

Distributed Planned Economies in the Age of their Technical Feasibility

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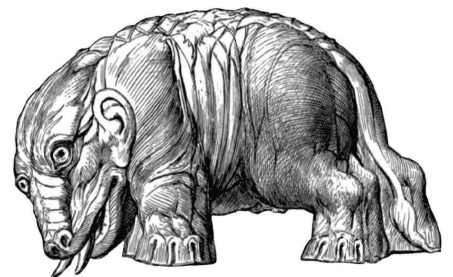
Abstract

Both climate change and the covid-19 pandemic have increased interest in a contemporary discourse around questions of planned economies. This discourse had been boiling up over the last decade and now meets a political landscape that has rather quickly and substantially re-assessed its relation towards planning. However, if the concept of planned economies is not to merely mean a more extensive role of the state within a social market economy, but fundamentally different types of political economy, substantial open questions need to be addressed. This article analyses the current discourse around non-capitalist planned economies and argues that there is a need for new conceptions of planned economies that neither resort to central planning nor variants of market socialism. For further work towards such alternative conceptions it proposes the term *distributed planned economies*.

Keywords, dt.: Planungsdebatte, Planwirtschaft, Digitaler Sozialismus, Distribuirter Sozialismus, Freie Planwirtschaft, Politische Ökonomie

Keywords, engl.: Socialist Calculation Debate, Planned Economy, Digital Socialism, Distributed Socialism, Political Economy

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Introduction

In the wake of the covid-19 pandemic the discourse around economic planning has left its niche status, with the German newspaper ‘Die Zeit’ stating that “planned economy is no longer a swearword” (Pausch 2021).^[1] However, even before this accelerated interest in planning in the wake of the pandemic, climate change had already begun to shift public discourse towards a growing recognition of planetary scale interdependence and the need for collective action. The legitimate doubt that this responsibility for collective action can be addressed satisfactorily through market forces in particular and market liberal frameworks of political economy more generally, creates an opening in which fundamentally different paradigms of political economy can again be discussed and tested as viable alternatives to capitalism as such. With the climate crisis as a constant imperative for fundamental change this discursive opening arguably has the potential to move beyond small circles of politically interested groups, and create a debate on the level of societies as a whole. In order to foster such a discourse around concrete alternatives on the level of political economy, this article pursues ‘Future(s) of critique’ as a practice of identifying and developing new frameworks of non-capitalist planned economies. Yet, while there is plenty of extensive, multi-layered and accurate critique of capitalism and its mode of production, the question that logically follows – ‘How do we do it then?’ – has been dealt with far less comprehensively than the rich abundance of critical debates would suggest. There are, however, good reasons for this lack of concrete proposals. Describing can all too quickly turn into prescribing and since we are all socialised within capitalist relations, there is an undeniable risk of extending undesirable aspects of capitalism into conceptions of the future (Adamczak 2014, 75ff.). And yet, this article is based on the premise that it is nonetheless necessary to develop concrete answers to fundamental questions of alternative social organisation. Focusing on the question of economic organisation it argues that neither central planning nor variants of market socialism are suitable paradigms for the work towards future political economies, but that new paradigms of planned economies need to be developed. After an overview of the historical Socialist Calculation Debate as well as its contemporary strand, a particular proposal for ‘Digital Socialism’ – developed by the economist Daniel E. Saros – is examined in greater detail. Based on this examination a new paradigm of planned economies is proposed for further work under the term *distributed planned economies*.

Socialism vs. Capitalist Market Economy

Any proposition for an alternative political economy that seriously seeks to challenge capitalism as such, needs to convincingly answer the question of scalable economic organisation in a hyper-complex and interconnected world. This inevitably leads to questions that have been asked within a debate that started in the early 20th century and that goes on to be of relevance for the development of alternative political economies today: the Socialist Calculation Debate. The debate took off after the socialist Otto Neurath had, inspired by the war economies of the Balkan wars, proposed a form of centrally planned economy based on natural resources (Neurath 1919). Neurath

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[1] For coverage in more conservative mainstream media see also: (Staun 2021).

regarded his proposal as superior to the capitalist market economy, as it overcame the chaos of the market and was directly oriented towards the needs of the people. In reply to Neurath, the economist Ludwig von Mises subsequently initiated what would become a century-long debate surrounding the general feasibility of “Economic Calculation in the Socialist Commonwealth” (von Mises 1920; 1935). Von Mises argued that there could be no rational socialist economic calculation, since this required prices and markets for the means of production. Yet, since under socialism the means of production were by definition under social ownership, any socialist economic planning would ultimately be mere “groping in the dark” (1935, 101).

The socialists who took up the debate – e.g. Oskar Lange, Abba Lerner and Fred M. Taylor – initially followed von Mises’ argument about the coordinating role of markets (Lange/Taylor 1938, 65ff.). According to these market socialists, however, the coordinating function of markets could also be harnessed if the means of production were in common ownership. They argued that gradually approximating estimated prices – so-called shadow prices or accounting prices – could be used within a process of trial and error to simulate market activity even under socialism, yet without buying into capitalist exploitation. However, their models of a centrally planned socialist economy were ultimately based on models of neoclassical economics and thus incorporated central misconceptions of the neoclassical paradigm. Lange and his fellow market socialists idealised economic activity as a balance of supply and demand that could and should be achieved by perfect information (Mirowski/Nik-Khah 2017, 60ff.). And just like neoclassical economics they conceptualised the problem of economics as the efficient allocation of scarce resources – a calculation problem, so to speak – which could be solved even better under socialism. Central economic planning in combination with markets for consumer goods would bring about a political economy superior to capitalism, since in socialism the state had direct control over the means of production and the economy was freed from capitalist diseases such as monopolies (ibid., 98ff.).

For Friedrich August von Hayek, who studied under von Mises, such a model of a centrally planned socialist economies missed the real problem of economic calculation. In his 1945 essay “The Use of Knowledge in Society”, von Hayek argued that the information that was needed for the efficient functioning of an economy was distributed throughout society and often embedded in tacit knowledge that could not be easily communicated. The information was so varied, dispersed and constantly changing that it was practically impossible for a central planning board to collect and process this flood of data. The capitalist pricing mechanism, markets and the profit motive were simply the best way to handle the complexity of the given task and it worked, according to von Hayek, precisely because there was no one who could actually oversee and steer the mechanism as such (ibid., 519f.). This shift from a logical impossibility, as von Mises had claimed it, to the assumption of a practical impossibility, however, opened the door for speculations about mechanisms that might be able to cope with this abundance of information possibly better than the market did. This was a position Oskar Lange advocated – influenced by cybernetic thinking – in his late work “The computer and the market” (1967). Lange argued that the market mechanism was an old-fashioned calculating machine of the pre-electronic age. If, on the other

hand, the equations were executed on an electronic computer, the solution would be found within seconds. A fine distinction in the interpretation of von Hayek's information problem should, however, continue to occupy later computer socialists. Because what von Hayek argued for was not only that it was practically challenging to calculate such a wealth of information – if so, powerful computers could possibly be the solution – but that a decentralised mechanism was needed to continuously feed situational, partly implicit and changing knowledge and information into the economy.[2]

Socialist Calculation Debate 2.0

If one considers the central questions within the historical calculation debate, a reappraisal of the debate under today's technological conditions seems almost inevitable. Apart from the increasingly obvious failure of market mechanisms and profit motive, e.g. in a thinned out health care sector, planned economies are today once again being considered and discussed as legitimate alternatives for two main reasons. On the one hand, the ecological catastrophe is shifting the focus towards interdependence. For more and more people, it is becoming increasingly clear that individual egoism does not produce overall positive results for the common good, but instead destroys the basis of life itself. Climate change – so the simple insight – can only be countered by means of collective planning. On the other hand, the current state of technological development is creating new solutions precisely in the area that has emerged as a challenge to socialist economic coordination within the Socialist Calculation Debate. Today the statement "There is no alternative" (to capitalism) causes the increasingly self-confident response: Indeed, there is and it is called planned economy.

The discourse on how a planned economy under current technological conditions might look like, has several layers. There are those who point towards large corporations such as Walmart or Amazon to emphasise the general feasibility of a socialist planned economy based on today's information technologies (Phillips/Rozworski 2019; Jameson 2009, 420ff.). The internal planning of these large corporations, so the argument goes, can do without markets, and yet manages to efficiently operate organisational structures on the scale of national economies. This layer of the discourse aims primarily at shifting the overton-window back in favour of planning and tries to push for the appropriation of digital infrastructures as central productive forces. In light of the failure of hierarchically organised centrally planned economies in the Soviet Union, this approach is generally accompanied by the demand for (radical-)democratic structures of decision-making. In order to realise these on a large scale without overloading those involved with permanent decision-making, various mechanisms of coordination and complexity reduction are proposed. This proposition of concrete, yet isolated approaches to solving specific problems represents another layer within the contemporary discourse about planned economies. A prominent example is the essay "Red Plenty Platforms" by Nick Dyer-Witheford in which he develops the image of a future in which "communist software agents" (2013, 13) work out various proposals for economic planning in semi-autonomous processes and prepare them as a basis for subsequent decision making. Furthermore, he proposes social media platforms as a medium of self-organisation in order to guaran-

[2] On how von Hayek changed his position on knowledge and information throughout his career, see: Mirowski/Nik-Khah 2017, 66ff.

tee that those affected by the decisions are also able to participate in the decision-making process without getting caught up in the more paralysing aspects of grass-roots democratic structures.

With “Digital Socialism – The Calculation Debate in the Age of Big Data” (2019) Evgeny Morozov, a long-standing critic of Silicon Valley solutionism, provided another important text aiming at concrete proposals for (partial) problems of economic planning. The technological possibilities of today’s “feedback infrastructures” make it possible, he argues, to bring together problem seekers and problem solvers efficiently and on a large scale, leading him to proclaim the need to “socialize the means of feedback production” (ibid., 65). In direct response to von Hayek’s assertion that the market serves as a discovery mechanism, Morozov proposes “solidarity as a discovery mechanism” (ibid., 55ff.). As a contemporary example for this alternative mechanism, he points towards hackathons as collective problem-solving strategies. The information problem brought forward by von Hayek is addressed by Morozov as well. Referring to the theories of cybernetician Stafford Beer (1973), Morozov states that today, with the help of modern information technologies, problem-solving competence can be utilised much closer to where the problem actually sits. In the current capitalist system these local problem-solving strategies are being hindered by capitalist competition which tries to regulate everything by means of price signals and thus prevents a needed diversity of approaches. Once freed from the ideological ballast of the price signal and paired with contemporary feedback technologies, a proper ‘design’ of social institutions – so Morozov’s conclusion – could function far more effectively than the market.

The persuasiveness of these proposals varies substantially and it is not the intention of this article to criticise them in detail. Rather, it should be emphasised that these approaches are concerned with describing individual mechanisms and specific technologies that serve above all to demonstrate the general feasibility of alternative functional logics on a case-by-case basis. However, even taken together, these proposals do not yet produce a coherent and convincing picture of how non-capitalist economic planning could actually be organised. Instead, as Dyer-Witthford puts it himself, these approaches should be read as “approximating orientations to revolutionary possibilities” (2013, 2).

However, there are detailed conceptions for contemporary socialist planned economies. Probably the best known of them has been developed by Allin Cottrell and Paul Cockshott in their 1993 book “Towards a new Socialism” and has since been further developed and strongly propagated by Cockshott. It is a model of a centrally planned economy paired with elements of radical democracy. Markets for consumer goods serve as indicators for demand and socially necessary labour time is proposed as a quasi objective value unit (whereby Cockshott’s student Jan Philipp Dapprich proposes mathematically calculated opportunity costs as an alternative unit of account, see: Dapprich 2019). The core of the proposal, however, remains to be committed to the belief that the key to a successful implementation of a planned economy is a calculated central production plan (Cockshott/Cottrell 1993, 111ff.). The question of the complexity of the calculation on the one hand and available computing power on the other are therefore decisive parameters in Cockshott’s approach. This shifts the discourse about the fea-

sibility of the proposal to a large extent to the level of applied computer science and thus remains within a deterministic thought pattern. Ultimately the approach is based on the belief that the essential parameters of economic coordination can be expressed in input-output tables and that given these and with the help of linear programming one would be able to compute the best possible plan by sheer computing power.

However, Morozov correctly notes that many of the original assumptions within the historical calculation debate no longer apply, including the assumed benefits of central planning (2019, 55). As a possible alternative, he describes a more recent approach, developed by radical economist Daniel E. Saros in his book “Information Technology and Socialist Construction: The End of Capital and the Transition to Socialism” (2014). Since the idea of a centrally planned economy, as described by Cockshott and Cottrell, stands on rather deterministic grounds of comprehensive computability and since Morozov only briefly sketches Saros’ model, the following paragraph will engage with Daniel E. Saros’ proposal in detail. The examination of his approach is based on the book “Information Technology and Socialist Construction” as well as an in-depth conversation between the author and Saros in the context of the Future Histories Podcast (Saros/Groos 2020a; 2020b).

Beyond Amazon

Saros neither pursues the argument that socialists could have even better markets than the capitalist ones nor does he argue for a centrally planned economy. Instead, his proposal is strongly inspired by the principles of Participatory Economics (ParEcon), developed by Robin Hahnel and Michael Albert (1991), yet deviates from it in crucial aspects, e.g. by rejecting the idea of a balanced job complex. The role of information technology in Saros’ model is not that of calculating a central plan by brute force, but to provide an infrastructure for a more dynamic approach to the question of planning.

The basis of Saros’ proposal is an online platform, called the “General Catalog” (2014, 173ff.), which includes all currently available use values (goods and services). Desired items can be searched for within the catalogue and stored in a needs profile for ordering. By ranking the use values within the needs profile each individual articulates the importance of the need, thereby creating a weighting relevant for the subsequent production process. Basic needs such as food and housing can automatically be placed on top of the needs profile in order to ensure that sufficient resources flow into the production of the given use value. After the registration phase, for which the intervals can be varied, a process of resource allocation for the subsequent production takes place. This process is based upon production points which are derived from the ranking and thus weighting of individual needs. If a use value is ranked high, the workers’ council that posted and offered it in the catalogue receives more production points. If it is ranked low, it receives less. The distribution of these production points at the end of the registration phase answers the question: *What* should be produced?

With regard to the question of *how* use values are to be produced, Saros proposes a system of workers’ councils. These councils produce in far-reaching autonomy and can thus make use of the advantages of self-organisation, argued for by Stafford Beer (1973) and Morozov (2019, 58ff.) amongst oth-

ers. Each worker is an equal member of his or her workers' council and thereby embedded in a legally defined relation referred to by Saros as the "legal right of guardianship" (2014, 182), which he proposes as a direct alternative to private ownership of the means of production. The guardians of a given workers' council – i.e. all the workers therein – are generally free to decide how to make use of the production points allocated to them via the credit system. Yet, if they do not direct their actions towards the satisfaction of the needs for which they have received the production points, the likelihood that people will place their order with this particular workers' council during the upcoming registration cycle is greatly diminished, since reviews would quickly show that the needs were not sufficiently fulfilled last time. Similarly, the catalogue would hold information for any given use value on things like working conditions, ecological footprint, workers satisfaction within the council etc. as multidimensional indicators on which decisions can be based. An important aspect in the concept of a "legal right of guardianship" – and one that crucially differs from e.g. that of a cooperative – is that guardians cannot decide, not even jointly, to sell the means of production of the respective workers' council. Additionally, the remuneration in the form of credits, which the guardians in the workers' councils receive for their work, is not linked to profit being made. Instead, labour cost is covered as part of the means of production which are allocated via the credit system and the subsequent distribution of production points. Furthermore, the amount of remuneration that each worker receives is defined by mechanisms that are not within the power of the workers' council. The remuneration is instead made up of several components, in which a base income is supplemented by various bonuses, which are awarded for e.g. working in a workers' council for a long period of time, for consumption according to one's own estimates or for restraint in consumption in general. Moreover, the base income can vary within narrow limits, depending on the popularity of the work in question.

It is important to emphasise that many central categories of capitalist economy, such as money or the commodity form, do not exist in the political economy proposed by Saros. Credits, for example, are personal credits that cannot be transferred and expire as soon as they are spent. Also, workers' councils do not receive credits for the use values produced, but are only allocated the necessary production points by means of weighting. And since they cannot decide on the level of income for the workers, the use values produced are not distributed – as under capitalism – with the aim of achieving the highest possible exchange value. This means that profit as a category does not exist anymore. On the contrary, the workers' councils production pursues the goal of satisfying needs as much as possible and is indeed evaluated by this standard. The existence of some sort of prices within Saros' model is due to the use of the credit system as a coordination mechanism. Prices continue to be an important source of information, but in the form described above they explicitly and systematically exclude categories such as exchange value, commodity form and accumulation of capital. As the subtitle of his book "The end of capital and the transition to socialism" clearly gives away, for Saros, Capital itself is a category to be overcome.

Another crucial aspect regarding the *how* of production is the finite nature of natural resources. A powerful argument in favour of planned economies compared to market-based, profit-oriented economies is that

planned economies offer more effective ways to address collective coordination problems such as climate change. In Saros' model this is addressed through special workers councils – so-called “councils of scientists” – that prepare proposals for e.g. upper limits of emission levels and similar restrictions on the use of natural resources. Based on these proposals the general public is to hold a vote on which of the proposed plans it believes to be best suited. The collectively decided limits would then be expressed in a sum total of production points. Based on the thus attained total number of production points for a given production cycle on the one hand and the weightings already carried out through the credit system, it will then be determined how much of which means of production is available to which workers' council.

Besides the *what* and the *how*, standard works of orthodox economics describe the *for whom* as the third of the “three fundamental questions of economic organisation” (Samuelson/Nordhaus 2010, 7). In this case, the *for whom* is easy to answer, since the model proposed by Saros is that of an ‘ex ante’ production in which the articulation of needs comes first and the production is then geared towards the fulfilment of those needs (unlike in capitalism, where most of the production is an ‘ex post’ production, meaning that goods are first produced and afterwards ideally a profit is realised on the market). Even though spontaneous consumption would still be possible, it would simply be more expensive than the planned one.

It is important to note that Saros' proposal has different phases: the so-called lower phase of communism – in Saros' diction the socialist mode of production – and the higher phase of communism – in Saros' diction the communist mode of production. Societies would move on to the second phase only after the first one has become the new normal. The crucial difference between the two phases is whether or not the availability of individual credits is coupled to performed labour or not. Within the mechanisms described so far such a coupling is in place. This clearly distinguishes Saros' approach from other proposals, e.g. in the field of commons theory, in which it is seen as a necessary principle that any labour is being performed on a voluntary basis (Sutterlütti/Meretz 2018, 16off.). However, in the second phase of his proposal Saros does indeed include absolute voluntariness regarding the question of whether or not work must be performed in order to receive credits. Yet, he argues that due to a lack of common experience with these modes of practice a transitional first phase is of need. In the second phase, so goes the idea, the social organisation of production/distribution/consumption would still be organised via the credit system – its coordinating function would thus remain intact –, but the incentive systems described above would be obso- lete.

What distinguishes Saros' proposal is that, while he imagines a mode of production that is far off the status quo, he is thoroughly pragmatic in doing so. He doesn't suppose means of production that are not already attainable and neither does he build his approach only on moral grounds or overly positive idealisations of human altruism. However, this approach creates its own omissions and lines of conflict.

Overcoming the Economist as Engineer

“When Austrian economists respond to today’s defenders of central planning by noting that any non-capitalist system – even one rooted in the power of Big Data – could only beat the efficiency of the price system if it also created new behavioural modes and frameworks of meaning, they have a point.” (Morozov 2019, 46)

The concern that present historically specific modes of (capitalist) thought could all too easily creep into models of future political economies, cannot be dismissed when analysing Saros’ proposal. By adopting the exchange of labour time for credits as a necessary prerequisite for individual survival in phase one of his proposal, Saros arguably prolongs one of the foundational forms of mediation of the capitalist mode of production. This implicit coercion to work might be welcomed by some as a realistic necessity of the transformation phase and is described and conceptualised by Saros as being in line with the lower phase of communism as he understands it. However, there are good reasons for opposing this exchange relation as a part of the transformation phase. For if phase one starts out by carrying along the exchange relation of wage labour it undermines the process of learning the relationality that is a necessary precondition for what Saros describes as phase two.

Saros’ approach is in parts reminiscent of a sub-branch of game theory, called mechanism design (Roth 2016), in which institutions are ‘designed’ in order to produce certain outcomes. Furthermore, the way in which he proposes to incentivise certain behaviour, such as planned consumption, and to economically punish other behaviour strongly reminds of the concept of libertarian paternalism that forms the basis of so-called Nudging (Thaler/Sunstein 2008). Yet, the specific way in which Nudging, with its origins in behavioural economics, models behaviour is ridden with prerequisites. The ‘agents’ are modelled as ‘predictably irrational’ (Ariely 2008, 240ff.) and the economist’s role is to build decision architectures in which the ‘agents’ behaviour is guided along a pathway that the presumed future self of the individual would in hindsight value the most. Yet, the guiding line for the evaluation of ‘good’ or ‘bad’ behaviour ultimately still is formed around the concept of expected utility maximisation found in orthodox economics. In the case of Nudging, as well as in Saros’ first phase, this creates a situation in which the role of the economist is that of an engineer of the social sphere, who has a supposedly superior knowledge over what is desirable behaviour and what is not. The nudged humans are modelled as if they were not to be trusted and so mechanisms are brought into place to steer their behaviour in order to correct their imperfect rationality.

However, the flaw in Saros’ proposal lies even deeper and can be traced back to the question of transformation. For it is the temporality of this transformation that forces Saros to discipline his subjects and thereby prolongs essential behavioural modes of capitalist relations into his proposed mode of socialist production. To avoid this unwanted inheritance, it is important to note that the radical change inherent in Saros’ proposal can not break into societies from the outside, as is the case in the classical model of revolutionary overthrow or, for that matter, via mechanism design. Instead, the radical difference would have to acquire the status of a new paradigm through ex-

panding practices established in the present (Sutterlüti/Meretz 2018, 81ff; Groos/Meretz 2021). As the philosopher Eva von Redecker argues, these radically “new behavioural modes and frameworks of meaning” (Morozov 2019, 46) in the here and now can be read as revolution itself (von Redecker 2018, 34ff.). By doing so von Redecker addresses the question of “How is this supposed to work?” on a very different layer than Saros does. In the case of von Redecker the argument for the plausibility of radically different social conditions is not based on new technological possibilities. Neither is it developed along the expectations of economic orthodoxy – the *what/how/for whom* of neoclassical economics. Instead, von Redecker describes a pre-figurative relationship in which today’s emancipatory practice contributes to the formation of new paradigms through persistent expansion. This temporality is crucial, since von Redecker’s subjects won’t need to be disciplined by a group of economists turned social engineers through nudging or mechanism design. Von Redecker’s subjects are well trained through years and years of alternative social relations that they have practised in the interstices of (then former) capitalist societies. Yet not until read together the approaches by von Redecker and Saros become fully convincing, since the anticipatory practice described by von Redecker will, if it grows and flourishes, inevitably encounter problems of large scale coordination, such as articulated within the Socialist Calculation Debate. These are not dismissed with a simple ‘this will come to pass’, but have to be answered at least in the form of a generally plausible outline beforehand. Any proposal that does not take these questions seriously will not be able to mobilise majorities away from the capitalist status quo. This is not to say that, along the line, things will or even should play out exactly the way they were described in any model of a future political economy, but it ascribes equal importance to both the practice-lead approach of radical-emancipatory practice in the here and now and the development of convincing meta-narratives and models of political economy.

No final and complete criticism of the proposal put forward by Daniel E. Saros can be achieved in the confined space of this article and so at this point only some other open questions will be mentioned briefly. It is important to point out that there are substantial areas of social life whose own institutional logic is not adequately represented in quantifiable parameters of ranked lists and production points and that public goods are not the sum of individual preferences. Education, health care and care work in general are such areas and it is important to question in which cases the application of a credit-based allocation principle might be of benefit and where such a procedure counteracts the productive inherent logic of these areas. Furthermore the crucial topic of privacy is largely left untouched by Saros and a possible concentration of power in the hands of the so-called “council of scientists” is not addressed as well, nor is the scientism implicit in this constellation. Furthermore, as indicated, the question of transformation is not sufficiently explained in “Information Technology and Socialist Construction”, leaving it unclear how the “species consciousness”, which Saros regards as a necessary basis, is to be developed within today’s power relations.

When asked about the criticism and open questions, however, Saros shows himself to agree with the concerns expressed and refers to the proposal character of his work, as well as the flexibility of the model to incorporate such points of criticism (Saros/Groos 2020a; 2020b). According to

Saros, the main purpose of the book is to present the basic principles of independent socialist laws of motion based on today's technological possibilities and to provide a new approach to the questions posed within the context of the Socialist Calculation Debate. Based on the analysis of the strength and shortcomings of Saros' approach towards 'Digital Socialism' the following final paragraph proposes the term *distributed planned economies* as a discursive carrier for further development.

Distributed Planned Economies

Taking into account the criticism articulated above, Saros' proposal can nonetheless serve as a starting point for further work towards an alternative paradigm of planned economies. His approach holds the potential of a planned economy that is not based on dreams of total computability, a central plan or another variant of market socialism. Neither does it disregard the advantages of centralisation where these advantages do not affect, but instead generate the much needed autonomy of producers with regard to their own production processes. This is a crucial point, since most of the critique of contemporary proposals for planned economies is directed towards the idea of *centralised* planned economies, such as the one developed by Cockshott and Cottrell. The fundamental argument of this critique is either that a centralised planned economy would be impossible to handle in terms of complexity and processing power (Shalizi 2012) or that it is built on flawed epistemic grounds regarding the type of information it harnesses and the subsequent ignorance towards the much more difficult problem of (political) control (Mirowski 2017, 60ff; Bernes 2020, 64). This critique is absolutely valid when it comes to proposals for centralised planned economies that are based on the premise of computing a central plan that is then supposed to be put into practice by everybody else.

However, this critique of *centralised* planned economies does not hold up when directed towards Saros' proposal, because its main advantage is that it aims for a bottom up approach when it comes to *both* the information on what it is that should be produced as well as the production itself. Since the workers councils are in far reaching autonomy on how to organise the production of the use values they themselves decided to produce, many of the problems centralised planned economies are facing no longer apply. The question of dynamism is addressed by the ability of any potential producer to post a use value in the "General Catalog". This way new ideas for products, services as well as production techniques or forms of organisation are easily detected and brought into the production process as a whole. The focus on ex ante production guarantees a high degree of access, since funding will be available for anybody, if there is a need for the given use value. The question of computability is addressed as well, since the proposal is not based on the assumption that an optimal plan could be computed. This also takes into account an important critique brought forward by Bernes, who states that "[t]here is as yet no serious proposal that eliminates both sovereign decision and market mechanism from central planning through a direct registration of preferences, since there is no avoiding a decision about which preferences to privilege" (2020, 63). Bernes' assertion is certainly correct when it comes to centralised planned economies. However, Saros' proposal aims at provid-

ing exactly that: a mechanism for providing the “direct registration of preferences” (ibid., 63) without resorting to the sovereign decision of a central plan when it comes to the question of how to produce the use values needed to satisfy the articulated preferences.

This article argued for ‘Future(s) of critique’ as a practice of identifying and developing new frameworks of non-capitalist planned economies. In this Daniel E. Saros’ proposal can be seen as a fruitful starting point for further work. By describing non-capitalist laws of motion and leaving behind the dichotomous opposition of centralised vs. decentralised it brings important contributions to a debate that will continue to gather momentum in the coming years. It is a distributed system which serves common goals, but in which the implementation of actual production is distributed among the various autonomous workers’ councils. These are, as is the case in distributed networks, in permanent exchange with each other to ensure the best possible use of the given resources. By providing a centralised platform for the articulation and organisation of decentralised information while leaving the sovereignty over the control of production with the producers, a political economy is described in which the legitimate critique towards centralised planned economies can be productively incorporated and that is at the same time flexible enough to address and hopefully resolve its own shortcomings. Leaving behind the fixations on centralised planned economies on the one hand and variants of market socialism on the other, an alternative approach towards political economy comes into sight that is best described as: *distributed planned economies in the age of their technical feasibility*.

Literatur

- Adamczak, B. (2014) *KOMMUNISMUS kleine geschichte, wie es endlich anders wird*. Münster: Unrast.
- Albert, M.; Hahnel, R. (1991) *The political economy of participatory economics*. Princeton: Princeton University Press.
- Ariely, D. (2008) *Predictably irrational*. New York: Harper Collins.
- Beer, S. (1973) ‘Designing Freedom’. In: *Massey Lectures*. https://archive.org/details/DesigningFreedom_CBS_Lectures (14/10/2020).
- Bernes, J. (2020) Planning and Anarchy. In: *South Atlantic Quarterly* 119(1): 53-73.
- Cockshott, W.P. and Cottrell, A. (1993) *Towards a New Socialism*. Nottingham: Spokesman Books. http://ricardo.ecn.wfu.edu/~cottrell/socialism_book/new_socialism.pdf (15/05/2021).
- Dapprich, J. P. (2019) Simulating Socialism (3): Mathematically Derived Valuations. In: *Homepage ADH*. <https://www.designing-history.world/theory/simulating-socialism-3> (13/10/2020).
- Dyer-Witheford, N. (2013) Red Plenty Platforms. In: *Culture Machine* Vol. 14: Platform Politics. <https://culturemachine.net/platform-politics> (13/10/2020).
- Groos, J.; Meretz, S. (2021) Future Histories Episode 47. In: *Future Histories Podcast*. <https://www.futurehistories.today/episoden-blog/s01/e47-stefan-meretz-zu-commonismus> (31/01/2021).
- von Hayek, F. A. (1945) The use of knowledge in society. In: *The American economic review* 35(4): 519-530.

- Jameson, F. (2009) *Valences of the dialectic*. London: Verso.
- Jasanoff, S. (2015) Future imperfect: Science, technology, and the imaginations of modernity. In Jasanoff, S.; Kim, S. (eds.): *Dreamscapes of modernity: Sociotechnical imaginaries and the fabrication of power*. Chicago: University of Chicago Press.
- Lange, O. (1967) The computer and the market. In Feinstein, C. H. (ed.) *Socialism, capitalism and economic growth: essays presented to Maurice Dobb*. Cambridge: Cambridge University Press.
- Lange, O.; Taylor, F. M. (1938) *On the economic theory of socialism*. Minneapolis: University of Minnesota Press.
- Mirowski, P.; Nik-Khah, E. (2017) *The Knowledge We Have Lost in Information: The History of Information in Modern Economics*. New York: Oxford University Press.
- von Mises, L. (1920) Die Wirtschaftsrechnung im sozialistischen Gemeinwesen. In: *Archiv für Sozialwissenschaft und Sozialpolitik* 47: 86-121.
- von Mises, L. (1935) Economic Calculation in the Socialist Commonwealth. In: von Hayek, F. A. (ed.) *Collectivist economic planning: Critical studies on the possibilities of socialism*. London: G. Routledge.
- Morozov, E. (2019) Digital Socialism? In: *New Left Review* 116/117: 33-67.
- Neurath, O. (1919) *Durch die Kriegswirtschaft zur Naturalwirtschaft*. München: Callwey.
- Pausch, R. (2021) Die schöne, irrealer Utopie der FDP. In: *Zeit Online*. <https://www.zeit.de/politik/deutschland/2021-05/fdp-parteitag-liberalismus-zeitgeist-konsensverschiebung> (15/05/2021).
- Phillips, L.; Rozworski, M. (2019) *The People's Republic of Walmart: How the World's Biggest Corporations Are Laying the Foundation for Socialism*. London: Verso.
- von Redecker, E. (2018) *Praxis und Revolution: eine Sozialtheorie radikalen Wandels*. Frankfurt; New York: Campus Verlag.
- Roth, A. E. (2016) *Who gets what – and why: the new economics of matchmaking and market design*. Boston: Mariner Books/Houghton Mifflin Harcourt.
- Samuelson, P. A.; Nordhaus, W. D. (2010) *Economics*. Boston: McGraw-Hill Irwin.
- Saros, D. E. (2014) *Information Technology and Socialist Construction: the end of Capital and the transition to socialism*. London; New York: Routledge.
- Saros, D. E.; Groos, J. (2020a) Future Histories Episode 31. In: *Future Histories Podcast*. <https://www.futurehistories.today/episoden-blog/s01e31-daniel-saros> (13/10/2020).
- Saros, D. E.; Groos, J. (2020b) Future Histories Episode 32. In: *Future Histories Podcast*. <https://www.futurehistories.today/episoden-blog/s01e32-daniel-saros-part-2> (13/10/2020).
- Shalizi, C. (2012) In Soviet Union, Optimisation Problem Solves You. In: *Crooked Timber*. <https://crookedtimber.org/2012/05/30/in-soviet-union-optimisation-problem-solves-you/> (28/01/2021).
- Staun, H. (2021) Wann kommt der digitale Sozialismus?. In: *Frankfurter Allgemeine Zeitung*. <https://www.faz.net/aktuell/feuilleton/debatten/wann-kommt-der-digitale-sozialismus-17317735.html> (15/5/2021).
- Sutterlütti, S.; Meretz, S. (2018) *Kapitalismus aufheben: eine Einladung, über Utopie und Transformation neu nachzudenken*. Hamburg: VSA Verlag.
- Thaler, R. H.; Sunstein, C. R. (2008) *Nudge: improving decisions about health, wealth, and happiness*. New York: Penguin Books.