

## From precariousness to risk management and beyond

**Angela Mitropoulos**

Conceptually and historically, precarious work teeters between curious symmetries, at once public and private, both magnified as general social condition and yet perceived as personal failing, simultaneously an index of deregulation and the increasing prevalence of compulsion. Blurring the distinction between the time of work and that of life, it might well indicate a decrease in the actual time of work while nevertheless amplifying all the senses in which one is always available, always preparing for, or always seeking work. It marks out, to put it another way, the paradoxical condition of the liberal (or perhaps: neo-liberal) subject – that is, both autonomous *and* coerced, situated on a terrain of an enhanced freedom of commerce existing *alongside* increasing constraints on the migratory movements of people, globalisation *and* border policing, the coincidence of self-determination *and* conformity, the invisible hand of the market *and* the iron fist of the state. None of which suggests that the usual critiques of liberalism offer a way out of this paradox, or a way to understand it, whether those critiques emerge from conservative or progressive approaches, whether social democratic or national socialist.

The regular work, or regular pay, or the 'normal working day' that is regarded as typical of Fordism is an exception in the history of capitalism.<sup>[1]</sup> Outside a small number of countries for a brief historical moment, and outside particular occupations in specific industries, the experience of work in capitalism has, for the most part, been intermittent, without guarantee of a future income, without punctual limit and, oftentimes, without any income at all. Indeed, regular, full-time and secure work, where it did exist, depended upon the organisation and maintenance of precarious conditions for the vast majority of the world's populations. Analytically and politically, the assumption that the wage (and its distribution or absence) indexed an antagonistic political valorisation was, very simply, one of the principal means by which the value-form was restored in those moments of its intensive uncertainty – the question I would pose instead is of the distribution of abundance and the imposition of scarcity, in which the wage is both technique and map. The Fordist worker's distinction between work time and leisure time was made possible by unpaid domestic labour. The emergence of the welfare state was underwritten by colonial forms of accumulation, coercion and war. The much-celebrated protectionism of social democracy was made possible by laws and practices that were as nationalist as they were sexist. National socialism, for its part, in fantasising about the suspension of capitalist crises and antagonisms, while nevertheless retaining capitalist exploitation as such, unleashed catastrophe on a scale and with such ferocity that it remains the most salient reminder of how the dream of security materialises as nightmare.

To be blunt: there is no capitalism without crisis. Precariousness is the capitalist norm. The history of precarious work – and indeed, capitalist history – is the history of the enforcement, crossing and restoration of limits; of the organisation, displacement and valorisation of crisis and risk that capital accumulation requires. Moreover, the experience of precarious work, therefore, is not one of loss. It should inspire neither nostalgia nor optimism. It might, however, suggest a history of struggles that runs counter to received narratives of both decline and modernisation. For that matter, it may serve as a warning against much faith in projects of inclusion, or rights, or recognition – which is to say, in the re-foundation of contracts. It might, also, sharpen the focus on questions of the arrangement and enforcement of scarcity, on the ways in which political struggles can challenge and transform this, or collude with it. Because in the last two decades or so of the twentieth century, something did in fact shift dramatically – such that it became plausible to speak not quite of a rise in precarious labour, but instead of its expansion beyond the complex of race, class, sex and geopolitics to which it was previously confined.

In the latter half of the twentieth century, three vast and inseparable upheavals took place. First, from the late 1950s on, there was a flight from the Fordist factory, its assembly-line discipline, its social norms and standardisation. The political traditions of *Operaismo* and *Autonomia*, most notably in the early writings of Mario Tronti, Sergio Bologna and Antonio Negri,<sup>[2]</sup> refer to this moment as the flight from the factories. But this did not simply involve younger male workers refusing work. Where Tronti and others write (or are translated as writing) of the emergence of the social wage, it is more accurate to speak of the family wage. When Henry Ford introduced assembly-line production in the early part of the twentieth century, he was confronted with what seemed to be a simple problem but which inaugurated a quite complex solution. Assembly-line work was, and remains, mind-numbingly boring. The immediate result was that workers, quite simply, ran away. His factory had an annual turnover of almost four times the total workforce. Levels of daily absenteeism hovered around 10 per cent. Prior to the Great Depression of 1929, there was simply not enough poverty and austerity to impose work discipline, to ensure that many came to work, or did so for very long. And so, in 1914, Ford introduced the family wage. Higher than average at the time, paid only to men as a “breadwinner’s wage” and, for that reason, functioning to expel women from the factory, the family wage was also conditional upon remaining at the factory for longer than six months, and the fulfilment of a moral code around sex, alcohol and “thrifty habits.” The social wage that emerged here cannot be understood outside its conditions as a family wage, one premised not only on the joint stock company, but also on the inseparability of heteronormativity, race, productivism and nationalism.<sup>[3]</sup>

Secondly, and much later, there is the rise of the great social movements around civil rights, feminism, gay liberation, and various anti-colonial struggles. Put together, these movements challenged Fordist arrangements from the intimate to the global. But by the very late twentieth century, the kinds of identity that had emerged within these, or did so as their prevailing representational forms, became increasingly experienced as capture and normalisation, as a limit to be surpassed. Feminism was brought to task for its assumption of the figure of the white, middle class woman from the United States, for its Eurocentrism and homophobia. Gay Liberation underwent splits, conflicts and reformations around sexuality and gender. And so on.

But, thirdly, and perhaps most dramatically, just as anti-colonial struggles found their ultimate expression in – or, perhaps, were channelled into – third world nationalism, the migratory flows of previous centuries (as in the movement of people from the Old to the New World) shifted course, reversed. Since the 1970s, migration from periphery to core has been historically unprecedented in both scale and direction. By the end of the century, third world nationalism had become – with the decline of the subsidies provided by Cold War conflicts, the collapse of Bretton Woods, and so on – modelled less on a promise of liberatory movement than a new form of enclosure. By the late twentieth century, the project of self-determination became, given the perseverance and extension of capitalist forms of accumulation, the administration of self-exploitation in the world market. The politics of representation, visibility and recognition was, all too often, translated into the dynamic of nationalism, homophobia, sexism – into, that is, the fortification of identity and the policing of internal enemies. Liberation was delimited by the contractual. In some ways, this should not have come as a surprise: it is not possible to think of a race, or a people, or a nation, or the continuity of these over time, without asserting norms of production and reproduction, and therefore, without insisting upon normative practices of gender, sex, and sexuality.

By the end of the century, in metropolitan spaces such as Europe and the US, it became possible to discern not only the proliferation of border controls against these enormous migratory flows, but also the colonisation of metropolitan spaces. The precarious conditions for so long confined to the global periphery, or to those occupations where women, non-citizens, or racialised others predominated, began to extend into the core zones of the world market, into the professional classes, into those spaces long considered to be secure. To be very clear: the various social movements, migratory movements, the flight from the factory and the nuclear family, forced capitalists to resort to precarisation so as to renew accumulation and re-impose

discipline and control.

This is why analyses and political struggles around precarity are often in danger of re-asserting the politics of Fordism – not in any actual material sense, since the conditions which made that possible have been surpassed by various struggles, but as the resurgence of affective attachments to conservative agendas, as the aspiration for transcendental securitisation, whether theological or militaristic, or as a combination of the both. Elsewhere, I noted that the precariousness of life – experienced all the more insistently because life depends on paid work – tends to close the etymological distance between prayer (*precor*) and the precarious (*precarius*). Since then, Sergio Bologna, Lauren Berlant and others have discussed at more length the conformist inclinations that are amplified by the expansion of precarious work.<sup>[4]</sup>

As an aside, this history, which I've outlined all-too schematically, is the context in which post-structuralism, or what is usually understood to come under the heading of post-structuralism, might be situated. The critiques of essentialism, identity politics, the shift away from representational politics, and anti-foundationalism, are perhaps the most obvious signals of this. In a more complex sense, the anti-Hegelian turn – often rendered as a critique of linear, progressive, binary, or dialectical paradigms of history – might be read as a shift away from Fordist norms of production and reproduction, which is to say: of both the assembly line and the binary sexual difference of heteronormativity.

That said, capitalism is still with us. Strategies of accumulation have always involved the valorisation and management of risk, the trading on minor difference, securitisation, speculation and forward contracts. This is the way in which, increasingly, flight is folded back into, or recapitulates, the contractual – and therefore the temporal perseverance of capitalism. This empire was constituted, above all, by its movement across the unpredictable environment of the frontier, and it was the confluence of the household and frontier finance which served as its most effective machinery of intensive and extensive elaboration. Moreover, contrary to understandings of empire which imagine it almost entirely through the model of domination or homogenisation, the empire that pushed through frontier spaces was forged by oceanic expansion and common law, by a very specific mix of military strategy and legal form. Rule Britannia borrowed from piracy (and made legitimate pirates of some) in order to secure its rule of the waves. Common law, with its reliance on case law, unfolds through a subtle play between precedent and approximation – or, put another way, common law navigates power through repetition and variation.

But it was the frontier household that furnished the architectural and intimate dynamic through which limits were escaped and restored. And so, more recently, the flight from Fordist discipline became what Andrew Ross has called “the industrialisation of bohemia”<sup>[5]</sup>– much of this taking place through an indistinction between the space of work and that of home. Richard Florida's understanding of the “creative class” suggests less the eminence of creative work than strategies for exploiting non-normative “lifestyles” and, in the area of digital labour and social networking, there is of course web 2.0, what some have referred to as the channelling of the general intellect to profitability – much of which, again, takes place in the space of the household.<sup>[6]</sup> Moreover, gentrification and a managerial, top-down version of flexibilisation followed in the wake of the expansion of non-normative households, including: shared student houses, those who (unlike the Fordist husband) needed to spend less time at work due to childcare, those for whom paid work was considered as a support for a more interesting life elsewhere, what are often referred to as 'single-parent' households, etc.

In any case, the valorisation of risk and the ostensibly non-normative can be seen, perhaps most acutely, in the emergence of the subprime housing market, the derivative, in the increasing significance of the insurance industry and its speculations on death and disease, and in the rise and expansion of personal debt – all of which have, alongside the privatisation of health care, education, welfare, water, and energy, created an intimately contractual network of responsibility, mutual obligation and, it is anticipated, the foreclosure of radically different futures.

This is the transformation of risk into profit, the re-imposition of limits through contract, and the restoration of productivist (and reproductivist) norms through intimate self-management. Where the assembly-line divided management from work, post-Fordism stitches them back together as the internalisation of command, meshes production with re-production, intimacy with genealogy, the space of work and that of home, the time of life and that of labour. This nexus of autonomy and coercion in a neo-contractual, financialised form of subjectivity assumes the household as its object and foundation. Much of this turns on the systematic displacement of capitalism's risks and crises onto households – something the International Monetary Fund noted in a report in 1995 when it suggested, perhaps not very accurately as it turns out, that the household sector would be the “shock absorber of last resort.” The International Monetary Fund stated the question in these terms: “there has been a transfer of financial risk over a number of years, away from the banking sector to non-banking sectors. [ . . . ] This dispersion of risk has made the financial system more resilient, not least because the household sector is acting more and more as a ‘shock absorber of last resort.’”<sup>[7]</sup> The question of the household is, as might be obvious but perhaps needs to be underlined, a question of the forms of life. And this question is, increasingly, posed as one of contagion and contracts.

In these times, contagion seems to be as much a hermeneutics of everything as it is a biological model of the generation, transmission and course of various diseases. Politics has become epidemiological. Contagion is the emblematic meme – and the meme, by definition, spreads by contagion. Contagions are simultaneously affective, financial and biological. The 1997 financial crisis in parts of Asia was characterised as the “Asian flu.” There was the subprime contagion, and more recently, “the Greek contagion.” Pop psychologists speak of a contagion effect, involving mimicry, susceptibility and repetition. Marketing goes viral, its research arm turns to pattern recognition. Surveillance goes panspectric. Biotech and venture capital ply the recombinant and symbiotic. With the concept of emerging diseases, the War on Terror became bio-defensive and biologically speculative. Contagion is said to be endemic to the network, the exemplary model of globalisation. And so on.

More specifically: It is all too easy to believe that migration policy is, self-evidently and naturally, an instrument of hygiene, quarantine and immunisation – that borders are there to protect life itself, that they trace the contours of organic entities: the body politic, bio-sovereignty, the English Way of Life, and so on. According to this view, migration control is a matter of public health and social order, and undocumented or poorly regulated migration in particular poses a significant risk to life as we know it. Welfare and warfare conflate in bio-security. From here, the inclination toward moral, authoritarian, or more overtly fascistic understandings of contagions and borders is, in practice, a more or less violent one. The most obvious figure here, of course, is the disease-bearing migrant, the foreign germ.

This is Priscilla Wald, writing of Mary Mallon, otherwise known as Typhoid Mary:

The discovery of human vectors of disease fleshed out the contours of contact phobias, explaining the easy enlistment of typhoid in the discourse of 'race suicide.' Typhoid epidemics typically struck the affluent as often as the destitute. Thus they served as a convenient analogue for the extinction of the white race that was to attend the competition offered by the cheap labour of migrants ... Physically and economically, in other words, white middle-class America was under siege.<sup>[8]</sup>

Notions of public health and the history of migration policy are closely intertwined. Panics about contagion invoke race, class, sex, sexuality, border politics, colonial history and the post-colonial, all at once. In Australia, the relatively recent mandatory internment of undocumented migrants emerges from the long history of quarantine confinement, as much as it does from the similarly long and horrible history of wartime or exceptional powers. But this historical nexus should not lead us to believe that border controls are, in fact, techniques for the elimination of disease. Any more than it should incline us to believe that borders stop movement as such. What is at stake in border policing is not the elimination of diseases transmitted through contact, but their management, distribution and, increasingly, valorisation.

The border is permeable, and mobile. The question migration controls seek to answer is not, exactly, how to stop the spread of the dangerous classes, foreign germs, the indiscriminate sharing of bodily fluids, data, or microbes. On the contrary, the question of migration control is how to transform movement into circulation, communication into commerce, and the moment of contact into an instance of exchange. In this, there is a constant swing between the opening up of borders and their closure, between connection and quarantine, deterritorialisation and re-territorialisation, the liquid and the solid.

But if all of this suggests that contagion is hardly foreign to empire, that does not imply that empire corresponds to contagion, that it can or should be opposed by a politics of sanitation, immunisation or pathologisation. In other words, neither an orthodox reading of Marx, nor a quick reading of Deleuze and Guattari will do. Social democracy imagined it would stop the spread of capitalist exploitation through state protection. Historically, this is why Labor parties form such an attachment to migration controls. It's an approach that remains current: one essay on the rise of precarious work calls it a pandemic. Hardt and Negri, writing on globalisation, slip perhaps a little too easily into describing it as "the universal contagion."<sup>[9]</sup> Some deleuzoguattarians, on the other hand, sound a lot like biotech venture capitalists, or Israeli military strategists.

Christopher Kullenberg and Karl Palmås, in their essay titled "Contagionology," discussing Gabriel Tarde and what they argue is the eclipse of a Durkheimian approach to social forms, write:

In this contagionology of ours, we need to become more astute in distinguishing promiscuous and rapidly mutating contagions from controlling and dogmatic ones. ... Deleuze and Guattari would later ask their readers not to place too much hope in a simplistic tearing down of hierarchies ... When they write about the war machine and smooth spaces, they invariably point out that there is no inherent good in processes of deterritorialisation.<sup>[10]</sup>

Whether a Durkheimian approach has, indeed, been eclipsed and how is, I think, a matter of debate. Just as there is a whole debate around regular and precarious work, of the relation between what we think of as Fordist work practices and those of post-Fordism. There are some striking parallels between Fordism and Durkheimian sociology. What both shared was a disciplinary distinction between Nature and Society, one that found its initial impetus in a progressive denaturalisation of social norms, and ended with the re-imposition of an organic, genealogical understanding of the social bond. Of course, Henry Ford's factory had a Sociology Department, and the question there was always about the attachment of forms of life to productivity, about the productive organisation of a biomass and its management.

It is not, then, simply a matter of distinguishing between promiscuity and control, or at least it isn't if these are read as place-holders for the often associated distinctions of open and closed, or network and hierarchy, or libertarian and authoritarian, vertical and horizontal, and so on. The distinction, the political and analytical question, is more specific and literal than this. And, this is what can precipitate and legitimate the inclination toward moral, authoritarian, or a more overtly fascist violence at and of the border.

Deleuze and Guattari put it like this:

How can we conceive of a peopling, a propagation, a becoming that is without filiation or hereditary production? It is quite simple: everybody knows it, but it is discussed only in secret. We oppose epidemic to filiation, contagion to heredity, peopling by contagion to sexual reproduction ... Bands, human or animal, proliferate by contagion, epidemics, battlefields, and catastrophes.<sup>[11]</sup>

Genealogy and contagion – this is the obvious but often implicit question of capitalist strategy. How to make contagion profitably productive? How to fold contact back into contract? Where contact signals the risk of contagion, contingency, the touch that is neither a matter of will or self-control, contract assumes a subject of

self-management, responsibility and autonomy. And it is the insurance contract that, increasingly, comes to mediate between these two moments.

Rosalind Morris, in an essay called “Rush/Panic/Rush: Speculations on the Value of Life and Death in South Africa’s Age of AIDS”, writes:

... if we want to understand AIDS, we need to understand the apparent simultaneity of two discourses, one of panic and the other of accommodation through investment. ... AIDS requires that we re-conceive the relationship between panic and rush. The rush is the affect of a speculative economy, and it has a lengthy history in mining communities ..., and especially those oriented around highly industrialised, deep-level mining where the joint stock form of finance capital has been so historically central. ... This speculative economy has a new object in South Africa, namely, insurance. ... The adaptation to dying that is being solicited from so many (South) Africans today, while not the conscious aim of capitalists, is nonetheless required by capital at the present juncture, and that what we might call speculation on and investment in death is occurring — in complex and highly mediated ways — through new forms and domains of risk management. This management takes place within the insurance sector, where it enacts the value-producing dimension of risk while seemingly offering the techniques with which to contain it. And it is achieved through a vast set of temporalizations, which distribute risk without eliminating it, and which cultivate a new oppositional structure between the HIV-positive and HIV-negative persons in the stead of older racial structures, even as it recalls and in some ways reinstalls the latter. [12]

Morris notes that around 90% of miners regarded themselves as migrants, and begins the essay by remarking that this “is probably the most epidemiologically well-surveyed community in southern Africa, given the twin facts that migrant labour forms its centre and that migrant labour is considered the primary vector of most HIV transmission in the sub-Saharan region.” What I would add to Morris' analysis is the ways in which this particular complex of rush and panic culminated, at around the same time her essay appeared in 2008, in one of the most violent moments of xenophobia in post-apartheid South Africa. Migrant labour was, indeed, considered the primary vector of disease. Hundreds of migrants were attacked, some burnt to death – most of this accompanied by talk of hygiene and purification.

This value-producing dimension of risk and the often violent re-imposition of limits can, in a slightly different way, be seen in the collapse of the subprime housing market in the US, in the repatriations of migrant workers that followed, in the return of moral economy and a neo-Keynesian preoccupation with bodily fluids, stimulus packages, demand management and contractual norms. But while capital might well follow in the steps of various social movements, seeking to make these new forms of life and connection profitable, the risk to capital itself, in so doing, is that the minor variation becomes amplified as crisis for capital. Just as it did with subprime. [13] But here, I'd like to conclude with a slightly different take on “the Greek contagion.”

For the ancients, contagion was intimately associated with the collapse and restoration of empire, the liquidation of foundations and re-foundation. In his “Chapters from the Foundation of the City,” the Roman historian Livy writes of many plagues, but also of sedition spread by contagion. There “was the greatest danger,” he writes, “that the contagion of sedition might spread from the city, and the camps [of soldiers] also be involved in the confusion.” In Livy's telling, the contagion moves from home to city to battlefield, and back again. [14]

Michel Serres, reading these Roman texts, lays out their narrative of foundation and re-foundation in this way:

The crowd is fluid. An institution is stable, solid. The foundation solidifies the crowd. Sickness and contagion invade the space – germs spread, the plague contaminates the expanse .... There is

destruction, violence and war. These are the images of the multitude. These are the avatars or apparitions of population. These are its performances as well. Foundation, then, is the passage from water to stone, the transition of phases. ... The [seditious] clamour of the multiple makes noise; it suddenly takes form as hope or deception; it achieves harmony, and this harmony is the contract. [15]

Cicero similarly writes of sedition as contagious, and the plague as prelude to re-foundation and contract, the restoration of limits and identity. But if Cicero attempts to translate what he calls Greek philosophy into a Roman idiom of genealogical lines of obligation, it is to the Stoics and not the Epicureans that he turns. Cicero prefers – like too many commentators on financial contagions – to relate a story of the inexorable necessity of the re-imposition of scarcity, rather than observe the fact of abundance. Unlike the Roman poet Lucretius.

For Lucretius, contagion is, very simply, the story of the fall of empire. His *On the Nature of the Universe* – which includes a nascent version of germ theory and atoms, and still informs current understandings of chemistry, biology and physics – ends with a chapter on storms and pestilence. [16] But for Lucretius, there is no re-foundation. Unlike Cicero, in the Lucretian narrative of contagion, familial obligations only serve to multiply the corpses. There is no demand for austerity, no dream of re-foundation. Nor is there providence. For him, the fear of the gods – whether they incite hope or pessimism – makes people “cleave to cruel masters whom they think, unhappy fools, to be all-powerful.” Lucretius wants to show instead, in this story of the fall of empire and catastrophe, that it is merely this particular way of life – and not life as such – that ceases when the Athenian empire ends. He insists that “all the realms of the universe are mortal,” without for a moment implying that the universe, as such, ends.

He maps it like this: there are atoms which fly around by chance. Some of these atoms cause disease and death. By some chance they amass in the migratory flows from periphery to city. The universe is transformed at a molecular level, the aleatory movement of atoms continues. The swerve that bumps one atom up against another or more cannot, entirely, be predicted, pre-empted or channelled. But it can change everything.

---

[1] Much of this discussion on precariousness is developed in Mitropoulos, A. “Precari-Us?”, in J. Berry-Slater, ed. *The Precarious Reader* (London: Mute), 2005, pp.12-18.

[2] Negri, A. *Marx Beyond Marx: Lessons on the Grundrisse*, New York: Autonomedia, 1991; Tronti, M. *Operai e Capitale*, Einaudi: Turin, 1966; Bologna, S. “The Tribe of Moles,” in S. Lotringer and C. Marazzi (eds.), *Italy: Autonomia. Post-Political Politics*, New York: Semiotext(e), 1980, pp.36-61.

[3] This analysis of the family wage is developed in Mitropoulos, A. “Oikopolitics, and Storms”, *The Global South*, 3(1), 2009, pp.66-82.

[4] Berlant, L. “Nearly Utopian, Nearly Normal: Post-Fordist Affect in *La Promesse* and *Rosetta*,” *Public Culture*, 19, 2007, pp.273-301; and Grimm, S. and Ronneberger, K. “An invisible history of work – Interview with Sergio Bologna,” *Springerin*, 1, 2007 <http://tinyurl.com/bologna-springerin>

- [5] Ross, A. *No-Collar: The Humane Workplace and its Hidden Costs*, Philadelphia, Temple University Press, 2003, p. 123.
- [6] Florida, R. *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life*, New York: Basic Books, 2002; cf. Mitropoulos, A. "The Social SoftWar", *Mute – Web 2.0, Man's Best Friendster*, 2:4, 2007. <http://www.metamute.org/en/The-Social-SoftWar>
- [7] International Monetary Fund, *Global Financial Stability Report*, April, 2005, p.89. <http://www.imf.org/External/Pubs/FT/GFSR/2005/01/index.htm>
- [8] Wald, P. 2008, *Contagious Cultures, Carriers, and the Outbreak Narrative*, United States: Duke University Press, pp.80-81.
- [9] Michael Hardt, Antonio Negri, *Empire*, Cambridge, London 2000, p. 136.
- [10] Kullenberg, C. and Palmås, K. "Contagionology," *Eurozine*, 2009. <http://www.eurozine.com/articles/2009-03-09-kullenberg-en.html>
- [11] Deleuze, G. and Guattari, F. *A Thousand Plateaus – Capitalism and Schizophrenia* (New York: Continuum Books), p.266.
- [12] Morris, R. "Rush/Panic/Rush: Speculations on the Value of Life and Death in South Africa's Age of AIDS," *Public Culture*, 20:2, 2008, p.209.
- [13] Cooper, M. and Mitropoulos, A. "In Praise of Usura," *Mute*, 2:13, 2009. [http://www.metamute.org/content/in\\_praise\\_of\\_usura](http://www.metamute.org/content/in_praise_of_usura)
- [14] Livy, *The History of Rome, Volume 1*, Montana: Kessinger Publishing, 2000, p.443.
- [15] Serres, M. *Rome – The Book of Foundations*, California: Stanford University Press, 1991, p.240.
- [16] Lucretius, *On the Nature of Things*, New York: Bibliolife, 2009.