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Policy Perspectives for Socially, Spatially, and Temporally Embedded and Dis-Embedded Agents

Henning Schwardt

University of Denver
henning.schwardt@du.edu

Abstract

Economies are complex systems. To enhance our understanding in analyses, we have to introduce simplifying assumptions to allow the construction of analytical frameworks. Under different assumptions, different analytical frameworks result. The vantage point that we choose for analyses can shape what we see, and how we see it. There is no singular nature of socio-economic reality, then. Insofar as economic analyses serve to inform policy makers, differences in analytical frameworks may be expected to lead to differences in policy frameworks developed from them. We discuss different areas in which decisions about the construction of analytical frameworks impact policy approaches. We focus in particular on conceptualizations of individual agents and their relation to and position in their social and economic environment, time, and space.

Keywords: Policy-making, embedded agents, dis-embedded agents, space, time, socio-economic

JEL codes: B50, A10, D01, D04

I. Introduction

An economy is a complex system, embedded in the complex system society, and the complex systems of our natural environment. The complexity is the result of heterogeneous agents interacting. Their interactions result in emergent effects; that is, effects we can only understand at the level of the system, not by analyzing its individual units. In this environment, we see non-linear and non-singular processes showing path dependence, circular and cumulative causation, non-ergodicity, and phase transitions, among others (e.g., Beinhocker 2006, Miller and Page 2007, Schwardt 2013, Elsner et al. 2015). For our understanding of complex systems and our ability to engage them, we have to find ways to provide a simplified representation of the system in question. A better understanding of the area of interest may lead to an enhanced ability to exert some control over it, for instance in order to reduce the risks to our livelihoods that we may face from the dynamics or outputs of the system in question or to enhance its functioning against some objectives we have defined. Given the complexity of the underlying system, how we approach our attempts of enhancing our understanding will always contain a measure of subjectivity (e.g., Carpataux and Crevoisier 2007; relatedly, Clements 2019). Our approach, will to some degree shape what we see and how we perceive what we see and will therefore be instrumental for our framing of economic conditions and issues, and the tools we consider for influencing them.

At the very heart of differences between economic schools of thought, we can identify different ontological positions. For the detailed discussion in the body text, we will focus on the neoclassical school of thought, on the one hand, and on original institutional economics as one approach to evolutionary economics analyses, on the other. In line with scientific approaches until the later 19th century, a guiding assumption we find in neoclassical economics is that there were fundamental stable causal relations in economic systems (Corpataux and Crevoisier 2007). Neoclassical economics has for some time laid the foundation for economic analyses and policies, and provides the reference frame for extensions, such as for instance in behavioral economics, that we can locate in

the 'protective belt' around the 'hard core' that the neoclassical core model defines (Blaug 1975). There is a range of schools of thought that focus on dynamics in economic systems that present in specific contexts, which are man-made and endogenously changing. Under such a perspective, an abstraction from the context-dependent specificities of a situation may present a, possibly severe, limitation to the understanding of economic issues and subsequent ability to formulate policies. Original institutional economics (OIE) provides a framework for analyzing economic issues as embedded process. For a detailed overview of distinction proposed to contrast mainstream, orthodoxy, and heterodoxy, see Mearman (2012); for a policy discussion drawing on a mainstream and heterodoxy distinction, see Ramazzotti (2022). Any individual point of distinction between approaches to economic theory that may fall into current mainstream and non-mainstream categories, is hard to make, as we see there. For a policy-focus, though, Ramazzotti argues that we can make a distinction between approaches that are oriented on relative prices and attempt to let those form in a way that supports underlying understandings of a well-functioning economy, as mainstream, and approaches that recognize prices as the outcome of given institutional structures, with more open sets of objectives that reflect an understanding of economic activity as a component of tools that serve to reach broader societal goals. Some of the discussion we undertake converges on Ramazzottis's stance, some of it emphasizes complementary aspects.

In terms of the approach to economic inquiry, in the respective epistemologies and methodologies, contrasting approaches follow. For the former ontological position, our focus will lie on assumptions that frame the search for generally valid causal relations in neoclassical theory and its static equilibrium frameworks (again reflecting 19th century tools, in this case those of the physics at the time). We may nevertheless note a convergence of policy suggestions between this framework and frameworks such as Austrian, Ordo-Liberal, Monetarist, New Institutional, or Neo-Schumpeterian economics who all build on a methodological individualism and emphasize markets and price signals as preferred tools for approaching economic issues. Neoclassical economics rests on 'first principles' to construct an explanation, or, lately, on the identification of 'stylized facts' to be brought back to first principles. Regarding original institutional economics, we can emphasize its proximity to, a certain degree of compatibility with, and in particular general policy convergence with schools of thought, such as Marxist, post-Keynesian, or structuralist, amongst others. All of these draw more broadly on complex systems notions in their foundation, not infrequently particularly centering on evolutionary processes of different kinds, that generate endogenously emerging novelty and change in economics structures, or are at least compatible with such approaches to analyses.

In the following section 2, we will discuss assumptions relating to the relations between individual agents, as well as their embeddedness in socio-economic structures. In section 3, we will discuss the relation of individual agents to their physical and spatial environment. In section 4, we will discuss the relation of individual agents to a temporal dimension and related informational aspects and the reflection these aspects find in the decision-making processes of agents. Section 5 offers a discussion of results and their impact on policy recommendations, as well as outlines for policy approaches that may be expected. Section 6 concludes.

II. The Relation of Economic Agents to Others and to Their Social Environment

When conceptualizing an individual agent one thing we can consider is how they are positioned with regard to other agents. Specifically, assumptions may differ about the role a social environment, beyond individual relations, may play with regard to agents' courses of action and about an integration of the relation of an agent to their economic environment as a specific focus within their general socio-economic structure.

i. Relation to Other Agents and Social Environment

In neoclassical economics, the individual agent is the focus for building analytical structures. This individual agent is isolated from their social environment and solely focused on material consumption (we can deduce this from the foundational scarcity assumption that refers to tangible resources). In their interplay with profit-maximizing producers, a market outcome results that provides the reference point for an evaluation of model outcomes under different parameter constellations. Allocation problems are at the heart of problem-discussions and solution focuses.

Positive feedback between agents is excluded by assumption, as such dynamics would prevent the manifestation of the equilibrium outcome that anchors the entire analytical structure. Consequently, social conventions, envy, status and relative position, or other factors introducing potential positive feedback dynamics, do not factor into agents' decision-making. Other outside influences, in the form of marketing efforts by firms, for instance, do not play a role either (for overviews over comprehensive critical considerations of the numerous assumptions introduced

Volume. 18, Number. 2
DOI: 10.38024/arpe.283

to justify the choice of methods and construction of the mainstream analytical framework, see, e.g. Mirowski 1989, or Keen 2011, amongst others). In terms of argumentation and rhetoric, such influences are excluded from the neoclassical framework as outside the purview of economists, but rather left to psychologists, sociologists, and others (e.g., Robbins 1962). Later attempts at integration of such issues in a neoclassical framework have generally introduced logical inconsistencies into the analytical structures applied. A turn to game theory has allowed to bypass such issues to some degree, but the absence of a well-theorized social structure in equilibrium approaches to economic analyses has still left a disconnected analytical structure that offers various degrees of freedom regarding the verbal presentation of analyses and results.

In the neoclassical modelling approach, the isolated individual is necessary to avoid feedback effects among agents. Within the framework, there is no consideration for where or how a socio-economic environment might emerge, nor for how it may change. In contrast, once a social embeddedness is included into analytical structures, how relations to others are structured becomes a necessary consideration. Social rules and norms provide such a structure, as the institutions that coordinate expectations and align actions among agents. In OIE, such institutions, as Veblen's 'correlated patterns of thought' (for a discussion, e.g., Cordes 2005)) establish 'socially prescribed patterns of correlated behavior' (Bush 1987) which provide a structure that reflects 'collective action in restraint, liberation and expansion of individual action' (Commons 1934, p. 74). Reflected here is the recognition that moving into an unknown future (also see section 4), people require some coordination and agreement, which can be captured as rules and norms guiding them. Restrictions to individual choices that such rules and norms may entail are exactly required to enable individual action in the first place, through the degree of predictability in interdependent processes and decisions that they provide.

The possibility of a coordination of actions that institutions offer lets them be reaffirmed by individuals' actions at the same time that they provide the decision environment in which actions are undertaken (e.g., Hodgson 2003, Lawson 2009). They have emerged from ongoing interactions over time (e.g., Veblen 1954) and carry in themselves the value structures that serve as guidelines and motivations for action (Bush 1987). How economic activity is undertaken will be shaped by the social structures in place; and in turn, in a circular causation pattern, specific power structures and ideological narrative are shaped by the production structures and relations in place. In these institutions, the subjectivity of a socio-economic environment stands in clear relief. Economic activity, in its embeddedness here, is context-dependent in all its facets. A universal reference point does not exist.

A corollary of a social structure is an awareness of power. For the isolated individual, power is not an issue. For instance, the endowments someone can sell will command the given market price for them, independently of any social identity dimensions of the bearer of these endowments. As a supporting assumption, we can also put forth that someone's ability to fill a position, capacity to perform tasks related to the position and embeddedness of a position in larger organizational scheme, were independent of a social environment. Once social rules and norms play a part, such statement is no longer necessarily true. Introducing the possibility of differentiated roles within a specific socio-economic structure, of power and status relations, the ability to gain by virtue of position and socio-economic identity, can also follow, and social identity dimensions may be expected to find a reflection in societal hierarchy. When we think about policy, the question what may be possible within a given power structure should also be considered.

ii. Relation to Economic Structures

Regarding the relation of individual agents to their socio-economic environment, we can also consider their embeddedness in and relation to economic activity itself. Given that basic needs have to be covered to continue living, how these most fundamental of activities are organized and structured, is a major influence on people's lives. In an economy characterized by a detailed division of labor, people are dependent on being able to gain access to their needs of life through exchanges. In a modern economy, such a participation requires an income. Wage labor is generally necessary for people to participate and partake in society, and to a good degree, for being able to survive. The necessity of wage labor introduces a kind of competition between them that is absent in other forms of economic structure, as Engels (1844), for instance, argues, as similarities of resource endowments within a given community and a restriction of available wage labor by employers would push people into a competitive state that may make it harder to maintain space for more communal relations to be maintained. Veblen (1954) makes a similar point.

If we take a modern capitalist structure as given, we already accept the organization of production around wage labor, among others, and might be inclined to see employment as mutually beneficial, without scope for much

analyses around alternatives, specific necessities and desirabilities, or other questions related to the position of a human being as wage laborer. Managing access to work, for people, and access to labor, for companies, in a stable economic environment then becomes a, if at times implicit, vanishing point for many economic analyses. Relying on market transactions to determine allocation and access, necessitates labor to be introduced as commodified human activity (Polanyi 1944). Otherwise, allocation of labor power would be decided based on non-market criteria. Such non-market criteria could be expected to interfere with, and might conceivably hamper or impede companies' access to the labor power they desire. The basic same argument holds for nature, as land (Polanyi, 1944). Commodification is not the result of a natural process, but social construct, and has to be structured and organized. Who and what gets pulled into the market sphere, and how, is a political decision. Instead of considering allocation of labor within a given structure, a developed social embeddedness of agents in analytical structures can allow to approach production and allocation as provisioning processes (for social provisioning processes, see e.g., Jo and Todorova 2017, Chester 2021).

Under a division of labor structure where part of the productive forces is in the hands of a very limited number of people who can choose and control whom to hire for the labor necessary to operate their assets, the fundamental dependence on wage labor equals unequal power between the involved parties. The only corrective to such private power is either other private power, or power exercised through the public sector. A systemic perspective can open space to shift the analytical focus from the assessment of what a best, or least bad, decision may be within the system that is assumed, versus the possibility of an assessment of what the system means with a view on generally defined objectives for human groups and our structuring of the system itself.

III. The Relation of Economic Agents to Their Spatial and Physical Environment

We can consider different aspects of agents in relation to space. One is the relation to other agents, not with a focus on their joint embeddedness in social structures, but in terms of the relational structure of connections and contact; captured as neighborhoods, for instance. We can also consider how the relation to the physical environment itself is approached.

i. Neighborhoods

As above, for the possible spectrum, the individual agent can be considered as embedded in a physical space, or as dis-embedded from it. In the neoclassical core model we find that agents are simultaneously connected to other agents, say as buyers and sellers, or where the flow of information is concerned, but are not impacted by any relations of this type they might hold. Rather, we might envision ad hoc anonymous interactions with random others. At the same time, we can therefore think of a structure where there are no direct relations at all, stochastic or otherwise. We find that there are no learning dynamics, nor social influences on behavior between peers and otherwise related agents, even as information that becomes somehow newly available is immediately known to all. In the model world that purports to identify the natural law-like relations of an economic sphere, for the treatment of space, in general, vector components in mathematical space are labelled as cost to suggest an equivalency in physical space (say, as transportation cost). This holds true for the initial approach and interpretation of neoclassical models offering them as direct abstractions from reality, as for the later approach of interpreting them as analogies to illustrate economic issues (relatedly, Lee 2018).

We can also introduce direct relations, where some agents interact with some, while others interact with others. That is to say, neighborhoods show up, as clusters of interacting agents. If agents' proximity and position with respect to others impact people, then neighborhoods we can identify, be they geographic or by social proximity, production networks that take shape and regional patterns of economic activity, or larger scale organization of economic activity and production, may hold insights into matters of economic relevance. There may be patterns to our relations that will impact potential and outcomes of economic activities. One aspect, to serve as an example, here, that we know about structured networks, is that we can note that changes in behavior spread more easily in well-connected networks, whereas a maintenance of existing patterns is more likely in more isolated cluster structures (for an overview, e.g., Cordes et al. 2021). Such connection and dynamics of possible changes, can have consequences for aspects such as knowledge flow and learning, for social influences on behavior patterns, or on the organization of production processes, amongst others. Patterns found in network structures may then offer information that can help exert a higher degree of control over related processes than their reduction into a cost dimension might allow. We can also consider questions through an economic lens that relate to the construction

Volume. 18, Number. 2
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of space and living space, and what aspects and trade-offs may have to be taken into consideration in related processes.

ii. Resources and Scarcity

Another matter that is touched upon where our spatial and physical environments are concerned, is how to understand resources, or, our relation to and utilization of our physical environment. If we approach economic issues from the perspective of a static equilibrium-based concept, then resource endowments are by definition static. The extent of the commodification of nature as land is given, as is the state of technology. Further assuming that humans want more things than they can have, and constructing the model agents accordingly, posits allocation issues at the heart of economic issues, and of what problems markets are supposed to serve. To integrate this concept into the neoclassical model structure, our ability to employ material to serve our needs, technology, becomes a cost function and the demand for resources becomes governed by their current price. Resources are considered as part of the production process, only, not a general life process.

If we consider economic activity an ongoing process, and human activity and learning driving it and reflected in it, then the scarcity issue can present differently. On the resources side, we find conceptualizations of what resources are and how they come into being. Ongoing processes of learning and skill-development shape the level of technological capacity that a group develops. As human problem-solving abilities change over time, resources are created as a function of what people are capable of doing (Veblen 1954, de Gregori 1987). Technology, as our ability to apply knowledge and tools to the manipulation and control of our environment in acts of skill (e.g., Ayres 1978), contains and defines specific forms of interactions with that environment. What material is available, depends on our understanding of our environment and our ability to manipulate and utilize it. Iron ore is matter until we learn to process and work it. At that point, it becomes a potential resource. Once applications are found that are perceived to have value, to add something to people's lives that some, at least, deem desirable, it takes on economic value, and becomes a resource. Our resource-base is a function of our technology. Technology in turn reflects our 'social knowledge fund' (Bush 1983) and is the outgrowth of our collective learning and its application. Resources are the product of collectively developed technological knowledge, the collective application of that knowledge, and the social rules and norms that are part of shaping things and possibilities as useful or desirable, or not. We can emphasize their role in communities' life processes, here.

While the resource-base for economic activity thus changes over time, at any given point in time non-renewable resources, and renewable ones, are not limitless, and allocation considerations may matter. However, the supply side is only part of what defines something that is limitedly available, as scarce. The demand side has to be included as well to arrive at a concept of scarcity that is economically meaningful. In the neoclassical model, it is the assumption of unlimited wants that creates scarcity as the dominant problem of economics to address. Resources, there, should be allocated where they are valued most, as expressed in a true signal, a willingness to pay.

While the neoclassical formulation is open enough to allow arguments into a function that represent a preference for leisure time, as a catch-all for all time not spent working, such an assumption introduces problems in other parts of the analytical structure. A preference for leisure time would result in a backward-bending labor supply curve, introducing multiple equilibria in labor markets (e.g., higher hours-lower pay, lower hours-higher pay). That possibility is excluded by assumption (of a substitution effect always dominant over an income effect; e.g., Prasch 2008), leaving additional goods and services that can be purchased with more time spent working for wages as always providing higher benefits than increased leisure time. So, to protect the modelling structure, the framework becomes entirely materialistic by default, occasional rhetorical presentation and prevalent partial market analyses notwithstanding. This mirrors the basic assumption of scarcity that arises from unlimited wants that are perceived against limited resources; that is, limitedly available physical production factors.

If we consider social embeddedness, and the influences on individual and collective choices that open up, the wants to be addressed, are not internally fixed to an individual any longer. Insatiable individual material needs are themselves already the product of numerous limiting assumptions; or, if they should find some reflection in the real world, have been learned. Galbraith (1998 and 2007), argues that once needs are covered, the realm of wants opens up, and in this realm people can be steered to learn to continuously want more and new things. After needs are covered, a producer does not, then, so much offer a way to address something that previously could not be, but, rather, stimulates the want once they have the means to satisfy it. Not dissimilarly, Schumpeter (1980) argues production comes first, and potential consumers have to be taught by producers to want their products. To a similar result, Veblen (1954) argues a main area of competition in modern economies is among producers and consumers,

where producers can bring the full weight of the tools of salesmanship to bear to induce purchasing decisions. Scarcity then is a social construct, that reflects dynamics where people have been socialized into a situation where they seek private goods in order to find satisfaction. Evaluations of allocation patterns that we find under such circumstances are necessarily different from the one that the mainstream framework offers.

In contrast to the equilibrium-based structures, where it is exogenous and static, we can recognize that space is constructed when our analytical structure is process-based, as is our relation to it, and changed by human activity. Allowing its subjective-ness and construction to be acknowledged and assessed, opens avenues for consideration that remain hidden otherwise, and which can be highly relevant; for instance, where environmental policy is concerned (for expansions and considerations relating to the relation to the physical environment as a function of socio-economic structures, see, for instance Kapp (2011) and Polanyi (1944)). The subjective-ness of space perception and the collective, context-dependent creation of space opens a view on aspects of people's environment that the treatment of an environment as reducible to a price dimension cannot capture.

IV. The Relation of Economic Agents to Time, Information Access and the Decision-Making Process of Economic Agents

The position of economic agents in, or with respect to, time, is approached differently in different frameworks. Relatedly, model conceptualizations of agents' decision-making are impacted by how we consider time.

i. Time

The position of agents in time shapes our approaches to economic issues as well. Again, we find that in the simplest of approaches to the complexity of economic reality, time is abstracted to the point that it is inexistent in any meaningful manner. The economic structure is collapsed into a point, not only in space, but in time as well. Terms like 'dynamic' may at times be used; however, much like with other terms – from competition, through rationality, waste, or uncertainty – the term is redefined, when contrasted with its use in other common or scientific occasions, to serve the specific purposes and needs of the perspective developed (for dynamics, see, e.g., Samuelson's (1947) comparative static integration of the Marshallian and Walrasian structures; also, de Vroey 2012). Semantics notwithstanding, we compare points, and may describe the way taken from one to the other, or, at most, the predetermined path into a steady state, when we talk about time in the neoclassical framework.

Time can also enter our analytical structure as ongoing process. Ontologically, the difference between neoclassical economics and critical approaches shows in the assumption of ergodicity or non-ergodicity of the economic system. A number of differences that contrast equilibrium- from process-perspectives follow from the consideration of movement through time in a non-ergodic system, versus the required ergodicity of mainstream's analytical structures (on that necessity, e.g., Samuelson 1967; for a recent discussion, e.g., Peters 2019). Long-term averages and correlations may only offer limited insights into a system driven by emerging novelty and innovation. In contrast to ergodic systems, initial positions, and subsequent trajectories influence observed outcomes and averages, as well. We see an a-historic system under the ergodicity assumption, where time can, in fact, be ignored because the aspects that time as process introduce do not impact our understanding of the system, its predictability, or decision-making structures for agents. Time averages in ergodic systems are independent, broadly speaking, of the starting point of a process – history is irrelevant – whereas in the non-ergodic system, different starting points typically mean different paths taken, and different system outputs related to these paths. History matters, in that case, and structures in different localities can differ; with consequences for the functioning of respective systems. Averages can change over time, we cannot define and grasp the system simply by looking back.

This different ontology also presents in the distinction between risk and uncertainty that is predominantly made by non-mainstream economists, as mainstream economics' ergodicity assumption again allows to treat those two as interchangeable. If the distinction is considered, if aspects of the future are truly unknowable, then we can also recognize that our assessment of decisions and decision-making will look differently than in a world under risk only, where expected values may stand for uncertainty (von Neumann and Morgenstern 1944). We approach and evaluate behavior differently depending on the perspective on time that is embedded, or consciously integrated, in our analytical structure (compare, e.g., Simon 1944, Gigerenzer 2007).

Volume. 18, Number. 2
DOI: 10.38024/arpe.283

ii. Decision-making

How agents' decision-making is conceived, depends on the system into which they have been introduced. Their embeddedness shapes their decision space, and epistemological and methodological positions further round out how and where decision-making takes shape. The decision structure in the neoclassical model positions the agent in a price-quantity space and the decision to make is the allocation of their endowments and resulting budget; or, available production factors and resulting revenue. In the timeless and spaceless point to which the system is collapsed, aspects that shape the decision-making of agents in other analytical approaches are removed by assumption at the outset. There is no decision-making process, no prioritization, no information processing and emphasizing, or framing or perception of data and information to consider. There is one calculation that results in a point solution for allocations.

Where agents' embeddedness in and relation to (space and) time is explicitly considered, the subjective-ness of our place in the world finds a reflection in decision-makers and their decision-making. There is also the recognition that agents' mental capacities are limited, and that they are susceptible to the way information is presented, just as they themselves focus on their environment and perceive some of its aspects as information, through the lenses of their socialization. Decision-making processes are not calculations, but rather processes that take place in different parts of the brain and in different ways, depending on how they unfold (e.g., Kahnemann 2011). When agents act under true uncertainty, so-called 'irrationality' and 'biases', that is, behavior that does not maximize some expected value, can be reasonable and in more common usage, rational (e.g., Gigerenzer 2007).

For the temporally embedded agent, following Commons' (1934) concept of futurity, we can identify institutions, social rules and norms, as collective action structures in situations under uncertainty (also compare Carpataux and Crevoisier, 2007). Considering or imagining future possibilities and acting accordingly, becomes a defining moment shaping social structures and their change. Institutions vary with place and time. For individual agents interacting, institutions reduce uncertainty where behavior of other agents is concerned, and enable the achievement of objectives that require collective action (e.g., Elsner 2012).

V. Discussion of the Consequences of Analytical Structures for Policy Frameworks

We have focused on some specific areas in which assumptions about individual agents have to be made to set up an analytical space. These have included their relations to social environment, physical environment, and time. From these relations, and their embeddedness in the respective overall analytical frameworks, follow directions for objectives and tools of the policymaking process that those frameworks set up. We can also consider the structure and focus of actual policy-making processes that the respective analytical frameworks may lead us to expect. As referred in section 1, an analytical framework cannot be constructed without values being introduced through the assumptions made, and policy frameworks that follow from analytical structures will then show the same values, if only by emphasizing some outcomes and objectives, and possible trade-offs involved in trying to reach them.

The objective of economics, as we understand it, is to offer analyses and understanding in service of improvements of people's lives that can be achieved based on analyses of dynamics unfolding in an economic sphere. What kind of improvements are prioritized, even what changes may constitute an improvement, differs between different approaches, and covers questions related to outcomes within a given structure to questions about the structure itself. Instrumental to answering questions concerning the objectives of policies, is how we perceive the situation we want to address. With divergent interests between groups of people, implications of various approaches to analyses may be favored by some group(s) over others.

A challenge with the evaluation of policies and observed outcomes is that such attempts are undertaken from within a specific worldview, and hence reflect our perceptions and interpretations through an already simplifying filter. Once a worldview, or a mental model of the world (Denzau and North 1994, Witt 2003), has taken shape, as the result of socialization processes we have undergone within an institutional framework, outcomes considered, outcomes perceived as possible, and outcomes deemed desirable, will already be a subset of what is possible for a society. Expectations we hold, as a point of comparison to what we perceive will likewise have been shaped during our socialization processes. Insofar as an analytical framework can shape the discourse about a situation, its assumptions may be internalized and drawn on as the natural or intuitive references for comparison and evaluation. Just as analyses are subjective in response to researchers' choices in the construction of their analytical frameworks, so are evaluations of possibilities for and consequences of policy decisions subjective. There is no reason that the outcomes that draw our focus would be amongst the more preferable ones we might identify under some

DOI: 10.38024/arpe.283

more general, objective, or otherwise defined set of criteria that could serve to assess a situation, and the scope for improvement it may hold.

i. Policy Framework Dis-Embedded Agents

In the neoclassical perspective, we assume that agents have a single clearly defined objective that they fully understand, consistently pursue, and for which they can filter information from data without ambiguity or distortions, context-dependence, learning or social environment. Freedom here is interpreted as an individual allocation of resources based on individual calculations with a specific view on individual benefits. All aspects that are considered in a modelling structure, are brought into or discussed with reference to a price-quantity space. This directs the focus for matters of policy to making the economic system function so that resource allocation is not restricted by rules limiting individual choices, or, 'getting prices right' to reflect collective valuations of resources and goods. The first and second welfare theorems provide the normative focus for considerations (Hunt 2002).

The translation of the neoclassical analytical framework into actual policy frameworks is not, in fact, straightforward, though. The neoclassical analytical structure dis-embeds its agents. Generally problematic issues related to the transfer of closed-system analyses to open-system understanding abound (Lawson 1997). Lee (2018) underscores that the model components do not, in fact, have any reasonable claim to representing relevant real-world categories. Even confined to the analytical structure, the general theory of the second best (Lipsey and Lancaster 1956) tells us that attempts at a gradual correction of dead-weight losses through changes in rules to resemble the (suspected) efficient set more and more closely may backfire just as likely as they might succeed. If the second best does not resemble the ideal very much, what are we left with to orient policy choices? Ramazzotti (2020 and 2022) proposes to capture the policy orientation put forward as focused on prices as coordinating mechanism and to contrast this focus with institutions as the focus of policy considerations in critical approaches. 'Market failures' are a case in point, here. Market failures mean incorrect prices in neoclassical theory, corrective measures can be acceptable in this case, including the extension of the market sphere through previously unassigned property rights, in order to internalize externalities, for instance, and more generally, in order for market prices to reflect collective valuations of goods and resources more accurately. We might also interpret the term as markets failing to support our objectives, or even as being suitable for attempting to do so in the first place.

For a guidance offered to policy-makers, the framework leaves us wanting. For prices to orient a pursuit of achieving societal objectives, objectives have to be clear, and how prices are formed – and by extension the utilization of market transactions to address the problem in question – and what and where they can contribute has to be considered. Prices are in some ways very straight-forward, but in a world where social structure, space, and time are realities for agents, they need not be so once we consider them outside of the neoclassical lens. With prices as the outcome of the interplay of rules and norms, technology, and the objectives that people pursue, including power and control, as consumers or businesses, they are not straight forward to interpret. Even an efficient allocation, if it was in fact possible, would reflect underlying conditions, and any changes considered would be focused on these underlying conditions, which the framework offers nothing to analyze or discuss. If conditions are not static and externally given, prices are reflecting socio-economic structures and the forces that shape those. Which prices to take as the correct, or at least a better, reference value, cannot be determined. This is not to argue that prices would or could not be focused on and serve arguments for specific policy programs, but to argue that the analytical structure does not have actual links to the reality that policies shape.

Furthermore, a configuration establishing a competitive environment cannot be derived from the neoclassical market model. To advocate competition based on a modelling framework that disallows all aspects of reality that impact actual competition, may resonate with how we have come to view the world, and our use of competition, for instance in the political sphere. This does not change the fact that the competition in the neoclassical world has no correspondence outside of it, and so provides only disingenuous reasons for policy orientation. The definition of markets is also vague, as space-less and time-less arenas for the coincidence of buyers and sellers. Which rules and norms do in fact structure markets, is not addressed (beyond the emphasis of property rights as a general concept; compare also Schneider 2020).

If the efficient allocation is the objective, the second welfare theorem tells us that given competition, as defined in the neoclassical world, any Pareto-optimal result is possible, given adequate initial redistributions. In that case, to emphasize market outcomes as providing any specific real valuation, is not without problems, as the initial distribution determines whose voice gets heard to which degree, in a one-dollar-one-vote market environment. We also find a recursive reasoning supporting the justification of outcomes, here, as prices are to signal valuation. As

Volume. 18, Number. 2
DOI: 10.38024/arpe.283

final prices determine monetary values of endowments, the monetary values of endowments determine final prices, given technology and demand structure. The income that results from initial endowments of agents determines whose voice gets heard how much. There is no specific normative value, then, in any given outcome, other than, let private agents do what they want with what they have at the outset, which is the assumption going in already.

Against this background, the casting of the 'free' market, and the focus on resource allocation and private consumption, leaves a structure that stretches itself to habitually argue in favor of a limited government presence. Unless a competitive market was the default state that had to be actively disrupted, with the default source of disruptions the public sector, the stated free market – a structure providing the platform for undistorted individual decisions – cannot be clearly defined. A structure without public power to balance private power, tends to allow some private agents to dominate others. A simple withdrawal of the public sector, is then not conducive to competition (an argument basically already made by Adam Smith). What kind of presence brings about a free, or competitive, market, is not something we can answer from the analytical framework. A policy structure guided by a withdrawal of public sector correctives, would always lean towards becoming a tool for the defense of a status quo, with not much else attached to it. The whole structure, and the impossibility of deriving a policy framework from its logic, leaves rhetoric, not reason, as the foundation of policy. Its vagueness turns into arbitrariness, once the re-translation of mathematical results has been undertaken, in verbal analyses that draws on the results of mathematical analytical results. The openness of analyses in complex systems is not overcome, but merely moved to a different stage of the process, where interpretations of outcomes from various modelling exercises are combined to outline a policy position, while leaving the key components of such a position outside the actual analytical structure.

ii. Policy Framework Embedded Agents

Embedding the agents signifies considering agents in relation to their environment, and at least leaving room where we can integrate spatial, temporal, and socio-economic components without violation of the logical structure of our framework. A conception emerges that can help assess what impacts on their lives we may expect agents to face that follow from systemic causes and dynamics. As we embed agents in their environment, we can at least potentially address wider impacts with a consistency that a structure centering on dis-embedded agents cannot offer. For policy guidance, we combine this with questions about what is desirable to achieve. Offering a perspective on how developments agents may face, can impact the achievement of objectives we have formulated, and hence how we structure policy responses. These responses will be part of an ongoing process of assessment, evaluation, and intervention, in which policy itself is part of a circular causation dynamic within socio-economic processes.

Socio-economic interactions are embedded into systems of rules and norms, and their dynamics may differ, across time and in different places. Consequently, there is no reason to suspect that there would be an underlying structure of economic regularities, much less universal law-like conditions and linear(izable) cause-and-effect relations defining dynamics and processes that we could gradually identify in attempts to strengthen our overall grasp of the system, but rather context-dependent ones that are shaped in the human constructs economic sphere and society. We also cannot, then, simply transfer policies from one place to another. Policy becomes an accompanying process to and influence in the ongoing reproduction processes of socio-economic structures (which does not mean that identities in the system would not impose constraints). Means are not justifying ends, but utilized in a process that, for instance, shows trajectories that within certain parameter ranges may be qualifying as ongoing development and progress (Colander and Kuipers 2014).

For policy considerations, in this context, we focus on how social rules and norms, institutions, may be impacting kind and direction of activity, objectives formulated, and their impact on the possible tools to consider for changing outcomes. In order to achieve a given set of objectives – again, not necessarily as specific ends, but as keeping the system in a certain range of output dynamics that support a social provisioning process deemed at least acceptable – we need to understand how dynamics in processes may unfold so that we may be able to influence them as desired. Space and possibly network structures, resources and transmission of information shape what we may want to achieve, and how we might be able to do so. Finally, agents embedded in time, and a non-ergodic system, behave differently than agents who are not, influencing what we might expect from them in response to policies, and what they may hope for or demand from policy actions. Changing outlooks, by impacting institutions, can change behavior (so that, for instance, instead of going with people's habits and working around those to hopefully still combat climate crises, part of any attempts to change behaviors and acceptance for supportive policies will have to be focused on impacting people's understanding of the situation).

If time- and ensemble-averages cannot just be substituted for one another, then an individual moving through time cannot expect the same average outcome as the average from a number of people choosing a certain course of action once, and thus may require or desire different means for protecting and securing livelihoods. We also want to be explicit about trade-offs of impacts in different areas of environment and life and about what we consider acceptable in people's lives, whenever possible with some degree of confidence (e.g., Schwardt et al. 2016).

Context-dependence of activities is displayed here in various ways. An awareness of the situation we encounter will be necessary to improve the chances for successful policy interventions. Agents' positions with regard to notable constraints and risks from natural environment or socio-economic structure, for instance, including what future challenges we may anticipate, can be expected to influence policy stances. Social embeddedness requires a concept of how agents relate. Their relations are captured through social rules and norms. As Ayres (1978) develops, the structure that social rules and norms provide goes beyond the immediate coordination of agents in various circumstances and problem structures. They contain values (Bush 1987) and they are embedded in a narrative that provides overall structure and stability to the institutional environment. This structuring narrative provides the ideological framework within which societal dynamics unfold, making sense of the world, explaining why structures are as they are, and as they are supposed to be. In ongoing socio-economic processes, the context within which these unfold limits the policy space that will be open at any time; not from the self-imposed limitation of policy considered through the lens of prices as guiding and coordinating signals, but because of what is possible to implement in a given context. At least, when communicating suggestions for policies, we need to be mindful of the phrasing and framing of approaches we formulate. How to shift the narrative within the conventional wisdom, for support outside the vested interests, for instance, in order to eventually change the conventional wisdom, if necessary, will have to be part of considerations when changes to a situation are to be realized, as well.

A focus on individuals only, finally, is not sufficient, in this context, as a micro-macro distinction is not strictly possible. Emergence, as exemplified by institutions, for instance, or business cycles, signifies influences that lay outside the individual level, but that will impact the ability to reach objectives, and will therefore be part of any context in which policy proposals are laid out.

VI. Summary and Conclusion

A shared perspective and worldview embodied in their conventional wisdom facilitates interaction between people and allows for concerted efforts in pursuit of their objectives; including presumably an easier time finding agreement on what those objectives may be. The shared conventional wisdom makes searching for, and agreement on potential paths to solving issues easier, as well. Were outcomes to become unsatisfying, due to mental models that are ill-suited to the actual environment, on the other hand, changes may be expected to be more difficult, as people may not generally be willing to easily let go of the ideological frameworks and mental models they implicitly or explicitly hold. If you know the problem are witches, the inclination may well be to try and burn more of them instead of wondering whether your understanding of the problem structure may be inadequate. As the perspectives we work with shape our problem-perception and our approaches to potential solutions, our socialization and ideological background are a major component to our ability to change, just as they are a potential major hindrance to possible changes.

If we posit individual freedom – and we might argue that its support and enhancement can be seen as a unifying thread to economic analyses, even as perspectives and approaches may differ notably – as the overarching guiding idea to structuring human relations, we can distinguish on the one hand, an emphasis on the means to advancing freedom through a market economy argument that centers on individual economic activity and decisions that are unconstrained by collectively set restrictions. On the other hand, we can delineate a support for freedom for the embedded agents as a reduction of constraints to their ability to develop their personal potential (following Sen (1999) and his understanding of individual freedom, for instance). This second kind of freedom can be attained more reliably if the means are made available collectively, mindful of systemic relations, and not through for-profit structures, nor the dominance of efficiency-informed thinking in public service provisions.

We saw that the neoclassical policy structure relies on a set of assumptions which result in a framework that provides a rhetorical structure to justify policy decisions without, however, informing them in a structured manner. For one, policy recommendations variously take the form of a restatement of its original assumptions (from the conception of competition to fostering competition, from its conception of welfare or benefits to advancing consumption, from its consideration of market interactions to emphasizing markets as problem-solving tools, and so on). Schumpeter (2003, p.77, fn 5) makes a similar point, referring to its theoretical structure as capturing truisms,

Volume. 18, Number. 2
DOI: 10.38024/arpe.283

such as people's ability to make reasonably good decisions in familiar situations, and give them a discipline-specific jargon to dress them up. Further, letting agents act without bounds that are collectively set through the policy process, may align with the concept of freedom proposed, from the emphasis of individual positive freedoms, at least for a select few of them, but tends to lead to structures that undermine the so-called competition component that the reference point in the model requires. Further, the focus on individual agents likewise results in a perspective that cannot address systemic effects in a structured manner. Clearing a path for private agents without consideration for interactions, relations, and systemic dynamics, and focusing on letting agents make decisions over what they already have, can easily result in a framework that perpetuates existing differences between agents and even exacerbates them over time as it tends to remove balances on individual private power and its exercise.

In contrast, agents who operate in a world of true uncertainty, and are embedded into a specific socio-economic environment, and structure and process, do not, nor can they, survive as atomistic units. Objectives and motivations become multi-layered with a focus on a social-provisioning process characterized by complex dynamics, within the process and between process and the structures within which it is embedded. This results in a context dependence of considerations, context relevance for policies, and not only superficially different system, but possibly differently functioning systems under differing circumstances. There are no longer multiple options that the policy-maker only restricts through rules and regulations. For the embedded agent, numerous options likely mean problems coordinating, potential for misunderstandings, and an unforeseeable dynamic to emerge from individual decisions; and thus establishes a requirement for means of coordination and restrictions of options. Individuals' exercise of power against the interest of the community, can be restricted in a justified manner through such rules and regulations, here. Systemic dynamics can exacerbate existing differences in starting positions, for instance, and an objective of reducing constraints to individual developments, may require acting on differential positions in concert with a restriction of paths of action that introduce dynamics which further differences in the possible degrees of participation.

Given a social structure, withdrawing some sources of influence – say, exercised from public sector agents – does not mean we are uninfluenced, and freer, in our decisions. At first it just means, there is a space open that was filled before. Next, it may well mean that someone else steps into that space. How the agents shaping the decision-environment for others, in turn, are embedded and who they answer to, will be part of considerations around socio-economic structure and organization.

References

Ayres, C. (1978). *The Theory of Economic Progress: A Study of the Fundamentals of Economic Development and Cultural Change*. New Issues Press, Kalamazoo, Michigan.

Beinhocker, E. (2006). *The Origins of Wealth: Evolution, Complexity and The Radical Remaking of Economics*. Harvard Business School Press, Boston.

Blaug, M. (1993). Kuhn versus lakatos, or paradigms versus research programmes in the history of economics. *History of Political Economy 7*(4), 399–433.

Bush, P. (1983). An exploration of the structural characteristics of a veblen-ayres-foster defined institutional domain. *Journal of Economic Issues 17*(1), 35–66.

Bush, P. (1987). The theory of institutional change. *Journal of Economic Issues 21*(3), 1075–1116.

Carpataux, J. and O. Crevoisier (2007). Economic theories and spatial transformations – clarifying the space-time premises and outcomes of economic theories. *Journal of Economic Geography 7*(3), 285–309.

Chester, L. (2021). Can régulation theory inform institutional analyses of contemporary social provisioning? *Journal of Economic Issues 55*(2), 359–66.

Clements, M. (2019). Subjectivity in economics. *American Review of Political Economy 13*(2).

Colander, D. and R. Kuipers (2014). *Complexity and the Art of Public Policy: Solving Society's Problems from the Bottom Up*. Princeton University Press, Princeton.

Commons, J. (1934). *Institutional Economics: Its Place in Political Economy*. Transactions Publishers, New Brunswick and London (Reprinted 1990).

DOI: 10.38024/arpe.283

Cordes, C. (2005). Veblen's 'Instinct of Workmanship', its cognitive foundation, and some implications for economic theory. *Journal of Economic Issues 39*(1), 1–20.

Cordes, C., W. Elsner, C. Graebner, T. Heinrich, J. Henkel, H. Schwardt, G. Schwesinger, and T.-Y. Su (2021). The collapse of cooperation: The endogeneity of institutional break-up and its asymmetry with emergence. *Journal of Evolutionary Economics 31*, 1291–1315.

De Gregori, T. (1987). Resources are not; they become: An institutional theory. *Journal of Economic Issues 21*(3), 1241–1263.

De Vroey, M. (2012). Marshall and walras: Incompatible bedfellows? *The European Journal of the History of Economic Thought 19*(5), 765–783.

Denzau, A. and D. North (1994). Shared mental models: Ideologies and institutions. *Kyklos 47*(1), 3–31.

Elsner, W. (2012). The theory of institutional change revisited: The institutional dichotomy, its dynamic and its policy implications in a more formal analysis. *Journal of Economic Issues 46*(1), 1–44.

Engels, F. (1844). *Outline of a Critique of Political Economy*. The Marx/Engels Internet Archive. www.marxists.org.

Galbraith, J. (1998). *The Affluent Society*. Houghton and Mifflin Company.

Galbraith, J. (2007). *The New Industrial State*. Princeton University Press.

Gigerenzer, G. (2007). *Gut Feelings: The Intelligence of the Unconscious*. Viking Penguin, New York, NY.

Hodgson, G. (2003). The hidden persuaders: Institutions and individuals in economic theory. *Cambridge Journal of Economics 27*(2), 159–175.

Hunt, E. (2002). *History of Economic Thought: A Critical Perspective*. M. E. Sharpe.

Jo, T.-H. and Z. Todorova (2017). Social provisioning process – a heterodox view of the economy. In C. d. T.H. Jo, L. Chester (Ed.), *The Routledge Handbook of Heterodox Economics*, pp. 29–40.

Kahnemann, D. (2011). *Thinking – Fast and Slow*. Allen Lane.

Kapp, K. W. (2011). *The Foundations of Institutional Economics*. Routledge, Milton Park, Abingdon, Oxon.

Keen, S. (2011). *Debunking Economics – The Naked Emperor Dethroned?* Zed Books.

Lawson, C. (2009). Ayres, technology and technical objects. *Journal of Economic Issues 43*(3), 641–659.

Lawson, T. (1997). *Economics and Reality*. Routledge.

Lee, F. (2018). *Microeconomic Theory: A Heterodox Approach*. Routledge, New York, NY.

Lipsey, R. and K. Lancaster (1956). The general theory of the second best. *The Review of Economic Studies 24*(1), 11–32.

Mearman, A. (2012). Heterodox economics and the problems of classification. *Journal of Economic Methodology 19*(4), 407–424.

Miller, J. and S. Page (2007). *Complex Adaptive Systems – An Introduction to Computational Models of Social Life*. Princeton University Press, Princeton.

Mirowski, P. (1989). *More Heat than Light: Economics as Social Physics, Physics as Nature's Economics*. Cambridge University Press.

Peters, O. (2019). The ergodicity problem in economics. *Nature Physics 15*, 1216–21.

Polanyi, K. (1944). *The Great Transformation: Origins of Our Time*. Farrar and Rinehart.

Prasch, R. (2008). *How Markets Work: Supply, Demand, and the 'Real World'*. Edward Elgar.

Volume. 18, Number. 2
DOI: 10.38024/arpe.283

Ramazzotti, P. (2020). Prices, institutions, and the coordination of economic growth. *American Review of Political Economy 14*(1).

Ramazzotti, P. (2022). Heterodoxy, the mainstream and policy. *Journal of Economic Issues 56*(1), 59–78.

Robbins, L. (1962). *An Essay on the Nature and Significance of Economic Science*. Macmillan.

Samuelson, P. (1947). *Foundations of Economic Analysis*. Harvard University Press.

Samuelson, P. (1968). What classical and neoclassical monetary theory really was. *Canadian Journal of Economics 1*(1), 1–15.

Schneider, G. (2020). Contemporary original institutional economics. *American Review of Political Economy 14*(1).

Schumpeter, J. (1980). *The Theory of Economic Development*. Routledge.

Schumpeter, J. (2003). *Capitalism, Socialism and Democracy*. Routledge.

Schwardt, H. (2013). *Institutions, Technology and Circular and Cumulative Causation in Economics*. Palgrave Macmillan, Houndmills and New York.

Schwardt, H., C. Graebner, T. Heinrich, C. Cordes, and G. Schwesinger (2016). Economic complexity and trade-offs in policy decisions. In C. Graebner, T. Heinrich, and H. Schwardt (Eds.), *Policy Implications of Evolutionary and Institutional Economics: Essays in Honor of Wolfram Elsner*, pp. 3–19. Routledge.

Sen, A. (1999). *Development as Freedom*. Oxford University Press.

Simon, H. (1944). Decision-making and administrative organization. *Public Administration Review 4*(1), 16–30.

Veblen, T. (1954). *Absentee Ownership and Business Enterprise in Recent Times: The Case of America*. B.W. Huebsch, New York.

Von Neumann, J. and O. Morgenstern (1944). *Theory of Games and Economic Behavior*. Princeton University Press, Princeton, NJ.