



Karl Polanyi's and K. William Kapp's arguments on social costs: is there a common "revolutionary" *raison d'être*?

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ABSTRACT

This article examines Karl Polanyi's and K. William Kapp's social cost proposals to test their suitability for a "revolutionary" Social Ecological Economics that radically breaks with neoclassical and neoliberal paradigms. Whilst some coherence is revealed in their revolutionary social cost analyses and solutions, this is much messier than previously thought. This messiness is partly due to their different adoptions and reactions to neoclassical and neoliberal arguments and partly due to differences in four key dimensions of social costs: simple vs. system-wide effects, local vs. central solutions, payment vs. prevention strategies, and monetary accounting vs. physical calculation. The coherence in their *raison d'être* is through 1) the *prevention* of social costs to secure social provisioning of human needs; 2) a *social* valuation of lexicographically ordered physical and monetary quantification of social costs; and 3) a qualitative measure as the ultimate concern, that is "social justice" of "Dasein" as a "humanitarian ideal" (Polanyi) and human "dignity" as a qualitative "measure of all things" (Kapp). This reflects their disagreement with neoclassical and neoliberal paradigms through their rejection of monetary economizing as the *exclusive* definition of the "economy" and for dealing with social costs.

1. Introduction

The economics of K. William Kapp and Karl Polanyi count as core theoretical foundations of Ecological Economics (Berger, 2008a, 2008b) and specifically the branch of Social Ecological Economics (Spash, 2019a, 2019b). These foundations are important because they fundamentally inform debates about the future surrounding the more radical and heterodox direction for Ecological Economics and for the understanding and transforming of capitalism (Spash, 2019b, p. 5; Söderbaum, 2015, p. 421). Recent debates on substantive economics in *Ecological Economics* set off by Gerber and Scheidel (2018) corroborate this point. These debates have led to the recognition of the importance of a more nuanced understanding of Polanyi's and Kapp's theories to account for their differences without resorting to oversimplifications (Spash, 2019a). For a "revolutionary" Social Ecological Economics (see Spash, 2019b) the key questions are how Polanyi's and Kapp's proposals on social costs can, on the one hand, be distinguished sufficiently from neoclassical and neoliberal arguments despite important similarities with them, and on the other hand, whether their proposals exhibit a coherent *raison d'être* despite their significant differences. Only a

careful comparative assessment of Polanyi (1922) and Kapp (1936) can rise to this task. However, the relevant literature does not yet evidence this nuanced understanding of Polanyi (1922) and Kapp (1936) arguments on social costs developed during the socialist calculation debate. The present assessment shows that their coherence is messier than they have appeared thus far in the relevant literature (see for example, Berger, 2017). Their legacies as social-ecological economists have eclipsed the extent to which they adopted ideas, each in their own unique ways, from neoclassical and neoliberal economists.

2. Polanyi's and Kapp's distinct contributions to the socialist calculation debate

The socialist calculation debate has proven decisive for the history of economics in the 20th century and the ascendancy of the neoliberal information economy (Nik-Khah and Mirowski, 2017). According to this account, socialist economists were derailed by neoliberal challenges into focusing on the informational characteristics of markets instead of on socialism. More comprehensive accounts of history argue that socialists are now justly considered to have lost the debate as they failed Mises'

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challenge (Steele 1992). Against this, Hodgson (2019) argued that heterodox economics should return to the socialist calculation debate in search of its lost *raison d'être*, which disempowers and undermines its future.

This article follows these insights by asking whether “social costs” - as *raison d'être* of socialist economists in the socialist calculation debate (cf. Oskar Lange’s statement in Kapp, 1950, p. 36) - were similarly derailed by Mises’ neoliberal challenge. The answer to this question is substantively important because “social costs” is the ultimate concern of two foundational thinkers of Social Ecological Economics: Polanyi (1922) and Kapp (1936). Their most significant contributions to the social cost discourse are their proposals for alternative modes of economic calculations and accounting that *prevent* social costs and *guarantee* social provisioning for human needs. While section 3 below demonstrates in greater detail how they differ in their understanding and conceptualization of social costs for now it suffices to acknowledge that both viewed social costs as social damages, harms, and losses that are attributed to allocation decisions based on monetary calculations for profit. Whilst the latter aspect of their works is quite well known (cf. Polanyi, 1944; Kapp, 1950) the former aspect is less well known. While it is relatively easy to critique unpaid and unnecessary social costs as shortcomings of capitalist calculation and accounting, it is more difficult to propose viable alternatives for the economic calculation and accounting for social costs. It is here that Polanyi (1922) and Kapp (1936) proposals made genuine contributions to thinking through the accounting and calculation of social costs in such a way that *necessary* social costs of social provisioning are paid, and *unnecessary* social costs are prevented. Furthermore, these contributions are consistent with their later arguments on substantive economy and substantive rationality, although these remain unfinished intellectual projects² and are debated controversially within Ecological Economics (Spash, 2019a).

Polanyi (1922) and Kapp (1936) initial contributions on social costs were lost in translation for the English-speaking world as they remained untranslated until recently.³ Moreover, Polanyi’s further elaborations on the theme of social costs (Polanyi 1924; 1925) have only recently been translated (Cangiani/Thomasberger 2018). Leading historians of the socialist calculation debate (e.g. Steele 1992) fail to discuss Polanyi’s work in any detail and fail to discuss Kapp. It has even been argued by Keizer (1987) that the entire initial stage of the socialist debate remained hidden to the English-speaking world for most of the 20th century, certainly until the 1990s, as its acquaintance was initially through the English book publication by Hayek (1935) and the ensuing second part of the socialist calculation debate.

As a result, the understanding of Polanyi’s and Kapp’s arguments on social costs in the English-speaking world has remained, by necessity, limited; even the more recent scholarship on Polanyi’s socialist accounting (Rief, 2023a; Rief, 2023b; Brie and Thomasberger 2018; Desai and Levitt, 2021) have not critically assessed his notion of social costs. This is surprising as this notion carries the full weight of his principle of social justice within his socialist accounting proposal. Polanyi calls (social) cost accounting the essence of socialist accounting: “Costs are the *characteristic element* of the socialist economy that constitutes the real object of accounting” (Polanyi, 1922 in Bockman 2016, p. 409). This underlines the importance of achieving a better understanding of Polanyi’s concept of social costs. The scholarship on Kapp (1936) argument on social costs suffers from similar shortcomings as that on Polanyi, which further underscores the necessity of present inquiry.

The differences between Polanyi’s and Kapp’s theories of social costs can only be understood in the context of the socialist calculation debate, that is, as responses to Ludwig von Mises thesis concerning the

impossibility of rational allocation under socialism (Mises, 1920). Their differences lie in their different reactions to different aspects of Mises’ argument. Their different publication dates reflect that they interpreted this debate differently, drew different conclusions, and availed themselves of different theoretical resources for their different social cost arguments. Their cultural backgrounds influenced their ethical outlooks too (Levitt, 2021; Pinault, 2020; Berger, 2017), which in turn resulted in their different positions towards socialism, the type of accounting and calculation, and the notion of social costs.

This article seeks to reconstruct Polanyi’s and Kapp’s theories of social cost without failing to recognize the latest scholarship on Polanyi’s and Kapp’s economics. Whilst the friendship between Polanyi and Kapp and the similarities of their substantive economics have been demonstrated previously (Berger, 2008b), riddles and open questions remain concerning their theories of social costs. That is, Kapp acknowledged in a letter to Polanyi that Polanyi’s article on socialist accounting had an important influence on his PhD dissertation (Berger, 2008b). Yet, Polanyi’s article on socialist accounting (1922) is neither mentioned by his dissertation (Kapp, 1936), nor his “The Social Costs of Private Enterprise” (Kapp, 1950) or any of his subsequent publications on social costs. These omissions warrant an in-depth look at the differences between Kapp’s and Polanyi’s understandings, conceptions and solution for the problem of social costs.

Nevertheless, both have in common a radical critique of the consequences of capitalist accounting practices, i.e. unpaid and unnecessary social costs. However, neither display any detailed knowledge of capitalist accounting practice, science or history, and neither show any interest in reforming capitalist accounting to pay full social costs, which bypasses an important avenue for incorporating social costs into capitalist accounting.⁴ Both argued for radical alternatives to capitalist accounting to calculate and account for social cost differently. This sets them apart from marginalists, whether Keynesian or Pigouvian, and neoliberal proposals on how to fix the problem of social costs. In contrast to the latter’s exchange-based theories of externalities, Polanyi’s and Kapp’s first principle is the Classical and Marxist notion of social costs as necessary costs of social provisioning for human needs. Moreover, by the time of publication of “The Social Costs of Business Enterprise” (1963) Kapp viewed society’s backlash against social costs as the “double movement” described by Polanyi’s “The Great Transformation” (1944) (Kapp 1963, p. 45, fn 3; Berger, 2008b), that is, a protective response that seeks to de-commodify fictitious commodities. This view of the evolution of capitalism and the role of the State therein demarcates one important albeit not the only departure from Marxism, which Kapp and Polanyi endeavoured (Brown, 1987).

2.1. Polanyi contra Mises

Recent research (Pinault, 2020) shows that Polanyi’s encounter with Mises in Vienna, their philosophic and political debates during governmental negotiations between the Hungary and Austria, and Mises’ (1920) challenge to socialism together fundamentally changed Polanyi’s stance towards socialism and the problem of socialist calculation. The argument is that Mises (and not Polanyi’s conversion to Christianity) was the catalyst for Polanyi’s argument on socialist accounting (1922), which marked a shift in Polanyi’s thinking towards a more critical position regarding a centrally planned economy in kind, as proposed by Neurath (Polanyi, 1922 in Bockman 2016, p. 378). Nevertheless, his fascination with central planning and economy in kind as complementary modes of allocation next to market exchange continued until his late work (see Rief, 2023a). The extent to which Polanyi’s socialist accounting signifies a break from central planning and economy in kind is thus debatable as even Mises (1924) detected elements of central planning in Polanyi (1922). What is clear is that

² See Kapp’s unfinished “social benefits of planning” in Kapp 2015; for the continuity in Polanyi’s intellectual project see Rief (2023a)

³ For a translation of Polanyi (1922) see Polanyi 2016; for a partial translation of Kapp (1936) see Kapp, 2015.

⁴ For such a proposal cf. Berger and Richard, 2021

Polanyi now accepted not only monetary commodity markets to guarantee individual freedom, but also fixed or negotiated *money* prices for de-commodified factor inputs, such as labour and intermediate goods. He also accepted *monetary values* of social costs to allow for negotiations between producers and the commune that generate a transparent “overview” of the local situation and secures social justice by paying for social costs. In Polanyi’s socialist accounting, money functions as a commensurable unit of account that makes production costs and citizens’ social costs *comparable* for the sake of social cost *negotiations*. On the one hand these must be viewed as important concessions to Mises, who had insisted on the necessity of monetary market-exchange values as a commensurable unit of account and an informational basis for calculations that maximize the *monetary* efficiency of allocation decisions. In other words, it seems that Polanyi took on board the informational aspect of Mises’ argument when he proposes *monetary* social cost accounting as the commensurable basis for negotiations between producers and communes who each perform calculations and accounting with incommensurable physical units. On the other hand, this reflects Polanyi’s continued support for Neurath’s understanding of the “natural” side of the economy by insisting on physically calculating technical productivity and by accounting for human needs in subjectively expressed real terms.⁵ While the technical “economizing” function is applied by producers to maximize productivity, it is not applied by the commune when accounting for social costs in terms of real human needs that are subjectively perceived and voiced. The producers’ translation of physical units into monetary production costs is achieved by using fixed/negotiated monetary input factor prices. The commune derives monetary values for social costs from commodity markets for satisfiers of human needs. Polanyi’s expressed goal is to keep social costs separate from production costs so that they do not corrupt the purely technical production cost information by “upstreaming” social costs into input factor valuations. This evidences Polanyi’s expressed concern for addressing the imputation problem for input factor valuation much debated in the marginalist Austrian school of economics at the time. Nevertheless, it remains questionable whether Polanyi’s (1922) argument is fully consistent, as he simultaneously concedes that social costs would get absorbed into production costs over time.

Polanyi’s (1922) response drew a reply from Mises (1924), to which Polanyi in turn responded by clarifying his argument on social costs (Polanyi, 1924). The latter rejected the assertions that 1) he proposed guild socialism (the possibility of which Mises had never denied) and that 2) he provided a muddled pseudo solution that would be nonviable because it consisted of conflicting elements of central planning and guild socialism. In another article, Polanyi 1925 clarifies that solving the problem of social costs requires an “overview” over human subjects’ interior pain from work and their needs. Polanyi now made explicit that he viewed social cost accounting not just as a question of social justice but also of social knowledge, for which he perceived statistics and central planning to be ill-equipped. Instead, Polanyi believed that an adequate “overview” of the situation can only be achieved locally by comparing monetary production costs to monetary social cost that are the result of negotiations between self-organized, democratic, socialist associations. Recent research (Rief, 2023b; Michael Brie and Claus Thomasberger, 2018; Desai and Levitt, 2021; Bockman, 2016, p. 391) shows that Polanyi’s proposal for socialist accounting was inspired by his positive experience of post-WWI socialist Vienna. Yet, Polanyi (1922) insists that the principles of socialist cost accounting for technical productivity and social justice are analytically independent of socialist theory and any concrete reality or particular theory of socialism. It has also been suggested that Polanyi’s modified stance towards central planning was to a large extent reflective of his concern for harnessing and generating transparent local social knowledge which paralleled his

brother’s, Michael Polanyi’s, neoliberal concern for “tacit knowledge” (Rief, 2023b). Yet, Polanyi’s remaining loyalty to Neurath’s idea of a “natural economy” and calculation in real terms at producer and commune levels suggests that his monetary social cost accounting is not a total break with his previous position on economic calculation but it is instead an extension that seeks to encompass a proper place and function for monetary values as a commensurable informational basis of accounting understood as local social knowledge generated within a framework of social valuation (negotiations). In other words, Polanyi’s proposal on social cost accounting might be interpreted as an argument for a lexicographic ordering or sequence in which calculations and accounting of social costs in real terms precede their translation into monetary values for negotiations and accounting.

2.2. Kapp contra Mises

“The Planned Economy and International Trade” (Kapp, 1936) was published 14 years after Polanyi’s “Socialist Accounting” (1922). Kapp’s preface thanks Ludwig Mises for his support and Kapp’s CV⁶ states that he completed “economic studies” at Geneva’s Graduate Institute under the supervision of Mises, amongst others,⁷ between 1933 and 1936. Kapp’s PhD thesis starts by stating the claim made by William E. Rappard⁸ that a planned economy is doomed to autarky because movements in international markets make the adherence to plans impossible (Kapp, 1936, p. 3). In response to Rappard, Kapp’s PhD thesis’ main chapters present empirical case studies of the trading techniques and organizational forms deployed by the Soviet Union to fulfil its international trade plan. The main findings are presented as disproving Rappard’s claim (Kapp, 1936, ch. 11).

In this context, Kapp also cites (p. 27; 31) Mises’ revised second edition of *Gemeinwirtschaft* (1932) which upheld the validity of Mises’ (1920) claim in the context of international trade. In response to Mises, Kapp (1936, p. 34) takes the position that it is futile to try to refute or disprove Mises’ claim because *per definitionem* a centrally planned economy defines rationality from the perspective of society, not from the perspective of the subjective individual. Societal rationality requires societal valuation and the physical calculation of social costs and benefits with a view to preventing unnecessary social costs. In other words, Kapp counters Mises with the claim that “rational allocation from the perspective of society” is possible in a centrally planned economy. Neurath’s (1925) proposal for central planning based on physical calculations is cited as one such proposal amongst others (Kapp, 1936, p. 31, fn 4). This suggests that Kapp’s case study of the Soviet Union’s international trade can be read as refuting Mises not just on the grounds that rational allocation from a societal perspective is possible but also that it is possible and desirable to achieve this via central planning that is *partly* based on *physical calculations*. That is, Kapp did not retreat to the claim that a socialist economy might simply exist without being “economic”, that is, without allocating resources rationally. Moreover, he neither advocated a money-less economy, nor an elimination of input factor markets, nor an elimination of calculations based on market exchange values. Kapp’s lexicographic preference for calculations in kind within central planning is due to their ability to take into account social costs proactively and pre-emptively with a view to *preventing* them before they can arise (Kapp, 1936, p. 43). This reasoning exhibits significant similarities with to Otto Neurath’s argument for economies in kind, which are not money-less but deny monetary profit calculations the sole authority to decide resource allocation.

⁶ K. William Kapp Research Center - K. William Kapp CV, Who is Who (kwilliam-kapp.de)

⁷ William E. Rappard, Jacob Viner, E.T. Gregory, Eugene Stanley, M.A. Heilperin.

⁸ In this context it seems noteworthy that William E. Rappard was next to Ludwig Mises one of the organisers of the first meeting of the Mont Pelerin Society, the neoliberal flagship think tank.

⁵ On the similarities between Neurath and Polanyi see Rief 2023a, p. 232, p. 240

While Mises takes the stance that there is no alternative to the rationality of the market calculus, Kapp (1936) argument holds that physical calculations are a viable alternative to monetary calculations. Rational allocation decisions can and should be based on physical calculations to prevent unnecessary social opportunity costs and to secure the satisfaction of human needs. Max Weber's "Wirtschaft und Gesellschaft" (Weber, 1925) also admitted that substantive rationality – defined as social provisioning for human needs – can be based on calculations in kind, lending some validity for proposals such as those offered by Otto Neurath (1919). Thus, it is surprising that Kapp (1936) references Weber (1925), but not on this crucial point, which would have buttressed further the core of his argument. However, 27 years later Kapp locates the origin of his theory of social costs in the "Weber-Mises" debate (Kapp, 2015, p. 120) citing the English translation of Weber's "The Theory of Social and Economic Organization" edited by Talcott Parsons (1947, pp. 202–212). Here Kapp viewed himself in hindsight as siding not with socialism but with Weber's recognition of the possibility of substantive rationality, that is, social provisioning based on physical calculations. This position taken by Kapp in the socialist calculation debate does not preclude in principle the existence of capitalist institutions, such as factor markets, commodity markets, money as a unit of account (prices), and private property. Indeed, Kapp (1936) explores cases of such coexistence in international trade of capitalist countries that perform central physical calculations without coherent central planning. Yet, Kapp's argument on social costs emerges not just as siding with the possibility but also the desirability of substantive rationality based on physical calculations when human needs are concerned. In this sense Kapp's support for physical calculations was stronger than Weber's. Thus, Kapp's above mentioned preference for deploying physical calculations of social costs within central planning due to its preventive capabilities went beyond Weber's mere acknowledgement of the possibility of substantive rationality. These differences between Weber and Kapp may be the reason why Kapp (1936) did not cite Weber on substantive rationality.

Yet, Kapp (1936, p. 51) also cites Mises' ideas (Mises 1932, p. 206) approvingly. Mises draws a parallel between socialist international trade with capitalist countries and communally owned utility companies that engage in market exchange with private enterprises. Correspondingly, Kapp argues that monetary calculations can be used in the central planning of international trade to obtain information about comparative advantage. However, the latter is not presented as a binding algorithmic criterion for allocation decisions and is instead subjected to social valuation. These may weigh social concerns such as national security or full employment against monetary efficiency concerns in international trade. Kapp's analysis of the tools and methods employed by the Soviet Union's international trade plan showcases tariffs and quotas, preferential trade status, dumping, and foreign trade agreements, which operate with a mix of monetary and physical calculations (Kapp, 1936, chs 8 and 9). Kapp also presents case studies of capitalist economies (Germany and Persia) to demonstrate how international trade is centrally regulated based on physical and monetary calculations in times of war and crisis that require protectionism. Although state-owned trade monopolies, quotas, tariffs, and currency management are shown to be employed by capitalist economies they are not embedded within a central economic plan and do not eliminate international trade by private businesses. Whilst Kapp (1936) does not discuss details of how calculations in kind occur, he does argue that central regulation in capitalist countries remedies social cost problems after they arise through compensation payments and takes on tasks of social provisioning that are not addressed by private enterprises. This occurs without a coherent plan in non-systematic ad hoc measures but can involve calculations in kind even in capitalism. Kapp's empirical work thus demonstrates that socialism and capitalism allow the co-existence of physical and monetary calculations at the central level, as well as the co-existence of physical calculations at the central level and decentralized monetary calculations. In other words, Kapp does not

defend against Mises the exclusive reliance on physical calculations at the central level but Kapp does emphasize their desirability when social costs are concerned; this does not preclude monetary calculations as supporting information in social valuation processes. Kapp also does not primarily advocate socialism but argues that physical calculations as part of central planning have the advantage of serving the prevention of social costs. Thus, whilst a socialist economy can make full use of the preventative capacity of physical calculations, a capitalist economy typically only addresses social costs after they arise (Kapp, 1936, p. 43). Kapp's argument on social costs may thus be viewed as advocacy for a lexicographic order in which central physical calculation precedes rather than excludes monetary calculation.

2.3. Kapp contra Polanyi?

The main difference between Kapp (1936) and Polanyi (1922) is in the former's empirical focus on central planning in international trade and the latter's assumption of a decentralized functional socialism as a closed economy. Polanyi excludes for the "sake of brevity" (Bockman, 2016, fn. 44, p. 408) the fixed costs of natural resources from his socialist accounting model, whilst admitting that raw materials "tend to be imported" (Bockman, 2016, fn. 50, p. 413). In other words, Polanyi intentionally chooses to forgo the questions that are at the heart of Kapp's research, namely the centrally planned economy in international trade. These differences in the type of socialism envisaged are connected with the differences of their proposals for social cost accounting and calculation. Kapp's argument is in favour of central and physical calculations of social costs as empirically objectified in-kind values and applied to both socialist and capitalist economies in international trade. This is likely the main reason why Kapp (1936) never mentions or references Polanyi (1922) proposal for a decidedly socialist, decentralized, self-organized, monetary accounting for social costs that are translated from subjective needs. These differences reflect further differences in understandings and conceptualizations of social costs, which are discussed below. In spite of these differences, both proposals may be viewed as arguments for a lexicographic ordering of physical and monetary calculation of social costs that are subjected to social valuation processes. Both seem to be concerned with finding the proper place for monetary values rather than rejecting them entirely. In both cases this can be attributed to Mises' influence.

Kapp's (1936) defence and support of central physical calculations drew on Carl Menger (1923), which was unavailable to Polanyi (1922). However, neither Kapp nor Polanyi attempted to integrate Menger's substantive understanding of the economy with Weber's substantive rationality until the late 1950s (Berger, 2008b). Kapp (1936) deployed Menger to conclude on the "merely formal" character of the rationality of allocations based on monetary calculations championed by Mises (Kapp, 1936, p. 40).⁹ Menger is quoted on the exclusion of people without purchasing power despite the satisfaction of luxury needs of the rich, and on the ignorance, errors, and passions in human awareness of their needs, such that less urgent needs are satisfied. These cases are called "imagined, underdeveloped, and pathological needs" based on Menger (Kapp, 1936, p. 37, 38). Additionally, Weber is cited to reject technical efficiency as a definition of "economy" (Kapp, 1936, p. 28). Kapp (p. 28–29) sides with the neoclassical socialist economist Cläre Tisch who argues that economy is about minimizing social opportunity costs¹⁰ of foregone human needs and that this requires a standard of

⁹ It is interesting that Kapp deploys against Mises here already the term "formal" as it suggests that he interpreted Menger's "economizing function" as synonymous with Weber's "formal rationality". (on similar semantic shifts in Polanyi's interpretation of Menger's "substantive economy" see Rief 2023a, p. 237)

¹⁰ Swaney and Evers, 1989 have noticed the neoclassical characteristics in Kapp's work.

comparison. Thus, on the one hand, for Kapp the physical calculation of social costs serves the purpose of economizing; and Menger (1923) admits that economizing coincides due to scarcity in most cases with the “techno-economic” meaning of economy that aims at social provisioning for human needs. On the other hand, Kapp suggests that it should in principle be possible to find the needed common standard according to the objective value theory of classical political economy in labour measured in units of time. (Kapp, 1936, p. 34) Despite adopting the notion of “economizing” for social opportunity costs Kapp does not discuss in detail how units of labour time can function as commensurable unit of account in physical calculation. Even Kapp’s later volume on environmental planning in China (Kapp, 1974) does not go far beyond the conclusion reached in his PhD thesis with regard to labour time as unit of account for comparing social use values. In the absence of a commensurable unit of account physical calculation can support the economizing function only by excluding absolutely inefficient options but without the ability to optimize between the remaining options. Due to this unresolved question of the unit of account employed in central physical calculations for social cost prevention it is not entirely surprising that Kapp (1936, p. 46) concludes the theoretical part by stating that he defers to a future study the question of social value, that is, how to arrive at a valuation of goods from the perspective of the needs and goals of society. (p. 46).

In sum, Kapp’s argument on social costs is not primarily an advocacy of socialism or socialist accounting as is the case for Polanyi. Following Kapp (2015) interpretation of his theory of social costs as emerging in the “Weber-Mises debate” suggests that his initial argument, presented in Kapp (1936), was about the possibility and desirability of central physical calculations for social cost prevention, that is, *economizing* on social costs as basis of substantive rationality. Nevertheless, Kapp finds central physical calculations of social costs to be compatible with both socialism and capitalism, and compatible with both central and decentral monetary calculations. Central *planning* based on physical calculations is preferred by Kapp due to having *in principle* the ability to *prevent* or *reduce* as much as possible social costs within an economy focused on social provisioning for human needs (Kapp, 1936, p. 43). Whilst Kapp’s preference for central planning could be read as tentative advocacy of socialism and thus similar to Polanyi, the main point of difference on economic calculation is the central physical calculation for social costs (with economizing) versus the local monetary accounting for social costs (without economizing). As shown above Polanyi’s (1922) socialist accounting assigns monetary values to social costs for purposes of having a commensurable unit of account in negotiations between producers and communes that yield social knowledge and social justice. Neither Polanyi’s monetary social cost accounting nor his accounting of subjective in-kind values of social costs at the commune level serve the purpose of economizing. Polanyi’s preference for the term social cost “accounting” and Kapp’s use of the term “calculation” of social costs is reflective of their different stances on the “economizing” function. That is, they envisioned different roles for the quantitative measure of social costs within qualitative social valuation.

Nevertheless, both social cost proposals make important concessions to Mises on the coexistence of physical and monetary calculations and accounting of social costs. They do so by insisting on lexicographic ordering that prioritizes physical over monetary calculation and by limiting the place of monetary calculation and accounting by embedding it in their distinct frameworks of social valuation. In other words, they maintain their common *raison d’être* of prioritizing physical or in kind calculation and accounting, their emphasis of social valuation, and their similar yet distinct proposals for social costs prevention. These characteristics differ greatly from neoliberal and neoclassical economics that identify economy with monetary economizing disembedded from social valuation and without a prevention strategy for social costs. At best, neoclassical and neoliberal approaches aim at fixing social cost problems after they occur through some kind of monetary compensation mechanism. Not surprisingly, neoclassical and neoliberal approaches

differ from Kapp and Polanyi in that they do not identify capitalist accounting and calculation as the root cause of the problem of social costs. For Kapp and Polanyi, the challenge of social costs requires a system change in economic calculation.

3. The differences and similarities between Polanyi’s and Kapp’s social cost proposals in greater detail

3.1. Definitions of social costs

For Polanyi (1922) social costs are what must be paid for “humanitarian ideals”¹¹ reflecting the principle of social justice. Social cost accounting gives a quantitative overview of the production costs of social utility (“*Gemeinnützigkeit*”) (Polanyi, 1922 in Bockman 2016, p. 404, fn. 36), the material aims of production, immaterial factors of the highest community goals, and the conscious will of the community (Polanyi, 1922 in Bockman 2016, p. 406). It also gives a quantitative overview of the cost of just distribution. *Just distribution* continually changes the production costs of individual businesses and individual production phases (Polanyi, 1922 in Bockman 2016, p. 409). The task of socialist accounting is to separate social costs as intervention costs from framework costs to avoid imputation problems (“*Zurechnungsproblem*”) for the upstream pricing of factor inputs. For Polanyi, socialist accounting is thus about preventing pricing and calculation problems described by marginalist (neo-)liberal Austrian economists. This method keeps the natural (technical-material) and the social (justice/ideals) spheres in separate accounts, and yet, for the sake of a transparent overview, these are displayed together through a common monetary value.

To get an idea of the kind of problems Polanyi seeks to solve with social cost accounting we now take a look at his critique of capitalist accounting. Capitalist accounting fails to secure 1) *technical productivity*, 2) *social utility* in production and 3) *social justice* in distribution because it aims exclusively at profits. Examples given for the lack of *technical productivity* include the conscious restriction of production by cartels, lack of economies of scale, and unproductive expenses of the competitive economy (“advertisement, travellers, agents, packaging”) (Polanyi, 1922 in Bockman 2016, p. 404). Examples for the lack of *social utility* are the artificial stimulation of false needs that disorient the healthy sense of the hierarchy of needs as for example in the alcohol industry and the “entire circuit of fad and junk production” (Polanyi, 1922 in Bockman 2016, p. 405). Labour effort is thus misdirected towards “creating use values whose rank ordering is inferior from a social perspective, or which even amounts to a counter-value¹²” (Polanyi, 1922 in Bockman 2016, p. 405). The local or distant repercussions of the production process on community life or general welfare are not encompassed, and it is not detected how “health, leisure, and spiritual and moral being [*Dasein*]” of producers and residents are structured (Polanyi, 1922 in Bockman 2016, p. 405). The lack of *just distribution* is viewed in that income from work does not correspond to effort, burden of labour, or to services and utility. Income distribution is fluctuating due to illness, unemployment or crises, and loss of income causes agonizing uncertainty. One is left without income when it is needed the most during sickness, pregnancy, and childhood, or age: “This situation contradicts the right to life, to which every member of society is entitled.” (Polanyi, 1922 in Bockman 2016, p. 407). These criticisms reflect the principle of social justice which require the just “distribution of workload according

¹¹ We leave unaddressed the question whether this signifies an idealist philosophy of the early Vienna Circle surrounding Neurath, Mach, and Carneri (Ueber, 1993), or an adoption of subjective value theory, and to what extent this is another departure from Marxism.

¹² Polanyi here uses the term “*Widerwertig*” which has resonances of “disgusting value” as “*widerwertig*” means “disgusting”. This term features in Rudolf Otto’s book *The Idea of the Holy* in the sense of “sin” (cf. Bockman, 2016, fn 37).

to ability and goods according to need (communism), or distributing goods according to work performance except in the area of basic needs (collectivism)” (Polanyi, 1922 in Bockman 2016, p. 407).

Social costs are thus the gap between the profit seeking businesses or the actual situation and attaining the potential of social justice. That is, adding social costs to production costs yields full costs of social provisioning for human needs (just distribution) and the achievement of social utility in production. However, Polanyi seems to suggest that socialism would avoid the wastefulness of commercialism and use unexploited productive potentials through economies of scale and dismantling cartels. “Counter-values” would be eliminated and negative repercussions of production on community well-being would be detected and reduced or prevented. This indicates the potential savings of social opportunity costs, i.e. lower social costs in areas of commodity consumption and production compared to capitalism, via a transition to socialism and socialist accounting. The prevention of unnecessary social costs yield savings while paying necessary social costs means increases spending.

Kapp (1936) notion of social costs also includes the notions of paying for the *necessary* social costs of social provisioning for human needs and preventing *unnecessary additional* social costs; the latter are “disadvantages” and “damages” arising in capitalism. Kapp (p. 41, 42) cites neo-classical marginalist Arthur C. Pigou and gives examples of crime, work accidents, damages to public health arising from lack of protections for motherhood, air pollution, noise pollution, unhealthy construction work, and costs of war arising from foreign direct investments, retardation of technological progress due to patent laws, cost advertisement, and premature resource depletion. Kapp (p. 43–46) then addresses necessary social needs that remain unrecognized by market calculus based on Carl Menger,¹³ naming defences against dangers that threaten the existence of society such as pandemics, illnesses, and enemy attacks. These are viewed as entailing social costs for building organisations that improve general welfare, public health, and the elevation of the cultural level of society as a whole.

3.2. Payment vs. prevention

Polanyi (1922) proposes that producer associations account for and pay money for the necessary social costs of social provisioning for human needs. Polanyi’s examples are baby milk sold below market price and linen for new mothers. This monetary payment approach aims at paying the full costs of social reproduction. However, Polanyi’s concept of social costs is not just about paying social costs but also about preventing social costs in two senses: 1) it is based on the idea that if necessary social costs remain unpaid then social needs are not met fully, which leads to further social costs as knock on effects. This vicious social cost spiral is preventable if social costs are paid and the “right to life” as a “humanitarian ideal” is secured. 2) Polanyi’s principle of social justice means preventing unnecessary and additional social opportunity costs arising from capitalist production. This prevention of social costs requires the detecting and encompassing of the repercussions of production on “Dasein” in the sense of the spiritual and moral dimension of human being, and the eradication of “counter-values” that are distasteful or harmful from the perspective of “Dasein”.

Polanyi’s and Kapp’s concern for paying necessary social costs as part of the full costs of production to prevent self-reinforcing social cost dynamics exhibits elements of Classical economics and Marxism. In this, subsistence wages are viewed as a precondition for social reproduction, not just for the worker but also for his family and community and are expressed in monetary units that reflect the costs of living at current commodity market prices. Against the background of this tradition, Polanyi proposes the decommodification of labour by fixing wages and

differentiating them according to various criteria of age, training, skills etc. In addition, he proposes paying additional social costs to pay citizens’ social needs.

Much like Polanyi, Kapp (1936) aims at paying necessary social costs reflecting social and human needs and preventing unnecessary additional social cost of capitalism. However, in contrast to Polanyi, Kapp focuses on social costs that are system-wide and affect society as a whole. As a result, Kapp advocates central planning that is able to prevent social costs for the entire economy. In contrast to Polanyi, Kapp views the advantage of central planning in preventative strategies for social costs that continue even after the social costs of capitalism have been eliminated. This foreshadows Kapp’s later (Kapp, 2015) explicit endorsement of the “ex-ante” prevention of unnecessary social costs instead of simply accounting for and paying necessary social costs after they arise, that is, ex post. “Ex ante” for Kapp means that social *costing* occurs before allocation decisions take place. That is, social costs “are not” but “they become” increasingly more objective in social valuation, which determines social opportunity costs in physical terms, i.e., the foregoing of human needs. In other words, Kapp views central physical calculation as a way of minimizing social costs through prevention, which reflects his understanding that economizing on social opportunity is the meaning of economy. He does not adopt the notion of social costs as monetary accounting data to reflect the market values from past transactions. The core of his argument is preventative ex ante calculation of social costs rather than ex post accounting. While “ex ante” cost theory has its roots in subjectivist liberal Austrian economics, starting with Böhm-Bawerk’s “law of costs” and Mises’ *The Theory of Money and Credit* (1912),¹⁴ Kapp employs the ex-ante understanding of social costs based on physical calculations and within social valuation. Prevention strategies include for example quantity controls, technological controls, controls of location decisions, and institutional reforms, such as safety standards and social minima (Kapp, 1950).

3.3. Local negotiation vs central planning

Polanyi (1922) views monetary social cost accounting as a “quantitative overview” concerning the state of social justice in the commune. This “social knowledge” is rooted subjectively in individual citizen owners and assessed by the commune in real terms. Polanyi finds central planning unable to obtain this local subjective social knowledge through statistics. This focus on localism has also been interpreted as a reflection of Polanyi’s increasingly critical attitude towards “holistic” or whole society approaches that he perceived to exhibit totalitarian tendencies inconsistent with individual freedom (Pinault, 2020). For Polanyi monetary social cost accounting values emerge as a quantitative overview from *negotiations* between producer and consumer associations and communes where the latter are owners of the means of production and represent the citizens. Communes are charged with the task of identifying social needs of their citizens who are at the same time workers within the producer associations and consumers organized in associations. These social needs are rooted in subjectively felt pains from work and from unmet needs. Giving voice to individuals’ subjective needs renders them social knowledge for negotiations.

Kapp (1936) takes a whole society perspective of social costs as preventable system-wide damages of large-scale industrial technologies in a multi-sector economy within international trade. They are not automatically resolved by socializing the means of production, establishing monetary social cost accounting, or paying for them at the local level. Kapp names defences against dangers that threaten the existence of society such as pandemics, illnesses, and enemy attacks, which are system-wide and preventing them entails social costs for building

¹³ This is clearly based on Menger’s notion of the “techno-economic” meaning of “economy” which is however not cited explicitly.

¹⁴ For these connections cf. Frigato and Santos-Arteaga (2019) *The Dark Places Business Enterprise – Reinstating Social Costs in Institutional Economics*, Routledge, pp 161-167.

system-wide organisations that improve general welfare, public health, and the elevation of the cultural level of society as a whole. Kapp sees an advantage of central planning as preventing system-wide social costs that are beyond the local level's capacity to calculate or prevent them and this is achieved by "calculating these damages beforehand and taking them into account in economic decisions." (p. 43) He views the existence of system-wide and complex social costs as the rationale for central planning and as strong rationale for a case against solutions based on subjective or marginal individualism, and these are elaborated in later works (Kapp, 2015).

3.4. Monetary accounting vs physical calculation

Polanyi (1922) adopts an *accounting* perspective to achieve a quantitative overview of the economy: "Accounting is a quantitative overview of economic activity. [...] accounting has to offer us quantitative answers to the questions we need to pose about the economic activity at hand. [...] the *general problem* of socialist accounting: How can one attain an overview of the economy that quantitatively presents the relationship of each of its characteristic elements to the requirement of productivity, on the one hand, and the requirement of social justice, on the other hand" (Polanyi, 1924, p. 401–402). Social cost values result from negotiations in terms of monetary market-exchange values for social needs, and not in any way from the "economizing" function of economy. While negotiations can include considerations of the future, monetary accounting for social cost is typically past-bound in the dual sense of reflecting unmet social needs that already arose and continue to manifest, and doing so with market values that correspond to commodity values from past transactions. There is no explicit mention of preventing social costs beyond paying for social costs and eliminating capitalist counter-values. Polanyi does not see a problem in converting subjective human needs that are recorded, assessed and quantified in real terms into monetary accounting values.

Kapp (1936) is critical of subjective valuation and rejects the monetary valuation of social costs. Partly based on Menger (1923), Kapp views market prices as distorted and arbitrary due to human ignorance, errors, unequal income distribution, and effects of marketing, and thus unreliable as indicators of human needs. Instead, he proposes physical calculations to prevent social costs that reflect human needs. Kapp's notion of social costs is objective in the sense that human needs are empirically objectifiable, objectively quantifiable, and can be physically calculated. This aspect is developed by Kapp (2011) further in his social minima approach that defines empirically derived minimal adequate living conditions. The social costs for guaranteeing each social minima are, in each instance, social opportunities, that is, the next best forgone alternatives. However, he does not reject monetary calculations entirely, acknowledges their usefulness in central planning of international trade, and as preliminary estimates of social cost levels. Kapp (1974) references Kant to argue that human health and life do not have exchange value but absolute value or dignity as they cannot be exchanged for an equivalent. In other words, Kapp's advocacy for physical calculations is based on the tenet that this is the most appropriate quantifiable measure of social costs that do not just reflect human needs but ultimately also reflects human dignity as the qualitative "measure of all things" (Kapp, 1985).

4. Conclusion: relevance of insights

The significance of social cost proposals by Kapp and Polanyi for a "revolutionary" Social Ecological Economics (Spash, 2019a) lies in their coherent *raison d'être* that differs sufficiently from neoclassical and neoliberal economics despite some similarities. That is, both rejected an exclusive reliance on capitalist calculation and monetary economizing as defining criterion of economy. In the face of Mises, they defended the merits of quantification and measurement in real terms as a basis for calculation and accounting that prevents social costs and supports the

social provisioning for human needs. Both rejected the exclusive reliance on capitalist accounting and the monetary maximization logic it represents due to its inappropriateness for adequately dealing with social costs. Both understood social costs as the costs of social provisioning for human needs in the tradition of the Classics and Marx. Nevertheless, both engaged constructively with Mises' challenge to socialists. As a result, both did not reject monetary quantification per se but did reject an exclusive reliance on it and its use for optimization as in neoclassical and neoliberal economics. That is, monetary values are not used for individuals' subjective or algorithmic maximization (on this point of difference see Uebel, 2018). Instead, both support a kind of lexicographic ordering or sequence of physical and monetary quantification of social costs. In this ordering physical quantification has priority as it is deemed most adequate for reflecting human needs. Moreover, physical and monetary quantification, calculation, and accounting of social costs even when they entail minimization of social cost or maximization of productivity are embedded in negotiations (Polanyi) and central planning (Kapp), which are social valuation processes. They are not envisioned as pure algorithmic optimizations. This means that Polanyi and Kapp developed genuinely *social* theories of social costs, which contrast with subjective individualist neoliberal theories and marginalist neoclassical theories that rely exclusively on monetary economizing without social valuation. Both deem quantification in real terms as most adequate for social provisioning for human needs. This commonality in their position can be viewed as a way of navigating a middle ground between Neurath and Mises. They broadly operated in the intellectual space opened up by Menger's and Weber's acknowledgment of the two meanings of economy ("economizing" and "techno-material") and economic rationality ("formal" and "substantive").

However, the coherence of Polanyi's and Kapp's proposals is messy as they differ on the role of monetary quantification. Polanyi advocates social cost accounting based on monetary values but only as a secondary step that follows the quantification of social costs in real terms. Conversely, Kapp rejects the monetary valuation of social costs and proposes physical calculations of social costs as a basis for economizing. However, at the same time Kapp does not deny that monetary calculations could play a limited role in providing preliminary indicators of the magnitude of social cost problems and unmet social needs. Both Kapp and Polanyi take different stances on the role of physical quantification with regard to economizing. Whereas Kapp suggests that physical calculations serve the economizing of social costs, which is the basis of "economy", Polanyi sees no role for physical economizing regarding social costs, but only regarding technical production costs. Conversely, Kapp rejects the definition of economy as technical efficiency and does not separate the question of social costs analytically from the "natural" (technical) sphere of the economy as does Polanyi. This suggests Kapp and Polanyi have different stances regarding the purpose of physical quantification of social costs. These different stances are tied up with the question of boundaries between the "economizing" and "techno-material" functions of economy when it comes to social costs, but also with the question of boundaries between the "physical" and the "social" dimensions of economy. As a consequence, these findings confirm the only messy coherence of heterodox economics (Mearman et al., 2023).

Last but not least, several weaknesses and limitations can be identified in both of their proposals. Neither Kapp (1936) nor his later works show in any detail how units of labour time could serve as a commensurable unit of account for calculations in kind that aim at social cost minimization. As a result, calculation in kind can only serve to exclude absolutely inefficient social cost solutions while leaving the task of choosing amongst incommensurable alternatives to social valuation. However, the theoretical framework for social valuation of social costs in the light of their respective social benefits remained largely an unfinished intellectual project although some important elements were developed in later works (Kapp, 2011; Kapp, 2015). As for Polanyi (1922), he does not explain in greater detail how the commune assesses and accounts for the subjectively felt needs of citizens in real terms as a

preliminary step towards monetary social costs accounting. Likewise, Polanyi fails to address the question of international trade and other system-wide social costs that transcend local knowledge. In summary, the investigation of the social cost proposals by Kapp and Polanyi demonstrates that despite their significant advances in rethinking social costs, the challenge of post-capitalist calculation and accounting remains an ongoing task for a revolutionary Social Ecological Economics.

CRediT authorship contribution statement

Sebastian Berger: Writing – review & editing, Writing – original draft, Methodology, Investigation, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

No data was used for the research described in the article.

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