

## John Clegg and Rob Lucas (Endnotes)

### Three Agricultural Revolutions

There is tenderness only in the coarsest demand:  
that no-one shall go hungry anymore.

—Adorno, *Minima Moralia*

#### Critique of Revolutionary Reason

It's safe to say that there is today no particularly obvious consensus about what the overcoming of capitalism might look like. Surveying the field of imagined scenarios, we find everything from neo-social-democratic bids to gradually legislate capitalism away, to apocalyptic visions of social breakdown marked by the spontaneous redistribution of goods. Nor is there a simple, uncontentious definition of communism. It could in principle be anything from some classical Sparta's helot-exploiting collectivism, to a recapitulation of hunter-gatherer lifestyles; from the perfected bureaucratic state, to federated worker's councils; from Stafford Beer's cybernetic visions, to a return to pastoral commons.

Marx, of course, was famously reticent about giving the term any positive content, displacing its meaning instead onto the historical unfolding of the movement of the same name. He claimed to prefer "critical analysis of actual facts"

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to “writing recipes for the cookshops of the future” (Marx 1976: 99). And Marxists of various stripes have often appealed to that precedent in one way or another to justify a focus not on the speculative future, but on the “real” present. In *Endnotes*’s broadly “ultra-left” milieu, a passage from Marx’s *German Ideology* often functions as a kind of mantra: “communism is for us not a state of affairs which is to be established, an ideal to which reality [will] have to adjust itself. We call communism the real movement which abolishes the present state of things” (Marx 1970: 56).

This orientation to *the struggles themselves* is not without reason: if one assumes that communism is strictly something to be produced through class struggle rather than, for example, through Fabian technocracy, there is a logic in attempting to render one’s thinking about communism immanent to such struggle. Moreover this approach has often led to insightful analyses of contemporary struggles. The problem is that one can quickly slide into rather “theological” modes of reasoning here, for without a criterion for identifying struggles and their limits, we end up with a circular problem. If you take something that is mysterious—communism—and defer to “struggles” to demystify it, then you risk ending up with mysterious struggles. There is always an implicit criterion by which we differentiate some struggles from others before we even consider whether they might be capable of shedding some light on revolutionary questions. Our speculative sense of what communism might be already gives us an orientation to specific struggles—and within them. If we fail to think this through directly—perhaps in favour of some kind of class-struggle empiricism—we are not left with an unmediated relation to “the struggles themselves.” On the contrary, our fundamental presuppositions remain fully active, but are unexamined.

### The Problem of the Indeterminate Totality

A sort of infuriatingly abstract riddling around the speculative question of revolution is not only a problem of ultra-left theory, though the premium on rhetorical revolutionism in this case probably forces it more to the surface. Such thought-patterns seem to be a tendency in any thinking concerned even implicitly with the transcendence of this world. What is this world that we want to overcome? What does it include? Everything or just some things? If the latter, does that mean we can just make a list of what to keep and what to junk? Should we call this world capitalism, class society, patriarchy? All of the above? Whichever we choose, it is hard to say definitively what constitutes it. If we take capitalism, what does that include? The market? Exchange per se? Accumulation? The commodity? Concrete infrastructures and

goods? Technologies and organizational structures? It is difficult to locate determinate limits. And if we can't say with clarity what it is that is to be overcome, our visions of its successor worlds will be even hazier. This leaves questions of struggle and strategy dangling in a formless space, typically unable even speculatively to bridge the gap between immediate situations and projected utopias.

Any suggestion can then seem as good as any other. Why not join the military, as Fredric Jameson advocates (Jameson 2016)? Get yourself arrested, à la Extinction Rebellion? Start a LETS scheme with Kōjin Karatani (2005). Move to a rural village with the invisible committee (Invisible Committee 2009). Colonize some hollowed-out political party with the American DSA or British momentum. Set to work on an alternative tech project. There is always the cut and thrust of immediate class struggle, of course. But how might it lead out of the mere regulation of the capital-labor relation? Perhaps nothing short of a total simultaneous overturn of everything will do it; a spontaneous global riot at the end of time. Everywhere we find the same uneasy relation between a relatively arbitrary concrete and a hazy speculative horizon. The ubiquity of this sort of problem suggests that we are faced not simply with a set of bad ideas, strategic delusions or suchlike, but with an objective conceptual problem: attempts to imagine a transition to a post-capitalist world tend *necessarily* to be bedeviled by peculiarly blocked patterns of thought.

At the risk of seeming simplistic, we would suggest that this is because one typically conceives of the present world as an *indeterminate* totality in which any number of things may be included. A capitalist present of indeterminate scale and scope then begets a speculative notion of revolution—as the overcoming of everything that might be included in that totality—that is equally indeterminate. To imagine revolution, we somehow have to imagine how this enormously complex world that capitalism has bequeathed to us could be replaced *in toto*, and this thought seems either impossible or absurd. Are we, for example, to prepare in advance the detail of distributive mechanisms that are somehow to rival the capitalist market without reproducing its social relations? And then to successfully implement these in good time in a moment when the mode of production, the legal system and the nation state are all breaking down? Where might one even begin?<sup>1</sup>

### Planning as False Solution

The market/planning opposition is one major way in which this sort of problem has been posed historically: in the first decades of the twentieth century, an era of market “anarchy” and the consolidation of state bureaucracies, and

in the aftermath of the total mobilization of the war economy, the centralized state plan presented itself as the obvious answer to the question of how to replace the capitalist world. This depended implicitly on imagining the capitalist totality that was at stake as largely bounded within determinate states; as essentially a distributive mechanism for allocating raw materials to factories and the products of those factories to citizens.

If we consider the attempts to implement such central plans, in the Soviet Union and elsewhere, it is clear that they faced insuperable problems. The planning machine often broke down, with the wasteful over-production of some goods and raw materials, and the critical under-production of others (Ticktin 1992; Arthur 2002). Faced with what can only be described as the mess of the Soviet economy, it is tempting to think that the critiques of Ludwig von Mises and F. A. Hayek had a point: no simple planning system seemed capable of coordination anywhere near as effective as the spontaneous activity of market actors.<sup>2</sup> But to read this simply as a problem of “information”, as people are prone to, is to obfuscate something of fundamental importance. As Jasper Bernes convincingly argues in this issue, the problem faced by actual planners in the Soviet Union was not essentially one of information, but of discipline.

The planners had no effective way to turn the information they had into reality, because unlike the market—which imposes discipline on participants by default—they had no easy way to enforce orders.<sup>3</sup> Though people were required to work in order to earn money to survive, they could not, as in capitalism, be threatened with unemployment if they were caught slacking. Recalcitrant workers would simply be shifted around, leading to high levels of labor turnover and endemic absenteeism. If we recognize the centrality of this issue of control, it becomes clear that no amount of computing capacity could ever have solved the problem—as some late Soviet planners wondered, and some socialists have again been considering in recent years (Phillips and Rozworski 2019).

But there are further problems with the market/plan opposition. The capitalist market was, of course, never merely the internal distribution mechanism of individual countries; its scope was never coextensive with that of the planner-state, and it is not obvious that the plan could ever really have successfully substituted for it (or, indeed, vice versa). Yet actual capitalist markets are everywhere shot through with planning, both in the sense that the firms that produce for the market plan their production, and in the sense that planned state policy continually regulates and in some senses creates markets. In the current conjuncture it is hard to imagine either planner

states or pure market spontaneity by themselves managing an extremely complex and variegated global economy, large parts of which are currently planned in ways that transcend the borders of individual states, while the balance of payments hinges upon the management not of the “national economy” but rather of a precarious debt pile.

“Planning” thus doesn’t present itself as a meaningful solution to the problem of transition. The point is not that we should be opposed to planning as such—it is hard to imagine what this could even mean, since planning seems to be a generic aspect of human behavior. The problem is that, even if we wanted it, the present conjuncture doesn’t present us with anything comparable to the early twentieth century planner-state; no single conquerable vantage point from which to grapple with the economy as a whole, all at once. And this brings us back to our point about capitalism as indeterminate totality: The reason we tend to think of capitalism in this way is that, for mere mortals, the capitalist world *really does* appear as something of indeterminate scale and scope. It can’t be mentally or strategically gathered into a totality other than in the haziest of imaginings, leaving us at a loss when we try to imagine its overcoming.

### A Physiocratic Reduction

Finding ourselves in the midst of this riddle we would like to propose that we can begin to find a solution through a change of scope. This entails both a broadening of perspective—considering capitalism and communism in the very long run of human history—as well as a narrowing of focus—what might be termed a “physiocratic reduction.”

Although capitalism really is in many ways the sublime, horrifying object that critical theorists like to make it out to be, its core defining characteristics and prerequisites are actually quite simple: it is premised on the bulk of people having to sell their work for a wage, and the condition for this is that those people do not already have access to their own means of subsistence. While there are many such means, and the definition of “subsistence” is of course itself variable, it may be useful—both from an analytical and a strategic point of view—to focus on that which will remain a large subset of subsistence needs in any foreseeable world: food.

After all, as some of its most astute critics have noted (Bordiga 1978; Wood 2002; Brenner 2007), the capitalist mode of production was born not in the city but in the countryside, and it is in agriculture that it must perpetually seek the most basic conditions of its reproduction. That reproduction involves

a metabolic exchange between human life and the earth's crust that has no precedent in human or indeed planetary history. From the human point of view, the distinctive feature of capitalism is that it marks a break in the history of the species in which, for the first time, the majority of people are not in a position to produce their own food. From the planetary point of view it marks the advent or acceleration of a geological period in which the biosphere has become fundamentally shaped by the activity of a single species.

Of course capitalism was not the first, but the second agricultural revolution in human history. The first was the Neolithic revolution, which in a relatively short span of time gave rise to agrarian class societies in which the bulk of people became exploited tillers of the land. The second revolution both accelerated and reversed the first in the sense that capitalism finally spread settled agriculture to every corner of the world, while shifting the bulk of the population off the land and into cities. It achieved this by making the mass of people dependent for their own reproduction on markets rather than land.

A minimum condition of communism would be the ending of this market-dependence, through the establishment of secure, non-market-mediated access to the means of reproduction. We might thus speculatively define communism as the third major agricultural revolution, one that overcomes the impersonal domination of the market without re-establishing the personal domination of extractive lords or states (what Lenin called "groups of armed men"). Yet if, thus following Marx, we define communism as the negation of the negation, a lot depends on which negation—which agricultural revolution—it is supposed to negate. Are we just talking about capitalism? Or the overcoming of class society per se? To unpack this problem we need to consider the first two agricultural revolutions in more detail.

### The Neolithic Origins of Class Domination

The first agricultural revolution took place between 8000 and 6000 BC around the river valleys and Mediterranean coasts of Mesopotamia. Slightly later, and apparently independently, similar revolutions took place in the Indus valley, Central America and the Yellow River delta. Many archaeologists today argue that the source of these "Neolithic transitions" was neither new techniques of domestication and animal husbandry, nor the plough itself, nor even the practice of settled agriculture per se—all of which pre-existed the first agricultural revolutions by thousands of years.<sup>4</sup> Instead, the key innovations of this era were the tax-collector state and slavery (Clastres 1987; Scott 2017). These institutions were symbiotically related, for the early

state's primary tax base was grain, and some form of slavery was necessary to compel masses of people to do the back-breaking work of ploughing (Bowles and Choi 2013).

James Scott refers to these first agrarian states as “late Neolithic multi-species resettlement camps” (2017: 18). The close proximity of animals and humans gave rise to the most virulent diseases known to medical science: cholera, smallpox, mumps, measles, influenza, chicken pox, perhaps even malaria. The resulting increase in mortality required a continual replenishing of the local labor force through slave-raiding.<sup>5</sup> Thus alongside written language (to keep tax accounts), a distinctive technology of this era was the wall, constructed not only to keep “barbarians” out, but also to keep the “civilised” in (Scott 2017: 118–20).

If communism is to amount to the abolition not only of capitalism but of class society per se, then a communist revolution must be seen as the negation of this first agricultural revolution. But viewed from the long run of human history it is hard to see anything worth preserving in a “determinate negation.” By all accounts, before the Neolithic revolution human beings lived longer and more interesting lives, with more egalitarian and less oppressive social arrangements—and, importantly, had a lot more free time (Sahlins 1972; Flannery and Marcus 2012). We might thus follow primitivist thinkers like Jacques Camatte (1995) in conceiving a communist revolution as an *indeterminate* negation of this first agricultural revolution, one that simply reverses a world-historic errancy. Yet this would today imply mass die-off, for pre-Neolithic agricultural practices would not be able to sustain the human population that the second agricultural revolution has generated.

### Capitalism as Second Agricultural Revolution

The second agricultural revolution, which began in fifteenth- and sixteenth-century England, both accelerated and reversed the first. It accelerated it insofar as its spread finally completed the extension of surplus-yielding grain agriculture to every corner of the earth. Cash crops were planted wherever they could be grown profitably, and territories were often transformed to make that possible. With the extension of taxable agriculture went the extension of the territorial state.<sup>6</sup> The second agricultural revolution thus finally eliminated the “barbarian” periphery, which had symbiotically co-existed with agrarian civilizations for thousands of years. Finally, as we shall see below, it also acted as an accelerator for the ecological destruction latent in the Neolithic revolution.

Yet it also reversed a primary social effect of that revolution insofar as an exponential growth in agricultural productivity freed the bulk of the earth's population from the actual labor of grain-cultivation. Wherever capitalism took hold, populations were ultimately separated from the land and shifted to cities, where their inability to feed themselves without money became the basis of a new system of surplus extraction. Thus whereas human history from 6000 BC to 1800 AD saw a relatively steady rise in the proportion of the population in settled agriculture, that share has since taken a sharp nosedive. Today only twenty-eight percent of the world's population works in agriculture. In most developed countries that share is less than five percent. Yet due to the exponential growth in productivity, that five percent is usually more than capable of feeding the other ninety-five percent.

The second agricultural revolution, like the first, has often been confused with a specific set of techniques—crop rotation, draining fens, improved manuring and machinery, and so forth—rather than with the new social relations underlying them. It's true that rapid technological development is in many ways the distinguishing characteristic of this revolution. But the underlying force driving such development was not itself a technological breakthrough, but rather a transformation in rural property relations that made access to land conditional on competition in agricultural markets. The increased dependency of producers on markets created powerful incentives to discover cost-saving innovations and compelled farmers to adapt—to innovations adopted elsewhere—or die.

Relying on a simplified reading of Marx on "so-called primitive accumulation," many Marxists attribute the origins of capitalism in England to "enclosure"—the abolition of the traditional "open field" system of cultivation, with its associated common lands. The first wave of enclosure was carried out by landlords starting in the sixteenth century, and the second wave by acts of parliament in the late eighteenth and early nineteenth centuries. However, Robert Brenner (2007) has shown that enclosure was just one tool in an arsenal of landlord and state strategies that resulted in the eradication of peasant farming in England. The key transformation was the replacement of customary with market-determined rents as an unintended consequence of the struggles between lords and peasants in the aftermath of the Black Death in the fourteenth and fifteenth centuries. The ability of English peasants to resist re-enslavement led lords to abolish the fixed customary rents and inheritance rights that the peasants had traditionally enjoyed. This allowed rents to adjust to productivity in response to the competition of



increasingly mobile labor and capital, which forced both peasants and lords to abandon strategies of reproduction that had characterized rural relations for thousands of years (Brenner 2007; Wood 2002).

Competition among landlords compelled them to improve their land in order to attract the most productive tenants, while competition among peasants led them to abandon the “safety-first” approach of producing for subsistence and marketing only their surplus. Instead they were compelled to specialize in those crops for which they could generate the highest return on investment. Specialization meant that they had to purchase more of their own inputs, creating an expanding home market for manufactured goods and agricultural supplies. Crucially, they ceased to subdivide holdings among children, as neither landlords nor tenants could afford the loss of efficiency on smaller plots (Seccombe 1995). It was this underlying condition that made enclosure both possible and desirable for capitalist farmers and the state. Enclosure in turn added to the population of displaced laborers, some of whom were hired by capitalist farmers, while others drifted to growing cities where they became the fodder for an emergent industrial economy.

The second agricultural revolution did not, however, generally take the same form outside of England.<sup>7</sup> In the settler colonies of the British Empire, land was commodified early in the settlement process, in tandem with the elimination of indigenous populations, such that farmers became market dependent when squatting frontier lands was no longer possible (Post 1982). In most other cases it was the state, whether absolutist or bourgeois, that attempted to impose an agricultural revolution from above (Isett and Miller 2016). The only way to compete with the rising capitalist powers of England, Holland and the United States was to beat them at their own game, and at the most basic level that game was played in agriculture: you couldn’t obtain munitions factories, battleships and railways without the increased agricultural productivity necessary to feed the armies of workers who would build them, and you couldn’t even assemble such armies unless the bulk of the population was no longer bound to the land. Yet state plans for a top-down agricultural revolution faced opposition from powerful landlords who risked losing direct power over peasants. Thus the second agricultural revolution generally required the suppression or extermination of the landlord class. In Western Europe this took two world wars; in Russia and China it took successful peasant insurgencies (though these in turn would have to be brutally suppressed to get the revolution going); in East Asia it took a campaign of terror initiated by the Japanese occupation forces (Allen 2011).<sup>8</sup>

### The Communist Garden: A Third Agricultural Revolution

We referred above to the second agricultural revolution as a separation of people from the land. But there is in this terminology a risk of naturalizing the prior connection. As we have argued, that connection was in fact generally a *tethering* rooted in the coercive power of the first agrarian states. Capitalism, the second agricultural revolution, loosened this tether whilst creating a new one. Human beings were liberated from the land, thus creating a potential abundance of “free time”—time not slavishly devoted to satisfying this primary human need. But any free time was immediately filled with a new form of domination—wage labor. And this impersonal form of domination was in fact based on that prior “liberation,” for without access to the means of subsistence proletarians were forced to sell their labor to survive. St. Paul’s injunction that “he who does not work does not eat” (2 Thess. 3:10) thus outlived material scarcity in the food supply.

If, following Brenner and Bordiga, capitalism is fundamentally the second agricultural revolution, and if one thinks of communism as the determinate negation of capitalism, the separation of human beings from the land wrought by capitalism might then be viewed essentially as something that should be *realized* in a communist revolution in which the existing agricultural surplus is simply redistributed—for example by the plan instead of the market—thereby cutting the new tether of wage dependency. Such a *determinate* negation would thereby preserve a liberation implicit in the second agricultural revolution.

But this separation is, of course, not really a liberation at all—it merely reinforces the tethers of the state while substituting impersonal for personal domination. It is, in the end, the most profound deprivation to lack direct access to one’s own means of subsistence. Even in a nominally post-capitalist situation, populations without such access would be at serious risk of exploitation and domination by anyone in a position to intervene in the supply of food. A revolution that overcame capitalism by simply redistributing its agricultural surplus would thus be liable to slide back into capitalism—or perhaps into some other, older form of class society. This is one reason why any genuine overcoming of capitalism could not just stop at re-purposing the existing agro-industrial complex (Phillips and Rozworski 2019), but would need also to put at stake its Neolithic underpinnings. To prevent a new system of domination from arising (and as we shall see below, even to defeat the counter-revolution) people must secure direct access to their own means of subsistence—without dependence on either the market or the state—and,

crucially, today this may mean something closer to the pre-Neolithic relation to land, albeit on a quite different technical and demographic basis.

All this assumes that preserving the agro-industrial complex would even be an option—an assumption which the current path of ecological destruction calls into question. The second agricultural revolution is often associated with a rift in what Marx called “the metabolic interaction between man and the earth” (Marx 1976: 677). Marx, who was informed by the work of a German chemist, Justus von Liebig, understood this largely in terms of declining soil fertility.<sup>9</sup> Twentieth century agri-business addressed this problem with chemical fertilizers, following the discovery of the Haber-Bosch process by WWI munitions manufacturers, which uses natural gas to convert atmospheric nitrogen into ammonia. Together with a batch of new pesticides and high-yielding crop varieties, the resulting “green revolution” that was rolled out across the developing world in the post-war period has been interpreted as a petrochemical counter-revolution (Bernes 2018), tying basic subsistence to flows of oil and the military power that secures them. But this solution to the problem of declining soil fertility has opened up a far greater metabolic rift. Some estimate that agriculture accounts for over half of all greenhouse gas emissions, which include methane and nitrous oxide as well as CO<sub>2</sub> (Isett and Miller 2016). Deforestation to clear land for pasture or crops prevents carbon reabsorption, and transporting halfway around the world food and agricultural inputs that could be produced locally dumps huge amounts of carbon into the atmosphere. Meanwhile pesticides contaminate the soil and kill off insects, while nitrogen runoff has acidified waterways and generated toxic algal blooms.

In reuniting people with the land, communism would be humanity’s best chance of mending this metabolic rift, which was arguably already latent in the soil-exhausting tendencies of Neolithic monocropping. Such reunification need not be some apocalyptic Khmer Rouge abolition of the city, nor a twee William Morris jaunt up the Thames Valley to rejoice in the hay harvest. The “abolition of the distinction between town and country”, which was a key element in the Communist Manifesto’s ten-point program—in line with most of nineteenth century socialism—was a reasonable response to the miserable conditions of urban life at the time. But while some degree of spatial de-concentration may be necessary from an ecological point of view, it is hard to imagine a mass reconversion of 4.2 billion city-dwellers into tillers or tenders of the soil.

In view of all the apparent irrationality and waste of the current system, many environmentalists argue that the solution is to take the profit

motive out of agriculture. But the truth is that it is already heavily planned in most developed countries, and environmental destruction is just as often the result of that planning (especially in so far as it intersects with global logistics). The clear way to reduce farming's ecological footprint is to cut down on meat production and grow more food locally, while reducing reliance on fossil fuels and synthetic fertilizer. We can hardly expect this from either the market or state-planning in their current form, but it may be a necessity not only from an ecological, but also from a revolutionary point of view.

In Marxian theory the "agrarian question" is often thought of as a historical puzzle of the late nineteenth century: Why was the population of peasants in mainland Europe not declining as it had done in England? But for Kautsky and others this was actually an urgent question of revolutionary strategy. Peasants had starved the cities during the French revolution, and this cast a long shadow over nineteenth century revolutionary thought and practice. Here's Kropotkin's (1995: 54) account of the Paris Commune in the *Conquest of Bread*:

In 1871 the Commune perished for lack of combatants. It had taken measures for the separation of Church and State, but it neglected, alas, until too late, to take measures for providing the people with bread. . . . At last the Commune saw its mistake, and opened communal kitchens. But it was too late. Its days were already numbered, and the troops of Versailles were on the ramparts.

Kropotkin's answer was to leave the peasants alone and set the city to work feeding itself. "Instead of plundering the bakers' shops one day, and starving the next, the people of the insurgent cities will take possession of the warehouses, the cattle markets."<sup>10</sup> Using these provisions to tide them over, the city's hinterland would be developed into giant market gardens, with whole neighborhoods "under glass" (Kropotkin 1995: 191–95).

According to Preobrazhensky (2014: 701), urban gardening was temporarily adopted in Moscow and St. Petersburg in the winter of 1917, when forced requisitions in the countryside largely failed. But this was merely a fallback, and was never intended as the Russian road to socialism (Shanin 1983). Stalin's solution was the orthodox Bolshevik one; Trotsky urged him to brutalize the peasants even more. The anarchists objected, but when their turn came in Spain they too used violence to requisition crops and compel compliance from a recalcitrant countryside (Seidman 2002).

In some ways history has solved this problem for us. The peasantry is everywhere a minority and declining, and it produces an even smaller share

of the global food supply. But the core strategic concern hasn't gone away. The "agrarian question" has become a "logistics question." We are so dependent today on international supply chains to feed ourselves that any notion of seizing a territory and carving it off from the rule of capital appears futile or mad (Bernes 2018: 335).

How do you break free from global supply chains without starving? While we don't have any glib answers it is clear that, assuming revolution will not break out everywhere simultaneously, strategic as well as ecological necessity will imply a relocalization of food production, as well as a greening of the city. At least in any transitional phase, food security will be a paramount concern, such that the current wastefulness of a globalized division of agricultural labor would have to be replaced with an opposite inefficiency: a built-in redundancy of locally grown food.

This is not to defend a communism of autarkic enclaves. Some form of long-distance interchange will always be necessary. Minerals and other resources are not distributed equally across the Earth's surface and would need to be globally re-distributed in a communist world. Localized forms of guaranteed reproduction, as long as it was not restricted to locally-born populations, could, on the contrary, intensify large-scale global cooperation on grand projects such as preventing catastrophic climate change.

Indeed, we might speculatively assert that these two elements: (1) unconditional provision of basic necessities and (2) freedom of movement, are the minimal conditions of communist life. Unconditional provision undermines the power of employers over employees and producers over non-producers, decommodifying labor and ending market domination in the only important sense. Freedom of movement, on the other hand, wards off the potential for new forms of domination to take the place of the market. For as long as people have a fulfilling exit option they will have some capacity to resist new forms of personal domination.

The first of these two elements supports the second, insofar as my capacity to exit depends upon my capacity to find means of subsistence wherever I go. This will of course require planning—in the generic, abstract sense—and some degree of spatial redistribution. And there will always be coordination problems to solve. But the far more important problem is how people will be motivated to carry out such plans, absent St Paul's injunction.

If there is both an ecological and a strategic necessity for some relocalization, we may speculatively assert an additional imperative. The ecological and strategic concerns are about basic survival, but if survival is all that communism can offer, then it will not itself survive. It has to provide for real

human flourishing, not just bare necessities. Growing the food we need to live—the prototype of all instrumental activity—could become not just a means to an end, but an end in itself, and therefore no longer something that has to be imposed on anyone with threats of excommunication from the human community. The free production of one's own existence, unfettered by relations of exploitation or domination, would be the experience of a kind of freedom that has been almost entirely lost to humanity in the capitalist epoch.

This is not, we think, simply one utopian vision to be ranged alongside an arbitrary list of similarly improbable alternatives: cybernetic, primitivist, bureaucratic, councilist. It is not a formalist cookshop recipe, but nor is it merely some oneiric millenarian hope conjured out of the hopelessness of ever overcoming a boundless capitalist present which includes everything we have ever known. It is a question of the coarsest, simplest demand: that we be fed. This question takes us to the heart of the matter: of capitalism, of class society, and of their supersession. Posing it enables us to do more than dreaming up strategies and tactics that are typically as improbable as the utopias they shoot for. It helps us to specify the frame and preconditions for any strategy that would meaningfully take the surpassing of this mode of production as its goal. And it supplies unambiguous essential criteria for what communism would have to look like if it was to succeed in overturning the dictatorship of capital. In turn, once one frames things in this way, certain concrete courses of action start to suggest themselves. And certain kinds of struggle come to the foreground as those that might just be taking first steps on a path towards this speculative future, while others recede into shades of irrelevance. The task is clear enough: no one must go hungry anymore. But that will require establishing a material human community on the ruins of capital:

When, after the forcible crushing of this ever-more obscene dictatorship, it will be possible to subordinate every solution and every plan to the amelioration of the *conditions of living labour*, to fashion with this aim everything that has come from *dead labour*, from *constant capital*, from the *infrastructure* that the human species has built up over the centuries and continues to build up on the earth's crust, then the brutal verticalism of the cement monsters will be made ridiculous and will be suppressed, and in the immense expanses of horizontal space, once the giant cities have been deflated, the strength and intelligence of the human animal will progressively tend to render uniform the density of life and labour over the inhabitable parts of the earth; and these forces will henceforth be in harmony, and no longer ferocious enemies as they are in the deformed civilisation of today, where they are only brought together by the spectre of servitude and hunger.<sup>11</sup>

## Notes

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- 1 In the limited space available here, it is not possible to clarify satisfactorily the nature of this critique of revolutionary thinking and the diagnosis of “indeterminate totality.” A preliminary sketch is available in *Endnotes* 2019.
- 2 Hayek was not only a critic of the socialist planners, he was also heavily influenced by his debate with them, such that in a curious inversion of their notion of the general plan as a centralized market he ultimately reconceptualized the market as a decentralized plan (Hayek 1945).
- 3 In a sense both sides in the calculation debate had an interest in ignoring this. Hayek and Von Mises didn’t want to defend the market as a form of domination, and the planners didn’t want to imagine that socialist workers might lack motivation.
- 4 Surveying the current state of archaeological research, James Scott (2017) points out that it is now widely recognized that periodic long-term settlement in highly fertile areas (such as rich floodplains or coasts with plentiful fish stocks) had been relatively normal for pre-Neolithic peoples. Moreover, animal and plant domestication is in some sense a permanent feature of human history, just as plants and animals may “domesticate” each other as they adapt to living together. The rate of both domestication and settlement did increase between 8000 and 6000 BC. But since both processes had a long prehistory, they cannot themselves account for the rapid changes of the Neolithic transition.
- 5 The endemic demand for agricultural labor also put a high price on the fertility of women. Some of the first recorded Babylonian scripture incorporates the sign for slave as a combination of the signs for “mountain” and “woman” (Scott 2017: 158). In addition to providing the river valleys with a source of slave labor, nomadic “barbarian” societies in the highlands also acted as traders, including slave-traders, linking agrarian states together, and sometimes as conquering raiders who themselves became the new enslavers.
- 6 Indeed in the twentieth century the territorial state, which originated in taxable grain, extended even beyond the limits of grain cultivation, to the highest mountains and the most barren deserts, a final conquest that Scott (2009) seems to attribute to the attack helicopter.
- 7 Japan and Holland are the only cases that arguably followed the English path out of feudalism (Brenner 2001; Isett and Miller 2016).
- 8 In the less developed world, where top-down projects of agrarian reform generally failed, a slow and painful bottom-up revolution ultimately took its place, as a result of falling commodity prices and continually rising populations. In this context, the capacity of peasants to sell their surplus gradually dwindled at the same time as they found themselves with insufficient land for surviving children. As a result, a kind of demographic dispossession has been the most common form of agrarian transition for much of the world’s population, albeit with the dispossessed finding fewer and fewer places to insert themselves in the expanding urban periphery (Benanav, forthcoming). Rural landlords who find their political power dwindling have either succumbed to agro-industrial buyouts and land-grabs, or joined forces with them.

- 9 Liebig was particularly perturbed by the fact that urbanization deprived soils of human waste. This was one reason that Engels argued for overcoming the separation between town and country: “The present poisoning of the air, water and land can be put an end to only by the fusion of town and country; and only such fusion will change the situation of the masses now languishing in the towns, and enable their excrement to be used for the production of plants instead of for the production of disease” (Engels 1935). Along similar lines Preobrazhensky noted “the enormous exhaustion of the soil, due to the fact that the city does not give back to the village, in the form of fertiliser, what it takes from it in the form of food” (Preobrazhensky 2014: 709).
- 10 “But provisions will run short in a month!” Kropotkin’s imagined critics exclaim. “So much the better,” he says. “It will prove that for the first time on record the people have had enough to eat” (Kropotkin 1995: 65).
- 11 Amadeo Bordiga, “Space against Cement” (1952) in Bordiga 1978: 168. English translation of this quotation is from CDW, “The Transformation of Social Relations.” *International Review* no. 85, 1996.

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