

# Economic Theory: A Field for the Application of Non-dualist Thought?

## A Clarification of Potential Epistemic Benefits

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**> Context** • Due to its grounding in a simplistic core model, mainstream theoretical work in economics is heavily conditioned by a realist epistemic framework that may be viewed as the “paradogma” – sensu Mitterer – of economics. **> Problem** • The contribution delineates theoretical developments on the basis of a realist epistemology and their problem-laden consequences for the economic sciences. The subsequent critical discussion seeks to clarify whether economic theory formation is a suitable field for the application of Mitterer’s non-dualist ideas. **> Method** • In the context of a review of their historical background, the paper will explore the possibilities and limits of an application of Mitterer’s non-dualist argumentation to the economic sciences, and present a diagnosis of compatibility and a characterisation of necessary steps towards amplification. **> Results** • It can be shown that the economic sciences would gain in expert knowledge and applicability by adopting the alternative of non-dualism, whose potential has been little appreciated so far. The solution to the meta-scientific problems caused by the pre-structuring of economics in terms of a realist epistemology seems at hand. To take up this new meta-scientific perspective, however, theoretical progress in both non-dualism and economics is required, particularly by paying more serious attention to the theoretical component of communication. **> Implications** • Non-dualism can certainly be utilised by the economic sciences to induce radical innovations and conceptional revisions involving higher meta-scientific consistency. In future, pragmatic gaps will increasingly have to be filled conceptually in order to develop more highly-reflected economic theory formation and corresponding scientific practice. Hence the main idea is that economic actions are inevitably, but not exclusively, based on communication. **> Constructivist content** • Theoretical approaches embracing epistemic relativism in the economic sciences will be properly assessed and developed further along the lines of a non-dualist conceptual revision on the basis of an ontology-free understanding of reality. **> Key words** • Meta-scientific decision, theory formation, economic sciences, rational choice, entrepreneurship, communication.

### Introduction

Increasing methodological reflection may be diagnosed as “a symptom of disease for every scientific discipline” (Eucken 1941: XIV). This also holds true for the discipline of economics. The epistemic schemata making up the mainstream of the economic sciences betray a relatively rigid adherence to particular epistemological positions that must be seriously questioned and discussed. The dominant orientation of scientific work towards the ideal of the natural sciences makes the economic sciences a paramount example of potential epistemic blockades (Luhmann 1997: 24). The economic sciences and their theory formation thus appear to be predestined for a discourse on the application of Josef Mitterer’s non-dualist mode of argumentation, a necessarily radical innova-

tion for the theoretical worlds of economics. The present contribution intends to fathom the potential gains in expert knowledge and applicability for the economic sciences promised by a conceptual alternative that has not – or not sufficiently – been considered so far. The meta-scientific analysis connected with it is intended to show up potential fields of problems within the theoretical explanation of economic decision making and action. The model of rational choice is generally used as the core model for theoretical work, which has up to now quasi channelled and thus pre-structured the theory formation in the diverse sub-disciplines of economics. What is required is a debate about how Mitterer’s non-dualist argumentation needs to be amplified with regard to the pragmatics of human action in order to become applicable. The question

is whether theory-relevant steps towards its acceptance and implementation can be formulated, in particular steps concerning its theoretical connection with communication and language as highly significant theoretical elements, steps that must also be taken by the economic sciences.

### Epistemological foundations as basic decisions in scientific practice: The unavoidable

Every kind of scientific analysis, in principle, follows a particular basic epistemological orientation or pre-structuring. This situation of meta-scientific decision-making cannot be evaded. It is one of the

tasks of every scientific discipline and it therefore conditions scientific theory formation on all the subsidiary levels of the intra-disciplinary labouring for the acquisition of knowledge (Burrell & Morgan 1979: XII). From the very beginning – explicitly or implicitly – some belief defines whether and to what extent “reality” can be known or not and, furthermore, whether some justifiable realist reference is at all meaningful (Vollmar 2007: 166). The implications are, on the one hand, an authoritative epistemological image of humanity and a typical kind of scientific language; on the other, the implicit assumptions, goal settings, and claims to validity of scientific assertions and methods of application. Considering the relationship between science and practical life, furthermore, even the constitutional make-up of the scientists themselves is thus determined. Non-dualism – in particular the work by Mitterer (1992, 2001) but also its consistent further elaborations (Weber 1996, 2005) – touches on the general scientific and disciplinary foundations of epistemology, sets them in motion, may even shake them up. Mitterer offers clear impulses and stimulating ideas to develop a fundamentally different understanding; he quasi prepares a new syntagma as a basic theoretical innovation and not just a paradigm change. The syntagma is responsible for the fundamental justification or transformation of the conception of science in itself. By contrast, a paradigm as an element of the syntagma<sup>1</sup> only touches a specialist field by justifying and changing it (Uexküll & Wesiack 1996: 20). Now the mainstream of the theoretical discussion in the economic sciences will be highlighted in order to elucidate its basic constants and to answer questions concerning their thoroughgoing reflexion and innovation.

1 | The constitutive, subordinating relation between syntagma and paradigm is comparable with the relation between structure and column. A paradigm consists of a class of elements that characterize a specific scientific discipline. Therefore a paradigm is a part of a syntagma, which is a combination of different paradigmatic elements or aspects (Uexküll & Wesiack 1996: 20).

## Under the spell of the dualist paradigm: A meta-scientific positioning of the economic sciences

### The present epistemological status of mainstream economics

The economic sciences – despite all isolationist tendencies – belong among the social sciences. What unites the specialist disciplines of the social sciences is that, whatever their subject-matter and their goals, they all deal with the behaviour and actions of human beings (Schanz 1990: 22, 31). The economic sciences, with their sub-disciplines of national economy and business management studies, try to explain the function and the stability of economic processes and systems, e.g., markets or enterprises and the corresponding behaviour of agents, and to prognosticate their effects as far as possible. The expectation is a better understanding of economic behaviour and, consequently, its better management within normative perspectives. The specific theoretical focus of the scientific discipline is, as a rule, on the resource-efficient handling of situations of scarcity, a phenomenon immanent in life in itself. The fact that everybody is quasi permanently and inevitably confronted with economic questions and decisions would seem to entitle economics to take a prominent position in the canon of theories within the social sciences (Kirchgässner 2008: 2f.). If it is asked what its epistemological basis is like and what status of reality is granted by its theories in order to give the purported scientific activities methodological orientation, the social sciences predominantly tend to follow the “hard” scientific ideal of the natural and the formal sciences. It is a widespread opinion that the methods of the exact natural sciences are applicable and adequate for the cultural and social sciences (Vaassen 1994: 23f., 39). The obvious underlying motivation is to obtain the status of a “hard science” for scientific work that has to devote itself to the solution of “soft problems” (Forster 1985: 172–192).

This *modus operandi* also prevails throughout the economic sciences. These, by and large, fulfil the criteria of an essentially scientific and mechanistic approach

to research and might even, despite the heterogeneity of all their theoretical traditions, be roughly considered to constitute a pertinent prime example (Brodbeck 1998: 22; Vanberg 2003: 118; Binswanger 2013: 5). The theoretical efforts are therefore directed at states of affairs that are preconceived as suitable for being modelled as machines, as being similarly controllable and manageable, once their underlying governing laws have been deciphered. The hypotheses, models, and theories are designed to apprehend natural or social realities empirically and objectively and to penetrate ever deeper layers of these realities (Ötsch 2002: 281; Priddat 2002: 138). Although differently styled theoretical precursors are available as options for thought and action, the general orientation is quite clearly guided by the alleged role model of natural science, in particular by the exemplary methods of physical mechanics and its formalist set of methods. These are sources of practically inexhaustible self-confidence because they lend the field legitimacy. There has thus been a conscious decision in favour of a specific kind of theory. In addition to the preference given to the natural-science ideal of empirical controllability, the mathematical ideal of logical analysis is adopted (Ötsch 1996: 36f.; Lawson 1997; Blinder 1999: 2; Lawson 2003: 343; Lawson 2004: 329–340). The expectation here is to reduce the complexity of the reality surrounding human individuals and the whole of mankind as cognitive subjects, a reality in which the “beyond of discourse” (Mitterer 1992: §99; 2001: §107) manifests itself. The scientific subject/object division implies the fundamental possibility of attaining objective knowledge so that reality can be comprehended as something unquestionably given. In the light of these strongly realist-positivist theories, economic reality becomes the goal of knowledge and the regulator of theoretical discourse, an evidently ontological reality, as a rule. This kind of realist, epistemically dualist logic of thought, which is also subjected to critical reflexion by Mitterer (1992, 2001), is deeply engrained in the economic sciences. It forms the dogmatic basis of departure, the “paradogma” (Mitterer 1983: 266) of all theoretical work. In the canon of the social sciences, it has practically become the hard core because it has turned so extremely

rigid (Priddat 1994: 12; Blaug 1997: 3). For the scientific community, overlapping theoretical roots may be discerned, and the mainstream thus still exhibits, despite all the simplifications, the common style of thought (Fleck 1999) of a science of the real or – better – of reality across all disciplines (Schneider 1995: 154). Nevertheless, there are topical areas in which, due to critical reflection, relativistic epistemic positions have been developed outside the mainstream. The further development of the economic standard model, which will be dealt with in the following, attempts to soften and even partly dissolve the mentioned simplifications and consequences step by step without, however, developing some sort of reference scepticism.

### Rational choice as “the” core model of economic theory formation

Although there are exceptions that very clearly prove the rule, the hard core of the economic mainstream is still characterised by a barely questioned ontological-realist and epistemically realist orientation. Chiefly responsible for this state of affairs is the rational choice model as the standard economic model. It forms the essential theoretical springboard and basis of operation and thus the guiding model of the mainstream. Within the framework of this conceptual model, which deals with the problem of the state of equilibrium and the efficiency of allocations in the market, the unit of action is the individual, the *homo oeconomicus*, as the methodologically guiding figure. Preferences and restrictions are strictly separated here. The preferences are seen as given and invariable. They cannot be established directly but only through observable behaviour. Individual action is determined only by restrictions and external stimuli. The intelligent model agents are presumed to act for purely self-serving reasons but not in a pro-social way. In their assessments of benefits, they do not take into account the preferences of other agents (Kirchgässner 2008: 16). And these other agents perceive the restrictions and stimuli in the same way. The implication is that emotion, information, communication, and institutions in processes of cognition and action are dispensable. Rational choice, in the under-

standing of a decision about goods that is considered invariable, functions as the basic economic action. From such action, due to methodological individualism, the macro-phenomenon of the state of equilibrium of the market is achieved through the aggregation of all individual states (Priddat 2005: 11; Kirchgässner 2008: 21). The principle of rationality applied here is significant: individuals act in a totally rational way because they are assumed to be able to determine exactly the maximum benefit within the given restrictions. The standard for measuring the rationality of an act of choice is to choose the best of the given alternatives. This happens quasi automatically, according to the schema of the efficiency of allocations. As the range of choices is determined and given, the agents solve this problem of selection on the basis of unambiguously given alternatives (Kirchgässner 2008: 14; Priddat 2008a: 3). Agents do not have to cope with an epistemological problem as such because they are presupposed to be naturally capable of comprehending the discernible world of objects completely and therefore know very well what there is to be chosen. The agents are more “system operators” (Priddat 2008a: 3, 6) than free deciders because they are committed to an unambiguous economic, i.e., efficiency-oriented, interpretation, determination, and assessment of the economic reality. In the framework of the epistemically realist rational choice model, presuppositions have been fixed to exclude contingency methodically because agents operate free of contexts, independently of cultures, and unencumbered by particular difficulties of interpretation (Priddat 2005: 15; Priddat 2008a: 16).

Any serious attempt at explaining economic processes and process representatives must be prepared to carry the theoretical burden of explanation because there inevitably still exist large areas of theoretical neglect. This theoretical core of the economic sciences has not been uncritically treated in the discussion with regard to the descriptive and the prescriptive substance of the model, even though it has had a sustained formative effect on theory development as a point of reference and a conventional pattern of thought. It is apparent, for example, in the theoretical models of decision-making, production, investment, and finance.

Therefore, in experimental economics and neuro-economics, even the empirically observable deviations from the theoretically defined optimum of the maximisation calculus are not described as instances of normal behaviour but as something imperfect, as anomalies, and as “rationality gaps” (Held & Nutzinger 1999: 8; Held & Nutzinger 2003: 124). The fine structure of the actual decision process is quite purposefully ignored. In this way, the still widespread assumption of the duality of rationality and emotionality is further solidified and upheld. Ultimately, the methodically guiding figure, an artificial figure no doubt, that is observed in the framework of the model, due to simplistic and admittedly “unrealistic,” context-free behavioural assumptions, moves in an operative vacuum where social, institutional, informational, cognitive, and emotional aspects are of no significance and there is no connection with the explanation of practical action (Schumann 2004: 197; Vollmar 2007: 187). It is epistemologically remarkable that this theoretical construct is censured for its “remoteness from reality,” as the current debate in economic theory seems to suggest (Dürmeier, Egan-Krieger & Peukert 2006). In the final reckoning, the theoretical concept is not really alive at all; it does not even minimally match economic operative practice.

Meanwhile, however, the theoretical framework of thought in the economic sciences has opened up, and the underlying image of humankind at the fork in the road for theoretical progress has been differentiated further with varying accentuations (Lindenberg 1992; Kahneman 1994; Kagel & Roth 1995). Quite understandably, the point of attack is now primarily the constitutional make-up of the agent, i.e., the notion of the perfectly informed agent, but with a sort of autistic appearance. Due to inevitably given cognitive limits, agents are considered as incomplete: because of their restricted knowledge, they are unable to comprehend reality in its totality, full complexity, and dynamics (Shackle 1979: 245f.). The concept of “bounded rationality” (Simon 1997) is the modified notion with reference to such considerations and is now seen as the legitimate further development of rational choice, the knowing subject becoming the focus of attention.

“Mainstream economics has visited a number of approaches, including game theory, evolutionary game theory, experimental economics and behaviouralism. One of the consequences is that evolutionary ideas and the study of institutions are now commonplace.” (Hodgson 2007: 7)

The stepwise transformation of the epistemic positions of the further developing theoretical mainstream may be taken to indicate, if one so wishes, a tendency towards a kind of monisation within the dualist frame of thought (Vollmar 2007: 188). Independently of all this, however, the consequences of the generally upheld epistemically realist foundations, with regard to the status of the theoretical building blocks provided by the different scientific disciplines, are still widely noticeable in the fine structuring required for the explanation of economic processes such as, for instance, decision-making, expectation, endogenous preferences, information, communication, and knowledge. Stances diverging from the mainstream represent approaches that can explicitly be classified as epistemically relativist.<sup>2</sup> They tend not only to discuss “the world as it is, but to reflect the contingency of reality and knowledge, which leads to an interest in identifying possible worlds as they could be” (Grand, Rüegg-Stürm & Von Arx 2010: 67). They argue along the lines of the unknowability of reality and thus keep holding on to a dualist, ontological residue. In the context of management and organisation theory, which essentially operates on social-scientific conceptual foundations, a marginal area has produced work with a radical constructivist orientation.<sup>3</sup> It has provided important impulses to the

re-thinking of the processes of knowledge acquisition and the special theoretical components with which it has more thoroughly concerned itself. Such a research programme “demonstrates the implications of taking the openness of *taking the future and its inherent uncertainty seriously*” (ibid: 73).

### Between discovery and creation: The entrepreneurial opportunity

As already mentioned above, economic theories may take divergent positions within the frame of dualist thought so that the relationship between reality, cognition, knowledge, and the relation between the knowing subject and the object of knowledge can be specified epistemologically in a more realist or more relativist way. It is worth taking a closer look to illuminate the epistemological points of emphasis guiding the explanations of economic states-of-affairs. In the specialist field or sub-discipline of entrepreneurship, for example, two fundamental concepts confront each other: the traditional theory of discovery (Shane & Venkataraman 2000) and the theory of creation (Alvarez & Barney 2007), which both very clearly follow diametrically opposed epistemological assumptions. Entrepreneurship is the process of identification, evaluation, and realization of (entrepreneurial) opportunities by an individual or collective (Shane & Venkataraman 2000: 217f.; Fueglistaller et al. 2012: 13). This special economic process implies the creation of a new venture as well as a special mode of action in established organizations. The main focuses of research are on themes such as innovation, growth, creativity, and flexibility. Depending on the chosen theoretical conception, differing answers are given to the question of whether and why entrepreneurial opportunities arise and what form, therefore, the process between the business idea and its economic exploitation may take. Corresponding descriptions – depending on the conceptual orientation – fundamentally affect the characterisation of the entrepreneurial modes of action of the entrepreneur and provide insights as to how innovation takes its systematic place in economic theory.

In the case of discovery theory, the entrepreneur is, naturally, specified as the discoverer of the entrepreneurial opportunity. This is considered feasible because accord-

ing to the presupposed fundamental logic, entrepreneurial opportunities exist as real objective phenomena and are, therefore, something given that is, in principle, accessible to and exploitable by everybody (Shane & Venkataraman 2000: 220). The opportunities exist independently of the entrepreneur; they are exogenous phenomena of “the” economic reality. Consequently, it is the activity of discovery that separates the entrepreneurs from others and makes them special. It is relatively clear that this idea is informed by the epistemically realist conception that there is something given independently of its observation that can, however, still be seized in an exact and objective way (Rüegg-Stürm 2003: 21). Entrepreneurs discover the opening for the business opportunity. They are – optimally informed and of ideal character – more successful than others in recognising and exploiting the opportunity. Due to the objectivity of the situation, all the imaginable consequences and results of a decision – and also the probabilities of their occurrence – are known at the point in time of decision-making (Alvarez & Barney 2007: 17). Uncertainty in the proper sense does not exist for the entrepreneur as an epistemic subject because the sequences of events can be exactly calculated mathematically and therefore foreseen. Owing to copy theories of cognitive representation, contingencies or “potential surprises” à la Knight (1921) can be excluded because the knowledge of the pre-existing reality is simply too good. This view, consequently, supports the instrumentalist-functionalist approach to entrepreneurial action expressed, for instance, by the idea of the strategic planning of a deterministically occurring and therefore controllable future, an idea that can be found in other sub-disciplines of the economic sciences.

In comparison with the idea of discovery, creation theory rests on a contrary epistemological constellation of founding notions. Entrepreneurial opportunities exist only *ex post*, i.e., when they have been created by an entrepreneur as their more or less creative maker. Inventing or bringing forth means here that something is created or developed in the process of observation itself. Only the observing agents are responsible for it (Rüegg-Stürm 2003: 21f.). Thus the entrepreneur is assigned the

2| Ötsch and Lehmann-Waffenschmidt discuss the substantial similarities between constructivism and evolutionary economics, which are in contrast to the concept of rational choice (Ötsch 1996; Lehmann-Waffenschmidt 2006). Further interdisciplinary approaches constitute socio-economics and cultural economics that also provide non-mainstream economic thoughts.

3| Here the views converge of, amongst others, Maturana, Varela, von Foerster, von Glasersfeld, Hejl, Luhmann, Roth, and Schmidt on theories of knowledge, perception, and communication (Hejl & Stahl 2000; Rusch 2006; Grand, Rüegg-Stürm & Von Arx 2010).



innovative role in the process of winning business opportunities (Baker & Nelson 2005: 336). From a perspective characterised as constructivist, entrepreneurial opportunities are created by the entrepreneurs, not least through their social interactions with other agents in a market: they are endogenous events (Alvarez & Barney 2007: 15). Entrepreneurs are responsible for the emergence of new things because of their, amongst other things, interpretative accomplishments and their interpretative competences. Their conditions of action are not in any way simplified by total information or secure prognostications of the possible yields of an entrepreneurial opportunity. Even the probability of its occurrence is not known at the start of the entrepreneurial action process or cannot simply be inferred. Consequently, the entrepreneur makes all entrepreneurial decisions under conditions of uncertainty (Grichnik et al. 2010: 68f.). An essential aspect of the entrepreneurial strategy is cognitive flexibility in handling the contingences of an uncertain future in order to attain viability for economic projects, and not adaptation to a pre-given economic reality. This is far from an adaptationist, plan-dominated attitude of perfect control; it is much rather context control (Hejl & Stahl 2000). Both theory options are summarised by Grichnik et al. (2010: 72): "In the real world there are entrepreneurial opportunities which are discovered, and there are others which are created by the activity of the entrepreneurs and their social environment." This kind of reference clearly shows – and not just in its theoretical language – epistemically realist and ontological aspects of the explanatory approach to central economic topics even in this sub-discipline, because the general goal certainly is the development of action-governing expectations and the genesis of action opportunities.<sup>4</sup>

4| A similarly different dualist orientation may be diagnosed for strategic management and the theory of organisation.

## Non-dualism and the economic sciences: An exploratory discourse

### Non-dualist impulses to know: Description and beyond!

The dualist principle of knowledge as the "paradogma" (Mitterer 1992: 18, Introduction §3), or the dogmatic syntagma, of philosophy can be constructively dissolved within the framework of a non-dualising mode of argumentation. In accordance with a "beyond of discourse," any kind of pre-ordered reality is disqualified and so can no longer serve as the objective of inquiry and regulator of discourse (Mitterer 1983: 266; 1992: §23; 2001: §70). A non-dualist conception ditches meta-theoretical duality, or "beyondings" (Mitterer 1992: §17) in Mitterer's wording. It manages without the reference to ontological objects as the targets of linguistic descriptions or specifications or – more broadly – epistemic acts (Mitterer 2001: §133). Relinquishing any objective reference base makes all methodological efforts dispensable in employing procedures to gain access to "the" reality in an objective way. The typical notion of science and scientific practice, i.e., to achieve objectively true or ontological knowledge, is devalued and neutralised (Schmidt & Zurstiege 2000: 34). The scientist can no longer play the role of the expert searching for objective knowledge and the apprehension of reality. The task is now to acquire viable knowledge that is valid until further notice but strictly on probation.

Among the apparent fields of problems and developments of non-dualism are the potential range of its statements on the level of concrete applications, and thus the gaps in its explanations and specifications as well as fundamental pragmatic gaps. Direct recourse to Mitterer could create problems of comprehension and validation because there, connections with practical action have not yet been developed with sufficient clarity. His deliberations remain rather abstract and cover only a reduced domain of validity with respect to conceivable operations (of inquiry and practical activity). In concrete terms: Mitterer's expositions "so far" belong exclusively to the linguistic level of descriptions and assertions. This type of language

makes it easy to characterise "what can be true or false" (Janich 2010: 39). Such descriptions as theoretical elements and other core concepts such as language, discourse, and truth are, remarkably enough, not specified exactly by means of definitions, not terminologically ordered and reflected (Ofner 2008: 148; Staude 2008: 231; Janich 2010: 35; Schmidt 2010a: 139). Linguistic acts do not comprise only descriptions, on the one hand; nor do they cover the whole spectrum of possible acts, on the other. It is worth remembering that the ordinary practical life of human beings is shaped by operations, some of which are of a much more elementary nature. One might ultimately even come to the conclusion that action does not figure at all in Mitterer's theoretical design (Janich 2010: 44). And it is not just descriptions that are performed in the partial domain of linguistic action, but primarily types of linguistic acts that help to initiate, correlate, and connect social processes of action through communication. The agents in their social and cultural frameworks of action must not be neglected here because they have to create and cultivate the relations with other agents. As Janich elucidates, there is the need to articulate not only summonses and challenges in a common discussion as well as queries in processes of co-orientation, but also future-directed things such as fictions and desires, or things in need of clarification in order to discern reasons for decisions and subsequent actions (Janich 2010: 36, 39f.). For these reasons alone, Mitterer's argumentation concerning the understanding of human practical activity rests on a rather narrow theoretical basis. If it is to provide the foundations for explanation and justification in specialist disciplines of science, then its "pragmatic deficit" (ibid: 44) must be removed. Consequently, there is a clear need for amplification: further areas of action and experience must be taken into account.

### Next steps for acceptance

But how might the step towards the generalisation and application of Mitterer's non-dualist argumentation be successfully accomplished? A theoretical unit must be chosen that promises multiple applicability and permits the subsumption of multifarious activities such as decision-making, communicating, and ordinary practical ac-

tion. The initial assumption of general operativity and continuing constitution makes the very idea of operation comprehensible, at least as a social-scientific base category with the desired properties (Weber 2005: 105). Thus Weber asks: "What would be more presuppositionless than the supposition that operations happen?" (ibid). The idea of operation as an event in time, specifiable by a beginning and an ending, appears rock-solid and multiply utilisable (ibid: 106). If this theoretical decision is followed up, then every event can be identified in its time course because it can be characterised by means of topical-thematic, temporal, spatial, and social dimensions (Luhmann 1984: 114–120; Rüeegg-Stürm 2003: 171–174; Weber 2005: 108, footnote 28, 145). Non-dualism offers an epistemological strategy enabling the solution of the inherent problems of dualist philosophy. From the beginning, the focus is not on objects but on processes or performing operations (Schmidt 2003: 144). The static rigidity of the epistemological subject-object-division, a typical example of the "beyonding" of thought, can be replaced with a processual and thus inherently time-relative difference logic of reality constitution (Mitterer 1992: §97f; 2001: §§153f). Reality logically turns into a topic of processual events and results and particular contingent starting bases. The recourse to reality vanishes and is replaced with operations of "starting from" and "taking up." Mitterer's temporal differentiation logic visualises the operative form of results and processes by separating operations "so far" from operations valid "from now on" (Mitterer 1992: §17, §21; 2001: §157). Operations performed so far, together with their results, constitute the status reached and the basis for further operations. Starting out in this way, imminent operations will be realised "from now on" and followed by further operations that in turn produce a new status, etc. (Vollmar 2007: 157). This kind of analytic grid of the dynamic further development of events may apply equally to economic processes such as, for example, transactions, as the economy may be viewed as a permanent eventful flow or a self-organised process of reality creation.

### Communication as a potential theoretical bridge

An important step in the preparation of their acceptance and reception in the different specialist disciplines is the critical clarification of whether Mitterer's assertions would meet with a productive climate so that a connection in terms of a common theoretical language becomes possible. The economic sciences must first accept language and communication as relevant theoretical elements for themselves so as to be able to link up with a theoretical language typical of linguistic philosophy and its pronouncements for the purposes of their own discussions and applications – even though Mitterer's argumentation is not yet broad enough to cover the whole spectrum of speech acts. The question is, therefore, what position and value communication and language have in the theoretical thought of the economic sciences. Do they deal with a communication-free and thus quasi speechless or even language-free theoretical world or economy (Männel 2002: 16; Vollmar 2007: 308f.)? Is price the only language comprehensible to an economy?

In large parts of the economic sciences, no productive understanding of communication and language has been developed; communication is simply believed to function naturally on its own. The reason for this attitude is the primary orientation by the model of communication as information transmission, which does not seem to need further elucidation (Shannon & Weaver 1949). Communication is thus ontologised as the exchange of information or even equated with information. The notion of communication is rudimentary and unsophisticated. Economic theory finds it difficult to recognise the semantic level at all or grant it particular attention. It is often heavily simplified to the extent that interpretations and the constitution of meanings do not seem to be relevant accomplishments by agents at all. Whenever problems of understanding arise, they are referred to the restricted cognitive abilities of the communicating agent with respect to the comprehension of the context of action. In the standard model of rational choice, communication is evidently a priori dispensable because the alleged decider is perfectly informed anyway. Language is given an un-

equivocal, objectivist role; its utilisation and its effects are rendered innocuous (Männel 2002: 22). Independently of the different stages of development of the economic sciences and the heterogeneity of the various concurrently existing theoretical strands, it may generally be stated that, in the discipline of economics, communication functions primarily as an explanans. In the majority of cases, communication is characterised as an auxiliary function, or as an instrument for the overriding general task of securing business performance and coordinating market processes (Arrow 1979: 9; Simon 1997: 154). Consequently, no really profound interest in a more penetrating understanding has developed. Communication is therefore an obvious desideratum of research. It is true that communication was recognised as an explanandum in the environment of some of the offshoots of the "cultural or linguistic turn" in the economic sciences (Scherer 2006: 58), particularly in the theory of organisation, but it has never been clarified further and explained in exact detail.

The incapability of (standard) economics to recognise the relevance of communication is astounding because the discipline is in consequence actually refusing to consider a theoretical element upon which it inexorably depends (Priddat 2008a: 17). A larger part of economic activity is undoubtedly connected with the use of language and thus carries aspects of communicative action (McCloskey 1994, 1998). Economic processes – whatever kinds of transactions they may contain – are essentially determined by cognitive and communicative factors. The possibility of performing economic actions is not simply given but only arises through communicative, i.e., also linguistic and cognitive, preparatory efforts (Männel 2002: 20, 73). Communication processes serve co-orientation in the context of the exploration of future realities and develop their own power of impact on generating, relocating or devaluing the preferences of economic agents (Priddat 2004: 358; Vollmar 2007: 295). In order to cope with the fundamental uncertainty of individual or collective action, linguistic acts of organisation serve the purpose of making mutual understanding possible, of agreeing on, coordinating, and realising reflexive designs and projects of action as closely to expecta-

tion as possible. Economic coordination not only happens on the basis of prices but also through the use of language in the context of acts of communication that must lead to mental convergence. A mutually compatible structure of expectations may result from such generation of meaning and elaboration of sense, which will consequently help to execute further communicative and consecutive connective action. Concurrently, a process of the evaluation of previous – and the generation of new – options for action takes place through which the allocation of resources is reinterpreted and old scarcities can be neutralised (Loasby 1998: 98).<sup>5</sup> Such linguistic interaction also introduces “newness” to economic life. A closer look at the economic action theatre of the market shows that the interaction of market agents involves recursive speech acts that do not solely refer to pure or evident goods but endow these with different semantic connotations, making them subject to possibly variable interpretation. These particular goods/semantic mixtures are called “hybrids” by Priddat (2000: 466; 2003: 93). Their meaning refers to a context of one or more communities of language game players. The goings-on in the markets or, more generally, everything that happens or can happen in economic processes, i.e., the totality of economic domains, is constantly being subjected to interpretation. The evaluations are part of the actions performed and form the presuppositions for positings and continuities in the processes making up reality. Mitterer emphasises – although in a different context – with regard to the constantly emerging and inevitably contingent interpretations: “Interpretations are interpretations of interpretations, whereby the previous interpretations are incorporated into the following interpretations” (Mitterer 2013: §21).

Nevertheless, from a theoretical point of view, a variety of speech acts is clearly necessary. It is, furthermore, relatively easy to understand that descriptions of the sort

5] It is surely beyond question that the movements of the financial market, business activities or simple purchasing acts are quite typically subject to communicative control. Rhetoric, in particular, i.e. the art or skill to convince or persuade a partner, is indispensable to economics (McCloskey 1994).

proposed by Mitterer are not sufficient in themselves to set up a primary reflexive constellation. Surprisingly, such an attribution of relevance is all in all relatively novel to the economic sciences (Priddat 2008b: 21). They are thus confronted by the need to make up for a considerable theoretical backlog, which unites Mitterer’s argumentation with the status quo of the economic sciences. Both theoretical universes must be amplified and further differentiated.

Economic actions are quite essentially, but not exclusively, linguistic actions or communicative action games, a fact that must not be overlooked when discussing their systematic incorporation. All one-sided fixation on language and speech acts, as might be suggested in connection with Mitterer’s ideas, must be avoided. In such an event, economic theory formation would exhibit the same pragmatic gaps as Mitterer’s non-dualist argumentation so far. And the sort of extreme theoretical development that wants to consider all organisation as communication (Luhmann 2011) is certainly not helpful either, because economic processes not only consist of linguistic suppositions and their continuations but also quite fundamentally of a great variety of other kinds of performed actions and operations. Such an approach would not grasp the totality of frameworks for economic action.

### Potential knowledge gains for the economic sciences

Has Thorstein Veblen’s diagnosis – “Economics is helplessly behind the times, and unable to handle its subject-matter in a way to entitle it to standing as a modern science” (Veblen 1898: 373) – still not lost any of its actuality? Surely it must not be generalised, but in its fundamental structures, as has been indicated in this contribution, a critical discourse can certainly be recommended. The present deliberations have tried to suggest that, from the perspective of the philosophy of science, there is not only a serious demand but also manoeuvring space for the re-shaping of economic theory at its roots, in its theoretical language, and in the theoretical representation of the process of inquiry (Herrmann-Pillath 2004: 167). Non-dualism holds the promise of higher meta-theoretical and inter-disciplinary consistency and plausibility for the economic

sciences. The core of corresponding relevant efforts must consist of a careful logical analysis of the framework of economic inquiry and the formulation of a new syntagma untainted by metaphysical assumptions. Implicit or explicit theses on the knowability or unknowability of reality are logically inexplicable and therefore superfluous (Vollmar 2007: 204). Along these lines, the economic notion of humankind and the understanding of economic processes can be modified, questioned more systematically, and fully differentiated with regard to its theoretical elements. The neglected social constitution of economic action, in particular, and especially communicative and rule-based action, can be explained with a higher degree of plausibility. Very deep layers of the fundamental syntagmatic and paradigmatic assumptions can be changed so that the step towards an epistemologically well-reflected status quo of the economic sciences can finally be taken (Männel 2002: 282; Vollmar 2007: 196). The pragmatic understanding of science, which in its basic contours follows fundamental non-dualist ideas, quite considerably transforms the role of the scientist. Scientists can no longer occupy an ontologically privileged position but are much rather specialists for systematically achieved orientation work that generates time-relative knowledge.

### Strategy of immunisation as possible answer

The pre-requisite for the application of a non-dualist strategy of argumentation is the determined study and discussion of the problems of the philosophy of science and the theory of knowledge. Even though the theoretical foundations of the economic sciences might be crisis-ridden, the relevant methodological discussions that regularly arise are not always followed with sufficient intensity. The explicit orientation in the direction of the natural sciences and formalist methods has accumulated an enormous measure of solid self-confidence over the years and led to a high degree of self-immunisation. The groundbreaking theoretical developments in the quite deliberately chosen guiding science of physics, particularly the phenomenon of historical contingency, have largely been ignored and repressed. Quite on the contrary, there are aggressive



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and even imperialist attempts to explain non-economic social domains of human life on the basis of economic approaches (Becker 1993). Such rigidification, and even somewhat pathological stubbornness, manifests itself, for instance, when the critical reflection of the history of the theoretical foundations of the sciences of organisation leads to the recommendation to proceed strictly on a deterministically oriented basis with regard to the theory of contingency (Hodgson 2012: 104). The functionalist paradigm is declared to be the theoretically central one so as to exclude theoretical pluralism (Pfeffer 1993; Donaldson 1996). Quite typically, it is generally added that reflexion might certainly be needed at critical junctures but that cultivating the permanent methodical meta-reflexion of one's own discipline would "quickly lead to ineffective navel-gazing" (Schreyögg 2007: 147) and spiralling speculation. Work should concentrate on down-to-earth material questions and remain strictly problem-oriented (Schneider 2001: 168, 262; Schreyögg 2007: 158). In the context of the epistemically chiefly relativist theory of organisation, the recommendation is, for instance, to refrain from changing constructivist theoretical foundations into radical constructivist ones because such a move is held to be without momentous effect (Fallgatter & Koch 2000: 88). From a pragmatic point of view on the one hand, it is preferable to put the theoretical framework in motion by opening black boxes and deconstructing some fundamentally taken-for-granted premises. But on the other hand, it is important to avoid unnecessary misunderstandings and counterpro-

ductive irritations. In view of the problem of the paradoxical assumptions within radical constructivism, the emergence of a "secondary theatre of war" (Fallgatter & Koch 2000: 88) in the theoretical debate should be averted. An inconsistent theoretical framework is not useful to achieving progress in the rare methodological discussions: it would threaten their main intentions. Obviously, only moderate changes in theoretical assumptions would be more suitable for acceptance, otherwise the economic sciences could not cope with the theoretical challenge. The reference to reality persists when the relationship is in transition, because of the epistemological scepticism. The assumption of an unknowable ontological reality is considered as sufficient.

Despite their epistemically largely realist, and in parts even still positivist, traditions and dogmatics, the following can be stated for the economic sciences: a conceptual revision of a radical kind is conceivable and discipline-compatible. Postulates such as the consistent orientation towards processes can be accepted with proper reflexion (Schmidt 2003: 28; Schumann 2006: 68; Vollmar 2007; Schmidt 2010b). With Mitterer's typical processual "so far"/"from now on" logic of argumentation, for example, some economic transaction reality may be identified as the initial reality. Thus transactions as operations "so far" and transactions as operations "from now on" may be distinguished. The connection between the present reality of transactions and the future one can then be established, the latter expressing the future-directed orientation. Thus the operative status difference indicates the progres-

sion of economic transactions, and, in fact, the process of their continuation in general, including the interpretations that are constantly being attached. The first results of work in the economic sciences that involves non-dualist thought have meanwhile been published (Vollmar 2007; Schmidt 2011).

## Conclusion

For a specialist scientific discipline such as economics, thinking against or across the mainstream will naturally not at all be easy as non-dualist thought is so utterly radical and turns the economic view of worlds and theories upside down, as it were. It generates not just trivial irritations of its argumentative structure but lands an upsetting attack. The processing and implementation of this attack require, in the truest sense of the words, courage, discipline, and high epistemic investment, granted the active interaction is performed with sufficient awareness. This does not easily accord with the inherited conventions of thought of the scientific community as a uniform thought collective or a linguistic community that is carried forward in a relatively homogeneous manner from generation to generation. To avoid endangering the existing language games and to maintain communicative intelligibility, self-corroboration will prevail over the intensive reflexion on problems of the philosophy of science and the theory of knowledge.<sup>6</sup>

6| For instance, Hodgson emphasizes "the importance of interdisciplinary dialogue, in-



We find ourselves at the beginning of a process of rethinking and the creation of an alternative, programmatic, theoretical project that advocates the conceptional revision of theoretical foundations and is capable of removing discipline-specific explanatory barriers. To achieve this, further elaborations of topical fields within the economic sciences are necessary in order to enlarge and substantiate step by step the non-dualist theoretical structures previously outlined. It has been shown that the level of linguistic descriptions must be relinquished in order to be able to explain and analyse economic processes of practical action. Theoretical progress of this kind may help to explain the process of acquiring knowledge in the economic domains of action with greater plausibility and to develop a fruitful concept of the human agent. In what ways and to what extent this will lead to a sustainably convincing theoretical (counter-stream) movement, remains to be seen; the dualist frame of thought in the economic sciences is still exceptionally obdurate. It must never be forgotten, though, that theoretical preferences are time-relative and can undergo drastic changes so that available paths of necessary innovation can be followed.

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- cluding with psychology, sociology, history, and philosophy. The technocratic specialists that now populate departments of economics have little grounding in the broad fundamentals of enquiry in the social sciences.” (Hodgson 2007: 20)
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