



THE SOCIALIST CALCULATION DEBATE AND NEW SOCIALIST MODELS IN LIGHT OF A CONTEXTUAL HISTORICAL MATERIALIST INTERPRETATION

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The Statement of Requirements for the Major Paper

This paper titled “The Socialist Calculation Debate and New Socialist Models in Light of a Contextual Historical Materialist Interpretation” culminates the direction of my Masters in Environmental Studies degree towards the examination of the dynamics of Socialist economic calculation in context of the inclusion of factors normally deemed externalities in the capitalist market framework. This paper explores the arguments and models of Socialist economic management, focusing centrally on non-market-centric economic direction and the issues of economic efficiency. In this paper, I assert that socialist models need to be understood as being applicable to particular historical developmental contexts which assume a particular level of capital accumulation, centralization of data and class composition and relative power, acquired on the basis of social leverage rather than fiat. I explore the early 20th century propositions, their most salient critiques, the critiques of the experience of the 20th century command economies as well as New Socialist models proposed later in the century. This paper is to be valued at 24 course credits devoted to Major Paper Independent Work (ENVS 7899) carried out between Fall 2019 and Fall 2020.

Abstract

This paper examines the historical Socialist Calculation Debate, some critiques of the command economies in the late 20th century as well as some New Socialist economic models. These models were assessed with regards to their feasibility for practice as well as their relation to a theorized historical trajectory in style of immanent critique. This trajectory can be broadly sketched in terms of the implicit dynamics of capital accumulation, the size of the state sector and relative class power. This paper finds that although critics of both socialist models and socialist historical economies present some significant obstacles to the prospects of central calculation and planning, their feasibility is likely to increase with greater data processing capacity and through the increasing feasibility of greater firm growth. It is contended that critics and some advocates misrepresent the obstacles confronting socialist states by assuming that various limited unidimensional criteria are the basis for decision making and economic organization in these states. For instance, one of the major assumptions they make is that short-term institutional economic efficiency is the key target of decision making. These assumptions overlook key contingencies and neglect the dynamics of real decision-making, instead assuming habit or mere formalism can just be imposed without sufficient leverage. Despite their flaws, some of these critiques might reveal an unfolding rationalization mechanism that begins with less computational capacity, relying on more crude political direction to those that would rely on a more detailed form, which could progressively shrink the domain of the market. I argue that although many models might be presented as competitors, they might be better understood as highlighting different aspects that might be emphasized at different stages in a developmental progression towards greater economic centralization and greater class power in a progressively more socialist regime. Like Marx's immanent critique of capitalism, the growing inefficiency of

lower forms should progress to more efficient detailed modes of calculation as is required by the scope of economic responsibility of the state. Their structural limitations do not invalidate them as potentially useful for a period of time, they just reveal the need for more nuanced forms of *ex ante* calculation that suits its economic breadth of responsibility as more of the economy comes under its purview.

Foreword

This paper is the result of an investigation that began as an attempt at a socialist efficiency calculation that was inclusive of externalities in search of a framework for calculation outside the typical market calculation. In contrast to a market-based metric, I examine the debate around the use of central calculation to direct resources since this kind of system can more easily set limits and regulations as well as provide economic equity and efficiency.

Writing this report has taken longer than I intended but has revealed a deeper dimension of political economy than I understood previously. I am grateful for the opportunity to acquire this understanding. Hopefully it will be able to better guide my future work, political engagements, and analysis in a more considered direction rather than merely movement orthodoxy. Hopefully this will not get me into too much trouble.

I would like to thank my always positive, ever-encouraging supervisor Justin Podur for proofreading my long tracts as well as the reading and discussing the different theorists whose ideas I am considering. I would like to thank Greg Albo for directing me to the different theorists I ought to study for this paper and for providing critical organizational direction for my proposal. I would like to thank Jonathan Nitzan for changing the way that I think about economy and introducing me to the concept of leverage through Veblenian sabotage. I would like to thank Eric Miller for giving me space to start to develop these ideas in his course, even as it was far from the intended subject matter. I would like to thank the many podcasters, unbeknownst to them, who helped me learn and understand better the issues in Marxist theory I have been contemplating in this text such as those from Zero Books, the Emancipation Network and Jacobin Magazine.

I would like to thank my amazing and patient fiancé, Jess, who has been so incredibly supportive throughout this endeavor; though my frequent bouts of self-doubt. I would also like to thank her for her keen eye in contributing to my proofreading and editing process. I would like to thank my mother, Leslee and my brothers, Corey and Joel, for their heartfelt support. I also would like to recognize the encouragement of my late father, who may not have appreciated the direction of my studies but supported me none-the-less.

Sincerely,

Adam Balsam

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Section I: Introduction, Context, Framework and Methodology

Preamble

In examining the historical Socialist Calculation Debate, some critiques of the command economies in the late 20th century, as well as some New Socialist economic models, with regards to their feasibility for practice as well as their relation to a theorized historical trajectory, in congruence with a historical materialist framework, this paper asserts that this trajectory can be broadly sketched in terms of the implicit dynamics of capital accumulation, the size of the state sector, and relative class power. In this paper, I examine these arguments, as well as historical and theoretical systems, subjecting them to an immanent critique, identifying their flaws, structural implications, as well as their core constructive potentialities. In many, but not all of the arguments presented, I posit that there is a critical core that advances an economic developmental dialectic towards a post-capitalist socialist economy.

In this examination, I take a very critical view towards what I see as a culturalist, essentialist, and idealist turn in left-wing and socialist thought that I find is a poorly considered deviation from a more historical emphasis on a dialectical, conflictual, interest-based approach to the understanding of power, identity, and economic structure. The previous centers a rough ideological egalitarianism as an antidote to a hegemonic chauvinistic, Eurocentric, imperialist idealism. Marx did critique this sense of absolutist equality, as impossible, in his Critique of the Gotha Program (Marx, 2008a). The emphasis on justice from one particular point-of-view assumes that there is some impartial adjudicator to appeal to, rather than interested parties on all sides. Contrary to this more liberal positionality that assumes a neutral arbiter, I argue that the adjudication comes from the relative balance of power, not some impartial judge. This egalitarian impulse is emotionally understandable, even if it is unhelpful in the longer term, since

it just counters one form of idealism with another counter hegemonic version, ignoring the necessity of an economically grounded synthesis, which is required to confront a significant material force. The problem of counter hegemonic idealism is that this does not address why certain arrangements exist and how to think more effectively about overcoming them. There is a sense that it is just merely the imposition of a biased aesthetic that people have been deceived into against their best interests, rather than the indirect implications of concrete economic, political and military domination. That is, it is a result of the confrontation with power and the accommodation to it, not subtle deception.

The anticipated, desirable, more egalitarian trajectory is a result of the economic harmonization of interests engendered centrally through a processes of integration and proletarianization, related to capitalist laws of motion, not the conscious imposition of a more egalitarian system of values. The egalitarian values gain cachet when they represent a larger swath of social interests subjected to these material changes, not merely on the basis of a change in cultural aesthetic.

I find that different historical socialist manifestations are more related to the potentialities made available by economic developmental factors, class composition, and class struggle, that in retrospect appear similar to the tradition of Robert Brenner (1977) and Ellen Meiksins Wood (2002); a tradition to which Chibber (2003) belongs. Considering them, I might be accused of mixing both political and economic determinism. However, I argue conditions in the long run are determined by economic factors, but in the short run there is some political flexibility, rendered more effective through organizing, which can shift the balance of power to some degree, within certain relatively narrow limits. There are always moves available on the game board, but economic factors, over time, change the layout of the board itself as well as the balance of forces.

Agency is obviously real but constrained by the political potentialities of material reality. Many innovations are possible, but only some will be advantageous to their particular circumstances. Many kinds of coalitions are possible, but they are not equal in their broader popular relevance or their potential for impact.

Throughout, I am very critical of national consciousness as necessarily sectional. However, I must note that this is also an immanent analysis. I recognize that national consciousness is organizationally superior to a feudal or tribal form, whose organization and expansion of solidarity is much narrower, but more limited with respect to a broader regionally or globally based, integrated, cosmopolitan positionality. I do not go into detail elaborating this argument in this paper.

I find that many of the more recent proposed socialist models are reflections of dialectical economic developments that were emergent in the times in which they were written. Despite this influence, these critiques can also point to necessary structural preconditions for building a more effective and precise economic form, increasingly weighted towards administrative direction. Rather than viewing these models as purely oppositional alternatives, I posit that some of these might speak to problems that are more likely to be dealt with in a sequence of dialectical progression. This sequence ranges from state economic growth, pushed through class struggle, generating a larger state in a capitalist social democracy. This reflects the market socialist critique as presented by Schweickart, Roemer and Lawler. After this, a more precise qualitative system of rationalization of that state through the expansion of more a finely targeted system of democratic accountability is necessary. This represents a decentralizing force of making the state more sensitive to various local interests with a more nuanced form of civil service bureaucracy advocated by those in the Mandelite tradition, including Devine as well as Albert and Hanhel.

Finally, a more quantitative form of administrative calculation becomes necessary through greater expansion of the state sector necessitating a more effective system of calculation than is possible through pure market measures. This reflects the forms advocated by Cockshott and Cottrell as well as Laibman, to some degree.

Introduction

Both critics of socialist models and 20th century socialist command economies present some significant obstacles to the prospects of a more centralized calculation and planning regime. Despite this, the feasibility of a more robust planning regime is likely to increase with greater computational capacity and through the increase in firm managerial capacity. This paper asserts that critics and some advocates misrepresent the obstacles confronting socialist states by assuming that various limited unidimensional criteria are the sole basis for decision making and economic organization in these states. Despite their flaws, some of these critiques reveal details about plausible elements of unfolding rationalization mechanisms that begins with less computational capacity, relying on more crude political direction to those that would rely on a more detailed form, which could progressively shrink the domain of the market, just as the market has shrunk the domain of the household. Many of these models might be presented as competitors, but they might be better understood as highlighting different aspects that could be emphasized at different stages in a developmental progression towards greater economic centralization and greater class power in a progressively more socialist economic regime. Like Marx's immanent critique of capitalism, the growing inefficiency of less centralized forms should progress to more efficient detailed modes of calculation, as is required by the scope of economic responsibility of the central economic social manager, currently the state. The structural limitations of the particular models do not necessarily invalidate them as potentially

useful for a period of time, they just reveal the need for more nuanced forms of *ex ante* calculation that suit its economic breadth of responsibility as a larger share of the economy come under its charge.

If humanity wishes to maintain a global economy with an increasing living standard on a livable planet, we will soon have to develop a greater scale of regulation on a global scale. Just as in the factory, where production is social, but appropriation is private, the international system of production and distribution is global, but appropriation is again private. When we can integrate the rule of production relations with the rule of governing interests, we can create an economic order that can maximize social utility and minimize disutility. For this reason, it is in the interest of humanity to develop systems of economic allocation for a larger-scale internalized order.

Context of this Investigation

Upon entering into this investigation, I wanted to work towards the creation of an alternative schema to evaluate the relative efficiency of production methodologies using a combination of net effort, net resource use and net environmental consequences for the purposes of planning under a collectivist economic model. I wished to apply this pricing mechanism to planned economic models like Michael Albert and Robin Hahnel's Parecon model (Albert & Hahnel, 1991). The Parecon model is, in many ways, a desirable method of communistic distribution and determination, but it lacks a method of evaluation for the relative prices of production factors (Laibman, 2014). At least this is what I thought at the time. The model assumes that relative opportunity costs will be quantifiable somehow without a market or a totalizing system of central calculation (Steele, 1992). My goal was to remedy this somehow.

The major driving force for this pursuit was the desire for a method of determination to evaluate methods of production for their appropriateness of use in a collectivist approach to economy rather than a competitive approach. I imagined that an evaluative technique could be engineered to be able to determine if production methods deemed efficient under a capitalist system of evaluation were in fact efficient in terms of global social utility, when all limiting factors were integrated. Were modern production methods ‘actually more resource efficient’ or are they utilized more on the basis of ‘relative exploitability’ of labour and the externalizing of environmental factors? This question was relevant to the relative value of the pursuit of industrialization and to the value of the increase in potentially less negatively impactful methods of production and increases in environmental regulation that are advocated by some indigenous-led environmental movements. Even if absolute production output volumes were lessened, decreases in relative costs of externalities could potentially compensate for this, I thought. This might be a useful economic argument that could be deployed in defense of traditional indigenous land uses which emphasized production for use rather than exchange, in-line with a traditional communistic goal, if this metric could be shown to indicate in their favour.

In this, I was making a Proudhonist error, like many socialists before. I was tending towards an attempt to mix romantic reaction with a scientific approach to socialism and discovered they cannot seriously mix despite common rhetoric of the contemporary new post-1968 left. This reaction has nothing to do with the particularities of any historic economic approach, but the sense that it is necessarily more economising than other contemporarily successful approaches is essentialist. It ignores the role of feedback systems and scale in the formation of more efficient approaches to fulfilling human need, even as any system has its lacunae. I was imagining price in a very classical sense as an addition of priced physical factors

(that were, in turn, constructed on this same basis), including labour and services that would agglomerate into some total cost. In a way, this approach mirrored Hornborg's and Martinez-Alier's neo-physiocratic approach to economic calculation (Hornborg, 2006, Martinez-Alier, 2007). I thought, similar to Kapp (1978), all that was necessary was to adjust the constituent formula to generate appropriate shadow prices, adding what was unaccounted for in externalities and correcting labour price information on a more egalitarian principal, with requisite safety conditions incorporated. However, priced externalities are a product of governmental legislation ostensibly aimed at protecting a commons. Although methods of market simulation of the institution of shadow pricing are often used, the only reason they are obeyed is the relative power of the stronger actor in the relationship, the government. Power here is more relevant in the determination of price, as a rent, than a sense of relative contribution (Nitzan & Bichler, 2011). Even in the context of an assessment of a particular shadow price, the normative expectations around all other elements of economic costs are rendered unproblematic, for the purpose of this analysis, without a full integration of the shadow pricing in general outside of the particular case under examination, making this approach *ad hoc* rather than systemic and integrated.

Further, I came to understand that any integration of physical values into common units is achieved at a factor that is effectively arbitrary and further that this is not the method of price determination. Even if cases and contexts can be found to justify these factors of integration, any change to the relative scarcity of resources or technologies for use globally would alter relative demand, creating greater or lesser impetus for optimization of distribution in terms of some metric or other in the face of limited distribution. This is why single physical units of value are popular i.e. labour, energy, carbon, etc. The limitation of this approach is that a single limiting factor cannot possibly encompass the relevant economic limitations that could constructively

guide production in any economy, which might be why these are never functionally deployed. This, however, does not discount their utility in terms of valuable regulatory functions of particularly significant limiting factors i.e. CO₂. These, however, will always be secondary.

The market is able to integrate various unique use values since market price is more determined on the basis of the rent acquired through the ability to exclude others from access to various domains, rather than on the basis of equitable compensation (Manno, 1999). The potential exclusion from these domains via sabotage is charged with significant social leverage due to the result of the process having some sense of social desirability. The rent is proportional to relative bargaining power not relative contribution, however defined, even if these might not always be completely without correlation (Nitzan & Bichler, 2011). Subsistence minimums have influence on price at the lower end, especially in the context of a landless working class, but beyond this, they have little impact in terms of price determination (Hornborg, 2017). This led me to abandon the construction schema for an alternative system of integrated shadow pricing.

The main theoretically viable alternative to economic regulation centered in competition-based bargaining power is a central calculation for egalitarian aims, assuming some sense of administered quantitative equality, whose definition would have to be consistently enforced though some parameters. The calculation would require the input of all limiting resources for production, all potential means of production, all regulatory limitations and match these to production goals.¹ Although plan goals in the past have been characterized as authoritarian, a plan could, in principal, be based on popularly surveyed needs and desires (somehow prioritized

¹ This equilibrium solution has been critiqued by Kornai (1971) for its lack of dynamism, when compared to relatively quick price recalibration in the market. I don't think an equilibrium model is unworkable, however, especially in the face of the future potential automation of economic metrics, use of super-computers for processing, internet for quick distribution of information, and with the possibility to adjust plan goals in the face of a large deviation of demand or supply (Davidson, 2010).

in rank order) then altered and ratified by an inclusive democratic process, constrained by egalitarian principals and regulatory goals. Electing a total economic plan, based on surveyed consumption desires, production limitations and social aims, given various options for popular proposals might be a more interesting application of electoral democracy than our current representational pursuits. This economic plan would theoretically not need prices, since the ability to meet a maximal proportion of a total plan could be computed (Kantorovich, 1965). This could therefore dispense with the need to evaluate the relative value of each constituent element. It therefore could deal with production in natural units (Cockshott, 2008).

This conclusion led me to a need to evaluate the history of the ‘Socialist Calculation Debate’ in terms of its possibility for effective implementation as well as potential advantages and disadvantages of its application. Only a central calculation that inputs all factors and can run simulations of potential outcomes with different combinations of production methods can more accurately determine the most efficient distribution of resources. It can do this based on its ability to fulfill a maximal proportion of a particular plan, constrained by chosen limits and the wasted effort and resources in overproduction of perishable and non-durable goods. However, the advantages of a particular production method will depend on the relative supply and demand for particular resources in the economy as a whole, so no methodology can ever be determined as superior universally in any context based on a particular metric. Also, what is the least costly solution will always be skewed towards advantages of the environment as it already is. This environment consists of the dynamics of built space, ecological services, hegemonic social relations and acquired skill sets of the population. Evaluation of objective circumstances that transcend particular contexts is impossible, even if certain useful generalizations could be made.²

² There is a tendency of those who advocate central planning to fetishize the advantages of economies of scale, potentially ignoring associated diseconomies (Kornai, 1992). Therefore, this, in theory, could be modeled for

Although these massive models would be daunting to process, due to the regular increases in computing power, running larger models could become more and more feasible. Soon after these initial theoretical models were presented in the early 20th century, they were critiqued by Hayek and Mises as well as Weber (Hayek *et al.*, 1935, Uebel, 2018). This was followed by various defenses by theorists such as Lange (1938) and Dobb (2012) and further subsequent critiques of models and the revolutionary socialist experiments by Ellman (2014), Kornai (1992), and Nove (2003) starting in the 1970s.

Due to observed theoretical difficulties with historical models and negative experience in socialist experiments in the late 1980s, a number of theorists presented new theoretical models that attempted to address perceived weaknesses. These models were again subject to further critiques by socialists and non-socialists alike.

Since the early 20th century, when this debate was most prominent, computational power was vastly inferior to our present context. This debate mostly occurred before the existence of computers. Now supercomputers exist with vast computational power that could be appropriately deployed for this function. However, the vast computational problem would still require vast resources, but the problem may become theoretically less daunting.

Another modern advantage that can facilitate central calculation is the development of the technology of sensors. This could serve to automatically record and quantify certain activities, facilitating the centralizing of this information for analysis and potentially nimble adjustment to production goals based on previously unforeseen circumstances (Joseph, 2017). This would drastically reduce the quantity of labour required in data collection and could be based on automated inventory management systems that are currently in use (Davidson, 2010). Although

optimum scales based on experimentation with experimental diversity in scales of application and a more thorough collection of inputs and outputs to analyse of trends and develop formulas.

quantitative research would be very central to this process, qualitative research would also play a significant role in plan feedback.

In the context of these possibilities I wish to assess the feasibility of the various proposals. In light of this critique, I wish to highlight certain elements that could be integrated to increase the potential for the development of an effective and valuable system of central economic calculation in the future.

The Possibilities of Socialist Models

Francis Fukuyama has declared Liberal Capitalism as the end point of historical economic developments and Margaret Thatcher has asserted, “There Is No Alternative” (TINA) to the neo-liberal order. After the collapse of the Soviet Union in the late 1980s, the critique Mises presented over sixty years previously was declared as obviously correct all along (O’Neill, 1996).

Liberal economists imagine that the capitalist social order was merely a model implemented based on the ideal organization of production relations given the fulfillment of natural human rights. This form of organization had to be determined through trial and error, but as soon as this ideal could be discovered, it would continue to be the ideal form for the remainder of time.

Marxists see this a different way. As opposed to reaching some ideal balanced state of public and private order, Marxists posit that different scales of production and organization produce drastically different relations between people. These relations are largely determined by the power dynamics implicit in production, that is, who gets to appropriate the surplus and direct it.

Historical materialist theory suggests that the mode of economic reproduction of society determines its dominant economic and social relations (Engels, 1999). Economic concentration

under capitalism changes the economic relations so that more and more of the majority will be employed workers wholly dependent on the wage fund rather than the owners of the means of economic production. This occurs due to the gradual displacement of petty-bourgeois artisans and small property owners by those firms that own more capital and employ more workers due to superior methods and access to a greater quantum of capital. Moreover, unlike small-shop artisans, these larger firms, benefitting from the advantages of economies of scale, will be organized into cooperative production as opposed to manufacturing whole commodities in relative isolation. This is the change from artisanal to factory production. Due to both this social position and the experience of working together on collective production, these workers, the proletariat, will be able to, and have the desire to, produce for the collective subsistence and not merely for exchange. Due to the alienation of labour from the end product, the nature of commodity production is necessarily social. The owner of the firm might formally own the product, given the legal form, but the social nature of productive organization allows the worker to see the product of this process as being owned by the organized totality of the producers required to manufacture it. Generalizing from this approach, the social nature of this production can be generalized to larger units of social organization, which can then produce for common provision rather than narrow personal or sectional ends. If the workers are organized politically to act as a block, then they can dominate the political position of the owners, who are fewer and fewer in number. Unlike, a decentralized peasantry, who are atomized and cannot coordinate effectively, collective workers can exert significant leverage over the production process. The objects of production are produced with less net effort and at a scale that can accommodate a larger group of consumers than the same effort of isolated artisans. As this concentration occurs, the vast majority can either choose to be dominated economically and therefore politically by a

small capitalist elite, or they can institute rule in the broader democratic interests of the majority. Due to the issue of self-interested capitalist appropriation at different nodes of production, like that of the artisans, a broader system of coordination can increase efficiency over the whole system. Therefore, removing ownership's ability to govern production in a smaller private interest allows the process to be geared to a broader interest. This process begins with factory production and can be expanded to even broader socialist forms. In the latter contexts, innovative methods can be shared to their social optima instead of hoarding knowledge for the purpose of rent seeking.

One can see this transition from a largely artisan dominated economy, to a factory dominated economy, to our present system of corporate monopoly capitalism, as was described by Baran and Sweezy (1966).

Even if we were to concede to TINA to Thatcher in the present economic phase in no way would we need to commit to this into the future since economic relations will continue to change. With these changes will likely come new political and economic relations.

For example, Baran and Sweezy (1966) describes the figure of the more manipulative self-aggrandizing tycoon as establishing early monopoly capital transitioning to a more conservative figure of the CEO managing the more contemporary corporation. They describe the tycoon as having more of the characteristics of an owner, even if he is responsible to investors, while the CEO is more like a manager who is more accountable to the board. The latter is true in their more risk averse character, even as they have significant strategic leverage over the less organized shareholders, a situation that accounts for their gigantic salaries (Baran & Sweezy, 1966). Even if the image of this figure might be of great individual ambition, they are still more accountable to a larger group than the previous system of organization. The system dominated by

many owners of small individual enterprises has transitioned to a system dominated by many owners of very few gigantic enterprises. Although this rule remains oligopolistic and sectional at present, the possibility of democratic rule of these organizations is not a large structural leap from the present order. Also, given their extensive systems of internal coordination, in absence of market signals, broader systems of integrated production become possible. The greater capacity to produce had generated significant environmental externalities that have been a difficult hurdle for effective regulations. Many of these negative effects cannot be localized within the domain of one company or even one country, necessitating an even greater global system of regulation which has yet to be effectively achieved. Fortunately, the effort required to effectively regulate few gigantic firms is less than to regulate many small firms. This is only deterred by the fact that these gigantic firms amass significant political power so that it can largely dominate and dictate to regulators. If they could have a broader system of accountability, that is usually endowed by ownership right, these firms could be subordinated to the interests of a larger public. This is usually seen as a process of nationalization; on a global scale, this might be deemed a process of supra-nationalization.

Contemporary neo-liberals view the attempt at socialism as a failed experiment and therefore as doomed for all time. This was not the view of much of the economic establishment during the time of the Soviet Union. Many liberals might have found problems with their mode of organization and found it less than optimal, but few found that it was somehow doomed or impossible. Unlike many Leninists, I will concede that there are limits to the economic systems of coordination of really existing socialist regimes. Unlike the liberals, I take the Orthodox Marxist view that these regimes were not socialist in a Marxist sense, even if they were politically pro-Marxist and sincere in that belief. Unlike Trotskyists, I do not think this occurred

because of a postlapsarian betrayal of the revolution. Relying on such explanations is to rely on the great-man theory of history, for both good and ill, which does not conceive of history as a conflict between groups with different interests. They rather seem completely reliant on the eccentricities of great leaders.

Marx stipulated that socialism is a post-capitalist economic system and that the contradictions and developmental potential of capitalism must be exhausted before an effective transition to socialism can occur. The revolutions that occurred in Russia, China and others like it, like that previously in France, signified a transition from a more feudal political order to a more capitalist dominated political order. This process is not necessarily smooth and regular. It does necessarily involve significant growth of the state as planner, when compared to the more chaotic and *ad-hoc* feudal order. The Stalinist project might be compared to the Bonapartist regime where there was populist support for the project, but neither the peasants nor the capitalist could effectively subsume the state to the independent interest of either one. In the absence of effective pressure from dominant classes, it became largely directed by a juridical / managerial order in key mediator positions that sought to remake society in what it largely understood as the broader social interest as a vanguard. I think these regimes did make honest attempts to create a socialist society. However, without effective pressure from those interests it wished to represent based on class-composition, organization and power, it could not receive significant direction from these interests to rule effectively on their behalf.

As productive forces developed, like under a formal bourgeois capitalist order, plant managers developed the strategic leverage to the extent that they demanded more autonomy and influence. At which point, they came to influence the vanguard, who previously might have been more ideologically driven. The ability of an ideologically driven vanguard of state planners is

due to insufficient leverage exerted by any class in this critical juncture, mimicking the situation during the French Revolution. This broadening of vanguard to oligopolistic rule is an increase in political enfranchisement, despite what seems to be a cheapening of universalist aims. This stage of greater enfranchisement would lead towards a more broadly accountable governance structure based on the ability of different groupings to exert social leverage rooted in their strategic power rather than abstract political rights.

Although Devine (1988), following from Wlodimierz Brus (1980), defined democracy as a productive resource (Devine, 1988), I define power as rule in a more effective popular interest rather than one that is dominated more sectionally. This is more in line with how Veblen (1948) defines this power- as the leverage gained by the ability to sabotage elements of the social product.

As opposed to mere formal enfranchisement that is necessary for democratic rule, I suggest that the economic conditions that normalize social leverage broadly are necessary for this form of rule that dictates in the broadest interest. It is this condition that this attempt of model evaluation is made for, not the previous experiments which, although largely effective at vastly accelerating the rate of development by dictating a high rate of savings and investment in capital at a national level, could not rise to the level of development where paternalism is ousted by the will of the proletarian class based on their ability to better manage social resources as a group.

I emphasize that power is achieved through the obtaining of greater differential social leverage in a Veblenian sense. This form of power is critical to understanding economic structures and the feasibility of new economic models. I reject the presumption that the bourgeois state is structurally a corrupted institution that cannot be adapted to proletarian

interests. In this sense, it is different than the monarchic structure, which is structured around a model of domestic familial governance that cannot be easily adapted to popular rule. Yes, in the case of the commonwealth countries, the evolutionary reduction in monarchical power can be contrasted to the French revolutionary model that represents a ruptural break, but the rise in the power of civilian government has necessarily meant the reduction in monarchic power to more of a ceremonial cultural formality. The structures of the modern state can be skewed towards more egalitarian popular rule, even if bourgeois actors exert a disproportionate influence on it.

Due to the changing balance of power that is accomplished through the changes in economic conditions which favour greater centralization, the proletariat will over time gain social leverage superior to the bourgeois class. At this point, whether through electoralism or revolution this ascendant class will be able to take power. I suppose when examining both the English and French roads to bourgeois rule, the means to seizing class power seems more or less irrelevant to the convergence of their outcomes overall. However, either way the obtaining of a mere popular mandate should generally be dismissed where what is relevant is popular leverage. Adherents to old structures will futilely attempt to cling to power while being out competed by new more efficient structures. These structures do not disappear because they do not adapt immediately, but lack that expansive potential of the new modes, similar to how evolution functions not by violent competitive elimination, but as differential rates of reproduction that replaces these with intentional displacement. G.A. Cohen articulates this well:

“The explanatory power of the class struggle is similarly restricted. Capitalism develops when and because the bourgeoisie prevails against pre-bourgeois ruling classes, and socialism begins to be built when and because the proletariat defeats the bourgeoisie. But why does the successful class succeed? Marx finds the answer in the character of the productive forces. 'The conditions under which definite productive forces can be applied are the conditions of the rule of a definite class of society.' The class which rules through a period, or emerges triumphant after epochal conflict, is the class best suited, most able and disposed, to preside over the development of the productive forces at the given time. Hence Marx frequently allows that a dominant class promotes not only its own interests but, in so doing, those of humanity at large—until its rule becomes outmoded, and it becomes reactionary—

and he gives no explanation of class supremacy which is not founded on the productive needs of the relevant age (Cohen, 2000).”

The Problem with Models

Since the time of the utopian socialists in the mid-19th century, people have been attempting to design models for a more collectivist social order. Marx mostly objected to these early models, suggesting that he did not wish to write “recipes for the cook shops of the future” (Marx, 2004, Ellman, 2014, Devine, 1988).

One of the problems with modelling the ideal form of collective economy, is the same problem of idealizing any manifest social form. Many forms are appropriate to particular stages of development in given economic conditions. For instance, a libertarian ideal might be appropriate to an early post-feudal society where there is a dearth of significant economic institutions that serve the general public and production is mostly domestically-centered but inappropriate to a more developed industrial society that has a significant amount of accumulated public infrastructure and much production is directed to private sectional interests but not within a domestic production sphere.

Many models of what is termed the socialist economies may be feasible and useful to a degree, given that the growth of the public sphere is gradual and given the readiness of the central economic institution to take over a particular economic role. Some may fit in similarly with what is termed a lower stage communism and others with a higher stage.

However, this is not to suggest that models are useless and that these will be not be borrowed from when the time comes for attempting to coordinate larger organizational systems. It is just to say that evaluation of the feasibility of implementation of an economic structure at any point in time depends on what is relatively easily achieved given the present accumulation of particular functioning economic structures that could be expected to perform adequately the new

roles that are imposed. Beyond this, the economic structures largely influence the political structure in terms of class interests. So, if we are to rely on political democracy, the class character of the vast majority must be proletarian if we expect them to support a proletarian result. If we are dominated by sectional interests, even nationalist ones, then a proletarian socialism will be difficult to introduce or maintain.

The other economic spheres are the domestic, private and the public/private corporate form. Different historical systems emphasized different economic spheres and their existence, expansion and efficiency were mainly linked to the dominant economic sphere. The idea that an economic institution of socialism is never appropriate or advantageous is like saying the institution of feudalism and primitive communism never made any sense or were inefficient. These historical systems were common, not based on direct lineage, association or conspiracy, but on the viability of the model, given particular economic conditions in terms of the social relations significant to the dominant form of economic organization. The expansion of one economic organizational form does imply the decline in the significance of other forms.

Depending on the level of development, the feasibility of the reliance on economic institutions that operate on a larger scale and have broader popular accountability is subject to the technological and socio-organizational feasibility of the project. The idea that socialist experiments have failed may speak to the economic and organizational context of these experiments and not necessarily to the feasibility of the model overall. Certainly, some organizational models will be impractical in any circumstance. However, the economic dominance of large scale planned coordination over smaller scale operations has proven itself under the capitalist system. There have been proven advantages of this scale, despite the increased alienation that accompanies it.

The idea that there is some perfect balance of economic forms on a particular scale is an idealist error in the Marxist sense, since it violates the historical record of a perpetual changing balance of forms in relation to economic development. The communist ideal of the absolute dominance of a public economic organizational form over other smaller scale forms, I would legitimize as merely a scientific extrapolation of the broader trend of the balance of forms over the course of development. There is no saying to what extent this trend can progress, but if efficiency increases broadly with scale, then this trend is likely to continue.

The capitalist relation, as encapsulated by wage labour, has never encompassed the totality of relations under any social system. Ideologues might argue that the relations that govern wage employment should infiltrate all household relations including relations between parent and child, but these ideas may come off as odd to conventional wisdom and seem utopian. Certainly, I argue that the availability of market products and services has shrunk the domain of the household economically, however, its absolute overtaking of the household economy seems unlikely. Although socialist calculation might aspire to overtake the totality of social relations this also might be seen as utopian. What is more socially evident is that universal programs and services that do not rely on the appropriation of private surplus are increasing in prevalence, are cost efficient (often more so than smaller private service providers) and fully viable under any modern social system. More, without these services the modern social system could not function. What is more realistic than these imaginary absolutist models is the envisioning of the progressive growing of some economic domains that are governed by a particular social logic at the expense of other domains, which retract in significance to economic life.

In responding to both critics and "defenders" of Marx's materialist method who misunderstood it, Engels wrote in an 1890 letter to a friend:

“According to the materialist conception of history, the *ultimately* determining element in history is the production and reproduction of real life. Other than this neither Marx nor I have ever asserted. Hence if somebody twists this into saying that the economic element is the *only* determining one, he transforms that proposition into a meaningless, abstract, senseless phrase. The economic situation is the basis, but the various elements of the superstructure--political forms of the class struggle and its results, to wit: constitutions established by the victorious class after a successful battle, etc., juridical forms, and even the reflexes of all these actual struggles in the brains of the participants, political, juristic, philosophical theories, religious views and their further development into systems of dogmas--also exercise their influence upon the course of the historical struggles and in many cases preponderate in determining their *form* (Engels, 1890).”

This same point was stated the other way around by Marx earlier, in his *The Eighteenth Brumaire of Louis Bonaparte*:

“Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past. The tradition of all dead generations weighs like a nightmare on the brains of the living (Marx, 2008b).”

System of Classification

Various economic models are presented in the history of the calculation debate. They could be broadly classified as:

- 1) Authoritarian command planning where market competition has no involvement in determining allocative decisions (i.e. the Soviet model or the Cockshott and Cottrell model)
- 2) A more decentralized participatory economy with markets (like Devine, Albert and Hahnel or the Yugoslav model)
- 3) Market socialism that consists of a strong government with significant social programs, but with a role for market that, although regulated, is not state directed (such as contemporary Sweden, Norway or contemporary China as advocated by Schweickart and Lawler).

The problem with evaluating these as a simple menu of options that one could choose based on a preference for their advantages against their disadvantage is that, insofar as they are similar to functional systems that have existed at some point, in most cases they arise historically under different economic conditions and therefore serve different roles in historical economic development. Insofar as they have ever been viable for a period, they represent a balance of forces manifest in the social interests that have leverage over social production and distribution in a given system. For instance, the authoritarian command systems were historically implemented in relatively recent post-feudal countries that are newly modernizing and attempting to undergo rapid development, while the market socialist systems are generally developed modern capitalist economies that are able to socialize some of the surplus extracted from the predominant market economy to benefit the public or post-command economies that are in transition towards increasing market dominance.

These really cannot be effectively implemented in the same economic context or if one tried, it would produce drastically different results. For instance, as Ha Joon Chang (2007) discusses in his book, *Bad Samaritans*, the Free-Trade capitalist regime is very different for a highly developed capitalist economy, that has previously benefited from protectionist development in strategic industries, than it is for newly developing economies who benefit from no such historical privilege. The systems that one might attempt to implement the same policies, might be in such different circumstances, that they produce drastically differing effects (Chang, 2007). This makes dehistoricized evaluations of models more or less irrelevant. Another problem is that of definition. Various theorists will classify historical models under different categories. For instance, the Yugoslav model has been used as an example of nearly all the categories listed above due to an emphasis on one element or another.

In his introduction to the Penguin edition of Marx's *Capital*, Ernest Mandel writes:

"When the dialectical method is applied to the study of economic problems, economic phenomena are not viewed separately from each other, by bits and pieces, but in their inner connection as an integrated totality, structured around, and by, a basic predominant mode of production (Mandel, 1981)."

Methodology of Evaluation

In attempting to assess various models that have been proposed for a feasible alternative, one needs some sort of methodology of evaluation.

1) The simple temptation is to assess moral character of the system, its sense of justice, equality, egalitarianism and conformity to some sense of natural rights (Berliner 1998), but these are merely an idealist error. That is, they imagine a static form of society based on fully designed operations, which overall, is not enabled and reinforced by relative social power of groups based on their degree of their opposing or aligning interests. Dialectical historical processes are always in a state of antagonism that drives towards a new synthesis. Some full equilibration of historical social forces that does away with all possible social antagonisms is not possible and is the height of utopian thinking. Based on newly developing social and economic realities, some inequalities are inevitable, even as historic ones are mitigated. It could be that these become relatively slight, but they likely will remain a source of antagonism.

2) Certainly, with relative power in mind, I will describe what the state of class power, organization, class composition and communications technology must be for this type of model to be enacted. This analysis would feed into the feasibility of the model itself in a given context, beyond its social constituent requirements. What degree of accountability will certain groups have to hold leadership accountable and how has this fared in similar modern circumstances?

3) Feasibility is a primary concern, as it is a principal subject of the historical debate. Feasibility might be thought of in a few areas. There are productivity requirements that restrain productive capability, there are communication requirements that restrain organizational capacity, there are data processing requirements that restrain organizational centralization, there are social feasibility requirements that expect agents to seriously conform to behaviors that may or may not be in their social interests, there are environmental feasibility limitations, both in terms of absolute scarcity and in terms of the negative externalities produced through the consequences of production.

4) However, it should not be confined to feasibility merely using the contemporary state-of-the-art technology. The internet would be a utopian technology to many, say, in the 1950s and therefore a social organization that relied on this basis would be imagined as completely unfeasible. However, technological change, especially in the realm of communications, does present possibilities that are more realistic in relatively short timespans. Therefore, this sense of technological feasibility should not be restricted to merely a contemporary form but should not venture too far into what could be deemed as science-fictional innovations.

5) Beyond the fulfillment of needs, which all economic systems do to some degree, what does this system produce and drive towards. Certainly, many critics of socialism, like Kornai (1992), have suggested that the production and availability of surplus under capitalism generates sufficient opportunity for innovations to be developed on the basis of this surplus. He suggests that capitalism produces a surplus economy and socialism produces a shortage economy.

Section II: Primary Proposals in the late 19th to early 20th Century: The Historical Socialist Calculation Debate

Utopian Socialism, Proudhon and Marx

Although many socialists, notably Proudhon wished to develop a schema to abolish money without elimination of commodity production, Marx argued that this was not possible. He argued that so long as commodity production exists, it will require a system of pricing. What Proudhon had intended was a system of prices based not on the average labour time of produced items but on the concrete time spent by any particular individual (Weiss, 2009). Something Proudhon did not consider was that this would cause items produced by those with less expertise to never be purchased, since they would cost more labour time than objects made by those with greater expertise, who can work more efficiently. His macro solution undermines its micro foundations.

Marx argues that modifying the way that product equivalency is evaluated in exchange will not be fundamentally alterable without changing the relations of production. That is eliminating what appears as 'unequal exchange' cannot be overcome without transcending (exchange) value production. Weiss (2009) argues that, despite this critique, much of the contemporary left attempts to remedy inequality by altering exchange relations but seem to neglect the production relations that produce the exchange values. This mindset therefore leads to an approach that imagines that politics, not the economy is in command. This culminates in pursuits for the seizure of political power, of consciousness and/or organizational form with little understanding of how production relations affect relative power and distribution. What is required is a more thorough understanding of the possibilities for social transformation that are made available through the changes in the economic forms and their relations rather than seeing

political power as a panacea. What was true of the historical Leninist states was that even though they were able to assume political dominance of the state, they were not able to abolish the commodity form (Weiss, 2009).

In critiquing the detailed models presented in the early trend of utopian socialism of the 19th century, Marx and other aligned thinkers decided to emphasize not the particularities of a liberatory model of society, but how to engineer the social and economic conditions that would empower people to bring such a society about. These conditions might be broadly thought of as a stark increase in the unification of interests in society. The mechanism for the unification of interests is the dominance, both numerically and politically of a working class. This involves the concentration of capital in fewer hands and the generalization of the social positionality of wage workers in collective productive behavior. This would occur because of the ability for the cause of class struggle to harmonize the interests of this class (Marx, 2005).

To refute this suggestion that the discussion of models is unproductive, I contend that given the possibility of an eventual working-class ascendancy, the exploration of what amounts to policy options for social organization could be a useful tool in transitioning to a more effective form of organization. It may be countered, by Marxists such as Phillips and Rozworski (2019) who contend that capitalism produces the structural institutions for the greater organization of expanded production under socialism. The advantages of these models are that they are significantly field-tested, and their faults and contradictions are more apparent socially in existing society which theoretical or small-scale models lack. I would not disagree with this but would add that understanding both the theoretical possibilities and the pitfalls of these structures alongside some potential alternative forms can be advantageous to an empowered working class and can be heavily influential in directing their organizational form. Also, one of the main issues

motivating the socialist calculation debate, revolves around the question of the possibility of socialism in theory. The theoretical responses were not necessarily intended for the direct purposes of planning but are helpful to discuss the potentiality and viability of enacting such a system.

Since the decline of the Soviet Union, many leftists proposed alternative structures for socialism emphasizing smaller scale governance rather than the giant unified projects of classical socialism. There is a persistent sense that giantism is inefficient, inhumane and does not work (Nove, 2003). This is occurring at the same time as gigantic capitalist conglomerates are in their ascendancy under a system of globalized monopoly capitalism. As opposed to limiting diversity in production, similar end products can be produced even more efficiently by utilizing relatively flexible machinery and adaptability of human labour. Moreover, they can take advantage of virtually identical coordinated supply chains. This contradicts the idea that only economic diversity with smaller tailor-made structures can produce for a diverse market. This mirrors concerns voiced by manufacturers in the early 20th century, that their investments in particular machinery would be outmoded by either market saturation or by a change in trends.

This problem was also effectively transcended by monopoly capital by suppressing innovation (Baran & Sweezy, 1966). Because similar machines can be reprogrammed to produce different outputs, invested capital has gained a new flexibility. The adaptability of large firms allows for not only greater quantity at decreased cost, but also greater relative diversity of output forms than smaller producers are able to accomplish. Large firms are also able to centralize vast swaths of data for anticipatory planning (Phillips & Rozworski, 2019).

These aforementioned socialist theorists seem to be succumbing to elements of the theory that the particularities of localities should not be transcended by a unified organizational program

in proportion to the common interests and desires. Rather, they assert that these decisions must be tailor-made to a particular social context, a presumption contradicted by the truth of the advantages of economies of scale. The Marxist idea of social progress towards common abundance is abandoned in favour of a localized democratic, nominal egalitarianism. In reifying traditional structures as socially preferable, as exemplified in Schumacher's ideal of *Small is Beautiful* (2011), the economic organization is to be intentionally limited. This emphasis on local economic governance, would reinforce a trend towards a narrow parochial economic and social conservatism in contrast to the interests of an expansive broadening totality engendered by modern capitalist and socialist modes which have a progressive lack of concern for these traditional modes as inherently valuable and reified social structures. Part of this trend of collapsing ambition derives from the failure of really-existing socialism to have effective intermediate representative leadership. In the context where the developing economies struggled with more immediate needs that could be prioritized in socially functional terms in existing conditions, these were neglected. Compounding this is the lack of effective class composition and organization that could hold representatives accountable more to an electorate than the collection of people in strategic positions of power and influence which could help them meet both individual and organizational goals.

Introduction to the Socialist Calculation Debate: Barone's and Neurath's models

In the early 20th century, Enrico Barone presented a model of socialist economics completely divorced from formal competitive market logic. He presented a model centered on the construction of linear equations that could administratively engineer shadow prices based on a vision of maximum collective utility in a Pareto efficient fashion based on the totality of a production plan. This was based in the preference for a least-cost-price of production that could be theoretically attained in competitive equilibrium. This system would require a great deal of

centralized data and experimentation if it were to be possible to implement. If socialism was to ever be independent of market conditions, then such a model was theoretically necessary (Hayek *et al.*,1935).

In contrast, Otto Neurath, an Austrian economist thought that the ultimate utility of differing products were incommensurable, and that market derived monetary calculations would never be able to capture the diverse factors implicated in market directed production such as ecological externalities. In this light, he advocated an ‘in-kind’ calculation that relied on a prioritized physically delineated plan based on the total centralization of all economic statistics. He observed the “in-kind” prioritization of particular physical economic targets in his role during the war and theorized that this would be a valuable generalizable social impetus towards socializing the system of production and distribution. Neurath did acknowledge that his thinking was utopian, but thought such creative thinking is necessary to expand the horizons of the possible (Uebel, 2008). Uebel (2008) cites Neurath’s defense of utopian thinking:

“Civil war is raging in Germany. Famine, Disease, and Murder are at work, the Horsemen of the Apocalypse. How could they be resisted? Only by our will and knowledge. This misery has befallen us not at least because we lacked clear aims. Marxists killed playful utopianism, thus saving the unity of the Party and ‘scientific rigour’, but also paralysing the resolve to think up new forms. The doctrine of historical necessity became quietism for many; what Marx said about active engagement in reconstruction was forgotten. As if conscious work on the order of society with a specific goal would be opposed to the realisation that what is willed as well as the willing are necessary for development! In place of creative action one pursued detailed analyses of the more accidental forms of the doctrine of surplus value and other parts of the Marxian edifice of ideas, the real impetus and force of which will only be appreciated in the future. The proletariat and their allies found themselves with much political power in the November Revolution. What was lacking, however, was an idea of the economic future that could have guided the will (Neurath, 1920 as cited in Uebel, 2008).”

Neurath particularly emphasized the role of agency in economic imagination, in opposition to the historical materialist emphasis of his time (Uebel, 2008). Unlike historical materialists, he saw revolutionary volunteerism as necessarily a primary force (Uebel & Cohen, 2005). These plans characterize a maximal administrative command economy.

The political right generally decries this kind of system as a massive reduction of their freedom, since free enterprise is impossible. However, this is just an attempt to pre-empt the massive capital accumulation that is expected in the future of capitalism, where most production is governed by monopoly capital making competition virtually impossible. A maximal command economy would also imply direct allocation of labour rather than using financial incentives to be a more subtle directive. Although, potentially the most efficient outcome, again, given correct information and an effective system of coordination, this is generally seen as threatening to the agency of the worker. For this reason, this kind of labour allocation is not generally used in command economies, though it has been used in many military contexts.

Most characterizations of relative equality seem to miss that equality is only possible in relation to a common structure, otherwise equality is more or less incidental. By having a single economic structural unit, maximal equality is possible, though this is in no way guaranteed since both producers and consumers would lack choices and hierarchies would be relatively rigid. These types of models have been described as barracks socialism, since it implies a military-like discipline, notably by Karl Kautsky the preeminent Marxist theorist of his day (Uebel & Cohen, 2005). In that sense the connection to war economics is more than incidental.

For this type of structure to exist, the state must have virtually absolute power in the society with no other institution being of any economic relevance. This requires either virtually universal consent of the governed, which must acknowledge that this is the best scenario possible, or universal tyranny if they would rather not. This is based either on the structure's absolute competitive dominance or its absolute capacity for coercion. This alludes to the class formation required to reinforce this type of system. Either absolute leverage of the managers of the means of production over society or the absolute leverage of the producers over the means of

production. The contradiction in these dual possibilities is very striking. The scenario that produces a maximum of productive efficiency, due to maximal capital coordination and could therefore produce a maximum of leisure time for the population would also produce a minimum of flexibility of initiative in principal, outside the consent of the central structure. Of course, generally, if an initiative requires loans from a bank in a capitalist system then one must also appeal to a central structure to socially license the economic initiative, but the social reach of the capitalist arrangement is necessarily less constrictive.

Both of these plans, to be effective, however, require the instantaneous centralization of all economic information including all supplies, methods and end targets in the total economy. This is a significantly unrealistic basis to begin an economic system. Uebel (2008) suggests that Neurath acknowledges that this plan was unrealistic at the time but did not wish creative solutions to be constrained by current possibilities. Different than a pure alteration of distribution, like a Proudhonist plan, these methods would alter the scale of coordination involved in economic planning. The actual war economy Neurath was describing was significantly less ambitious. The war economy in the 20th century, only specifies a limited number of target products, conscripting labour towards these narrow goals and legislating against the production and distribution of non-priority products. Generally, as well, there is a corporatist effort of temporary cross class collaboration so as to work out a situation that can accommodate the needs of all classes. Usually this includes representatives of capital, labour and the state. Generally, big capital gets guaranteed contracts and labour gets close to full employment and increased wages (Cox, 2013).

Neurath discussed merely centralizing all currently existing productive methods including small scale production to maximize output coordination. Later, production would be

shifted towards higher productivity methods by planners, after all firms are integrated into a general planning method (Uebel, 2008). In theory, a maximally integrative system could allocate goods towards where they are most needed in the most resource efficient way possible (given they actually have the capacity to accomplish this effectively). However, if the system of regulation and appropriation at the micro-level is not structurally accountable to the larger scale economic unit, the smaller firm will have little incentive to comply. Also, it is much more cost effective to regulate a large firm than many small firms operating at many diverse sites of operation. What this optimistic suggestion implies is that the social relations of production can be severed from the mode of appropriation, which is unlikely to be very effective. Stalin (1952) admitted as much in his “Economic Problems of Socialism in the USSR,” where he found that imposing central control and appropriation on the peasantry was bound to be disastrous. Neurath was aware of this possibility, but warned against the idealization of social patterns, since we do not know to what degree social elements are inseparable (Uebel, 2008). In light of many historical examinations, including Stalin’s reflections referred to here, I assert that, in congruity with the historical materialist thesis, dominant economic forms do have a constraining effect on the range of possible social relations that are produced by them.

The “in-kind” model, in Marxist terms, appears to be a regression to the “natural economy” rather than a progression beyond a market economy. Since valuation of items might be formal, on the basis of physical type, smaller-scale adjustments to the balance of production allocation is difficult to assign on that basis. Although Neurath does incorporate the war economy as an external factor pushing economic centralization towards an administrative system as a contingent reaction to real external events, this still possesses a utopian quality. In Marxist terms, the efficacy of centralization is dependent on the development of the methods available.

An absolute administrative system would not be understood as most efficient in all contexts, but only in the contexts that standardization of method, communication and transportation are sufficiently developed for this to be true. An administrative system might be said to grow in response to a dialectical conflict under the conditions of bourgeois dominance, but might be limited in its efficacy outside of a limited response at any one time since the objective conditions might be inappropriate for it to do so.

Section III: The Socialist Calculation Debate:

Part 1: The Austrian Critique

Introduction to the Austrian Critique

The critique by Austrian economists Mises and Hayek started what is generally known as the Socialist Calculation Debate. According to O'Neill (1996) this was not a single debate but several different ones. Initially Mises published a critique of Neurath in 1920.

In this paper, Mises suggested that rational economic calculation under a socialist economy is impossible. Later, Hayek in the 1930's attempted to modify Mises claim that this kind of economic organization was merely impractical rather than impossible (O'Neill, 1996).

To roughly characterize the arguments, what started off as a critique by Mises of Neurath's (1925) and Barone's (1908) conceptualization of a totalized administrative socialist calculation model that completely lacked markets was countered by Lange and Taylor (1938) as a market socialist model, where the market plays a shrinking but necessary role. These discontinuities between early and later debate phases are missed in the more common characterization of the debate as mainly between Hayek and Lange even if Hayek does acknowledge this. In the response to the initial exchange, O'Neill suggests that the opponents internalized some of the positions of the opposition. He suggests that Lange internalizes some of Mises' critiques, while Hayek has internalized some of Neurath's views. Specifically, Lange accepts Mises' assertion regarding the need for some commensurable unit and a method to make calculations. However, both Hayek and Neurath ultimately reject the possibility for the commensurability of economic values. For Neurath, the lack of commensurability suggests the need for values to be imposed by non-technical reasoning to make moral decisions. Hayek, however, due to this incommensurability, rejects any role for moral determinations so that people

with different moral values can work together (O'Neill, 1996, Hayek *et al.*, 1935). However, by rejecting some method for determining a rational calculation they have removed themselves from the necessity of the effort to determine practical institutional reasoning. For Neurath, in asserting that this system of moral prioritization must be predominant, yields a system of a benevolent aristocracy to determine economic affairs, for idealistic reasons. For Hayek, there is no space for economic governance beyond the firm level. For Lange, however, a system that integrates both forms of decision making in the context of dialectical opposition is preferable.

Although this was not explicitly clear, a more charitable steel-man reading of the spirit of Lange and Taylor's argument might suggest that a market socialist model could gradually transition over time through the process of growth of the socialized sector to become a more administrative model. This growing administrative domain would be in contrast to the imposition of an instantaneous totalizing administrative model that requires a reworking of an entire economic system all at once, in a utopian manner. This would reinforce the arguments of Phillips and Rozworski (2019), regarding the favourability of the models organically developed by international capitalist firms such as Walmart and Amazon. This path would be in contrast, however, to those who believed in the efficacy of instituting an administrative economy by revolutionary fiat in a more totalizing manner. The totalized program was not even done in the context of the Soviet Union, which instituted a mixed economy under the New Economic Program (NEP) after a brief experiment of autonomous soviet or workers' council direction. It resembled a more syndicalist economic model following a centralized war communism which was a situational expedient. Lenin rightly suggested that workers were not sufficiently familiar or capable of fulfilling this role, even as a collective (Lenin, 1972b). This might be due to a lack of educational competence, but I suggest that this could be attributed to an insufficiency inherent to

the economic organizational form. Even under Stalinization, where the economy shifted to being more centralized in comparison to the NEP, there remained some enterprises that were not centrally directed, especially in the countryside, even if many of these were collectivised in a less totalized sense i.e. under workers' control within the firm.

The Arguments of Ludwig von Mises

Socialism and Capitalism as Discrete Systems

Mises, being a non-dialectical thinker, sees socialism and capitalism as differing discrete systems stemming from ideological principal and not dynamic material relations. Therefore, he counterposes a fully developed socialism to one of a more totalizing capitalism. In reality, no pure system exists since the older economic relations continue to persist in a degraded form and new ones emerge in the midst of the old. Mises goes on to state:

“It is characteristic of socialism that the distribution of consumption-goods must be independent of the question of production and of its economic conditions (Hayek *et al.*, 1935).”

This, however, is completely contrary to Marx's claim that the dominant means of production determines the capacity for equitable distribution. Only when capitalist governance becomes a fetter to the development of greater industrial capacity is it effectively displaced by a more expansive and socially integrated form of economic organization (Marx, 1992). Beyond Marx, even Soviet leaders like Stalin resisted the attempt to fully socialize the economic units in the countryside, attributing this to the underdeveloped economic conditions (Stalin, 1952). Mises' confusion on this point is legitimate due to the popular political attempt to impose socialism by revolutionary fiat before these relations become a fetter to further development. This view treats capitalism as a conspiracy rather than a mere manifestation of inegalitarian social leverage as characterized by the prevalence of a particular mode of production (Ellman, 2014). This rise of strong planning regimes in modernizing economies, however, is a seemingly

necessary precondition for a more effective modern urban economy over which a more explicitly competitive economy rises. Libertarians like Mises and Hayek would prefer to forget this history and assume only competitive conditions as a foundation for a competitive economy.

Issues of Price Determination and Unit of Economic Value

Mises rightly suggests that the common ownership of production goods in a socialist society would not eliminate the dynamics of individual governance of consumption goods. He contends that due to the exclusion of production goods from the domain of exchange, society will not be able to rationally allocate these. With regards to consumption goods, due to the lack of dynamic market forces, he suggests that the value of coupon substitutions will always be out of balance (Hayek *et al.*, 1953). This is less an issue of price determination that might underly the value of coupons and more the granularity of price determination. It might be true that small shop proprietors can more readily adjust prices by observing alterations in demand and prices of competitors, but managers of corporate outlets are significantly less empowered to do so. Corporate organizations tend to standardize prices more broadly across their storefronts, but also have the capacity to process more information to determine their pricing strategy more broadly.

Broader scope comes at the expense of local variability and responsiveness to local consumption behavior in pricing *ex post*. However, due to economies of scale, these organizations are able to achieve more competitive prices than smaller units. Similarly, the *ex ante* pricing determinations by the Central Planning Board (CPB) would be adjusted *ex post*, just like in a competitive firm, but at a broader scale and at a slower rate in an analogous fashion, based on a statistical analysis. The efficacy of organizing at greater scales is not automatic but is dependent on the technological efficacy of standardized production methods along with standardizing methods of analysis and communication. Due to the empirical fact of the greater

competitiveness of corporate firms in relation to smaller ones within a competitive system, one can dismiss the greater nimbleness of pricing determination at lower levels of granularity as a significant hurdle at both a corporate and state-determined scale. One might dispute the motivation of state-managers to adjust prices at all within this system, due to the high degree of monopoly which also affects the corporate firm albeit, presumably to a lesser degree. However, if growth and efficiency are an effective mandate imposed on state managers through the expectations of increasing returns to the population, in a similar way that shareholders can exert leverage over a corporate executive, then their legitimacy in governance is dependent on their ability to deliver this. Therefore, the motivation of the monopolist firm to adjust prices is dependent on the organizational efficacy of their stakeholders since the effect of external competition is weak by definition. If the social leverage of the population is relatively weak in comparison to state managers, then there is less motivation to increase the value delivered to the population at large. However, as this organizational power grows, the efficacy of the social demand for more balanced pricing adjustments increases in tandem. This prediction should track with levels of development more broadly despite dialectical fluctuations in relative institutional power.

Mises correctly points out that the generalized printing of specific consumption coupons does not generate the feedback necessary to adjust production, since the consumer has not really been given a choice in consumption priorities, but merely to use the coupon or not. He emphasizes a fixed rate of substitution that does not reflect market values (Hayek *et al.*, 1953). Beyond the models that take issue with market consumption in an absolute fashion like the administrative models advocated by Neurath (1925) and Barone (1908), other versions of socialism examined later do significantly rely on consumer choices involving general use money

(or coupons that are a similar general consumption equivalent without a purely circulatory method of allocation), since consumption in this form produces valuable information to reflect back on rates of desirable production *ex post*.

Mises suggests that by fixing labour time as the unit of value, Marxists discount the inequality of labour in terms of quality (Hayek *et al.*, 1953). In this, Mises takes issue with labour values but misunderstands their meaning in Marx and uses more of a Proudhonian interpretation. This confusion is not completely the fault of Mises since this is a program advocated by many socialists who confuse the consequences of the changes in economic forms on production relations for political proscriptions that can be applied beyond their relevant context (Sweezy, 1949).

While Proudhon advocated using specific labour-time vouchers as a currency unit, Marx suggested that the average necessary labour time of production of a commodity was already a major basis of value in the competitive market. Therefore, integrating labour time as a basis for cost was not necessary. Value, however, is not necessarily proportional to cost. Value is evaluated on the basis of cost and quality to other items on the market. These commodities are subject to competitive pressure so that their prices were heavily dominated by cost of production, given a low degree of monopoly. This is not related to the time that each individual spends on the production of a product, but the average amount of time required to produce it in the most efficient method of production of the time and place in question. This is to say, it is a descriptive analysis rather than a proscriptive program. Marx is suggesting that the exchange value of objects relates to their relative costs of production in terms of labour (McNally, 1993). Although Marx did, at times, approve of a system of labour vouchers, in his Critique of the Gotha Program, he criticized attempts to work towards some idealist form of absolute equality, both in

concrete labour values and in other axis of difference. He suggested that any form of fixing values in an absolute fashion would irrevocably generate inequality in other dimensions (Marx, 2008a). The projected relative equality of workers in production relations is not based on the moral advocacy of absolute equality, but in projected relative leverage.

If time was fixed as a value, skill would be undervalued. Marx distinguished this program from a proscription for collective ownership of production methods (Marx, 1976). Descriptively, as mechanization increases, more skilled labour with greater individual bargaining power is substituted for more unskilled labour, with less individual bargaining power. Through this process, degree of skill becomes a decreasingly relevant factor in production time and the more coordinated projects tend towards the wage minimum. In this context of collective production under capitalism, rates of remuneration for similar work also become more fixed and less dependent on individual rates of production (Braverman, 1974). Marx saw the increased efficiency of this mode of collective labour under capitalism and extrapolated its expansion into the future. Despite the characterization from Mises, the deficit in competitive firms is an extrapolation of the trajectory of capitalist development, not merely a political program of socialists. How one addresses this accumulation is a matter for political determinations.

Increasing competitiveness results in capital concentration which, through the creation of greater and greater barriers to entry, further increases the degree of monopoly (Lange & Taylor, 1938). This gives the firm significant leverage over society to set monopoly prices. Lange and Taylor (1938) elucidate three significant options to address the inevitability of capital concentration. The first involves breaking up the firm, which sacrifices competitiveness, increases cost and leaves these resultant firms vulnerable to being outcompeted by foreign firms that were not subject to anti-monopolistic dismantling. The second involves allowing the firm to

remain and allowing the society to be dominated by its monopolistic behavior without significant popular regulation. The third involves subjecting the firm to democratic control or nationalization. This subjects the firm to popular accountability rather than the interests of a small group of shareholders (Lange & Taylor, 1938).

Mises argues that 'lower order' aesthetic, moral, and other use values do not necessarily need to be included in economic calculation. In this sense, he sees exchange value as being necessarily limited in its scope and as fundamentally insufficient to encapsulated value due to its deviation from individual marginal utility. He rejects the ability to impose these kinds of values on a system of a larger scale and leaves this to small scale atomized decision-makers, assuming like most economists with a libertarian persuasion, that most economic actors are relatively autonomous and their choices are motivated largely by free choice rather than need (Hayek *et al.*, 1935). That is, to historicize the libertarian ideology, it imagines the world as made up of semi-autonomous yeoman farmers. This is because land can produce and meet the necessities for subsistence which allows economic exchanges to be mostly selective and voluntarist. That is, the limited economic complexity allows one to use or store the surplus produced rather than exchanging it on the market. This material positionality must necessarily be differentiated from laborers who can never hope to be able to subsist on property income. In the latter scenario, exchange of time for wages is not a serious free choice like the exchange of productive surplus for exchange value, but one coerced by the alternative of deprivations and a fundamental threat to the worker's means of survival. The workers cannot merely allocate their labour for themselves as an alternative to exchanging it. This option is foreclosed to them. Thus, this supposed freedom in voluntary exchange becomes hollowed out of its significance.

Mises correctly suggests that due to the complexity of factors involved, no individual can sufficiently fix economic values. For this reason, monetary calculation is a necessity (Hayek *et al.*, 1953). This is not seriously disputed by socialists. They suggest that an administrative *ex ante* calculation, given sufficient data of sufficient quality, could be superior to *ex post* calculations involved in market relations. The *ex ante* calculation can also allow for the admittedly artificial imposition of non-market factors that are necessarily beyond the regulatory potential of isolated individual market actors. Given the history of the state intervening in the economic sphere in states dominated by capitalist relations, it is evident that these actors find significant benefit in these state interventions as a general rule.

Regarding Economic Calculation

Mises suggests that the elimination of exchange relations is a necessary devolution of economics to the complexity of the household economy. That is, he cannot see the potential advantages or even the reasonable coherent expression of *ex ante* regulation and provisioning beyond this sphere (Hayek *et al.*, 1953) despite the evident history of state investments in a capitalist context. In the domestic economy, Mises sees this mode of allocation as ‘good enough’ given its sphere of operation. However, since the larger firms have greater access to data, they can potentially evaluate which method is better, given a common unit of calculation. Direct output rate cannot be used as the unit of calculation since different methods of production require different inputs and these inputs are not directly comparable without a common unit of conversion. Mises uses this point to critique a totalized administrative economy since it would be impossible to determine the value of particular inputs, intermediate products or outputs without a common unit of calculation (Hayek *et al.*, 1953).

I argue that the only viable alternative would be a central calculation where plan alterations are tested against the existing plan to determine if it produced any improvement. This, however, would require a great deal of processing power to calculate and would be out of reach in a relatively modern economy of Mises' day. However, this is not a transhistorical fact and also need not be implemented using all factors of production or a totalized economy per se. At a certain level of data quality and scale of internalized economic analysis, a number of directly calculated factors will be superior to the *ex post* market feedback mechanism on its own. This will not exist for all scales and at all levels of development, but at a certain point, the more direct method becomes superior to the market method.

Mises uses this critique to target Neurath's administrative economy with an *in natura* method of allocation. Neurath derives this conceptualization from the war economy, which sets targets in physical units. Mises suggests that an *in natura* based economic system can only value consumption-goods and is therefore irrational with regards to the means of production. Mises asserts that only through the privately held means of production can a system of rational economy be maintained. He asserts that state enterprise in a capitalist economy can only maintain a semblance of rationality due to its existing in a society dominated by private enterprise which sets prices on the market. In absence of this environment, he asserts, these enterprises would have no method of rational economic calculation. Insofar as the administrative economy is possible, in Mises view, it can only calculate cost values and is more disconnected from use values than through more direct feedback by consumer evaluation. He appeals to the efficacy of the disciplining effect of the market on both production and consumer behavior as a necessary part of the economy that is lost in an administrative structure (Hayek *et al.*, 1953). However, the degree that accumulated capital can gain superior advantage to atomized market

relations in terms of their transaction costs suggests the optimum scale of the firm. This point was best articulated by Ronald Coase (1995). If the market was in all places more profitable than the administrative calculation, employment would be a rare and uncompetitive phenomenon. Due to the competitive advantages of atomized actors in this scenario, the economy would prefer interactions between private contractors rather than permanent employees since the market mechanism would be a superior method of calculation to the methods of internal allocation. This, however, seems not to be the case in a competitive economy since disproportionate returns appear to accrue to operations with internalized wage relations rather than externalized market exchange of end products.

Mises suggests that a socialist society can at best aspire to vague estimates of the value of future projects while a society employing an economic calculation based in private ownership of the means of production can accurately calculate the value of projects (Hayek *et al.*, 1953). On the contrary, however, in all cases future values are estimates and projects are always a gamble in terms of their economic value. This goes for the cases within a free-market economy as it does in a socialist one.

He suggests that economic changes cannot be evaluated in terms of their efficacy due to the inability to assess these against an internal firm standard. This would only be possible if one variable was altered and all other economic variables remained static. However, since the economy is never static, the outcomes leading from more particular changes cannot be determined in advance or evaluated after the fact (Hayek *et al.*, 1953). It is true that this does present an empirical difficulty at the smaller scale in terms of economic evaluation, but this would be equally true of all large dynamic firms involved in complex operations. Determining the specific site of economic advantage based in changes in production method is always a

theoretical assertion that relies on ‘groping in the dark’ with no absolute assurances on the ultimate source of this change due to both abstraction and necessarily limited information. Certainly, internal firm complexity makes this more difficult to theorize. However, there is no possibility, whether in an administrative or in a free market economy, to distinguish correlation from causation. Certainly, in a capitalist mode, different agents can be incentivized by innovating superior methods. Although independent contractors are free to implement these changes of their own volition, in larger firms, employees have only the discretion they are granted by their employer. That is, they require approval from superiors in larger scales of operation just as they might in an administrative economy. These superiors, just like in the more fully articulated administrative economy, simulate the economic model with the proposed alterations as well as empirical evidence, which could be circumstantial, and attempt to evaluate the proposal.

Structural Congruence of Monopoly Capital and Socialist Organization

Certainly, factor pricing presents advantages in directing economic behavior, producing physical surpluses in advance of their allotment into future economic plans. This is the significant character that differentiates a socialist economy from a capitalist one, as described by Janos Kornai (1992). Kornai (1992) asserts that the capitalist economy incentivizes the production of local surpluses while the socialist one is perpetually plagued by shortage. Without specific administrative direction, surpluses would not be produced in a socialist economy (Kornai, 1992). There would be little reason or motivation to produce these without a particular plan to reallocate this surplus to productive ends. Unless these factors could be viewed as having potential value beyond internal firm operation or as directed output, they would not be accumulated. One could argue that it is the relative accessibility of monetary calculation that provides an advantage to the free-market form. However, if electronic economic simulations

were accessible to local management, this could level the advantage of the market directed economy in comparison to the administrative one and potentially surpass it.

Alluding to the fact that many socialists suggest that nationalized firms should not operate in a substantially different fashion than large shareholder owned firms, where the director is an employee, Mises argues that these are fundamentally different and cannot operate in the same way. He attributes this to the limited internal pressure on nationalized firms to improve and adjust to changing demand (Hayek *et al.*, 1953). I argue that this might have been true of nationalized firms in some contexts but there is no reason that it must be so structurally. Certainly, employing more directly accountable representatives of the public interest to monitor public firms and engineering more effective incentive mechanisms could remedy the ostensible insensitivity of nationalized firms.

Mises suggests that directors of nationalized firms are fundamentally different than those of the large private firm. Unlike the former, the interests of the director of the private firm is bound up with the success of that firm (Hayek *et al.*, 1953). However, the career and reputation of the former tends to be reflected by their esteem in the eyes of elected officials to whom they are responsible. If the public is disappointed in the services of socialized firms, they could hold their elected officials accountable for this and replace them with those who are more effective administrators of the public interest. It is possible that the public at a certain level of development lacks sufficient leverage over government officials to hold them accountable. But as development continues, so does the leverage of labour. This leverage allows the public to gain relatively greater influence over public officials. Therefore, even if public officials have been relatively less accountable previously, one can expect, in a more general sense, a higher degree of accountability due to the efficiencies in the bureaucracies that transcend elected terms.

Mises suggests that the position of public accountability makes the official unmotivated towards the improvement of the public firm. This could be because they are more likely to be held responsible for any losses but less likely to be celebrated for successes, giving them a more conservative character (Hayek *et al.*, 1953). However, in the Soviet Union, for example, regular improvements and innovations were expected of firm management. They were not simply accountable for losses making them risk averse but were also expected to make consistent improvements to their operations. Given the high rate of economic development experienced by many of the ‘socialist economies’ historically, the assertion that firm management was merely unmotivated, and conservative is inconsistent with the record. These regimes imported a great deal of innovations from more developed economies (Ellman, 2014), which would indicate an inclination towards increasing their capacity. This would contradict Mises’ assertion that these economies are necessarily more economically conservative than their commercially motivated counterparts.

Mises’ characterization of the enterprising private firm director contrasted with the more conservative director of public services mirrors Baran & Sweezy’s (1966) comparison of the tycoon who establishes a joint stock firm to the more conservative CEO who inherits its operations. In light of this, one might suggest that the different character of the director of the public enterprise is due to them lacking the pioneering role of the tycoon rather than the incentive structure which the tycoon shares with the CEO who follows them. Baran & Sweezy (1966) suggest in their text, *Monopoly Capital*, that even though the CEO is more risk averse than the tycoon, profits are more stable under the direction of the former.

Critique of Socialist Prioritization of Use Values

Mises is correct in his assessment that many Marxist socialists presume that, in an increasingly coordinated socialist system, objective use-values can dominate over transactional values and that this process would not necessarily require a degeneration to household production. That is, a coordinated economy beyond the household necessarily involves producing goods that are not for personal use and therefore lacks this intrinsic motivation. Consistent production for less direct relational purposes requires some sense of transactional compensation if it is to extend beyond the voluntarism of true believers. However, I argue that that this does not rule out socialist production given the social relations of a progressively proletarianized economy, where skilled labour through mechanization is increasingly transformed into unskilled labour. This occurs because the bargaining power of proletarianized labour is obtained through common struggle rather than through individual leverage of property or skill (Braverman, 1974). Through this process, a more common social yield is produced by an increasing generalization of economic relations in cooperative labour. This positionality does not depend on benevolence or altruism, but on the self-interest of the increasing majority under new economic conditions. Transactional values represent a more generalized social valuation of an item as skewed by various factors such as cost of production, supply, demand, degree of monopoly, and purchasing power of the target market rather than an individual's rational or moral assessment.

Mises is also correct in condemning the paternalistic evaluation of use values preferred by a substantive popular fraction of society which might be condemned by many socialists still marked from the utopian tradition. Although regulation of various economic and social behaviours is desirable in some cases, these ought to receive a popular mandate to gain

legitimacy. It is not that all popular mandates are necessarily just and correct, it is just a more legitimate liberatory form of social evaluation than mere moralistic paternalism. Certainly, the struggles for social inclusion involve breaking popular taboos as advocated by popular movements, but this requires expanding identification rather than imposing rigid forms of morality on others who do not share it. As well, Mises rightly condemns those regressive socialists who wish to be free from capitalist rationality due to its degenerative moral character so that they might have the power to retreat to what might be imagined to be a cooperative peasant utopia.

Conclusion

In general, Mises appears to neglect the most significant factor in the socialization of the means of production, that is, the economic advantages of economies of scale. Although, in Nitzan's and Bichler's (2011) terminology, historic socialist economies might lack the impulse for increasing economic depth of firms, they primarily generate increases in efficiency through the rapid and vast expansion of the economic breadth of firms. He also sees as insurmountable the problem of generalizing skilled labour into hours of unskilled labour but fails to realize it is industrialization that causes this paradigm shift (Braverman, 1974), not mere socialist policy doctrine. He also sees individual incentives as primary to motivate worker productivity. However, due to various bottlenecks in cooperatively organized labour, individuals working at above average rates do not lead to increases in output overall. This is generally why wages for this kind of labour tend to be relatively fixed, treating all labour as average in productivity terms rather than relying on piece rate compensation. This is an emergent tendency within capitalism not a mere doctrinaire policy position.

The Arguments of Fredrick von Hayek

While Mises emphasized the problem of calculation and individual rationality, Hayek emphasized knowledge problems in the administrative economy. Hayek believes that for a good deal of economic information, only proximate individuals can be aware of their own economic problems and that this knowledge cannot be generalized or scaled upwards. He refers to this form of knowledge as ‘tacit.’ He emphasizes that market demand marshals the filling of roles in an economic way superior to mere formalized prioritization from central directors since it is able to apportion at a higher level of specificity on the basis of cost (Hayek *et al.*, 1953). This is because in this system due to competitive pressure, actors are predominantly ‘price takers’ not ‘price makers.’

Hayek criticizes the historicist method of Marxism, seeing it as mere arbitrary ideological volunteerism, and seeks transhistorical general laws (Hayek *et al.*, 1953). This is a general misunderstanding of historicist analysis which does not prioritize universal principles and instead suggests that economic regulations depend on the dynamics of the economic organization. If capitalism did not always exist, then surely these laws cannot be transhistorical. Also, just because these are historical categories does not mean that they are arbitrarily determined by fiat. Rather, they are established on the basis of really existing economic dynamics.

Hayek argues that past tastes change, so historical trends are not a sufficient indicator of future market performance (Hayek *et al.*, 1953). No model is sufficient to fully capture the behaviour of any complex system. The purpose of a model is to help to broadly anticipate general trends that are assumed as dominant while ignoring others, which are assumed to be of lesser significance. Appeal to historical analogy for theorizing what will be successful will be the main evaluative technique of institutional investors like banks. So, this technique will be quite instructive for a significant portion of capitalist investors, at least at the primary investment

stage, which involves solely *ex ante* planning. These are not sufficient to explain investor behavior overall but would explain a significant fraction of it. Hayek's dismissal of the attempt to understand economic systems and potentially replace or modify their elements is instructive, since it reveals that he sees this institution as a mystical entity that cannot be simulated in parts but must remain whole to perform its function (Hayek *et al.*, 1953). This harkens back to the explanation of the invisible hand of the market as being a proxy for God, rather than a more collective process of valuation (Denis, 2005, Graeber, 2012).

Hayek's Utopian Political Rigidity

Hayek saw the problem of socialist aspiration as centered in the capacity of a central authority to effectively administer quantitatively competing priorities. He therefore would issue any monopolistic organization that seeks to set prices such as government, unions, cartels or concentrated capital as irrational since they are able to influence the setting of prices to some degree without being passive 'price takers' (Hayek *et al.*, 1953). In this sense the autarkic totalitarian state is the ultimate 'price maker.' Like Mises, Hayek fails to connect the monopolistic position to the consequence of capital concentration by means of competition and merely characterizes it as a coercive intrusion. Marxists see the trajectory of capitalist concentration and seek to manage it in the broader social interest rather than seeing concentration as inherently problematic.

Hayek saw all concentrated control of the direction of productive activity as derived from this coercive model (Hayek *et al.*, 1953). In this sense, Hayek is even more of a utopian absolutist than Mises, seeing all governing institutions as necessarily authoritarian. Therefore, in his view, modern capitalism, with its relatively strong state, is an irrational deviation from the

ideal Laissez-faire system. He dubs this ‘really-existing capitalism’ as ‘interventionist chaos’ that skews the rationality of the market calculator (Hayek *et al.*, 1953).

Regarding the Mechanism of Economic Transition

Hayek critiques the socialist presumption, shared by both Lenin and Neurath, that the war economy demonstrates the advantages of central direction which can be extended beyond wartime conditions (Hayek *et al.*, 1953). While Hayek’s observation of this presumption is not incorrect, his critique excludes the materialist dimension of the problem. That is, it suggests that the mere social rationalization of productive activity in wartime is sufficient to cause a productive mission creep towards further centralization in the absence of these conditions. This ignores the fact that due to the underdevelopment of the productive forces, labour has insufficient leverage outside this crisis to jettison a competitive system completely. More likely, the state generally grows at a greater rate in response to the regular cycle of capitalist crisis, where they are called upon to innovate a solution.

The limited ability of war communism to achieve the degree of centralization necessary to enable socialist calculation is particularly illustrated by the context of the Leninist state. Capitalist competition has not yet become a fetter to further development in this context, even if the massive centralization of productive resources by fiat does cause a rapid increase in growth potential. For this reason, Lenin acknowledged that the Soviet Union retained state capitalist governance (Lenin, 1972a). It also largely copied more advanced technological organizational methods from more developed capitalist contexts, further emphasizing the limitations of war communism and revolutionary transformation to develop these methods (Ellman, 2014). That is, the revolutionary transition to a Leninist state could not act as a technological vanguard and required the importation of field-tested models that were established through historical

materialist evolutionary development by means of class struggle. This tailing position presents the unique opportunity to catch-up more quickly to the developed technological vanguard rather than being in the position to initially supersede it.

In Marx's view, revolutionary transition from capitalism to socialism would occur in the most developed contexts, however, the revolutionary socialist states have all occurred in the context of relative underdevelopment (Chattopadhyay, 2003). When presented with the prospect of revolutionary transformation in Russia, Marx stated that this could only occur in the wake of the revolutionary transformation of Germany or some other more developed region into a socialist society (Marx & Engels, 1882). Leninists disagreed with this limitation even though they would have preferred the 1918 German revolution to be successful. They hoped that a socialist Germany could potentially assist in accelerating their development and provide greater protection through a military alliance (Chattopadhyay, 2003). The important question for historical materialist theory, despite their outward socialist political positions, in terms of economic structure, were the revolutionary transformations mainly the result of a transition out of feudalism in a similar trajectory as occurred in the French and American revolutions or was this a concrete path to effectively transcend bourgeois capitalist rule? Given the historical evidence of most of the 20th century socialist economies transitioning to capitalism, I lean towards the former. That is, economic conditions tend to be more deterministic than political ideological ones. The dominance of the manufacturers' governing interests in the post-revolutionary French state does not necessarily stem from the hegemonic political program of the revolutionary nationalist actors, who in fact were quite politically diverse. It mainly comes from their greater social leverage in the emergent economic conditions. So too are the programs of formally socialist states skewed towards those actors with greater economic leverage despite

their ideological commitments to the contrary. Hayek, therefore, zeros in on a core deviation in the mechanism of social change in the Marxist imagination from broader forms of economic developmental struggle to the revolutionary break in the context of crisis. He correctly identifies the issue that this wartime break does not change the fundamental material forces that produced these economic conditions in the first place.

Hayek highlighted the critiques articulated by Mises, referred to earlier, but also brought in Weber's critique of Neurath as well as Brutzkus' evaluation of the prospect of planned agriculture in the USSR. Weber argued that *in natura* calculations would be inadequate to a complex economy, at least in the sense of administering under contemporary conditions and that money and exchange would be necessary (Hayek *et al.*, 1953). Recognizing Weber's critique would not rule out a slow economic transition that would grow the socialized sector under direction of administrative calculation but would rule out quick or instant transition in a utopian manner (Sweezy, 1949). This, in a sense, mirrors the Soviet Union's own behavior in their imposition of the New Economic Program (NEP) where they strategically reintroduced market relations in many sectors after a period of war communism (Ellman, 2014). One should note that central economic planning during wartime is not a feature of societies transitioning to socialism, but of most societies in times of crisis. Most of these do not permanently retain wartime economic direction, or barracks communism, even though sometimes they retain elements. Transitioning back to a more market driven system is not atypical after the severity of the crisis has subsided. Weber, like Hayek, doubts that a planned administrative system can ever be superior to market direction. Hayek does acknowledge that the USSR turned away from the pretensions of transitioning to a totalized central plan and suggests that its proponents continue to act as rear-guard defenders after they have mostly conceded (Hayek *et al.*, 1953).

The fact that Brutzkus' subject matter for examination is agriculture is interesting since it existed at a relatively low level of development. The Marxist view that relations of production are connected to developmental conditions is extremely relevant here. Due to the high degree of decentralization and low degree of capital concentration, market mechanisms would be necessary for efficient production until the capital is accumulated to the extent where greater coordination is more feasible. In Marxist theory, this would become much less necessary after the outcomes of capitalist competition generated a high level of capital concentration. Even Stalin admits as much, with regards to economics in the countryside, in his 'Economic Problems of Socialism in the USSR' (Stalin, 1952). The fact that an agricultural economist like Brutzkus suggested that this context is improper for the imposition of central direction is compatible with Marxist theory, since Marxism rejects transhistorical economic prescriptions.

Hayek's Time Preference Rigidity

Hayek suggests that the rapid industrialization recommended by socialists is not necessarily efficient. He universalizes the perspective of the individual capitalist, who might find greater economic efficiency in cheap labour (Hayek *et al.*, 1953). However, from a state developmental point of view, increasing industrialization reduces the cost of output and benefits both downstream consumers and producers. That is, the positive externalities of industrial development cannot be accounted for by private actors so public actors taking a larger scale perspective decide on this kind of investment. No capitalist state has ever merely relied on private initiative for economic direction for good reason. Developmental states tend to invest in key strategic industries that they project will have positive downstream consequences for the economy as a whole. Even if the consequences of the innovation in the short term are not superior to methods requiring less investment, it does not preclude this balance from changing

through technological improvements over time. To some degree or other this is the gamble with all new firms or methods that require time and experimentation to determine if they are more efficient than old methods. Even if they are not initially more efficient, this does not mean that they will never be more efficient as processes improve (Chang, 2007). The key issue that Hayek neglects here is the possibility of a legitimate difference in time preference for returns on investment. Most alterations in methods of production require losses for a shorter period, which are to be overtaken by superior efficiency. Public investment in modernization projects falls under this category.

Hayek suggests that the economic system can be judged on the basis of consumer satisfaction and the rationality of the decisions of the central authority (Hayek *et al.*, 1953). Usually, in a market economy, this rate of investment is directed by competitive pressure *ex post* rather than by public administration *ex ante*. However, due to the intention of a forced high rate of investment by the central authority that emphasizes developmentalism, consumer satisfaction would be generally lower initially, but this investment could be expected to pay off at a later time. A high rate of investment implies that surplus is necessarily extracted from worker wages, delaying the potential for short term consumption in favour of longer-term rewards. This time preference would not necessarily be the preference of the worker, but generally the worker is not really a ‘price maker’ on the market anyway, due to the affect of competitive pressure on setting wages. Their ability to choose a wage that they would prefer, that is consistent with their preferences for economic investment in productive capital, is outside their control in both private and public administration. Even under the condition of cooperative worker control, market pressure directs a rate of savings, so time preference is not really under the control of the actors on the supply-side either in the longer term. As Marx highlights in *Capital*, subsistence wages,

and not personal preference, tend to dominate the necessary economic calculus of the growing proletarian workforce (Marx, 2004). Therefore, it will be difficult to determine consumer satisfaction in general due to an initial high rate of savings and the time required for this investment to yield tangible improvements to the consumer. In direct contrast, Hayek believes that central structures are in a poor position to quantify rates of investment due to the presumed inaccessibility of a proper method of preference aggregation. He argues that self-interested actors are better at determining allocations based on individual consumption preferences. However, his point of view ignores the inability of actors with narrower vantage points to rationally allocate investment for the benefit of the broader populace. Looking at the broader historical record, certainly the USSR and China were able to achieve a very significant rate of growth for a long period that did increase the average living standards drastically, due to high rates of investment as a result of the initiative of the revolutionary regime, which seemed to be lacking under the previous one.

To the second point, on the rationality of the central authority, Hayek suggests that as opposed to emphasizing scientific methods of decision making, planners in the Soviet Union use arbitrary and uncorrelated decisions based on present contingencies (Hayek *et al.*, 1953). However, outside price setting, it is unclear how planners use methodology that is any more arbitrary than any entrepreneur, since all investment prospects are gambles by their very nature. These decisions are made neither with an eye to prospects for market profit nor with a mathematically calculated plan, so it can be conceded that no quantitative system of rationality was in use to direct investment in this period. He argues that it is logically possible to replace an *ex post* market solution to price determination with an *ex ante* mathematical one. But it is

practically impossible, due the immense complexity of the required calculations involved (Hayek *et al.*, 1953).

Hayek, like Mises emphasizes the difficulty of the task of calculation, whose complexity certainly overshadows the computing capacity of the time (Hayek *et al.*, 1953). There is no reason that this might always be the case. Computing capacity continues to improve over time under modern conditions. If this keeps up, at a certain point, improvements in computing capacity will facilitate more effective economic administration with a greater emphasis on *ex ante* planning. Just because this is viewed as insurmountable in one period of development, does not mean that it will always be so. A historical materialist understanding might suggest that under particular economic conditions, this system of greater central coordination will be more effective than a more diffuse method of governance. Hayek assumes that a unique total calculation including all economic factors in the entire society would be necessary for every economic decision (Hayek *et al.*, 1953). In a sense, he is correct and what market price valuation does *ex post* is what a planning calculation could do *ex ante*, except the latter is much harder to achieve without supercomputers centralizing all data with access to this calculation for all levels of decision making. The total method of calculation is the method by which one makes use of *ex ante* equivalents. However, this does involve a great deal of difficulty. Certainly, a general plan can be calculated and implemented with some slack due to predictable irregularities, but actually modifying the plan due to unexpected requirements or a change in method would require either a novel calculation or prices for rational decision making.

Corporate Capital vs. Central Planning

Hayek suggests that the imposition of central directive on proximate management would fail at the task of efficient allocation (Hayek *et al.*, 1953), but it is unclear why this would be a

problem for central planners and not CEOs as well. If a corporate capitalist structure can accommodate directives from on high without compromising the local efficiencies discovered through tacit knowledge of local management, why would a central planning board direct enterprise function differently? Hayek implies that if the economy is administrative, that it could not efficiently integrate feedback from local management to determine working policy. But this is exactly what happens in corporate capitalist structures, which are quite successful in the capitalist economy in contrast to smaller firms. It is as if to legitimize the administrative structures, one cannot use managerial feedback for the sake of consistency. But this appears irrational. The advantage of a large administrative system is not only economies of scale, larger scope of administrative control and specificity, it is also the capacity to integrate and process a greater quantity of technical knowledge than systems operating at a smaller scale. Hayek suggests that since this knowledge cannot be communicated, that the farther these directives are abstracted from intimate knowledge of the 'shop floor,' the less efficient they would be (Hayek *et al.*, 1953). If this were the case then corporate structures would be less competitive than small private firms, but within capitalism this is not the predominant case. This efficiency of a conglomerate, overseeing firms in multiple sectors, would be even less efficient than the large corporate structure, since it could not rationally allocate machinery between these sectors. Again, this is not the case and therefore need not be the case in a centrally planned economy.

Limitations of the Market as a Universal Social Calculator: The problem of pricing machinery and expertise

Hayek suggests that without the price mechanism, resources would be misallocated (Hayek *et al.*, 1953). But it is difficult to assess on what basis this could be judged after the fact since social priorities do not remain the same. Even in capitalist societies, the market is never absolute. The market could be seen as a useful calculator of economic priority at an individual

level, as skewed by differential income of excludible goods. However, the market would necessarily neglect common pool resources and public goods which are beyond the scope of the individual consumer (Manno, 1999). Market action is also everywhere constrained by regulation to prevent foreseeable externalities.

Hayek suggests that it would be impossible to determine rationally the amount of machinery to be allocated to an enterprise without prices and markets. He suggests that one could not merely allocate these on the basis of class of object but would need to integrate variables such as wear and tear, location and so on to determine the profitability of reallocation or replacement. This would erode the ability to group large industrial machinery as a class of object, forcing the administrators to treat every one of these as a unique variable unto itself. He also extends this onto any other unique feature differentiating like objects (Hayek *et al.*, 1953). I argue that one of the advantages of mass production, beyond the above-mentioned efficiencies, is the ability to set a common price, at least in a space and time of the output. Certainly, one could argue for independent price setting by local management, but this would increase the transaction costs in terms of their labour. So, this data will likely be more effectively integrated centrally. Hayek's suggestion that each batch of output must be evaluated individually (Hayek *et al.*, 1953) is contradicted by the existence of a commodity form of similar products. That is, they are generally priced rather than priced on the basis of the peculiarities of a specific batch, outside of this batch being particularly notable (i.e. a notable batch of wine or scotch that is determined to be more valuable due to more natural particularities of an agricultural crop rather than differences in processing technique or the costs of materials). Although this does continue to exist under a mass production system, when compared to artisanal production, the pricing

relevance of particularities of individual output is reduced. Marxist central planning only appears to extend the pricing behavioural trajectory of monopoly capital further.

Hayek extrapolates the same issue to the problem of selecting people with particular technical expertise by a central authority, since they cannot be expected to be able to evaluate individual technical capacities in all fields (Hayek *et al.*, 1953). However, the ability of planners to select experts to create and administer effective testing methods for a graded determination of technical capacity is not only possible but is used in many corporate and government departments. Both of these organizational types can also utilize testing beyond mere technical capacity and incorporate soft skills like testing for workplace conflict management skills. The analogy to effective corporate management, again, speaks to the potential efficacy of central planning. Certainly, experts are tasked with the speculative pricing of projects, even before they have encountered the particularities of a project, and this pricing is based on historical analogy and its relation to a competitive market price. Similarly, central authorities can hire experts to speculate as to the staffing and expertise requirements for a project based on requirements of similar projects and historical analogy. However, they are not restricted to historical analogy but can also speculate about staffing requirements based on the testing and efficacy of new and innovative techniques. Any cost savings due to alteration of technique will shift profit margins in the short term, but will generally lead to the later incorporation of these techniques into the assumption of a cost price in the longer term, so long as the system is driven by competitive pricing and free information. Similarly, the introduction of new techniques will allow the evaluation of the types of expertise required in the short term and would allow for the identification and incorporation of these staffing requirements in the long term.

Hayek emphasizes the function of market behaviour in ranking the relative importance of various commodities in the mind of the consumer and how this produces relevant data for producer feedback that can be then incorporated *ex post*. Absent this feedback, it is very difficult to determine what the consumer might prefer (Hayek *et al.*, 1953). This is certainly a difficult problem for an administrative structure. Rank ordering of priorities is difficult to ascertain especially given that different people have different thresholds of satiation before they might allocate the satisfaction of some needs to different ones. Also, these preference rankings would necessarily change over time. One might look to how this is dealt with in a modern mixed economy for an understanding of how socialists might deal with this. In these real economies, many services fall under the purview of state direction and those are not subject to consumer choice while others do fall under the domain of market determination, providing *ex post* data. In a mixed economy with a formal democratic electoral system, the state plan can be evaluated, at least formally, by the population. This could be achieved by using the electoral process to replace the governing party with one that has a differing plan, assuming these parties actually do represent organic popular opinion. This mechanism lacks specificity, but evaluated as a whole, it can respond to popular feedback. All governments must operate with some degree of consent beyond mere coercion. All governments must achieve some degree of consent to operate or they will be replaced by a stronger internal coalition, if not through elections, than by force. This illustrates two broad mechanisms that are at work in these mixed economies, one of democratic will and political coalition and one of the market. In a socialist economy we would see the previous grow, but this does not necessarily mean the complete elimination of the domain of consumer choice. Contrary to the position of McNally (1993), it would likely mean selective prioritization by an administrative domain while other economic spaces remain under the

direction by consumer choice. This would at least remain the case until a monopoly is produced that can only be effectively regulated by subjecting it to democratic control, since its break from competitive pressure gives it too much freedom to set prices to its own advantage (Lange & Taylor, 1938). Certainly, in all really existing socialist societies, markets were never eliminated. What did occur was alteration of legal ownership rules, restriction of the domain of the market and market regulation. Whether these directives are good or bad can be reflected by the democratic approval of the governing coalition. Therefore, the universal domain of market relations is not even abided in self identified capitalist societies, so it is in no way necessary for efficient economic relations. The degree of government prioritization of different economic spheres does not exist without popular feedback mechanisms, even if these mechanisms lack those of market specificity. The greater emphasis on democratic economic direction is not incompatible with popular satisfaction, it simply operates through a different mechanism. This mechanism is not merely elections themselves but is anticipated by the techniques of market research such as polling and focus group studies, similar to those utilized effectively by monopoly capital. Monopoly capital in fact acts as a transitional form between a small private firm directed by the market and state directed by popular approval.

Hayek disputes Lange and Taylor's (1938) assertion that capitalist pricing can be a sufficient starting point for a transition to socialism and that new alterations can be tested by trial and error. He offers two fundamental reasons for this. The first is that the change in systems is expected to be too significant in its impact on relative values for prices to maintain their relevance. The second, Hayek suggests is that the fixing of some prices necessarily leads to fixing of all prices (Hayek *et al.*, 1953). Historical evidence, however, contradicts this view. For instance, price fixing and rationing during wartime did not necessarily lead to the generalizing of

prices to all commodities, at least in any quick succession (Cox, 2013). Unless Hayek is referring to a slow dialectical process of historical materialism, where social production and the state is continually encroaching on the private competitive domain, there is little evidence for this.

Hayek suggests that price changes in a capitalist system must be daily or even hourly (Hayek *et al.*, 1953), but I argue that this is a misrepresentation of capitalist realities. Certainly, raw material prices can fluctuate regularly based on supply and demand, but the prices of finished goods tend to stay fixed for regular periods and are not subject to regular fluctuations except under the condition of price shock to a constituent raw material or process. Marx asserts this in Capital Volume III:

“The value of raw and auxiliary materials passes entirely and all at one time into the value of the product in the manufacture of which they are consumed, while the elements of fixed capital transfer their value to the product only gradually in proportion to their wear and tear. It follows that the price of the product is influenced far more by the price of raw materials than by that of fixed capital, although the rate of profit is determined by the total value of the capital applied no matter how much of it is consumed in the making of the product. But it is evident — although we merely mention it in passing, since we here still assume that commodities are sold at their values, so that price fluctuations caused by competition do not as yet concern us — that the expansion or contraction of the market depends on the price of the individual commodity and is inversely proportional to the rise or fall of this price. **It actually develops, therefore, that the price of the product does not rise in proportion to that of the raw material, and that it does not fall in proportion to that of raw material.** Consequently, the rate of profit falls lower in one instance, and rises higher in the other than would have been the case if products were sold at their value.” (Marx, 1992).

Hayek correctly points out, in congruence with Marx’s view, that price changes are not always easily calculated in proportion to cost price, due to differing elasticity of demand (Hayek *et al.*, 1953). However, this does not prevent him from suggesting the necessity for greater price elasticity for socialist calculation than is practicable under capitalism, for large competitive producers. Due to the consequentialist chain of impact of price changes, that are not always shifted proportionally to their cost price, Hayek doubts that Lange and Taylor’s (1938) experimental price adjustment method will be practicable. Hayek suggests that the administrative method of calculation, though impracticable is better than the trial and error method (Hayek *et*

al., 1953). This is odd, since the *ex post* method of experimental price feedback is the same method employed in capitalist price determination. However, he is correct that it is unlikely this *ex post* method would be adjusted in relatively quick succession. This would leave a significant time period with unadjusted prices. Therefore, the experimental method is likely insufficient. This is why a method of administrative calculation is superior to mere *ex post* experimentation, whether it is in a socialist or capitalist context.

Central planning and the Problem of Worker/ Consumer Sovereignty

Hayek suggests that a project of central planning eliminates the potentiality of consumer sovereignty as well as freedom of occupation, since it removes the prospect of changing purchasing behavior on a whim (Hayek *et al.*, 1953). However, this need not be the case as many socialist theorists indicate contra Dobb. With regards to consumer sovereignty, since general estimates might be produced to project demand based on a plan, currency could be used to purchase items so changes in consumer decision-making are still possible. With regards to freedom of occupation, the really-existing socialist societies have generally allowed for the freedom to apply for posts based on the personal volition of the worker. They did not generally assign labour centrally based on qualifications alone. Similar to the previous reasoning, a system of planning would estimate the broad qualifications of a job pool and attempt to match them in theory to projects at an approval stage. This might be a similar process to getting approved for a loan at a private bank based on potential factors for success (i.e. an available pool of potential employees). The new firm would then attempt a hiring process, just as they would under a capitalist system. These solutions are more in-line with Lange and Taylor's (1938) neoclassical solution than with Neurath's or Dobb's absolute administrative one. As stated previously, the

administrative system does have utility in a stage of initial post feudal developments, especially for the purpose of catch-up developmentalism.

In reference to Dobb's support of a purely administrative solution, where consumer sovereignty might be legitimately sacrificed, Hayek argues that this would necessarily mean a direct assignment of goods to individuals irrelevant of their preferences (Hayek *et al.*, 1953). However, there would be little reason for doing this if the goods were not deemed valuable by the consumer. Even an administrative system would likely use surveys and other market research techniques, similar to those employed by monopoly capital, as a basis for determining consumption preferences as well as basing current consumption on the record of previous ones. Hayek here imagines this administrative system as merely barracks communism, which is not necessary, given sufficient data processing capacity. Hayek assumes that the planners would merely assign a rank order of preferences to subjects without their input, which would be unwise. However, all states appropriate funds for projects they deem of social value irrelevant of consumer preferences. These decisions are checked in so far as a democratic counter power is active and effective potentially as part of an electoral platform, but they are not evaluated on the market. The fact that these decisions go through a state structure and not market exchange does not make them dictatorial. Hayek assumes that monopoly power cannot be checked. Therefore, in his view, a world of competing monopolies would just create circumstances for exploiting the consumer and irrationally allocating productive resources rather than creating an opportunity to assert democratic control.

Hayek argues that planners, which in this sense could be understood as state initiative, can act with more knowledge and foresight than entrepreneurs. He assumes the shorter time horizon preferred by market dependent entrepreneurs represents a more efficient investment

rationality. It is unclear that this is true, since business investment itself is highly variable in its time preference and would be valued accordingly due to risk. However, due to the economic stability of state planners, they can invest in projects that have a larger time between investment and potential reward. The social value of these investments is difficult to determine objectively since usually they are not made for revenue generation alone, but also for the positive externalities they would produce. However, the idea that this makes them fundamentally inefficient is a difficult proposition to maintain. For instance, road construction and maintenance increase the value and accessibility of commerce. Would Hayek suggest that roads be left for the market to value? If this was done, the efficiency of the market he puts so much stock in as a primary social institution would be degraded. It might be true that the market would allocate these resources differently, but it is unclear that this allocation would maximize social utility. Hayek objects to the simulated pricing required to determine public utility rates since competition is absent. In the case of public utilities, competitive systems and the greater infrastructure required to maintain them (i.e. multiple sets of power lines and systems of water piping) would come at significant social cost. The idea that these should only be attempted on the basis of revenue generation (i.e. through the universalization of private toll roads) would produce significant social costs, especially since limited space would also put road owners in a relatively monopolistic position, thereby allowing them to appropriate more resources than they would under a system of public ownership. This would also have other externalities such as limiting the potential labour pool for business on the basis of toll rates. Hayek is correct in that the absence of a competitive system, these utilities cannot obtain correct market prices. But this does not mean that the presence of competition in these industries would generate greater social utility. This is merely a fetishization of this mode of valuation. From this point of view, market

valuation should be universalized to all economic domains, a dynamic without historical precedent under feudal, capitalist, or socialist economies. Historically, the relative growth of public domains under all systems of government should not be viewed conspiratorially, as mere parasitism, but as an economically advantageous adaptation. If one takes Hayek's view of universalized market competition seriously, then states in competition with one another should be able to differentiate themselves on this basis and gain competitive advantage through their absence of public investment. However, this relationship is not borne out by the historical trends and more likely, the inverse is true.

In fact, the reason a system of general wages is superior to mere trade of intermediate end products produced by artisans is the advantages of scale coordination which avoids the transaction costs of the market internally (Coase, 1995). If direct trade between independent producers was superior to employment under the direction of a planner of a workplace under capitalist supervision, then this would be borne out by the competitive market. However, historically, also the inverse is true, favouring the economic tendency towards larger firms subject to a greater internalized planning system, avoiding internal market pressures.

Differential Wage Incentives

Hayek argues that if equality of reward was the rule then market value would lose its significance since money cost would be robbed of its meaning (Hayek *et al.*, 1953). However, this is untrue since utility is not only realized at the level of the wage but also at the level of consumption choice. If the economy was purely administrative, then market valuation would be absent completely. But if markets are active then so is the reflexive evaluation of the consumer in terms of maximizing personal utility with the funds under their control. There are many things in contemporary capitalism that are illegal to provide through the market. However, this does not

mean that due to this obscuring influence that prices are meaningless in their totality since there are social domains that are absented from this method of calculation. According to this statement by Hayek, prices would have no meaning in the context of either regulation or the provision of public goods. Since this applies to literally all contexts of pricing in history, this objection can be dismissed as inflammatory. That said, most modern socialists do not recommend absolute equality of reward and neither did Marx. The generalizing dominance of the subject position of the proletarianized worker does not imply absolute equivalency of wages but a tendency towards this. Many modern socialist theorists proscribe some difference in remuneration for labour on the basis of superior effort (Albert & Hahnel, 1991) or superior result (Devine, 1988, Cockshott & Cottrell, 1993). Lenin also argued that that wage differentiation was necessary in many instances (Lenin, 1972a). What is emphasized is an elimination of individual property income.

Investment Rationality

Hayek disputes that the socialist state can effectively act as a ‘super-bank’ distributing funds for socially valuable projects since it would bear all the risk and no collateral could be recouped for losses, since there would be no collateral to present. Its difficulty is not only in distributing free unallocated resources, but also in redistributing resources under the purview of other industrial projects. He suggests all changes in economic circumstances would require an appeal to an administrative calculation or a system of competitive market competition (Hayek *et al.*, 1953).

Hayek asserts that there will be little to base investment decisions on other than the historical success of the ‘entrepreneurial’ agent in charge of the projects (Hayek *et al.*, 1953). However, determinations of success or failure would be often outside the control of these agents

due to exogenous factors. Hayek suggests this agent will become risk averse (Hayek *et al.*, 1953). However, the record of public investment in the context of capitalism and socialism suggests that the state often invests in research programs that do not have an immediate prospect of return but could potentially provide significant gains if achieved (i.e. the computers, vaccines and the internet). This would seem to contradict the assertion that state projects are necessarily more conservative. Hayek's contrast evokes the previously mentioned contrast of the tycoon of an early institutional form to a more risk averse CEO of an established firm outlined by Baran and Sweezy (1966). As opposed to this being a relation between capitalism and socialism, it is more likely a contrast on the basis of succession between the agent establishing a new project and the one inheriting its leadership. Just as a board of directors will evaluate the performance of a CEO based on the specific conditions of their operation by incorporating the factors of exogenous shocks as well as actual profits compared to a projection, the socialist planners will be able to evaluate the performance of their firm and sectoral management (Baran & Sweezy, 1966). It is true that a purely quantitative market-based evaluation would be unfair due to exogenous factors. However, they can evaluate their performance in a more qualitative way by measuring their performance against projections that incorporate the exogenous variables, even if they cannot be priced. They can also assess the reaction to these shocks and how they altered processes to account for these. It certainly is not true that return on investment is the only way to assess managerial performance, either under capitalist or socialist systems, for exactly the reasons Hayek presents. If manager performance can be evaluated by the capitalist owner and the CEO performance can be evaluated by a board of directors without access to market comparisons, then firm manager performance can be evaluated by a central planning board. If this was not the case then, again, artisanal trade would be superior to capitalist coordination. In

none of these cases does the decision-maker necessarily have the tacit knowledge of the employee or artisan, but none-the-less these techniques are effective. In this sense as well, the dominance of internalized systems of decision-making suggests the transition away from a more competitive model under capitalism. Just as the capitalist and Board of Directors is accountable to a banking institution, the central planners, as part of an administrative bureaucracy ought to be accountable to the population through a democratic mechanism. In capitalist democracies, elected representatives can replace ministry management if they determine that they mismanage their charge. Hayek completely disregards the latter mechanism in contrast to the hegemonic ideas of the present day, which conflates capitalism and electoral democracy.

Hayek assumes that those who make investment decisions necessarily do so for personal self-interest alone. However, the situation of the CEO contradicts this, since they are an employee of the Board. If they were merely a representative of the Board, managing their collective self-interest, they would be elected within its ranks rather than employed based on their management expertise.

Hayek asserts that since new investment must be approved by the Central Planning Board that the responsibility for errors cannot be determined (Hayek *et al.*, 1953). Again, the parallel of the corporate model is instructive. The CEO might have to go to the Board to approve decisions of a certain scale, but this neither negates the decision-making power of the CEO nor the Board. They are both responsible for operations at a particular scale. They are both accountable to different sets of interests in a vertical direction. Evaluation of responsibility for success or failure must be determined in relation to the context and not using some absolute scale. The determination of investment in neither capitalism nor socialism is based solely on the past performance of the manager but also the projection of the value of the proposal. Certainly, the

reinvestment of profits can be a domain of autonomy for the firm without an appeal to the approval of funders. Calls for investment for project expansion is very common under capitalism and requires the same mechanism of approval as would be operative under a planning authority. Also, with regards to reinvestment, there is no reason why a planning board might not give more investment flexibility to successful firms. In the corporate model, the shareholders at large are accountable to financial institutions in the same way that the entrepreneur is. The financial institution might accept refinancing after a bad performance if the Board can convince them that the project would succeed with this reinvestment and if they can root out the source of mismanagement or identify the exogenous factors that will probabilistically not reoccur. Like Hayek asserts, the ultimate responsibility here will not lie at the level of direct firm management or the CEO, but at the level of the board or planning authority as bureaucratic representatives. The Board will be responsible to their financiers and the planning board will be responsible to representatives of the electorate.

The Problem of Idealism

Hayek asserts that Lange and Taylor's neoclassical socialist response to the critique of the administrative model of Neurath and Barone is a poorer prospect than the original, since it cannot effectively account for a price adjustment. Both the market and the mathematical administrative method have at least the pretense of appealing to a mass method for determining social efficiency in production. They do this by *ex post* or *ex ante* adjustments to price, respectively (Hayek *et al.*, 1953). Lange and Taylor's guess and test method does not have a referent for either, other than relatively blind *ex post* determinations with regards to market clearance. This can be contrasted to a measure of profit or a total system optimum produced by the other 'ideal systems.' The significance of market clearing prices as the key bit of economic

information for planning, in absence of both a competitive market and an effective administrative calculation, might explain the phenomenon of chronic shortage as described by later theorists like Kornai, since this would be the remaining mode of systemic optimization available. The advantage of a consistent system is a single framework of calculation for optima as both Mises and Hayek emphasize. As stated earlier, governments use not only profitability of the industry itself as a projection of the positive impact of the investment but also on the positive externalities that it would produce in relation to other economic factors, including positive impact on other industries. Since the government obtains revenues from a share of overall national revenue, they tend to emphasize the maximizing of GDP. This means that people attempting to operate effectively in the governmental domain should be expected to attempt to maximize total GDP rather than emphasize some particular industry or other. The exception to this would be with regards to strategic investment or regulation that admits to a variable time preference. This attempt should be expected to lead to the nationalization of some sectors rather than an absolutist position of the attempted universalization of market relations.

Lange and Taylor's (1938) model, in contrast to both administrative and market idealists, allows for dialectical change that grows the system of administration and shrinks that of market competition by degrees in the face of a dialectical conflict rather than abolishing one or the other absolutely on the basis of pure political preference. In contrast to these more idealist models, this process reflects the observed conditions of economic institutions better than both capitalist or socialist contexts. However, the limited scope for both the administrative socialized sector and the market economy leads to an incoherence with respect to the totality. For Hayek, this is the inefficiency that is the characteristic of arbitrary authority. But for Lange and all states which subsume some productive processes under state direction, the advantages or utility of this choice

outweighs the disadvantages due to the particularities of the existing sector in relation to the rest of the economy under their indirect management. What seems like an incoherent mix of administrative and market management for Hayek, is the characteristic of all modern states for good reason. If a pure system using the logic of one or the other were achievable for a modern state, its implementation would be an economic advantage. However, it seems no state has really ever attempted either one. Beyond internal political calculus, there must be some reason for this. I suggest, contrary to Hayek's idealist claim, that the pure system is in fact not optimal under real conditions and this must be recognized by state actors if they are to prevent imposing a disaster. It is interesting that Hayek's objections to the imposition of a planning regime by fiat could be understood as congruous with Marx's critique of utopian socialism.

Hayek recognises that giving workers a share of land and capital income would improve their lot, but correctly recognises that mere egalitarian distribution will not necessarily improve the absolute economic productivity of the economy as a whole and the worker's resultant absolute income in contrast to a relative measure against the capitalist (Hayek *et al.*, 1953). There is a conflation, both among Marxists and critics of Marxism, of the proletarianization process, which drives the generalization of economic conditions among the working class, causing them, in their collective self-interest to struggle together for their common lot with an absolute egalitarian ideal to be imposed politically by fiat. The previous observes a leveling of conditions for workers under capitalism in contrast to an artisanal economy. Assuming this process continues, not linearly, but on the basis of dialectical processes, one would expect the zone of common interest to expand gradually overtime. The latter idealist position Marx criticized in his 'Critique of the Gotha Program.' Marx remarked that some sense of absolute equality was impossible since equality in one sense would necessarily violate equality in another.

In observing the results of the utopian Owenite project, mere egalitarian distribution has been found to be insufficient for creating greater collective abundance. Therefore, Marx asserts that socialism must come through the process of capitalist developments and not as an alternative to them (Marx, 2008a). The generalizing of interests by fiat seems more utopian than dialectical. One should recognize that even the history of socialist regimes does not suggest anywhere the achievement of full equality of income. If anything was achieved, it is the public ownership of the means of production. This ownership was ostensibly conducted in the interest of the owners, issues with principal-agent problems aside.

Part 2: Socialist Defense and Counterproposals

A Neoclassical Socialist Rebuttal: The Arguments of Oskar Lange and Fred Taylor

The Advantages of a Socialist Economy

As mentioned earlier, Oskar Lange and Fred Taylor, in their 1938 book *On the Economic Theory of Socialism* respond to Mises' critique in neoclassical terms. They suggest that the socialist economy would be superior since equilibrium prices could be reached in a shorter series of trials (or iterations) than a competitive market. These trials would not be calculated in an integrated totality, like in a Neurath's *in-kind* model or Barone's calculated model. Rather, they would be experimental adjustments, which planners would respond to based on *ex post* feedback like a capitalist firm would. This method, they suggested could create Pareto efficiency and economic equilibrium (Lange & Taylor, 1938). This trial-and-error process is inspired by the theoretical Walrasian auctioneer process that produces equilibrium prices through what Walras referred to as *tatonnement* (Walras, 2014).

Lange and Taylor's method of planning through price manipulation differs significantly from the material balance method employed in the Soviet Union or their use of input-output tables. Material balances were calculated requirements in physical units, in a similar way to Neurath's suggested model. Input-output tables are an examination of the more macro scale requirements of industrial production at an intersectoral level, without the degree of specificity of the particularities of each individual output.

Lange argue that a main feature of their proposed socialist economic model would be a Central Planning Board (CPB). He conceives the CPB as doing planning in collaboration with regional and local planning boards. The role of the CPB would be to: 1) coordinate plans and data of subordinate boards and 2) suggest a plan for the economy as a whole after incorporating the latter (Lange & Taylor, 1938). The CPB could theoretically consider a greater number of

factors than entrepreneurs can since they would have access to a greater quantum of knowledge. This, according to Lange and Taylor (1938) gives them a competitive edge over small firms in terms of ability to calculate, thereby mitigating social waste. This would include not only pure production factors but also health and safety and other more social statistics. This type of planning, in terms of regulation of social externalities such as environmental pollution and labour safety standards are commonly imposed by governments outside the sphere of publicly owned enterprises by force of law. These institutions, however, set general baselines for economic conditions such as maximums for worker exposure, labour time, equipment quality and minimum compensation rates. They do not calculate how much a marginal increase in risk or damage is justified by a marginal increase in productivity. This is a perverse calculus which is done by the firm itself and is calculated in terms of such factors as the potential cost of legal settlements or fines against increases in revenue or cost savings. Although generally distasteful, if this level of policy determination is administered at the level of transparent, democratically accountable public policy rather than private discussions among owners of enterprises, it is more likely to be given greater social licence. Also, the motivation for firms to protect their methods and data would disappear under this system giving wider access to knowledge of superior techniques for a greater proportion of the economy. This would allow industry to maximize the knowledge economy to a much greater degree than in the capitalist context.

Lange suggests that although socialists often indicate that this economy will eliminate all waste that is incurred under a capitalist economy, it should not drive to eliminate waste altogether. This is because waste is a by-product of experimentation, whose positive results are never guaranteed. Since experimentation is key to the development of a socialist economy, this waste should be excepted if living standards are to be increased (Lange & Taylor, 1938).

Lange and Taylor (1938) also assert that business cycle fluctuations that plague capitalist economies could be mitigated under socialism, as errors could be localized and corrected more quickly. This could be achieved without the generalization of the resultant shrinkage in general output due to the idleness of production factors. These production factors can be more easily reassigned to other sectors than their origin (Lange & Taylor, 1938). Kornai (1992) and Ellman (2014) dispute this claim and assert that there is an investment cycle in socialist economies as well. However, I assert that the problem these authors identify is more due to the limited capacity of the nominally socialist economy to calculate and plan with sufficient accuracy without requiring constant readjustments.

Lange and Taylor (1938) assert that another advantage of socialist economy is the ability to maximize social welfare with incomes rather than relying on exchange and ownership alone. They justify this in neoclassical terms, suggesting that the income marginal utility curves of individuals could generally be understood as the same under a socialist regime, in contrast to a capitalist one. This could allow for a more effective prioritization of needs to direct investment rather than one that skews prioritization towards the desires of the rich (Lange & Taylor, 1938). Beyond individual income distribution, social efficiency is gained through the provision of public goods. Public goods are, we might say, the redistribution of the social product towards a more generalized utility away from the priorities of those with more individual purchasing power. These allow for a redistributive effect without the direct alteration of individual incomes. It is interesting that under even the most ideologically capitalist modern state, that the social provision for public goods and welfare appropriates a significant portion of social investment. Beyond humanitarian sentiment, this investment can also be justified in economic terms. This suggests a dialectical progression of the growth of public provision and services despite

ideological opposition in principal in many contexts, since it can secure investment value and prevent damages, not only on private property but also on human resources, to put it in stark capitalist terms.

Another advantage of a socialist economy, according the Lange and Taylor (1938), is that it allows for a generalized rate of capital accumulation as opposed to the one based on individual preferences (Lange & Taylor, 1938). In modern mixed economies, some capital is extracted for investment in industries as directed by the state, even if much is also left at the discretion of private owners. As opposed to an absolute change in the form of investment, this is more a matter of proportion.

Lange sees a significant limitation in monopolistic industry in its bureaucratic propensity for conservatism in terms of its slow adoption of new innovations. There is no reason to think that, all else being equal, state firms would not behave similarly. The way that state firms might be different from private ones is that they may be more sensitive to political compulsion. This puts this compulsion in the political realm as opposed to a more straightforwardly economic realm. But if there is a drive for increasing growth and prosperity, then this conservatism can be moved by the pressure of popular will (Lange & Taylor, 1938).

Considerations for Nationalization

Problems of socialist bureaucracy are similar to those experienced under monopoly capitalism. Lange suggests when competition is not economically relevant, there is little motivation for private enterprise to innovate labour-saving devices until invested capital is amortized. It will only do this if the cost savings will be so large that they will offset the capital devaluation. Under competitive conditions, firms must submit to this devaluation if they are to remain competitive. Large firms that are not under significant competitive pressure are able to

attempt to either suppress innovation or maintain the value of old investments. Lange suggests that this conservative drive creates chronic instability under capitalism. Due to their political power, these large firms consistently seek government intervention to inflate the value of their previous investments. If these institutions become a fetter on further development, then they ought to be altered or abolished to serve the cause of more general prosperity. Lange points out that monopolistic firms could be broken up, but this would decrease their scale efficiency. The alternative is governmental control and restrictionism which could, at least potentially, subjugate the firm to the national interest (Lange & Taylor, 1938).

Lange's view might be differentiated from the traditional division between right wing and left-wing socialists. The latter regards rapid nationalization as politically necessary but economically less preferable. Lange suggests that, in fact, gradual nationalization cannot be effective since it would upset the feeling of security of business given the prospect of success leading to government takeover. The prospect of nationalization of an industry could lead to negligence by the business. Therefore, nationalization must occur all at once or not at all, according to Lange (Lange & Taylor, 1938). However, nationalization in mixed economies does not seem to have dissuaded capitalists from competitive behavior. This process of a transition from private to public ownership has been incredibly slow in formally 'capitalist' countries. There have been some alterations to capitalist strategy under these conditions. Baran and Sweezy (1966) did allude to the strategic attempt of big capital to not become an absolute monopoly so as to not be expropriated (Baran & Sweezy, 1966). However, governments are not forever helpless when confronting this kind of collusion. They therefore can still regulate big capital even if it evades formal monopoly. Lange, like other Marxists that view socialism as a mere voluntarist political project, thinks that a quick insurrectionary break will bring about the

dominance of this new form of relations. We could contrast this to a more historical materialist view which views socialism as a burgeoning means of production that will displace the capitalist form. I argue that historical materialism does not rely on such ideological particularism.

Lange also asserts that, so as not to further spook private enterprise, nationalization should not proceed beyond the industries that are initially included as targets of nationalization (Lange & Taylor, 1938). This, however, suggests that only those industries that are at a stage of development, in a single period, make them appropriate for nationalization should be targeted. This means that economic development in the industries that later develop a monopolistic form, making them ripe for state expropriation, will be forever tied to the capitalist mode of production, which is undialectical and regressive. It has a strategic logic in terms of economic governance but is conceived in a form that cannot change. In contrast to his description, both the socialist left strategy of speed due to political expediency and the socialist right strategy of slow progression on the basis of economic appropriateness seem reasonable. These more predominant tendencies have had larger historical roles. The socialist left has been more predominant in revolutionary movements while the socialist right has been more predominant in labour struggles within capitalist regimes. Lange makes the exception that in a crisis, a socialist party might assume power due to an ideological capitalist party's unwillingness to commit to public investment due to its low rate of return (Lange & Taylor, 1938). Reflecting on wartime social measures, the 2008 economic crisis, and even the current COVID-19 crisis in ideologically capitalist states such as the US and UK, many capitalist parties do in fact react to the special circumstances revealed in a crisis with measures that violate their normative framework on public investment. Therefore, the reliance on the rigid ideological fidelity of bourgeois parties to a consistent framework for action so as to be able supersede them politically is overblown in

terms of potential. Most of these parties react opportunistically rather than on the basis of ideological consistency.

Socialism and the Role of Accountability

Both Lange and Taylor (1938) attempt to deproblematize a government coordinated economic order in terms of the possibility to produce a rational economy. Also, they suggest that this kind of structure has more potential for economic accountability to an electorate than a system organized in terms of private interests. They suggest that the presence of private industrial efforts does not promote nor inhibit freedom in itself. The more important factor is the dynamics of the system of accountability and its broadness. Public efforts such as roads or the management of the postal service or electricity grid has not limited freedom but increased it. The more efficient fulfillment of basic needs allows for greater possibility in fulfilling other needs. Lange suggests that in socialised industry, qualification rather than wealth or personal alliances could be the main influence for the determination of an individual's charge (Lange & Taylor, 1938). I dispute this minor point, as I have observed government posts being highly influenced by alliances and the careerist strategizing of management. To its credit, the public sector, as I have observed it in the Canadian federal government, exerts a much greater effort in attempting to combat these influences than the private sector does, due to the greater influence of the public in its calls for more transparent and formal hiring practices that require a much higher degree of public accountability.

Lange suggests that a central planning board should not have greater organizational difficulties than a corporation, which is also run by employees rather than owners. However, the central planning board could have access to a much larger quantity of information, allowing it to make more informed decisions. It also has the advantage of being accountable to bodies that

could represent the public will, at least in principal (Lange & Taylor, 1938). Hayek and Mises seem to assume that planning must always include a dominant autocratic element impervious to popular feedback mechanisms, but this is not necessarily the case. State institutions can be made to have greater popular accountability than private ones, even if this is not always the case.

Income Inequality and Wage Differentials under Socialism

In contrast to many socialist theorists, Lange does recognize some necessity for income inequality as an economic incentive (Lange & Taylor, 1938). If we understand differences in income, not as a mere formalism, but as representative of the differing bargaining power of agents in relation to the economic production process, then changing formal rules is less significant than changing production relations. Since social production under capitalism seeks to eliminate the special position of skilled labour, replacing it with more highly capital intensive, unskilled labour, we can see the greater generalization of a proletarian bargaining position. What might have previously been a skilled role will become increasingly reduced to an unskilled position. This position gains strength to a greater degree through its collective efforts rather than through striking particular bargains for sections of workers. Also, with increased mechanization, individual aptitude and physical qualities become decreasingly significant. All these factors lead to a greater generalization of wages, both between individual workers, on the basis of individual productivity and between different groups of workers, on the basis of their increasingly common bargaining position (Braverman, 1974). A government can attempt to increase development and push towards the greater predominance of social production and thereby the generalization of wages. However, if skilled labour is compensated at the same rate as unskilled labour, there will be minimal incentive to pursue the previous, leading to the necessity of incentives. This was Lenin's realization regarding this issue (Lenin, 1972a). A government or any employer might

have an egalitarian ethos and wish to generalize income absolutely, but this leaves them without a mechanism to incentivise pursuit of labour that they are in greater need of. Therefore, technological development is necessary to make greater income equality possible since technological progress reduces skilled positions to unskilled positions, this differential incentive becomes decreasingly necessary. Lange's recognition of the present necessity of differential income of various economic roles continues to be necessary. However, I assert that as labour becomes more social and proletarianized, this will decreasingly be the case. The mere establishing of income rate by state fiat cannot permanently substitute for real differences in bargaining power which will reveal themselves socially either through a deficit in a particular role or in the institution of a more informal system of privileges. Just because a regime wishes to create the conditions for an egalitarian distribution of income, does not mean that they have the technological knowledge and infrastructure to make this a concrete possibility. In reflecting on previous attempts to impose a system of egalitarian strictures, this resulted in cynicism regarding the large-scale systems that were not worked out to the extent that they would have greater efficiency than the smaller scale and shortage of necessary labour which incentives could fix. Pure empiricists might suggest that this disproves the possibility of more egalitarian structures, but a historical materialist can suggest that the potentiality is in the dialectic of production which developed particular means at an increasing scale over time, even if not linearly. It is the relations that come out of the technology producing dialectic that allow for greater egalitarian relations and not merely seizing of formal state power and the ability to fix a policy direction.

To solve the problem of the relative unpleasantness or disutility of particular forms of work, they suggest more pleasant or desirable work be given a lower wage. This would be understood as more pleasant forms of work becoming accessible to the worker with the user

being charged an opportunity cost like a licence fee (Lange & Taylor, 1938). While wage differentials may be applicable to increased incentivizing of unpleasant work rather than pleasant work, it does not address the issue of compensation for skilled versus unskilled work.

Differential incentives are a large part of why people would be motivated to pursue roles which require more training and expertise, rather than labour that does not require this. Unless there is no calling for these roles, incentives are likely necessary to drive people towards them. Unless we are to read training requirements as a disutility, this would not fit the model. In attempting to motivate people towards labour pools which are lacking, differential remuneration is an effective method of management of human labour capacities. However, this does not mean that the differential cannot be reduced over time. This ignores the role of bargaining power as a prime factor in wage rate determination as well as the progressive deskilling process that is part of development (Braverman, 1974).

Lange's Model: Applications, Limitations, and Possibilities

Comparison the Nordic Models

Lange's model has never been formally attempted in any state. Lange's socialism is a market socialism in a formally democratic state, in contrast to some aspects of the Soviet form. The Soviet Union and other analogous states have offered elections, but only for representatives to a single party. It seems that Lange imagines a traditional multiparty democracy rather than a single party. Due to its underdeveloped context, the major 20th century forms of revolutionary state socialism lacked this more formal democratic character due to insufficient power of the working class in a realpolitik sense. Lange, in his description of limited nationalization necessitated by capitalist overdevelopment, leading politically to greater public accountability to counter the emergent private monopoly power, brings to mind an advanced capitalist state going through a process of expanding its social democracy through state planning. This evokes the

Nordic socialist model. However, this model, in practice, relies less on the centrally calculated efficiency of state projects and more on universal programs provisioned through public investments in sovereign wealth-funds, at least for the citizens. These also rely on the corporatist form of negotiated tripartite compromise, historically characteristic of fascist states rather than worker dominated democracies (Phillips, 2015).

Comparison to the Hungarian ‘New Economic Mechanism’

A calculated experimental state planning model, existing alongside a market economy might be understood as occurring in Hungary during the weakening of the state planning model and the introduction of pro-market reforms titled the ‘New Economic Mechanism.’ This short-lived program was instituted in 1968, but largely curtailed by 1972. It represented a greater emphasis on decentralization and local decision making, rather than a greater reliance on central authority. This system seemed to be more export-oriented than the autarkic emphasis of the Soviet model (Ellman, 2014). It could be supposed that the Hungarian economy had outgrown the need for the autarkic developmentalism of the war communist aspects of the Soviet system and could therefore afford to prefer a system that had a greater export orientation due to the economic advantages of specialization. The scale advantages of an autarky are dwarfed by the productive scale advantages of international production, so appeal to the international market in Ricardian terms can be advantageous economically. However, as South Korean economist Ha Joon Chang (2007) points out, that free trade only becomes advantageous after a period of protectionist development that build-up local specializations. This can be contrasted to an economy that centers raw material exports, which tends to limit the drive for industrial specialization without strong state intervention (Chang, 2007).

Comparison to Chile's Project Cybersyn

Another real-world, though short-lived experiment that might be said to fall broadly under the Lange rubric, is that of Chile's project Cybersyn, also active in the early 1970s. This project also relied on a large conglomeration of state industry in the midst of a market economy. It was based on the attempt to determine the greatest social efficiency for nationalized industries, so that they could overtake their competitors and eventually greater portions of the private sector through calculation and experimentation (Medina, 2006, Cockshott & Cotrell, 1993).

Due to the significant political instability of both the Hungarian and the Chilean forms, we might suggest that these were implemented before the domestic social forces could have been able to maintain or defend them. In both cases, the strong state was soon displaced by one that was aligned with market interests rather than a social orientation. It is clear that in both cases this was strongly influenced by a much larger state actor who could effectively politically dominate these smaller actors. However, the significant leverage created by the alliances formed by domestic and international capital in these contexts suggests that the economy was at a developmental stage where export capitalist orientation could still overwhelm the social state if it is not maintained by coercive power. Many socialists like McNally (1993) and Lebowitz (2012) maintain that if the market is given sufficient space to determine investment, then the market will necessarily dominate the state by economic forces. This relies on the assumption that private firms can always outcompete public ones. If we are to internalize a historical materialist understanding of economic development, then we cannot accept that smaller, more fragmented institutions will always dominate larger ones with greater access to information. The more market directed method will dominate (due to broader socialization of production) when more effective planning methods have yet to be determined or organized and the infrastructure for their effective implementation is unavailable. But this should not be a permanent state of affairs.

In Marxist terms, when capitalist forms of economic organization become a fetter to further increases in efficiency and development, then these can be overtaken by firms responsible to the population rather than a small grouping of formal owners. This suggests that capitalist economic organization had not yet become a fetter in these contexts, since its availability represented a substantial increase in economic efficiency, yielding to its most significant nodal agents a preponderance of political power sufficient to overwhelm other political institutions. In these realpolitik terms, these forms may have been implemented before their time. This would mean that maybe this kind of model may find its place in future developments rather than historic ones.

Lange's model should not be understood as significantly different from the developmental context of capitalist social democracy. However, it should be contrasted to a system based on the growth of the expediency of war communism and the state growth necessitated by the displacement of the feudal order that represents a less accountable administrative system at a lower level of economic development.

Addressing Critiques

The grounds for the objection to Lange's model by Hayek and Mises, as stated above, is more in terms of practicality than in terms of overall freedom. Lange's model in their terms would not be significantly different than the modern capitalist interventionist state.

Lange's model does not require the superior computational power of the system proposed by Barone, which has yet to be demonstrated as feasible to run a modern national economy. Therefore, Lange's model would be deemed as more feasible in advance of this potentiality for superior computational power. However, Hayek and Dobb (2012) suggest that this method lacks the subtle consequentialist chains in the impacts of pricing changes on other prices, including items with differing degrees of marginal price elasticity, that are present in both a market and an administrative calculated model. Hayek suggests that this lack of integration would cause this

method to lack the specificity and nimbleness necessary to locate an equilibrium price in less time than either the administrative *ex ante* model or the capitalist *ex post* model. Even if it had access to a greater quantity of information from all nationalized firms, they would need some relatively consistent method to be able to process it and use it to set prices. It would, however, require significant developments in terms of communications and productive efficiency. Since it is conceived as a movement beyond capitalism, in contrast to an alternative developmental path proposed by a Leninist political model, it requires a significantly technologically developed economic system. Both Sweezy (1949) and Dobb (2012) critique Lange's narrow role for his model's central planning board as merely fixing prices and not directing production based on the estimated social value of such projects.

One can see the basic structural mechanism of social democracy growing under capitalism in Lange's model. The state grows in an economy dominated by private institutions due to the greater efficiency of its system of management. Historically, large states have used input-output tables to manage a complex state sector. However, the input-output method of economic management lacks significant specificity in terms of particularities of the costs of outputs. In place of this it uses general quantities allocated between sectoral units; a much coarser measure. Modern capitalist states use a social-return-on-investment calculation, which helps them maximize the impact of spending on social welfare. But this operates mainly in terms of preventing and mitigating negative social impacts rather than producing superior social goods. Without a more effective system of price determination, Lange's experimental method is likely insufficient to direct a modern economy. This does not mean that many of the other elements of his model could not be put to productive purpose.

As stated above, this system, once established would push against its edges, necessitating greater nationalization. However, Lange takes issue with the expansion of the public sector so as not to scare the private one and engender its mismanagement. This leaves the system with nowhere to go, which will present a problem in the face of continuing capital concentration.

A Marxist Rebuttal: The Arguments of Maurice Dobb

Critique of the Neoclassical frame: purchasing power and utility

Dobb (2012) presents a critique of neo-classical equilibrium theory, targeted particularly at Henry Dickinson (1933), by suggesting that differing equilibria would be produced by different economic models, none having ultimate superiority over any other. Dickinson, attempted, like Lange to defend the prospect of a socialist economy on neo-classical grounds. This anti-equilibrium critique would apply significantly to Lange as well. Dobb (2012) says the neo-classical equilibrium theorists, with their quantitative emphasis try to jettison hedonistic utility and utilitarian welfare from classical economics, but merely make it implicit. He suggests that they turn consumer preferences into a sacred object in a similar fashion to the way that suffrage under political democracy is imbued with a similar quality. However, economic democracy is skewed by a system of unequal voting due to wealth inequalities. If differences in compensation are to be related to differences in relative demand for particular types of labour then this generates a skewing of production towards satisfying needs/wants of labour with more spending power. If there are no differences in compensation, then there is no differential incentive mechanism by which to direct labour (Dobb, 2012).

The Economic Role of Cultural Direction

Dobb (2012) describes the role of the advertiser in directing culture and tastes and wonders why the socialist state would not perform a similar role. He questions the idea that

there is such a thing as a natural rate of interest or savings that a state would need to conform to beyond the interest of their project and the needs of their workers. Similar to Lange, Dobb (2012) asserts that innovation depreciates the value of accumulated fixed capital. Therefore, the pursuit of equality of net marginal yield is undesirable under socialism, since its pursuit would suppress the rate of introducing these innovations so as to preserve the value of historic investment. Dobb suggests that economic conformity to a plan should be superior to market determination due to the more concrete foreseeable ends to the plan which can be considered more thoroughly than when longer-term outcomes are unknown (Dobb, 2012).

Dobb (2012) however points out that the greater stability of a socialist economy may be elusive since the demand for capital is connected to the rate of investment, generating an unstable equilibrium. He asserts, like Hayek, that this could not be controlled by a trial-and-error process. He argues that if investment is low it will be difficult to maintain wage rates and employment levels (Dobb, 2012).

Dobb (2012) highlights the problem of and yet necessity for value judgements in determining which items should be subsidized and taxed in a socialist economy. In terms of administrative allocation with the goal of a welfare maximum, certain needs can be clearly labeled as having lower social priority than others. However, many determinations cannot be clearly differentiated in terms of social prioritization. This presents a significant problem for planners attempting to maximize welfare. In this way, consumer choice is superior to a planner's ranked priorities. However, Dobb (2012) sees these as minor problems and, contrary to the Mises school, does not wish the need for a perfected system to be the enemy of the good (Dobb, 2012). Classification of consumer goods of various kinds within a modern capitalist society, with regard to their taxing or distribution criteria, is virtually universal in all countries. Some commodities

deemed either luxuries or generating some degree of social ills are taxed at a higher rate or are restricted or banned, while those deemed social goods can be subsidized. This is more subtle when planners do not direct production on this basis, but this kind of intervention is virtually ubiquitous. It is clear an absolute ranking of all commodities is impossible on this moral basis, even more so since some objects have multiple functions. Certainly, the prescription of use, beyond the narrower restrictions of social harm prescribed by illegality, would be nearly impossible to enforce and unwieldy to administer. This imperfection does not stop capitalist societies from imposing these systems of ranking in terms of artificially increasing or decreasing costs, so there is no reason to emphasize this as an insurmountable problem for a socialist society.

Dobb (2012) applies the issue of ambiguous ranking, discussed above, to the matter of Mises' critique regarding the pricing of the means of production, suggesting that this degree of inefficiency in money terms is tolerable. Since market value is not a precise mechanism of utility allocation, strict adherence to the most profitable options will also not maximize welfare. Dobb (2012) suggests that a strict adherence to a general model, logically constructed, has a utopian quality and is more characteristic of a generally framed argument, than the confluence of social needs that might characterize general welfare. Dobb (2012) acknowledged that advocates of consumer sovereignty suggest that minoritarian preferences are better served by free choice in a market rather than through the likely majoritarian solution determined by planners. Therefore, like Lange he suggests some role for consumer markets, just not one that is solely determinate of production goals. This mix of logics that are not perfectly applied may not conform to Mises or Hayek's market idealism, but the balancing of these factors seems more reasonable for actual economic administration (Dobb, 2012). Further, I suggest that these mixes of rationality

schemes, rather than a perfect utopian solution in terms of a single mode of value determination, approximates social reality in all societies due to the limitations of all schemas. The idea that consumer preferences rule in a market economy anyway is an oversimplification, since consumers never control the allocation of investment but merely reinforce their preference based on what is available on the market. Through a popular democratic mechanism, preferences that are overlooked by profitability criteria but are desired by the population, can receive significant economic investment.

Dobb (2012) argues that due to limited information and expertise, atomized consumer preferences are not always ideally rational. He also suggests that collective wants are not well represented by consumer market behavior, mainly since these options are not available in a market context. Excluding Veblen goods, value is not necessarily reduced by the increase in distribution so the overall increase in availability of goods should increase general welfare, even in terms of their externalities. With regards to the previous point, Dobb (2012) suggests that when faced with the rejection of the absolute sovereignty of consumer choice, many authors caricature the alternative position as the reflective polarized extremity, a singular value dictator who is able to evaluate the correctness of all desires as the only remaining option (Dobb, 2012).

Dobb (2012) suggests that historical economic development tends to be inhibited by the failure to invest in key industries i.e. transportation, which facilitate the more effective functioning of other industries. States intrude on market dominance here and make the economy more effective, thereby increasing welfare by bypassing consumer demand. Dobb (2012) appeals to the economic strategy of the 'infant industries' argument to reinforce the point that mere consumer choice does not maximize welfare. These kinds of strategies, Dobb (2012) reinforces, require addressing the economy as an organic whole rather than as independent profit-centric

strategies. Therefore, Dobb (2012) argues that key economic decisions should not be left to a decentralized method of economic determination under socialism. This kind of strategic focus requires a quantity of factors generally unavailable to the entrepreneur such as location in relation to other proposed projects like power developments and transportation infrastructure (Dobb, 2012). Rather than being controversial here, Dobb (2012) reinforces the state's role under modern capitalism and politically socialist states alike. Only idealists like Mises and Hayek seem to reject this point. Governments the world over invest in strategic industries that can facilitate their development whether or not the investment, in itself, is profitable. It is generally viewed that this course of action increases welfare despite it not being validated *ex post* through consumer preference.

When simultaneous development projects are planned, neither development can be considered a dependent or independent variable. Since, no 'least-cost locations' can be set without fixing other factors, a coordinated evaluation would be superior. This coordinated solution attempts to maximize the positive externalities of multiple projects in relation to each other and to external social factors while minimizing the negative externalities. Since these are based on projections, they are speculative in the same way that capitalist investments are and therefore suffer from the same deficiencies. Dobb (2012) suggests that it is only within the framework established through planning that consumer direction can have influence over *ex post* decision making (Dobb, 2012).

He argues that the logic of increasing development extends not only the efficiency of production but the number of potential alternatives available to the consumer (Dobb, 2012). The extent to which this is true should be considered. As monopoly increases through capital accumulation, fewer firms produce the commodity that is successful on the market. In the

attempt to capture a greater range of preferences with their products, they generate a broader range of styles or use variations on the basis of similar production equipment and serving a similar market. Here, variety is increased, but as a product of fewer firms.

Underestimation of the Significance of Consumer Direction

Dobb (2012) emphasizes that wants do not stay static over time and are a 'social product' influenced by the availability of commodities (which the consumer likely did not recognize the need for on their own) as well as social standards and customs. Due to the complexities involved in generating economic development, Dobb (2012) doubts the magnitude of marginal adjustments in allocation as economically significant enough to outweigh the emphasis on other factors outside direct profitability criteria (Dobb, 2012). This rationale is justified, however, mainly within particular bounds as has been applied within the context of the economy of the developmental state that wishes to catch-up with the more developed economies. The reason for this is that the models and methods of production that could be applied in those contexts largely already exist and merely need to be imported. Although, due to the low bargaining power of labour against a relatively low GDP, the cost of investment in catch-up development will be significant and will not obey profitability criteria in the short term. The goal is to generate capital accumulation (through a fixed rate of savings) along a path that is largely, though not totally, mapped by the more industrially developed economies. This is only effective to the degree that the end point social conditions are generalizable to the context that it was developed from. The technique of attempting to deduce economic efficiency through this form of abstraction has significant benefits. The state can forgo a substantial portion of the experimentation process involved in developing these methods from scratch at smaller scales, skipping instead to larger scale production since the end goal has been determined. This becomes a more significant

problem only when the technological vanguard has been reached and new methods have to be checked against other allocation criteria where a model has not been envisioned already.

Accounting schemes like the material balance methods and input-output tables can be used to manage the process and even generate some cost savings. But some criteria will eventually be required to increase the social value of investment beyond the known vision of present economic organization and allocation that will increase efficiency. This method will have to eventually have some experimental economic criteria beyond a concrete vision, even if it is imperfect. This both serves to legitimize the value of the Soviet Five-Year Plans, but also foresees their future limitations and need for more effective selection criteria in future. The most advantageous system of economic organization cannot be viewed transhistorically. Dobb glosses over this since an empirical view would suggest that these rapid industrial developments are extremely effective for a developing state. Therefore, he downplays the value of a semi-coherent quantitative selection criteria, since methods look obvious after their rationale has been already understood. Certainly, Dobb (2012) recognizes that the social ills stemming from the guarding of more effective production techniques under capitalism would lead to the slowing of growth. This is remedied under monopolistic 'socialist' conditions, but this does not allow for the transcendence of a quantitative criteria for evaluation with the degree of subtlety present in the aggregation of marginal market measurements.

Overreliance on Technical Criteria

Dobb (2012) argues that if fixed technical coefficients are known and consumption is highly complementary, consumer choice becomes extremely limited. This suggests that efficient outcomes do not require much input from the consumer (Dobb, 2012). Dobb (2012) might be correct that outcomes are based on technical factors. However, he assumes that this technical

efficiency is shaped by these factors alone and not as against market prices, which represents relative abundance and demand for the combination of factors related to commodity production. Without formal standard measures, it would be difficult to know which of the various alternatives should be chosen. This measure would not necessarily be the only factor to consider, but it would likely be a major one. Others tend to be regulatory criteria. This might suggest that the consumer matters less and supply-demand interrelationships of leading branches of heavy industry matter more (Dobb, 2012). But this does not lessen the need for an integrated method of calculating price by administrative calculation and / or by market determinations, in so far as this process cannot be merely abstracted from elsewhere. Certainly, as Dobb (2012) suggests, mass distribution is facilitated by the cost reducing effects of mass production (Dobb, 2012), but the way that the production is arranged depends on a relative price calculation.

Application of Dobb's critique

Ultimately Dobb (2012) rejects the conception of a simple formula, fully market based or administrative. He suggests that many key economic decisions must come down to a determination by a central government (Dobb, 2012). This is not a controversial statement for either capitalist or socialist economies. Unlike other idealist forms, this is a very dialectical view. Capitalist economies, due to the greater conflict between more proximate owners, require a larger, stronger, more interventionist state than feudal economies did to adjudicate their conflicts and provide an infrastructure for their smooth functioning. Part of this effort in a modern context is government investment in transportation and heavy industry for the benefit of the economies of other industrial sectors. Since government power relies on the size of the tax base, maximizing the economy as a whole is in its institutional interest. Therefore, this investment can actually improve the surplus available rather than being a net cost. This isn't necessarily based on the

direct income generated from the project itself, or else it might be done already by the private sector, but by its positive externalities on the economy as a base for taxable income. Dobb is correct, contrary to Mises' and Hayek's claim, since this can't be settled on the market directly. The state acts as a facilitator and mediator not a market actor directly or as a neutral spectator. This is true in all modern contexts, while Mises' and Hayek's vision of an absolute model of market directed determinations has never existed and likely could not exist. In this same sense, Dobb argues that the state taking charge of certain decisions can be determined as generally conducive to welfare. This can include providing certain key necessities for free or at a significant subsidy and increasing the prices or restricting items with significant negative externalities (Dobb, 2012). This rationale can be understood as similar to public investment in key industries, since the economic potential of individuals can be similarly facilitated through public investment.

Like Lange and Taylor, Dobb (2012) recommends using *ex post* measures as a key indicator to optimize the supplies of consumer goods. However, he warns against treating this as a mere automatic mechanism as opposed to an important factor for consideration modified by other considerations. This view is taken up later by Devine as well as Cockshott and Cotrell.

Dobb (2012) suggests that planners weigh various factors including, but not limited to, supply and demand when deciding to approve expansion of productive capacity in particular industries against alternative allocation of these factors (Dobb, 2012). This type of planning reflects Stafford Beer's (1993) later approach in designing Project CyberSyn in Chile which did not attempt to depend on single indicators (Medina, 2006). Ellman (2014) would likely comment here, in historical retrospect in the case of the Soviet Union, that left to state managers, an overrepresentation of their priorities seemed to have produced an overinvestment in military

armaments (Ellman, 2014). However, due to the severity of the external military threat throughout Soviet history, it is unclear what exactly the appropriate level of investment would have been relative to their economic output.

Dobb (2012) suggests that an economist's conception of equilibrium as well as growth rate might be different from the balance of development that would be advantageous to a developing economy in the modern context (Dobb, 2012). Like in the case of the strategic investment in and protectionism regarding infant industries, government intervention can have a net positive effect on economic development as well as individual consumer satisfaction. Time preference will be conceptualized differently when observing the economy as a whole as compared to the perspective of an atomized worker or owner. The rate of capital accumulation may not be the preference of the individual worker in the short-term but might be what they prefer in the longer term under aggregated conditions. Dobb (2012) emphasizes the developing economy of the Soviet Union as a prime example. Strong state developmentalism has been a successful 20th century approach to 'catching up' to the developed capitalist world. It relies on the importation of successful organizational and technological models so that local organic methods do not need to be innovated and struggled through from scratch. If this capitalist experimentation process were to be allowed to develop, it might be better adapted to the local economic context, but the rate of growth in the living standard would be slowed, and significant investment would be wasted in failed attempts. These administrative methods are effective so long as they don't actually have to evaluate process efficiency of new methods. These economies might suffer from a less nuanced and precise form of investment allocation, but in the context of its application, this has been demonstrated to be advantageous. This, however, does not mean that this approach would be beneficial to all contexts. What is a salient point, is that government

intervention in the economy can have some significantly beneficial effects. Although this is controversial to Mises and Hayek, it is literally the consensus of all modern governments and does not imply some necessary radical change.

The Arguments of Paul Sweezy

Paul Sweezy, an American Marxist economist, also weighed into the debate in his book *Socialism* published in 1949. Sweezy (1949) contended that much of what Mises and Hayek argued against, were the more experimental utopian conceptions of socialism (as a pure administrative system) that did away with money and prices altogether rather than a more practical regime of economic management. Sweezy (1949) suggests that this was not an attack on socialism in general. Rather, it was a theoretical critique associated with a transhistoricization of the phase of war communism. He argues that Mises provided no concrete evidence that an absence of private ownership of the means of production translates into an ineffective pricing mechanism. Sweezy (1949) referred to Taylor and Lange's (1938) model of a free market in consumer goods and price adjustment by trial and error as the most significant practicable model (Sweezy, 1949). This, however, ignores Hayek's salient critique that all price adjustments will filter through the economy as a chain reaction, since they alter the relative prices of production of different factors. The approach to adjusting single prices centrally lacks the coherence of either a market or a central calculation. This is why Hayek concentrates on the practicality of the central calculation approach, since the limitations of a central trial and error process are more obvious (Hayek *et al.*, 1953). The practicality argument for central calculation is an important critique for the early 20th century, but this critique becomes decreasingly meaningful as processing power increases.

Section Conclusion

Both sides claim victory in the socialist calculation debate. Although my ideological commitments fall towards the socialist side of the arguments put forward, I think there were some salient points one can draw on from both sides. With regards to the Austrians, Mises and Hayek made strong points regarding the need for an effective system of calculation, either administrative or market based. They suggest an administrative system is computationally beyond the capabilities of the human agents (without the aid of supercomputers that did not yet exist). With regards to the socialist side of the argument, literally all modern states engage in some form of intervention and economic planning. The idea that this ‘impurity’ in the system would somehow pollute the market is just idealist dogmatism. Their idealism in pursuit of the social relations that did not have this intervention is a regressive pursuit of universalizing the very quintessentially American yeoman ideal that cannot recognise the reality of expansive capital concentration.

Interestingly, the neoliberal era, starting a significant time after these debates, could be said to be a synthesis of these ideas. It is a political process of conscious intentional state planning and intervention for the purpose of deliberately facilitating market processes which would otherwise not be possible (i.e. systems of intellectual property enforcement). This acknowledges the state as a necessary economic planner in contravention of the libertarian position. But it also sees market exchange as a useful rational calculator, in contravention to the advocates of a purely administrative system of allocation whether through *ex ante* central calculation or *ex post* trial and error. Aborted experiments in Chile aside, computed efforts at central calculation have not yet been experimented with at a scale necessary to justify their adoption. The substantial requirements of data centralization from significant subsections of the

productive system and the requirements of major computational resources make more casual attempts at this relatively insurmountable.

What went unstated or generally unappreciated, was the availability of economic production techniques that were innovated and refined through capitalist processes to be merely imported into socialist states. This allowed them to circumvent the long and arduous process of generating production techniques more adapted to the price signals indigenous to their locality. This method allowed socialist states to grow their economies significantly until they might reach a limit where they had to innovate productive processes on their own. At this point, they begin to approach a vanguard of production technique that is more conscious of the efficiency of resource allocation. There is overwhelming pressure to use a method with greater allocative specificity than was possible to achieve through the use of a system of material balances.

Section IV: Late 20th Century critiques

Introduction

There were some key socialist and non-socialist liberals who critiqued the economic models of the socialist countries and used these critiques to generally dismiss the desirability of a socialist economic system in contrast to welfare state or relatively free-market capitalism. Some notable critics include Alec Nove, Diane Elson, Robin Blackburn, Janus Kornai and Michael Ellman. Being idealists, they seem to not appreciate that differing developmental contexts might benefit from different systems of governance and allocation. In contrast to the previous cycle of debate, this round reflects on the extensive experience of the socialist economies in practice rather than theory. However, these theorists leave aside the question of whether these regimes really represented what Marx referred to in his discussions of socialism and take their Marxian socialist identity at face-value. These ‘really-existing’ forms are closer to a utopian socialism established by fiat, despite Marxist pretensions, through military dictatorship rather than a socialism established through the dialectical progression of class conflict. Although this might suggest a Bernsteinian line, implying an evolutionary transition to socialism through capitalist development, my argument is that class power is more connected to developmental structure than to ideological commitment emphasized by the Leninist line, which advocates a more directed revolutionary approach. The historical socialist command economies had certain strategic developmentalist economic advantages over others with weaker states, but the reasons for their flaws were not clearly understood by either its critics or its defenders.

Many socialists disenchanted with the Soviet system critiqued this system without situating it in its context of economic development and instead as the preconditions

approximating an ideal final form. Some proposed new economic models that were meant to deal with some of its short comings as they saw them. This was usually done in a utopian manner.

A Critique of Historical Record of Socialist Economies: The Arguments of Michael Ellman

Michael Ellman, a British economist, first published his detailed analysis of socialist economics in 1979 in his text *Socialist Planning* though he updated it in 1989 and then again in 2014. Ellman observed that the Gosplan, establish in 1921, was significantly altered in 1985-1991 when it was transformed into the ‘Ministry of Economics and Forecasting’ due to the increasing failures of directive economic planning to manage the Soviet economy and later, the Chinese economy as well. He declared that socialist planning had therefore come to an end and that this method had been discredited (Ellman, 2014).

Revolutionary Socialism and Backwards Economies

Ellman (2014) described how the initial economic plan of the Soviet Union was poorly formulated by Lenin and the All-Russian Central Executive committee. They had an intention to replace the market with planning but did not have a clear conception of how to go about achieving this on a country-wide scale. Initially they attempted to maximize the centralization of economic production and draw up a unified economic plan. The goal was to avoid destructive market fluctuations and the waste produced by competition through the intentional coordination of the entire system of production within the national boundary. This was to be achieved through a system of accounting and calculation (Ellman, 2014).

Ellman (2014) points out that Lenin particularly emphasizes copying successful methods from the advanced capitalist economies to employ in the more backward Soviet context (Ellman, 2014).

Unlike Nove (2003) and Kornai (1992), Ellman (2014) appreciates the significance of the ‘catch-up’ developmentalist economic drive of the revolutionary socialist countries such as the

USSR and China. He correctly points out that Marx had expected the most advanced economies to turn to revolutionary socialism, yet the main countries that took up the mantle of revolutionary socialism were relatively backward economies. He also points out that Marx suggested that backwards countries could advance economically through the ‘dictatorship of the proletariat.’ Ellman, however, concludes that this dictatorship is only relevant to the backward economies and suggests that the advanced capitalist countries could see no advantage in the jettisoning of the market. He suggests that this is proven by the abandoning of this program by the Eurocommunist parties (Ellman, 2014). Ellman does not recognise the increasing role of economic planning and conscious coordination in more developed economies.

I would counter this point by suggesting that the nature of these ‘socialist revolutions’ are misunderstood. These revolutions overthrew monarchies and instituted modern states in a similar fashion to the French revolution. Although the French revolution is referred to as instituting bourgeois capitalist rule, the process was not so intentional. It underwent various failed theoretical programs and was replaced by others that could more effectively manage the contradictions of French society. What the new planning regime did was massively grow the state to effectively accommodate newly developing capitalist social relations away from a more decentralized feudal form. It instituted urban planning for these purposes. One might see the 20th century revolutions as analogous to this form. Like the imposition of modern urban planning models of the French revolution, these new revolutionary regimes also attempted to use modern models to effectively plan their economies. Different from their predecessors, they could take advantage of more modern methods developed by capitalist industry. They could do this without going through the process of decentralized trial and error as well as the dialectical struggle between workers and capitalists over the share of the surplus that results in a relatively greater

bargaining position for workers over a larger surplus. In the advanced countries, there were no significantly superior models to emulate to the degree that would justify a planning regime beyond the one that developed to manage the welfare state. This kind of regime would be expected to dominate at least to the point that the decentralized model of competitive capitalism proves to be a fetter to further economic advancement. The resultant system dominated by monopoly capital, to maintain democracy and prevent price gouging, requires these industries to be subject to greater quantities of state control. This is not the situation for these revolutionary backward economies and has not yet become the situation for the advanced capitalist economies. Even though these countries were ideologically Marxist, it does not mean that they were in the economic situation to undertake a proletarian seizure of power as a demographically and economically dominant class. The revolutions were taken on behalf of this class by petty-bourgeois revolutionaries who attempted to work on the behalf of the proletariat. But since the class did not possess sufficient strategic leverage due to the context of underdevelopment, they could not hold their leadership to account. Moreover, when the prospects for known industrialization models had been exhausted, the leverage of firm-management became significant to such a degree as to make the central planner irrelevant, since only through a system of calculation could these firms, and therefore the economy as a whole, innovate further. Without an effective centralized method of socialist calculation, which has yet to be devised, these economies had to necessarily rely on market mechanisms due to the lack of viable alternatives. This meant that they had 'caught-up' as much as they could based on available models and needed to shift to a more capitalist form of economic development to advance further. The political rise of capitalist interests, in these contexts, is not merely the effect of an imperialist imposition propping up a comprador capitalist class but relates directly to the real strategic

leverage of this class over the economic process at this stage of development. This does not contradict Marxist theory but in fact reinforces it. Although these regimes claim to be in the socialist stage of economic development, they have yet to reach it in a formal sense. I maintain that socialist prospects develop as the efficacy of capitalist economic management declines due to greater capital accumulation.

Military Investment in Socialist States

Ellman (2014), in his criticism of socialist states spends a great deal of space in condemning the large degree of military investment in economic terms and the problematic organization of collective farms (Ellman, 2014). The proportionally large amount of military investment is in many ways necessary in these states due to the high degree of external threats. It is difficult to know exactly how much a country under perpetual threat of foreign military invasion should devote to military production. There is really no way to make what Ellman (2014) might deem a proportional allocation to military production in a concrete way since the severity of threats can only be assessed in hindsight. It is difficult to make comparisons between different states as well since the severity of the threat, the advantages and disadvantages of geography and the ability to count on the assistance of allies would be different in each instance altering what might be deemed a legitimate proportion of productive effort. The relative backwardness of their productive capabilities would also require a greater proportional devotion of effort than if this was in the context of more advanced methods. Due to the requirements of military production as well as a plan to accumulate productive capital to advance standards of living in the longer run, the production of consumer goods and services was neglected.

Even if internal threats are overstated, there is a great deal of historical evidence for this emphasis on defending against external threats. What goes unrecognised with regards to analysis

of Soviet military investment, is that it required significant military industrial commitment to confront the Nazi regime in a more significant fashion than all other states at the time, as well as confront constant threats from the primary post war economic vanguard of the United States. However, there is an economic element to this process that does transcend historical context, but this has more to do with political developments that seem to coincide with the growth of the state as an economic institution and the growth of capitalist driven developments. Both in the US and Britain much of the early economic growth of these capitalist powers was invested in strengthening the state and specifically the military as an economic actor. The US remains the largest investor in its military when compared to many of the next leading states (Tian *et al.*, 2019). At least initially, any state that is reconceived through a military conflict and is reorganized through a process akin to ‘war communism’ will result in an outcome that grows the economic domain of the military, due to its relative importance at the time. This applies as much for revolutionary Russia and China as it would for revolutionary France and the USA proximate to the time of their founding. Comparing contemporary economic structures, in terms of their relative sectoral investments, is improper due to their being in altogether different stages of development, political context aside. This earlier stage, in the context of both emergent ‘capitalist’ and ‘socialist’ political regimes, seems to require massive state growth.

Bourgeois economists often deceptively compare particular economic elements at very different developmental stages. Ha Joon Chang (2007) draws attention to this kind of deception in his book *Bad Samaritans* with regards to free trade and how successful economies often undergo a long protectionist period, building infant industries before imposing a free trade regime when they have greater power in relation to global trade. Similarly, the proportion of military investment might also differ in different developmental contexts.

Beyond the economic disadvantages of overinvestment in military directed production, there are also some advantages. Due to its insulation from market constraint, the military, like the state in general can invest in research with a longer time preference than would be sustainable under the discretion of private funders. As a result, the military has been able to produce innovations in computing and avionics that would have likely taken the private sector much longer to produce without sustained state funding (Nobel, 1986). The socialist command economies did sustain significant scientific qualitative innovation through research funded by the state. However, efficient methods of commodity production, in contrast to novel technological achievement would be difficult to assess within such a system, so its lack of innovative capacity in this regard would be significant, as Ellman (2014) notes.

In the transition from the more socially totalizing (though territorially more fragmented) household-based economies of the feudal and slave types, capitalist production relations require a stronger administrator and mediator to manage their conflicts and plan space to avoid them to a much larger degree than the previous forms of dominant ownership where economic and social life are more integrated. This is because, for the most part, capitalists do not lay claim to the entire social lives of their employees, they only formally lay claim to their bodies during the working day. The greater territorial differentiation of ownership of economic domains in the urban environment necessarily requires a greater role for the state as economic planner. This would be differentiated from a more feudal economy centered around the manor, where there is no formalized differentiation between working and leisure time since the domain of the workplace is the same as the domain of social infrastructure and the home. It should be noted that the domestic economy has not been eliminated or transformed into a mere vestigial cultural role but has declined in its economic significance relative to the institution of wage labour as

modernity has become more entrenched. Beyond the emerging capitalist state's necessary role in its legal structure and its urban planning and social service role, military coercion is another means by which its power and priorities are imposed. In addition to the role of greater military investment in the transition out of feudalism, larger military investment in absolute terms is required to protect the greater investment in territorial infrastructure, the protection of shipping vessels, as well as state control of ports in a modern capitalist regime.

In the context of monopoly capitalist developments, Baran and Sweezy (1966) discuss how many other social outlets for economic surplus are insufficient compared to the prospect of military production (Baran & Sweezy, 1966). Lenin also discussed how imperialist conflict is rooted in the surplus of monopoly capital in search of new markets to offset a falling rate of profit that is a natural consequence of improving technological efficiency. Military power is necessary for defending the domestic market against this imposition by foreign monopoly capital and also for potentially imposing domestic monopolies on other regions to effectively dispose of domestic surpluses (Lenin, 1999). This kind of investment does not truly distinguish 'really existing socialist states' from their capitalist counterparts when understood in a stagist perspective and in the context of the degree of threat imposed from the outside.

Farm Collectivization in Socialist States

With regards to Ellman's (2014) critique of the collective farm, it seems that the revolutionary socialist states made an error in their expectation of the agricultural collective being a more advanced form of economic organization that would increase efficiency. Although Marxists are correct about the trajectory of agricultural labour: 1) under capitalism agricultural land increases per firm and ownership rate decreases displacing agricultural labour as the capital requirements of the current level of efficient production increase over time. 2) The overall labour

force in agriculture declines absolutely and the proportion of labour done by the owners declines over time (though not at the rate one might expect when compared to urban industry). Where they are wrong is the degree to which full time labour (rather than seasonal supplements) is required for efficient agricultural production with the addition of modern equipment and methods.

The collective farm, like the soviet, is a utopian organizational form, in that it is theorized as both productively and socially progressive without concrete historical evidence. Both of these forms were abandoned when found to be inefficient in production. Marxists, however, were not wrong in their broad theoretical trajectory of high productivity developmental forms of economic organization in terms of capital concentration as well as larger scale and an increase in the relative proportional employment of unskilled labour. However, the ideal of more directly democratic forms of workplace-centered self-management have not, as yet, been favoured by the competitive pressures of capitalist developments in contrast to the corporate form.

Unlike the form of agricultural organization eventually favoured by big capital, this form is not specifically informed by the trial and error process with the pricing feed-back mechanism alluded to by Mises and Hayek. What it has in common with the forms that have been winning out in capitalism is the capital intensity as well as large scale and greater proportion of hired low skill labour. Under a capitalist system of production, there may be many organizational forms experimented with that may have these elements. Due to competitive pressure, unsuccessful forms are weeded out, leaving the ones that possess these requisite qualities, but they are unique organizationally in other ways that are difficult to predetermine on a purely theoretical basis. It is difficult to anticipate what this exact form would be without experimentation, even if they are theoretically correct about the trajectory of the broad traits of the developmental trajectory. Most

commonly, revolutionary socialist states merely copied forms from developed capitalist economies (Ellman, 2014).

However, what Ellman (2014) fails to appreciate is that these countries may have instituted the collective farm for another reason that transcends the logic of pure organizational efficiency. Organizational rationales are not necessarily exclusively a solution to the single social predicament of insufficient productive efficiency internal to the firm itself. In this case, I would suggest that the crisis produced by the trajectory of the flows of available labour, in the context of rural capital concentration must be considered for this approach to be understood.

Ellman (2014) often brings up that the prime motivation for the inefficient locations of industry in revolutionary socialist states (and likely in capitalist ones as well) is to be found in military strategic considerations. Another major consideration, for this form of social organization, neglected by Ellman (2014), is the crisis of the inadequacy of the third world megacity in housing displaced rural migrants. The developmental trajectory occurs broadly as follows. Any technological development or local crisis in the agricultural sector concentrates ownership and displaces agricultural labourers. Poorer economies under socialist control are unable to keep up with the flood of rural migrants to the city, in terms of providing adequate housing and infrastructure, and attempt to delay this flow by holding back migration through the internal passport system. Since these economies lacked the absorptive capacity to integrate this surplus labour into efficient capital-intensive production, they are allocated to the relatively inefficient activity of the collective farm. This form gives them time to develop the urban infrastructure required to adequately integrate rural migrants into the urban environment at a living standard that allows for their more effective use in the industrial economy. Other than the decreased cost of building up alternative centers, a rationale advocated by Mingione (1987),

holding the rural population back would be a way to hold back urban pauperization. Holding more labour back than would be efficient in rural areas in collective agriculture could achieve this end. Although industrialization is a process that involves massive displacement and casualties, it is unknown if this process, which does in later periods lead to increased living standards, can be achieved without this. In the precursors to the historical European capitalist states, the enclosure movement also achieved this end (Mingione, 1987, Marx, 2004).

As Karl Polanyi suggested in his classic text, *The Great Transformation*, through the technological developmental process, many people who have adapted their lives to a form of economic activity are made economically irrelevant. This is a demoralizing process that leads to people losing their sense of personal importance and meaning since the ways in which they have trained themselves to contribute are no longer of social utility. Losing this sense of importance and power, leads to a demoralization that causes massive casualties, often through suicide and personal neglect, beyond the point of mere economic immiseration itself. It is a difficult problem to avoid in the long term (Polanyi & MacIver, 1944). It is not a socialist or capitalist problem, *per se* but a quintessential problem of modernity in every context. As Oscar Lange and Fredrick Taylor argued in their comments on transition, if a country attempts to hold back this concentration, for the sake of upholding the lifestyles of the small producers, the entire region is likely to be outcompeted by those regions that do permit capital and ownership concentration. This alternative causes even more extreme immiseration, in an even less productive direction, causing people to desert their farms since they will not be able to survive given the current market price of their chosen commodity, but without the mobilization of competitive capital-intensive production to take its place (Lange & Taylor, 1970).

In the scenario that big capital begins to exert an unfavourable degree of political and social influence, it can be either severely regulated and taxed in the national interest, building the state sector, or preferably nationalized and subject to popular control. Either way this could result in raising the overall living standards. The revolutionary socialist state's attempt to manage the developmental process appears to be an effort, at least in some ways, to limit the severity of its destructiveness by managing the process rather than leaving it to be determined by market forces alone.

There has yet to be evidence to the contrary of industrialization without massive casualties, whether in the capitalist or socialist context. In a way, this process is similar to Polanyi's description of the Speenhamland laws which was a method used to maintain settled rural labour where requirement for effort was seasonal (Polanyi & MacIver, 1944). Fascist societies, though often developmental in the short term, are likely to kill too much of their population in the attempt to reintroduce a slave or semi-feudal form of social organization, to be able to actually sustain increasing industrial capacity in the long term. Beyond the terror that peasants have been subjected to in the centers of historic capitalist development, this destructive industrial developmental process, to their relative advantage, was subsidized by slavery and colonial theft, providing at least the potential to decrease its severity domestically (Mingione, 1987). Fascist economies would also need to rely on these methods, if their project does not ultimately destroy itself internally, resulting in widespread impoverishment due to reduced capacity, or externally, being militarily defeated from the outside. In contrast to the alternatives, the state-mandated collective farm and the internal passport system seems to be a relatively humane stopgap solution.

Problems of the Bureaucratic Market Economy

Ellman (2014) argues that a war economy tamps down on luxury consumption and strengthens the bargaining power of labour, though he does not see this as a positive element. After the period of war communism in the USSR, they instituted a less stringent system called the New Economic Program (NEP) which gave greater autonomy to the peasantry by restoring market relations. However, Ellman (2014) argues that low grain prices fixed under these conditions incentivized peasants to feed grain to animals rather than provide it directly to the population, leading to significant shortage. Ellman (2014) argues that this shortage led to the ending of the NEP and the institution of the Stalinist model and greater agricultural collectivization. He correctly points out that the system he describes as a 'bureaucratic market' primarily involved the dynamics between multiple administrative hierarchies. It also lacked popular control mechanisms either through the democratic electoral system or through the consumer market (Ellman, 2014).

Ellman (2014) also correctly points out that the lack of the pricing of opportunity cost under the administrative economies led to significant waste (Ellman, 2014). Efficient prioritization in resource allocation is difficult to impose with an *ex ante* administrative mechanism. This is because the process of ranking must impose the value assessment of the planners rather than the consumer. Hayek alluded to this as well, since inputting a ranked assessment of alternative combinations of desires for each consumer, based on a shortage of some things over others is an impossible goal. Anticipatory techniques could never be perfected since economic conditions are never fully replicable due to their complexity. However, in analyzing purchasing and browsing behavior, such firms as Amazon can use and refine anticipatory allocation techniques *ex ante* as opposed to merely relying on *ex post*

determinations. This kind of data could be used to anticipate relative priorities based on actual consumer behavior to guide shifts in production which would be superior to merely imposing planner ranking biases (Phillips & Rozworski, 2019).

Ellman (2014) highlights that in the drive to impose techniques that are capital intensive to increase growth and development, capital-saving techniques and small enterprises that could fill gaps where larger scale development was not yet possible, were not employed leading to significant wastage (Ellman, 2014). As Nove (2003) discusses as well, the elimination of these industry scales by fiat, rather than through competition, has a utopian character which decreases the living standard through neglect of these potential opportunities which would increase overall resource efficiency of the economy (Nove, 2003). The rationale for elimination of these forms is too future oriented, based on the attempt to cease the reproduction of class relations. It neglects that in many contexts there is no other viable alternative possible. Ellman (2014) points out that this critique was taken up in Maoist policy, in contrast to the Soviet model. However, he also suggested that this process slowed development due to the use of inferior techniques (Ellman, 2014).

Ellman (2014) argues that, in practice, the administrative economy did not eliminate investment cycles as it intended. He refers to Kornai's theory of cycles caused by investment hunger and investment tension in a socialist economy. These cycles begin with a 'run-up' stage that is the result of investment hunger, where more projects are started than was anticipated in the plan. This is followed by a 'rush' phase that increases the volume of required resources at the expense of consumption or balance of payments. The 'halt' phase occurs as a result, characterized by cutting sharply the rate of new investment approvals and the push to complete projects already begun. In the slowdown phase, the rate of investment falls and investment

allocation is reduced to the benefit of consumption and balance of payments (Ellman, 2014). This investment rebalancing would not be dissimilar from reaction to increasing demand in a capitalist economy. The point he makes is that it would not end the investment cycle. However, this cycle can be more successfully dampened with more effective anticipation of potentialities based in greater data consideration. Just as Amazon can do anticipatory shipping based on expectations from historical data, a project could also plan to accommodate potential contingencies based on similar historical data. Therefore, the cycle should continually dampen over time, at least for methods that remain useful.

Ellman (2014) suggests that due to these fluctuations and the economic result generally differing from the central plan meant that the plan was only one factor in a complex process. Therefore, due to the dynamics of investment tension, Ellman argues that planning was not socially rational (Ellman, 2014). However, the process of planning would necessarily have a trial and error element and should not be so rigid so as to be ineffective and unresponsive to feedback from the process itself. That is, it should not be too taut. This, however, does not invalidate a having a strategic direction. A trial and error process to some degree or other is impossible to avoid, since plans at any scale without perfect foresight cannot comport perfectly with reality. There is a large degree of investment direction in capitalist countries where the state either funds or provides incentives to particular industries. Hayek criticizes this along with communist investment direction as irrational and leading to inflation. This is merely a difference in extent of 1) direction of investment and 2) subject of institutional accountability. In capitalist countries, government investment is directed through the influence of popular projects on one side and through the political power of large combines on the other. Economic planning is inseparable from modern society.

Ellman (2014) described three potential methods of labour planning, namely, administrative, economic, and moral. The first is characterized by hierarchical relationships of command, while the second is characterized by incentive and penalty more common in capitalist markets. Ellman (2014) correctly points out that economic incentives create a more efficient and motivated workforce than mere administrative command. The final method was the reinforcement of the social value of hard work and the institution of its reinforcement. He emphasized that moral incentives were extremely beneficial in motivating the early generations of the revolutionary socialist project, but the motivating power of this method declines with distance from the initiating event. It is therefore not sustainable as a mechanism of economic reinforcement (Ellman, 2014).

Ellman gives a good example of why Lange's guess and test method, based on demand, is a problem in socialist economies. He argues that when price is increased, demand falls and due to the fall in demand, planners further restrict the supply. They do this by either exporting these goods for foreign exchange or slowing production, creating a cascading effect producing further shortage (Ellman, 2014).

Ellman criticizes planning consumption by social norm suggesting that it is an undesirable imposition and the population desires greater flexibility in governing their consumer decisions. He suggested that the unwillingness to raise prices (and merely adjusting production targets) in response to shortages led to the prevalence of queues as well as formal and informal rationing (Ellman, 2014). This is not in dispute and has been more of a problem historically due to inferior methods of anticipatory planning as well as the more antiquated problem of the relative inflexibility of large industrial machinery. Differences in price elasticity could be seen as a barrier to *ex ante* planning, but historical analysis might inform planners with regards to the

price variability of various classes of commodity. There is no reason that this kind of information could not inform calculated price determination, even if it would add to its complexity. This does not invalidate future methods that are increasingly sophisticated.

Conclusion

Ellman (2014) did have significant insights into the problems of socialist planning as it has been historically implemented, such as the lack of popular control mechanisms in the bureaucratic market; significant waste arising from the lack of pricing of opportunity cost and avoidance of gap-filling capital-saving techniques under administrative economies; the limitations of moral incentive mechanisms; and the drawbacks of the trial and error method of pricing. He also did incorporate a more sympathetic view to the growth-centric perspective that characterized these socialist command economies than other critics did. But he failed to adequately appreciate the extent of geopolitical threats and crises facing these states and the efforts required to address them.

[The Proposal for a Minimalist Socialism: The Arguments of Alec Nove](#)

In the early 1980s, Alec Nove, a critic of the traditional Marxist model of socialism, advocated a more minimalist socialism in his book *The Economics of Feasible Socialism*. This text was updated in 1991 and then again in 2003. In internalizing many of the critiques of the Austrians and the problems that arose under the experience of the 20th century socialist regimes, Nove (2003) advocates a much more significant role for the market and profitability in his version of socialism so it resembled capitalist social democracy. Nove (2003) appears to be inspired by Charles Taylor in what is a more anti-consumerist politics rather than an anti-capitalist politics, that sees its motivation in managing the externalities of industrialism. These politics seem to derive from the New post 1968 left and resemble middle-class moralizing resentment of certain economic and social behaviours rather than a sense of generalized social

liberation. He is more motivated by a liberal rejection of Thatcherian conservatism and Milton Freedman's 'Monetarism' than against capitalism *per se*. Nove's efforts seem to be more about containing the cultural and economic power of corporations and maintaining a welfare state rather than changing capitalist economic relations at their core (Nove, 2003). Traditionally, this was viewed as more of a Keynesian rather than a traditionally socialist outlook, but the rightward shift in the politics of the 1980s in the UK and the US had Keynesians labeled as socialists, so the conflation is not of their own doing. In this weaker qualified sense, Nove (2003) is identified as a socialist, but Nove's is more of an appeal to a Keynesian structural solution rather than a proletarian populist one. It is notable however that Nove's attempt to distinguish himself from his neoliberal moment is less total than he realizes, since he internalized much of its political aesthetics into the goals of his program. That is, like the Thatcherite government, he also advocated the use of government to create and manage markets as a central way to manage economic problems. Like most left leaning liberals of the period, he suggests relying on this mechanism to a slightly lesser degree with more welfare state interventions.

Hegelian Thought as Utopian?

Nove (2003) viewed the aim of both the theorists of the socialist states and Marx as utopian due to their belief that they could achieve a conflict free society. He argues that this element is imbedded in all Hegelian thought (Nove, 2003). I disagree, since this form of thought does not project the fixed course of events but theorizes how a particular conflict is likely to be resolved in a synthesis. The synthesis is not assumed to be a utopia, but only a new better context to develop the next form of dialectical conflict. It could be seen as related to a historical process of game theory rather than a fixed course of events.

He suggests that an anticipated generalized solidarity of workers, particularly internationally, is unlikely (Nove, 2003). He is correct that this solidarity only makes sense in response to a common class enemy. However, he does not seem to consider as a possibility a movement against international capital as a potential opposition, but rather dismisses the prospect as an absurd conflation of actors in irreconcilable contexts. The absence of effective international working-class collaboration historically does not rule out this potentiality for the future, as international conditions and class interests increasingly converge in more interconnected supply chains as well as under multinational firms (Dunn, 2009).

Nove (2003) criticizes the practicability of the edict that economic decisions are to be decided 'by the associated producers.' He rightly points out that this eliminates the possibility of particularity in the zone of responsibility leading to many decisions being undertaken by people who are uninformed, uninvested and unaccountable. He does think that many areas of economic decision making can be democratically directed, it is just that this does not include significant areas of micro-economic decision-making (Nove, 2003). This point is not in dispute by any socialists except those who are in favour of a purely administrative, barracks communism.

Nove (2003) emphasizes that there are two types of economic decision-making. The first is hierarchical or administrative, characterized by order taking and receiving and the second is horizontal or market, characterized by mutuality of benefit in exchange. He correctly points out that all real economic systems will involve a combination of both. Management under capitalism takes directives *ex ante* from ownership and *ex post* from the market. He correctly criticizes the theorists who assume that purely democratic structures will direct all decision making, contrary to Mandel (1986) and those who follow from his tradition. This is due to the necessity that someone will have to enforce these decisions and people will have to be incentivized through a

sense of equivalence in exchange (rather than just coercion) to produce more socially desirable ends or engage in work that is relatively more arduous or unpleasant. This appeal to ‘the associated producers’ is rhetoric to mask what this must be in practice, which is some form of state with authority. The authority of the state can be legitimized and directed through a democratic process, but there must be some institution to enforce what they feel is the will of the ‘associated producers.’ This anarcho-syndicalist conception of merely voluntarily associated democratic councils of workers in shops could not possibly come up with a production plan and enforce even a semblance of fidelity (Nove, 2003). Although this is the aim of the model of Albert’s and Hahnel’s (1991) Parecon, in practice it could not possibly work. The number of meetings and negotiated iterations required would prohibitively discourage any new plans, making the process so intensely conservative in a worse way than state command planning production was. In the attempt at greater substantive democracy, the process would sacrifice such a large degree of efficiency that people would abandon it immediately. As Nove suggests, it would be unclear who would be able to enforce discipline if agreements are violated or commitments rebuked.

In a similar fashion to some Marxists like John Roemer and Michael Lebowitz³, Nove describes the empirically observed aspirations of workers under capitalism as reformist rather than revolutionary, seeking fairer wages rather than the abolition of the wage system (Carling, 1986, Lebowitz, 2012, Nove, 2003). Nove suggests that this discredits Marx’s assertion that the worker pursuing their class interest will lead to the overturning of capitalism (Nove, 2003). Of course, in the short term, Nove (2003) is correct, but given the way that dialectics develop over

³ Lebowitz (2012) fetishizes worker particularistic subjectivity in his book *Real Socialism: the conductor and the conducted* in a way that suggests that socialists tail working-class cultural developments in a way that Marx did not.

time, it is not conclusive that this will always be the case. He would take this as evasive. But I think when capitalist governance becomes a fetter to further economic development and effective organization, the working class will demand a change that will surpass its capacity to adapt. This is the gradual growth of the state and of big capital. Nove (2003) argues that workers often have as backward views as anyone else in society and the idea that they are a social vanguard is a fantasy. However, Nove does not recognise the role of the dialectic in this process. As employers seek to undercut wages by bringing in previously excluded groups, workers are confronted with two potential responses of which only one will further their interests. Either they attempt to ask to retain their differential privilege, earned but now undermined, or they can incorporate the excluded groups and retain their bargaining power. The previous case is weak and can be a method the employer can use to justify wage suppression. The latter is a strong position. Therefore, the class interest of the working class, in the long term, depends on their rejection of identitarian particularism, whether or not any individual or group of workers hold these views or not at any particular time. Nove (2003) rejects the conditioning effects of this kind of class interest and thinks that people change temporarily in response to a crisis. This ignores the real conditioning effects of social relations that change people more broadly in ways that are difficult to isolate in historical trends. Though economic relations never do make people saints, they do shape patterns of identification slowly over time, though identification often trails behind economic reality as people cling to the old forms they inherit. The fact that these views are retained proves to Nove (2003) that they are beyond economic forms and are more rooted in culture. But this discounts the process by which these forms decline in significance through forms of economic then social integration. Just because the differentiation of identity has

economic roots does not mean that once this basis is removed that the form disappears. The form retains its coherence through romantic reaction.

Similar to Lange (1938) as well as Cockshott and Cotrell, Nove (2003) argues that the ideal of equal rates of compensation cannot be achieved when certain jobs need greater incentive to attract workers to them. As mentioned earlier, Lange argues for a licencing fee for desirable jobs, but this amounts to the same thing, under minimum wage conditions (Nove, 2003). As the struggle for better wages and working conditions progresses, the differential incentives for work that is particularly undesirable should reduce, given that marginalised groups are not directed towards this work. If the trends of both integration and globalization continue, this should be less of a possibility.

Nove (2003) emphasizes that without a market measure that reflects product quality, a success indicator is lacking. Under the Soviet model, adherence to the production plan was considered primary. However, a plan cannot specify quality, so quantity was more consistent than quality leading to consumer dissatisfaction (Nove, 2003). Although capitalist corporations do get *ex post* feedback, they are also able to enforce product quality internally through a method of quality control. Certainly, when site management is incentivised by raw physical output numbers, there is incentive for them to limit quality control in favour of raw numeric output. However, many corporations deploy quality evaluators accountable to the corporate center rather than to the site itself to remedy the drive to manipulate success statistics. This all can be done *ex ante* rather than waiting for the *ex post* consumer feedback. There is no reason that this could not be done in a planned economy as well.

Nove (2003) argues that due to the lack of success indicators and a preference for ‘gigantomania,’ projects would be rejected politically if they seemed less than ambitious and

small in scale. This would be in contrast to profitability criteria active under capitalism (Nove, 2003). This emphasis echoes Hayek, in his critique of the socialist regimes' trend to prefer to use the most modern technologies in economically backward areas with sufficiently cheap labour availability. That is, the strategy of forward-looking economic planning ignores the current state of prices and bargaining power. It thereby does not produce the most efficient result in the present by attempts to view this as a longer-term investment to increase living standards more rapidly. If the critique only views the present as a barometer, Nove is correct, but the explicit intention of this strategy is to produce a more efficient result in the longer-term. As longer-term projects go, however, the future value is always speculative. It can not be known if the increased potential developed by pre-emptively introducing more modern methods would necessarily produce an inferior result when compared to the reliance on a competitive system dependent on maximum efficiency in the short term. Nove (2003) and Hayek are correct that these investments lack a sufficiently robust *ex post* feedback mechanism to determine if these organizational models are in fact preferable, but this goes with all government projects. The efficacy of feedback is proportional to the strength of the democratic system.

Nove (2003) argues that market price is imperfect and needs to be augmented with 'shadow prices' which incorporates future conditions similar to other more liberal economists (Nove, 2003). One might view this type of more regulatory planning as a softer kind of directive used in most capitalist economies. It attempts to regulate the market activity with regards to unintegrated externalities without directing production in terms of mandating particular activity.

Obstacles to and Drawbacks of Mathematical Planning

Nove (2003) argues that mathematical and programming methods have consistent limitations. The central problem lies in the process of determining what gets minimized or

maximized in the objective function. The problem he identifies is that the goals of an entire economy are too general and diffuse to be optimized. He suggests that this method of cost-plus pricing will result in the maximizing of effort rather than output. He argues that this will occur since it will be difficult to quantify the value of increased leisure time and other non-market factors when workers and consumers cannot make decisions in an atomistic way (Nove, 2003). McNally (1993) argues that leisure time could be set just as any other regulatory criteria. Moreover, this is already a social fact given the enforcement of a maximum working week, beyond which overtime pay is required. There is no reason that a similar system could not be active in a socialist context.

He argues that this criterion would necessarily reflect planner preferences rather than a social aggregate based in consumer preferences. But given sufficient data quality, there is no reason this must be the case. Nove (2003) suggests that without a market mechanism, the planners cannot know the relative urgency of priorities and the Soviet experience suggests that more micro methodological decisions are left to the firm level. He argues that the necessarily massive aggregation ignores the specific requirements for particular outputs at a particular place and time rather than more generally within a production period (Nove, 2003). This merely speaks to the sophistication of the planning program and not planning per se. All this said, he does not dismiss these efforts to optimize particular tasks but discounts their validity in attempting to solve the economy mathematically as a whole (Nove, 2003).

Inefficiency of Socialist Structural Elements

Nove (2003), similar to Ellman (2014), criticizes the bilateral structure of Comecon, the trade coordinating institution for the socialist block, as not sufficiently beneficial. Trade agreements had to be incorporated into the plan not in terms of currency, but as a bilateral barter

transaction in terms of goods transfer. In absence of a good reference for a system of prices, these Comecon countries used capitalist prices for product equivalents on the world market as a sufficient substitute (Nove, 2003). This system's inefficient capability to generate prices severely limits the economies of scale it could operate on the basis of. It therefore limits the potential benefits it could obtain through a trade relationship in that it could evaluate product prices in more quantitatively specific terms. Although socialist states sought to expand the social quality of labour to increase labour efficiency, its autarkical orientation gives a ceiling to its systematic efficiencies. The capitalist international system of production therefore would have a more 'socialized quality' than the nominally socialist economies. Therefore, the capitalist international trade system can potentially benefit from a more specialized division of labour which does not lose efficiency through poor allocation efficiency in trade relationships.

Nove (2003), like Ellman (2014) highlights the inefficiency of eliminating small capitalists and traders (Nove, 2003). In the attempt to shift production to a system that relies solely on firm breadth efficiency, the economic advantage of filling in productive gaps with entrepreneurial innovation and facilitating more productive allocation from externalities of the larger system is lost. Under a capitalist system, even if generally economically dominated by larger firms, these intermediary roles can make the system run at a higher degree of efficiency, even as this role shrinks in its relevance over time.

Nove (2003) refers to Marx in his assertion that economic forms are eliminated only after they have exhausted their potentialities not by state fiat. He asserts that the state was both too big and too small. It was too big in its ability to prevent more spontaneous activity that could create greater social efficiencies and freedoms. It was too small in its inability to sufficiently plan in harmony with supply and demand, to impose effective discipline on labour management, or its

own internal agents (Nove, 2003). This is not in dispute in the context of the early revolutionary socialist regimes, though this does not undercut the efficacy of their method of catch up developmentalism and its beneficial effects on broader economic welfare for a limited but substantial period. In a similar way to Ellman (2014), Nove suggests that agriculture is most efficient in the context of small private holdings (Nove, 2003). However, both misunderstand the purpose of these institutions for modernizing state's attempt to manage infrastructural growth with population needs. Smaller private holdings with few employees are a declining model of agricultural firm management in the capitalist west. Just because this form of agricultural collective was more inefficient does not mean that all possible forms would be. Efficiency of an economic form depends as much on the context of its implementation as the structural planned efficiencies that it solves. In an area of low human density, a subway system may be deemed supremely inefficient while being very efficient in other areas.

Nove (2003), in an agreement with neoclassical socialists like Lange (1938), argues that the maintenance of a regime of prices and consumer markets is useful and necessary in concert with public goods that are politically evaluated through democratic decision making to be granted gratis. He suggests that pricing of certain goods might even be determined as preferable since giving them a state-mandate would eliminate personal autonomy in terms of consumer choice. Nove (2003) argues, like Mises in contrast to Lange, that a market for consumer goods is insufficient and a market for producer goods is necessary as well. He also rejects the advantages of vertical integration, suggesting that this naturally leads to firms producing their own components (Nove, 2003). However, vertical integration in capitalist corporations have not produced such diseconomies, so this is likely due to other factors such as the lack of

dependability of supply chains in the Soviet context. Nove (2003), like Hayek and Mises, assume that diseconomies of scale are a core problem for socialist firms.

Nove's Model: Socialist Democracy with Market Dominance

In a similar way to Devine (1988), Nove (2003) venerates the views of Polish communist Wlodimierz Brus. Brus (1980) emphasized the need for socialist democracy, the need for a market mechanism and the rejection of economic central planning. Nove (2003) also appeals to the economic model of Ota Sik (1968), an economist of the former Czechoslovakia, which he describes as democratic socialism in contrast to the Soviet model. This economic model is a mixed economy which does not emphasise 'profit maximization' but 'profit optimization' within social constraints. Sik (1968) also emphasizes the self-management aspects that are characteristic of the Yugoslav model. Nove (2003) describes these later characteristics, I argue correctly, as insufficiently scalable.

Nove (2003) defends the profit motive as a socially beneficial drive since the surplus need not be appropriated personally by capitalists but could be allocated to some more beneficial ends. When analysing the Hungarian reforms under the 'New Economic Mechanism' (NEM), Nove (2003) observed that transitional models could not be instituted without problems. I argue that this is due to the impossibility of the implementation of utopian schemas that can exist without contradictions. Their contradictions drive them in a particular political direction towards a new synthesis.

When analysing the Yugoslav model, Nove (2003) identified a major flaw in the assumption of universalizing participation in economic decision-making. Since the desire for engagement in higher-level managerial matters was not equally distributed among workers beyond their immediate working conditions, these decisions were left to management by default.

Nove (2003) criticizes the Yugoslav model for its reflexive emphasis on managed ‘over-decentralization.’ By making the economic unit of the firm less responsive to the market mechanism, the sectional firm interest ends up gaining power at the expense of the general welfare; a primary socialist critique of the capitalist model. This leads to a greater emphasis on fragmentation due to the power of local democratic elements as opposed to centralization and harmonization of interests. Nove (2003) also identified the issue of chronic unemployment since workers did not wish to reduce their income share by taking on additional labour (Nove, 2003).

The failure of the Yugoslav model demonstrates why maximizing local governance and autonomy solidifies fragmentation as opposed to integration in either a capitalist or central planned economy. This could be seen as a central critique of many of the more contemporarily proposed socialist theoretical models like Mandel’s from the 1970s as well as the models published in the late 1980s to early 1990s such as Parecon and Devine’s Participatory Planning. These models wish to rebalance economic power towards the economic and political ‘self-determination’ of local units without the dominance of a mediating center, market or administration which can set prices. In the Yugoslav context, this atomisation led to the solidification of regional and ethnic boundaries as well as a resistance to bringing in new labour to a workplace. Driven by a sense that groups, seen in an essentialist way, need to ‘self-determine’ leads to this view that local self-government is superior to broader groupings, rather than merely operating at a different level of granularity. Although led by a politics that is concerned with respecting difference in the name of solidarity, it serves to reify this difference and solidify structures that militate against broader solidarity and greater economies of scale. Both the centralizing forces of capitalism and strong state central planning regimes serve to erode difference by subjecting different people to a common governance regime, transcendent of

ethnic or regional identities (or at least it does it in the long run), as opposed to engineering structures that subject them to direct competition on this basis. As opposed to an effectively centralized regime serving in the common interest, the state fractured into ‘small protected markets’ as Tito referred to it, in response to the attempt to ‘liberalize’. Nove (2003) also quotes Yugoslav economist Branko Horvat suggesting: ‘the whole conception of the basic organisations of associated labour is wrong because it leads to fragmentation and disorganisation of the economy.’ I concur with Nove’s critiques of a maximalist ‘self-determination.’ Rosa Luxemburg in her influential essay “The National Question” identifies the problems with an attempt to maximize so-called national autonomy. She emphasizes both the classed nature of the economic advantage of this pursuit as primarily benefiting the domestic capitalist class over the working class. She also highlights the lack of necessity of political division between those with different ethnic backgrounds, while at the same time emphasizing that larger groupings can have significant economic benefits to the broader populace (Luxemburg, 1976).

Nove (2003) reinforces the slogan “Small is Beautiful” in a few separate instances evoking E. F. Schumacher’s 1973 book of the same title. This text, in common with Nove’s (2003) view, advocates achievable ‘moderate’ aspirations for poor countries in contrast to the road of the rapid developmental state. In this direction he refers to the peasant populist Narodniks and Ivan Illich’s (1995) critique of technological civilization. This appears to proscribe ‘reasonable and moderate’ aspirations to the poor nations, to avoid harsh authoritarian regimes and the maintenance of a more relaxed form of life, avoiding exploitative excesses. However, this ignores that absent these strong regimes, these people are bound to regimes of colonial extraction of raw materials and/or local (semi)feudal excesses. Without a strong state, the ability to maintain this simple idyllic pastoral life is extremely limited, since there is little

force available to keep out those who would upset this dynamic. Therefore, what Nove (2003) advocates here is a romantic reactionary illusion since it ignores the realpolitik that everywhere makes this dynamic one of continued shrinking possibility in the shadow of advancing capitalist imperialism. He believes that the problem is driven by over-inflated consumer demand. That is that they have been infected by a degenerate materialist culture. He seems to assume that if these aspirations were just more reasonable, they would not have to go through the hardships of capitalist industrialization. After chiding the poor for their over inflated aspirations, he then hits on the other reactionary Malthusian hallmark of decrying population growth in these poor countries. He imagines that these states can choose a more relaxed form and that they will be free to do so, contrary to the historical record. This is not unique to Nove and is common in many of the following theorists since it is characteristic of the romantic reactionary turn of the New Left from Adorno and Horkheimer on (Phillips, 2015)

He also rejects the idea that a period of autarky and protectionism, to whatever extent, is beneficial to developing economies, despite the effective history of the infant industry programs, and suggests that continually being open to the world market cannot but be beneficial (Chang, 2007). He does this through the critique of the World Systems school attempting to refute the conception of 'unequal exchange.' Although this is cynical, the centering of exploitation in exchange relations, in contrast to production relations, is a problem with this theory in general. Producers, in-so-far as they are not under a state of coercion, are free to sell to whomever they would like. Nove (2003) is correct that the developed economy need not be the chosen customer, so the idea that free exchange is exploitative is a misnomer. What Nove (2003) ignores is the more direct coercive political manipulations that underly these relationships in a neo-colonial manner which makes these exchanges less than perfectly voluntary. Many states are constantly

under threat of coups directed from more powerful economies if they do not fulfill their expectations in their economic and political forms as well as maintaining a policy privileged trade dynamic with these regimes. He suggests that these previous forms are preferable to Soviet or Chinese models of rapid authoritarian industrialization. He asserts that these regimes likely lead to waste and needless human suffering but does not seem to recognize that the alternative would produce these dynamics as well, but without the benefit of local capital accumulation. He advocates a mixed economy where the commanding heights are nationalized, leaving small scale industry to its own volition, in a similar fashion to the New Economic Program (NEP) period of the early Soviet Union after the cessation of war communism. He correctly points out that making these forms illegal, as opposed to unprofitable through superior competition from a more heavily capitalized sector, is not necessarily strategic or Marxist and neither is the process of forced collectivization (Nove, 2003). I dispute neither of these points.

Nove's (2003) socialist model involves a multiparty democracy in a state where the division of labour and responsibility still exist. In contrast to most of the state socialist models situated in the developing world, his imagined target is a modern industrial economy like the UK, where he resides. This makes his attempt at contrasting this model with those that have been utilized in economies attempting rapid industrialization to be lacking in specificity. In congruency with the post-68 emphasis of leftist thought, Nove emphasizes an attempt to reduce the alienation of labour through the purposeful minimization of firm size and to incorporate producer preferences into production. This model would be a mixed economy with regulated private enterprise. He emphasizes the need for competition to maintain product quality and a policy of greater differential incomes. In contrast to the strategic global efficiency advantage of the free availability of technique, Nove (2003) argues that pricing knowledge is advantageous

and would be of lesser quality if provided *gratis*. However, he retains the paternalist mechanism that employs altruism related to personal volunteerism rather than democratic mandate. Similar to Lange, he suggests that some limit could be set for private enterprise before it would be converted into a more socialized enterprise or co-operative, with compensation to the entrepreneur. He proposes that entrepreneurs would work constructively and would not be absent from the production and management process. But he still maintains a position for private and institutional finance capital so it is unclear how the previous would be maintained. He argues that monopolies should be resisted to maintain competition but being careful to not destroy economies of scale. In his model, the administrative center would be responsible for major investments as well as monitoring of production to avoid waste in terms of redundancy as well as projects that are unsound. They would also be responsible for major infrastructural sectors like electricity and railways and would set regulations domestically and in terms of foreign trade. Through selective investment, they would be able to pick winners in competitive relations (in contrast to parametric incentives) and fix certain prices like agricultural goods to inhibit overproduction. They would also employ anti-trust legislation and foreign trade regulation (Nove, 2003).

Nove (2003) argues that his system is socialist because a) large-scale property would not be owned privately, b) the existence of conscious planning would be accountable to an elected body, c) microeconomic affairs would be centrally managed, d) a would incorporate preference for small scale for managing alienation, e) output and distribution would involve negotiation, f) workers are free to choose their employment, g) income policies and tax structures would be state determined and the state would play a role in removing certain sectors from the market like education and health, h) moral incentives would be used instead of administrative direction, i)

attempts would be made to generate structures that prevent abuse of power and maximize democratic consultation (Nove, 2003). However, despite Nove's claims, what this appears to be is the Keynesian mixed economy of the capitalist west; employing both planning of major investments *ex ante* by the center and privately directing market *ex post* using consumer feedback. Maybe this is a historical materialist notion that at the current stage of development he considers, the most economically efficient socialism is Keynesian capitalism and the more explicit directive planning beyond this developmentalist stage is utopian. This text is explicitly an attack against Marxist socialist notions, but it is clear that Nove's primary political conflict is with the Thatcherite right attempting to erode welfare state Keynesian policies, not the communist left. Like many of the liberals of this type, however, the left is where they train most of their ire as they attempt to present a reasonable aspiration to the right. However, Nove (2003) does give some credence to institutional critiques of the school of public choice theory regarding the self-interest of bureaucrats which really amount to a principle – agent problem, also shared by corporate structures. Nove (2003) imagines that what he suggests is a fundamentally different structure to the 'imperfect and mixed system that now exists.' But what he recommends is exactly this structure with a few alterations of social and economic policy. In other words, he wants the Labour party back in power rather than a more coordinated socialist economic policy.

The Arguments of Diane Elson

The Conflation of Morality and Economic Organization

In the year 1988, Diane Elson, a British economist, sociologist as well as gender and development social scientist, penned a critique titled "Socializing Markets, Not Market Socialism" in the journal *Socialist Register*. In this article she emphasizes, not a particular market socialist project, but the harnessing of market structures in service of socialism as a component of the project. She argues that markets preceded capitalism and that the conflation of

markets and capitalism is ahistorical. She suggests that a socialized market is a market that produces a product which is socially desirable, which does not violate a sense of socialist morality (Elson, 1988). This critique centers the morality of the ends and the process, in contrast to the social relations generated from competition between small producers. That is, market competition results in capital concentration and concentrates power. What she argues is that capitalist economic structure has a legitimate function under certain conditions, which should be understood in a Marxist framework. Structures supported through market relations should not be understood as immoral acts in and of themselves. If we accept the Marxist critique of capitalism as immanent and not temporarily moralistic, this would be clear. A coherently Marxist anti-capitalist critique presents the prospect for a more equitable society but does not imply that present functional economic structures are temporarily without a legitimate function. These structures can not be easily replaced without economic structural change. Elson's (1988) justification of the funding of pro-social not-for-profit projects or 'socialized markets' with private funds does not structurally legitimize these relations just as a charity does not legitimize concentrated wealth. The term 'socialized markets' appears to be an intentional conflation of independent pro-social associations that are not profit driven and socialist economics. Like Nove (2003) and Blackburn (1991), Elson (1988) attempts to legitimize a neoliberal economic structure in static idealist terms. Elson does this through justifications for particular kinds of voluntary associations.

She argues that the forming of collectives that are not rooted in individual human rights generates regimes enforcing a suppression, distortion and exploitation of human capacities. Here she centers conformity to a human rights regime as an idealist sentiment for what a socialist regime ought to look like, in contrast to the historical revolutionary socialist regimes. This

implies that regimes are not formed through the dialectic generated from conflicting interests but rather by the formal institution of ground rules that all must follow.

She suggests that the socialist pursuit of freedom from the influence of market forces at the state or community level has not adequately considered the limitations of small-scale production on one side and the problems of large-scale planning on the other. For instance, Elson suggests that due to the marginality of leftist publications and book sellers, they would not benefit from the necessity of appealing to a planning committee for the granting of resources to be able to produce publications. She argues that markets are not inimical to socialism and that certain regulated market forms are of significant use for socialists and these should not be rejected (Elson, 1988).

Elson's System of Sectoral Classification

Elson presents a four-sector analysis of the present economic order consisting of 1) a private, for profit sector, 2) a public sector, 3) a domestic sector and 4) a private, what amounts to not-for-profit sector which she deems an 'associative sector.' Her interjection concerns the final sector. This sector would include voluntary organizations and charities (Elson, 1988). Her inclusion of the domestic sector is important since it is left out of most economic theory. Its relation to the public and private sector as an economic sector rather than a merely natural solidaristic association is an important feminist intervention to Marxist economic theory. I argue that the economic domain of the domestic sector has declined over time in relation to the first two sectors, which have been growing relatively in broad historical terms. Also, the economic organization of voluntary not-for-profit associations can support political agency and have redistributive effects, though not necessarily towards egalitarianism.

Elson (1988) argues that like the domestic sector, all economic sectors involve a mix of altruistic (or solidaristic) and self-interested motivations (Elson, 1988). I agree that economic form does not translate directly to intention. This point does nothing to discount the social effects of the predominance and ascendancy of particular economic forms.

She argues that these sectors do not and likely cannot maintain a purely independent existence, which is correct (Elson, 1988). She highlights that many organizations and supply-chains cross national boundaries so they could not easily be subject to a central plan. This does provide support for the value of economic structural pluralism. However, this does nothing to refute historical materialism in terms of the relative dominance of particular sectors in particular developmental contexts. In other words, it does not refute the growth of the more heavily socialized spheres of state and corporate organization as well as the shrinkage of the domestic sphere and artisanal production in relative terms. It also does not refute the efficacy of globally dominant economic systems in their ability to erode state autonomy in terms of economic relations.

Elson (1988) suggests that each structure promotes a different value set: the private sector transmits commercial values, the public sector transmits regulatory values, the associative sector transmits solidaristic values and the domestic sector transmits provisioning values. She argues that each of these have positive qualities and negative qualities. She also suggests that these sectors are gendered though not to an equal extent. She contends that the socialist project has historically emphasized the transfer of private corporate ownership of the means of production to corporate ownership under state or worker control, but this ignores the third and fourth sectors. She criticizes socialists for what she finds to be an overemphasis on this corporate form (Elson, 1988). Marx emphasized the dialectical conflict between the capitalist and

proletarian classes, but this did not mean that he thought that these were the only operative classes in society. In this same way, emphasizing the progression between private, for profit economic forms to state forms that organize for the public good does not mean that these are the only economic forms in society; the emphasis is on the change. The other sectors like the other classes likely will not undergo significant change or will decline in terms of their economic significance.

Elson (1988) argues that socialist theorizing has not given sufficient emphasis to the balance of common property rights among individuals, individual property rights and corporate property rights of either private, state or co-operative form. In this, Elson (1988) correctly argues for the advantages of regulations of both selective inclusion and exclusion, but she justifies this in idealist terms contextualized to particular sectors.

Elson argues that strengthening common property provisioning would bolster the domestic and associative sectors and this would fortify gender equality (Elson, 1988). With regards to the former case I think this is untrue, since what is done more efficiently by the private and public sectors due to economies of scale, need not be done in the domestic sphere. Therefore, less labour is necessary in this sector. Also, the access to greater household appliances and social infrastructure from the private or public sector means that fewer people with less training and specialization can perform household duties. This means that a cultural regime emphasizing intra-household labour specialization is less necessary than without this.

She suggests that slowing the rate of growth is somehow connected to a reduction in externalized values like leisure time, health and strength and 'provisioning values.' This implies that greater leisure time would be correlated with a regime where the domestic sphere claimed a higher breadth of responsibility for economic reproduction. However, I dispute this. The greater

access to surplus, bought through the larger scale corporate economies would allow for a greater proportion of time devoted to leisure on a purely voluntary basis, but this should be disentangled from domestic social reproductive work. One might observe that household size, both employed (domestic workers and servants) and voluntarily associated kin, declines in the context of development. With regards to the latter, I agree that greater net access to surplus means that individuals would be able to devote more resources, both human and financial, towards voluntary organizations that are not profit-seeking since time devoted to provisioning needs would be less of a necessity.

Elson (1988) correctly points out that stronger common property rights translates to a relatively weaker ability of the private sector to compel labour through financial need. In congruence with the anti-corporate sentiment of this time period, she advocates a limitation to mergers and acquisitions through market measures, which evokes liberal anti-trust legislation not socialist economic management.

She wishes to remove the regulatory monopoly from the state and yield some of this to the associative sector in terms of research, publication and advocacy. Under capitalist social democracy, this has long been the case. Private regulatory associations do exist but often their regulatory parameters are significantly shaped by narrow financial interests. She wishes to subsume macro-economic organization under a democratically accountable planning commission (Elson, 1988), which also is the case under capitalist social democracy, since elected governments can run on a platform of different economic plans.

Conclusion

In contrast to the more traditional socialist project for nationalization of productive industry, Elson has three recommendations. The first is to strengthen social movements

countering concentrated economic power. The second is to transform markets through ‘social entrepreneurship’ and impose a participatory organizational role in monitoring social standard through advocacy. The third is to build links between realization of human rights, access to common property and exercise of collective rights over corporate property (Elson, 1988). This analysis conflates a socialist project with any sort of mixed economy subject to significant democratic control with an emphasis on egalitarianism. What Elson neglects is the relative power of various interest as they are connected to forms of economic power and organization. In contrast to an economic organizational theory of socialism, this view depends on a moralistic utopian ideal. We might differentiate this from the potential opened up through dialectical developments. In this view, socialism is merely a more advanced thorough form of liberalism in a mixed economy which ignores the relative leverage of social positions and advocates mere plurality as a solution.

Cockshott and Cottrell (1993) critique Elson (1988) along with Nove (2003) for their abandonment of the possibility of central planning. They assert that the shift of the critique of capitalism from the moment of production to the moment of exchange misses Marx’s intervention with regards to Proudhon. They argue that it would retain both the social relations of capitalism as well as its subsequent lack of stability which causes periodic crises. Particularly, they highlight that this model relationship would not address the antagonism between the sellers and purchasers of labour power. They contend that this half-way model would be progressive for a capitalist economy, but regressive for a socialist one (Cockshott & Cottrell, 1993).

Reflections on the Socialist Calculation Debate

In 1991, shortly after the Soviet collapse, British historian Robin Blackburn penned a critique of the traditional model in the *New Left Review* called 'Fin de Siècle: Socialism after the Crash.' In it, he argued that socialism, as Marx described it, was to become possible after significant capitalist development. He refers to Kautsky's qualified skepticism with regards to the potentialities of the Bolshevik project. Blackburn (1991) largely agrees that Mises and Hayek were correct in their assessment of a totalizing planning regime. He also discusses the more contemporarily feasible, but somewhat weaker alternatives to central calculation that were possible, suggested by Mises, such as a syndicalist capitalism and the use of capitalist price equivalents. Blackburn agrees with Mises on the point that the preferential biases towards national or ethnic interests might be engendered by a nationally oriented planning regime. This is contrasted with the more pluralistic economic direction fostered by market forces (Hayek *et al.*, 1935). Blackburn contrasts the Austrian view to the more 'liberal socialists' like Oskar Lange who suggested that market mechanisms be subsumed under state management. Blackburn (1991) describes these theorists as emphasizing workers' councils which would govern each industry on monopolistic lines thus doing away with wasteful competition. He observes that while Lange concedes that simulating market prices would be necessary to avoid market relations, Hayek asserted that this would be insufficient, since it lacked entrepreneurial agency in seizing opportunities. The use of a socialist central bank advancing funds to enterprises lacked central economic criteria to guide funding one project over another and firms could promise unrealistic returns without fear of the consequences, since personal risk would be eliminated. Since all responsibility for investment would lie with the central authority, the entrepreneur could not bear the responsibility for project success or failure (Blackburn, 1991).

Blackburn (1991) argues that competition cannot be meaningful without a real sense of risk. Risk is not dealt with well in socialist economic structures due to the desire to prevent significant hardship. This is addressed by some theorists in the context of managerial incentive design. However, if the risk of absolute loss of wealth rather than loss of a bonus is necessary for sufficient motivation, this is not addressed in any model. Certainly, Hayek argued that the CEO is not merely an employee. Due to significant compensation in stock options, the CEO is also a partial owner who is integrated into the risk of the firm, in contrast to a state corporation manager (Hayek *et al.*, 1935).

Blackburn (1991) also reinforces Hayek's emphasis on the ability of the entrepreneur to be able to act on tacit knowledge, taking advantage of opportunities that planners would not be aware of. To this latter point, it is unclear why these must be independent entrepreneurial initiatives. They could also be managerial initiatives, in search of productivity bonuses, within larger economic units.

Blackburn (1991) argues that in modern economies there is a conflict between individual choice and collective character of the units produced. He suggests that collective decisions lack the coherence of individual choice. However, in opposition to Hayek and Mises, he does not reject the prospect for beneficial collective arrangements (Blackburn, 1991). Blackburn (1991) argues that socialists embrace the ideal of 'individual self-determination,' but retain the view that:

"1) a broad equality of material conditions will be most conducive to generalized self-determination
2) the intimate structures of individuality are constructed out of a social fabric which should consequently be as rich as possible
3) there are common conditions of human existence that require collective attention and sustenance
4) a variety of processes of democratic self-determination are required to achieve such outcomes" (Blackburn, 1991)

He argues that the core of socialism is the drive towards the conscious human control of economic processes with the aim of:

“1) banishing want, 2) furnishing every individual with the material means for self-realization, 3) preventing class division and 4) ensuring a sustainable relationship with the natural environment” (Blackburn, 1991)

He contrasts this socialist view with the more libertarian view of Hayek and Mises that opposes equality, restricts the social scope of individuality, argues that common group problems are self-correcting and therefore no group deliberation is required (Blackburn, 1991).

Socialists involved in the debate argue that social costs are not corrected automatically by market forces but are dealt with best in a conscious, intentional way. Blackburn (1991) suggests that the debate seemed to neglect Neurath’s ecological argument that social costs transferred to future generations are neglected in shallow rationalist profit calculation giving a bias towards short-term time preferences over longer-term social costs (Blackburn, 1991). This is a flawed perspective. The longer time horizon of planning illuminates the possibility of incorporating the foreseeable interests of future generations. Therefore, regulations can be instituted with this perspective in mind, in so far as it can be anticipated.

Blackburn (1991) argues that, even if this point is correct, that Neurath’s insistence on the suppression of the market was not feasible. Further, he argues that liberal socialists did not put forth a model that could be utilized directly. Rather they presented modifications to a market or planned economy since they could not address the need for entrepreneurial agency as advocated by Mises and Hayek (Blackburn, 1991). Neurath saw the market as a flawed mechanism rather than the most advantageous mechanism for economic expansion given the possibilities opened up by the means of production and distribution of his time period. Blackburn (1991) goes on to suggest that these models informed how war economies in Britain were structured during WWII, so it is clear that elements of these structures had utility under the conditions Neurath had predicted. These structures did not have the extreme consequences that Hayek highlighted in his

text *The Road to Serfdom* (Blackburn, 1991). Blackburn (1991), like Elson, misunderstands the actual utility of the command economic model, its rhetorical function aside, which is of catch-up developmentalism rather than economic expansion beyond capitalism. This method necessarily loses its efficacy once catch-up has been achieved. Therefore, its utility must be assessed in terms of historical economic relations and developments and not on the basis of an ideal ahistorical model.

Addressing the Command Economic Model

Blackburn (1991) correctly points out that the failure of the command economic model derives from its inability to assess socially necessary labour time in its determinations of economic efficiency. However, he suggests that due to changes in technique, these problems faced by planners are not algorithmic (Blackburn, 1991). However, it is not that economic determinations are not based on algorithms; it is just that these algorithms do not remain static.

He argues that command economies operate best when there is a single consumer who can reject orders of a substandard quality but is not adapted to a situation where consumers are relatively atomized. Further, he argues that command economies do not drive towards the creation of robust central calculation but towards the cobbled together solutions of informal fixers, who can bend regulations to their will (Blackburn, 1991). It should be noted that the latter is not unique to command economies as bureaucrats who bend regulations to produce desired targets exist in the large capitalist corporations as well. However, this would not negate utility of the central body of either the corporate board or state planners in the coordination of production at a higher level that is invisible to the smaller organizational units. This coordinator role between production processes becomes a position of significant leverage in both command and capitalist systems at a particular stage of development but in a more effectively centralized

system, we would expect this role to become superfluous. Another element of this role in capitalist economies is the retaining of a large legal team for big capital to use to skirt regulations.

Blackburn (1991) argues that the utility of these fixers serves to generate a 'slack' rather than a 'taut' plan, since this would make the organizational goals more achievable. This thereby reduces the drive towards greater efficiency. He also argues that there is insufficient motivation for the reallocations of industrial byproducts to profitable ends in the command model (Blackburn, 1991). However, Dobb (2012) argued that the greater *ex ante* efficiencies can be generated through planning, but the *ex post* efficiencies are generated through market measures. Although both command and market systems use both types of decision making, it seems that the capitalist system is better suited to *ex post* modifications and the command system is better suited to *ex ante* decisions. The issue becomes that after significant industrial establishments have already been created, committed capital is reallocated *ex ante* only at an increasing cost. Therefore, micro-level allocations in the system increase in their economic significance, at least until these are outcompeted by a new innovative organizational scale method which supplants the previous method of organizing production.

Blackburn (1991) argues that the inefficiency of the market in the command model drove firms towards a sort of autarky, since they would attempt to maximize internalized production. This would reduce the advantages of economic scale in specialized tasks that the large organization was constructed to combat, resulting in a decline in the socialization of the production process (Blackburn, 1991). This, as I have argued previously, is not only a limitation at the firm level but mainly a limitation at the state level due to its difficulty in generating

effective valuations for sale internationally. Blackburn (1991) also highlights this point with a poignant insight by Che Guevara in February 1964:

“The starting point is to calculate the socially necessary labour required to produce a given article, but what has been overlooked is the fact that socially necessary labour is an economic and historical concept. Therefore, it changes not only on the local (or national) level but in world terms as well. Continued technological advances, a result of competition in the capitalist world, reduces the expenditure of necessary labour and therefore lowers the value of the product. A closed society can ignore such changes for a certain time, but it would always have to come back to these international relations in order to compare product values. If a given society ignores such changes for a long time without developing new and accurate formulas to replace old ones, it will create internal interrelationships that will shape its own value structure in a way that may be internally consistent but would be in contradiction with the tendencies of more highly developed technology (for example in steel and plastics). This could result in relative reverses of some importance, and, in any case, would produce distortions in the law of value on an international scale, making it impossible to compare economies (Guevara, 1964 in Blackburn, 1991).”

Blackburn (1991) also argues that physical output incentives, reminiscent of Neurath’s physical planning, in the command economies led to perverse behaviours which were contrary to their intentions, producing inefficient results. He argues that while market value neglects social costs and benefits and allocates disproportionate funds towards promotional and managerial remuneration, its method of calculation does effectively reduce production costs. Like Phillips and Rozworski (2019) he emphasizes modern methods developed for capitalist corporate ‘internal markets’ and the Japanese ‘just in time’ production techniques which are better able to translate trends in consumer preferences into plan directives. He suggests that a socialized market might steer production to limit consumption of scarce materials rather than purely maximization of output (Blackburn, 1991). Arguably this is already the case under a capitalist market, but certainly generating disincentives like a carbon tax or other regulatory mechanisms could, in theory, de-emphasize these techniques and drive the search for viable alternatives both within the market sphere and through state directed investment.

Blackburn (1991) argues correctly that command economies were able to produce technological innovation, but lacked the ability to economically innovate, due to the absence of a

coherent economic calculation. Beyond production scales, it lacked the ability to reflect consumer preferences *ex post*. To address the issue of disproportionate wealth captured through entrepreneurship, Blackburn (1991) suggests that there could be a ceiling on the turnover of private firms, after which they must look to public firms for further ownership (Blackburn, 1991).

Blackburn's Recommendations

Like Alec Nove (2003), Diane Elson (1988), Maria Mies (2014) and Eric Olin-Wright (2010) he emphasizes 'green,' 'ethical' businesses and cooperatives as a way forward for socialist development, but this is just moralistic liberalism with Keynesian characteristics. These recommendations seem to look to social models that occupy niche or declining space within the capitalist economy as the way of the future, but these recommendations lack the rigorous treatment that is directed at the command economies. Neither cooperatives nor 'ethical consumption' have any serious prospect of gaining economic dominance due to their structural limitations and niche appeal to moralistic middle-class liberals seeking social capital. Although these sectors have grown significantly in absolute terms since the 1980s, it is unlikely that they have grown significantly in relative terms or could sustain either their growth or their 'moral' commitments. I suggest that this is due to the attempt to replace the goal of an economy directed by the working class with a new-left critique of consumerism and the alienated giantism of corporate structures towards an unattainable moralistic economy of the petty bourgeois scale. That is, it is the neoliberal synthesis of plan and market that it is attempting to address. These writers just theorize different policy programs in their idealist distribution and become completely divorced from class struggle as a motive force of history.

It was noted earlier that the ‘soft budget constraint’ decried in the command economies as being the reason for their failure has reemerged in the capitalist economies as the designation of ‘too big to fail’ except without the public ownership. Like in the command economies, the leverage these large firms have over social production translates into political power yielding a privileged policy and disproportionate direct government support in times of crisis. However, under liberal capitalism, there is no sense that large firms must work in the public interest in exchange for support.

Blackburn (1991) argues that the replacement of outright bankruptcy with takeovers and mergers is a less destructive development under capitalism (Blackburn, 1991). However, if this is the case it is unclear why the possibility of bankruptcy is so important under a command economy, since there is no reason it could not also be subject to management restructuring when underperforming.

In an attempt to decentralize from the central national body, like Mandel (1986) and Elson (1988), Blackburn attempts to advocate for autonomous public bodies with different spheres of accountability to combat the force of absolute centralization (Blackburn, 1991). However, this is in fact what a government in all developed economies already exists to do since they often already possess different spheres of representation and subordinated accountability i.e. municipal, provincial and national as well as agencies with different scopes and mandates.

Blackburn (1991), inspired by Lange (1938), advocates the institution of a ‘social dividend’ and a universal basic income, but it is unclear how this is substantially different from welfare state provisions under capitalist social democracy.

Blackburn (1991) and other market socialists seem to perform an idealist category error since they recommend neoliberal reforms, not only as a transitional phase of capitalist

development, but as an endpoint to a socialist project. If they were to recognise this form in historical materialist rather than idealist terms, this proposition would be acceptable. Seeing these forms as provisional goals is different than seeing them as an endpoint. In a similar way to the expectations of socialists under feudal relations, where the best they can hope to achieve in the short term is (state) capitalist development, the current prospect for a balance between state and market is the best that could be hoped for under existing circumstances given contemporary social forces and technological capacities. This does not mean that this should always be the case. Like most critics of the significant role of the growth of state management and organization in a developmental period, he seems perplexed by the authoritarian nature of South Korea and Taiwan in their economic success even when these are not Marxist. What he appears to miss is the significant efficacy of state managed developmentalism in the period of transition to an economy more effectively dominated by industrial capital rather than by owners of agricultural land. The theoretical idealist capitalism of Mises and Hayek has never existed. Market relations have always been restricted to particular spheres and it would be undesirable and unfeasible to extend it in this manner. The idea that deviations from complete market determination is socialism would deem all historical capitalist societies socialist making the term meaningless in the real world. Although it would be unclear as to what balance deserves the title, this argument appears quite superficial.

Blackburn (1991) does a good job of exposing the conflict between the nationalist focus of socialism and its internationalist ethics. He points to the issue raised by Hayek that socialist schemes are usually only offered to the favoured few (Blackburn, 1991). Bill Dunn (2009), in his work 'Global Political Economy' suggests that during the First World War, nationalist tendencies seemed to win out against internationalism (Dunn, 2009). This divide split the Second

International. Maybe this political divide represented a significant material divide that had yet to be bridged between the first world proletariat and the third world proletariat. I might suggest that as the third world becomes more industrialized, effective organization and solidarity might become more feasible between these groups as the economic position of these groups becomes more similar. Dunn (2009), in a similar way to Elson (1988), suggests that fighting globalization is not a worthy battle for the left since it reinforces the nation against the outer world. He suggests labour needs to be able to compete at the same scale as global capital if it is to remain effective (Dunn, 2009).

To remedy privileging of the interests of the nation, Blackburn (1991) recommends that tariffs and taxes be levied for the development of poorer regions (Blackburn, 1991). This already exists as development aid but is less benevolent in its effects than its rhetoric. It is used as a method of political dominance and coercive manipulation by major donor states.

Blackburn (1991) recommends appealing to democratic institutions both nationally and internationally to monitor negative market externalities. He suggests that international democratic institutions should be weighted to population, not merely based on government representatives, and chosen by lot like jury selection. However, he fears the influence of intimidation on these institutions which is significant when comparing this behaviour to the positions taken at the United Nations (Blackburn, 1991).

Blackburn (1991) concedes that global poverty and global ecological threats seem to require planning on a global scale to address them but rejects the idea of a global command economy as a positive potential solution. He suggests that market regulation and the funding of international research (as opposed to planning) organizations as a superior solution (Blackburn, 1991). Here again, Blackburn argues for the status quo as if it were a unique solution to global

problems. If these mechanisms were in fact adequate, they would have already worked towards solving these problems. Since Blackburn (1991) recognises that they have not, it seems that they are insufficient and require solutions with a greater degree of control.

Blackburn (1991) recommends the imposition of global labour standards to allow for the maintenance of ethics for imports and mandatory labeling (Blackburn, 1991). Although there have been few import restrictions of this type, the 'Fairtrade' movement has attempted to do this on the basis of consumerist volunteerism in contrast to a more robust form of state regulation. As mentioned earlier, all this has achieved is the creation of a market in 'ethical goods' for the niche 'ethical consumer' who is willing and able to pay more for it (Fridell, 2014). For example, in reference to 'Fairtrade' coffee production, Fridell (2014) finds that the Fairtrade designation has only grown to encompass 3% of coffee producers, a marginal impact. The rate of compensation is 5 cents per pound better than the global market price (Fridell, 2014), suggesting that in a similar way to the problems of price setting within Comecon, fair prices are not easy to determine without a reference to some calculated form. Rather than eliminating poverty, it has merely made a select few producers slightly better off while the vast majority remain in relative poverty for the purpose of assuaging the guilt of the privileged (Fridell, 2014). That is, they serve the role of status increasing Veblen-goods for conspicuous consumption in contrast to expanding the bargaining power of labour through improved organization for a more generalized social benefit.

The Arguments of János Kornai

In late 1992, Hungarian economist János Kornai reflected on his own experiences in studying central planning in communist Hungary in the text *The Socialist System: The Political Economy of Communism*. Most centrally, he posited that a command economy structurally produced chronic shortage due to the inadequacies of the pricing system generating

consequences that cannot be easily anticipated. Kornai (1992) primarily differentiated a capitalist from a socialist economy in the fact that the previous was demand-constrained and the latter was supply-constrained. The supply-constrained system necessarily produces shortage due to unforeseen bottlenecks that are the result of a relatively taut plan (Ellman, 2014, Kornai, 1992).

Kornai (1992) seems least sympathetic to the catch-up growth model of socialist economic development of the three more modern theorists previously examined. This might be because he was situated in one of the more developed CMEA countries at the point when its command structure was being outgrown through the effectiveness of the catch-up method.

In harkening back to Hayek's critique of Lange's proposal, the inadequacy of the centralized *ex post* trial and error methods would likely be demonstrated in most of the command economies. The predictable flaw in this method to administer prices by mere experimentation, is the crudeness of the consequences that this would produce in supply chains. Since adjustment would be less automatic, one would expect that both shortage and surpluses would be produced by this system. Contrary to Kornai's position, this is not a characteristic of a planned economy, but a consequence of the absence of an effective method of central calculation. As stated in the above section, the reason catch-up developmentalism via a command structure is effective is due to the availability of significantly more productive methods. As Hayek pointed out, a more efficient production method will not always be the most locally profitable, due to the relative cheapness of labour (Hayek *et al.*, 1953). However, if the goal of the developmental state is not short-term profits, but longer term increases in productive capacity, the implementing of methods that have already been developed elsewhere and have been evaluated through capitalist price competition may be more efficient, even if not precisely adapted to competitive pricing in their particular locality. This cruder push for rapid industrialization allows for significant growth very

quickly. This, however, becomes a problem when new methods need to be developed, not merely in terms of production possibilities (i.e. novel military technologies), but in terms of allocative efficiency not only internal to the process but for the economy as a whole. Therefore, once 'catch-up' has been roughly approached, the requirements for a system of economic calculation that is at least as good as the market becomes necessary, if market pressures and the political dictation by market forces are to be avoided. Significantly, at this point, the pressure to transition to a capitalist mode of production is greatly increased.

Many socialists attribute this phenomenon to mere political vagaries, but I think the more salient factor is the growing inadequacy of the command system in absence of a system of effective internal calculation. Broadly then, the 20th century command economies might be described as not post-capitalist, but pre-capitalist. The access and imperative towards technologies that were a product of capitalist relations allowed them to largely avoid the arduousness of the process of this form of experimentation. However, they could not avoid this imperative after 'catching-up.' It is not capitalism that is necessitated per se. This is only the case if a system of administrative calculation superior to the market is not yet practicable. I argue that this is the reason for their transition to capitalist relations, since they did not have a system of *ex ante* calculation that was superior to the market *ex post* calculation.

Many on the left would say that these societies regress back to capitalist relations, but their economies, before transitioning to command economies, were mostly pre-capitalist, even if they had a small capitalist industrial sector in major cities. Most of their governments, as well, were of a semi or fully feudal form. They establish capitalism after significant state directed development, which, in general, was the case for a capitalist society even if the length of this period is quite variable.

Kornai (1992), after the experience with economic reforms in Hungary, articulated that principles of efficiency can conflict with what he referred to as 'socialist ethics' (Nove, 2003). However, this sense of conflict related more to their technological stage of development than a normative absolute. Marxian socialism is understood as a stage of political / economic development that comes through the exhaustion of the developmental potentialities of capitalism. Moral normativity will not make economically advantageous methods irrelevant. This does not refute a socialist form of economic organization; it only suggests the necessity of its capitalist precursor. Kornai (1992) advocates a free market economy due to his frustration with the economics of communist Hungary, in contrast to Nove's (2003) emphasis on social democracy in a relatively free market system.

Kornai (1992) emphasized the consequences of an over-abundance of job security that made it so that managers could not discipline workers. Their only recourse being to grow employment and material investment in hopes that more bodies and materials would translate into greater productivity. Kornai called this 'investment hunger.' This refers to a situation where there is an almost unlimited desire for investment, in a context where bankruptcy is impossible, and officials benefit from additional investment. Kornai (1992) suggests that this leads to managers underrepresenting costs and overrepresenting benefits (Lebowitz, 2012, Ellman, 2014). In Nitzan's and Bichler's terminology, this is expanding breadth without an increase in depth. Broadly, this corresponds to a process of increasing industrial capacity through proletarianization and socialization of labour alone, without the depth process of increasing efficiency of labour on a per worker basis beyond the bounds of a given industrial organizational model.

He referred to the impossibility of bankruptcy in the socialist economies as 'a soft budget constraint.' He argued that since they could always be bailed out, expansion as a bureaucratic

objective always took primacy even if the firm was inefficient (Ellman, 2014). He also argued that firms lacked effective competition in general so that superior firms and methods were not produced efficiently (Nove, 2003). It is interesting to reflect on the 2008 bailout of large financial institutions in the capitalist economies. It is exactly this mechanism of the 'soft budget constraint,' decried in the command economies, except here directed in the interests of private profit rather than public good since these institutions were deemed 'too big to fail.'

Kornai (1992) described a situation of 'investment tension' in socialist economies. This refers to the excessive construction periods due to chronic shortage of investment goods. This would also have the same cause and would generate an even greater waste of materials. Due to the emphasis on a taut plan, bottlenecks would cause a delay. This meant that a significant number of projects were canceled. Kornai (1992) attributes the full employment model to this attempt at a taut plan. Kornai concludes that socialism is prone to inefficiency and chronic shortage (Ellman, 2014). He argues that once command type socialism is rejected, there is no alternative for a modern economy but Western capitalism (Nove, 2003).

Section Conclusion

Nove's, Kornai's, Elson's, Ellman's and Blackburn's critiques temporally coincide with the global neoliberal shift both in capitalist and command economies to an increasing reliance on marketization. Due to the increasing globalisation of supply chains and its economics of scale advantages, the bargaining power of autarkically-oriented production within nation-states was in the process of significantly weakening due to the competitive pressures presented by the shift of production to lower-waged peripheral economies. This shift caused a decline of the bargaining position of labour in the developed world and consequently their welfare-states. This period is also politically considered an age of neo-colonialism where market pressures (as well as more conscious trade agreements and political interventions) from developed economies largely

dictate the political and economic development policies of the newly independent peripheral economies. In contrast to the more direct method of economic and social domination in a previous period, this shift transitioned to the more indirect method of economic coercion on nominally newly independent states to service the needs of both the production of goods and the outlet of the surplus overproduction centered in the imperial core. Maybe a better term for this process is neo-imperialism due to its greater association with market and supply-chain expansion rather than an emphasis on a more seemingly selective voluntarist political paternalism driven by a chauvinist ideology. In line with Marxist thought where culture tails economy, the latter is merely the rationalization for the previous and not its cause.

This pattern of redistribution of economic development on a global scale is of a similar pattern to the internally planned redistribution of development in modernizing peripheral economies that are undergoing a more conscious developmentalist trajectory (i.e. China and the Soviet-Union). The problem being addressed in developing peripheral economies is the overheating of the productive potential of the mega-city where the infrastructure required to maintain growth cannot keep up with demand, leading to stagnation. This coincides with increasing land concentration in the countryside due to technological innovations which displace former peasants driving them towards cities in search of labour due to the increasing demand for labour in the industrializing economy of the city. However, the development of urban infrastructure increases in costliness as the size of the city expands. The response of this newly modern state is to plan a slowing in the rate of growth of the mega-city where development has been concentrated. It also directs investment towards the development of new productive centers. These new centers lack the significant advantages of proximity to both labour and industrial output of the urban context, but due to the increasing efficiency of transportation infrastructure

and the increasing cost of urban expansion, they can be utilized at significant economic advantage after an initial investment. The slowing of the development of the mega-city and the economy in general, due to temporary decline in scale and proximity advantages, is likely coincided with a stagnation of wages. This can be attributed to a geographically specific decline in labour demand in major industrial centers at the same time as wages are increased in these new centers. The trajectory represents a broadening of proletarianization and a trend towards an equalization of rates of compensation even if the inequality in rates is what drives it in this direction. What is also notable is the attempt to slow the rate of growth of the mega-city required not only the conscious development of new urban areas and the collectivisation of farmland (so that it might hold more people than otherwise), but a reintroduction of an internal passport system to further stall this flow of labour from rural to urban. This emphasis parallels, as well, the increased focus in the neoliberal period on the attempt to stall the flow of labour from peripheral to core economies, at least in part, as an attempt to redistribute development to peripheral areas and prevent the urban core metropole from overheating. On a national scale, the advocacy of stronger border restrictions on labour is often attributed to the influence of an ideologically racist and labour aristocratic chauvinism. This is seen as an attempt to maintain their domestic labour's bargaining power in contrast to domestic capital, who benefit from cheapening of wages through an increase in the domestic labour pool. What this neglects is the dominant interests of international capital which seeks to better manage the concentration of development and labour on an international scale through the restriction of labour and strategic distribution of capital to particular zones. This is intended to minimize costs globally in the interest of a more global productive profitability in a similar way that a developmentalist state planner might do this internally.

All this to say that, in this period, the weakening of the core state, in terms of its bargaining power over industrial production in relation to international capital as well as the increase in the productive potential of the periphery, causes an increased reliance on market relations internationally due to the geographical expansion of proletarianization.

These critiques of the command economies in the periphery as well as the tempering of the more redistributive projects in the core, which motivate Nove (2003), are not ahistorical in their validity but specifically tied to these new international conditions. Counter to these views, I assert that the growth potential of both the developmentalist command economies and the welfare-states in the core were not faulty historical models in previous periods even if their present effectiveness is in decline. These are rather dialectical developments that follow a particular pattern which will also be temporally bound in terms of its economic efficacy, contrary to Fukuyama's assertion of 'The End of History.' In response to the increase in globalization of production, the remedy for an increasing bargaining power of labour is expansion of international coordination of labour within international firms, industries and supply-chains. In the longer-term, as wages alongside development veer towards equality, this possibility will likely have increasing potential, since poorer workers will likely not be motivated to increase the bargaining power of wealthier ones without a relatively equal potential benefit and visa-versa. This will only, however, be possible in-so-far as a larger scale ecological crisis can be mitigated on an international scale through more effective seeding of power to a supranational governance structure. This is due to the fact that distributive parity has to be feasible for this potential to exist. Without this potentiality, broader coalitions of labour are sadly less than likely.

Section V: New Socialist Models

Introduction

There were various models proposed by socialists in the late 20th century that are of relevance here. I will classify these into three types:

- 1) Models that rely on greater worker participation in administrative decisions such as those advocated by Ernest Mandel, Pat Devine as well as Michael Albert and Robin Hahnel
- 2) Market Socialist models such as those proposed by Schweickart and Roemer
- 3) Computational models such as those proposed by Cockshott and Cottrell.

These three models speak to three somewhat distinct critiques which can all be said to relate to different concrete structural adaptations required to make an economy work beyond its previous limitations. What the first critique highlights is that the central bureaucracy was less accountable to distinct local democratic structures due to the concentrated power of the central state. As significant development occurs, the leverage of the developed locality reasserts itself and requires greater input into administrative decision-making. This speaks to the modern power of unions and of large municipal and regional governments in relation to the central state. The second critique relates to the power of decentralized market decision making in determining new models for efficient economic organization. It is a process of experimentation that is lacking in purely administrative models. However, the trajectory towards monopoly makes administrative models more significant. Since the administrative economies exhausted their abilities to innovate due to the absence of an effective central calculation technique, it was recognized that market processes are required to determine an adequate structure to build an administrative economy, in congruence with Marxist theory. This admission recognizes the fact that the economic structures charged to the state must be driven through the conflict between capital and labour, as a slow,

dialectical, historical-materialist development. It recognizes that elimination of market actors through state power is mere utopianism, which falters after its utility in achieving its mobilizing effects of a war communist structure and catch-up developmentalism. The third critique speaks to a process by which internalized administrative economic models can become internally efficient through a socialist calculation. This is not only significant to growing states but to international monopoly capital as Phillips and Rozworski (2019) argue. Although these theorists propose differing emphasis and goals, they cannot help but be driven by the historical material developments that are made central at the time of their writing.

In contrast to the advocates of market socialism, Laibman (2002) deems theorists in the first and third groups as 'New Socialists'. The first set of models evoke the Yugoslav model in its structural syndicalism and regionalism but seem to have not learned from its shortcomings. The history of participatory roles for worker representation in more explicitly capitalist forms of corporatist decision-making also have a history that makes many Marxists resistant to this form, viewing it as class collaborationism. The 'corporatist' structure used in fascist regimes solidified the tripartite role of big capital, workers and the state in mutualist negotiation rather than these being open to dialectical antagonism under capitalism. As opposed to the competitive refinement of capitalist management under capitalist competition, this form grants status for capital merely because it exists and is deemed a social priority. This corporatist model applies to the Scandinavian social democracies, as well as post-fascist Germany and Italy (Phillips, 2015). Advocates of the corporatist, class collaborationist model must contend with the effect of these structures in reinforcing exclusion on nationalist grounds. This is in stark contrast to a more inclusionary capitalism and socialism which erode the validity of traditional roles rather than propping them up. Although none of these theorists recommend this model and prefer to

eliminate the role of the profit seeking capitalist, they choose to maintain market processes and exchange using different mixes of economic institutions. It is important to point out the problems with these models as they have been practiced historically.

In contrast to both Cockshott and Cottrell (1993) as well as market socialists like Schweickart, Roemer and Lawler (2016), theorists of the first group seem to lack a unit of measurement and a method of calculation and evaluation. Without these it is very difficult to determine if economic innovations in method (in contrast to mere scientific innovations) are advantageous or not. This was one of the significant critiques from Mises of the Austrian school which theorists in the first group deal with poorly. In the place of economic measures, they place either habitual relations (Mandel) implying a *de facto* monopoly or they appeal to democratic determinations (Devine, Albert and Hahnel) without any coherent way to determine efficiency. This lack of attention to *in situ* efficiency determinations mirrors the command economy historical projects these theorists are attempting to distinguish themselves from. That is, they do not provide a more effective method of calculation. Without this method, economic actors are expected to make decisions using mere qualitative information without a good way to quantify relative value. Despite these shortcomings, these models are not necessarily inapplicable as they represent the imposition of democratic governance on economic processes, which are a benefit in terms of regulatory direction in conjunction with other methods of value determination.

Although in this section I address the claims of these theorists on their own terms, I think that the core of these critiques has relevance to a historical economic developmentalist trajectory towards the growth of a more totalizing *ex ante* dominated system. In synthesizing these critiques, one can imagine a strengthening democratic check on economic processes (type 1), on

a mixed economy that slowly grows worker power and control (type 2), until an effective *ex ante* method of calculation (type 3), can more effectively dominate.

Worker Self-Management: Ernest Mandel's Model

In the mid-1980s, Ernest Mandel penned 'In Defense of Socialist Planning', in principal, contesting Nove's rather scathing characterization and tepid advocacy of a simplified socialist model (Mandel, 1986). However, similar to the way Marx elucidated the normative capitalist logic from Proudhonian labour money schemes, Mandel's (1986) proscriptions reveal the already existing logic of a mixed economy under a social democracy. Although his attempt was to critique Nove's mixed economy, he merely suggests a greater emphasis on decentralized bureaucracy as a moderating force. However, Nove advocates for this as well.

In this article, Mandel (1986) correctly points out that the sphere of planning and the sphere of the market do not neatly map onto capitalism and socialism respectively. As the scale of internal organization increases, planning becomes more significant. As a more decentralized capitalism consolidates into a form that approaches a more concentrated socialism, the sphere of the market shrinks but does not necessarily disappear. This is the advantage of capital consolidation, which is the main reason why capitalists, as an economic group, have an advantage over mere mercantilists, which were ascendant in a previous epoch (Mandel, 1986).

Mandel (1986) downplays the role of market competition in determining supply chains and purchasing decisions and credits consistency, trust and habit as playing a greater role than price differentiation. He suggests that there is a price and quality range threshold beyond which market decisions take precedence, but these cases are rarer. For this reason, he suggests that *ex ante*, or direct allocation, predominates over *ex post*, or market allocation. Since most intermediate goods and large machinery are made to order, market price comparisons are rarely a consideration at all (Mandel, 1986). In a similar way to which the historic revolutionary

communist states took for granted the industrial organizational forms inherited from capitalist developments, Mandel also takes these as a norm as well since competition has been made less relevant after this kind of trial and error process has produced a more efficient form.

Mandel (1986), like others in the Trotskyist tradition rejects historic claims of socialist adherence by the Soviet Union, Eastern Europe and China and asserts that the suppression of market relations in these contexts has been ill advised. He posits that the conditions were not adequate in these contexts to create a Marxian socialist system. This is an important point with which I am in agreement with Mandel, but not for the same reason. In congruity with Marx's opinion on the subject, he suggests that the more economically advanced countries are the most suited for a greater role for planning since they possess the material, technical and human resources needed to achieve it. He also argues that they suffer heavy costs by not planning. Some of these costs include mass unemployment, gendered and racialized super-exploitation and the lack of ecological accountability by corporations and governments. He construes the Marxist drive away from commodity production as merely a drive towards economic efficiency.

However, he emphasizes the role of 'self-determination' in production decisions for his proposed model (Mandel, 1986). This emphasis on 'self-determination' highlights the role of autarky and nationalism in the transition from feudal and colonial forms to capitalist forms. The representative 'nation-state' might be a progressive economic organizational form, but nationalism becomes a reactionary pursuit as dominant groups attempt to maintain identity boundaries and differential privilege via nationalist chauvinism. I do not think its mythical nationalist representative rationale is as important a factor to maintain in its broader organizational orientation as is emphasized in the rhetoric around 'self-determination.' Through the incorporation of immigrants as well as the integration of excluded minorities, the internal

coherence of the nationalist ethos is eroded towards a more cosmopolitan structure. The narrower identitarian boundaries underlying the conscious political conception of self-determination become an obstacle to the necessary labour solidarity with sufficient economic leverage to counter that of capital, as discussed earlier. This becomes relevant in the context of the firm, in relation to the pitfalls of the Yugoslav model, mentioned earlier. The narrow forms of identification militate against broader social integration which is a barrier to the expansion of labour solidarity and organization at both the national and international level. At the international scale, there is a need for broader forms of identification to impede the power of international capital and engender effective labour organization between territorial states. Broadening of an international consumer base creates the conditions for the more democratized goal of desire fulfillment rather than narrower luxury production by artisans. Also, by expanding the productive base, the leverage of organized labour increases, thereby increasing their share. The generation of greater productive efficiency cannot be separated from a socialist goal since greater productivity can serve to meet a broader range of needs and desires.

Developmental context, Pricing and Prioritization of Needs

In response to Nove's suggestion that there are just too many decisions to be made in a modern economy, for these to be left to a central body, Mandel (1986) contends that most economic decisions in modern economies are already made *ex ante* rather than *ex post*. He attributes this phenomenon to the increasing socialization of labour. He suggests that a massive network of socialist calculations are unnecessary due to the relatively slow change in consumer habits. He also suggests that broad technological changes are not requested by consumers before development but are funded *ex ante*. Mandel (1986) addressed an illustration by Nove about a region in Scotland that decides not to charge residents for water consumption due to its natural

abundance. Mandel (1986) critiques Nove's idea that preserving a natural abundance as a free good is a natural decision in its internalization of merely local conditions. Rather he argues that this is a political decision since natural abundance could be allocated for foreign consumption, even if it is locally abundant. Mandel (1986) refers to the marginal elasticity of demand that can maintain a free good, even if this is not the most efficient allocation, since the cost of pricing is less than the waste from not pricing it. Nove assumes that property rights stem inherently from natural scarcity, but Mandel (1986) correctly points out that property depends on the ability to socially exclude others from their consumption, rather than some sense of natural scarcity. Mandel (1986) also rejects Nove's assertion that humans are naturally acquisitive rather than acquisitive in particular circumstances relative to particular needs. He posits that needs are not infinite and therefore scarcity is not infinite, yielding a prospect for the social space of Marxian socialism in the future. He suggests that needs differ in their relative intensity and that this point is very significant in this prospect. He suggests that in the course of economic development, certain patterns of acquisitiveness change, depending on the sense of insecurity of the need in question. Mandel (1986) argues that you can rank these needs in terms of priority, but the problem one encounters when attempting this is that the same objects may be used to fulfill various classes of need. Unless we are to prescribe uses to items, this would be impossible to regulate. However, it may be conceded that these patterns are revealed somewhat in the context of development, as more basic needs become less subject to price regulation (Mandel, 1986).

Mandel (1986) asserts that large scale changes in consumer demand are rare and points to a few major shifts such as the introduction of the private automobile, electrical household appliances, and plastic goods. Under the democratic socialist system, these would have to be

introduced in a more careful and considered manner compared to capitalist anarchic development.

Mandel (1986) argues that an imposition of a discrete hierarchy of social needs will be resisted by some in the population. Hayek emphasizes this conflict in his text *The Road to Serfdom*, where he suggests that those that determine this hierarchy limit the freedom of the rest of society. In my opinion, this is rather hyperbolic, given that in all capitalist societies, governments acquire taxes to allocate towards socially determined priorities. Hayek, like other libertarians, consider this a theft rather than an allocation towards popular and necessary priorities, in so far as the government is accountable to the population. Therefore, the attribution to specifically socialist societies is moot, since this equally applies to a mixed economy of whatever proportion. Mandel emphasizes that not all needs are recognized by society, implying that there is already a tyranny over needs in the marketplace. He asserts that this is unavoidable, but the order of priorities is politically variable (Mandel, 1986).

Mandel (1986) suggests that the intensity of the resistance to rationing by social priority is in proportion to the intensity of the needs unfulfilled under the current income distribution. The direct allocation towards basic needs is not generally viewed as unjustified. With regard to these, market allocation seems unnecessary. Mandel (1986) asserts that consumer freedom only becomes relevant with regards to consumption that is beyond basic needs. He asserts a positive projection of the prospect of Marxian socialism in the following statement:

“The withering away of market and money relations envisaged by Marx would involve the gradual extension of the principle of *ex ante* resource allocation for the satisfaction of these needs to a greater and greater number of goods and services, in a wider and not lesser variety than exists under capitalism today” (Mandel, 1986).

Mandel (1986) suggests that Nove ignores the problem of how market relations seem to impose a despotism over the producer in her working life. Despite earlier reference to expansion

of consumption under socialism, Mandel (1986) suggests that workers, given the choice, might prefer an expansion of leisure time than an expansion of money for consumption, but this choice is largely unavailable (Mandel, 1986).

In response to Nove's assertion that the only alternative to market forces ordering economic life is rule of a centralized bureaucracy, Mandel suggests that the habitual free cooperation that does not alter current arrangements is the dominant form, as opposed to any directive intervention (Mandel, 1986). This is not a strong refutation from Mandel. It relies on the method of conservative habit rather than any decision-making mechanism. At all points in history this force of inertia would be dominant, since changes are not always necessary and there is little advantage in 'reinventing the wheel' in every moment of production decisions. This, however, says nothing of how actual decisions get made. Nove is correct here, these decisions are either the *ex post* consequence of micro-level decision making or *ex ante* policy decisions. However, in all mixed economies, there is always some combination of these at every level of decision-making, so this point does not count for much.

Mandel (1986) asserts that the way to organize a self-managed socialist democracy would differ from other forms of governance in that a congress of decision-making bodies would assemble and determine economic regulations and priorities (Mandel, 1986). If one sweeps away the idealistic rhetoric, this is merely a representative democratic body that passes social policy, something that should not be foreign to any government in the world. Even the most capitalist of governments often set differential tax rates, fix the price of or subsidize certain goods and set maximum working days.

The global economic plan Mandel (1986) describes is akin to a parliamentary budget. The main difference between a capitalist version of this body and a socialist one is the institution

of a more pervasive economic production plan outside the sectors normally dominated by the state (i.e. military, electrical and transportation infrastructure, etc.).

The self-managed production bodies that are expected to fulfill portions of the global plan are effectively firms bidding on government contracts, given their self-assessed productive capacity (Mandel, 1986). The product mix determined from workers' council and consumer preferences, is effectively, giving this a steel-man reading, the matching between productive capacity and consumer demand. Really, the idea that this could be worked out in a democratic meeting is unrealistic since it is too complex to process these among non-specialists. In any functioning organization detailed proposals are sent to small committees to produce a limited number of desirable options rather than rely on the whole body to work them out from scratch with the entire group. Certainly, it is productive to have a meeting to identify the potential unforeseen problems with a proposal integrating factors that were not considered by the specialists on efficiency grounds. However, having these meetings to determine production possibilities could create an even worse version of productive anarchy than under capitalism. This critique not only applies to Mandel's vision, but to Devine's as well as Albert and Hahnel's.

Mandel (1986) then asserts that consumer goods will be designed on the basis of consumer preferences, *ex ante*. The consumers are to engage with proposed product and rate them at the model stage, before large scale production, in a similar fashion to what is done already with focus groups and trade shows (Mandel, 1986). What this leaves out is the insufficient knowledge of the consumer in relation to the designer. Getting submissions from the population can be useful to the design process, but this opinion would be largely ignorant of technical possibilities and the relative cost of various methods of production. It would be very difficult for non-producers to predesign for instance, clothing specifications integrating various

combinations of preferences without specialist knowledge of these combinations of factors. In these cases, an *ex post* analysis, with little *ex ante* direction would be more advantageous, exactly the balance currently employed by big capital. The advantage of Mandel's (1986) recommendation would be a greater consumer influence on the product mix, but the market research methods of surveys and focus groups already achieve this end without the problem of technical direction from non-experts. Mandel (1986) does recognize this, but it is unclear what then differentiates this system substantially from the one run by big capital with the resources to research consumer preferences. Corporations, after all, are not often ruled by a one-person dictatorship, even with the CEO at the top of the chain of command, but are constrained by a board representing, not only shareholders, but often other significant stakeholders that are integrated into the decision-making structure without altering its structural nature as a corporation.

Nove is correct about the possibilities for democratically determining the product mix of particular sites but is incorrect about the political directing function of determining the broad outline of overall production priorities. Even if consumers might not be in a good position to knowledgeably make technical production decisions, this does not rule out the integration of broad consumer priorities to be directed by census. This information could be the basis for a general production plan at the macro scale.

A central problem with Mandel's (1986) model, as well as Devine's (1988) model discussed later, is that micro-level self-determination in plan fulfillment conflicts with the power of central plan priorities and the efficient use of productive resources. A consultation process is useful but not autonomous decision making at distinct levels of production and consumption on the factory floor. This lesson was learned historically in the early Soviet Union before the

introduction of the NEP because of the chaos that worker self-management produced (Lenin, 1972a).

Mandel (1986) suggests that delegates from a factory council would be better at determining productive capacity and product mix than a technocrat or computer due to their familiarity. This harkens back to Hayek's argument that tacit knowledge gave proximate managers superior understanding and ability to direct production decisions. However, all levels of hierarchy act at some degree of abstraction in a cooperative process unless they have had the time dedicated to mastering each skill set as well as the practical obstacles of coordination. Although this process might have been feasible in an artisan's workshop, it makes little sense in an industrial operation. This level of abstraction, although imperfect, is superior to the muddle produced by a mere agglomeration of relevant facts. Synthesis, analysis and direction at a larger scale plays an important role that seems quite advantageous under capitalist and socialist regimes and there is no empirical reason to doubt its efficacy broadly. If this was not advantageous, we would see a clear ceiling to the size of firms under capitalism. Since this is not present, we can assume that this condition has not been a significant constraint to efficient industrial management at higher levels of abstraction that exclude tacit knowledge.

A major reason for the necessity of this larger scale view of productive operations is that worker's or consumer representatives wouldn't understand the needs of the factory downstream that will use the output or the factory upstream that supplies them the raw materials. This does not mean that they cannot contribute valuable input, just that their expertise is discretely bounded. Even if they could all acquire this broader perspective, it would be unnecessary to burden the entire factory with such mundane decision making.

The idea that one can remove the roles of the capitalist as coordinator of supply flows by pure fiat is naïve. There is no reason this person needs to be a capitalist. This role could be performed by a technocrat or a computer program, but this mediation role is unavoidable in coordinating scales beyond artisanal production. I suppose the reason this role might be thought of as replaceable is that it is a role with a great deal of leverage over industrial operations and is therefore socially undesirable from an egalitarian perspective. The process of capital accumulation does in fact considerably restrict this role but does not eliminate it. Plant managers, even under the Soviet Union, were able to demand substantial compensation and wielded a great deal of power due to their strategic position in relation to productive operations. They wielded such significant growing power, in fact, that in the leadup to the dissolution of the Soviet Union, these managers were able to wrest considerable autonomy from the central planners (Lebowitz, 2012). This is because the failure to effectively coordinate supplies can very easily cause extensive problems for all involved especially in downstream production. Bottlenecks in the production process generate significant reductions in productive capacity and the manager of plant operations holds considerable leverage over this end. Although this is a key management role, there is no advantage in scaling it up in terms of making the job collectivized. Rotating the responsibility would likely end in a greater rate of errors due to the time required to train people to be better at this task. If the power of management is to be avoided here, this coordination function should be deskilled and automated to the greatest degree possible. If this had to be done democratically, the person responsible for coordination would present the informed proposal to the council to address it. This would allow the council to determine if there would be any foreseeable barriers in fulfilling it, thereby subverting managerial control.

Conclusion

A major problem with the proposal of Mandel (1986), Devine (1988), Cockshott and Cottrell (1993) as well as Albert and Hahnel (1991) is that in their attempt to legislate in an egalitarian structure, they ignore the leverage that gives strategic power to key positions in the production process. This power is only superseded by an increase in the power of technology that either automates the role or builds significant counter-power that can hold this position in check. This construction of an internally participatory democratic structure is unfeasible at certain levels of development. Moreover, the idea that endless meetings to determine all minutia of the decision-making process would be desirable to workers is also naïve (Hodgson, 2005, Laibman, 2014). In his critique of Parecon, David Schweickart illustrates why this degree of participation in workplace decisions would be a dystopia rather than a utopia (Schweickart, 2006). Hodgson (2005) in his critique of Devine's participatory planning suggested that this degree of participatory interventions will discourage all but busybodies and people with improper moral judgements of others behavior. These types of people would be more likely to intervene to regulate the workplace and all others would be disinterested, annoyed and bored (Hodgson, 2005).

The trend towards participatory planning is well intentioned but ill conceived. It is utopian in the sense that it does not come from effective practice, even on a small scale. Worse, as it would be scaled-up, it would become more unfeasible due to the difficulty of getting even larger groups to come to agreement. The only solution to this problem is through technology and data processing with a minimum of meetings. In China, there are worker representatives on corporate boards. These institutions must be made to be effective in their role as worker representatives and not merely an arm of the state in a model (which is evocative of fascistic

corporatism). This requires sufficient worker social leverage to make this institution accountable to their interests.

Marx's critique of Proudhon was to say that the present-day economy was not a conspiracy, as brutal as its consequences are, but a manifestation of current day productive relations. However, the antagonisms within those relations shows promise for how they like will be resolved at a higher form of justice, wealth and distribution that is not yet possible to manifest fully. That is, this is not Kantian critique that transcends time and space, but an immanent critique, that exposes the potential for future change. Through the dialectic of class-conflict the progressive development presides in the synthesis, not through the prospect of absolute domination and utopianism to grant the power to unilaterally set an agenda. This is not to take issue with revolutionary struggle or radical reforms per se, but only to suggest that these gains are not rights granted by decree, but a policy demanded on the basis of social leverage attained and held by the people who benefit from the new relation. Further, they will only be maintained so long as they are viewed as worth defending by their constituency. The establishment phase of any new system results in a temporary loss of productivity. But if gains are not established in a sufficient time this demographic will become resentful and skeptical of claims towards their social betterment and will pursue regressive reaction towards smaller scale forms and relations.

Mandel's (1986), Devine's (1988), Albert and Hahnel's (1991) conception of participatory or democratic socialism all seem to suffer from Hal Draper's 'Socialism from Below' conceit. That is, the initiative stemming from the popular worker's self-organizing and conception is the authentic socialism, rather than the state centric model, which is paternalistic (Draper & Gallin, 1966). The problem is that it is often difficult to tell the degree representatives are directly, rather than merely formally, accountable to a constituency beyond assessing the

efficacy of mechanisms for checking power. As referred to earlier, the New Left focus on the central issue of worker alienation and the reacquiring of ‘authenticity’ veers politics towards the reactionary and nostalgic (Phillips, 2015).

Participatory Planning: Pat Devine’s Model

In 1988, Pat Devine, a socialist economist, published his book *Democracy and Economic Planning*. As Blackburn (1991) had described it, he internalized Elson’s (1988) emphasis on the need for negotiated coordination of production and Mandel’s (1986) emphasis on this more decentralized democratic form of governance (Blackburn, 1991). Devine’s attempt to merge these views is to differentiate ‘market forces,’ that direct production in an informational sense, to ‘market exchange’ which might be indicative of demand but is not a force on its own. This suggests that this system could use the market as a calculator without the predominance of a regime of private property. He differentiates his form of ‘mixed economy’ from what tends to be understood as a mix of private and public firms. Devine (1988) envisions merely different public domains with different spheres of accountability. This echoes Dobb’s (2012) view that market forces could be indicative of demand but not necessarily determinative of productive priorities. What he advocates amounts to a mixture of what appears to be a relatively independent civil service with regimes of accountability that are not merely responsible to the central governmental political establishment but also to different groupings in civil society. This is hardly a novel innovation. The institution of implicated forms like municipality-centric socialism and the ‘transition movement’ of voluntary small scale production for social/ ecological ends, in the name of ‘self-determination’ (a contested concept), will not be structurally and economically impactful in the shadow of larger processes (Phillips, 2015). This movement increased in popularity due to the decline in paid employment under the conditions of a relatively strong, but declining welfare state and a relatively high level of industrial development. In this context,

participants can eke out a meager economic role through voluntary projects that are mainly there to give meaning to the economically excluded.⁴ This decentralization emphasis mirrors most other socialists of the neoliberal period in the first world. It derives largely from the lack of efficacy of the central production institutions which have re-emphasized this new decentralization by default as they both shed jobs due to improvements in methods and offshoring of production. This leaves precarious first world workers in the position of requiring a greater emphasis on the entrepreneurial and small-scale industry to fill the gap. In a similar vein to voluntary projects, the role of small-scale democratic projects is to mainly serve as a tool of socialization and community rather than as a productive operation. Most of these projects emphasize psychological benefits over productive efficiency. This kind of institution can retain a niche socially beneficial role since the majority of material needs are met elsewhere by the more centralized productive economy (Phillips, 2015). Devine (1988) expected these initiatives to grow, but found they remained marginal. I argue this is because he seemed to neglect their actual, rather than envisioned economic role. This vision is part of an anarchistic imagined trajectory of an accumulation of power from as an additive effect of disparate parochial organizations. This vision fails, however, due to its lack of power and capacity for coordination of small organizations in contrast to large ones. Like Mandel (1986) as well as Albert and Hahnel (1991), little attention is paid to the process of price formation or with regards to incomes determination (Laibman, 2011).

Negotiated Coordination and Democracy

Devine's (1988) conception of 'negotiated coordination,' an effort to give (governmental) projects at various scales more democratic accountability, appears to be the negotiated 'horse

⁴ Although laudable as a pro-social project, its economic structure cannot be generalized, and its pro-ecological goals will not be achieved though a shrinking in economic scale except at the level of consumption.

trading form' of exchange, criticized by Lebowitz (2012) in his characterization of the flaws with the traditional Soviet model (Lebowitz, 2012). Different from the historical conception, however, Devine (1988) suggests that these could be determined through democratic councils, making the process even more onerous and unwieldy (Blackburn, 1991). Laibman (2011) argues that participatory democratic elements need to be optimized not maximized. Lebowitz (2012) suggested that these forms dominated the interactions of command economy supply chains. They involved dealing in the reciprocity of favours rather than the logic of direct benefit. Therefore, these dealings were not based on market efficiency maximization but established horizontal reliance more characteristic of pre-capitalist economic relations of village life as outlined in David Graeber's *Debt* (2012). According to Lebowitz (2012), this was one of the central flaws of the Soviet system, where industrial managers would informally work out a deal and stick to it to maintain regular supplies based on honouring the relationship in good faith (Lebowitz, 2012). This does happen in any economic system, but the reason relationships are established and broken is a key issue, not merely the maintenance of the relationship. This was of great significance to the relative unreliability of supply chains (Ellman, 2014). Laibman (2002) argues that the predominance of this form of arrangement was due to the poor quality of data processing capacity that was available at the time and argues that more modern informatics can make the process of continuous adjustments more feasible without the intervention of these bargaining agents. The problem with Devine's (1988) model, like Mandel's (1986), is that it has nothing to do with maintaining efficiency in production, just with maintaining regularity and democracy. Lebowitz (2012), like Cockshott and Cottrell (1993) suggested that a central calculation using methods like those developed by Kantorovich (1965) could allow planners to more effectively assess what is expected rather than just relying on what the plant managers would ask for. It

would also allow for efficiency increases beyond pure growth based on just numeric inclusion of more employees but could involve productivity gains (Lebowitz, 2012). However, it is difficult to see what the domain of either Lebowitz's (2012) or Devine's (1988) model would grant to central calculation, since this would necessarily violate local 'self-determined' structures.

Devine's (1988) views on the beneficial advantages of perestroika reforms in 1988 look naïve in retrospect. He, however, correctly identifies this as an attempt to transition from a regime of merely extensive growth to a regime of intensive growth. Devine (1988) is correct that due to the absence of an effective method of calculation, the command economies could not develop adequately in this direction and this was one of the primary reasons for transition (Devine, 1988).

However, Devine's (1988) conception of democracy, which he takes from Brus (1980), suffers from petty bourgeois idealism, since he believes that democracy is about input in determining preferences through formal mechanisms, participation and decentralized decision making. However, I would counter this view that groups and individuals can influence outcomes and distribution on the basis of their relative leverage over a collectively valued project, in line with a Veblenian (1948) view of sabotage. This means that even absent formal mechanisms, relative power allows for relative influence. The reason there is significant political inequality in systems that ostensibly possess formal democratic mechanisms is that economic leverage is highly unequal, and this skews political influence. It might be true that inequality is a necessary mechanism to motivate workers and managers to improve performance at particular stages of economic development, but this policy necessarily comes at the cost of the collective power of workers as a group, since it erodes their cohesion and thereby their leverage as a group. The advantages of groups in relation to the economy can be significantly altered by broader economic changes in the mode of production that can achieve the greatest economic efficiency, which

alters the balance of power. The design of formal mechanisms is always subordinate to the balance of power, which is rooted in the economy.

Devine (1988), in agreement with Rudolph Bahro (1978) and Branko Horvat (1964), does not see ‘actually existing socialism’ as the economic stage referred to by Marx, but a novel formation that attempts to create the preconditions for socialism / communism (Devine, 1988). I largely agree but would modify the claim that the ‘catch-up’ developmentalist economics of these underdeveloped regimes creates a developmental trajectory that accelerates the precondition for modern capitalism not directly for socialism / communism. The path of China demonstrates this fact. Many in the Chinese regime justify the turn to more significant market direction as a method for generating the economic preconditions for socialism (Zhongqiao, 2006). Many interpret this as mere rhetoric justifying the betrayal of their revolution, but I think that this claim is consistent with a Marxist theoretical approach. However, Devine (1988) like Brus (1980) emphasizes the lack of democracy in the ‘actually existing socialist’ regimes as the central factor for excluding them from the category of socialist (Devine, 1988). While, I argue that the lack of formal democratic mechanisms is more of a second order phenomenon which comes as a consequence of the underdevelopment of the material factors of these economies in relation to the technological vanguards of the world economy. Here I am in agreement with Horvat (1964) and Bahro (1978) whose views seem more historically explanatory and less idealist in contrast to Devine (1988) and Brus (1980). This view should be differentiated from the Trotskyist conception of the command economies as ‘degenerated worker’s states,’ a more postlapsarian idealist conception than a materialist one. It should also be differentiated from Leninist and Maoist views that center the return to historical forms.

The reason that the statist countries were not democratic is because if they allowed the population to determine their political structure, according to a Marxian understanding, they would reflect the ideological influences of the most predominant relations of production, the petty bourgeois, which were particularly the peasant class in these cases. As a majority, this mass would attempt to secure their privileged position, even if it was at the expense of society as a whole. Their ideal might have been a new Czar who would let them have their plots, with market relations, without the control of lords. One might compare their aspirations to the populist farmers in the United States. Their attempts at regulation and control of big capital were an inevitable failure. However, their efforts can still stall development. For this reason, acting as what they imagined to be an enlightened minority, the revolutionary vanguard attempted to structure the society in the interests of the proletariat, with some positive effects. However, as a dominant managerial stratum, their interests are not checked by the working class, which is relatively weak, so the balance continually shifts in their favour over time, despite their formal ideological commitments.

Since a proletariat does not seem to be the most populous class in most of these countries, one might not expect their interests to be dominant. In the developed capitalist countries, one of the effects of offshoring has been to slow the rate of domestic proletarianization. This can temporarily stave off worker predominance and therefore workers' democratic aspirations. These countries often also skew more electoral representation to rural areas than would be attributed to equal representation on the basis of population to further compound this effort. This is an attempt at limiting proletarian power, though as stated above, formal mechanisms are not necessarily an effective barrier to an organized opposition. The state socialist experiments may more closely

resemble the Bonapartist form as a centralist transition out of monarchic rule, which at least is nominally more accountable to the public.

The idea of proletarian democracy is prefigurative in this sense, if it is honest at all when being advocated by a managerial stratum. Gearing political decisions to what they theorize to be the coming populous class, not the present one, is their understanding of building democracy for the future class composition. Although the developmental push may, at least in theory, effectively serve the democracy of the future, it is unclear if this kind of paternalism would serve the other spheres of governance of society or regress them to even greater rule by a paternalistic aristocracy. In a way, this has a lot in common with the discussion regarding climate change and the representation of the interests of future people in current decision making. Lebowitz (2012) challenges this pretense to prefigure, suggesting that the current proletariat must be in the role of directing policy for socialism for it to be substantive (Lebowitz, 2012). One might retort that much of the hegemonic ideology that infects the contemporary working class may skew in a regressive direction, if their identities are wrapped up in sectional identification, such as chauvinistic nationalism. However, if there is no institution keeping a paternalistic ruling vanguard accountable, how does the proletariat shift the party, when it is determined that it is moving society in a regressive direction? To relate this to our contemporary capitalist political context, this is an inevitable conflict of an electoral democracy seeking nostalgia and its state management seeking economic progress in reaction to capital flight.

There is something to say for the value of the building up of prefigurative structures that will need to be practiced and effective to run in the future, even if the present structure will be used to work counter to future interests. It may be difficult to generate these institutions just at the point when class composition is in the favour of proletarian democracy without them having

some effective historical significance under bourgeois democracy, even if these structures ultimately look very different. Devine's (1988) supposition that functioning democratic institutions are a necessary prerequisite for both a socialist economy and a socialist society, could be necessarily the case. Democracy, however, as an evocative concept is too loaded with various meanings to be coherent in a trans-historical sense, as opposed to its contemporary meaning of being a synonym for a capitalist order with representative institutions. Institutions that have effective popular accountability and space for the advocacy of popular programs do not need to be of the form of the contemporary political party. The structural limitation of these popular parties is due to limited capacities and real substantive wealth inequalities. Therefore, it is more effective for the leadership to have closer relationships and thereby greater accountability to large donors than have their views represented in the membership. This is true even if these structures are governed by a popularly elected leadership.

Because the material dynamics of the 'really existing socialist' regimes are in the process of modernization but are organized differently with respect to capitalist economic relations, Devine (1988) concludes that the political relations or superstructure determine the economic relations, an inversion of historical materialism towards political idealism (Devine, 1988). However, this ignores the relations of these economies to the world economy as well as to their own internal class compositions and stage of development, which better reinforces a historical materialist view. Devine (1988) states that in these regimes, control of the means of production is based on status in the party state apparatus, not as a private owner so therefore this is purely a political designation. In contrast to this, I assert that these structures should be viewed as large corporate bodies of a state capitalist form. The economic advantage of this form is that it can attempt to maximize economies of scale, introduce modern methods pioneered elsewhere, and

impose a high rate of capital accumulation beyond the control of small private interests to catch-up to more developed economies more swiftly. The rapid growth and improvement in living standards of these regimes demonstrates the efficacy of this method. However, this method would be unavailable if the regime was already approaching the productive vanguard, since it would need a method of economic calculation to determine what production methods to impose. Since they were not, it can use this method to catch-up more rapidly. This is not a mere political aesthetic that prefers the egalitarian over competitive conditions, but a method of responding to economic conditions in a constructive fashion, even if the efficacy of these methods have a ceiling. Even in non-socialist regimes like South Korea, rapid industrialization is linked to a strong authoritarian dictatorship (Chang, 2007, Chibber, 2003).

Autarky, though initially a useful aid to internal development in the context of underdevelopment under a regime of colonialism, becomes limiting after a certain degree of specialization has been achieved. As Ellman (2014) discusses, the problems of working out an effective trade system that can be of mutual benefit to the states involved, would become a fetter to expanding economic development (Ellman, 2014). If economic development benefits from increasing degrees of specialization in the method of production, then coordination on an ever-expanding international scale should continually increase the efficiency of the process. If there is a political barrier to this integration that is imbedded in the economic structure, then there is good reason why it can lead to economic catastrophe if this political structure is maintained. What initially was an advantage, becomes a fetter.

This argument is offered in Chang's *Bad Samaritans*, where he presents the question as a metaphor for a developing economy: "Should I send my 6-year-old to work?" The argument for doing this is that she will learn financial discipline and work efficiency from this process.

However, the counter argument is that their early exiting from (paternalistic) schooling, will limit what this child can achieve in the longer run. If one chooses schooling (longer-term developmental investment), it does not mean that the child will never leave school, only that this process will potentially prepare them to compete more effectively in the market later. This is the case with underdeveloped economies that have undergone rapid growth and have not crashed (Chang, 2006).

The swing towards political democracy in the realm of capitalist development is a consequence of the swing towards decentralization of the economic sphere. This is useful at a particular stage of industrial development, after the previous, more absolutist (statist) form has been exhausted. In a similar fashion to many liberals, Devine (1988) conflates political democracy and economic decentralization as necessarily synonymous, in a utopian fashion, and fails to understand these within the dialectical developmental process. This process culminates in an expanding economic capacity along with an expanding state sector, even in the context of capitalism.

There are significant advantages to not subjecting an internal developmental trajectory to the needs of external actors, potentially just looking for cheap labour and resources. The need to develop one's internal infrastructure, not merely for export to international markets, does seem to require some kind of political break. In most cases, that leads to a greater degree of internal development. The development of centrally planned price systems, that may have had considerable internal strategic benefits, does present a sizable problem when attempting to create effective export pricing schemes. Ellman (2014), discusses how this was a significant problem in the internal exchanges within Comecon leading to its breakdown. The need for internationally

convertible currency seemed to lead most communist autarkies to subjecting their internal economies to the logic of the international market, since they could not compete with international scale efficiencies if they did not undergo this process. This necessarily required an eventual break with the centrally planned pricing schemes (Ellman, 2014).

It seems China and other developing economies, including non-communist countries like South Korea, have found the shift to Export Led Industrialization (ELI) an effective method to make this transition and sustain staggering growth rates (Chibber, 2003). Internal democracy has nothing to do with it in the Chinese context, as it still doesn't have that. Internal democracy develops as a consequence of bourgeois economic power as a means of dispute resolution, not as a necessary political developmental prerequisite. The successful corporate form of international capitalism does not operate with an internal democracy, but a military style hierarchy. However, people are free to quit a particular workplace, if they like, and are also free to pursue personal goals outside of employment structures.

One could understand the state socialist countries as analogous to the centralization of an absolutist monarchy coming out of a more decentralised feudalism which then gives way to a more decentralized capitalism. This historical 'socialist' stage should aptly be referred to as Bonapartist, a post-feudal popular absolutism. It should be noted that capitalism got significant material support from the expansion and fight for independence of the large (centralized) imperial corporations supported by the monarchic state, which then vie for a break with direct state control leading to a phase of more decentralization (Mingione, 1987). Economic growth increases steadily throughout these stages even as the degree of centralization oscillates significantly. One might suggest that the centralization swing in the neoliberal stage, can produce

the means for socialist economic calculation as Rozworski and Phillips (2019) suggest in *The People's Republic of Walmart* if capital accumulation continues.

This runs counter to Devine's (1988) view, who sees democracy as a permanent feature of an expanding developmental trajectory. He might consider that the perspective of many contemporary hipster petty bourgeois small producers and libertarians. These groups can legitimately view factory capitalism as a more centralized and anti-democratic turn to take from artisanal production. However, the productive turn to factory production did increase living standards overall, at least after its initial brutality at the expense of a more relatively democratic, egalitarian artisanal village culture save its repressive traditionalist roles. Just as the European artisanal culture grew as a labour surplus from the feudal economy, the hipster artisan is a surplus from the developed industrial economy shedding workers it doesn't need. That is, the previous and current system lacks the absorptive capacity to efficiently integrate them into its major projects, so their peripheral existence allows for some productivity to be maintained for otherwise surplus labour. In the case of artisan villages, this happened to generate greater productivity than the previous productive centers, while in modern capitalism artisans are mostly poor and their prospects for the future are not rosy. As mentioned before, in the 20th century command economies, the use of small-scale industry, though not as productive as large-scale industry, can fill niches and appropriate opportunities that the larger scale structure does not yet have the ability to inhabit.

Devine (1988) argues that statist economies in particular are dominated by the 'political' over the economic, but I think this is a misreading. The contradiction I feel he identifies here is the lack of political compatibility between the economic sphere and the social/political sphere. The fact that Devine suggests that the lack of political and economic democracy has become a

fetter may be true, but there is no reason to believe that this is the primary contradiction. If it was, then why would states like China continue to expand effectively without these? In this context, I offer an alternative, that I think is a more economically plausible explanation. The lack of a convertible currency pricing system caused a fetter to internal production efficiency. Once the economies are geared to export pricing, capitalist agents need a dispute resolution mechanism, so they promote and are able to achieve more internal democracy (Chibber, 2003). Internal democracy does not come first, however.

Although the external expansion might be a significant fetter to further industrial improvements in the production process, the lack of internally increased efficiency beyond the reallocation of labour towards high productivity sectors would also be a significant internal fetter. There are many structural limitations that might be identified as more significant than democratic openness as a limiting factor to development. It is not clear why Devine (1988) thinks that the lack of formal democratic mechanisms must be the primary fetter.

Devine (1988) argues that effective control is traditionally paired with ownership of the means of production in both capitalism and socialism. However, as production becomes more socialized, this becomes less so. This is especially evident in the capitalist corporation where ownership and control are significantly disentangled (Coase, 1995). It is also analogous to the large firms in the 'really existing socialist' regimes. Neither Lebowitz (2012) nor Devine (1988) appear to recognize this important fact. Shareholders only exert weak influence, mostly being able to do little else than 'vote with their feet' like consumers, while the operations are controlled by an employee, the CEO, which is effectively, a professional owner. Most of the power in a corporation is in the hands of the CEO, leading to significant principal-agent

problems. This explains their disproportionately high salaries. Due to this relationship, the CEO is effectively its owner, even if they do not actually possess true ownership rights (Coase, 1995).

The shareholders do have some democratic control, i.e. they elect the board of directors and the directors hire or fire a CEO. In a sense this structure is closer to the Paris Commune model lauded by Marx, of elected recallable executives accountable to a mass, it is just a mass with very different sectional interests than those representing the population as a whole. This, in a sense, would seem to vindicate historical materialism as effectively predictive of economic forms.

Market relations in the context of a Planned regime

Even though markets relations are active in Devine's (1988) model, he argues that what characterizes socialism is not the presence or absence of markets, but production for use rather than exchange (Devine, 1988). Although historically accurate, I wonder if intention is really that relevant in system developmental terms since all production is for use in the end. 'Production for exchange' emphasizes an incentive towards a more global productive end rather than a local one. The differences lie in the ability to encapsulate this regime under a single conscious economic entity whose workings are more intentional and controlled, and less crisis ridden as opposed to a more incidental, anarchic market, even if it is regulated to one degree or another. Under Devine's (1988) definition, socialism refers to the degree that distributional dynamics are a broad design for public welfare rather than an incidental result of interpersonal exchange in the context of competition.

Devine (1988) discusses the crisis of credibility suffered by the 20th century command economies due to their increasing ineffectiveness. He identifies a few areas that require significant reassessment: the relationship between legal ownership, actual control and

exploitation; between the market and planning; and between planning, the market and individual freedom (Devine, 1988).

With regards to the first issue, he observes that in the context of the abolition of formal private ownership of the means of production, the relations of production have not changed significantly. Worker involvement in management is tokenistic at best and workers' councils have been suppressed. He identifies an increasing skepticism towards the role of bureaucrats in the controlling of economic processes to serve their own ends rather than broad socialistic ones. He identifies the traditional Marxist view that the 'character of the state' is the relevant factor to determine its social and political priorities (Devine, 1988). Here Devine (1988) sheds light on some key topics that allude to the crucial differentiation between formal title to ownership and control and effective ownership and control. I argue that meaningful ownership depends on the actual leverage, in a realpolitik sense, that the entity or individual has over the social process not merely the formal right to extract surplus. This dichotomy is exemplified in the principal-agent problem, as mentioned earlier, where even though the shareholders are formal owners, control rests effectively in the corporate executive. This is why this executive is able to demand such a large share of the surplus in the corporate form. This would not be different in principle in the command economies where the population effectively owns all firms but the managers, due to their strategic leverage, are able to demand significant perks that the rest of the population does not have access to. Even if workers are formally co-owners of firms in these states, they are still in the relationship of wage labour to capital due to their effective relationship to the means of production. The Soviet Union also discovered early on, that workers' councils (or soviets) were not particularly effective in firm management since workers did not know how to effectively manage the relationships with suppliers and consumers outside the firm, due to lack of

experience (Lenin, 1972b). This regime quickly discovered that specialist management in this role is significantly advantageous and is more easily held accountable for mismanagement (Stalin, 1952). As stated earlier, workers' councils in direct charge of firm management are a utopian form of syndicalist capitalism. Further, in the Yugoslav form, firms of this type drive in an insufficiently social direction. Since they attempt to restrict firm participation to effectively dominate benefits generating a result that produces less generalized socialized benefit than the free market. The formal versus effective control issue at the firm level mirrors the identical problem at the state level. Although the socialist command economies are formally socialist states owned by the population as a whole, the population is not able to exert effective control over these firms, or even the character of the political establishment, in a significant way. Due to the nodal power of particular social positions, power is concentrated unevenly. I argue, the formal character of these states is less significant than the dynamics of relative social leverage particular groups are able exert over the production process. Therefore, the self professed titles of state managers and political intentions of these states are less significant than the internal power dynamics which yield that effective control.

Regarding the second issue, Devine (1988), like Hayek, argues that production for use presents an informational problem of determining what the population actually wants and in what rank order. This information is more easily determined *ex post* through market arrangements than *ex ante* through pre-emptive planning. He argues that planning and the market are seen as antithetical in classical Marxism but are increasingly seen as complementary for reformers and market socialists. Market determined prices, in absence of production blueprints, have been acknowledged as a necessary signal informational mechanism to allow producers to

be able to determine how to arrange production in terms of allocative efficiency, rather than mere organizational efficiency which has been a traditional focus (Devine, 1988).

With regards to the issue of the lack of individual freedom in command economies, Devine (1988) acknowledges that autonomy does decline as capital concentration increases under capitalism. Devine's (1988) emphasis on personal autonomy in productive activity idealizes the qualitative positionality of the petty-bourgeois artisan producer in contrast to the growing sector of cooperatively labouring employees. In the context of a growing standard of living enabled by more centralized production, this emphasis is economically regressive even as it might feel desirable from the individual worker's point of view.

In response to the decreasing power of the individual in relation to big capital, the state can respond in roughly the ways that Lange (1938) illustrates. They can either break-up powerful firms at the cost of efficiency, allow corporate rule at the cost of substantive democracy, or nationalize the firm to subject it to democratic control (Lange & Taylor, 1938). Devine (1988) problematizes the situation of the state being the sole employer, forcing all economic activity to be subordinated to this hierarchy. He suggests that substantive political freedom necessitates economic freedom from the subordination of a single institution. As opposed to this point necessitating private property rights, Devine (1988) argues that it need not. It could be manifested in the form of worker's cooperatives or local community enterprises with specified ownership rights (Devine, 1988). I feel cooperatives and community enterprises need to be dealt with separately.

Community enterprises evoke something that might be granted funding from municipal budgets or under capitalism the local Business Improvement Association. Although governments are thought of as a single unified entity, in practice this is almost never the case. Usually there

are municipal, regional and national level governments that consist of political representatives of differing political groupings as well as a civil service bureaucracy consisting of relatively permanent departments. However, as well, there are usually some smaller scale program initiatives that might be funded by government, but not staffed by government employees. NGOs, consultancies, contractors and temps come to mind. Although this is a particular sphere of independent employment, even under capitalism, it is incredibly marginal. Without a private funding structure that exists under capitalism, there is little difference between these and just being small, relatively arms-length, governmental initiatives. In fact, the need to satisfy funders' desires tends to drive these socially minded initiatives away from their formal mandates.

Although more seemingly democratic, workers cooperatives are not as egalitarian as one might expect when examining their formal structure. These are often dominated by those workers that possess the key skills, yielding them greater leverage over the functioning of the firm as compared to their less specialised counterparts even if votes are formally equal. The ability for key individuals just like key funders to vote with their feet gives them greater leverage than their formal status grants them. As stated above, even if the forms appear egalitarian does not mean these structures function this way. Relative pay often approximates relative power just as it does in formal hierarchies. Although cooperatives have been thought of as a method to prepare workers for self-rule, I feel this is a utopian proposition. The instinct of protecting one's own position within a cooperative, necessitates against improvements in efficiency that yield competitive economic structures. This is why the cooperative occupies only small niche positions in competitive economies. A cooperative outside a competitive economy is essentially a soviet, a form rejected by command economies due to its inefficiency. However, if this sector is merely invented as a small token marginal form to those who do not wish to be subordinated to

other dominant economic institutions and not a form that performs a significant economic role, this is understandable. It could also be a useful form for working out experimental production processes that have yet to be scaled up. However, if it expected to occupy significant economic space, as in the Yugoslav structure, one would expect significant waste and inefficiency to be generated by this sector.

In a developmental context, not all sectors can be expected to be equally developed to the degree that large centralized control can be the most efficient feasible form. Usually, smaller scale experimentation is required to determine superior methods. Relative autonomy is required to make this process of experimentation meaningful. Built infrastructure at any given time and location limits the absorptive capacity of large-scale industrial enterprise. As opposed to the unemployment of the remainder of society, these alternative social enterprise arrangements may continue to add to the social product, even if at a lesser efficiency than the large-scale arrangements. This would remain true until the appropriate time when these are ripe to scale up. As opposed to the requirement of universal public ownership, which in a way is utopian, since it expects that all desirable products of labour are ripe for such a scale of organization, having diversity in types of social ownership (that may be geared to sectional interests), can allow for these types of developments in a similar way that capitalism can conduct these experiments.

Devine (1988) argues that planning is absolutely necessary for the best use of limited possibilities. He argues that a competitive general equilibrium model is impossible and would not be desirable even if it was possible. The reason for this, he argues, is that a Pareto-efficient system would require significant inequality to motivate by incentives. This prospect, he argues, should be distasteful to socialists (Devine, 1988). The distaste is understandable, but the lack of consequence for even managerial performance would lead any economy to stagnation at

minimum. Most of the command economies used managerial incentives since they needed to motivate managers to achieve their targets and potentially make improvements. Even if all the means of production are owned by the proletariat, they still might want to provide incentives for successful work and for improving processes since this would lead to a net positive outcome for all in terms of productive efficiency. This should be distinguished from private ownership. Albert and Hahnel (1991) argue that innate ability should not be rewarded, since endowment is unequal. Instead they assert that only superior effort should be rewarded. This is a rather moralistic way to treat the issue of incentives that are not really about raising up successful individuals as social models in a moralistic reward system but are about attempting to reinforce behaviour that produces a greater social good. To prevent this, one could maintain a relatively high living standard and have incentives calculated to be generally enough to motivate people on average, but not enough to cause significant disparity so as to create substantial material inequality. Although some historical socialist regimes have attempted to utilize the system of moral reward in deemphasizing the financial, this method proves to be of declining efficacy as the temporal distance from the initiation of the cooperative project increases (Ellman, 2014). Cockshott and Cottrell (1993) posit an incentive system by introducing a graded scale for work quality that would be conducted by management. Laibman (1992) recommends a bonus calculation that values ambitious plan fulfillment with graded rates of remuneration (Laibman, 1992). The demand for absolute equality in remuneration by Devine (1988) is utopian, even as the social trajectory towards the egalitarian is due to progressive deskilling of labour.

Devine (1988) also argues that a Pareto-efficient equilibrium assumes existing preferences are exogenous. Devine (1988), like Dobb (2012), argues that these are socially formed, but he feels this does not legitimate paternalism; instead it legitimates democratically

determined decisions. However, only people in the position to innovate can know what new alterations to existing production are possible. This is the socially significant element to Hayek's emphasis on tacit knowledge. The population can give investment direction, but they are not in the position to evaluate the feasibility of any specific project possibilities due to lack of appreciation of specialist knowledge. Both capitalists and planners use specialist knowledge based on a hypothesis of what people might prefer, to determine what they feel is the best investment plan under their specified purview at different scales. As opposed to an attempt to merely weight decisions towards present consumption preferences in aggregate, having a more coherent plan of action based on the outcomes of a combination of targeted investments as well as projected future needs and preferences is necessary to prevent serious bottlenecks and anticipated deficiencies. Therefore, a plan is necessary both at the firm level and at the state level to prevent the anarchy produced by mere conformity to present individual preferences. In this way, the democracy should be directed to choose among various feasible investment plans for a specified period. Certainly, a greater role could be made for aggregation of preferences from individuals. But this could not replace the need to strategically include or exclude various elements and reinforce others to effectively achieve the goal specified with a minimum of negative externalities. Production under both capitalism and socialism would require entrepreneurial agents to present new production hypotheses, which can be evaluated *ex post* in terms of market feedback as well as *ex ante*, at the investment and planning stage. These agents need not be owners, as they are not in the context of capitalist institutional investment. But it would probably be of social benefit to incentivise the production of innovative plans which do take externalities into account, through governmental incentive and regulation. An incentive

must also be determined for the funding side to encourage behaviour to be aligned with the popular interest.

Devine (2002) differentiates his model from Laibman's (1995), Parecon (1991), and Cockshott and Cottrell's (1993) by arguing that firms, in his model, set their own prices rather than having them determined by central calculation. He argues that this allows his model to avoid Hayek's tacit knowledge problems since firms, although publicly accountable, are formally independent (Devine, 2002). The problem is that this system suffers from the same deficiencies as the initial Hungarian reforms highlighted by Kornai (1992) where a socialized system in the context of market competition is subject to a soft-budget constraint since the mechanism of firm activity is ultimately reliant on state support rather than market competition. Cockshott and Cottrell's (1993) as well as Laibman's (1995) methods for firm evaluation, which would be based in some sense on a calculation would inform a mechanism for funding approval. But these methods integrate the market *ex post* determinations with the *ex ante* ones, so these mechanisms of feedback will not work at cross purposes.

Paternalism vs. Pluralism

Devine (1988) refers to Lindblom's distinction between paternalist and pluralist models in determining the economic structure he posits. Paternalist models rely on the belief in the perfectibility of correct solutions and pluralist models rely on the belief in fallibility of projected solutions, so preference determined choices are made through a social process which deemphasizes the suboptimal. Although he finds these categories a bit reductive, he suggests a mix of elements rather than the implicit moral judgement in the dichotomy that accentuates the pluralist, market model as opposed to a paternalist model that highlights state intervention. Devine (1988) rejects Nove's (2003) conflation of horizontal economic links with market ones.

Devine argues that since democratic mandates, are enforced through hierarchical structures, they still can represent a horizontalist popular will (Devine, 1988). However, Devine's stress on 'negotiated coordination' seems like a mystification of economic relations, endowing them with a greater degree of consensuality than is actually present, in the contexts of exchange, voting and command. All involve a mix of consent and coercion, since these are affected by external forces, even if specific interactions are often not mandatory.

Devine (1988) believes that this process of negotiation, due to its greater openness can make economic transitions more comprehensible to workers who feel undervalued by economic changes. He thinks that this process would allow the system to take greater care and not abandon the people that may feel increasingly irrelevant (Devine, 1988). This emphasis evokes Polanyi's discussion of the severe psychological impact on workers who are made obsolete by economic change (Polanyi & MacIver, 1944). Devine makes a laudable attempt to support people who feel useless in the current system. However, at what efficiency cost will society bear the reproduction cost of using inefficient modes to salve the self-esteem of people trained in these modes of production if it will necessarily slow the transition to superior forms and thereby improve the general living standard? This consideration need not be absolute insensitivity, but it also cannot also become absolute acquiescence in a socialist society based on an improving living standard.

Devine (1988) highlights the need for a macroeconomic plan to be coherent and not just be an aggregate of atomized decision-making. He emphasizes that market failure occurs in cases where collective action is required to reach a solution such as in cases of prisoners' dilemma, or when significant externalities or public goods exist (Devine, 1988). This is the case even under capitalist management where regulation and strategic investment exists.

Devine (1998) differentiates technocratic from corporatist planning under capitalism. He argues that the technocratic planning has an anti-democratic ideological function that naturalizes the structuring views of economists. He contrasts this with corporatist structures, which have a more intentional democratic negotiated character, which does not rely on specialists (Devine, 1988). However, I argue that corporatism is not value neutral in terms of its method of democratic inclusion. Also, it has a tendency to solidify traditional hierarchies and reinforce national and ethnic divisions, as opposed to eroding them, as highlighted earlier. Democratic structures are often treated fetishistically as an unassailable good, but more intentional 'self-determining' structures also generate more of an impetus for exclusion and sectional benefits. Technocratic plans can, for instance, naturalize austerity due to the capitalist class maintaining disproportionate political power in its influence on state policy. But this maintains a context of class conflict in contrast to the corporatist class collaboration, which produce results that are both economically and socially regressive. Here we might differentiate Mandel (1986), Devine (1988) as well as Albert and Hahnel (1991) whose schemes have a corporatist character from the scheme of Cockshott and Cottrell (1993), whose plan is much more technocratic in nature, due to the greater emphasis on economic calculation rather than mere consciously asserted political will. Marx's observation that economic progress precedes social progress means that often, in a conscious political structure, political agents will challenge and restrict economically progressive policies. One can reference issues such as racial integration, women's equality, and transgender integration as issues that ought not to be left to a potentially conservative local polity. The economic advantage of greater potential inclusion and equality must take precedence over traditionalism if social progress is to effectively advance. Devine (1988) recognizes that international pressures shape national objectives and structures so that a

self-government ultimately requires an international scale (Devine, 1988). This internationalism would militate against regressive localism, making corporatist structures extremely limited in their potential efficacy. Devine sees neo-corporatism as a positive sign which brings together disparate interests for consensus and sees this as a move towards industrial democracy (Devine, 1988). This view should be critically contrasted to the view of the traditional Marxist left who are suspicious of the class collaborationist character of corporatism in its attempts to blunt rather than heighten contradictions. In contrast to the emphasis on greater substantive majoritarian enfranchisement and representation of the previous socialist eras, Devine (1988), in congruence with the neoliberal period, emphasises not minority inclusion, but self-determination. However, this is not in congruence with his emphasis on decentralization, since local majorities discriminatory tendencies are to be disabled in a structure that is more centralized, but not in contexts that these are more fractured.

Devine (1988) discounts the mathematical, technocratic approach of Cockshott and Cottrell (1993), in the tradition of Kantorovich (1965), for three reasons. The first is an *ex ante* totalized plan relies on an assumption of perfect knowledge. The second is that it assumes that the social interest can be determined at the national level and be communicated to enterprises in terms of output requirements. Devine rejects the possibility of a coherent resolution of general social interest, group interests and individual interests, even when democratic procedures are employed (Devine, 1988). This analysis evokes different spheres of responsibility for democratic mechanisms, such as municipal, regional and national, that also leave space for the individual as an actor in decision making. He also rejects this since a central plan eliminates the role of decision-making of the individual, as they must merely follow orders from the center (Devine, 1988). This again is Devine's petty bourgeois, new left critique that centers on the alienation of

the worker. Workers almost never have the ability to self-determine, except in the narrowest sense. In so far as they do, it is dependent on the strategic position of their ability to hold some significant aspect of society hostage with respect to a general interest. There is no reason why proposals cannot be submitted for review to agencies of differing spheres of responsibility. Experimental processes could be accounted for with some plan flexibility.

Kornai (1992) describes the regulator game between the center and the locality as the struggle of central regulators to bend local actors to the will of the center. Kornai (1992) asserts that since the center has minimal presence in the local context that conformity to regulations will generally be deceptive, in contrast to its intended purpose. In Mandel's (1986), Devine's (1988) and McNally's (1993) analysis, which are in congruence with Kornai, in the regulator game conflict, the balance of power will always favour the local actors. I disagree because I think this depends on the effective leverage of both parties, which is related to the level of technological development; specifically, this is situated in the cost and reliability of process monitoring. Certainly, in underdeveloped economies, the balance of power seemed to be with the local officials but with the centralization of effective standardization, surveillance, monitoring and regulation by the center, this can change, just as it does in capitalist corporations. From the perspectives of McNally (1993) and Devine (1988), this is why the state must not allow an unregulated market, because they assume, once unleashed, this mode will automatically dominate. This would be Kornai's (1992) perspective as well except that he is in favour of this outcome. This is a very undialectical outlook, however, since it views the conflict between market and planning as necessarily favouring the market side. I think a more fidelitous outlook to historical materialism would be to see the advantage oscillating between plan and market depending on what is materially more effective under particular conditions. However, as

development occurs the system would be expected to contain a greater and greater role for planning, in contrast to the market. Although this does not encompass the corporate role of planning, as highlighted by Phillips and Rozworski (2019), the state sector in modern capitalist industrialized countries continues to grow into the neoliberal era, despite all rhetoric about its intentional shrinkage. The tendency towards increasing planning in both the state and the corporation suggest a shift towards a relatively more planned economy, in general in absence of a state ideologically committed to this end in a utopian manner. This suggests that the market will not likely win in the end on balance.

Information, Motivation and Alienation

Devine (1988) attributes the problems with command planning to issues of information and motivation. Regarding information, since scale production requires an informational collaboration between smaller and larger scales of granularity, Hayek contends only *ex post* pressure via the market, can force cooperation between these in a way that is comprehensible through the disciplining effect of price signals. Kornai (1992) claims that without this external pressure, relations succumb to the regulator game. Devine (1988) reasons that the market mechanism provides poor information for investment decisions in terms of social rationality, due to the significant externalized factors missing from the equation. However, he also suggests that a primary problem with command planning is that it assumes total and perfect knowledge, but a complex modern economy necessitates partial ignorance (Devine, 1988). To this latter point, I argue that this lack of data processing capacity is only a limitation at this stage of development and that this hurdle could potentially be overcome in the future as capacity increases. The central calculation methods pioneered by Leonid Kantorovich (1965) indicates a possible direction. Devine (1988) calls for centrally planned economies to be somewhat decentralized, since the

center lacks the capacity to subsume the expanding economic structure. This requires relative autonomy.

Regarding motivation, a central problem with command planning is the issues of designing a strategic incentive structure that forces narrow self-interest to conform to broader social interest. In large socialist bureaucracies, management is incentivized to overstate input requirements and understate productive potential, so targets are more easily achieved, and they avoid any penalties for under-fulfillment of targets. Each level in the hierarchy recognizes that the information is tainted in this direction and attempts to compensate for it, so that the construction of a taut plan is largely based on the assumption of this pattern of a lax one. Due to the historical unreliability of these supply chains, each firm gears itself towards relative autarky by building up its capacity to produce necessary inputs and spare parts without the scale advantages of specialization. It also has fulfilled plan targets in correct but perverse ways, such as by producing overly heavy products when incentivized by weight. The emphasis on such physical targets has caused these firms to significantly deviate from consumer requirements and quality by fulfilling the letter but not the spirit of the directive. Also, emphasis on merely fulfilling plan targets militates against innovation since this requires the empowerment of local actors to be able to use and benefit from the local innovation. Proper incentives therefore require inequality (Devine, 1988, Ellman, 2014). Devine takes issue with this explanation and argues that this is more due to the insufficient political and economic democracy in the system that allows people to feel that their small economic acts are part of a collective social whole, which would reinforce behaviour with a moral incentive (Devine, 1998). The expectation of the moral sense of buy-in and volunteerism in self-determining the economy that Devine (1988) hopes for here is consistent with his petty-bourgeois, post-1968 view that work will become less alienating

and more personally engaging and inspiring in a socialist economy. This is a utopian expectation that would cut against the trend of the move from less alienated artisanal production to more alienated, specialized, and heavily socialized work under capitalism. There is no reason to expect this trend to reverse without a massive reduction in productivity. Workers in larger cooperatives have a similar relationship to employment as wage workers do, even if they get a small influence on the macro-level investment decisions and some elements of policy, since their wages would likely be relatively fixed. In a smaller cooperative, their voice would individually have a significant impact, but their vote in a large cooperative would have merely tokenistic relevance to outcomes. Certainly, greater productivity of labour in tasks that meet necessities allows for the maintenance of a greater quantity of population that need not be involved in this process and are less constrained in their activity in theory. But an increasing material living standard is not compatible with a decline in alienation, in the sense of a greater relationship of the worker to productive output. Lesser alienation would be associated with a decline in productivity growth. I agree with Devine (1988) that allowing greater decentralized space for local agents to innovate (and be compensated for it) is necessary to maintain worker morale and produce beneficial results on a larger scale. But this will likely only bring the worker under command planning to a level of alienation that might be just slightly less than the worker experiences under capitalist management.

Abstract discipline is necessary since the process of socialized production is relatively abstract itself and motivations are not intrinsic, like in the case of production for use or potentially artisan production. Alienation may be thought of as a feature not only of the relations of production but might be understood as a product of the scale of production. The lower productivity of society, as a whole, does impact the worker but very indirectly. A proximate

laxness in formal labour discipline would be insufficient to motivate the worker even if the reduction in overall social wealth does impact them in aggregate. It is difficult to instill a small proprietor's sense of responsibility over the process of labour in this abstract state, since they are not directly its 'owners' even if it is public property. However, it might not be possible without the mediation of endless disputes to achieve broad consensus over any processes, especially at a large scale which necessitates some means of discipline.

To illustrate the problem of pure autarkical management using a hypothetical scenario, one might imagine, the considerations of a new collective in the context of an overthrow of the bosses of a sector and the institution of self-rule by, say, a medical system. It could then be operated like a democratically run guild, which could empower its membership. However, this means these spheres would operate autarkically and therefore would be significantly less accountable to society as a whole rather than to its members more directly. One would imagine the terrible outcome of doctors, who are already well paid, demanding a significant increase in wages on society as a whole. Often one encounters the struggle to improve the lot of lower paid sectors to a basic minimum, which is just, in terms of social equality, but there is no inherent constraint on organized demands of sectional interests. It is just as possible that organized groups demand differential privilege. What is required is a means to mediate the power of organized groups to the needs of the interdependent social body. The state administration of these sectors and a system of economic integration is a way to constrain their otherwise significantly less limited aspirations. This illustrates the limits of 'trade union consciousness' in the socialist project, as well as the equivalent problem of an autarkic state itself, being accountable only to a sectional territorial interest rather than the equivalent economic domain that reproduces economic life on an international scale.

Devine (1988) argues that the removal of competitive capitalist exploitation would eliminate the necessity for coercion in the production process (Devine, 1988). It is not clear this is so, since if it is of social benefit to maintain a certain level of common productivity, the discipline of a manager may be required, even with common ownership. It has been stated earlier that the general social benefit in terms of common ownership has not been sufficiently motivating in the statist countries to incentivise labour for their general share rather than their specific incentive in the form of a wage. Devine assumes that if people elect for a production plan that involves their personal commitments, holding individuals to this plan would not necessarily require coercion. However, people are not always so consistent in their commitments as the existence of free-rider problems demonstrate. In modern capitalist social democracies, citizens are involved with electing a party on the basis of their policies with regards to the allocation of public funds. Even though this is the case, it is not true that no working discipline is required to keep workers to the plan commitments merely because they were involved in the decision-making process. Devine (1988) here conflates participation with intrinsic motivation. Due to the structural alienation of high productivity cooperative labour, extrinsic motivations are necessary to maintain consistent motivation.

Decentralization and its Historical Dynamics

Devine (1988) argues that decentralization can be maximized while still maintaining a coordinated structure. However, this is no different than what exists under modern capitalism (Devine, 1988). As productive economic growth occurs, a larger and larger state is required for administration of the economy. Under a capitalist paradigm, this state growth is not ambitious and is constrained as much as possible, so long as growth does not stagnate. This process, due to its constraint, maximizes decentralization while maintaining a heavily coordinated economic

structure. This does not decentralize the workplace per se, but it does give agents within it more leeway to bargain their individual positions, at the expense of workers as unified collective agents. Workers as a group, in this context, have less economic leverage than when they assert their power in a united fashion. In this regard, Devine (1988) highlights the economic reform of the Soviet economy under Kosygin, where it tried to replace gross output targets by market value indicators, although this met with only minimal success at the time. One could argue that this was the beginning of their transition to capitalism away from an administrative economy, but not towards some sustainable middle ground, as many reformers had hoped.

Devine (1988) sees a problem with the ambitious growth targets of the administrative economies, since this violated the democratic will. Therefore, he expects a more democratic economy to produce a lower rate of accumulation (Devine, 1988). However, by committing to a lower rate of investment, the society is committing to a slower rate of economic growth and rate of expansion of living standards so that they can properly motivate management. The higher level of consumption by private actors, in their self-interest, comes at the expense of the living standards of the majority, whose lives could be improved by the investment of this surplus. Why would people support this? What exactly is so 'democratic' about greater private control of socially beneficial resources? In fact, what is being done is the de-democratization of resource control through the public agency since the democratic infrastructure is seemingly inefficient and underdeveloped. His use of the term democratization is misleading, since it means a greater influence of private and sectional interests on economic decisions and less so with regards to the broader public interests.

In a historical materialist understanding, this could be understood as a continuation of a dialectical mode of industrial development. The public mode of economic execution needs a

rational method to determine which organizational methods of productive enterprises are effective so that they may appropriate and scale up their operation in the public interest. The extensive methods of incorporation of population into highly productive sectors by underdeveloped socialist economies was very advantageous. However, they lacked a proper method of industrial experimentation and evaluation to push towards the engineering of more productive methods via intensive development. Private initiative does serve as a source of this experimentation, even if its motivations in conducting it are in opposition to the appropriation of these gains by the broader public. Mathematical methods could do this as well, given there is sufficient space for economic experimentation and analysis that could be used to inform production methods.

In a way, this could be compared to the dialectical oscillation of waves of economic centralization followed by decentralization. Examples of this would be the transition from a more centralized imperialist household slave economy of ancient Rome to a more decentralized feudalism, to a more centralized absolutism, followed by a more decentralized industrial capitalism. One would expect the next stage to be a more centralized imperialist monopoly capitalism followed by neoliberalism that is less centrally coordinated, even as governments generate contexts of new market dynamics that could not be possible without international enforcement (i.e. intellectual property). Potentially this might be followed by a socialist stage of greater international coherence in state governance, but it is impossible to know before it happens.

One might understand the waves of centralization and decentralization as being related to the maximal capacity of the means of economic governance in the context of a particular level of development. Once the dominant centralized economic governance institution of the time

reaches its absorptive capacity, economic expansion must occur via decentralized methods until a new more efficient system of coordination is able to manage or absorb an even broader breadth of economic activity. At different times, this institution might be the village council, the monarchic city state, the broader monarchical state with feudal lords as subservient to the monarch, or the civil service responsive to a democratic polity. Private institutions may find themselves dominating these structures, but it is unlikely that this can be sustainable without some sense of eventual public accountability. The dominant institutions might be incentivized to innovate to remain relevant in response to the vanguard production methods of the private sector that are ripe for appropriation, if its governance method allows that to be feasible and advantageous, due to economies of scale. It is important to recognise that corporations began as chartered state agents.

In the state socialist context, the establishment of the centralized rule may be compared to modernizing expansive Bonapartist regime that follows a more centralized absolutist one. It is similar to the centralized Keynesian phase in the advanced capitalist countries as predicted by Neurath but is closer to a stage of bourgeois revolution of an early post-feudal period. In both stages there is more relative intervention and growth of the state, creating a welfare state in the capitalist countries. It could be that the Keynesian project represented the extrinsic growth period, like that in state socialist countries, and the latter neoliberal period represents the dialectical response of intrinsic growth, after internal extrinsic expansion has been largely completed. Internal to the capitalist countries, this period of extrinsic incorporation involves the (incomplete) breakdown of the formal barriers of identity such as gender, race and geolocation. In the later globalized period, to participation in the formal capitalist economic sphere. This period may be thought to span from the great depressions and war economy to globalization and

offshoring in the 1970s and early 1980s. The intrinsic shift, like that proposed by the mathematical economists like Kantorovich (1965), was a rise in big data driven efficiency calculations in what amounts to centrally planned administrative economies, like that done at Amazon and Walmart as Phillips and Rozwarski (2019) highlight. Although now in private hands, what one might expect the next step in this dialectical process to be, is the centralization of these processes in the democratic (public) interest that started with the public internet. This type of resource can be a further aid to even more efficient central planning.

On the left, neoliberalism in popular leftist discourse is largely presented as a conspiracy of an economically powerful state to privilege finance capital, big industrial capital and technology firms enforcing intellectual property rents at the expense of the public interest, which without this strong state could never be enforced. Alternatively, it could be read as a dialectical swing generating greater capital concentration in the private sphere, in an alliance with the state, in a similar way as in the context of war planning, but largely excluding labour as a relevant bargaining agent. This is often represented as a break from the historical materialist process of a cynical state breaking from the Keynesian new deal. The critique of this development from both left and right in the 1980s and 1990s led to the rise of anti-corporate politics, seeing the state support of these as mere corruption. They would contrast this to the less alienated small businesses which are represented as a more authentic and moral form of economic governance. Due to the greater monopoly power of these largely multinational corporate structures, they may be subject more and more to democratic accountability as Lange (1938) suggested. This can lead to greater spheres of decommodification and public regulation with increased standards of living, not merely for shareholders.

This analysis seems more in line with the neo-Kautskyist strategy of patience, since there are more relevant stages to the dialectic than just capitalism and socialism writ large before a transition to communism, if such an event is to occur. The capitalist dialectical process may be ultimately unavoidable as a developmental stage in historical materialism that cannot be sidestepped through the revolutionary seizure of the state. This would suggest a lesser role of political determinism as compared to economic determinism in the transition to communism.

Emphasis on worker participation at the firm level, evokes cooperative structures, which have not seen economic advantages under capitalism. These largely occupy a niche space in the economy. This appears more like a petty bourgeois ideology of equality discussed by Marx in the Critique of the Gotha program in reference to the French influence on the Lasallians (Marx, 2008a). Pluralism, in so far as it is advantageous and not merely a capitalist buzz word, might be read as experimentation with economic structure to generate useful innovations. However, counter to Brus' (1980) claim that is touted by both Devine (1988) and Nove (2003), China has demonstrated that political pluralism is not necessary for continued capitalist growth.

The Participatory Economy and Planning

Devine (1988) foresees positive economic reform in the command economies involving greater workplace participation at the enterprise level by electing workers' councils. Firms would become self-financing, relatively autonomous in their methods of production and use of resources. Also, firms would be granted autonomy in setting prices rather than relying on the center. He suggests an extension of firm plans from annual to every five years to prevent a ratchet effect that requires unrealistic improvements in efficiency which are a long run disincentive. He suggests reduced subsidies, the use of wage differentials as a mode of motivation and the institution of rigorous quality control to more significantly link income to successful production. Lastly, he suggests the expansion of the potential for small-scale

cooperatives and self-employment (Devine, 1988). Devine's opposition to exploitation rules out more explicitly capitalist structures that involve employee subordination, however these reforms he suggests veer towards capitalism without capitalists. It is not that these reforms are necessarily ill advised in the context of command economies, it is just that they do veer away from command structures towards a more capitalist form of economy.

Devine (1988) contends that the lack of democratic involvement will inhibit the creation of the subject that will have broader regard for people, rather than narrow self interest. He claims that under an administrative system, that workers become mere objects, rather than decision-makers. In contrast to the view that the experience of cooperative labour is what endows people with a regard for their comrades, this view asserts that it is mainly through the experience of differential governance, that 'self-governing subjects' are able to consider others' interests (Devine, 1988). This argument is akin to the assertion that without the possibility of charity, regard for others is impossible. Here Devine presents a theory of economic change being driven by individual moral principle and the opportunity to exercise it rather than being driven by institutions that have the servicing of relative pro-social regard built in. This view depends on a cultural shift due to individual empowerment rather than cooperative experience. It is a conservative argument, that harkens back to the morality required to exercise broader rule rather than being subject to finer restraints, where this moral variability is less permissible and therefore less explicit or conscious.

Devine (1988) refers to Brus' (1980) classification of decisions in attempting to conceptualize his model. He differentiates these into three categories:

“[1] basic strategic and macro-level decisions, concerned with major investment, income distribution and macro-stability; [2] decisions concerning job choice and personal, not collectively provided, consumption; and [3] current economic decisions, concerned with the size and structure of enterprise and industry outputs and inputs, the destination of outputs and the source of inputs, and minor investment.” (Devine, 1988)

Devine (1988) argues that for any economy to be accurately characterized as ‘planned,’ the first category of decisions must be directed centrally while the second must remain decentralized. The third is the contested sphere at issue in debates over economic reform or market socialism (Devine, 1988).

Devine (1988) cites how both the market socialist Hungarian New Economic Model (NEM) and the Yugoslav worker self-management model have resulted in failure due to the tendency to attempt to preserve firms that are going bankrupt, even though they are in many ways subject to a competitive environment. He presents a picture of these economies as a system at odds with itself. Since it cannot win the regulator game, the best it can do is rely on parametric regulation, which he views as destabilizing. In contrast to this, Devine (1988) attempts to avoid the alienation and incentive structure present in both command and market-based economies by entrenching participatory democracy. What Devine neglects is that mass production on a social scale is alienating since workers are alienated from the object of their labour in contrast to artisanal and craft work. Voting and allowing for individual worker input, in the context of larger scale industry, can make this arrangement more tolerable, but it cannot solve the nature of the problem. Devine (1988) argues that the Yugoslav economy, though formally socially owned, was in reality under sectional control for sectional profit. The soft budget constraint allows them to act in ways that may help an enterprise directly but harm the economy as a whole. Devine (1988) cites Brus’ (1980) explanation that as opposed to transitioning public ownership to social ownership, these economies empowered market forces to enact an economic coordinating role giving rise to the dominance of sectional ownership (Devine, 1988). Although I don’t dispute the fact that sectional interests began to dominate in these economies and their ability to do so was

further enabled by the reforms, I dispute that their leverage came from the reforms and insist that they came from more objective economic factors.

Devine (1988) differentiates state from social ownership, since state ownership can lack meaningful social control and this social control requires effective democracy (Devine, 1988). However, it is unclear how Devine (1988) can reconcile a participatory view, which will necessarily promote self and sectional interests, with a need to socialize production, which necessarily requires a broad perspective. More socialized production needs to integrate disparate factors outside of the individual's perspective which is only feasible through the aid of some economic metric that can quantify the relative values of various inputs and outputs on a broader social scale. I posit that access and availability of institutional means to tweak the local aspects of a central calculation plan, would allow workers to simulate modifications which could improve the production process. Providing bonuses for successful innovations could incentivise this process. Bonuses at the work team level might increase solidarity rather than competition on an intragroup level, and thereby increase participation and motivation to innovate. Devine (1988) rejects this kind of central calculation, therefore removing this possibility in his vision. Without this modification, production will just be ad hoc and cannot integrate to a common platform, that is, unless the market is used as the mode of economic calculation. However, Devine's (1988) view that socialization is gradational and not binary, is acceptable since degree of control is never absolute but is always relative to other actors involved. He emphasizes, in congruence with Brus's (1980) view, that there is a deepening transitional process to socialization. As opposed to linking control to the roll-out of a regime, control reflects relative leverage which may be entrenched by an intentional regime, but also may not, in congruence with the views of Bettelheim (Devine, 1988). I argue that politics, even revolutionary politics that can seize the

state, cannot transcend the process of historical materialism. Armed with the knowledge of historical materialism though, these revolutionary groups could accelerate the process towards modern capitalism, but not transcend it, as they aspire to. Socialism might then truly be on the horizon through a significant capitalist stage. Maybe it can only transcend it once its methods have been exhausted. In the realm of the climate management and international food distribution crises, international coordination could maximize utility and wellbeing if organized in the interests of the poorest. Capitalism cannot solve this crisis since it involves the management of a global commons that transcends state boundaries, so its methods are exhausted in these realms at present. Suggesting that conditions for full transition to socialism have not yet been established, does not necessarily suggest a purely evolutionary path as counterposed to a revolutionary path. But it may be that the built means of production in the state socialist countries was insufficient to transition to a fully socialist form, despite their best efforts.

Devine (1988) asserts that for economic democracy to be substantive, the use of socially owned means of production must be controlled by those most directly affected by them. He however asserts that other parties also have a significant interest in these processes and should be party to the determination (Devine, 1988). Hodgson (2005) asserts that there needs to be legally determined bounds to limit who gets a claim of being affected by a decision, since this type of structure could lead to boundless interference into the lives of others. Hodgson (2005) illustrates that people could claim to be affected by a couple's choice to procreate or interfere with a women's right to have an abortion if she chooses, but they should not be given rights to interfere with this decision. Laws and legal precedents are ways to make these determinations in a less unbounded way as a mere claim of interest in the outcome (Hodgson, 2005).

Devine (1988) refers to the theorists Beetham, Macpherson and Poulantzas in his claim that there are different forms of democracy. He asserts that a participatory democracy is preferable to other forms. He argues against the classical Marxist attempt to abolish the separation between legislative authority and executive authority to support self-activating and self-governing decision-making (Devine, 1988). Although this critique is important and correct for a post-capitalist socialism, as stated previously, the breakdown of this separation served a developmentalist agenda that becomes less meaningful as the economy becomes more developed. Also, the establishment of any new regime begins with a more assertive dictatorial character which reduces as hegemony is solidified or its founder dies. As stated above, this even occurs with respect to corporations where the founding tycoon is replaced by a CEO, who runs the company in a more bureaucratic fashion than their predecessor (Baran & Sweezy, 1966). Devine (1988) asserts that the lack of separation of powers is due to the concentration of technical expertise and the power this conveys. He hopes for the development of a method in which expertise does not translate into power over others (Devine, 1988). This view is utopian and anti-materialist. The position of workers with respect to the means of production depends on the assertion of their power over this means as a collective. The materialist view is that, even though an owner has greater leverage at some levels of development, at others the workers, if organized collectively, can wrest greater leverage and therefore greater control. Devine (1988), citing Beetham, argues that the greater the concentration of authority, the more difficult it is to subject this authority to democratic control. This implies a necessary degree of decentralization to prevent control of dominant centralized power. However, popular leverage depends on the degree of generalization of popular interests, facilitated by capital accumulation, as well as organized coordination of those interests. Mancur Olson in his text *'The Rise and Decline of*

Nations: Economic growth, stagflation, and social rigidities highlights diseconomies of scale that exist in large organizations with broad interests and minor potential pay off for individuals such as through the free-rider principal (Olson, 2008). This speaks to the potentially decreasing growth in power in relation to scale of organized interests. Even if we recognise this as a factor, it does not necessarily counteract all factors of scale themselves. It merely recognises that the growth in efficacy reduces with scale but is not undone. Therefore, we can still predict that an increased convergence of economic interests can challenge and more effectively direct centrally coordinated control in a highly socialized economy. Mere centralization does not necessarily translate to authoritarianism if the popular check on the center can have access to sufficient leverage.

Devine (1988) critiques both the irregular electoral check on central power as well as an admittedly less feasible structure for decision making involving the selecting of citizens by lot to serve in governance, termed demarchy. This type of selection process, outside particular contexts like on juries, would risk significant inefficiencies being furthered that would otherwise be easily avoidable. Although the model of Cockshott and Cottrell (1993) highlights this mechanism significantly, like Devine (1988), I think this is an error.

Devine (1988) believes that the solution to the problem of a hierarchical division of labour is for all citizens to become experts in something. He argues that this will allow for greater participation in democratic determinations (Devine, 1988). This view reflects petty bourgeois ideology that everyone can become a 'professional' with the implicit respect accorded to them on the basis of that status and expertise. This will be quite contrary to a growing proletarian social structure, given its likely increased mechanization and decreased proportion of professionals and small proprietors relative to current relations due to capital accumulation. This

view is in line with his anarchistic leanings and is common to other writers of this time.

Anarchistic views had a resurgence in the late 1980s and early 1990s as a leftist alternative to Marxism. These views gained appeal due to the context of the imminent collapse of the Soviet Union understood as the failing of the Marxist project. It is telling that Devine (1988) references the writings on Bakunin on these points as an antidote to a Marxist emphasis on a hierarchical structure that organizes workers who become increasingly cooperative and unskilled in their work and therefore require greater organization to express their common interest. Following from many in the new left, influenced by the Frankfurt school with its the emphasis on the combatting of alienation by appealing to the writing of the young Marx, they saw as the egalitarian ideal, the autonomous professional and small proprietor as the future universal agent, rather than a proletarian class of cooperatively labouring unskilled workers. In a more Marxist materialist view, these positions would be in decline as modernity progresses relative to the past due to mechanization and capital concentration. However, in the context of a more post-scarcity view, it could be that people are trained for more self-directed exploratory personal pursuits which are less alienated rather than those that suit the population in a competitive marketable role more generally. This could only be the case when most 'necessary' labour has been eliminated. This view would map onto Marx's view that in the communist future, "labor has become not only a means of life but life's prime want (Marx, 2008a)." Given current hegemonic ideology, we read that the ideal form of labour is this kind of self-directed, individualistic pursuit, but it is unknown whether this will be the form idealized by the people living in this context. The example this is likely to be based on is the pursuits of the wealthy, historically, in scientific and artistic enterprise, given their relative freedom from want. This would also be the historical trend in developed nations, with a higher rate of education and professionalization

among the population at large. This is largely accomplished by offshoring most of the necessary labour that serves to reproduce the population or broadly allocating certain types of domestic labour to foreign workers without formal status and thereby alienating them from the national democratic self-conception.

Present here is an unexplored conflict of the class composition of the communist society to be produced by the trajectory of historical developments. Although, this society is defined formally as classless, in terms of social division of labour and status, it might be instructive to explore the character of the predominant economic roles that society would require. The historical trend of the changes in class composition that are experienced in developed societies might be instructive in this regard. From the context of the development of capitalism, the small proprietors and professionals were displaced by collective working enterprise in the factory. So, it might be natural to imagine a more general proletarian future, based on collective work since its efficiency is much greater. However, at the developmental point where laboring necessity is eliminated by automating at least most essential labour, the working class becomes economically superfluous as well. This would lead to the economic emphasis for all people, not just the elite, to become specialized experts themselves and not in fact, unskilled collective workers. I suppose this is likely the position of the bureaucrat with a particular sphere of developed expertise in a collective operation, but also one that contributes to governance, unlike the labourer. Devine's (1988) emphasis here might be criticized as skipping the requisite transition of proletarian consciousness to this more individualist, communistic form. Devine (1988) characterizes this as the transition between primary motivations from compensatory consumption to psychological productive activity.

In a historical materialist sense, this can be seen as another dialectical oscillation of emphasis, where further developments require a greater degree of individual specialization, this time in the context of collective enterprise, rather than more autonomous individual firms. The worker at the origins of capitalism began as an artisan who was displaced by the unskilled atomised worker. This atomization then proceeds to the extent that unskilled labour is less and less necessary due to mechanization, so what remains is an atomized skilled labourer or engineer. If this trend were to proceed even further, one would expect that all that would remain of the human role in the reproduction of economic necessity, would be its task as solely the governing of economic decision making. That is, as a democratic ruling class.

The supposition that proletarianization is not eliminated altogether through economic development, but is merely relocated, might be a position advocated by Third-Worldist theorists, such as Zac Cope (2012) who see industrial concentration coming at the cost of their increased exploitation. This view, however, regards technological development as necessarily zero-sum and therefore fundamentally conspiratorial on the basis of geographic or racial privilege of the imperialist powers and not progressive in an absolute sense. As opposed to being a beneficial arrangement that serves both parties, even if this is to differing degrees, they see this as a necessarily coercive arrangement that one party might actually be better off doing without. Therefore, the views of these theorists emphasize unequal exchange as the active model of the trajectory of unequal development. What is required to combat this claim, in a scientific sense, is a central economic evaluation which can internalize the necessity of all participants in the economy as relative equals. This would allow them to more objectively determine if their needs are fulfilled to a greater extent using either predominately autarkic arrangements or alternatively relying more on greater interconnection with more developed societies. This would allow them

to evaluate more fully the net costs and benefits of each strategy. Since all calculations exclude some factors, they will necessarily highlight this to suggest it was a deceptive conspiracy all along. Only then, can one make a clear claim to the progressivism of economic developments, due to their actual globalized form. This is, in contrast to more geographically specific bourgeois economic evaluations which rely necessarily on more sectional claims, such as GDP, while leaving externalities outside consideration. These indicators cannot incorporate sufficient data to evaluate the totality of the economic consequences of particular developments in an international context. Without this evaluative technique, it is unclear if developments that improve the lots of those in the developing world are progressive in an absolute sense. Certainly, agricultural innovations can demonstrate their progressivism by the net growth in population they can support relative to older methods, but other innovations may be less definitive about their relative advantages in terms of overall welfare indicators.

Devine (1988) emphasizes ‘self-determination,’ but has not fully considered that socialized production under market conditions is not the result of worker self-directed agency, but the pressure of market forces. The idea that workers would freely arrange themselves in structures that can maintain the potential for universal provision is utopian. Pressure in this direction generates these structures, they are not merely voluntary manifestations of social will in a vacuum but the product of a social process of historical materialism. Luxemburg addressed the problems with this utopian conception of ‘self-determination’ in her 1909 text, *The National Question*, which could also be generalized from macro-level political structures to micro-level ones brought up here. That is, the same way that national units of affiliation and organization are naturalized and transhistoricized, so to are the micro economic arrangements reified in this way to make them seem like a purely voluntary organization of collective will.

Devine (1988) emphasizes the differing character of socialism / communism as emphasizing the development of human potential but does not recognise that the investment in public education and providing funding to stoke innovation within capitalist social democracy is already characteristic of this attempt. The operative logic of profit maximization is not necessarily at odds with the development of individual potential, since the investment in this potential is also profit generating on a national scale. Just as capitalists are stoked to reinvest due to the attempt to maintain longer term profitability, governments invest in the human potential of the population so as to eventually capture the benefits of future growth and innovation. Devine (1988) suggests that this would require a revolutionary break, but this seems at odds with real historical materialist developments under capitalism.

Devine (1988) wants to distinguish his model from central planning by emphasizing a number of alterations. He wants to maintain the representative character of economic decision making in terms of broad popular interest but wish the organizations that manage these interests to be more self-determined and as decentralized and granular as possible (Devine, 1988). He emphasizes the concept of governance by those affected by decisions, but as Hodgson (2005) points out, legal precedent is required to prevent what might be deemed personal decisions (i.e. choices around reproductive rights) not to be overwhelmed by passionate reactionary forces. Even if different parties are judged to be affected by a decision, they are unlikely to be affected in equal proportion. Legal determinations would be required to judge the particular extent of influence rightly allocated on the basis of severity of impact, since this is in no way obvious in its translation to quantifiable vote share. The economic control by other competing institutions also might not be constructively included in a firm's production decision making since their interests might be at odds with the effective operation of the firm, even though they might be

significantly affected by these decisions. Also, since each decision by each firm would likely impact different groups both within and outside the firm, the logistics of bringing in affected parties in all cases would be unfeasible logistically. The mere assertion of the category 'all those affected' is too broad and vague to have operational significance.

Devine (1988), like Albert and Hahnel (1991), argues that participatory politics maintains a politicized economy, in contrast to market socialism and new-right perspectives (Devine, 1988). However, in the neoliberal era, participation and choice are given as a substitute for a greater share of the surplus due to the weakening of labour's bargaining power. It is not that this process is a mere diversion. In the developed world, the decline of opportunities in large scale industry due to increases in efficiency and offshoring leads to the growth of small-scale sectors, due to the lack of sufficient higher wage alternatives. The tendency towards broader inclusion in the formal economic sphere is a necessary development to expand efficiency of production through greater mobilization of underserved groups due to historical alienation and greater new market innovations to serve them and the more integrated totality. This is not a transcendence of capitalist relations. The economy maintains a political character in all contexts despite bourgeois consumerist obfuscations. Contrary to utopian assertions though, politics cannot overcome international economic conditions by mere political democratic decision. Devine (1988) also recognizes that participatory democratic structures may produce more conservative allocation that could create stagnation rather than greater transformation due to a popular preference for stability. He just accepts this flaw as a necessary potentiality of self-rule (Devine, 1988).

However, political preferences aside, economies that are better able to prevent stagnation are likely to dominate those that do not, making the latter less economically relevant and more subject to foreign dominance. Therefore, structural innovations that prevent this conservatism

will likely gain favour in contrast to ones that just formally conform to a democratic aesthetic. We can see this in the context of the rise of China as a growing economic power.

Marketized Elements with Democratic Structures

Another key element Devine (1988) emphasizes is that as opposed to a predetermined production plan, customers retain the choice of suppliers. This determination is correctly used to address issues of product quality under what was previously monopolistic conditions (Devine, 1988). Although essentially this is market direction, for good or ill, he attempts to mystify the process by the designation ‘negotiated coordination.’ In a similar way to Albert and Hahnel’s (1991) Parecon model, this structure emphasizes a competitive syndicalist structure contrast to a more centrally planned one. Devine (1988) emphasizes the way that self or sectional centred decentralized decision-making would be addressed by reinforcing moral transformation of people to be more concerned with the needs of others. This is to be based on them being specifically affected by particular policy as a sort of more abstract solidarity. The reason one might attempt to balance influence is to proportion influence to impact. But the emphasis on “other regard” attempts to generate a situation where formal influence of others is unnecessary due to the solidarity inherent in the structure. Although laudable, the direction would confuse actors from both sides since they would be both attempting to advocate for their particular interests accurately as well as regarding interests of others simultaneously. Roles must be clearly defined to enable such a governance structure to be functional. This is more likely to result in a muddle than a clear direction.

Devine (1988) also mystifies the role of central planning by the central state. He designates a role for allocation decisions by a ‘national chamber of interests’ from whom they would receive directives on prioritization (Devine, 1988). This is effectively the role of party

plan in electoral democracy where the populace elects the party with the investment plan they prefer, although with a slightly less majoritarian orientation and more of an intention to cater to the entire populace. This however ignores the issue of priorities that are in conflict that cannot be resolved merely through efficient allocations and organization. He stresses the role of social prioritization but underplays its necessarily conflictual character under conditions of scarcity. Laibman (2014) underscores in his critique of the Parecon model, the role of negotiation between interest groups in the negotiated coordination model. Laibman (2014) asserts that this model would be reducible to a Walrasian equilibrium as determined by market forces due to the aggregation effect of differing bids on resources. Similar to the Parecon model, however, not only would these groups have to present their own requirements but also be involved in approving the plans of others through this chamber of interests. This requires decision making to be outside interest and expertise as previously emphasized and towards the dominance of ignorance towards all specific plans thereby rendering all modifications of plans incoherent and likely unproductive (Laibman, 2014). This reproduces the problem of the regulator game that this system attempts to account for.

Price Determination

Devine (1988) argues that prices should be determined in a decentralized manner at the cost of production, but primary input prices must be set centrally. He suggests that firms should be free to set prices but argues that the central state, in charge of input prices as well as major investment projects, should use accounting prices (Devine, 1988). Like Parecon, this model is similarly flawed in its lack of a meaningful unit of price determination. It assumes 'cost of production' is something immediately evident in non-physicalist terms for the purposes of both accounting and rationing. Not only is this not evident, but even reconciling accounting cost

prices with either changes in supply or demand as well as longer term rationing are not straightforward. It solves neither the method of central price determination nor the localized version since cost must have some mechanism of relational determination. For all his criticism of the Yugoslav and Hungarian NEM market socialist models, his would likely fall prey to similar problems of pseudo-market dependence. Devine (1988) characterizes the Soviet system for price determination as merely a product of the central state, but this is incorrect. Although the planners did send down orders, the production estimates were developed in consultation with the plant and industry managers. There may have been some greater imbalance in these relationships, but they were there. The power of a manager is subject to fluctuation depending on the strategic power of their domain in conjunction with their hold on it, just like under capitalism. Lebowitz (2012) discusses the shift near the collapse of the Soviet period to more significantly empower managers in relation to central planners (Lebowitz, 2012). I argue this is because their coordination system lacked the capacity to centrally plan effectively and with proper feedback. A superior system of more optimal price determination based on linear programming with strong computing capacity could be superior, given proper coordination of production and adequate ability to collect information.

Devine (1988) argues that prices would involve both supply and demand considerations, but these would not be directing production decisions on their own (Devine, 1988). However, even under capitalist production conditions, these factors are not the sole considerations for firm decision making. Certainly, governmental regulatory decisions also steer relative costs as well as longer term interests of the firm which it might differentiate from mere short-term profitability. Therefore, the distinction made by Devine's (1988) model between market direction and the use of markets is less relevant than the relative power of institutions that center sectional interests in

relations to those that center the general interest. He argues that price increases are not automatically necessary in response to rising demand if significant adjustments in production is the informational response (Devine, 1988). However, the expected affect of an increased price under conditions of rising demand is an incentive signal to increase production. If increased capacity can be easily accomplished to achieve this, then there is no reason to react with price adjustment. But if this is more difficult, then price rationing would be the preferred solution until the proper supply can be feasibly achieved.

Devine (1988) wishes to empower consumer evaluation in directing production to a greater extent than was involved in the command economies, but not to the extent of the capitalist economies. Therefore he, like Albert and Hahnel (1991), argues for consumer representation on formal bodies governing production (Devine, 1988). This is likely to be inefficient. It would be difficult to determine on what basis consumer preferences can be articulated electorally. Big capital has incorporated consumer views *ex ante* through the usage of the focus group. However, this is not based on universal representation but on the specificity of the target markets they imagine will dominate consumption. It is likely that these methods will be preferable to elected delegates in terms of conformity to consumer preferences. These theorists reject this method due to their distaste for market direction of production. However, if consumer preferences were better served by incorporating consumer delegates onto production boards rather than through market research and focus groups, why would big capital not adopt this method? What these theorists ignore is that the dominance of these methods is due to their superior effectiveness at predicting preferences. If they were not effective, they would not be replicated. What is likely to be a more successful socialist project is to utilize the methods of big

capital in the broader public interest; to take issue with them entirely is to fall prey to a genetic fallacy.

Preference for Small Scale Enterprises

To avoid the influence of market forces on the functioning of small-scale enterprise, Devine (1988) suggests that these be subordinated to local democratic planning structures. This might avoid the unplanned overproduction of an unregulated market. But it would not prevent “the self-exploitation and sharp practice” that he is concerned about since it would not preclude the planning structure from selecting and retaining the most productive candidates. Their lack of bargaining power collectively would likely lead to their exploitation, formal designations aside.

Devine’s (1988) preference for small scale structures, like Nove (2003), is intended to maximize experiential autonomy as a psychologically beneficial aesthetic experience rather than employing an economic justification for this preference. But lack of centralization also has an economic function. Maximally efficient systems are also necessarily brittle, since the lack of built in redundancy means that these systems can more easily succumb to bottlenecks. Systems that have more resiliency to shocks are less efficient but are more stable. Therefore, the mere attempt to maximize efficiency without paying attention to resiliency to system shocks creates a very vulnerable economic structure that would not be desirable. Also, redundancy allows for experimentation, here regarded as economic pluralism, at the firm level. Experimentation at this level can allow different methods to be compared so as to accumulate knowledge about the advantages of different technical methods. Obviously, maximal resiliency, like maximal efficiency would be undesirable, since these are on the same continuum. Therefore, even if innovations are efficiency oriented, resiliency constraints must be factored in to create a

sufficiently functional design that accounts for shocks. This however is an economic stability consideration as opposed to an aestheticization of an economic form.

Conclusion

Devine (1988), like other theorists who generate model economies, attempts to proportion power balancing through formal democratic institutions without recognizing that power is not merely formal but also substantive, primarily relating to leverage over the functioning of social processes. Therefore, in attempting to balance formal power, substantive leverage should be formalized to avoid an overconcentration of power where it already exists. He assumes that 'a self-governing society' would be more economically conservative. It is true that without the propulsion of competition, economic actors would be less driven to innovate as well as invest in future consumption, but I doubt this is actually in the social interest in the longer term.

In a way, the negotiated coordination model is the state corporation model, in that it is subject to a series of stake holders, political directives and the law. The right-wing critique of this model being unreliable is only true when it is poorly modeled and organized. That is, the development of the productive, informational and organizational forces are not sufficient for the administration of higher-level organization. In a historical materialist sense, only when these are sufficiently effective can they dominate a previous mode, whose practical organizational and informational kinks have been worked out through greater experience in practice.

His contrast of central planning and negotiated coordination evokes the contrast between the central political administration and the civil service, operating at various scales as compared to the political bureaucracy of the party structure and its appointees. Do the civil service professionals balance interests in effective, honest, relatively objective fashion or does data meet

the expectations of particular interests within the bureaucracy or the political party? I think they do accomplish this balance as a separate institution that has various structural accountabilities. The civil service does this to a greater extent than the political bureaucracy or the private sector, but the question is, how is this accomplished? What allows the civil service to be relatively objective and accountable to different social interests as opposed to just their proximate superior or the party in power? The following are relevant factors:

Clear separation of powers (legal, civil bureaucracy, elected representatives); specific and clear roles for job definitions; relative job security; the need to conform to very clearly defined rules; support of a strong union; relative departmental continuity and job stability in contrast to the private sector; elections that weaken the political bureaucracy; and legal structures accountable to the public.

All of these are characteristic of the more developed bourgeois state, from the point of view of the Marxist-Leninist tradition and therefore viewed negatively as necessarily favouring the bourgeois class interest; a genetic fallacy. They might view the state as necessarily lacking any independence from the party structure as a superior political organizational structure. Alternatively, however, one might view this accumulation in the state sector as a development that serves to encroach on and displace the private sector economically. Even if this accumulation disproportionately serves the bourgeoisie, as the power of the proletariat increases with proletarianization due to capital accumulation and deskilling, these structures can become more accountable to their institutions. This would be in contrast to the emphasis of the vanguard party which takes a more aristocratic form in revolutionary circumstances, as Cockshott and Cottrell (1993) suggest. I describe this stage in more Bonapartist terms as a transitional phase between a society more dominated by feudalism to one more dominated by capitalism. Due to

the mostly peasant means of production, despite its significantly modernist bent, very centralized authoritarian rule seemed all but inevitable, until the masses could present considerable counter power. All of the Bonapartist type dictators appear to have encouraged extensive modernization projects and seem to improve the lot of the popular classes, albeit only to a particular point of bourgeois takeover. This accumulation of relatively independent public institutional infrastructure serves to better create the conditions for an effective socialist rule than the alternative. That is, popular accountability and direction is more considerable at a finer level than is possible in a form that is less centralized and dictatorial at this stage. It is not just that power is less concentrated, it is that there is a huge structure with a very large division of labour and responsibility that can be accountable to a broader public. In a certain sense, scale of operation might be said to be roughly correlated to scale of popular accountability. Not in a pure sense, but in a relative sense. Scale might also be correlated with alienation, but it is not clear that work that is less alienated in a per capita sense, is compatible with methods that increase productivity and therefore living standards. Middle class radicals like to imagine that their less alienated working conditions could be more generalized socially. However, in a historical sense their role has been in decline with capitalist developments in relation to less generalized roles in the international division of labour. This development is in favour of more coordinated operations that increase the division of labour and specialization within these operations. I certainly have felt this way aspirationally, for less alienated work. However, the popular availability of such roles is inversely proportional to an increase in technical development, so long as our scope is not bounded within national borders.

The more complex network of civil service institutions would be larger than a fully centralized state but could respond effectively to local conditions and concerns and mediate them

with a more general interest coordinated at the centre. This is a dialectical response to centralization that, due to insufficient capacity of the center, institutes a more fragmented distribution of responsibilities in a larger government institution. These bodies mediate between the local and central scales of direction. In some sense, this is a larger government than that required for central planning. However, one might imagine it to be increasingly effective at managing a more sophisticated body of operations. Therefore, this is not really a system that contradicts central planning but is merely an expansion of it.

This civil service would not be substantially different than that which exists in most developed economies, as the state has been able to grow over time under both capitalism and socialism. This service as its own power center can be governed in a way that is more transparent and accountable to the public, if there is sufficient power that can be wielded from outside the ruling coalition, from both capitalists and social movements. Even though this structure does directly serve the ruling party, they are more vulnerable to public accountability than most other institutions. In this way it develops in the direction of negotiating the priorities directed from the center with other scales of representation and interest groups. It can do this at a finer level of granularity than the center can. This is a relevant acknowledgement that this type of structure needs to be accountable to more local concerns. However, in broad terms, the less streamlined a process, the less efficient it will be. If local stakeholders can maintain their traditional governance structures, then sectional interests may dominate global ones. This is one of the major problems with power relations in governmental institutions. Due to there having been sufficient time for various rounds of dialectical power struggles to have occurred in the institution, various nodes of power accumulate, generating a structure that resists rationalization which can increase global efficiency. These nodes, however, can accumulate valuable knowledge

that can, if used in a way that does not attempt to wield sectional domination, practically mediate the implementation of central directives. With the assistance of local stakeholders, they increase efficiency and gather sufficient feedback to the center to increase the efficacy of these directives for the future. However, this can cause the generation of a Byzantine structure that is there to serve various power brokers in the hierarchy rather than the masses as a whole or the institution as a whole itself. Left with insufficient pressure from the public on the center to rationalize and increase global efficiency, this kind of structure will form, and bureaucrats will be able to lord their positions over society rather than being relatively more efficient. This is why the introduction of some form of calculation is necessary.

This in effect is the rational element of the neoliberal turn to austerity. It could be used to increase global efficiency of institutions that have achieved significant growth. But due to greater proportional accountability to monied interests rather than the popular will, it skews this justification to strategically sabotage services to the populace to the benefits of wealth rather than a broader social good. Often austerity is portrayed as a conspiracy by the left since its proponents are not honest brokers. However, without some pressure to increase the efficiency of the public service, it becomes a network of fiefdoms, suffering from a similar principal-agent problem as the shareholders have in relation to the CEO. That is, although accountability structures exist, they are insufficient to hold the agent to account to the degree necessary. This causes the agent to be able to wield a significant proportion of strategic power that is translated into a disproportionate share of wealth and potentially influence. More specifically in this case, the agent is more accountable to particular minority sectional interests of the formal principal, rather than the principal as a whole. If democratic power were to be more broadly effective, the process of streamlining and rationalization would serve its interests rather than sectional dominant

interests. It is not impossible to do this effectively in the more general interest, even if most evidence is to the contrary.

Devine (1988) wishes to differentiate his model from an unplanned market model, but this is a false dichotomy. Planning is functional at various scales which are more or less integrated. His attempt is to more formally reconcile sectional with national interests in contrast to a totalizing dominance of national interests. He wishes to differentiate market decisions, which he views as impersonal and unconscious, from democratic ones, which he views as more conscious and explicit. It is not that democracy or consumer action is impersonal, per-se, since they both are and are not in different ways. Democracy and consumer behaviour have effects in aggregate that are beyond the control of the individual, hence the need for politics. Market action is more personal in terms of the actions of directly buying and selling. However, the individual in relation to 'the market' as a whole in terms of price formation is impersonal. Democracy may involve personal decision making, but the personal is only relevant in aggregate, that is, in alienated impersonal form. What differentiates formal market action from democratic action (at least in its ideal form) is the disproportionate power of those who have greater purchasing power to shape production and distribution decision-making. Of course, contemporary 'democracy' suffers from the same deficiencies as market forces, due to the affect of both campaign donations, political favours and other sorts of corruption as it relates to politicians as well as the real leverage over economically valuable institutions that is the source of their power. However, the concept evokes popular equality rather than the plutocracy engendered by market forces as ruling ideology. The ethic of market rule does not consider its transformation in historical materialist terms. That is, due to the efficiencies of scale, it tends more and more towards inexpensive popular products to serve the masses and away from expensive luxury products

produced by artisan experts. Market rule is conceptualized in contemporary terms, that of relative inequality, but this is not a necessary characteristic over time. Market relations therefore are less significant than production relations.

Devine (1988) wishes to set up a binary, idealist dichotomy between equality and inequality in the context of interdependent production relations. In terms of historical developments, movement towards relative equality has been a gradual process of incorporation, not dependent on the pure declaration of an absolute one way or another. Moreover, this process is dialectical, in that it is not a linear process of improvement, but a struggle for strategic power between those who vie for what is imagined as traditional power relations and those who assert further integration. Devine (1988), like McNally (1993), argues that planning and market forces are inherently incompatible, but this interprets economic developments as idealist manifestations rather than dialectical ones. The effectiveness of market or political dominance relates to developmental stages and relations to the global market rather than some absolute tendency inherent in the organizational form.

Devine's (1988) model would likely suffer from extreme bottlenecks due to inefficiency of decision-making processes just as the market socialist forms he criticizes. It would also lack the drive for economic efficiency due to the likely conservatism of established organizations absent social pressure to innovate and the effective coordination of larger firms.

Parecon: Michael Albert's and Robin Hahnel's Model

Albert and Hahnel's Parecon model shares a great deal in common with Devine's (1988) model in that it emphasizes small-scale, participatory democratic control. In their case, however, this appears more like an horizontalist anarchic syndicalism except one that must be approved by total plan consensus. It devalues coordinator roles and assumes direct democratic ones in its place.

Although the Parecon model was intended to use the best parts of a planning model and a market model, it is more likely that it embraces the worst parts of both systems. According to Schweickart (2006) it is irredeemably flawed. It takes the anarchy of a syndicalist capitalism reminiscent of the Yugoslav model and adds to it a process of even greater deliberation and bureaucracy than is required for central calculation under hierarchical division of authority. It also requires each organization to be its own central planning and calculating office and require each organization to be in the informational position to coherently evaluate all other organizations' plans (Laibman, 2014).

The Parecon system emphasizes three central features:

- 1) Roughly egalitarian income structure based in relative effort
- 2) Workplaces being non-hierarchical; requiring a rebalancing of job responsibilities
- 3) Direct democratic determination of production quantities by consumers' and workers' councils based on negotiation at differing levels (Schweickart, 2006)

What Mandel (1986), Elson (1988), Devine (1988) as well as Albert and Hahnel (1991) share that also characterizes the neoliberal moment is a substitution of regimes of participation for regimes of pursuit of popular power and redistribution. This is an element of the greater culturalist turn away from structuralism and an embrace of fetishization of process over outcome that is mostly manifest in liberal political establishments rather than socialist ones. They emphasize the importance of choice over the broader coordination for collective abundance.

Albert and Hahnel (1991) share the participatory emphasis of Mandel (1986) and Devine (1988) but have a more syndicalist structural focus and distrust representative institutions due to their even more explicit fidelity for classical anarchism (Laibman, 2014). They take the sense of sectional democratic negotiation but attempt to totalize it to the entire social structure, beyond

the expanding but limited scope that Devine (1988) provides for this. A major flaw in this structure, in contrast to Devine's assumption of the use of market price, is their negotiated structure also requires a central calculation to generate prices on the basis of opportunity cost. But it is completely unclear how this aggregation will be performed without either a market or central state (Laibman, 2014). They extend the idea of a democratic economy, assuming that each relationship can be moderated through interest group negotiation, where a reasonable middle ground can be reached. Hodgson (2005) correctly pointed out that this not only would be incredibly time consuming but would empower busybodies as well as reactionaries to micromanage all levels of social decision-making since most others would be alienated by the minutia of the decisions that do not pertain to their experience or expertise. Hodgson (2005) zeros in on an important point that economic changes that produce social progress, which violates previous social mores, are not determined as a conscious deliberative democratic project, but as the product of unfolding contradictions that are not under the direct control of popular institutions. By allowing a normative consciousness to inhibit social progress through conscious social regulation is to empower the forces of reaction beyond their current capabilities.

More, the iterative procedure aggregated by the Iteration Facilitation Board (IFB) in setting what amounts to prices, approximates the processes of the Walrasian auctioneer, attempting to set equilibrium prices *ex post*, except much less efficiently than the market in this case. This structure is much less functional than a market since all must formally agree on the general plan, generating endless virtually irresolvable bargaining conditions. Also, all must approve all plans, meaning they must have access to a universal knowledge and a universal capacity for engagement, even as no one can set a plan for anyone else (Laibman, 2014). This lack of functionality relates to a lack of power of a central mechanism, democratic or otherwise,

to coordinate all of the disparate interests into a coherent plan that serves the populace more broadly (Laibman, 2011).

Reward for Labour Effort

Based on a sense of justice rather than natural endowment, Albert and Hahnel (1991) advocate for reward on the basis of effort. They suggest that this can be rooted in evaluations of their fellow employees though modified on the basis of need on a programmatic foundation assessed at the workers' council level. Rather than fostering an egalitarian workplace, this would entrench an environment of social popularity and social exclusion in the workplace beyond what an individual manager could foster. In contrast to a more impartial evaluation by a party who is directly incentivised in the success of the project, the empowerment of all to engage in evaluation, absent incentive pressure means that this forum would become an outlet for all sorts of petty grievances without restraint or consequence, maximizing disfunction of the incentive system (Schweickart, 2006). Laibman (2014) also points out that allotment by workers' council and the peer assessment system will likely come into conflict. Further, this form of compensation based on individual evaluation would seemingly override compensation reflecting the relative needs of the economy to direct labour to various positions on the basis of supply and demand, thereby limiting its capacity to direct free labour without explicit direction (Laibman, 2014).

Laibman (2014) critiques Parecon for its imposition of the preferences of the model designers on those subjected to it in a manner typical of utopians. He suggests this is most apparent in the imposing of the degree of participation, the criterion of effort as central to determining reward, pre-ordering of personal consumption items through a consumer council and the 'balanced job complexes.' Laibman (2014) emphasizes that these determinations should be

made democratically as based on level of development and cultural context which more effectively encapsulates the preferences of the local population.

Balanced Job Complexes

Alberts and Hahnel's (1991) major contribution is the conception of 'balanced job complexes.' This conception is that the job responsibilities will be shared out so that individuals get the opportunity to develop both their physical and mental capacities (Albert & Hahnel, 1991). This effort has a great deal in common with the behaviour internal to governments, with strong unions, where employees are viewed as relatively permanent. In this context, the employer invests a significant amount in skill training so as to maximize the efficacy of each worker. In doing this, it allows the workers to effectively fill in for their superiors or for others who may be relocated within the large organization. In terms of investment, there is always a trade off between efficiency which necessarily increases brittleness of the process and resiliency to shock which involves greater redundancy. This effort falls on the latter side, in comparison to the traditional efforts of on the job training. However, the project for universal minimum education, a broadly common program in most developed countries, attempts to instill students with a broad range of expertise and competencies, even if they seem to be weighted towards the abstract rather than the physical. A major problem with a prearranged model of balanced jobs is that it presumes both worker preference for this arrangement as well as the structural feasibility of such arrangements under all social conditions. Some workers might prefer a narrower range of specialization and imposing other duties will likely lead to poor quality results and foot dragging. Also, there is the problem of economic feasibility of investing a significant surplus in worker training beyond what is necessary for efficient system functioning or even preferred by individual workers to improve equality and broaden participation in decision making and

experience with broader forms of labour. Laibman (2014) refers to the objective conditions that dictate the degree of devolution of managerial and creative functions and that imposing them in their most developed form would be utopian and would cause disillusionment (Laibman, 2014).

The emphasis on generalization of working roles cuts against the trend of capitalist development from peasant to industrial production which goes from less alienated generalists producing mostly for personal consumption to alienated specialists producing socially for a significantly more coordinated system which goes far beyond personal preferences. The attempt to reinstitute generalized less alienated production roles would be expected to come at a significant loss in efficiency and performance though it would increase stability. In these larger organizations like some corporations and government, it is beneficial to invest in workers skill expansion, but this is never mandatory. The option is available if the worker wishes to take it, given certain conditions. This, however, rarely crosses the relatively firm intellectual / manual boundary in so far as these can be distinguished categorically. However, just as our work becomes more specialized in practice under capitalism, there is a widening of the broad, abstract universal skills which are imparted more extensively through public educational programs. This gives the population broader skill sets that, in principal, makes them more adaptable to various work positions rather than more narrow particular ones. This adaptability, generated at public expense under most contexts of developed capitalist economies, is more on the intellectual side than the manual side though.

Marx certainly referred to the potential to take up various kinds of work as an outcome of communism. However, I interpret this to refer to the state that both work has become significantly mechanized and therefore deskilled as well as there being a general improvement to the overall popular basal level of minimal educational attainment. In the former case,

mechanization allows different people to access a broader range of labour conditions with minimal training. In the case of the latter, improvement in educational attainment would allow intellectual and cultural production to become more accessible to the general population (Marx & Engels, 1970). Certainly, technological innovations in communications, like the internet, have expanded access to both cultural and intellectual production as well as consumption. This has broadened the potentiality for a larger group to engage in this sort of labour which was formally much more restrictive both financially and in terms of exclusive qualification. Music production and distribution is a prime example. It used to be that one would either need training or specific recognition and investment by big capital to obtain access to music performance spaces and granting access to materials for distribution. Now, however, due to the cheapening of audio and video recording equipment and the virtually costless mass distribution via the internet and broad central platforms like Soundcloud and Youtube, a majority of people have access to this sphere of production. Both distribution and consumption come at the cost of what amounts to a virtual utility.

Direct Democratic Direction of Production and Consumption

Both production and consumption quantities under Parecon is to be determined by consumer councils, attempting to avoid market direction which gears towards those with greater spending power (Albert and Hahnel, 1991, Laibman, 2014). However, this system is just a more unwieldy form of aggregation of individual consumption preferences against productive potential that might be done via *ex ante* survey techniques and *ex post* analysis by a central state. Without coherent parameters to bound orders and valuations of cost, it will require a significant number of iterations to allow individuals to comprehend the consequences of their requests. This makes

the setting of prices *ex ante* by a central state or through the market *ex post* seem significantly preferable.

Similar to Devine, this view is based on the idea that the central problem of the 20th century command economies was the lack of a sufficient democratic and participatory planning mechanism (Schweickart, 2006) rather than a more centrally coherent mechanism of the integration of preferences in broadly desirable quantities.

Conclusion

As stated previously, the Parecon model appears as a further development of the Devine model in the Mandelbrot tradition which emphasizes participation and an emphasis on moral mechanisms without incorporating a centralizing price signal or totalized plan that could account for the allocative efficiency necessary for a mode of organization superior to market allocation. Like Devine (1988), its moralistic emphasis betrays it as a petty bourgeois project with little hope of improving material reality for the masses. Its byzantine mechanics would likely lead to reaction and calls for the substitution of less integrated structures. However, the motivation behind parecon might represent an increasing decentralizing tendency in the public sector under neoliberal capitalist social democracies that has aspects of interest group representation and input outside an executive structure. This system can only be tangential without a functional means of central calculation.

Market Socialism: Limited Horizons or a Debate over Dialectical Progression

In 1998, David Schweickart along with Bertell Ollman, Hillel Ticktin and James Lawler published a book titled *Market Socialism: The Debate Among Socialists*, a very contentious topic of the time due to the recent collapse of the Soviet Union and the search for leftist alternatives. Different than other modern social democrats, Schweickart and Lawler have not abandoned Marxism or even the eventual establishment of a more centralized communist social goal, at

some point in the future, but see social democracy as a quantitative evolution of capitalism into socialism. Schweickart and Lawler took the ‘for’ position and Ticktin and Ollman took the position ‘against’ market socialism. A significant strength of Lawler’s general idea of market socialism is that it is understood, not as a utopian model to be imposed by a revolution but as a development produced by an active class struggle in historical materialist terms (Ollman *et al.*, 2016). This would put him in the Bernsteinian camp.

Schweickart’s and Roemer’s Models

Roemer’s Model

Schweickart presented both his and John Roemer’s market socialist models. Roemer’s model suggests that:

- 1) All the corporate stocks are redistributed to each citizen, initially, to give each a per-capita share.

These stocks could be traded for other stocks but could not be sold for cash. They presumably are only used for the purpose of dividends. Also, to avoid intergenerational wealth accumulation these stocks would not be heritable (Ollman *et al.*, 2016). This is an interesting way to nationalize and enclose the corporation for public benefit without fundamentally altering its structure.

- 2) The nationalization of all banks (Ollman *et al.*, 2016).

This proposal is similar to the Proudhonist program, but this is not an inherent flaw.

- 3) Corporate boards are to consist of delegates of the commercial bank that funds it, representative of firm’s workers and representatives of the stockholder (Ollman *et al.*, 2016).

This corporatist-type structure is very popular in many modern social democracies. What is concerning about this, as mentioned previously, is that it is class collaborationist and therefore conservative rather than conflictual and progressive.

4) The direction of significant investment planning and incentivization of key industries with differential interest rates and discouraging of certain kinds of investment (Ollman *et al.*, 2016).

This is similar to the planning and regulation that modern capitalist economies already do.

5) Firms are nationalized after the death of the founder or when it reaches a certain size (Ollman *et al.*, 2016).

This characteristic indicates relatively weak ownership rights and a preference for nationalization. The attempt is to emphasize the experimental character of using financial risk to direct investment, but with this conscious attempt to fold the outcomes back into the popular benefit of the polity.

Schweickart argues that this model is viable economically since these firms compete, eliminating informational and incentive problems that are highlighted in the context of central planning models. These firms lack authoritarian accountability, so they can be politically independent. Private competition with public firms forces the latter to remain competitive as opposed to stagnating. The smaller remaining place for entrepreneurs allows for innovation, but not so large a space that they can dominate. The advantages of this model over capitalism, Schweickart suggests, is that it severely dampens both economic inequality and investment irrationality. As opposed to merely being directed by commercial success and private investment, the heavy influence of public investment differentiates this model from capitalism in theory (Ollman *et al.*, 2016). This is less of an issue in really-existing capitalism, where governments significantly direct investment to particular private firms for economically strategic reasons.

What might be key to understand from a Marxist perspective is that formally, this structure does not alter the firm in itself and merely alters its redistributive policies and governance. It does not alter productive relations of the firm. However, the form of socialist production relations, in contrast to capitalist production relations, at the firm level, are very unclear. As stated previously, the worker's cooperative model seemed to be dismissed under early Soviet experience, replaced by a more corporate vertical structure, typical of big capital.

Roemer's model seems more like a Proudhonist plan, especially the nationalization of banks. However, since all firms inevitably become social property, they constantly build the socialized stock of property in general. The expansion of the ownership of stocks to a democratic right of citizenship is interesting in that it directly socializes the results of social productivity. However, stocks would just be dividend generating devices here and would not serve to allocate funding to firms as they currently do. Stock trading would also be peculiar, given that money would not be involved. This means that you have to find a person who wants the stocks you have and wants to get rid of the stocks you do not. This is reminiscent of the direct barter problem requiring the 'double coincidence of wants' making exchange extremely difficult. This being the case, one wonders why this is not just replaced by a kind of sovereign wealth fund used by the existing Nordic social democracies.

Ollman suggests that making all workers shareholders confuses their class character, but this is not fundamentally different than pension funds or more indirectly social welfare programs funded by progressive taxation of business income (Ollman *et al.*, 2016). The shift towards expanding socialized property is progressive in my view. The fact that firms might be still incentivized to protect intellectual property is a social loss to society that could benefit from expanded production of desirable products without the permission of the firm. This structure

would disincentivize the social pressure of capitalism that privileges larger firms with more capital and superior methods in a competitive process. In this way, this is similar to Neurath's more utopian plan that disconnects the social relations of the firm from the form of appropriation. Stalin, in his 1952 text: *Economic Problems of Socialism in the USSR*, emphasized the difficulty in the attempt to socialize the property of smaller capitalist and peasant enterprises. This led him to reinforce the Marxist claim that the social relations of the firm, in terms of scale, is connected to the forms of appropriation of surplus and that this problem could not be fixed by mere legislation (Stalin, 1952). The fact that these firms will be nationalized at least within the lifetime of the owner does allow for their methods to be more broadly distributed at the point of nationalization.

Schweickart's model

Schweickart's model, termed Economic Democracy emphasizes worker self-management, like the Yugoslav model, in contrast to a more universalist egalitarian ownership structure emphasized by Roemer. Schweickart's model has no stock market (Ollman *et al.*, 2016). This is all just as well, since Roemer's stock market would not serve much of a purpose anyway other than a short-term mechanism to direct investment absent a planning board. Capital would be publicly owned but workplaces would be democratically governed cooperatives and property income would be eliminated. The firm management would be overseen by an elected workers' council. The capital used by firms would be rented to them from the state. The proceeds of this rent are then allocated back into the economy (Ollman *et al.*, 2016).

Similar to Devine's plan, market forces do not dictate investment here, but are publicly allocated. It is not clear how exactly this process will occur, but Schweickart asserts it will be directed towards the public welfare. He also suggests that cooperatives are just as efficient as a more narrowly governed institution. This depends on how a cooperative is defined. If it is just a

corporate board with worker representation then, this would be true. However, if it was a directly democratic institution governed by its workers, then this form is less successful than centralized management, since dispute resolution is much more complex, to point out one problem.

This model would retain a competitive market for the firms themselves but restrict the initiative for development to the public sector. An advantage Schweickart touts for this plan is the elimination of capital flight (Ollman *et al.*, 2016). However, the social rationalization process would therefore merely be confined by domestic borders and interests. This limitation puts it at a significant disadvantage when compared to the socialized character of international monopoly capital, both as a vehicle for investment and as a mechanism of larger scale productive operations. Like most social democratic plans, the emphasis on the beneficiaries being territorially confined gives Schweickart's and Roemer's models a nationalist character which can reinforce this form of social division in a way that the current capitalist structure is not limited to. In a liberated world, could these be internationalized instead? Is it necessary to develop national solidarity more broadly before the development of more global solidarity?

Tickton's and Ollman's Critique

Tickton and Ollman, critiqued Schweickart's and Lawler's proposals directly in the text. Situated in traditional Marxist-Leninist politics, Tickton and Ollman, take a generally more political determinist view of the prospect of market socialism and downplay the role of already existing economic relations as a relevant factor. This is contrasted with the market socialist model of Schweickart and Lawler. Market socialism, as Schweickart and Lawler present it, could be seen as a more tangibly historical materialist development, transitioning away from capitalism in an evolutionary way, leading to a greater concentration of capital under the control of the populace, greater regulation and redistributive efforts. The concentration of capital in the hands

of the state, is ostensibly accountable to the population, relative to their social power as a mass. This would be contrasted to an economy that is more weighted towards private holdings (Ollman *et al.*, 2016).

Ollman believes that one must establish democratic central planning in a democratic dictatorship of the proletariat to put together the scaffolding of rules that a communist edifice can be constructed around. Also, the market under socialism must be quickly phased out, rather than being the significant transitional phase Lawler suggests would be likely and effective (Ollman *et al.*, 2016). What is missed by the political determinist types is the effects of capital concentration and the increasing feasibility for public appropriation when these firms reach a sufficiently large scale of operation. In the modern corporation, the owner has already been replaced by an employee and the stand-in for the owner is accountable to a board representing diverse social interests. Merely democratizing the structure of governing accountability can shift this structure towards greater public benefit quite easily. This is much easier, for instance, than building institutions from scratch based on a theoretical utopian plan.

Critique of Political Determinism

Most Marxists have historically fallen on the revolutionary side of the ‘revolution versus evolution debate.’ The Bernsteinian socialist right tendency rejected the validity of historical materialist developments as opposed to the Leninist center and the Luxemburgist left. However, historical materialist development could not be expected to occur on the basis of the good intentions of a revolutionary regime. Rather it is dependent on the gradual economic developments and the resultant changes produced from an increase in productive development which alters the balance of relative class power. That is, for these changes to be broad, effective, and lasting, they cannot be centered around a professed ideology or ethic. Swings in popular

ideology should not be divorced from dynamics of historical economic change. It would be difficult to argue that the feudal mode, dominated by the landed gentry and justified through physiocratic economic theory, was displaced by the capitalist mode juridically before the latter's economic dominance was able to assert itself already within the old feudal governance regime. Only when the feudal order had exhausted its contradictions and it became a fetter to further development, was it replaced by a more formally capitalist form of government. Even if it was not intentionally or directly achieved, it was a result of the upheavals and the emergent dominance of shifts in power relations as manifest in relative social leverage. Political revolutions, in these contexts only seemed possible after the amassing of significant capitalist economic power to the extent that they could present an effective challenge to the dominance of the previous order within the regime itself, especially at a point of economic crisis. It would be hard to imagine that a political revolution could herald in new economic forces that could not even be manifest under a previous regime. Lawler states:

“In the dialectical framework of Marx, the role of the proletarian state is not to create a new society, but "to set free elements of the new society with which old collapsing bourgeois society itself is pregnant.” (Ollman *et al.*, 2016)

Lawler also cites Marx's comments on the Paris commune:

“If co-operative production is not to remain a sham and a snare; if it is to supersede the Capitalist system; if united co-operative societies are to regulate national production upon a common plan, thus taking it under their own control, and putting an end to the constant anarchy and periodical convulsions which are the fatality of Capitalist production-what else, gentlemen, would it be but Communism, "possible" Communism? The working class did not expect miracles from the commune. They have no ready-made utopias to introduce *par decret du people* (by the people's decree). They know that in order to work out their own emancipation, and along with it that higher form to which present society is irresistibly tending by its own economical agencies, they will have to pass through long struggles, through a series of historic processes, transforming circumstances and men. **They have no ideals to realize, but to set free elements of the new society with which old collapsing bourgeois society itself is pregnant.**” (Marx, 1986 in Ollman *et al.*, 2016)

Traditional Marxist-Leninists would counter that the working class engaging in cooperative production was this economic form, as the broad establishment of soviets would

suggest. But these were not a rising dominant economic form as compared to capitalist industry, especially under the rule of the monopoly. Yes, cooperative production was dominating atomized commodity production, but these forms were not democratically organized cooperatives that only needed to shed the formality imposed by bourgeois rule so that they could more effectively assert their dominance. Cooperative factories do not scale up well and they are generally less profitable than their centrally organized equivalents, like in the case of the corporate form. If they were more productive than these centralized forms, we would see them rising as economically dominant under capitalism. Lenin seemed to come to this realization quickly as he largely abandoned the expansion of the soviet form, imposing a more hierarchical corporate form. This was a necessary step if he was going to be committed to rapid development. As opposed to relying on the discretion of privately-owned big capital for their own policy with regards to capital accumulation, they would establish it centrally. In this way, these regimes were state capitalist, by his own admission (Lenin, 1972b). One could imagine this as the attempt to subsume domestic monopoly capital under the state as a primary organizational form imposed by law. However, by enclosing this form to an autarky primarily, it structurally limits its continued international expansion. It could be argued that this barrier was later transcended by the Dengist regime in China after a structurally necessary phase of protectionist developmentalism enacted under the Maoist regime. In this case, however, monopoly capitalism is embraced with heavy state regulation. What here characterizes a socialist mode of production that can be expanded into a dominant position? We might have essentialist definitions dictated by theorists, but where are these forms under existing capitalist regimes, if the state is discounted and cooperatives are in decline?

A revolution, except at key historical junctures, cannot change the nature of the relations of production, only the nature of leadership and law. That is not to say that they cannot push development in certain directions or push for intensified rate of development. What they cannot do is change the operative effective scale of economic organization of the developmental period given the maximal effectiveness of the current institutions and reasonable accessible methods. If they surpass this, then the institution will not be more efficient than previous modes, leading to resentment and calls for economic regression. Marx emphasized that after the overthrow of a precapitalistic regime by peasant uprisings, there was little the masses could change but the personality of leadership. These insurrections could never change the character of the primary means of production and the resultant social relations. Marx asserted that it was economic changes that are required to change the character of social relations.

Typically, Marxists saw their revolutionary opening in the periodic capitalist crises that occur about once a decade (Engels, 1999). Marx and Engels highlight the incongruity between the increasingly scale-efficient cooperative mode of production instituted under capitalism and the private mode of appropriation, that required consumption to be limited by the wage fund. The mode of appropriation and governance becomes a fetter to the greater prosperity produced through a more efficient mode. This incongruity leads to periodic crises where there are too many goods produced and insufficient purchasing power available for workers to be able to buy these goods at a sufficient rate. This causes the imperialist search for new markets and beyond this for production to slow or stop, further exacerbating the poverty of workers now deprived of wages, making it even harder to afford these goods. This crisis can only be resolved by the state which then needs to institute some regulatory mechanisms and methods to alleviate the poverty of the working class and thereby to restore profitability to capital. Marxists saw potential in these

crises as being an opening towards potential revolutionary transformation rather than just an intensification of reform efforts by the state. More often in the capitalist economies, a Keynesian solution of pump priming has been preferred to an effort to ultimately disrupt bourgeois rule. On reflection, these crises are not ultimately catastrophic for the rule of a bourgeois economy. They create a significant opportunity for the growth of the state in terms of its role in structuring and regulating the economy. This is due to the nature of its economic relevance in these instances. These crises also present an opportunity for significant capital accumulation in the private sector.

Neurath saw a potential opening for increased socialization of the economy in the war economy. War, especially the inter-imperialist wars that dominate the 20th century are not disconnected from the aforementioned economic crises. Because big domestic capital needs to find colonies as an outlet for its overproduction of goods, it pushes the state into conflict over their establishment. However, Neurath conceived of war in political terms that would centralize the productive system towards a common project. In a way, the war economy thesis is similar to the anarchist communist Peter Kropotkin's assertion that in times of crisis, mutual aid systems are developed to more directly coordinate activities for the common good (Kropotkin, 2012). Neurath saw the trend that in times of war, economies centralized to such a degree for common goals, which did improve the lot of low wage workers and rationalized the economy in a certain sense. He thought that if the structure of the war economy could be maintained but transitioned away from provisioning the conflict and towards collective provisioning, then this development could be a transition towards Marxist socialism. In a sense, this is the Leninist project that is an attempt to drive more quickly towards socialism by instituting a high rate of capital accumulation in the post-revolutionary period without relying on the discretion of individual capitalists. In this way, the state becomes a collective capitalist even if it is for the purpose of collective

provisioning. The Leninist regime did initiate a break, not in the context of a secular economic crisis, but after a failure in context of war. One could argue that this regime was not the result of a crisis of capitalism, but the result of the consolidation of economic forces in the context of military defeat.

An early post-revolutionary Leninist regime might be understood as being in a similar political position to the Jacobins after the French revolution. They are overthrowing a feudal regime and replacing it with a modernizing idealist model. They are able to enact significant changes in the organization of the economy due to the temporary relative weakness of all other economic strata in the time of transition including the aristocracy, the merchants, the capitalists, peasants and urban workers. This juridical dominance allows space for significant rationalization of urban planning, economic regulation, public investment and subsidy. The Jacobin regime resulted in a few failed economic and political experiments but eventually stabilized in a bourgeois mode. However, as much as the revolutionary government might profess certain high-minded ideals, their power, relies on their ability to govern effectively into the future. This ability to govern requires them to make coalitions with individuals and groups that wield strategic power or to coalesce new groups on the basis of common interests to do the same. This strategic power relies on the ability to sabotage socially valuable operations in the Veblenian sense. Just like the capitalist, who cannot retain this role for long, unless they are able to maximize profits in a fashion superior to their competitors, the regime must make effective power alliances within the society or be replaced by those who do. The reason that industrial workers can exert more strategic power than the equivalent number of peasants, is that in their cooperative economic activity they can organize and control production much more effectively than groups of isolated individual operations. Having a predominantly peasant and petty

bourgeois population means that the majority has little capacity to exert strategic power on the government to skew social dynamics towards their interests. This is contrasted to the military, capitalists and other key trading partners. If the regime is to maintain power, it will have to rely on real sources of strategic leverage to accomplish its goals. If this is the case, a post-feudal economy will veer towards a sort of economic capitalism, however structured, even if its professed ideals are to the contrary. In a sense, the revolution could be thought of as a kickstart to the social rationalization characteristic of war communism, in both the Russian and French revolutions. These are temporary scenarios that strengthen the state as a dominant economic structure but cannot be the totalized impetus to transition to a fully socialistic society, despite certain professed ideals.

However, this thesis for the development of socialism is purely voluntarist, which is a break from the idea that economic developments occur in an evolutionary dialectical pattern and the new relations they produce alters the power balance within the society on a fundamental level. If economic development had no connections to the relative power of classes and relied on mere organization and political will, we would see no coherent pattern to political and economic models at particular economic developmental stages, contrary to a core historical materialist view. I believe this is not the case. In these post-feudal revolutionary contexts, the workers just do not wield the power (as imbedded in social leverage over the productive process) necessary to hold the regime accountable to its interest to any sufficient degree to maintain a regime geared to their interests in the long-term. The maintenance of ideological commitment will be difficult in the face of more effective alliances. For workers to gain this strategic power, economic development must occur to the degree that they can exert this leverage in the absence of benevolent idealist rulers. Their idealism will be difficult to maintain without this organized

power to back them up when threatened with greater power exerted by narrower alliances. I argue, that despite the best of intentions, these regimes represent more of a developmentalist regime that produces industrial capitalism than what might be imagined to be a true dictatorship of the proletariat. That is not to say that it cannot eventually become this, it is just that this would not be socialism in the post-capitalist sense of the term. There is a difficulty in distinguishing socialism and capitalism as either different political philosophies that are voluntarily imposed and dominate a particular form of governance juridically; or as different economic forms which dominate the political form. In a Marxist framework, I suppose there should be a concrete method to distinguish these forms, but this would necessarily exclude a pro-socialist regime that is economically unprepared for such a stage of economic development.

Since the voluntarist path seems structurally limited and is more a progressive project to grow the state to the degree that essentially creates, at least when effective, a rapidly growing developmental state capitalism, we should consider the evolutionary path of post-capitalist socialism. The gradual, though dialectical and uneven progression of capitalist development does transfer relatively more power to the working class. This translates, through class struggle, to a greater welfare state and the economic size of the state overall. This is because the greater surpluses that are generated by capitalist developments, the more that can be appropriated into state projects. These projects can make growth more effective and can attempt to mitigate the externalities created by them, increasing the standard of living of the populace. Efficacy is increased through legal and urban planning schemes that mitigate conflicts between industrial interests and domestic interests alike. Efficacy also is increased by providing social housing (allowing for a greater workforce capacity), education (allowing for greater workforce economic diversity and innovative potential) and health care (allowing for greater worker efficacy and

working life). Efficacy is also increased through strategic investment and strategic protectionism. Even if the state is thought of as accountable to the masses when democracy is at least nominal, the relative power of these strategic forces largely determines the apportionment of relative benefit governance is enacted to service. The effective balance of these interests might be said to be modified in a conservative direction by hegemonic ideas that causes a lag between the generation of economic power and social power.

As both the state and monopoly capital grow, the economy becomes more and more subject to planning due to a high degree of capital concentration. Beyond social programs, some productive activity can be more effectively operated by state monopoly due to higher capital concentration, so long as agents can be kept accountable due to the principal-agent problem. This is a similar principal-agent problem to that between shareholders and the CEO, except substantially worse. The shareholder can presumably vote out the CEO or disinvest. The only common recourse to state firm management is to hope that the election of another party will be effective motivation to take better care of this firm. Alternatively, citizens can attempt to motivate change through protest and public sabotage actions. This would require effectual intermediate organizations to act as regulators of state-socialized enterprises, who themselves must be actually accountable to the populace in some fashion for the same reason.

Marxists like Tickton and Ollman seem to see socialism as necessarily formalist and political. They see socialist institutions in a way that seems more absolute and needing to conform to pure definition than a more dialectical manifestation that comes into being, evolving gradually alongside the previously dominant mode of production. There is a sense that the socialist essence will be corrupted by the presence of capitalist elements. This is more a reactionary essentialist Heideggerian conception than a Marxian one. This might be due to the

considerable influence of Adorno's pessimism, most significantly captured in his *Dialectic of Enlightenment* (Philips, 2015).

Ollman (2016) states: "People's turn to socialism will only emerge out of the rejection of all market relationships." There is no sense of the new society emerging from within the old, but a logic of the need for moral purity to facilitate emergence. Ollman argues that the cooperative experience for workers in the workplace, as Marx advocated, is merely of value at the psychological level, giving them confidence to build socialism. However, it would not lead to a transitional period that would significantly rely on market relations (Ollman *et al.*, 2016).

The growth of the state and the relative growth of the power of labour, as most clearly manifest in the level of real wages as well as universalist endowments, causes the state to shift towards the needs of labour. Certainly, this is not a linear progression. There can be declines that have other functions, but they are not absolute. For example, during the movement towards globalization in the 1970s and 1980s, the bargaining power of first world labour declined due to the expansion of capital to previously less developed regions. This process shifts and deconcentrates economic development and thereby raises the bargaining power of labour elsewhere, insofar as it can be organized, creating a greater generalization of proletarianization and the economic growth of these states. The bargaining power of capital is greatly increased due to its mobility, but the generation of infrastructure and local expertise will allow for the bargaining power in its new localities to increase based on the successes of local class struggle there. As these conditions are generalized, they will reach a point where greater externalization of productive capacity is no longer cost effective. This will cause a rebound in the bargaining power of western labour, though this would likely be stronger if labour can build effective global institutions. Therefore, although local declines in bargaining power of labour do occur, they will

not be absolute and should eventually return to an increasing rate, when countervailing strategic advantages have exhausted their potential. More, the relative bargaining power of global labour should be consistently increasing under these conditions, even if some localities experience relative decline. Linear reductions in the Gini index in the shorter timescale should not be expected, since the progression is dialectical. New proletarians are initially poorer than they were as peasants, but this trend should not remain over the longer term due to the potentialities of class struggle.

Most Marxists that favour political determinism theorize the necessity of an absolute break in political regimes as being a necessary catalyst for the transition to socialism. Whether this is ultimately necessary at some point in time misses the key issue. Concentration under capitalism generates the conditions that facilitate the transition from a capitalist regime, based in narrower private interests, to a socialism, based in institutions that serve broader interests. That is, economic factors that shape the realpolitik of groups are neglected as relevant factors. These theorists posit a definitional minimum program for the foundational characteristics of their understanding of the structures that will lead towards socialism. But nothing inherent in Marxist theory gives them access to the correct formula for achieving this beyond creating the conditions of more generalized social leverage. This leverage generates the more concrete possibility for creating socialism than the seizure of the state on its own, relying on the benevolent paternalism of the new rulers that they cannot hold in check due to weak organizational capacity. This weakness in organizational capacity is due to the class composition being at a lower developmental stage.

The conflict between market forces and state planning in historical terms might be seen as not necessarily in absolute conflict, but as dialectically connected processes in a struggle

towards economic expansion and efficacy. Market or horizontal economic relations negotiate externalized economic reach while state or vertical relations might be said to negotiate internalized ones. Although there is a wage labour market, I posit that these should be understood as having more of a vertical nature than a horizontal one because of their structural inequality. This relational inequality does not negate their validity in a Kantian sense but does suggest a need for a more equitable resolution in a dialectical, imminent sense.

Due to economies of scale, all else being equal, greater enclosure can provide greater productive capacity. This would be limited by the efficacy of the organizational structure and the scalability of its internal mechanisms, including those that increase the rate of surplus per labourer. Once a structure has reached its limit of internalized capacity, it can only expand further through external horizontal relations. From then on, the externalized relations will dominate and develop until they can be enclosed by a more advanced system of economic organization that can be scaled further. It might seem that I am endowing the structure with its own agency. However, the structure is only maintained by the participants involved, due to the relative advantages of doing so in relation to other possible alternatives.

Often in the process of expansion, agents of the central structure that are not effectively bound and served by their principal, break into smaller units due to capacity limitations, like international capital did with its chartering state. These capacity limitations might not be based in pure abundance but are often disincentives based in the overconcentration of social benefits relative to other agents. This serves to counter the effects of over accumulation in the core structure, strengthening horizontal relations. However, this scenario generates more geographic generalization of productive capacity, due to this decentralizing effect. However, it increases the

potential for more organizational reach in a world system, allowing for greater effective internalized organization in the future.

Many Marxist theorists' analysis of monopoly capital, like Baran and Sweezy (1966), do not see the prospect of socialism arising out of the contradictions of this world system mode. This is due to the restrictive conditions dominated by monopoly capital, where true competitive pressure is much more limited. In these conditions, they imagine revolutionary autarky is the only solution to sidestep this problem of the dominance of monopoly and its alliance with state interests. I do not think that historical materialist development occurs by politically sidestepping a principal economic mode that cannot be effectively subsumed. To beat it effectively, they must either subsume or engineer a more effective mode of productive organization. The political dominance of transnational monopoly capital might be an intermediate form of organization whose contradictions need to be more thoroughly exhausted before it can be transcended through an effective challenge to this form of minoritarian ascendancy. Roemer's market socialist plan appears to be more of a plan for subsumption on a national level (Ollman *et al.*, 2016), but like all market socialist plans, this does not deal with the fact that these structures are transnational. Even if these structures were subsumed under the national democracy for the benefit of the domestic population, they would still act in an exploitative manner internationally. However, this contradiction is likely unavoidable at this stage.

Rather than being a progressive force, theorists like Sweezy and Tickton see production under capitalism pessimistically, as a degenerate conspiracy. Lawler describes this tendency as a "nihilistic socialism," which views capitalism as an inherently contradictory system which is wholly evil and needs to be replaced by a system that is fundamentally different (Ollman *et al.*, 2016). Due to the perverse inequalities and the improperness of the goals of the system, it would

be better that the system was less productive and more humane. Progressive forms of greater economic expansion, in their view, can only be achieved by morally eliminating unproductive and immoral forms of industry like military production and advertising. This is a regressive, idealist, and ultimately, liberal argument since it posits capitalist immoral trajectory as inferior to previous modes of organization that necessarily provided for fewer people and less well. It also posits, in congruity with Collier's (1981) thesis, that socialism ought to be foundationally a moral project, first. In contrast to this view, Lawler reiterates that the socialist society emerges from the womb of capitalist society (Ollman *et al.*, 2016). The scale of organization and the inclusion that increased production generates through complex social processes allows for the possibilities for this moral project on a larger basis, but not on the basis of the weight of the assertion. However, there is no reason that this broad demographic's preferences will necessarily conform to theoretician's socialist morality in practice.

As for the issue of environmental regulation, this becomes more feasible as accumulation increases, just as does greater productive capacity. Although the externalities generated by the greater rate of production force the issue of externalities to be dealt with in a more significant sense, as is a dominant politic of the present time, a reduced scale of production would not force the innovations that would conform to these regulations to the same degree (Phillips, 2015). This issue as well should not be viewed as linear and empirical, but as oscillating and dialectical.

Lawler argues that the regulation of the market by the state, presumably motivated by class forces, is just as much an impetus to innovation as any other (Ollman *et al.*, 2016). Further he recommends:

“National legislation that has regulated the sale of labor power needs to be reinforced by international laws. Such laws should protect the conditions of the sale of labor power in all countries, rich and poor. There is a heightened awareness, too, that ecological havoc caused by spontaneous market forces must be remedied by national and international legislation that takes into

consideration what economists call the "externalities" of economic production, the hidden costs that do not (as yet?) appear in the "barometric fluctuation of the prices." (Ollman *et al.*, 2016)

Tickton believes that because of the conflict between the state and market, that market socialism is unstable (Ollman *et al.*, 2016). This is true, but it should be added that capitalism is also unstable. Further, if communism is seen as a desirable end, then it is good that market socialism would be unstable, so long as the dialectic is favoured in its net effect towards planning and not the market. Similar to Baran and Sweezy (1966) as well as the Marxist feminist economist Maria Mies (2014), there is an intense pessimism in Tickton to modern economic developments. They are seen as immoral due to cost cutting, rather than serving a narrower as opposed to a broader interest. I argue that as relative power increases, both average quality along with abundance increases. Many theorists like McNally (1993), Devine (1988) and Cockshott and Cottrell (1993) seem to think that in the context of a mixed economy, that capitalism will always dominate. However, as capital accumulates both in the state and in monopolized sectors, it makes these ripe for nationalization. Historical materialism is based on the relative advantages of different modes of production and organization changing with material conditions, not remaining static over time. The competitive advantage of these structures is superior to smaller capital. Due to their economic superiority, large private firms will dominate politically. If this influence is seen to be intolerable by the majority, which, if democracy continues to be a professed value, then these firms should become subordinated to the popular will. This will only be the case if the population holds real strategic power beyond that of the capitalist class or other elite interests. Lange articulates this dilemma well. He suggests, the society could also choose to break up the monopoly, but the advantages of scale would be lost through this process. If another region decided to keep the monopoly whole, then they would dominate economically, thereby further impoverishing the region (Lange & Taylor, 1938).

Lawler is advocating a more Kautskyist strategy of patience and slow struggle through the vehicle of social democracy and class struggle under a capitalist state to be the proper vehicle for socialism rather than a Leninist revolutionary break. This could also be interpreted as an advocacy of Hal Draper's 'Socialism from Below,' but I do not think you could effectively accuse Lawler of being so undialectical so as to be advocating for only one-sided activity of the worker power / state power dialectic. That is, I do not think he is issuing the taking of state power for socialists per se, forcing socialists to merely act in a protest role, pushing the state into a position more amenable to workers. He is advocating for both sides of this dialectic. Taking formal power might only be necessary when reforms are made impossible by the state, so the next possible advancement is to depose it from rule. That is, at the point where the institution becomes a fetter to further progress. Doing this too early will lead to either similar problems for the working class, causing resentment or economic scale overreach, leading to a decline in efficiency. This decline in efficiency would cause resentment and reaction clamoring for earlier economic and social forms. The overreach in ruptural moments, however, can create some enduring infrastructure that can propel the society forward economically and therefore in the trajectory of socialism. In this sense, Lawler gives a strong argument for a transitional market socialism somewhat in contrast to Roemer's and Schweickart's more static idealist conceptions. The strength of this argument is that it does not negate the possibility for more developed forms of economy as it advocates for a realistic transitional strategy.

A Simplified Computational Model: Cockshott & Cottrell

In 1993, Cockshott and Cottrell presented their model in their book *Towards a New Socialism* where they placed much greater emphasis on a central calculation than any of the other of the previous models. They emphasize the role of Soviet computational theorists such as Kantorovich (1965), who worked on computational models for central planning using linear

programming, as well as Stafford Beer's brief Cybersyn experiment in Allende's Chile. Unlike many of the other modern theorists, they retain faith in the project for an *ex ante* socialist calculation rather than mere expansive participation in democratic planning. They expect that the increasing capacity of supercomputers might reveal expanded facility for this form of calculation in the future, giving this project increasing feasibility. Unlike the participatory models, this one would not be bogged down in process. However, their peculiar emphasis on appointment by lot, in contrast to either parliamentary democracy or democratic centralism, is likely a socially inefficient process and the populace would more likely prefer the process of recallable representatives. Like Devine (1988) and the market socialists and in contrast to Albert and Hahnel (1991), they do believe in the use of incentives to direct labour at a macro level, towards certain unfilled forms of employment as well as at a micro-level, reflecting individual job performance (Cockshott & Cottrell, 1993).

Due to their emphasis on labour value calculation, they insist on maintaining that net labour time compensation be balanced out by summing the differential micro level rewards. Unlike Devine (1988), they argue that the socialist command economies were in fact socialism, even if these were lacking in real democratic governance. They do feel that new conceptions of socialism need to be both planned and radically democratic. Cockshott and Cottrell (1993) mainly differ in terms of economic policy implementation. This argument, like that of the Leninist school, removes the limitation of a requisite economic developmental stage from the possibility of achieving socialism, replacing it with a political voluntarist project.

Like Devine (1988), McNally (1993) and Mandel (1986), they believe that market forms will inevitably dominate social democracy due to their dependence on capitalist surplus extracted by tax revenue. Therefore, they argue that social democracy will only be effective in times of

relative prosperity (Cockshott & Cottrell, 1993). This holds little faith in the efficiency of the economic encroachment of the more socialized state sector to be economically competitive, in its own right, due to scale efficiency. However, they do not wish to banish the market mechanism in an absolute sense. They merely wish to redefine its units of calculation and accountability as well as restrict its domain to very particular spheres of production, so it does not prevent gratis allocations based on more generalized necessity (Cockshott & Cottrell, 1993).

Average-Necessary-Labour-Time as a Primary Cost Variable

Similar to classical Marxist thinkers, Cockshott and Cottrell (1993) emphasize labour value as necessarily the central element to be minimized for economic progress in technique. Unlike bourgeois economics, however, they do not view production in particular firms as the relevant unit of analysis. Rather, the entire production process, from raw materials to the mitigation of production externalities, is examined as their unit of analysis. As opposed to a flexible currency, they argue for basing the economic unit in labour time certificates. This element is reminiscent of the Proudhonian model of labour time exchange except these would not act as universal exchange but as vouchers eliminated on use and maintained for accounting purposes by a central state. As Cockshott and Cottrell (1993) recognize, Marx critiqued Proudhon's labour money scheme since pure labour time exchange is antithetical to market dynamics, since poor quality products would have the same labour quantity as high-quality ones. They would therefore differentiate consumer allocation certificates from producer accounting allocations, though they insist on both units being synthesized in terms of labour time content, at least initially. The labour time cost price would be compared to a market clearing demand price and this information would signal planners to adjust production targets. Also, since not all labour content is consumed in any one period, the Gross Value Product consists of the results of current

labour as well as the depreciated result of labour of previous periods (Cockshott & Cottrell, 1993).

Cockshott and Cottrell's (1993) model, due to its emphasis on the particularities of labour time measurements, endows it with a physicalist 'in kind' character reminiscent of Neurath's economics. However, the bounding of the currency unit to a productive physical referent would serve to prevent inflation. This would ground their system in greater coherence to actual physical expenditures than other proposed capitalist and socialist alternatives. This can be contrasted to the crank advocacy of returning to a gold standard from fiat currency, as if there is some natural transhistorical value to precious metals, which would be a less rational alternative. Average labour productivity relates more directly to current value production in particular industries than a market value of precious metals.

Its planning mechanism and reliance on a restricted form of managed market socialism, which uses prices in contrast to mere direct allocation, is reminiscent of Lange's model. They argue that the need to constrain consumption is dependent on the abundance of productive capacity and the desirability of capital accumulation. If this is unrestrained it will be difficult to manage available resources and plan for the future. Also, the price constrained consumption is superior to direct allocation since it allows for greater flexibility in consumption preferences (Cockshott & Cottrell, 1993).

Although this average necessary labour time quantum would be a benchmark within their system, it would not necessarily be inviolable. The system would be geared towards market clearing prices generally. However, Cockshott and Cottrell (1993) provide caveats where labour price is to be altered. For instance, cost price should be altered by a particular ratio to curb excessive demand. The ratio would be an indicator of the effectiveness of social labour.

Rationing of goods beyond the pricing mechanism would be utilized when particular goods are in short supply, especially in the case where these are viewed as relative necessities. However, in the context of an egalitarian income structure, they believe market price would be a superior regulator of distribution (Cockshott & Cottrell, 1993). However, I argue that some items (such as those that provide disability support) be subsidized out of general taxation on both moral and efficiency grounds, since these investments in accessibility should facilitate a greater social product than a more defacto exclusive alternative. The moral aspect would be that those who require significant support should not be relegated to be significantly poorer in terms of discretionary income than those who do not. This conflict is similar to those who advocate the replacement of government social services with a universal basic income (UBI). Cockshott and Cottrell (1993) do recognize that strict adherence to labour value calculation could lead to the undervaluing of natural resource stocks, which is why they institutionally separate natural resource parameters from profitability criteria.

To roughly measure labour content, Cockshott and Cottrell (1993) recommend using input-output tables to compute average labour cost by sectoral output units to reduce the complexity of treating each factor of production as a separate variable. To reduce the computational complexity, they also recommend using linked production lists rather than a single table for solving the production tables through Gaussian elimination (Cockshott & Cottrell, 1993). However, I argue that this form of measurement is too coarse to be effective in terms of its operative economic regulation and a more precise measurement that involves greater particularity is necessary. The reason this is not used is due to the significant computational power required as well as and a thorough understanding of technical specificity (Cockshott &

Cottrell, 1993). However, for an effective socialist economic calculation that would be superior to market measures, smaller granularity of process chain specificity would be required.

Pushing against this drive for less granular specificity is the time required for calculation (Cockshott & Cottrell, 1993). A significant limitation to this method is the fact that all production processes have multiple outputs and therefore it is difficult to tie labour content to any one product. The only way to avoid exclusion or double counting of labour is to do comparisons of the inclusion and exclusion of various production processes in relation to the whole economy as a single unit and making sure that labour content attribution approximates the total labour used in the system. This, however, would not ensure attribution was categorically optimal only that there are no ellipses or redundancies.

Central Calculation

A major advantage of this system over Devine's (1980) as well as Albert and Hahnel's (1991) is its unapologetic use of a well thought out central calculation which adds to system coherence as opposed to merely relying on political decisions at differing scales without any ability to evaluate decisions systemically or to normalize their interdependent impacts. This point was acknowledged by Hayek when he argued that a computational system would be superior to a political *ad hoc* one since the previous could be subject to internal evaluation and feedback while the latter could not (Hayek *et al.*, 1935). Although one might expect quantitative insufficiencies to surface through the political check on governance, this is likely too coarse a mechanism for more precise quantitative direction of productive activity. The inefficiencies of the command economies could be attributed to the lack of a sufficiently effective mode of economic calculation rather than a lack of political pluralism.

Equality and Distribution

Cockshott and Cottrell (1993) recognize an egalitarian distribution as stemming from ideological principle but do not associate this with the deskilling process of industrialization which does reduce wage earners to relative equivalents in terms of their bargaining power. Unlike Albert and Hahnel (1991) they do not envisage a more novel distribution of balanced labour complexes but conceive professionals as equivalent to low wage workers. In congruity with capitalist developments, what I imagine to be more likely is the progressive socialization of the labour occupied by skilled professions into low skilled labour wherever feasible due to economic rationalization. Even in the medical field, lower skill technicians and nurses are rapidly increasing in their role in comparison to professional general practitioners. We might expect the role of the generalist professional to shrink over time. Therefore, a particular policy project of leveling incomes would be less relevant than their prescriptions recognize since capitalism degrades these roles wherever possible, given current technological possibilities. Cockshott and Cottrell (1993) wish to treat the production of skilled labour as similar to social investment in means of production and this is mostly correct in its emphasis. Educational investment would not be an allocation of personal risk but would involve state investment. In this sense, state educational funding balances out the expectation for greater wage reward after attainment of professional skills. However, this ignores the reality of bargaining power in time which allows those who have been the subject of state investment to withhold their labour in efforts to increase their rate of compensation.

Cockshott and Cottrell (1993) correctly recognize the domestic economy as a major source of economic inequality between genders and argue that capitalist encroachment into the domestic domain has increased efficiency and somewhat reduced this inequality. They do this

while recognizing that the domestic economy accounts for a significant portion of unaccounted working time in an economy even as it is a low productivity sector. To remedy this, they suggest a communal alternative to the patriarchal family which would benefit from greater scale efficiency than the nuclear family. They recommend this alternative but would not wish to impose it in a dictatorial fashion (Cockshott & Cottrell, 1993).

Cockshott and Cottrell (1993) seem to issue differential rewards on the basis of industry in contrast to individual managerial evaluation. They, however, feel the moral success of an expanding operation in contrast to a declining one, should be its own reward along with potential advancement opportunities. In contrast to an ownership cooperative, this structure would mean that workers would not be invested in firm success, just as they are not under most capitalist firms. However, so long as management is effectively incentivized towards this task, this should not present a problem as it does not under capitalist management.

Value Considerations and Innovation

Cockshott and Cottrell (1993) correctly argue that capitalism, though innovative, restricts innovation due to the undervaluing of labour (Cockshott & Cottrell, 1993). The value of labour in terms of its share of the surplus is based on the bargaining power of labour. Although ideally it should be treated as the absolute limiting factor, as it is in the longer run, this is rarely the case in any particular context. This view is not useful for the logic of catch-up industrialization. Although upfront and short-term cost are higher than more readily available alternatives, long-term efficiency and productivity goals are better served through this investment project than by merely relying on a short-term efficiency calculation in terms of labour efficiency. In these kinds of projects, a long timescale must be incorporated to imagine its impacts.

Scales of Planning

For Cockshott and Cottrell (1993) planning consists of three levels: macroeconomic planning, strategic planning, and detailed production planning. The first category would govern the general breakdown of labour investment in various branches of production, the second concerns future-oriented changes and the third involves more precise quantitative production targets (Cockshott & Cottrell, 1993).

Cockshott and Cottrell (1993) argue for the use of algorithmic techniques in solving allocative distribution in physical terms using a harmony function for detailed planning. This function, due to its requirements in balancing complex interdependent elements, uses programming techniques developed for neural net simulations. These systems can benefit from thermodynamic normative regulation functions, like that of a thermostat. This kind of system also involves imputing the diminishing value received from particular kinds of durable outputs that are subject to wear and tear. Cockshott and Cottrell's (1993) attempt here is a development of the efforts of Barone, Neurath, Beer, and the later Kantorovich (1965) to solve economic problems using centralized computational techniques. They are specifically utilizing cybernetic ideas for more effective system regulation.

Cockshott and Cottrell (1993) reason against Mises claim that socialist management, due to its lack of ground rent pricing, would not allocate resources efficiently. They contend that capitalists historically have displayed little concern for natural resource depletion due to greater emphasis on short term profitability rather than longer term sustainability, except in the context of an economically strong land-owning class supported by the state (Cockshott & Cottrell, 1993). This class, however, only maintains the land if the discount rate makes it favorable to do so. Cockshott and Cottrell (1993) reason for a rate of rent to be charged in a purely accounting

fashion in a socialist economy to be able to determine differential priorities. Therefore, they acknowledge the necessity of ground rent as an economically valuable factor but do not concede that it must be solved through the antagonism of private interests. Also, they argue for either a general discount rate of labour time investment to be set democratically by periodic referendum or to be pegged to the growth rate of productivity, purely for accounting purposes (Cockshott & Cottrell, 1993).

Cockshott and Cottrell (1993) make a case for a fully planned allocation of producer goods and a market in consumer goods. This market would not include the goods that are determined to be the 'rights of citizenship,' which would be provided out of general taxation and therefore would be fully planned. However, there would also be a significant domain where freedom of choice dominates. They present a caveat on this freedom of choice in consumption, contending that externalities of these must be minimal. They argue for price rationing of scarce resources which cannot be easily expanded in terms of production rates. They also set the constraint that if the cost of metering consumption is higher than the revenue to be gained, it should not be subjected to regulation through a market mechanism (Cockshott & Cottrell, 1993).

Management of the Rate of Accumulation

In contrast to merely a public rate of accumulation and investment set centrally, Cockshott and Cottrell (1993), argue for marginal products that encourage individual investment in savings such as retirement assets or consumer savings deposits. These could be used as additional stock of investment for allocation by planners, if deemed desirable. The necessity of these mechanisms is that labour tokens, in their schema, would have an expiry date and therefore would not be able to accumulate privately over time. This is because hoarding would disrupt the allocation plan. Also, too much simultaneous withdrawals would threaten the liquidity of

currently available labour and product stock, so withdrawal in particular periods would have to be limited in similar ways that banking policy can prevent bank runs in a capitalist system. An invisible interest would accrue on accounts. This is not due to a quantitative increase of labour hours, but, because of increases in technological efficiency in terms of each labour hour, these are able to claim greater use values in future. The general rate of accumulation in their model is to be financed through taxation, but in contrast to the command economies, this rate is to be set not by a managerial elite but determined democratically by plebiscite. If spending is in excess of consumption targets, then planners are directed to consider increasing the taxation or increased allocations towards consumer goods production. The attempt is to try, over time, to match spending to consumption on average in the consumer goods sector. This is achieved by comparing the ratio of price and labour values to spending and planned consumption targets. If the previous is greater, then the production is upregulated, and if it is lower it is downregulated. However, for certain goods, buffer stocks are to be maintained to prevent excessive price fluctuations. Also, speculation would have a dampening effect on the fluctuations of price of particular goods since relatively higher cost over value ratios may cause consumers to either delay consumption, while lower cost over value ratios would increase consumption (Cockshott & Cottrell, 1993). This would encourage the populace to increase the rate of accumulation but would not have the directing effect of privately directed investment that Roemer's plan does for instance. However, we would assume that this system would be operating at a much more effective level of central coordination, information processing and democratic accountability than a more social democratic mechanism of investment direction. In contrast, Roemer's plan merely directs firms as they are under a nationalized framework.

Pricing of Production Factors

In contrast to a capitalist economy, in this system there is no market price in factors of production. It will not be able to differentiate sectoral efficiency by paying lower wages or imposing a longer working day, but only by increasing the attractiveness of products or increasing process efficiency. This model would also fully utilize digitization of production stages and consumption for plan monitoring and alteration. However, this system would see full universalization of these mechanisms (Cockshott & Cottrell, 1993). On the consumer distribution end of things, these methods are already being implemented by large firms such as Walmart and Amazon (Phillips & Rozworski, 2019). Coding systems are also harmonized between particular governments that are undergoing trade agreements. The greater trade is integrated between states, the more the system of classification will be universalized.

Taxation

Due to the relatively egalitarian incomes in their system, Cockshott and Cottrell (1993) advocate a flat tax in an economy based on full employment. Ground rent to the state would be based on the amenities available in the area, but upfront housing costs would be based on materials irrelevant of location (Cockshott & Cottrell, 1993). This effort is similar to Hausmann's opposition to the property regimes common in all capitalist countries since his time. Under these regimes, which private property holders benefit financially from proximate public investment in infrastructural improvements to which they add no individual contribution (Harvey, 2003). They also suggest an excise tax on goods that are thought to have negative social consequences in a similar way that capitalist economies employ this kind of particular taxation (Cockshott & Cottrell, 1993). However, I argue that a superior method, which might be

more equitable and balanced, would be to incorporate these social costs of mitigation of these consequences into the price of the good rather than inflating it by an artificial amount.

Information Quality

In terms of accuracy of information, the previous problem of the command economies was managers systemically under-estimating current productivity, to make targets more easily achievable. The automation of information gathering would bypass the potential skewing of information by requiring reporting to be more centrally administered. The gathering of manufacturing process information must be recognized as a critical node in the production process, since the ability to alter production statistics can skew benefits in the favour of certain parties while making the entire process more unreliable as a whole. In the context of managers overestimating the benefit of investment projects to increase their domain and prestige, experts would check these models against their own estimates of expected production efficiency for future projects (Cockshott & Cottrell, 1993). According to Laibman (2011), this still fails to account for Hayek's critique based on tacit knowledge of the particularities invisible to non-participants. Laibman (2011) alternatively proposes a normalized incentive calculation that rewards both accuracy of prediction and local initiative rather than merely superseding the process through the increased surveillance abilities of the center (Laibman, 2011). However, as useful as Laibman's calculation may be, the abilities of surveillance and control due to technological innovations from coordinators of production allow an increasingly distant coordination from the shop floor as capitalism progresses. This process necessarily involves the subordination of the preferences of local actors to the broader framework of coordination. Since larger firms retain competitiveness, coordination at a distance must retain its effectiveness rather than eroding as a diseconomy of scale. Therefore, Cockshott and Cottrell (1993) are correct to

put their faith in this strategy. They also argue that if sector production is not fully monopolized, the presence of alternate firms, even in a socialized system, should disincentivize underestimating productive capacity since this will merely cause the firm's capacity to be downregulated to the benefit of their competitor. The presence of a pricing mechanism in the consumer market should also generate these upstream consequences on factor production so long as alternatives are present (Cockshott & Cottrell, 1993).

Monopolies

Cockshott and Cottrell (1993) argue against the formation of monopolies wherever possible due to the inability to subject their process to scrutiny in the form of competition. This initiative would cut against Lange's (1938) view of merely subjecting monopolies to firmer state management so as to retain their scale efficiencies (Lange & Taylor, 1938). It contradicts the logic of the historical materialist dialectical process of further accumulation of capital. This process generates the subjectivity of egalitarian worker solidarity due to the necessity of the check on the productivity of the process with the mechanism of competitive pressure. Oddly, of the models examined, this one posits the highest degree of centralization, due to the activity of a central calculation. At the same time, it necessitates against this centralization being absolute even as it is centrally administered. The issue of competition remains a problematic one. In the context where one firm dominates all others in a particular sector, are these other firms to be maintained artificially, thereby removing the mechanism of competitive pressure? Alternatively, should an anti-monopolist policy be formed to dismantle monopoly power or does the successful monopolizing firm need to be broken up, potentially damaging the efficiencies that it generates through centralization? Lange's (1938) answer is to democratize the firm, subjecting it the interest of the populace, but this is insufficiently effective for Cockshott and Cottrell (1993). It is

not exactly clear how they might deal with this central problem of centralization under a competitive environment.

International Trade Dynamics

Cockshott and Cottrell's (1993) model for international trade with capitalist countries is inverse to the Soviet model. The Soviet currency was designed to circulate internally but not be convertible externally. The Soviet state instead accumulated foreign exchange to be used for international trade. In the case of their model, imports could be purchased by labour credits, but labour credits would not be 'circulated' internally. Also, foreign currency would not be permitted to circulate domestically. The latter issue is difficult to regulate internally, but they argue that they wish to attempt to prevent capitalist relations internally. They, therefore, wish to use non-circulating labour credits internally (Cockshott & Cottrell, 1993). Due to the proliferation of debit and credit card electronic withdrawal technology, this system would be more feasible at present than previously, under the Soviet system. To effectively integrate imports and exports into a planned economy, this must be regulated by planning authorities on the basis of relative labour costs of different production methods. The black-market transactions would be less feasible due to all official consumptive transactions being tied to individual electronic accounts. Likely, these would only be done through barter transactions and the higher value fruit of theft. Although Cockshott and Cottrell (1993) issue the use of foreign currency domestically by citizens of their theorized socialist state, they suggest that when traveling, labour credits be exchangeable to foreign currency for use there, but this currency could not be brought back into the country nor can the foreign currency be converted back into labour credits (Cockshott & Cottrell, 1993). I imagine this would be a very large source of stress for the traveler, since the amount they withdraw in foreign currency must be spent and cannot be recovered. I suppose the

inability to transfer currency back into labour credits would restrict unaccounted for productive capitalist investments by socialist citizens in capitalist countries, at least whose profits need to be reintegrated back into the domestic labour credits. This might also create problems for foreign direct investment, even if heavily regulated, that seem to benefit developing socialist economies like China.

Positing an eventual socialist world economy, Cockshott and Cottrell (1993) suggest that trade, which assumes distinct property, would not exist. In this system they suggest that productive resources are governed by international organizations. They give the example of allocations between different Soviet republics as well as common wage rates as an example of 'international' policy. However, due to a common governing regime, this difference is similar to the distinction between federal and regional policies which exist in all relatively large countries.

However, in the shorter term more formal trade relations are required. Cockshott and Cottrell (1993) argue that socialist countries are likely to attempt to aid in the development of less industrialized countries because of the need to acquire sources of raw materials and primary products as well as a sense of socialist internationalism. This motivation is contrasted to capitalists who would want to exploit cheap labour, develop outlets for overproduction as well as potential colonial chauvinism. They argue that underdeveloped socialist nations such as Uzbekistan within a socialist commonwealth of USSR, can benefit from a non-exploitative relationship. However, they note that the economic concentration of extractive and intensive monoculture in these regions can have negative environmental consequences. Cockshott and Cottrell (1993) identify the disadvantages of autarkic production as opposed to international production coordination in Ricardian terms. They identify that international capital has been better equipped for this process than have socialist states (Cockshott & Cottrell, 1993).

Cockshott and Cottrell (1993) suggest that the tendency of regressive economic nationalism in socialist command economies related directly to the inability of the political class to maintain their living standard in another position in a similar fashion that capitalist politicians can in the private sector. Therefore, they argue that they required isolationism to maintain their economic position. This is often the motivation of the uncompetitive domestic bourgeois who wish to be sheltered from broader international competition by state management (Cockshott & Cottrell, 1993). However, what a nationalist protectionist investment policy does in terms of economic development, at least initially in economically peripheral economies, is to further deconcentrate investment from the center to the periphery. Although this does involve some duplication, it also causes a leveling of economic conditions which can increase worker solidarity across borders. For both socialist and capitalist states, the value of the concentration of investment declines if other sites are underutilized. This also works in terms of the world market. Due to the chauvinism of colonizers or the lack of foresight in terms of the developmental potentialities, high productivity investments are excluded from underdeveloped zones. Therefore, force and reorganization are required to redistribute investments when rationality fails in terms of inclusivity in the same way it does in the context of the anti-feudal revolutions. However, as development occurs, what begins as catch-up developmental protectionism can easily become nationalist chauvinism after the living standard has been shifted above the level of other sites competing for developmental investment. The former is more congruent with socialist internationalism than the latter. Cockshott and Cottrell (1993) argue that internationalizing the economic level is not feasible without a political union and this would be more feasible with an active Comintern acting as a significant international political party (Cockshott & Cottrell, 1993).

Method of Popular Economic Planning

In contrast to the participatory forms of previous theorists, where groups meet to determine allocation plans, Cockshott and Cottrell (1993) present a more time efficient form for some kinds of economic decisions (e.g. spending change on programs such as the NHS). For instance, the rate of increase or decrease of allocations could be submitted by census and averaged to produce the popular result by electronic ballot. To prevent allocations being above productive potential, the proportion will be constrained by some formula to reflect this. Otherwise taxation and social spending will not match, leading to deficits (Cockshott & Cottrell, 1993). In contrast to their emphasis on allocating decision making by lot, this method is superior to the idea of having an in-person meeting for all types of allocative decisions that may have some impacts. Deficits are not necessarily a large problem for a strong economy, especially in the context of growth and the availability of sufficient credit, so long as the rate of return on investment is greater than the rate of interest required to service the debt. Therefore, the requirement that spending and investment match is not a necessary constraint on a growing modern economy. Of course, this investment must come from the population above the planned rate of taxation or by foreign actors.

Issues with Labour Planning

Cockshott and Cottrell (1993), like Lebowitz (2012) and Nove (2003), see the central problems of the Soviet model as its inability to reallocate labour as well as the inability of firms to go bankrupt. However, they regretted the introduction of bankruptcy laws and the move towards cost accounting since this emphasized a capitalist side of Soviet industry by highlighting its role as a buyer / seller (Cockshott & Cottrell, 1993). I object to this explanation and would stress that after a period of accentuating extrinsic growth into modern industry, intrinsic growth

and better allocative efficiency was required. Due to the lack of a functional socialist calculation, efficiency calculated through the market was the only viable option.

Cockshott and Cottrell (1993) advocate, in contrast to the right to hold on to your particular job, the right to employment in general, to receive full value of your labour and the right to decide how to spend your income as you see fit. They do this because they do not wish the actions of sectional bargaining power from either the side of labour or employment to disrupt the allocative mechanism or the industrial process (Cockshott & Cottrell, 1993). This ending of struggle based on total universal common interest using economic leverage is a utopian assertion. Certainly, the formation of institutions that lessen antagonisms on the basis of class will be a significant improvement, but the struggle for better working conditions will not likely ever end due to the changing nature of work on the basis of unceasing technological change. Workers subject to common conditions, will likely always attempt to advocate for their interest in this manner using methods that are most effective even if they could capture the 'full value of their labour'. This remains true even if the employer is a democratic representative of the whole of society, since, due to the necessary alienation of socialized labour the majority would have little understanding of the experience of any group of labourers. Cockshott and Cottrell (1993) seem to think that this would go away if the state sheds its capitalist character, but I do not see how this would be the case necessarily. What is required, even in a communistic society, is an effective and generally trusted mechanism to litigate between various social interests. Even though an ethic of solidarity might be expected where the majority are proletarianized workers, only substantial leverage will move the institution to act differently to a significant degree, especially if this alters outlays.

Conflict between Plan and Price Direction

Cockshott and Cottrell (1993) recognize the potential conflict between planned production and cost accounting with centrally determined prices. Cases can occur where meeting the plan is unprofitable. Due to the potential for more diffuse positive externalities, loss-making enterprises can still bring a net economic benefit to an economy as a whole, but this cannot be determined merely through their monetary accounts. The tendency of command economies undergoing market reforms is to allow these firms to undergo bankruptcy proceedings. In contradistinction to this, Cockshott and Cottrell (1993) argue that fixing consumptive budgets for projects in the planning period prevents the issue of loss due to lack of profitability. Since labour credits are merely canceled out rather than recirculated, they argue, this makes the needs of firm profitability unnecessary. They also maintain that the planning authority be able to terminate or modify any project that ceases to fulfill its role. This is not expected to result in unemployment, since labour is expected to be redeployed through employment agencies (Cockshott & Cottrell, 1993).

In socialist command economies, even though all property was nationalized, rent was not required to be paid for the use of state property. Cockshott and Cottrell (1993) suggest that this is due to the historical disdain for exploitative landlords and a popular will to be rid of such oppressive dynamics. However, they argue that without a rental charge there would be no sense of utilizing property for its most economical uses. Where land is granted to users gratis, those who are allotted higher productivity land or land that is more strategically situated find themselves in an economically privileged position in relation to those granted less fertile lands (Cockshott & Cottrell, 1993).

Cockshott and Cottrell (1993) argue that historically more narrow sectional property relations and interest have caused environmental devastation. Therefore, they recommend a regime of global stewardship to maintain sustainability in the longer-term. They also recommend an institutional separation between the groups attempting to maximize profitability and those setting environmental parameters so that production goals do not overwhelm environmental regulation (Cockshott & Cottrell, 1993). I agree with these sentiments since I believe that global environmental problems must be confronted at a global scale for broad efficacy. The Anti-Globalization slogan “Think Globally; Act Locally” is profoundly naïve in its parochial theory of both power and change in its attempt to accommodate greater parochial particularity. More coordination and organized exertion of power is required to accrue sufficient power to the pursuit of environmental regulation (Phillips, 2015). Cockshott and Cottrell (1993) mirror this sentiment by arguing that global management of environmental resources require socialist world dominance. However, I would argue that although capitalist firms and states might butt-up against regulation, they are not necessarily incompatible with it, even if they try to evade it. As Chibber (2003) illustrates in some contexts, competing capitalists can be persuaded that regulation is in their collective group interests (e.g. in South Korea) where in others they refuse to be swayed (e.g. in India). If they are sufficiently convinced of the common interest or dominated to the degree that they have little choice, this type of regulatory regime is achievable. Certainly, socialist management would be more rational with regards to environmental regulation, however, international regulation of largely capitalist states is not impossible. The building of international regulatory institutions for global benefit is a necessary foundation for constructing an effective socialist international system. The assertion that this must be imposed only by those with ideological commitment to a socialist means of organization puts little stock

in the historical materialist process and imagines the imposition of economic forms in a more utopian manner.

Conclusion

Like other right critiques of central planning models, the lack of agency of those who would amass private capital, to do with it what they wish, is not an available option in this system. Cockshott and Cottrell (1993) are conscious that property rights in this system are limited. However, when viewing the system from a more macro perspective, most business plans require loans to realize their vision. This most often, along with some smaller scale private sources of financing usually requires the approval of the plan by large institutions such as banks. If these banks were not quasi private institutions seeking sectional financial benefits but were the representatives of the economy and its maximal functioning, the functional differences would not necessarily be so great as to disrupt the process of approval of plans. However, these would be understood to be in a broader public interest. Also, due to the greater access to information, they would be in a better position to assess demand in contrast to potential competition.

In contrast to other proposed systems of socialist planning, this one has greater ability to analytically assess the relative efficiency or even the potential efficiency of a project. One of the main deficiencies of a purely administrative planning model is the lack of the ability to calculate what ought to be produced in appropriate proportions. This kind of method should allow for rational calculation to a greater degree than other systems at the level of comparative labour time. However, the calculation of labour output using broad input-output methods by sector proportion is very coarse. Its lack of precision for the particular method in question, from raw materials to end products is a deficiency that may be more significant than Cockshott and Cottrell (1993) let on. They recommend this because of the monumental complexity of the

alternative and the sheer time and processing power required to solve this by linear programming methods. The advantage of their method is that it avoids the problem of dividing labour effort into the various outputs produced through any production process. Thereby, it avoids the analytical problem of labour time being objectively divided between multiple outputs of the same process without a clear rationale (Nitzen & Bichler, 2011). At some point this problem will have to be dealt with if efficiency is to increase beyond this method. It is unclear if the coarseness of the method will be superior or inferior in terms of efficiency to market methods of evaluation in practice. But some methods of calculation are likely to be found to be superior to a relatively purer traditional market calculation at a particular stage of development. This is likely not to be driven by pure requirements of equitable distribution, since this can be addressed more easily by a more egalitarian income policy. But it will likely be driven by need for greater allocative and production efficiency than can be found by market methods alone.

The pegging of value to (average – necessary) labour time is a more objective metric of the increase in productivity of the system than is straightforwardly evident under a capitalist system with a theoretically unbound currency unit. This system, despite its potential limitations mentioned previously, would have the advantage of mostly eliminating the problem of inflation due to the grounding of the value unit to an integral measure of the production process which is much less arbitrary than the value of precious metals. It also avoids the problems of the Proudhonian method of valuation based on actual individual production time.

Like most socialist models, this model also imagines that economic class antagonisms have been dealt with by their administrative model and therefore do not need to be considered. However, where sectional group interests continue to meaningfully exist, they are likely to be manifest in some attempt to skew allocation to their benefit. This predicament cannot be wished

away through any administrative system. But it characterizes the nature of the methods of production in their characteristic variance in relative leverage of agents in the production and administration chain. Insofar as this variance in leverage is large, allocation will likely be skewed in its direction. Given a non-negligible variance, it is better to use clear methods to deal with this formally than through subtle and informal methods which are less transparent or naturalistically coded. What is clear is that most socialist systems at an industrial level beyond catch-up developmentalism would require a large degree of proletarianization, representing a real harmonization of interests, to gain an effective political mandate. This one is likely no different.

This model more than all other modern models examined would require a high level of computational capacity since it does require significant broad system *ex ante* calculations, even though these are simplified in some ways.

Like all other socialist systems, one must be concerned with reproducing the drive to generate innovations in production techniques which are economically-minded rather than mere qualitative scientific innovations in possibility. Cockshott and Cottrell (1993) are generally concerned with the presence of monopoly conditions in their ability to stifle this process, leading to stagnation. However, they do not deal with the need to incentivize or support innovative processes beyond providing allocations towards research and the ability of a planning board to hold a research institution to produce results according to their mandate. Like other socialist systems, this one is oriented towards increasing scale and allocative efficiency and equity through administrative interventions, building on (economizing) innovations that are already available. However, its ability to drive innovation beyond the predispositions of innovators who are intrinsically or morally driven, would be in question. As was the problem under the Soviet system, they would have to be significant measures to prevent the suppression of innovation

output, due to the need for managers to produce consistent results but not have expectations increase beyond their ability to deliver. Cockshott and Cottrell (1993) suggest that greater informational transparency requirements and greater evaluative expertise could aid in this effort. Also, like other socialist models, production for earmarked allocation produces a system inhibited by shortage. All surpluses must be intentional. Therefore, these systems are less easily adapted to changing conditions and are best oriented towards relative macro stability. Kornai (1992) would contrast this to the capitalist model, which due to its unplanned character, produces surpluses more readily, which yields opportunity to find innovative and productive uses for these. It does this as many are deprived of the output they would readily consume if they could. The socialist models allow more to be done with less, due to the reduction of losses related to overproduction achieved through greater system rationality. However, it is generally lacking in its ability to invest economical uses for unplanned surpluses. This is why effective socialist models must grow on top of substantial capitalist development.

Also, similar to other models of socialism with unique currency calculations, it's lack of formal exchange rationalization as integrated with the world market makes its production system less socialized than one which can more easily transcend borders. The experience of the Comecon, as Ellman (2014) articulated, showed that trading internationally, in prices that were not set by the international market was not to the advantage of most of the socialist block and therefore were reduced. The considerable difference in calculation methodology between this and the external market might generate significant tension to conform, just as it did in the Hungarian, Chinese and Yugoslav contexts after partial reforms failed. Therefore, the feasibility of the method of calculation as a trade currency depends on its ease of convertibility between state organized economic systems. The substantial deviation of this model of calculation from

the market model suggests indicates that this system will be less oriented to international exchange and therefore less socialized as a productive system.

Section VI: Synthesis

The Advantages of the International Scale of Production

The problem with the autarkic nationalisation solution is that it does not merely face domestic capital on its own, to which it can be economically superior to. The major competitiveness problem it confronts is in relation to the international system of production, which will always be more socialized, in relational terms, than a socialist state autarky. The advantage of these capitalist firms is that they can integrate more seamlessly into an international system of production than a state monopoly can, especially one which sets its own market clearing prices for internal consumption. An international division of labour can always be superior to a local domestic form. This presents a significant obstacle to all forms of socialism that wish to contain their economy within state limits as primarily autarkic.

The Soviet revolutionaries were cognizant of this problem and expected the success of their revolution to depend on the outcome of the 1918 German revolution, since they were a world capitalist power and Russia was far from it. Since Germany did not become the center of world socialism at that time, the prospect for a world socialist economic system has been, as an emerging economic order, delayed (Chattopadhyay, 2003). The only countries that became revolutionary socialist states politically, were states undergoing post-feudal, post-colonial and nationalist revolutions. None of these were a center of a prevailing economic order and could therefore shift the relations of peripheral states with it. The existing world economic powers were largely untouched by these 20th century revolutions. Economically, all of these were in peripheral states. Although many of these states did pursue a rapid developmental path, given the availability of more modern technology for import, leading to them becoming much more significant economically, they could not set the relations of international trade by their influence

alone. As discussed previously, a mutually beneficial system of price determination for the context of international trade between autonomous socialist states with planned economies is still unresolved. Therefore, they had to remain either autarkically oriented and/or develop an export orientation using international market pricing as a guide. Although Germany and Italy did seem to displace their feudal regimes, they underwent a brutal nationalist chauvinist transition to a modern state in the form of fascism, as opposed to a theoretically more egalitarian minded socialism. These attempts were not only destructive to those externalized from their social hegemonies but were also doomed overall due to their project of declining socialization in the context of modernity. Nationalism is progressive in its role of expanding and generalizing a sense of social interest and representation from more disconnected, parochial and identity stratified systems of representation and organization. However, it can become regressive to the degree that it makes the regime more exclusionary in service of a mythical reified identity. Other more advanced economies seemed relatively unmoved by political revolution in this period.

This presents a problem for the transition theory of the self-proclaimed 'socialist states.' In their experience, the political revolutionary socialist regime was more of an alternative path to a modern capitalist state, transitioning out of the feudal and/or colonially dominated state, rather than out of a modern capitalist state that Marx predicted. This problem can be addressed by suggesting that socialism is not a political transition precipitated by contradictions of capitalist developments, but an alternative path to a modern capitalist state as it transitions out of the feudal state. Alternatively, it could be suggested that these were not post-capitalist revolutions but proto-capitalist ones in a similar vein to the political experiments enacted in the aftermath of the French Revolution.

The way the first presupposition was dealt with, in the Russian context, was by suggesting that the bourgeois and proletarian revolutions were close in historical proximity as unique events. However, this suggests that the distinction between a bourgeois revolution and a proletarian one is not based on the character of the material productive forces in a state and the way this changes the balance of social power of economic classes. Rather, it is based on the character of the ideology of its ruling party and its formal alliance to a particular class. This gives these regimes a more utopian aspect rather than a materialist realpolitik one since politics are thought to mostly precede and generate new material conditions rather than the inverse, formerly orthodox Marxist position. Although a state can prefer a concentration on development politically, if a group or class lacks economic leverage then they will likely be overtaken politically by classes that do, in spite of ideological formalistic adherence.

Regarding the second presupposition, many might object to this attribution since the French revolution is labeled a bourgeois revolution. However, the politics of the French revolution was not homogenous. It was a mix between peasants, artisans, capitalists, nationalists and socialists in a similar way to the 20th century revolutions. The post-revolutionary governments were unstable experiments of different mixes of class alignments as well (Marx, 2008b). In a Marxist materialist reflection, the dominance of the capitalist class, in the context of post-revolutionary France was not due to the guidance of political ideology, but the leverage that the capitalist economic positionality held over economic relations. It is this leverage, at a particular stage of development, that allows them to attain their political and cultural dominance, not mere formal cultural veneration or the legal sanctification of bourgeois right. Therefore, a socialist regime would have to be based on the capitalist mode of production becoming a fetter on further development through the exhaustion of its potential to increase economic development

rather than on it merely being morally objectionable to the workers as political actors. Certainly, the overthrow of the feudal regime, at least in its governing position, in contrast to a vestigial ceremonial role, was based on its inability to accommodate the interventionist planning structure required by modernizing economic and political relations. It is unclear what the concrete structural organizational difference would be between a modern state dominated by capitalist interests and one dominated by proletarian ones in terms of accommodating its structural requirements. A larger state would need better communications technology to be effective and might likely require a superior technological base. Maybe a revolution would be required to transition from a bourgeois state to a proletarian one, but it is unclear why a simple transition of leadership would not suffice, since the barrier would merely be concentrated in the political allegiances of representatives administering a similar bureaucratic state. What is clear is that a revolutionary political transition from a developed capitalist society to a form of socialism based on the stagnation caused by private enterprise, had yet to be experienced. In a capitalist context, the state has merely grown gradually, but most significantly, in response to capitalist crisis. Maybe something like Lange's model will grow out of capitalist social democracy in a more stable form, either through gradual dialectical replacement of private interests with public ones or through an eventual revolutionary break. This would not likely use an *ex post* method for administrative price determination, at least not without more robust methods to approximate the impact of the change on the rest of the economy, which would require significant data processing capabilities. It could however be an economy that has a growing integrated state industrial sector and a shrinking private market.

The problem with the economic coordination between states organized autarkically was exemplified in the problems of exchange in Comecon. Planned 'accounting' prices might be

meaningful within a state, but how would they meaningfully exchange between states? This was a complicated problem, for which they mostly relied on the prevailing prices on the capitalist market to identify substitutes since accounting prices were of limited utility outside of the plan parameters (Ellman, 2014). If market prices were not available in a post-capitalist transition, by what means could they perform exchanges efficiently? This is a central problem for a socialist future, since they are faced with the significant obstacle of determining an efficient approach by which they could conduct international trade without formal plan integration or the availability of capitalist market prices. Historically, this has been done on a more *ad hoc* basis which drove many socialist states to prefer to trade with non-socialist states (Ellman, 2014). This is similar to the problem of economic calculation within a political regime. Except that it becomes an even greater barrier since, by definition, allocation cannot be administered on the basis of a plan, unless the regimes are integrated to the point where their institutions are subordinated to a central institution, like in a federated system. Hayek points out the advantage of the market economy is that it allows for the coordination among groups that do not organize together for common interest but find differing utility in the various outputs (Hayek, *et al.*, 1935). This critique gains salience in arrangements that transcend commonality in economic organizations like a common state since they could allow for expanded socialised production.

Like other economic systems that center planning, Kornai (1992) would highlight the tendency for this system to produce shortage. However, this would be based on insufficient data quality and the ability to respond effectively. Given the accumulation of greater economic knowledge, demand elasticity and shelf-life could be determined so as to plan a proper quantity of surplus production to maintain sufficient stock. This would lessen the severity of both shortages and gluts.

Central Calculation

I assert that the dominance of central calculation as envisioned by Cockshott and Cottrell (as well as Laibman's recommendations I have not discussed in detail here) is a more developed form of socialism than those presented by Mandel, Devine, Albert and Hahnel as well as the market socialists. The utopian models discussed highlight not only *de-jour* changes in economic direction, but also a potential schema of rough forms that would follow the trajectory towards greater accumulation, while at least somewhat appreciating the dynamics of each situation. As a historical schema of progressive development, I imagine market socialists advance (as characterized by systems advocated by Schweickart, Roemer and Lawler) through class struggle that accumulates a larger civil service (characteristic of Mandel's or Devine's democratic model accountable to different groupings, under different mandates), accountable to the public over time. The growth of the civil service necessitates superior methods of allocation to prevent sectionalism and inefficiency within this sector through superior methods of economic calculation. These calculation methods would extend the 'social return on investment' to a larger fraction of the public sector of economy to the point that *ex ante* administration becomes gradually superior to the more decentralized democratic and market allocation methods. The later method would be evocative of Cockshott and Cottrell's model of central *ex ante* economic calculation as well as many of Laibman's recommendations, whether they center labour time as a unit of value specifically or not. Many of the methods of superior *ex ante* allocation will be innovated by the corporate sector, as emphasized by Phillips and Rozworski (2019). Due to increasing monopoly position, these firms will be subject to increasing democratic regulation, hopefully to the point of effective democratic administration as Lange's assessment suggests, even as this will likely not happen all at once as he recommended.

Revolutionary political transitions may occur within this process. But this will not significantly change the class-based power dynamics and potential to harmonize common interests that derive from the material conditions. The leverage of economic position will eventually re-assert itself as a share of political power up until the point that these positions become economically irrelevant, despite the ideological idealism of a revolutionary vanguard. Potential for class leverage, though increased by organization, is ultimately bound by economic conditions. Therefore, relative class-based control can only increase so much within any particular economic context. Catch-up developmentalism, characteristic of these revolutionary projects, can only be effective on the basis of importation of models for economic improvement. Innovation of new efficient productive methods, at a larger scale than that which is feasible for capitalist firms, requires some coherent means of economic calculation, either by central plan or market or some combination, but not by mere conscious political prioritization, no matter how democratic. This is in contrast to the views of Mandel and Devine. Albert and Hahnel seem to take issue with central calculation but their model requires it to compute opportunity cost despite this. The Cockshott and Cottrell model of central calculation may approximate where post-capitalist socialism may reach, but it will likely not be able to be instituted whole cloth without going through other forms that involve less totalized economic administration, due to the lack of organizational and computational capacity. Like Lawler emphasizes, this process will be dialectical and there is little point in emphasizing idealist or postlapsarian viewpoints of purity politics. The morality of a self-appointed ideological vanguard is not the determining factor in social structural organization beyond the space that is opened up during their ascendant role in reorganizing society in the post-feudal economic order or more narrowly in economic crisis. This space allows them to experiment towards a preferable modernity. In a similar fashion to the way

that Baran and Sweezy discuss the transition between the role of the tycoon and the CEO, these centralizers are later supplanted by more bureaucratic minded, less idealist administrators who are in fact superior, in terms of administrative effectiveness, than their predecessors, despite their greater economic conservatism. They can also become more accountable to public and administrative pressure due to their lesser ideological fixation on particular economic and social forms. Therefore, key aspects of these various models are not necessarily in absolute conflict. They could represent differing structural emphasis of administration at different stages of the transition to socialism at various degrees of progressive centralization and development.

The idea that an economic institution of socialism is never appropriate or advantageous is like saying the institution of feudalism and primitive communism never made any economic sense or were inefficient in all contexts. These historical systems were common, not based on direct lineage, association or conspiracy, but on the viability of the model, given a set of particular economic conditions in terms of the social relations significant to the dominant form of economic organization. Even if these regimes had substantial economic limitations, at a particular scale and developmental stage they could be sufficiently functional. The critiques of these models would therefore be immanent critiques, in that they can be subject to a more effective mode of economic distribution in a more rationally productive system. The same issues apply to both capitalism as well as socialist developments. These will necessarily be imperfect in an absolute sense but will be adapted to a particular capacity.

Depending on the level of development, the feasibility of the reliance on economic institutions, that operate on a larger scale and have broader popular accountability, is subject to the technological and socio-organizational viability of the project. Although an *ex ante* planning system may be limited in its efficiency in many developmental contexts, this does not necessarily

remain the case at higher levels of efficacy of coordination, population density and information flow. The idea that socialist experiments have failed may speak to the economic and organizational context of these experiments but not necessarily the feasibility of a model overall. Certainly, some organizational models will be impractical in any circumstance. However, the economic dominance of large scale planned coordination over smaller scale operations has proven itself under the capitalist system. There has been sustained advantages of this scale, despite the increased alienation that accompanies it.

The idea that there is some perfect balance of economic forms on a particular scale in all contexts is an idealist error in the Marxist sense, since it violates the historical record of a perpetual changing balance of forms in relation to economic development. The communist ideal of the absolute dominance of a public economic organizational form over other smaller scale forms I would legitimize as merely a scientific extrapolation of the broader trend of the balance of forms over the course of development towards increasing accumulation and the dialectical imposition of popular democracy. There is no saying to what extent this trend can progress, but if efficiency increases broadly with scale, then this trend is likely to continue.

The French, German, Russian, and Chinese revolutions, and even the American revolution to a certain degree, all had very different concrete politics. They all had populist elements and the new regime became dominated by modernizing strong-men leaders. Even if some of these regimes sought to subvert centralized power of the monarchy or feudal society through a democratic movement, this seemed to concentrate power and economic growth through the increase in the mobilization of the population in coordinated effort. This is similar to Neurath's thesis on the war economy as being integral to the development of socialism. However, it represents a period of concentration and coherence of previously organically

developed economic entities that are brought under a larger planned regime, increasing economies of scale via a breadth regime, using the terminology of Nitzan and Bichler (2011). When this means of governance reaches its maximal capacity for effective coordination, given particular means of communication and social organization, only organic decentralized development can expand until a larger system incorporating new developments can be made to cohere internally. This can be achieved through a superior method of administration taking advantage of modern technology and economies of scale.

All of these revolutions seemed to signify a transition from a feudal regime to a more bourgeois economic order, even if a few of the revolutions had explicitly anti-bourgeois politics. Marxist-Leninist theorists of the Russian revolution generally suggested that their revolution after the overthrow of the monarchy, was inherently socialist. This implied that they were at the stage of transition from capitalism to socialism rather than just a transition away from an absolutist regime to a modernizing bourgeois state. This requires a theory of political determinism that can subvert the balance of internal forces generated through economic development at a particular stage. If one were to take an economic determinist lens, one might theorize that in terms of economic organization, all these revolutions seem to come at a similar economic stage of transition to favour a capitalist means of production from a previous one dominated by mercantilism. They served to develop a new more coordinated, planned economic structure, using newer methods. In addition, after a period of intensive centralized planning, they all become weighted towards more organic decentralized developments led by markets, furthering market relations internally and externally. The expansion of the domain of the market, the direction of accumulation and its egalitarian dialectical opposition internally results in sectional efforts that expand popular inclusion compared to the previous period.

Broadly, in this viewpoint, these might all be seen as economic transitions from feudal rule to bourgeois rule, no matter what the professed politics were of the intervening periods. This view is a vindication of Marx, is his response to the Russian revolutionaries of his time that the capitalist stage of development cannot be skipped through genuine political intentions despite sincere contrary objectives unless this was as a periphery to another regime in its transition from capitalism to socialism. It may be that these cycles of increasing mechanical coordination that make previous economic development more coherent are followed by organic expansion through market experimentation. The public sector control over the economy grows, in the long run, even if it goes through periods of expansion and retraction in a dialectical struggle that tends towards greater system coordination. It could be that we have yet to see a transition to Marx's socialism, in terms of the political forces generated through the predominance of larger scale coordination of the means of production. As corporate and state forms expand, they become much more susceptible to popular controls, from an effective aristocracy to bourgeois rule.

One might even see the level of public accountability of governance structures rise as they expand from small private to board to corporate to public form, even in NGO structures not driven exclusively by the profit principal.

Personal Reflection

I have been part of a growing political organization that has always been dominated by a central council. As we endeavour to grow, we have been encouraged to attempt to raise funds through cultivating relationships with prospective large donors. This seemed to me to generate a potentially corrupting influence on the board away from the democratic. However, the democratic checks on the board are not currently that strong. Would greater control by larger donors actually be an expansion of governance beyond a vision of the activist clique? Could this

expansion be in the trajectory of greater popular rather than sectional control that can more easily transition to even broader democratic governance? Or is this a method that will appropriate the democratic structure to a narrower vision? If it is the former, then maybe systematically, a sufficient bourgeois stage is necessary.

In the current 2020 US electoral campaign, many of the top Democratic candidates, who have raised the most money do not rely on few private donations but small donations from a broader public. This might be a sign that the social infrastructure and living standards have increased to make this greater scale of governance possible. This increasing level of coordination could bring with it greater popular governance and a particular political slant due to its broader base of accountability if they can use it to wield effective leverage. This is not socialism, even if a democratic-socialist wins the election, but is an encouraging development of popular power under capitalism. It may well be true, as suggested by Mancur Olson (2008), that larger organizations, with goals of relatively lesser sectional gains are less vigorous than ones with potential greater sectional gains. However, the rate of growth in the power of these organizations that come from an increase in membership declines, due to free-rider problems, still represents a superior quantitative expansion in relative power. The mere attempt to coalesce more people around a popular program is limited by the methods of efficacy for broader coordination and identification. Sectional interests are able to punch above their weight, but this does not mean they cannot be overcome by broader interests at a larger scale at some threshold. It could be that my desire to go straight from vanguard to effective egalitarian democratic control is utopian and a bourgeois stage is in fact a necessary unavoidable step in this trajectory contra my personal aesthetic preferences, something I feel is common to most who identify with a socialist aesthetic.

Conclusion

Newer methods of big tech to generate and utilize massive quantities of user data and preferences is the structural template for the possibility of greater popular political controls if these means are transferred from sectional to public governance. This is the thesis of Phillips and Rozworski (2019), where the ideas for centralized mathematical economic coordination of Kantorovich (1965) and Beer (1993) is realized more broadly, despite the differences in the intentions of their designs. As the means of popular input and participation expands, the means for both broader and more effective coordination is enabled so long as popular leverage expands with it.

All socialist economic theorists are criticized by left liberals for promoting a system that would flatten diversity and suppress minority preferences which they argue are better served by market forces. I argue that this is not necessarily an inevitable outcome of economic democracy. Production allocations could be collated by an aggregate frequency of desire among the population in a similar way that markets do but without the significant skewing of purchasing power as determined through more substantial economic inequality. At a certain mass of popularity, in contrast to mere majoritarian desires, production of these items could not be overruled except in the case of emergency where the particular resources in question are needed more desperately elsewhere for a reason that would be at a higher level of need. Also, socialist policy would directly confront the systemic economic subjugation of those minorities that are subject to either formal or informal economic exclusion. This would yield a generally higher living standard for these minorities, resulting from greater relative incomes than under a free market system. The weight of this assertion does not depend on mere personal aesthetics, but the

seeming trajectory of political economic developments, even as it is much slower than we might all prefer.

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