however, those claims are being contradicted by the more conventional manner in which the case study has been conducted (Gingras, 1995: 128). Park Doing draws much the same conclusion from his close rereading of Steve Woolgar's and Bruno Latour's iconic laboratory study. He accuses them of having dodged the key question, how their startling, theoretical propositions were anchored in their actual, empirical findings. This failure has simply been clouded behind hyperbolic rhetoric (Doing, 2008). Our tentative conclusion is that whether the epistemological critique of the dichotomy between agency and structure originates in negative dialectics or in the flat ontology of post-structuralist thinking, the theoretical argument does not bear out in practice.

Although we have listed a number of commonalities between Open Marxism and ANT, we admit that these points might come across as rather circumstantial. In addition, it is possible to argue that the two camps share the same, historical roots. Their respective polemics against allegedly reified modes of thinking in the social sciences is foreshadowed by George Lukács' seminal work *History and Class Consciousness*. Neither tradition is comfortable with this intellectual debt. As of late, it has become fashionable among ANT scholars to trace the genealogy of their theory. A number of pioneers are being credited as forerunners of their branch of constructivist STS, most notably: Ludwik Fleck, Gabriel Tarde and, more reluctantly, Thomas Kuhn (Latour, 2002; Barry and Thrift, 2007). The legacy of George Lukács, as one might expect, has been passed over in silence. But the old 'philosopher of Lenin' is no less of an embarrassment to the Open Marxists. His scandalous support for the avant-garde as the true bearer of proletarian class consciousness sits badly with their political outlook. It is debatable if Lukács' theoretical insights can be disentangled from his unconditional support for Bolshevism. According to some commentators, the latter standpoint was inscribed in Lukács' endorsement of the Hegelian notion of Totality (Kolakowski, 2005: 1011; Tischler, 2009: 106-107). Both ANT scholars and Open Marxists, although in different ways, have expelled the idea of Totality from their theories. Even so, Lukács' work casts a long shadow on present-day reflections over epistemology and politics. Crucially, he detected the Hegelian movement at work in Marx's political-

such categories, regarding notions of structure as vestigial modernist relics. (Katsiaficas, 1997: 248)

economical texts. This insight would later be confirmed by the rediscovery of the writings of the young Marx. The interpretation of Marxism as a science which dominated at the time could now be challenged through a restoration of Marx as a sophisticated critic of scientism (Amato, 2001). Lukács emphasised dialectics as a means to overcome the dualism between object and subject. He protested against the scientific worldview which he considered to entertain a reified mode of thinking where the world appeared to be frozen into eternal facts and laws. A central target for Lukács' pen was empiricist sociology, both in its Marxist and bourgeois disguises. Hence, many of the arguments he developed resonate well with the statements now being made by constructivist STS scholars. Karl Mannheim repackaged the politically flamboyant critique of Lukács into a less offensive analysis of ideology in general. Thus he laid the foundations for the sociology of science, later to metamorphose into the STS discipline. Lukács' influence on Mannheim was such that the latter has been described as a 'bourgeois Lukács' (Lichtheim, 1965: 187).

Perhaps then we might elect to call Bruno Latour a 'Bourgeois Autonomist'. By the same token, the Autonomists and Open Marxists might be dubbed 'Constructivist Marxists'. In their own distinct ways, they are building on the critique of reified modes of thinking that was initiated by Georg Lukács. The writings of Lukács is nowadays held to be as dead as the proletarian revolution to which he swore allegiance. But his polemic against the scientific interpretation of the world as a collection of facts and laws frozen in time and existing independently of man-made history is more popular than ever. We propose that the application of this critique to the social sciences is the common denominator of Bourgeois Autonomism and Constructivist Marxism, once forked by Mannheim and ever since kept apart by their political differences. The actuality of this kind of reasoning is suggested by the surging popularity of both ANT and Autonomist/Open Marxism among their respective constituencies. Another cursor is that similar-sounding arguments are surfacing in neighbouring disciplines. A case in point is the ideas proposed by Gerald Davis and Doug McAdam from the horizon of social movement theory. They are concerned with neither science studies nor Autonomist Marxism. Their goal is rather to present social movement theory as a candidate for understanding institutional and technological change. While doing so, however, they argue that both mainstream sociology and the concept of class in Marxism are out of touch with an innovation-driven economy. These attempts at analysing the world with fixed and stable categories fall short of capturing the dynamic of a world perpetually transformed by innovations (Davis and McAdam, 2000). The same kind of ideas have circulated among scholars working in the field of communication studies and who look at 'new media'. Calls have here been made for new, analytical tools by which society can be theorised in terms of 'processes of organizing' rather than as a collection of stable organisations. Such analytical tools should put stress on the hybrid character of these new processes of organizing (Bimber, Stohl and Flanagin, 2009: 84).

These ideas resonate with some of the objections raised in constructivist STS against the fixed categories with which classical sociology interprets the world. But the social movement researchers and the communication studies scholars go one step further. They do not shy away from attributing this intellectual reorientation to the development of information technology. It is the acceleration of technological development which

has made a revision of established, social theories necessary (Gane, 2005). ANT scholars and Open Marxists balk at such a proposal. They scent the old base/superstructure terminology which they have fought so long and hard against. Contrary to their own claims and intentions, however, one might suspect that the soaring popularity of Bourgeois Autonomism and Constructivist Marxism reflects the current development of the forces of production.¹⁰ It is not hard to understand the attraction of ontological assertions about plurality and contingency in a time marked by an ascending, perpetual innovation economy. Its effects are manifest from a life-world continuously punctuated by creative destruction and precarious labour demand (Kawashima, 2005). If preferred, the same thing can be approached from the angle of traditional sociology. Zygmunt Bauman has made similar observations about what he calls 'liquid modernity'. It should be noted that Bauman dedicates part of his discussions to how this state of liquidity has put to the test the categories by which sociology knows its object, i.e. society (Bauman, 2000; Pollock, 2007). Thus, the polemic of the STS scholars and the Open Marxists against fixed categorisations and structural explanations in sociology can be located in a broader stream of thought within the social sciences. All of them attempt to develop an updated social theory at a point in time when Marx's famous prophecy 'all that is solid melts into air' has just about come true.

Contingency of class struggle

In this section, we will discuss in more detail how the argument about contingency has been developed in Autonomist Marxism, Open Marxism and ANT. 'Contingency' denotes that something is coincidental, non-necessary, or lacking an essence. In the STS discipline, the claim about contingency was first applied to scientific facts and technologies. The goal was to problematise the notion of scientific discovery as something ahistorically and universally valid. Later on, this argument was famously turned against sociology and the Durkheimian notion of 'social facts'. The outlines of this argument was hammered out in a polemic against the sociological tradition within STS, represented by the Edinburgh School (Sismondo, 2004: 45; Ylikoski, 2001). Steve Woolgar, the chief proponent in this debate, protested that the interests of scientists had been 'backgrounded' in a way similar to how scientific truth claims had been taken for granted at a previous date. He claimed that the notion of interests had replaced scientific facts as an autonomous, explanatory force of science. He charged that 'interests' must be explicated too (Woolgar, 1981). This agnostic stance towards social facts and interest has stayed with ANT throughout its many transformations. For instance, Sheila Jasanoff

10 In saying this, we are doing no more than retracing a now often-made argument which links high-brow, post-structuralist theory with its vulgar Other, i.e. information age evangelism. This link goes all the way back to the indebtedness of 'French theory' in the 1940s and 1950s to American cybernetics (Valentine, 2000: 25; Lafontaine, 2007). Both of these currents of thought entertain the idea that there has been a radical break with the past, roughly dating to the 1960s or 1970s. The former group of theorists identifies a shift in the very structure of Being which has rendered humanist, transcendental and modernist beliefs untenable. The second group of thinkers, more modestly, foresees an end to industrial capitalism and the coming of a post-industrial era (Marx, 1998). In our opinion, the surge of these claims should be seen against the background of the same historical situation, which is to say: late capitalism (Jameson, 1992).

singles out this as a key tenet by which she differentiates between writers who belong to the co-production (constructivist) family and those who do not (Jasanoff, 2004: 31).

Among the social facts that have been eschewed we find (class) interest, power (structure), and references to capital/capitalism. The obvious target of this argument is Marxist-inspired traditions within the STS discipline, such as labour process theory and computer-supported cooperative work. These kinds of studies of industrial relations are said to be flawed because of a 'residual essentialism'. Allegedly, the interests of workers and managers are here taken for granted as stable, social facts. The writers lining up behind this critique advocate instead an approach where interests are understood as something which emerges with every new human-machine hybrid. It is no longer possible to say that a piece of machinery has been designed to further the interest of the managers against the interest of workers, since those interests are contingent (Woolgar and Grint, 1997; Berg, 1998; Pickering, 1999; for a critique, see Söderberg, 2010). The political implications of this argument is unacceptable to Marxists of any brand. Even so, contingency has an elevated position also in the thinking of Autonomist and Open Marxism (Virtanen and Vähämäki, 2004). We will argue that the notion of contingency resonates with one of the main theoretical contributions of Autonomist Marxism, i.e. the concept of 'cycles of struggle'.

In fact, the idea about cycles of struggle and the polemic against interests developed by Woolgar and like-minded constructivist STS writers set out to attack the same target. Both object to an allegedly outdated, rigid understanding of the confrontation between capitalists and (blue-collar, unionised, male) workers. By talking about cycles of struggle, the Autonomist Marxists hope to reformulate the notion of class struggle in an open-ended way that will avoid a foreclosing of emerging and unfamiliar sites of conflict. The ebbs and flows of intensity in the conflict between labour and capital stands at the centre of the theory. On the one hand, capital attempts to define a class composition with a particular distribution of intra- and inter-class relations. The goal is to isolate workers from each other by creating internal divisions and playing up chauvinism, nationalism, racism etc. Autonomist/Open Marxists thereby take account of gender and race without giving up the analytical primacy of class. Thus they answer to the challenge against class formulated by innumerable feminist writers while refusing to follow the lead of the so-called post-Marxists. When capital is successful, the working class is reduced to mere labour power, i.e. the proletariat is subjugated under capital's command. The political defeat of the working class is corroborated by a steady production of surplus value. But labour differs from other commodities in that it resists being commodified. The workers react by trying to redefine internal and external class relations and seek a new ground for unity. One step is to overcome race and similar divisions, another aspect is to invent new identities, interests and methods of resistance. Thus they regroup and become once more a class-for-itself, capable of mounting a renewed challenge against their antagonist. The old class composition that was imposed by capital has once more become an obstacle to the valorisation process. Capital is forced to launch a new wave of restructuring and innovation, and a new cycle of struggle begins (Tronti, 1973; Negri, 1988; Holloway, 1992; Camfield, 2004).

One attractive feature with the 'cycles of struggle' concept is that it provides an explanatory framework for technological change which at the same time is rooted in

antagonistic, social relations. This approach has a major advantage over the kind of contingency propagated by ANT. In the latter theory intentional actants (i.e. humans) have to be brought in *ad hoc* from outside of the network. Although ANT claims to have attached equal explanatory value to humans and non-humans – thereby moving beyond the distinction between structure and agency – a human is nearly always placed at the centre of the network, being responsible for its assembly. The individual inventor-entrepreneur or ‘spokesperson’ is postulated as the starting point for creation and novelty in the ever-evolving network. It is telling that the subject-less and relational ontology of ANT quickly flips into a taken-for-granted, methodological individualism when it is put into practice. The idea of cycles of struggle, in contrast, singles out the formation of a class-for-itself as the constitutive moment of change. Technological and organisational inventions are launched by capitalists as a reaction to growing resistance. In this way, the Autonomist Marxists have managed to maintain the notion of class without having to turn the blue-collar working class into an essentialist, pre-given and universal, ‘social fact’. Or, to put it in ANT-jargon: class does not explain anything but is the matter to be explained.

The concession outlined above is unlikely to reassure constructivist STS researchers. Although the concept of ‘cycles of struggles’ places contingency at the heart of the analysis of capitalism, some relations must be kept fixed in the theory. That is, the opposition between capital and labour is postulated even as the subjectivities of the two antagonists and the terms they are fighting over are continuously being transformed through struggle. *This antagonism is held in place by the totality of capitalist relations.* The antagonism between capital and labour (or, in Holloway’s terminology, between done and doing) is most directly experienced in the clash between the employer and the employee over wage rates, control over work processes, and the length of the working day. It follows that this antagonism cannot be overcome as long as the wage labour relation remains in force. Such a premise is unacceptable to a constructivist STS researcher working in the ANT tradition. The concept of a social totality (or system of relations), with its uncanny, Hegelian associations, was thrown on history’s garbage heap even before the discharge of macro-sociological, allegedly crypto-functionalist, terminology. It will therefore appear to the constructivist STS scholar as if interests and identities (of managers and workers) have once again been made into invariable, social facts.

Concluding remarks

This article has compared ‘Bourgeois Autonomism’ with ‘Constructivist Marxism’. We have argued that these schools join hand in their rejection of structuralist explanations and in their polemic against the allegedly reified categories used by mainstream and Marxist sociology. Furthermore, we proposed that this kind of analysis should be understood against the background of a post-fordist restructuring of the economy. Growing job insecurities, swiftly changing market fads, and accelerating technological life-cycles lend credit to the claims about a contingent life-world. We are doubtful, however, if the right response is to liquidise theoretical categories to the same extent as everything else has been - goods, images, values, etc. We agree with Slavoj Žižek when

he declares that theories which interpret everything as processes and flows have become the official ideology of globalised capitalism (Zizek, 2004).

This observation by Zizek invites us to re-evaluate Georg Lukács' contribution. Lukács' critique was directed against the scientific mindset and its interpretation of the world as a collection of eternally valid laws and facts. Lukács argued that this gaze mirrored the frozen worldview of bourgeois ideology. He enrolled Hegelian dialectics in order to reveal the historical, transitory character of scientific facts, including those facts laid down by sociologists. In a fashion, for the most part unwittingly, constructivist STS scholars have built on this legacy of Lukács and Hegel. The all-important difference is that they have stretched this argument about the historicity of scientific laws and facts to the point where every moment is considered to be emergent and disconnected from any other. In this respect, Anthony Giddens' negative judgement about the structuralist penchant is just as relevant when assessing its post-structuralist heirs of today. It is: '[...] a view which tends to exorcise historical explanations in the very acknowledgement that everything is chronically in a state of movement' (Giddens, 1979: 46). In other words, the notion of contingency has been pushed to the breaking point where history is dissolved once again. The outcome hereof corresponds with the ideology of flows decried by Zizek. This *cul-de-sac* can be contrasted with Marshall Berman's reflections over Marx's famous devise that 'all that is solid melts into air'. Berman's insight was that the sensation of living in a time of rupture and novelty has lasted for about three-hundred years. In other words: It has acquired a history all of its own (Berman, 1983). Given this historical juncture in which we find ourselves, an appeal to *historicity* today needs to shift emphasis, from 'history as contingency' to 'history as continuity'. In plain language, it is the relative stability of subjects (humans, classes) and structures (interests, identities, power etc.), which need to be foregrounded in the analysis. Putting the stress here is important not in spite of, but because of, the fact that we are living in a society seduced by dreams about perpetual change and newness.

The most glaring example of the latter is all the touting of the coming of a technologically induced 'revolution'. Sometimes it is called the information revolution, other times it is announced as the bio-medical revolution, later it is said to be the nano-technological revolution, and so on. The common trait of these stories is the promise that a completely new society is waiting around the corner, thanks to new technology. The ills of old, industrial capitalism will soon be swept away. Crucially, this transformation will come about without requiring neither bloodshed nor a redistribution of wealth and power (Dyer-Witheford, 1999). It is these kinds of apologetic narratives which have convinced the Open Marxists to reject the notion of post-fordism. In their opinion, such an assumption necessarily rests on a capital-centric point of view. ANT scholars, on their part, shun the unilinear direction and unequivocal meaning of technological development assumed when technology is viewed as the driver of history. ANT forbids the privileging of any type of entities or dimensions in explanations. The response of writers in both camps is rather similar. Bluntly put, they have countered the futurists with an epistemological critique where dichotomous thinking are rejected. As a consequence, there are no stable categories upon which an analysis of society can lean. Everything is rendered into a seamless flow of change. We do not believe this is the appropriate response. The Open Marxists and the ANT scholars have thereby deprived

themselves of the means to pose the urgent question to the prophets of the next technological revolution: *What stays the same in every new wave of same-but-different?*

In order to ask that question one must acknowledge the relative stability of structures over time. This is not permitted in the flat ontology espoused by ANT, where every entity is allegedly given equal weight and everything is equally in flux. We believe that the Open Marxists are better off in having chosen Hegelian dialectics as their starting point. However, in accordance with Colm McNaughton, we find that the Open Marxists go astray in adopting a one-sided interpretation of dialectics as a continuous stream of negation. Any attempt at reaching a synthesis, of positing something positive - however provisionally - is therefore considered as illegitimate (McNaughton, 2008). A token hereof is that the Open Marxists reject out of hand other Marxist accounts which seek to identify distinct periods in capitalism. The downside of this strategy is clear from the lack of empirical observations and historical specificity to back up their theoretical claims. In objecting to this shortcoming of Open Marxism, John Roberts recalls that the materialist theory of Karl Marx was helped by advances in empirical methods. It reinforced the claim that knowledge about the world flows from contact with it through sensory experiences. He concludes that the Open Marxists need to engage more seriously with empirical research in order for them to give an account of the refracted ways in which capitalist social relations are being experienced by people (Roberts, 2002: 92). This resonates with one of the strongest points of ANT, namely: its advocacy for the point that philosophy should be conducted through empirical case studies, what is sometimes labelled 'empirical philosophy'. However, due to its commitment to methodological internalism, ANT lacks the conceptual tools for seeing the historically differentiated character of processes of structuration, where things change at different paces. Ultimately, this is why we decide in favour of the historicist tradition, where empirical philosophy has long been practiced. Karl Marx's reflections over the role of Louis Bonaparte remains an excellent source of inspiration for how to carry out such an investigation (Norris, 1990: 30; Lavin, 2005). His well-known introductory remark in that essay provides the unsurpassed combination of historical inertia and the possibility of effecting change:

Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past. (Marx, 2001: 7)

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