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Reconnecting with the social-political and ecologicaleconomic reality

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ABSTRACT

This article critically reflects on the research portfolio by the ecological economist Clive Spash who has helped pinpoint specific and systemic blindspots in a political-economic system that prioritises myopic development trajectories divorced from ecological reality. Drawing on his published work and collaborations it seeks to make sense of the slow, or absent, progress in averting global warming and ecological destruction. Three strands of key concern and influence are identified and discussed with reference to their orientation and explicit expression regarding Ontology, Epistemology and Axiology. Some complementary points about indeterminacy and holism are presented to further strengthen the arguments for a transition towards a social ecological economic system that puts values and principles back into focus. While Clive Spash's work has made a strong case within the economic community and appealing to ecology professionals, the value-myopia or -vacuum has to be tackled across all disciplines, politics and society for a meaningful and urgently required transformation in decision-making. Hence, the article finishes with some suggestions for the (higher) education system, and highlights the importance of simplicity and sufficiency, as well as strong sustainability driven citizen and community action as necessary catalysts of change in this social-ecological transformation.

KEYWORDS: social-ecological transformation; critical realism; Ontology; Epistemology; Axiology; values; indeterminacy; sufficiency

INTRODUCTION

As a teenager in the 1980s, I remember an intense feeling of agency and opportunities and some optimism for change for the better: that by seeing and learning about the increasingly precarious state of the environment it would become obvious that resources needed to be shared and cared for, protected or boycotted and left in the ground or sea. However, actual 'mainstream' behaviour and trends went the opposite direction and advertising became pervasive. For example, shopping turned into a pastime; the marketing industry's influence and half-truths ('green-wash') kept growing; and so did the influence of financial institutions alongside industry in accelerating excessive resource use much of which has created masses of unsustainable and superfluous stuff. At the same time, most resource extraction and polluting or labour-intensive production processes moved from 'developed' to 'developing' countries, fuelling the globalisation of consumerism and effectively exported a large amount of negative visual, atmospheric and health impacts. A focus on consumerism and prices rather than resources and long-term human wellbeing in a holistic sense endorsed a socialecological disconnect. Coupled with increasing virtual activities and contacts, real socialecological systems are conveniently put out of sight and out of mind; and many high-income countries shifted towards service and knowledge industries. Neither the increases around the globe of environmental designations and species protections (e.g. Hammer et al., 2016) nor the changes in environmental regulation and policies over recent decades seem to have altered that course in any significant way. Furthermore, the gap between rich and poor widened rather than reduced.

Maybe no surprise then that forty years later few people seem to register or publicly debate and demand action about the ecocide and often seemingly invisible, yet real, range of air, water, soil and foodchain pollution and their impacts on wildlife and citizens. The loss of abundance and variety of meadow plants, birds, butterflies, frogs, fruit trees, ... obvious to some has gone unnoticed to most; although motor vehicle drivers may realise that splatters of insects on windscreens and sights of roadkill have largely disappeared. Actual policies and efforts to tackle the climate and ecological crises are still surprisingly weak, delayed or 'traded-off' despite increasingly frequent and more extreme climatic and ecological warning signs, more media coverage and some public concern. For those willing to see, environmental decline and temperature rises have moved from predictions to reality and from remote and sporadic to widespread and persistent challenges across the globe.

This article takes a reflective approach drawing on experiential evidence and research on environmental values, ecological economics, environmental governance and inter-and trans-disciplinary methods, including several endeavours and projects with Clive Spash

between 1997 and 2020. The underlying rationale and argument for this approach is that key problems are already known and solutions or alternatives in principle are both available. The trouble is not a lack of data, knowledge or insights, but an erosion of principled decisionmaking for the long-term wellbeing of society and ecosystems. The relegation of strong sustainability also compromised clear guiding social-ecological values influencing crosscutting long-term policy directions to achieve a political economy that focuses on healthy social-ecological states now and into the future. The meaning of 'evidence' and how it is being used has been scrutinised in many works, including Vargas et al. (2020), showing that better evidence does not necessarily lead to better decisions and the strategic use of evidence to support certain interests (e.g. Davitter, 2015), highlighting furthermore symbolic, opportunistic and instrumental uses of knowledge and data. Therefore, the accelerated push for innovation and more data and research seems blinkered in carving out new niches, careers and schemes that prioritise money-making rather than a healthy and just future with climate change mitigation and ecological restorative outcomes. However, the subtleties about evidence still warrant attention. What is evident or used as evidence is not just a matter of science and knowledge but also a matter of the way we see and approach things. The type, use and acceptance, or ignoring and rejection, of facts and figures is influenced by our worldview and underlying ethical or spiritual values. In the 1990s this came to the fore when the introduction of GMOs received insufficient democratic debate and the framing, at least in the UK, adopted positivist scientific terms rather than allowing ethical and fundamental societal choices to be properly brought to the table and be considered in the decision- and policy-making processes (Carter, 2003).

The chosen contexts for deliberation and decision-making then also largely by-pass attention to the indeterminate nature of Nature and its preternatural and energising characteristics beyond current scientific perspectives such as ecosystem services and rewilding. Consequently, development pathways in most countries have focused on economic growth rather than social-economic policies promoting simplicity and sufficiency for the wellbeing of many, and laws and regulations that protect ecological integrity. Awareness of the contrasting pathways is by no means new and has had various expressions, including various pertinent sections in John Stuart Mill's *Principles of Political Economy* (Mill, 1848/1871, chapter 6: 6):

'Most fitting, indeed, is it, that while riches are power, and to grow as rich as possible the universal object of ambition, the path to its attainment should be open to all, without favour or partiality. But the best state for human nature is that in which, while no one is

poor, no one desires to be richer, nor has any reason to fear being thrust back, by the efforts of others to push themselves forward.'

The teaching, projects and published works by Clive Spash have provided some insights and explanations of what had felt to me in the 1980s and 90s intuitively wrong with mainstream economics' influence on neo-liberal policies and political thinking. Specifically, the oversimplistic assumptions and lack of ethical and longer-term considerations, treating the environment as a free waste receptor and its 'materials' as exploitable economic goods rather than an entity to be kindly treated, respected and as sparingly used as absolutely necessary. Shortfalls of free-market economics as per its own critique include inequality, negative externalities, unsustainability, monopolising of power, inefficient or under-provision of public goods and the instability of provision. Even if some of the critiques were addressed, it would not fundamentally change the utilitarian perspective and myopic viewpoint. As expressed in Spash (2007a: 487):

'Ethical questions fail to disappear just because a market price and economic analyst are substituted for ethical debate and public discourse. The contradiction is that economists, in applying preference utilitarianism, take a very specific philosophical and ethical position and then, as above, try to deny the relevance of ethics in economics. Moral dilemmas remain despite the attempts to remove their explicit discussion from the economic debate'

Triggering policy changes to address these failures, let alone forging different pathways therefore have been slow, fragmented or prevented, even though many are trying to do just that, including Clive Spash. His evolving academic work and key strands mirror a cycle of stages of a life course (Elder, 1994: problem identification and formulation; variable selection and rationales; strategies of design and analysis): (i) criticism of existing status quo, yet some optimism and idealism for change; (ii) developing and testing alternatives; (iii) gaining deeper insights and refinement of ideas, methods. Then the cycle repeats with a new generation of people and ideas and critiques. I will be using these strands to structure the narrative of the following three sections drawing on and characterising Clive Spash's work, before exploring likely strong options for facilitating a social ecological economic transformation; this latter part aims to enhance and complement arguments evident in Clive Spash's published work to date.

PROBLEM IDENTIFICATION - FAILURES OF MAINSTREAM ECONOMIC METHODS

Problem identification in Clive Spash's work centres on scrutinising and critiquing the failures of mainstream economic methods and lobbying for inclusion of ethical, ecological and intergenerational equity elements. During his Masters degree at UBC Vancouver and PhD at the University of Wyoming, Clive Spash's research focused on linking scientific data on global warming and environmental pollution with assessing shortfalls of current mainstream economic thinking and teaching, and developing suggestions of what could, or needed, to be done to plug those serious gaps. His earliest academic paper published in Energy Policy (Spash & D'Arge, 1989) already shows the clarity, critical approach and persuasive arguments that is characteristic of his later works. At that time, data on climate change was not widely known or communicated and modelling forecasts indicative rather than with high levels of confidence. Yet key issues already clearly emerged and structured large parts of the literature review of that paper: irreversibility; international and institutional constraints; uncertainty; and intergenerational equity. The approach to the critique was largely in the economic tradition, including production functions, calculating utility and marginal utility, but supplementing this with the link to environmental sciences, ethics and governance. While there clearly were many uncertainties regarding impacts, and in particular the interactive effects of multiple pollutants under different climatic conditions, the need for action by the current generation on global warming seemed already clear.

Working with existing economic methods but critically reviewing them and amending them for environmental applications resulted in a collaborative (text-)book with Nick Hanley on cost-benefit analysis (CBA; Hanley and Spash, 1993). The book was in the field of environmental economics rather than ecological economics which explains why Clive Spash did not engage with a second edition. Instead, he conducted research into methods that seemed better capable of capturing, or at least reflecting, the interconnectedness of habitats and species, their incommensurability and irreplaceability (see next section on Contingent Valuation Method and Deliberative Valuation). Likely problems and shortfalls in conducting and using CBA in decision-making is not only levied by those who regard the method fundamentally flawed but also acknowledged by those in principle pro this appraisal technique. General weaknesses include difficulties with capturing all relevant impacts, unrealistic cost estimations (being over-optimistic), lack of consistency between project assessments, lack of transparency and clearly stating assumptions when communicating results (Atkins et al., 2017). Deeper criticism about its fundamental framing and calculation

of costs and benefits include the difficulty of defining, and morally considering, harm (especially irreversible negative impacts); the significant discrepancy between Willingness-to Pay and Willingness-to Accept values (Knetsch, 2005); that CBA 'denies the existence of inalienable rights' (Spash 1994a: 27); the multiple problems from an ecological science perspective in transferring environmental value estimates; and of ecosystem services valuation which goes beyond the scope of micro-economic welfare models which provide the theoretical base and justification for CBA (Spash and Vatn, 2006). However much maligned, CBA is still generally regarded as 'one of the best tools that governments have to appraise and prioritise investments' (Atkins et al., 2017: 6). In contrast, Clive Spash early on not only criticised economic valuation methods but fundamentally questioned their appropriateness in environmental management and decision-making (Spash, 1997).

Criticism of CBA and cost-effectiveness methods also featured in the EU-funded Concerted Action on 'Environmental Valuation in Europe' (1998-2000, ENV4-CT97-0558)¹ which built on work conducted under the 'Valuation for Sustainable Environments' (VALSE) project (1996-98; ENV4-CT96-0226)² which demonstrated 'effective social processes for valuation of environmental amenities and natural capitals for conservation and sustainability policy purpose' (O'Connor et al., 1998, p.2). The EVE project highlighted CBA's limitations especially in capturing biodiversity loss and climate change impacts (Spash, 2000c), its challenges with regard to its normative assumptions and possible alternatives to capture value plurality (O'Neill and Spash, 2020), health (Willinger, 2001) and benefit transfer (Navrud and Bergland, 2021). It was Clive Spash's first large international grant as project coordinator which he concepted with interdisciplinarity at its heart. The consortium were academics and experts from a range of disciplines including sociology, human ecology, philosophy (and particularly ethics), economics and accountancy. Invited workshop participants included academics and actual policy- and decision-makers working for Government institutions or Quangos. Similarly, the Social Psychology and Economics in Environmental Research (SPEER) project funded by the European Science Foundation (1999-2000)³ connected researchers across economics, social psychology and philosophy in two international workshops to advance research on environmental problems and methods and stimulate future collaborations. Such interdisciplinary approach - not just by name but fully embedded in the design and way of working - was then rare and resulted in workshops that constantly mixed disciplines in plenary discussions and working groups, emphasising

¹ https://clivespash.org/eve/homepage.html

² https://www.clivespash.org/research-programme-projects/research-projects/valse/

³ https://clivespash.org/speer/homepage.html

thinking and communicating across divides and better understanding ontological and epistemological differences, use of terms and language as well as exploring fusions and alternatives. Fundamental concerns that were discussed included rational choice and decision-making; the environment as a commodity; and acceptable and fair public decision processes (Spash and Carter, 2001). Outputs acknowledged limitations in existing disciplinary and institutional approaches and identified and discussed different ways of framing issues and advancing more participatory, ethical and holistic decision-making. The EVE Research Policy Brief Series published in 2000 and 2001⁴ in that sense is as relevant now as it was then.

NEW OR DIFFERENT METHODS AS A VARIABLE AND STRATEGY FOR CHANGE

A second strand, arising from the first of critiquing existing methods and decision-making approaches, is the explicit focus on reshaping methods. Amendments to existing and creation of new methods aimed to compensate for weaknesses in current mainstream applications or to influence and change the framing and outlook on complex challenges. This in turn affects who is involved and listened to in evidence gathering and decision-making. Clive Spash's work and collaborations focused on using different or amended methods to measure attitudes, preferences and norms; highlighting multi-criteria analysis (e.g. Munda, 2000) and public participation (e.g. De Marchi and Ravetz, 2001); and developing deliberative participatory approaches to valuation (see e.g. Spash and Vatn, 2006; Spash 2007 a, b).

Experimentation with approaches to and scrutiny of different elements in Contingent Valuation (CV) included assessing lexicographic preferences (Spash et al. 2000; Spash, 2000a also 'tested' visual cues - an artist's impression - about species compositions); ethical motives (Spash, 2000b); refusals to trade (Spash, 2000a); and social WTP in contrast to aggregated individual WTP (Spash, 2007b). Adding reflective and deliberative elements to CV resulted in the coining of a new method, 'Deliberative Monetary Valuation' (DMV). DMV has been described as 'a novel hybrid of economic and political approaches which raises the prospect of a transformative and moralising experience' (Spash, 2007b: 690; see also Spash, 2008a, b; Lo and Spash 2012) which offers a more democratic approach to valuation that can lead to more informed choices and fairer outcomes (Howarth and Wilson, 2006; Wilson and Howarth, 2002). This method was reviewed by Kenter (2017) who later

⁴ Free educational version can be accessed and downloaded from https://clivespash.org/eve/publ.html#PRB

developed with colleagues the Deliberative Value Formation (DVF) Model, informed by social-psychological theory, connecting transcendental and contextual values (Kenter et al., 2020).

Improving existing and producing new methods does not necessarily mean they will soon be widely adopted; they are likely to require training and some understanding of the underlying theory and principles to produce the appropriate mindset and context for their application. In addition to the well documented phenomenon of information overload, recent years have also seen a deluge of new methods, tools, manuals and papers which furthermore indicates that we should not feel surprised encountering fatigue; not just by participants to engage in research and decision-making processes (e.g. Richards et al., 2007) but also by professionals to try out new and better ways of informing and making decisions. This is also not helped by time-constraints due to high workloads and other commitments that are now common in many workplaces.

Furthermore, even if improved valuation studies introduced more meaningful measures and results, this does not necessarily lead to better decisions because political, power and profit interests may sideline or trump social-ecological interests and values. For example, even with 'government-supported' mainstream tools, such as CBA, limited actual decision-making influence has been highlighted (e.g. Atkins et al., 2017; Vargas et al., 2020). Also, despite strong evidence of accelerated climate change and cost studies showing that acting now (or 'yesterday', since most studies were published years ago) is more costeffective than no strong or delayed action (e.g. Stern, 2006⁵; CCC, 2019 for a UK-specific perspective), political and legal decisions may still come out with the opposite. For example, despite the New Zealand government in December 2020 declaring climate emergency, as part of a recent legal challenge, the court sided with the government and ruled that the climate crisis is 'insufficient' to halt oil and gas exploration (McClure, 2022). Similar actions are evident in several other countries (including Australia, UK), all contravening expert advice and seemingly ignoring the evidence that this makes achieving net-zero by 2050 and averting climate change disaster next to impossible (see e.g. IEA, 2021 which could be characterised as a 'mainstream' rather than 'climate change activist' publication). At the same time private fossil fuel extraction and supply companies reported profits in the billions in July 2022.

⁵ Stern's assessment takes a multi-criteria approach rather than narrowly CBA and while praised by some, also received criticism from some who saw it as an underestimate and others who saw it as an overestimate. Spash (2007c; 2009) also points out various other flaws of the review.

In such environmental governance processes, individual and societal norms and values (and associated specific ideology) matter; they shape mindsets and influence the choice and use of methods which in turn influence in varying degrees actual decisions - be that to inform or to retrospectively justify a decision. This is complicated by a multiplicity of formal and informal processes, overt and hidden agendas, legal and regulated procedures and rogue or below-radar behaviour. Plural interests and values compete, with 'win-win' situations rarer than common political rhetoric seems to suggest when outlining 'sustainable' policies that 'balance' social, environmental and economic aspects. The dominant political and economic modus operandi which citizens support, tolerate or actively challenge, is focused on individual interests and profit; it is reluctant to devise and enforce strong policies and regulations to engender ecological sensitivity, healing and more equitable ways of meeting societal needs or nurturing community-driven and -oriented change. The experience of extreme environmental and social negative impacts become temporary headlines rather than effective alarm bells.

Clive Spash's various editorials for *Environmental Values*, and his video-recorded talks and interviews, have provided examples and arguments to illustrate the case (e.g. Spash, 2016, 2017a, 2020a, 2021). Other ecological economists, scientists and artists have similarly amassed evidence and arguments of the ills of the time and the surprising lack of concerted high-level initiated efforts. This then essentially puts climate change mitigation and adaptation actions below economic growth, housing, health concerns; thereby bizarrely storing up more trouble longer-term for exactly those issues. In his efforts to help others to see and address not just the social-ecological and political-economic challenges but their underlying causal factors and drivers, Clive Spash has been working on defining an alternative stance to mainstream neoclassical economics. Outputs include edited volumes (e.g. Spash, 2017b) critically analysing how economic systems, power and politics operate and showcasing what ecological economics can offer. Fundamental to that work is linking the biophysical reality with social and economic realities and identifying and developing meaningful and realistic inputs for conceiving and enabling an alternative social-political and economic system.

FROM ECOLOGICAL ECONOMICS TO SOCIAL-ECOLOGICAL ECONOMICS

The third strand in Clive Spash's work highlights more explicitly the importance of ontology. Critical Realism has been the theoretical anchoring for his thinking and work, and

fundamental in his ambition to develop an integrated interdisciplinary social theory (see e.g. the Preface in Spash 2017b). His editorial for *Environmental Values* 27(3), aptly entitled 'Facing the Truth or Living a Lie: Conformity, Radicalism and Activism' (Spash, 2018), captures the crux of the problem concisely and bluntly: the social-ecological crises are marketed as a need for innovation and greening and thereby avoiding (if not supressing) a debate for systemic change. This malaise is evident in using metaphors and abstract terms such as 'sustainable' and 'greening' and speaking about opportunities rather than challenges or problems. Postmodernism and a preoccupation with constructed individual and social realities may help highlight the range of human experiences and perspectives but are fuzzy on the actual biophysical and socio-political reality. Phrases coined by marketing and political lobbying seem to carry more weight and conviction than actual scientific evidence and critical debate and thereby strengthening democratic scrutiny and accountability; lies and misinformation can spread like whirlwinds and linger, sometimes even becoming the dominant discourse or 'Parler'. Intensive social media use and constant exposure to advertising, marketing, political spin risk reality becoming a backstage that few see or enter.

Relatively more recent work by Clive Spash therefore still focuses on highlighting and explaining the blindspots and myopia of the current dominant neoliberal capitalist system and social-ecological failures or crises. However, it also begins to more clearly and coherently sketch an alternative pathway to facilitate a transformation towards a social ecological economics system. The emphasis is on transformation rather than transition because fundamental changes are now required. A good example is the 're-connecting economic with reality' article by Spash and Smith (2019). Social ecological economics (SEE), based on a critical realist ontology and epistemology, is envisaged to indicate a marked shift in dominant environmental, social and economic values, policies and actions, with three core characteristics or changes.

- (1) SEE emphasises and supports critical probing and discussion of the 'true' state of the world;
- (2) In a SEE system, people accept shared responsibility for what has been happening (impacts, challenges) and should happen (action); and
- (3) SEE shifts the focus of climate and ecological emergency from softening or reducing impacts to dealing with the causes of the crises.

First, probing into causes and debating should lead to a better understanding of the variety of processes, systems and options, eliciting interconnections and interdependencies. In a democratic system, one would expect that this already exists. However, the rise of

popularism and authoritarian and fascist political parties in Europe and beyond are symptoms that the political system is in a precarious state and not necessarily conducive to such open and critical examination which is advocated as being necessary for SEE. The unhelpful mainstreaming of seeing and discussing the economy as something separate and 'above' society is problematic, because an economic system inherently relates with social, institutional and political factors and systems. Hence Spash (2008a; 2020b; 2021; Spash and Smith, 2019; Spash and Guisan) and others (e.g. Brand et al., 2021) draw on the work by Karl Polanyi (e.g. Polanyi 1944; 1977a, b).

Second, unlike much research that focuses on individual behaviour and nudge theory, the emphasis in SEE is on shared responsibility, alongside individual responsibility. This may help get beyond a blame culture or passing responsibility up, down or across institutional structures and governmental or organisational levels. Instead, challenges would be approached from a viewpoint that each and every person, institution and nation carry responsibility. Civic pressure would influence economic, production and political systems to follow suit in adopting more holistic, equitable, benign and restorative policies and actions. The switch in emphasis from individual to social and shared could fundamentally change the readiness and attitude to engage in tackling damaging social and ecological impacts and in mobilising concerted efforts across all governance levels, sectors and nations.

Third, an integrated SEE governance system would focus on dealing with the causes of ecological, social, economic interlinked problems. In relation to accelerated climate change this means that actions of mitigation remain crucial alongside adaptation. IPCC's work, for example, initially focused largely on climate change science (IPCC's 1990 and 1992 reports⁶), mitigation measures and the adaptive capacity of ecological and social systems (IPCC's 1995 AR2⁷). The adaptive capacity of ecological systems is now reported as being largely reached (IPPC's 2022 AR6, WGII, C3⁸) and thus adaptation measures in the build environment and land use management are key alongside zero-carbon transition strategies focused on mitigation. Larry Susskind argues that the general public is likely to relate more easily to adaptation rather than mitigation but eventually will through their own changed actions or lobbying address the causes⁹; adaptation efforts signal more certainty than exists for mitigation (Susskind, 2010). In recent decades, addressing the causes has proven to directly challenge existing spheres of power and influence. Ecological activists and

⁶ https://www.ipcc.ch/report/climate-change-the-ipcc-1990-and-1992-assessments/

⁷ https://www.ipcc.ch/report/ar2/wg1/ar2-economic-and-social-dimensions-of-climate-change/

⁸ https://www.ipcc.ch/report/ar6/wg2/resources/spm-headline-statements/

⁹ Larry Susskind (MIT) Planning for Climate Change https://www.youtube.com/watch?v=DQMRv-dA5IU

journalists' who defend nature against damage or report such causes have had to endure threats or worse. In 2021 there were 358 recorded murders of ecological activists across the globe (McVeigh, 2022); others have suffered incarceration or physical and psychological harm. With greater media coverage and awareness, civic outcry and pressure against such behaviour, and injustices more generally, can cause situations to change and systems to flip (e.g. the Basque conflict changed following the murder by Eta of Miguel Ángel Blanco; Arabic spring). Stronger laws and regulations, and ensuring their effective implementation, would be required to fulfil the social contract and facilitate transformation in increasingly volatile times (due to economic, environmental and social pressure points) without descending into authoritative, military or chaotic political systems. 'We live in dangerous times' (Spash, 2017: xvii).

A critical realist philosophy of the sciences is proposed because of its depth and propensity to accommodate complexity and emergent behaviours, situations and processes with reference to underlying structural aspects all of which are part of reality even if we do not sense, debate or pay any attention to them (Spash and Smith 2019: 216-217). Reference to ontology and epistemology and a focus on methodology are all strongly represented in Clive Spash's own work and edited publications (e.g. Spash, 2017). Furthermore, a focus on values, and hence the third part to philosophical underpinnings, Axiology, is also clearly evident. For example, mainstream neoclassical economics is criticised for its narrow use and meaning of 'value' and instead the case made for value pluralism. Clive Spash's contributions are particularly significant in relation to criticising utilitarianism and highlighting lexicographic preferences, incommensurability and the intrinsic value of Nature (e.g. Spash 1998; 2000a; Spash and Simpson, 1993). The next section explores the role of 'values', and importance of Axiology alongside Ontology and Epistemology a little further. The reason is to explore some complementary arguments to help pinpoint the crux in the social-ecological-economic divides, and offer a signpost for SEE synthesis and transformation; thus it can help explain our bizarre mainstream development trajectory with which the paper started and contribute to a plausible alternative scenario.

VALUES IN ECONOMICS AND DECISION-MAKING

Spash and Smith (2019: 219) refer amongst others to Kay et al.'s (1999: 737-740) work stating that 'science informs but decisions involve ethics, values and concerns, visions of the future and socio-political context' and later in association with 'values of modernity' that 'attempts to remove values for hegemonic conformity merely create the contradictions of new environmental pragmatism in the modern environmental movement' (Spash and Smith,

2019: 222). Economic valuation and value were a focus in Clive Spash's early work and projects and continue to be discussed, largely from economic, environmental ethics and political perspectives.

Holism

Attention to 'values' in analysing the current malaise is crucial to better understand what has been sidelined and lost. My argument here is that Axiology is as important to emphasise and explicitly embed in the SEE framework as attention to Ontology alongside Epistemology. This section builds on but also extends Clive Spash's work on values in reference to uses and insights from mainstream and heterodox economics and environmental ethics. While a compelling case is made, Clive Spash's work finds strongest traction in ecological economics, heterodox economics and economic history circles and also conservation biology (his plenary presentation to thousands of participants at the joint 27th International / 4th European Congress for Conservation Biology in 2015 earned him a standing ovation), but only partly reaches beyond those disciplinary boundaries. Influencing political change and gaining wider traction beyond academia has in recent years led to more media interviews and actively supporting environmental protests¹⁰, making connections with various SEE-relevant campaigns and groups. The focus of this section is to explore a complementary way of explaining social-ecological-economic fractures and blindspots and how greater attention to these may then also help provide a wider arena for SEE to take roots.

A relevant starting point is another passage by J.S. Mill (Mill, 1848/1878) about the energising, complementing and 'whole-making' effects of a person spending time in nature away from societal activities and man-made surroundings:

'It is not good for man to be kept perforce at all times in the presence of his species. A world from which solitude is extirpated, is a very poor ideal. Solitude, in the sense of being often alone, is essential to any depth of meditation or of character; and solitude in the presence of natural beauty and grandeur, is the cradle of thoughts and aspirations which are not only good for the individual, but which society could ill do without.'

Time spent alone in nature helps grounding thoughts ('depth of meditation') and drawing of energy, inspiration and guidance ('cradle of thoughts and aspirations'). It helps to re-engage and ground oneself, realise misdirection or distraction and overcome trauma that is experienced in varying intensity and extent by everyone. Current educational systems tend to

¹⁰ See https://www.clivespash.org/social-ecological-activism/

focus on knowledge and basic academic and employment-related skills rather than overcoming and dealing with trauma or spending time to draw energy and inspiration from nature and look after it in return (the provision of Forest School is probably the closest to that in a UK context, for example). Mill's passage describes solitude in nature as being something complementary to our sociable self but essential to being and feeling full of wholesome thoughts and aspirations. The different kinds of connections with other people, biota and abiota are all being essential for a 'whole', healthy individual and society, and holistic perspective.

Reading the passage also evoked considering the need some 'unknowing', akin to unlearning (e.g. Becker, 2005), to be able to break through narrowly conditioned and set ways of thinking and open up for new ways and different kinds of knowing (and learning). Similar arguments are found in Buddhist and Taoist texts such as teachers sending their students out to become 'empty' and open for the Tao (not the same but to some the closest would be 'the Divine'); something beyond and complementary to knowledge.

In addition to ethical debate (a key concern in Clive Spash' work), spiritual and metaphysical aspects appear to have also vanished from social-political debate and decisionmaking and a close tie between religious and political leaders and influences may not be desirable anyway. However, explicit attention to the underlying and promoted values in debates and decisions should be sacrosanct (e.g. Eliot, 1948) and hence the need for ethics becoming again a firm part of the economics-politics relationship. A successful economic system needs labour, resources and favourable political conditions and support; political cycles in turn need strong economic performance. What different political-economic systems try to achieve and look like is a crucial point and will vary with different value positions. Over recent years an 'experiment' is unfolding in which explicit debate and scrutiny about values and principles have been stripped out Orwellian style (often subtle, incremental and confusing – but traceable). Signs include the behaviour of several nations' leaders, political and economic elite showing despicable, power-hungry, ignorant and self-serving statements and (in)actions which, while challenged by some, essentially fester and have become accepted (e.g. in some well-known democracies such as USA and UK people of such behaviour have been selected as leaders by their parties and the majority of citizens casting their vote supported them). It has also already been demonstrated that people in situations or systems guided by authoritative or misguided leaders and suppressing empathy and moral judgement are capable of horrible things (e.g. the well-known Milgram experiment or the Asch conformity experiment). By the state denouncing or ignoring social, ethical, moral and democratic values and principles, the social contract is in danger.

Indeterminacy

With regard to environmental and climate change policies, our current politicaleconomic system requires some certainty, yet the nature of Nature is indeterminacy. There is no certainty on how some human behaviour will affect ecological health and environmental cycles; innovation and technology may not come timely nor are they without negative 'sideeffects'. In fact, the opposite could be argued (and Clive Spash has done so), namely that many hailed fantastic inventions have contributed to massive resource exploitation and pollution and led to widespread complex challenges; be it forever chemicals, or invisible micro-pollution of air, water, habitats and pretty much all of the human food chain. This seems to signal an inability in developed (and many developing) nations to share and coexist with nature; instead taking over (developing) more and more. Ecological recovery policies and 'rewilding' projects may indicate some small changes but are only slowly gaining strength, are sparse and fragmented. Nature-near societies are threatened by national and international corporations exploiting shared or protected resources for profit maximisation (e.g. Amazonian rainforest). Some perspective-changing encounters that act as a paradigmshift are limited to some individuals rather than a societal trend. Consider, for example, Val Plumwood's deeper understanding of wild nature after being rolled under by a crocodile (Plumwood, 1995); or Paul de Gelder's change in perception of sharks from aggressive to threatened and defenders of their territory after losing his right hand and leg (Segalov, 2022).

WHAT NEXT? CATALYSTS FOR FACILITATING TRI-PART TRANSFORMATIONAL CHANGE

The previous sections have on the one hand characterised and critiqued the dominant political economic system which seems to have stripped out ethical grounding and on the other hand offered some alternative propositions. However, how to manage tensions between pluralistic strands and different ideas and how to move out of one system into other workable political-economic pathways that enable a social-ecological recovery anchored in strong (rather than weak or rhetorical) sustainability is less clear. What might be the 'gluon' and catalysts to help facilitate social-ecological transformation? The missed opportunity to pull different environmental factions together early (in the 1970 and 80s) and put stronger political pressure on politicians, industry and finance to enable transformative action was lamented as one of the big regrets when Gus Speth reflected on the 50th anniversary of Earth Day in April

2020¹¹. Whether this would have in fact worked or led to a pragmatist approach that essentially would have substantially watered down messages and actions and risked becoming part of the problematic mainstream (Spash and Smith, 2019; Spash, 2020b) is difficult to gauge. Still, it raises the issue of what and who will exert environmental political pressure to trigger a systemic and co-ordinated change rather than fragment further and what may narrow the gap between 'real conflicts between the values of modernity promoted by industrialised technologically driven economies and other types of economies' (Spash and Smith, 2019: 222).

What seems feasible and in the control of many to avert social-ecological collapse? Three suggestions are made that could have a wide reach and transformative capacity, aligning with a critical realist framing and paying attention to Ontology, Epistemology and Axiology: education; voluntary individual and social simplicity; and communities of collaborative action.

First, change would seem most easily facilitated through the educational system considering all its tiers but here paying particular attention to tertiary education. Higher education has seen a trend, in line with the observations and critiques in previous sections, towards bureaucratised and corporatised institutions with students as customers, to whom their teaching products and research opportunities are marketed and past prodigies used in advertisements. Tertiary education happens at a crucial influential time of young adults transitioning into a profession. This can be a period of possible reorientation and freedom to explore, unlearn and discover new communities of thinking and practice. Clive Spash has been engaged in university teaching for over 30 years and influenced many ecological economists in their thinking. However, change does not just have to happen for students of economics and all levels within the educational system and its underlying philosophy need attention. Recent trends have been for secondary and higher education to prepare students for the workplace rather than for life. Some countries have cut funding for and delivery of subjects such as the Arts, Humanities and the Classics yet those subjects tend to elicit and critically discuss ethical issues and different value positions. While specialism and expertise are needed, narrow disciplinary pathways and restricted choices seem unfortunate and illprepare young people for reality and a good life beyond paid work and financial security. STEAM (Science, Technology, Engineering, Arts and Maths) has evolved as a strong current through the educational sector in an effort to encourage creative approaches and inter- and trans-disciplinary learning and working but key drivers actually largely arose from a neo-

¹¹ https://thenextsystem.org/learn/stories/earth-day-50-movements-past-dialogue-its-future

liberal mindset, namely to produce an agile innovating workforce and for the creative disciplines (such as Art and Design) to get access to funding that was increasingly diverted to STEM subjects in a rapidly digitalising and innovation-driven political-economic context (see e.g. Catterall, 2017). However, according to Carter et al. (2021), there is considerable potential to use core STEAM principles to refresh the educational system and deliver more holistic approaches to learning and becoming critical of underlying values, to connect with 'reality', for stimulating mindfulness and awareness (not just knowledge), to use more practice-based approaches and to instil agency, political engagement and social-ecological responsibility (see also Schmid and Nesterova, forthcoming, on building transformative capacity). STEAM and other transdisciplinary models could play a huge role in helping to address complex sustainability challenges rather than superficially fix a broken capitalist system. A critical realism base, inter- and trans-disciplinary (collaborative, complementary) approaches and methods and a social-ecological enlightened value system in education are possible and could become the norm rather than exception. This, however, requires the will, resources and push to adjust teacher training, and make philosophical and structural changes in education systems.

Second, the increase in visible and experienced social-ecological and politicaleconomic crises may soon spurn a bigger push by policy-and decision-makers to take bolder, stronger action. At this stage a 'transition' seems less realistic and a more drastic 'transformation' necessary to manage, rather than being overwhelmed by, disasters and chaos; if not, military rule rather than social-political reforms may follow. Considering resource pollution and scarcity issues, sudden and more widespread loss of livelihoods and impact on food production and distribution, a focus on basic needs will come to the fore. Emphasis on voluntary simplicity (e.g. Bort and Kieser, 2023) and what a 'good life' means, weaning us off a consumerist and money-focus to learning to live with the basic ingredients and not taking more than we need; instead sharing and giving back any surplus time, labour or resources to meet others' (humans, biota, abiota) needs. Permaculture principles and shared community endeavours are already evident but not widespread. As Spash (2017a) argues, simplicity and sufficiency here is meant in a social-minded context that encompasses some self-sufficiency but not in a neo-liberal system kind of way. Frugality is also likely for most by necessity and hence we need entrepreneurism with conscience for a stationery state, or degrowth (Hickel et al. 2022), rather than growth (Mill, 1848/1871).

Finally, this change needs enabling at all levels from international, to national, to regional, local, community and individual level. In the light of lack of concerted and strong

action by governments, community and citizen efforts have been bubbling up to deal with causes, addressing mitigation and adaptation in their communities. To pick an example, close to my home, a socially economic and ethnic diverse area in Birmingham, England, called Balsall Heath (which is in the top 10% of most deprived wards in the UK) has been active in sharing information, mobilising and supporting locals in endeavours to address ecological and climate emergencies in their neighbourhood, including through energy-retrofit lobbying and action¹², community outreach and support, social networking and sharing of resources. Other projects across Europe and beyond range from challenging elites and purist forms of community action of extreme frugality to alternatives that Clive Spash and others may critique as not being sufficiently divorced of the current system (such as nature-based solutions endeavours). How to negotiate and achieve going beyond greenwash and feelgood, insular or individual action to socially mobilised and shared widespread action leading to 'radical' change in economic and political thinking and system(s) and accepting and expanding collective causal responsibility and action will be an interesting challenge (Boscov-Ellen, 2020; Spash, 2020a). Regarding Clive Spash's work, more recent publications included videos and interviews relating to civic action, signalling the need for going beyond knowledge and words to phenomenological expressions in aiding the transformation. Tricky issues will be manifold, amongst them how to stop cost-shifting. Can we regulate and 'police' in a socially driven rather than authoritative system? What are the realistic levers? Since different economic paradigms have very different foundations (theories and assumptions), different approaches and methodologies working through the transitional phase to then achieve actual transformation based on a holistic ontology (in addition to Spash's work, see also Avery, 2004) has at no point in history looked more necessary but also less likely, although possible.

By drawing on Clive Spash's and other relevant work, this paper illustrated that reconnecting with social-ecological realities requires attention to ontological, epistemological and axiological dimensions. His work has significantly impacted and inspired many people with an interest in political economy and ecological economics, but his attempts to bring different factions and disciplines together (even within heterodox economics) have encountered difficulties and been limited. How to disrupt, yet not always oppose (and fail bringing people together), and how to change the system without siding with the current powerful profit-oriented but misguided camp will remain real challenges in the social-ecological transformation journey. Similar to Clive Spash's efforts and successes, the

¹² See e.g. https://www.facebook.com/RetrofitBalsallHeath/ (using facebook shows that 'purity' of action/choices is moderated by pragmatism of reaching people); also https://climaniathegame.com.

academic community can engage in action research and champion transdisciplinary methods and approaches to foster a wider perspective and critical engagement with the socio-physical reality so that we can recognise and reduce green-washing, menticide and manipulation, move away from a primary focus on profit and foster social ecological awareness and principles.

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