PART II

Heterodox thought on the environment
Introduction

Many ecological economists question the ‘rational choice’ basis of mainstream economics. We acknowledge the existence of plural values. We question individual preferences as the ultimate judge of decisions regarding environmental issues as we observe the interdependencies involved between people given common environments. We also emphasise the importance of ignorance. Nevertheless, a fleshed out and coherent alternative ‘economics’ of ecological economics is lacking.

The aim of this chapter is to show that institutional economics could help fill this gap. While the tradition is itself rather heterodox, I concentrate here on the direction in institutional economics developed from a critical stand towards its neoclassical counterpart. The chapter is structured as follows: First, I offer a brief overview of two main strands of institutional economics—the ‘new’ or neoclassically inspired position and the ‘classical’ and more critical one. I link the latter to the wider realm of institutional analysis as found in fields like political science and sociology. Second, I present key focal areas of institutional analysis grounded in its specific ontology and epistemology. Third, I discuss how classical institutional theory responds to three basic issues in ecological economics, namely: (i), the systems perspective, (ii) valuation of Nature and (iii) environmental governance. Fourth, I follow up with a short section on future directions, before I conclude.

Positions in institutional economics

Institutional economics developed as a reaction to the neoclassical tradition more than 100 years ago. Thorstein Veblen may be considered its ‘father’. He criticised the idea, or assumption, of the ‘isolated’ individual so fundamental to the expanding neoclassical paradigm. He saw institutions not only as formed by, but also forming individuals. In clarifying the different perspectives and theories in this field, a brief presentation of neoclassical economics is necessary.

Neoclassical economics

Neoclassical economics has dominated the profession since, at least, the 1950s. Following Becker (1976) and Eggertsson (1990), we may define the following core of the neoclassical model:
• rational choice as maximising individual utility;
• stable preferences; and
• equilibrium outcomes.

Utility is derived from preference satisfaction and the preferences of individuals are typically seen as stable. At least they are seen as strictly individual; uninfluenced by societal or cultural factors. This is the essence of the individualist perspective underlying standard rational choice. Rational agents will exchange goods until a point is reached where no more gains appear and an equilibrium state is produced. Agents cannot get all they want, as they have limited access to resources (income). Hence, they have to prioritise and find the way (means) that increases their preference satisfaction (ends) the most.

Any model of the economy also needs to make assumptions about the context within which economic agents operate. Following Eggertsson (1990), the standard context or application area of neoclassical economics can be defined as:

• no information costs;
• no transaction costs; and
• private property rights for all goods that are exchanged in competitive markets.

The only institutional element appearing here is property rights. While the task of the State is to form and guard these rights, the analysis of how this comes about is regarded as outside the scope of economics. Given the kind of rationality involved, the only form of interaction implied by the model is the trading of goods and resources. Interaction will, moreover, appear ‘by itself’ as long as utility can be increased through such exchanges. In a model based on individualism and zero transaction costs, the market is taken to be a cost free and ‘natural order of things’.

While the above represents the standard version of the model, much research among neoclassical economists includes studies of decision-making under risk and uncertainty. We also observe that the issue of transaction costs is being more and more included in economic textbooks. These developments imply, among other things, dispensing with the assumption that information is cost-free. This has, however, created problems, because accepting that there are positive information costs is inconsistent with the assumption of maximisation (e.g., see Knudsen, 1993).

New institutional economics

While institutional issues are largely ignored by the neoclassical position, some mainstream economists nevertheless started to ask questions, such as: If transacting, or coordinating, is costly, are markets always the best way to allocate resources? Firms may be better (Coase, 1937; Williamson, 1985). Even State allocations could sometimes be more efficient (Coase, 1960; Williamson, 2000).

Douglas North has taken the above perspectives further in some seminal publications forming the basis for the tradition of ‘new institutional economics’. He has defined institutions as “the rules of the game in a society or, more formally […] the humanly devised constraints that shape human interaction” (North, 1990: 3, emphasis added). Institutions are seen as rules and operate as constraints. New institutional economics builds largely on the core of the neoclassical economics model. Humans act to maximise individual utility and preferences are unaffected by the institutional context. Under such an understanding of humans and human action, the only way institutions can operate is as constraints.
The most important ‘rules of the game’ are those defining the rights each individual holds, for example, the rules concerning ownership of resources. Given these rules and the existing distribution of endowments, individuals transact to get what, in the end, is considered best for them. Transacting is, however, costly and uncertain. According to this position, institutions are invented to reduce transaction costs and uncertainty. They are instruments that make production and exchange more predictable and efficient. Property rights, the institution of money, contracts and various measurement scales are all understood as invented to simplify transactions.

While institutions are human or social constructs, the individual agents are not seen as such according to this position. The ‘mature’ North (2005) moved somewhat away from utility maximisation as being a good description of human choice. Nevertheless, he did not grant any role to institutions in forming preferences. In that sense, the individualist tenets of rational choice institutionalism was kept intact.

**Critical institutional economics**

What is here termed classical institutional economics (CIE) was developed as a critique of neoclassical economics that emerged from the 1870s onwards. Veblen (1899) emphasised the influence of society and its institutions on human preferences themselves. While this tradition had a strong position especially in the USA until the 1940s, it lost influence and did not really revive before the late 1980s (Hodgson, 1988; Bromley, 1989).

CIE defines institutions in a similar way to new institutional economics, but attributes them a very different role and does not limit them to operating only as constraints. Institutions are primarily understood as formative of the individual and as creating different contexts of meaning. Synthesising the position, I have formulated the following definition:

“Institutions are the conventions, norms and formally sanctioned rules of a society. They provide expectations, stability and meaning essential to human existence and coordination. Institutions support certain values, and produce and protect interests.” (Vatn, 2005: 60)

Contrasting CIE to the neoclassical position, we observe that the latter see the human as *multi-rational* (Hodgson, 1988, 2007; Sjöstrand, 1995). The idea of maximising individual utility as the only form of rationality finds little support. Rather there can be different types of rationality, and the institutional context defines which is expected to operate. In some contexts, like a market, institutions seem formed to support choices that ensure what is best for the individual, e.g., ‘individual rationality’. In the family context, care is the formative logic, constituting a type of ‘social rationality’. Hence, considering what is right and wrong is an alternative form of rationality compared to the calculus of individual gain. What is right or wrong depends, moreover, on the kind of situation in which one finds oneself. Preferences and values are also seen as social constructs. Focus among representatives of this school is therefore not on equilibrium, but on change and the evolution of institutions, perceptions, preferences and values (Hodgson, 1996).

Concerning the *application area*, CIE and new institutional economics overlap somewhat. Hence, CIE emphasises the importance of information and transaction costs for understanding human action and the functioning of institutionalised systems like markets, firms, political and civil organisations. They differ, however, regarding why such structures exist and change. While reducing transaction costs may be important, CIE emphasises the role of power and interest protection as important when explaining the development of economic structures like...
markets and firms (Schmid, 1987; Hodgson, 1988; Bromley, 2006). CIE is finally interested in studying a wide variety of institutional structures (e.g., forms of property rights) and these again are discussed not only in relation to efficiency, but also with regard to the issue of power and interest protection (Schmid, 1987; Bromley, 2006). Thus, CIE challenges all the fundamental assumptions of the neoclassical model with important consequences for the evaluation of public policy.

**Institutionalism in other social sciences**

Regarding institutionalism in other social sciences, I simplify by distinguishing between historical and sociological institutionalism. There is a lot of common ground between these and CIE. Historical institutionalism is dominated by political scientists and sociologists and focuses less on economic issues. It puts strong emphasis on the normative role of institutions and the importance of power [see also Chapter 14]. Regarding the normative, the focus is to a large extent on what is the appropriate or the right thing to do (March and Olsen, 1995). In this respect, the historical school represents a further development of the ideas of early sociologists—Durkheim, through Parsons to Selznick—emphasising the normative dimension of institutions (Scott, 2014). Like CIE, prominence is given to how institutional structures facilitate or obstruct the access that various interest groups have to arenas of decision-making. Historical institutionalists also strongly emphasise the role of path dependence in understanding the development of institutions, which means that existing institutions influence the kind of changes that will/can happen.

The development within mainstream sociology itself has taken a somewhat different direction regarding institutional analysis (Scott, 2014). Again, any distinction, or grouping, must be treated with care. Nevertheless, in recent decades there has been an observable turn away from emphasising the normative importance, and more towards the cognitive significance of institutions. Institutions are not only formal rules and norms, but also symbolic systems, cognitive scripts and categorisations that make action possible and offer meaning to a situation. Hall and Taylor (1996: 948) note: “Institutions influence behaviour not simply by specifying what one should do but also by specifying what one can imagine oneself doing in a given context.” This implies an emphasis on what I term conventions, not just as practical rules to organise interaction, but also as symbolic systems influencing perception. ‘Facts’ do not present themselves to us in a straightforward way as assumed by rational choice. What we observe, and how we understand what we observe, depends upon the concepts we have learned to use [see also Chapter 2].

**Doing institutional analysis**

Institutional analysis focuses predominantly on understanding the relationships between human action and institutions. It therefore looks at the relationships between actors and structures, both to understand societal dynamics and to develop ideas about how alternative institutional structures may facilitate behavioural change. This is of great importance in the field of environmental action.

Studies in institutional economics concentrating on environmental issues have been undertaken by a wide number of researchers (e.g., Arun Agrawal, Daniel Bromley and Elinor Ostrom). Synthesising this kind of work, I note four key aspects (Vatn, 2015a):
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1 Rights and responsibilities
2 Transaction costs
3 Perceptions
4 Preferences and motivations.

There are certainly variations across authors regarding both emphasis and understanding of these issues. Nevertheless, I find it possible to formulate an overview that is consistent and captures the main features of CIE.

Rights and responsibilities

Rights and responsibilities may be formal or informal. Rights to resources (e.g., property or use rights) are crucial for people’s ability to sustain their lives. The literature typically distinguishes between private, common, State (public) property and open access (e.g., Bromley, 2006). While there is some distinctiveness to each type, these are wide categories, and internal variation is also very important. Understanding rights and the dynamics behind their formation is crucial to understanding distribution of resources and the various forms of (unequal) economic and political power [see Chapters 4, 14 and 15].

Due to social and environmental interdependencies, the actions of one person typically influence the opportunities of others. In this regard, the concept of responsibility is also key. The institutional structure may be such that the actor is free to do whatever she or he wants. She or he can ‘shift costs’ on to others (Kapp, 1971). Alternatively, a responsibility may be defined that makes such an action unacceptable. The interests of ‘the other’ are institutionally protected.

Transaction costs

Transaction costs are the costs of interaction. We may interact via trade, command or community arrangements. These formats are all defined by institutions. In answering his question “why we have firms rather than just markets”, Coase (1937) concluded that command is sometimes more efficient, less costly, than trade. While CIE emphasises the importance of power and interest protection—e.g., the control of labour—to understand the existence of firms, it acknowledges that transaction costs are important for the functioning of organisational solutions. One example regards common property, as an alternative to private property. It may facilitate coordinated use of a resource like a forest, a pasture or water body. ‘Cost shifting’ as following from individual uses of common-pool resources is regulated through common rules. This is often an efficient and flexible alternative to regulations by States or through individual contracting. Another example is the present emphasis on turning to trade to solve environmental problems, like biodiversity loss and climate change. A key notion is payments for ecosystem services (PES). Vatn (2015b) shows that these transactions mainly involve public resources as raised by taxes and fees. While some of these resources are distributed through auctions and other ‘trade-like’ systems, command and not trade dominates in PES. The cost of operating markets for ecosystem services is a key explanation for this fact [for more on ecosystem services, see Chapter 43].

Perceptions

Acting happens based on beliefs about what needs to be acted upon and the effects of action. These beliefs depend upon our perceptions about what the issues are and how the physical and
social worlds ‘work’. Due to great complexity and the subsequent high levels of ignorance and uncertainty, “fixing beliefs” is not in any way straightforward (Bromley, 2006).

Language is itself an institutionalised structure and crucial for our understanding. It offers predefined concepts through which we learn to understand the world around us. Understanding is founded on (subjective) experiences that are objectified through language-based ‘models of mind’. While there is a reality, perceptions of it may differ. Moreover, not all reality can be observed. What we know of the world around us depends on how we conceptualise it. Hence, changes in conceptualisations may result in new insights and, all the time, we have to be ‘critical’ of our conceptualisations [hence the importance of critical realism; see also Chapter 2].

We learn through a social process of standardising beliefs. In relation to this, we may talk of primary and secondary socialisation. Primary socialisation includes learning about the concepts and norms of the culture in which we are raised. Secondary socialisation refers to specialised (professional) competence. We learn to become a farmer, a plumber, a teacher, an engineer, and so on. Specialised knowledge implies specialised vocabulary. This is a necessary element in modern societies, while it implies that people develop particular capacities to perceive. This makes possible the development of skills and insights that would be impossible in a less specialised society, but specialisation may also create conflicts, as we tend to see and value different things as well as value things differently (Trainor, 2006).

**Preferences and motivations**

While acting rests on beliefs, it also depends on preferences and motivations. As observed from a CIE perspective, the following aspects seem central:

- There is a distinct social component to the formation of preferences. Hence, different cultures are characterised by different conventions and norms regarding what, for example, are normal consumption patterns. Being socialised implies—learning these conventions and norms.
- Our interests are strongly influenced by the rights we have, respectively, the type of role within which we operate. This shows up in our actions as different preferences. While roles are not straightjackets, they define what is seen as normal and appropriate.
- Hence, people hold different sets of preferences and have the capacity to act in accordance with different types of rationalities. They may be motivated by what is best for themselves. They may, however, also be motivated to act in ways that are best for the group they belong to or for others.
- While people are characterised by multiple sets of preferences and a plurality of motivations, it is the institutional context that defines which type of motivation, and hence what set of preferences is expected.

So human preferences can change through processes of socialisation. Deliberation over what preferences are best to hold then becomes both possible and necessary. This is important in a world of interconnectedness. Certainly, keeping such deliberations open and reflective is very demanding. When establishing or changing institutional structures, when introducing policy instruments like laws and payments into a given resource regime, one needs to notice that this does not only change what seems ‘best to do’. It may change the very logic by which actors perceive the problems faced, as in the theory of ‘crowding out’ (Rode et al., 2015).

So we observe that rights, transaction costs, perceptions and motivations are interdependent. Hence, basing human interactions on private property and trade creates different outcomes—
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protect different values and interests—compared to, for example, common property and community rules. Understanding the relationships and dynamics here is crucial for societies to handle environmental problems. There is, however, high complexity, and outcomes are typically emergent. While we are able to create knowledge describing key characteristics of various combinations of property rights and interaction formats, results in the form of behavioural patterns are often contextual in profound ways. Hence, a certain institutional change that may offer good outcomes in one societal context may fail to do so in another. This is a challenge of which institutional analysis makes us aware and helps us study.

Relations to ecological economics

As already emphasised, institutional theory offers a good platform for analysing key issues raised by ecological economists. I will illustrate this by looking at the systems orientation of ecological economics, its emphasis on plural values and engagement with environmental policy and governance.

Systems thinking

Ecological economics is systems oriented. It emphasises interdependencies between ecological and economic systems, or, even more broadly, between the non-human and human world. Accentuating systems thinking implies embracing complexity and hence emergence. CIE tries to understand human action in a systems perspective and emphasises relations. While its neoclassical counterpart is reductionist, which means that explanations to social phenomena should be found by reducing the analysis to the level of the ‘smallest part’ (i.e., the individual), CIE emphasises the interplay between individuals and institutional structures. The latter is seen as generating social constructs fundamental both to the creation of the individuals and the forms of interaction.

Institutions do not determine action. They offer expectations and must be interpreted. Different institutional contexts (e.g., the market, the firm, the family, the community) favour different types of interaction, and hence different rationalities. However, individuals interpret and evaluate the contexts. While much action is automatic, humans are also reflexive. We have the capacity to reflect on the process of our development and on the reasonableness of the social environments within which we act. Evolution of institutions is different from pure biological evolution. It is subject to reasoned choice, while dependent on history as embedded in perceptions, interests and power relations.

Valuation

Turning to more concrete areas of ecological economics, institutional theory offers a distinct approach to the issue of environmental valuation. It defines valuation methods like cost-benefit analysis, multiple criteria analysis and mapping [Chapters 30 and 31] and deliberative methods [Chapter 33–34] as value articulating institutions (VAIs). As such, these methods are distinct in the way they define who participates and in what capacity, e.g., consumers or citizens. They define what is considered relevant data and the form they should take, e.g., prices or arguments. They finally define how data should be used and conclusions formed, e.g., price aggregation vs. communicative judgements.

The VAIs therefore influence what values can be expressed and in what form, what way knowledge is produced, communicated and evaluated (perceptions), and finally which logic underlies the process of analysis (type of motivation). Hence, the various methods may result in
different recommendations. CIE theory may help explain why this is so, as well as offering a basis for choosing between methods dependent on the values/issues involved.

Ecological economists emphasise the existence of plural values and of strong uncertainty [see Chapters 26–28]. From the perspective of CIE, a key aspect regards the distinction between individual/egocentric vs. social preferences. CIE offers a frame for understanding this distinction as well as discussing which type of preferences should be emphasised in cases where we evaluate common goods, specifically those influencing future generations. In a monist perspective like that of neoclassical economics, such issues are made invisible. In a world of interdependent actions, claiming that one’s preferences should not be reasoned over and challenged is problematic. CIE emphasises the role of deliberative methods as a way to reason over the meaning and implications of the preferences an individual holds, whether egocentric or social.

**Environmental policy and governance**

While valuation emphasises issues regarding perceptions and motivations, studies of environmental policy and governance will have to engage with all four aspects mentioned in the preceding section on ‘Doing institutional analysis’. The fundamental policy issues are what values and whose interests to protect, and whose side to take in a conflict. These issues concern rights and responsibilities. Moreover, governance implies interaction, communication and coordination. One aspect here regards the costs of interaction (transaction costs). These vary between different institutional structures affecting both how access to resources can be organised (property and use rights) and how owners/managers of resources can interact. These costs influence the capacity to handle various forms of cost shifting so fundamental to environmental governance—note the above discussion regarding treatment of cost shifting in a context of private property/markets as opposed to common property.

Finally, institutions influence both perceptions and motivations. One aspect is the way institutions protect but also create interests. Decisions by firms are directed by their ability to create an economic surplus. In a world of global competition in commodities, the need to protect these interests creates tremendous constraints on environmental policies, so evident both in general and in areas like climate policy more specifically. Another aspect regards the way policy instruments themselves influence the way environmental issues are perceived and how they influence the logic of action. In a situation where the ‘logic of money’ already dominates, using economic instruments may work according to standard expectations. In other contexts, this may not be the case (Vatn, 2015a).

So environmental policy is not about getting prices right. They are artefacts of existing institutional structures and have little meaning beyond these. Policy and governance demands comparative analyses of institutional structures, being reflexive on perceptions and taking a stand on rights and evaluating transaction costs and motivational implications. These are complex issues. Therefore, CIE does not claim that the issue is to get the institutions ‘right’ either, but rather the creation of institutional structures that can ensure workable and legitimate solutions to identified problems.

According to CIE, environmental problems are not accidental effects of production and consumption. They are systemic effects of the existing dominant institutions (Kapp, 1971). These institutions have been established over the last centuries to strengthen independent choices, e.g., firms/corporations as operating in markets. This is, however, done in a physical environment of interdependencies. This development has facilitated economic growth, which has—despite vast and even deepened inequalities—taken many out of poverty. Economic growth has, however, also created heavy pressures on the environment and threatens the basis
for future well-being. Environmental policies have been established to reduce negative impacts when they have been acknowledged and become politically accepted. We nevertheless observe a conflict between an economic system with institutions demanding growth to work well and an environment that cannot manage the intensifying pressures. Based on perspectives from CIE, one may ask if present environmental policy programmes can handle this conflict.

**Future directions**

While CIE already delivers a series of important insights useful for ecological economics, further developments are needed. I emphasise three issues that require focus.

First, there is a need for engaging ecological economists in a systematic discussion about the ‘economics’ of ecological economics. I think insights from CIE should inform that discussion, while a better conceptualisation of human–Nature and society–Nature relationships is then necessary. Here is an area where ecological economists could inform the future development of CIE.

Second, while there is increased understanding of the relationships between institutions, motivations and action, we have just started to scratch the surface. CIE offers a good basis for the development of hypotheses and for interpretation of existing findings. Much more research in this field is necessary to support the future development both of ecological economics as well as of environmental policies. Certainly, success within this area may also have the capacity to influence the mainstream.

Third, the existing institutions for economic activity do not form a good basis for fostering sustainable futures. They create interests and motivations that are largely irresponsible and insensitive regarding environmental limits. The future seems to demand a fundamental restructuring of the economy making it much less dependent on growth and the interests protected by growth. It demands policies and economic actors that are socially and ecologically responsible. We must admit that we are far behind on developing ideas regarding what kind of institutions should be created to foster sustainability. CIE seems to offer important building blocks for the necessary conceptualisations. However, tremendous future effort is needed regarding both theory development and empirical research.

**Concluding remarks**

Institutional theory—not least as developed within CIE—offers a very good basis for conceptualising and understanding the relationships between humans, their societies and their physical environments. The concept of institutions helps clarify how interests are formed and protected, how the ‘world around us’ is perceived, and how human action is motivated and interaction is facilitated. Its specific understanding of actor–structure relationships seems productive for the topical research areas of ecological economics. There are substantial challenges ahead, though. These concern the need for developing ideas regarding (economic) institutions that could foster sustainable futures. A key area is better understanding and reflection about how institutional structures influence human motivation and action, including our willingness and ability to take the interests of ‘the other’ (e.g., future generations) into account.

**Note**

1 Editor’s Note: Veblen was also responsible for creating the term neoclassical economics.
Key further readings cited


Other literature cited