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An essay on the putative knowledge of textbook economics

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Abstract

The article pursues the two related questions of *how* economists pretend to know and *why* they want to know at all. It is argued that both the economic form of knowledge and the motivation of knowing have undergone a fundamental change during the course of the 20th century. The knowledge of important contemporary economic textbooks has little in common with an objective, decidedly scientifically motivated knowledge. Rather, their contents and forms follow a productive end, aiming at the subjectivity of their readers.

Keywords: Economic education, Philosophy of economics, Foucault, Neoliberalism

JEL categories: A10, A13, A20, B13, B40

1 Introductory remarks

The subject of this essay is the knowledge of economists. More precisely, it is not the content, but the form of their knowledge. It seems to me that this form took a decisive turn in the 20th century and that what economists pass on in textbooks today has little to do with knowledge in a scientific sense. In this way, however, they no longer follow an understanding of knowledge that prevailed, for example, in the early tradition of neoclassical theorization. Secondly, this change in the concept of economic knowledge is based on a change in the fundamental will or motivation of economists. What is the primary purpose of their activities? I think that this question cannot be answered as an inner-scientific one. Rather, it must be reflected today in the light of the politico-economic context of economic science and education.

The theses of this twofold change in the understanding of economic knowledge as well as in its underlying motivation will be presented by referring to a particularly strong contrast: on the one hand, using the example of those who introduced a consistent mathematical methodology into economics at the end of the 19th century and in doing so founded the still dominant neoclassical tradition. On the other hand with reference to contemporary textbook literature, that presumably sets out to introduce newcomers to the science of economics. The reference to didactic literature is based on a characterization of economics as a textbook science, which as such is constitutively dependent on the mediation of canonized knowledge (Bäuerle 2017).

The claim is not made here to meticulously elaborate the two different cultures of knowledge and will. Rather, the possibility of a systematic demarcation should be raised so that this border and its historical realization can become the object of reflection and criticism. In this sense, the basic intention of the essay is not to present a detailed empirical work, but rather to offer a basic interpretation scheme for a multitude of findings in current economic textbook research (Graupe 2019, 2017; Graupe/Steffestun 2018; Bäuerle 2018, 2017; Zuidhof 2014; Giraud 2011, 2014; Pahl 2011; Peukert 2018 a/b; van Treeck/Urban 2016).

The contribution is inspired by a study of Silja Graupe (2017), in which she draws a distinction between different epistemic cultures in the early neoclassical economic on the one hand and contemporary economic textbooks on the other. In contrast to Graupe's work, the focus of this essay will lay on a conceptual selectivity of two forms of economic *knowledge* and related forms of *will*. To this end, I shall rely on Michel Foucault's examination of political economy and its concept of knowledge in particular, and finally on thoughts of Philip Mirowski and Edward Nik-Khah (2017),

who also attest economic science in the post-war period a drastic shift in its underlying concept of knowledge.[1]

The question that should guide us through the first part of my presentation is: What is the understanding of economic knowledge that underlies the most important textbooks today? I limit myself to three internationally very popular textbooks of introductory courses (Econ101) (Bäuerle 2017, 253 f.): the archetype of the genre, Paul Samuelson's *Economics*, furthermore Gregory Mankiw and Marc Taylor's *Economics*, who hold about 20% of the international market share (ibid.) and finally the *Principles of Economics* by Robert Frank, Ben Bernanke and Louis Johnston.

2 The knowledge of economic textbooks

Samuelson/Nordhaus address my leading question as follows:

> „Our primary goal is to emphasize the core economic principles that will endure beyond today's headlines [...] there are a few basic concepts that underpin all of economics [...] We have therefore chosen to focus on the central core of economics – on those enduring truths that will be just as important in the twenty-first century as they were in the twentieth." (Samuelson/Nordhaus 2010, xviii-xix)

The two textbook authors are obviously interested in basic economic principles that apply to the entire economics discipline. These 'eternal truths' apply independently of time, they are not subject to any historical conditionality. In older editions, Samuelson emphasizes that they also claim validity independently of spatial situations (Russia, China, USA) and political affiliations (Republicans / Democrats) (Samuelson 1976, vii). The knowledge of economists is therefore a knowledge that promises universal validity, it is context-free. Frank et al. illustrate the supposed natural-law quality of economic truths by referring to an example from everyday life:

> „Most of us make sensible decisions most of the time, without being consciously aware that we are weighing costs and benefits, just as most people ride a bike without being consciously aware of what keeps them from falling. Through trial and error, we gradually learn what kinds of choices tend to work best in different contexts, just as bicycle riders internalize the relevant laws of physics, usually without being conscious of them." (Frank et al. 2013, 7)

In the understanding of the textbook authors there seems to exist beneath the surface of human action – all human action – a sphere of laws to which that action is as bound just as natural objects are bound to natural laws. These are the economic laws or principles that the textbook aims to explain. But what remains to be done for the economist in such a context of a law-governed economics?

> „Economists try to address their subject with a scientist's objectivity. They approach the study of the economy in much the same way as a physicist approaches the study of

1 In the case of the latter, I follow the changes mentioned not only with regard to economic *education*, but also with regard to economic *research*.

> matter and a biologist approaches the study of life: they devise theories, collect data and then analyze these data in an attempt to verify or refute their theories.
>
> […] The essence of any science is scientific method – the dispassionate development and testing of theories about how the world works. This method of inquiry is as applicable to studying a nation's economy as it is to studying the Earth's gravity or a species' evolution." (Mankiw/Taylor 2014, 17; Accentuation L.B.)

Sticking to the eminent orchestra of the natural sciences, Mankiw and Taylor state that as economists they are also using 'the' scientific method. At the end of their work as scientists with those methods there appear tested and found to be true theories about 'how the world works'. Economic science is aware of these truths and passes this knowledge on in the context of textbooks and accompanying courses. It thus seems to be a decidedly scientific undertaking, which the textbook authors quoted here agree with. In that last quotation of Mankiw and Taylor we also saw an explicit reference to the basic attitude of their action and thus also the results of this action (economic knowledge) as specifically scientific action and knowledge: scientific objectivity.

3 Objectivity as an epistemic virtue

Following the work of Lorraine Daston and Peter Galison (2007), I would now like to introduce objectivity as an epistemic virtue as a second step – in order to be finally able to judge whether the knowledge of the economists corresponds to this understanding of scientific action.

What is an epistemic virtue? The purpose of all epistemic virtues is stated by Daston/Galison in sharp demarcation from self-knowledge with world-knowledge: "Epistemic virtues in science are preached and practiced in order to know the world, not the self" (Daston/Galison 2007, 39). Epistemic virtues therefore serve as a guideline or ideal for the development of a certain scientific attitude with the aim of recognizing the world: "they are norms that are internalized and enforced by appeal to ethical values, as well as to pragmatic efficacy in securing knowledge" (ibid., 40-1). Virtuous epistemic action is – if understood as an attitude as here – especially demanding on the scientist. Epistemic virtues define how the formation of a scientific self is to be accomplished; a self that cultivates certain traits of character and prevents others: "The mastery of scientific practices is inevitably linked to self-mastery, the assiduous cultivation of a certain kind of self" (ibid., 40). Finally, Daston/Galison examine and understand these virtues in their historical contingency, as 'fashions' of scientific practice subject to cultural, intellectual-historical, technical, and economic processes of change.

Against this background, Daston/Galison reconstruct how objectivity as an epistemic virtue gained strength during the course of the 19th century, and how it should become decisive for a multitude of sciences and their members. What did it mean to be objective back then?

> "To be objective is to aspire to knowledge that bears no trace of the knower — knowledge unmarked by prejudice or skill, fantasy or judgment, wishing or striving. Objectivity is blind sight, seeing without inference, interpretation, or intelligence." (ibid., 17)

The acquisition of knowledge can only be achieved if the opposite pole of the objective, the subjective, is kept out of the act of perceiving (ibid., 36 f.). Only a knowledge freed from subjective influences allows one to hope that the object can actually be grasped in its own way and subsequently represented. Thus, the epistemic virtue of objectivity brings along for the scientific self the peculiar task of controlling itself in such a way that the cognitive process is not 'polluted' by personal desires, experiences and prejudices. The paradox of the objective scientific self is its obedience to an epistemic rule that makes it the enemy of itself. A "will to willessness" (ibid., 38) commands the objective self a consequent self-negation, a kind of epistemic asceticism.

It is crucial that the scientist *consciously* carries out this self-restriction in order to be able to recognize. The epistemic virtue of objectivity for the scientific self demands a constant distrust of itself; and this distrust must be carried out at every moment of scientific practice in the most precise way. Although in an extreme form – the permanent self-exclusion from the act of cognition – this form of cognition presupposes a conscious self-relationship. The objective self must know where and when it is transforming the object with subjectivity in order to protect it from it. In its bipolarity, the relationship between self and world is inseparably bound up and must be practiced virtuously for the purpose of knowing the world.

An anchor and guarantor of this scientific balancing act is, I already hinted at it with the 'will to willessness', the belief in the strength and freedom of the human will:

> "the will asserted (subjectivity) and the will restrained (objectivity) — the latter by a further assertion of will. In Jena and Paris, London and Copenhagen, new ideals and practices of the willful, active self took shape in the middle decades of the nineteenth century." (ibid., 228)

The will for objective knowledge aims at a knowledge of the world. However, this knowledge has no ultimate, metaphysical quality. It is rather the *result* of a virtuous cognitive process in the empirical confrontation with the world (cf. ibid. 213-215): "objectivity was conceived in the sciences […] as an epistemological concern, that is, as about the acquisition and securing of knowledge rather than the ultimate constitution of nature (metaphysics)" (ibid., 215). This limitation of the primary motivation of scientific inquiry also manifested itself in a shift of the scientific ethos away from the truth-seeking genius to the indefatigable worker, the objective observer.

In the overall view, in connection with the epistemic virtue of objectivity, two forms of knowledge are thus produced: based on a scientific will to knowledge, the scientist must first have and put into practice a virtuous knowledge of what is necessary for a 'good' scientific process. If sufficiently considered, the act of

knowledge or research then carried out promises a scientifically (i.e. objectively) assured knowledge as a result.

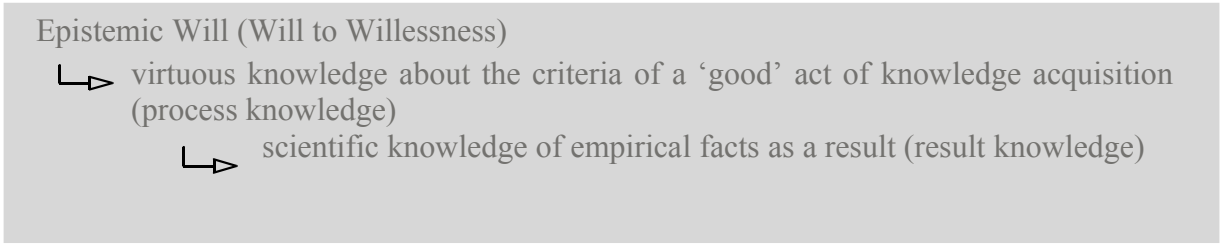


Fig. 1: Hierarchy of wills and knowledge of objective knowledge, based on Daston/Gallison (2007)

4 Objectivity in Neoclassical Economics

Did scientific developments and the epistemic virtue of objectivity have an influence on economists during the course of the 19th century? And if so, in what form? In his volume 'More Heat than light', Philip Mirowski has worked out what comprehensive influence the developments in the natural sciences of the 19th century had on the development of marginalism and thus also on the formation of neoclassical theory, which still sets the tone today. This influence also includes the enthusiasm for the objective ideal of knowledge, even if Mirowski does not make this facet the main object of his investigation. Although he reproaches the application of field formalisms and the development of mechanical analogies in the field of economics at the expense of internal coherence in the area of origin (i.e. analytical mechanics) (Mirowski 1989, 229-31, 272-74), he consistently emphasizes the *epistemic* intentions and convictions that led the mathematical economists in their revolution. It was confidence in the increased *cognitive faculties* of objective natural sciences that allowed the marginalists to adopt mechanical-mathematical methodologies into the science of political economy. This confidence is shared by the fundamental works of early neoclassical economics such as Leon Walras:

> „Pure mechanics surely ought to precede applied mechanics. Similarly, given the pure theory of economics, it must precede applied economics, and this pure theory of economics is a science which resembles the physico-mathematical sciences in every respect. If the pure theory of economics [...] is a physico-mathematical science like mechanics or hydrodynamics, then economists should not be afraid to use the methods and language of mathematics. The mathematical method is not an experimental method; it is a rational method." (Walras 1965 [1874], 71)

Further, William Stanley Jevons:

> „[John Stuart; L.B.] Mill [...] speaks of an equation as only a proper mathematical analogy. But if Economics is to be a real science at all, it must not deal merely with analogies; it must reason by real equations, like all the other sciences which have reached at all a systematic character." (Jevons 1965 [1871], 101)

And finally, Irving Fisher:

> „There is a higher economics just as there is a higher physics, to both of which a mathematical treatment is appropriate [...] The introduction of mathematical method

> marks a stage of growth – perhaps it is not too extravagant to say, the entrance of political economy on a scientific era [...] Up to this time political economy had been the favorite field for those persons whose tastes were semi- scientific and semi-literary or historical." (Fisher 1965 [1892], 109)

In order to enter a scientific stage, political economy had to incorporate the exact methods of the natural sciences, according to the unanimous opinion. What the marginalists undoubtedly differ in is the degree and quality of scientific objectivity they applied to their own work. Although the pronounced imagery and analogies to the analytical mechanics of the works of Jevons, Edgeworth, Walras or Fisher, for example, suggest that they are committed to the epistemic virtue of *mechanical* objectivity, the methodological remarks or chapters rather show a sympathetic proximity to what Daston/Galison call 'structural' objectivity; a kind of radical form of objectivity, which hoped to keep subjectivity in check at all by a consistent evasion into purely abstract, usually mathematical contexts and a scepticism towards pictorial representations of phenomena and empirical observation (Daston/Galison 2007, ch . 5). If this finding is true, then confidence in the methods of the natural sciences in economics even led to the loss of a concretely experienceable, empirically accessible world.

Regardless of the question of how the epistemic virtues of the marginalists showed itself in individual cases and brought to terms, they all had in common that they were guided by *epistemic* virtues; that they were thus interested in the most *successful epistemic process* possible (Mirowski/Nik-Khah 2017, 25). And a universal benchmark for successful epistemic processes seemed to have been found for many sciences in the field formalisms of Lagrange and Hamilton between 1850 and 1870 (Mirowski 1989, 35, 201, 217). The mathematical revolution in economics was led by epistemic convictions which in the middle of the 19th century seemed to be of great explanatory potential in the natural sciences about the functioning of the world ('Laplace's dream'). Thus, in the connection of the observations of Daston/Galison on the one hand and Mirowski on the other, the thesis could be formulated that a 'will to willessness' in the 70s of the 19th century also led to the decision for alternative methodologies in political economy and was finally reflected in the change of name of the discipline to economics.

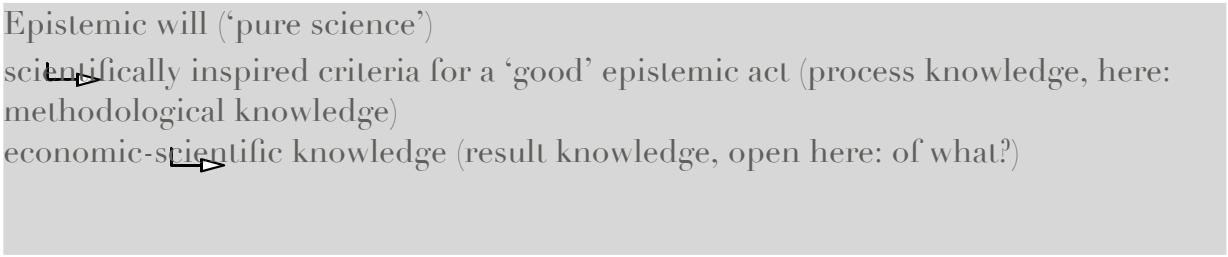


Fig. 2: Hierarchy of will and knowledge of objective economic knowledge, based on Daston/Gallison (2007)

5 The knowledge of economists

The occasional confession of contemporary textbooks to this decidedly scientific, partly also objective tradition is to be doubted on closer inspection. In order to be able to formulate and prove this doubt, I would like to present an understanding of knowledge in the following, which in my opinion is suitable to classify the one of economics textbooks. It originates from Michel Foucault's lectures on the birth of biopolitics and was developed in the immediate discussion of economic science. What kind of knowledge does economics develop according to Foucault?

> "The question here [in political economy, L.B.] is the same as the question I addressed with regard to madness, disease, delinquency, and sexuality. In all of these cases, it was not a question of showing how these objects were for a long time hidden before finally being discovered, nor of showing how all these objects are only wicked illusions or ideological products to be dispelled in the light of reason finally having reached its zenith. It was a matter of showing by what conjunctions a whole set of practices from the moment they become coordinated with a regime of truth was able to make what does not exist (madness, disease, delinquency, sexuality, etcetera), nonetheless become something, something however that continues not to exist […] It is not an illusion since it is precisely a set of practices, real practices, which established it and thus imperiously marks it out in reality." (Foucault 2010 [1978], 19)

Foucault negotiates economic knowledge as a 'dispositif', as a template of thought which, through the radiance of its true character on the one hand and its animation by human practices on the other succeeds in appearing in reality. Because people attribute truth to dispositifs and begin to align their actions with their immanent laws of truth and falsehood, non-existence – one could also say abstraction – becomes real in the sense of experienceability. For Foucault, it is this primarily productive character of the dispositifs that puts them at the heart of his power-theoretical considerations. Dispositifs of knowledge are dispositifs of power, whereby Foucault emphasizes:

> "We must cease once and for all to describe the effects of power in negative terms: it 'excludes', it 'represses', it 'censors', it 'abstracts', it 'masks', it 'conceals'. In fact, power produces; it produces reality; it produces domains of objects and rituals of truth. The individual and the knowledge that may be gained of him belong to this production." (Foucault 1995 [1975], 194)

Knowledge, one could formulate in reference to this understanding of power, is a *production task*. Its content indicates both what is and what ought to be, whereby what exists is identical with what ought to be. The peculiarity of this production task thus consists in the fact that it pretends that what is to be known, and thus what is to be produced, already exists: as truth. As the last sentence of the quote just mentioned underlines, for Foucault the most important product of modern practices of power is the modern subject itself (cf. also Foucault 1983, 208). The subject must act at the same time as the actor, as well as the target of the production task, so that power can be developed at all. Whoever appropriates a true knowledge of man, such as his true nature, true preferences, true motivations, etc. makes him- or herself the *subject* of this knowledge, the subordinate (lat.: *sub-iectus*). And the specific content of knowledge indicates the character of this subjectivity. With the execution of subjection to a specific knowledge, the

production task installed in knowledge is realized: the subject processes or produces itself on its basis.

Against the background of such an understanding of subjectivity, knowledge, power and truth, Foucault now reflects on the science of political economy as the decisive supplier of dispositifs of knowledge that set the tone for modernity. According to Foucault, it is the true laws of the economists to whom (initially Western) societies have increasingly devoted themselves since the end of the 18th century and who know how to distinguish between right and wrong actions. While at the time of political economy their knowledge, however, still referred to the leaders of territories and offered to evaluate their actions, at the latest with the emergence of neoliberal thinking in the first quarter of the 20th century an increase in the significance of economic knowledge for all human action can be observed. This conceptual expansion, for example by the Chicago School of Economics and the leading figure of neoliberal theorization, Friedrich Hayek, is followed by a global expansion of economic knowledge in terms of its historical effects, so that today it has assumed the rank of a "general style of thought, analysis and imagination" (Foucault 2010 [1978], 219). This style of thinking, which is actually a knowledge, is also characterized by the paradoxical peculiarity of wanting to be realized, although it is assumed to already exist:

> "Neoliberalism is [...] understood not only as ideological rhetoric or as politico-economic reality, but above all as a political project that aims to create a social reality that at the same time presupposes it as already existing." (Bröckling et al. 2000, 9; transl. L.B.)

In this quality as already existing that settles the 'true knowledge' on an ontological level. It is objective at best in the sense as it sounds in the English 'objective' or the roman – here Spanish – *objetivo*: as goal or purpose (of a production process of subjectivity). In this sense, the subject should submit to an 'objective' knowledge (of a certain subjectivity) that has always been fixed. It does not subject itself to a fundamentally open epistemic process, but to a self-contained truth.[2] It does not submit to an epistemic virtue, but the act of submission itself now appears as a virtue (Lemke 2001, 85). As guided by this purpose and will, there are also no limits to the production task inherent in economic knowledge, such as those of an object to be recognized, or in extreme cases: of a world to be recognized. The driving force behind this process is not the 'will to willessness', but Nietzsche's 'will to power', to which Foucault also refers (1991a). *Not the understanding of the world, but the creation of the world is the purpose of this will and its form of knowledge*. For this purpose, this form of will is inherent in the constant increase of its processual efficiency, as well as the expansion of its sphere of action (Foucault 1991b [1978], 100).

In terms of content, it is *economic* virtues that the subject is presented with and advised on in the form of true knowledge. The emerging subjects are economical in

2 On the basis of the specific content of economic knowledge (see below), the subject emerging at the moment of his subjugation reflects himself as well as the world surrounding him as ultimately limitlessly objectificable.

nature. As such they process a quantified, market-shaped world through a *ratio*, a calculating thinking, in order to always achieve an indeterminate surplus in this calculating execution. As mentioned at the beginning, I don't want to and can't go into the specific contents, the 'what' of economic knowledge. However, I like to refer to a discussion of this specific kind of subjectivity, which in my opinion is also reflected in economic textbook literature, namely the *money subject* of Karl-Heinz Brodbeck (Brodbeck 2009, chapter 5).

In the combination of its political, unlimited form with an economic, unlimited content lies the remarkable effectiveness of economic knowledge as it can be observed today under the keyword of economization in various areas of social and private life.[3] As the next but one chapter will show, economization processes today find an important starting point and catalyst in the context of academic economic education.

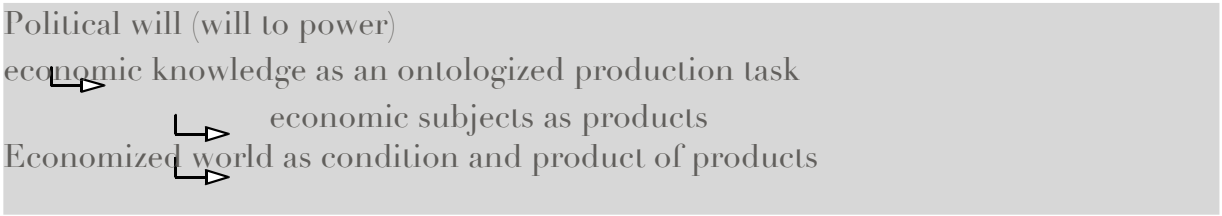


Fig. 3: Hierarchy of will and knowledge in contemporary economic education based on Foucault (2006)

6 The information of economists

After meeting in Foucault a first doubter of a purely scientifically understanding of knowledge in economics, I would now like to introduce Philip Mirowski and Edward Nik-Khah, two further thinkers who historically trace the knowledge and will of economists and attest them a change from an epistemic to a productive attitude.

In their volume "The knowledge we have lost in information" (2017) they elaborate upon a fundamental change in the cultures of knowledge and will of economists after World War II. This change found its conceptual manifestation in the term of *information*. The term spans a bridge from a political project of The Market[4] as a central coordination mechanism of social processes to an understanding of the subject that encompasses individuality within this political frame of reference only as a semi-conscious or subconscious reaction to external information (e.g. prices). The processing of information is no longer conceptualized as a conscious act of

3 With regard to empirical case studies in various social contexts, see Manzei/Schmiede (2014) (health care), Faschingeder et al. (2005) (education) and Akyel (2013) (reverence).

4 With this notation I follow those of Mirowksi/Nik-Khah (see next but one quote) and those of Ötsch (2019). On the one hand, it points to the anthropomorphic character of The Market, which is granted human abilities as an independent actor. On the other hand, it refers to the metaphysical character of The Market with superhuman qualities and abilities, which, among other things, give it a primacy over political processes (Ötsch 2019, 10 ff.).

perception and decision. Thinking in the sense of *computing* rather becomes a collectively unconscious process. And as the specific instance of this collective computing power, The Market comes into play, whose signals for market participants in turn gain the quality of imperatives for action. The central figure of this specific understanding of information integrating macro- and microeconomics was Friedrich Hayek:

> "Hayek came to portray knowledge as completely disengaged from the consciousness of the knower. This was the Hayek of 'Competition as a Discovery Procedure', wherein he deemed much of agents' conscious knowledge as irrelevant to the operation of the well-functioning economy. In this incarnation, some knowledge could only be discovered by the market, and so in this final phase Hayek conceived ideal intentionality of individuals as acquiescing in the market's signals." (Mirowski/Nik-Khah 2017, 152)

Markets and individuals were understood by Hayek as information processors, but without giving market participants themselves, scientists or others the opportunity to look into the black boxes of these processing procedures. Thus, the *results* of market-shaped and collectively unconscious processes became the only point of orientation. According to this understanding, truth is not the result of a conscious and human process, but the result of the market:

> "For orthodox economists today, truth is not a matter of morality, nor of individual standards of veracity, nor even coherence with some simplistic notion of the scientific method. For the orthodox economist, core doctrine dictates truth is the output of the greatest information processor known to humankind – namely, The Market. […] the wise market participant always defers to the pronouncements of the market" (Mirowski/Nik-Khah 2017, 7)

With regard to its qualities as a social coordination mechanism, but also with regard to its 'intelligent', superhuman services of information processing, the market is considered superior in principle to its advocates. In the light of this *a priori* superiority, not only alternative forms of shaping society, but also scientific foundations or even criticisms of the market are discredited as 'fatal conceit' (Hayek 1988 [1974]). What remains to be done for economists when taking such self-imposed humility towards The Market for granted? Mirowski/Nik-Khah use the example of three variants of the concept of economic information to show that economists, in sharp distinction to the founding figures of neoclassical theory, mutated from explorers to *producers* of market-organized processes:

> "Before 1980, many people believed that The Market was something that has always existed in a quasi- natural state, much like gravity. It seemed to enjoy a material omnipresence, sharing many characteristics of the forces of nature, warranting a science of its own. […] Where economists once placidly contemplated markets from without, situated in a space detached from their subject matter, so to speak, now they are much less disciplined about their doctrines concerning the nature of economic agency, and much more inclined to be found down in the trenches with other participants, engaged in making markets." (Mirowski/Nik-Khah, 2017, 144, 148)

According to Mirowski/Nik-Khah's thesis, during the course of the 1980s, released from the detachment of an objective science, economists made a start on installing and permanently improving markets understood as information processors in

various social configurations (ibid., 130). The authors underline that this productive credo originates from a genuinely political intention or program:

> "The Market (suitably reengineered and promoted) can always provide solutions to problems seemingly caused by the market in the first place. This is the ultimate destination of the constructivist political program within neoliberalism." (Mirowski/Nik-Khah 2017, 57)

While the will of economists was expressed as decidedly scientific before 1980, it was now a *political* will with social-technical intent that underlies their work. Mirowski/Nik-Khah trace this shift back to the decidedly political intentions of neoliberal thinkers and their post-war institutions, highlighting Friedrich Hayek and the Mont Pélerin Society as key institutions.

Similar to Foucault's analysis of the modern subject, the politically intended humility before the achievements of the market springs from a neoliberal subject whose specific activity no longer lies in understanding or thinking, but rather in subjugating to the truth of a superhuman information processor:

> "Neoliberalism influenced the way computational themes would enter economics: the agent would become one small cog in the grand market mechanism. […] Consequently, knowledge no longer looks like it did in the Enlightenment roots of political economy. What happened to the Kantian subject, able to reason for herself, autonomous, and hence an end in herself? Economists' fascination with information has inadvertently debased their treatment of knowledge – first, for the agent and then, ultimately, for the economists themselves. Now all we have left is information. It was a seemingly technical notion that, reified, was the progressively removed from the grip of the agent who, in turn, would be denied anything that could reasonably be signified as 'understanding' or even 'thought'. This neoliberal subject was banished from the realm of ends, denied any optimality that makes sense, fated to slave away on a supremely complex calculation, churning through a subroutine, Truth always eluding its grasp." (Mirowski/Nik-Khah 2017, 240)

In shaping the thinking and acting of a neoliberal subject, the introduction of an economic information concept precisely realized the active content of the term as a verb (lat.: *informare*): form, shape, imprint (Mirowski/Nik-Khah 2017, 45). Just as in Foucault's understanding of the subject, such an informational subjectivity primarily aims at the *production* of reality, although Mirowski/Nik-Khah rather subordinate this production task to a political project of the market, while for Foucault the subject itself is the neoliberal project.

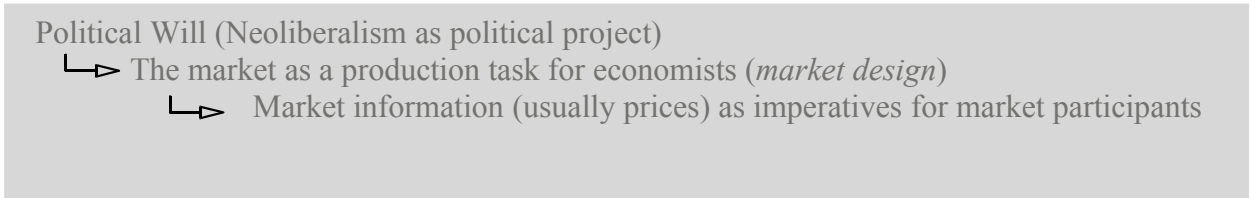


Fig. 4: Hierarchy of will and knowledge of contemporary economic theory formation based on Mirowski/Nik-Khah (2017)

7 Knowledge and information of economic textbooks

Taking up the theoretical remarks of the last two sections, I would now like to conclude by underpinning the thesis of a primarily *productive* nature of economic textbook knowledge.[5] The 'knowledge' captured in them is not the result of a conscious epistemic process which students should also be enabled to undergo. *The knowledge of textbooks is rather to be understood as a production task for a certain subjectivity*. It is intended to initiate and guide a process of subjectivation which is largely carried out *by students themselves*. As a productive task of (self-) guidance, the underpinning and realizing virtue of this process is to be understood as *political* and not epistemic in nature. It is about *shaping the world*, not understanding it. The focus lies on the antithesis of a knowledge of the world – self-knowledge (cf. Daston/Galison 2007, 41) – but as a self-knowledge that always presupposes what is to be recognized as inner truth. This productive intention of economic textbook literature becomes understandable in the context of the political project, which both Foucault and Mirwoski/Nik-Khah addressed, aiming at an economic government of social processes.

Even though it cannot certainly not be assumed that all textbook authors deliberately guide and initiate the production task of a certain form of subjectivity, the ones I have focused on here are sometimes very explicit: "Our ultimate goal is to *produce economic naturalists* – people who see each human action as the result of an implicit or explicit cost-benefit calculation" (Frank et al. 2013, viii; acc. L.B.). For his part, Mankiw emphasizes that he does not reflect his didactic work in an academic context, but in a political one. He connects the productive intention directly with the concept of information:

> „In making these decisions [choosing textbook contents, L.B.], I am guided by the fact that, in introductory economics, the typical student is not a future economist but is a future voter. I include the topics that I believe are essential to help *produce well-informed citizens*." (Mankiw 2016, 170; acc. L.B.)

Samuelson is also known to have at least partially discussed and developed his textbook from a political point of view:[6]

> „Let those who will write the nation's laws if I can write its textbooks." (Barnett/Samuelson 2007, 143)

> „The coin for which he [any ambitious scholar, L.B.] works is influencing the mind of a generation." (Samuelson 1977, 870)

If these political intentions are combined with the specific contents of many textbooks, the introductory textbooks of economics in particular appear to be central building blocks of *education for the market*. Zuidhof, on the basis of a discourse analysis of ten international introductory textbooks, comes to the conclusion that they do not lead to an understanding or even criticism, but rather

5 I did this in detail in Bäuerle (2018: chapter 5).
6 An in-depth analysis of the process of the creation of the first 10 editions of Samuelson's textbook suggests that political considerations had an extremely important influence on the development of the book (Giraud 2014).

to the creation of markets (Zuidhof 2014, 180). In this way they seem to be encouraging the market-constructivist, decidedly neoliberal aspirations of the economic sciences since the 1980s, as reconstructed by Mirowski/Nik-Kah.

Even if further quotations of this nature could be cited for Frank et al., Mankiw, Samuelson/Nordhaus and other textbook authors, this does not tell us anything about *how exactly* the process of shaping a certain subjectivity is ultimately designed, carried out and perceived. In her mentioned study, Silja Graupe addresses precisely this question of the *modus operandi* of subjectivation or, as she calls it, of influencing processes. She can show that only the introductory chapters of the textbooks by Mankiw/Taylor and Samuelson/Nordhaus contain over ten linguistic techniques known to the cognitive sciences, all of which have in common the ability to fundamentally change the emotionality, personality and value base of the readers exposed to them (Graupe 2017: Section 4.1; see also Graupe/Steffestun 2018). The fact that at least Mankiw/Taylor (2014, 17) have a knowledge of this possible effect of their textbook is suggested by their didactic orientation towards so called 'threshold concepts' by Meyer/Land, who characterize the potential impact of such concepts as follows:

> "We would argue further that as students acquire threshold concepts, and extend their use of language in relation to these concepts, there occurs also a shift in the learner's subjectivity, a repositioning of the self." (Meyer/Land 2005, 374)

> "The shift in perspective may lead to a transformation of personal identity, a reconstruction of subjectivity. In such instances a transformed perspective is likely to involve an affective component – a shift in values, feeling or attitude." (Meyer/Land 2003, 4)

Although these remarkably overt references and the findings of Graupe suggest that the didactical editing of the textbooks mentioned has undergone an exact weighing against the background of their persuasive potential, it seems important to me at this point to stress out that intentionality on the part of textbook authors is by no means necessary for economic education to have a productive effect in the above-mentioned sense. If students are primarily informed rather than educated, it is, assuming what has been said in the previous section, precisely a constitutive element of (economic) information that it, as well as its processing, does *not* (or cannot) have to be seen through in order to bring about a market-oriented shaping of social processes. Teachers, faculties or publishers can also assume the role of *recipients* of information (of curricula, PowerPoint slide sets, material to be dealt with) and thus pick up and promote what is currently given, normal, dominant.[7] An already established discursive power in terms of content and structure can thus be consolidated and expanded without conscious decisions by individual discourse participants.

This brings us to the adjective in the title of this essay. In my opinion, the knowledge conveyed in economic textbooks can be described as 'supposed' if the

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7 Sociology of science attests, that economics in particular has a strong tendency towards such self-referential, academic modes of reproduction that amplify the same signal (Maeße 2013).

concept of knowledge is to contain a certain rest of consciousness. Strictly speaking, a *consciousness of process* of the genesis and thus also the limits of the known. Such a processual awareness existed when it came to the production of knowledge in the 19th century. The cognitive process was always closely observed and controlled in order to have pure, objective knowledge at one's disposal. It loses this consciously controlled quality of knowledge in the moment it is elevated to the status of an 'eternal truth' and becomes, as it were, a blueprint for the creation of the world. The actors in this process – in this case the students – usually have no awareness of the process in which they are involved when learning 'eternal truths'. The textbooks examined here, at least, do not contain any possibilities to enlighten oneself about the peculiarities of a productive understanding of knowledge. In this way, students take part in a process that they are not able to understand. In the end they are threatened to abandon their own will by accepting a will that is initially foreign to them. This is precisely the specific intention of the 'will to power': "The will which aims at power and which acts in every power seeks the will of others as a counterpart. The former aims at overcoming the latter as will" (Gerhardt 1996, 25). At the threshold of this overcoming sit the 'eternal truths of economics', which at the moment of their acceptance and reproduction let individuals emerge as economic subjects.

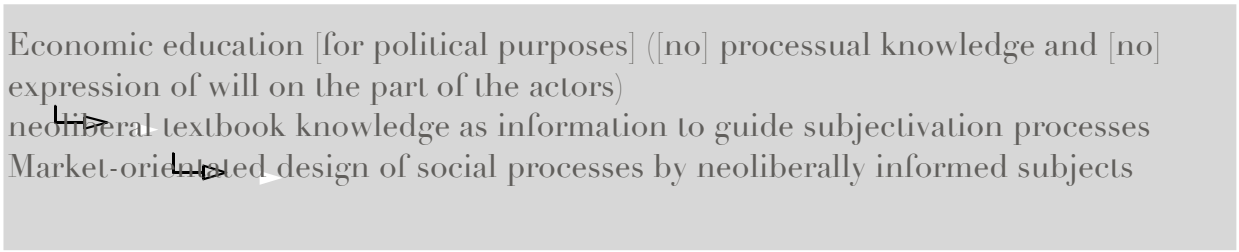


Fig. 4: Hierarchy of will and knowledge of contemporary economic theory formation based on Mirowski/Nik-Khah (2017)

8 Conclusion

The knowledge of early neoclassical economists, according to the thesis developed here, was epistemic in nature. It was the result of an epistemic process executed on the basis of conscious, virtuous decisions. The driver of this epistemic process was a 'will to willessness' on the part of the scientific subject, which formed itself according to the epistemic virtue at hand right up to its own self-banning from the cognitive process. Subjectivity was considered a disturbance in the realization of the epistemic virtue of objectivity.

On the other hand, the knowledge of important contemporary economic textbooks, such as those quoted here, must be systematically distinguished from this virtuous epistemic process. The knowledge contained in them is not the result of an epistemic process, but an imperative blueprint for the formation of economic

subjectivity among readers. Instead of keeping the subjective out of all cognitive action, economic textbook literature today aims at *producing* economic subjectivity. (Economic) subjectivity thus no longer appears as a danger to objective knowledge, but as a continuous creative task in a market-shaped world.

Nevertheless, as the present essay suggests, with the study of the history of economics, as well as with the theoretical penetration of its epistemological preconditions, there exist ways and means to break through the boundaries of this understanding of knowledge effective as well as those of objective, apparently selfless modes of knowledge. This study can show that the formation of this or that understanding of knowledge is based on decisions that are by no means already decided, but can be judged and made again and again by people. This freedom cannot be deprived of the human will and is a constitutive cornerstone of Enlightenment. To see the self-declared truths of economists as one of the major threats of enlightened, critical sociality and individuality will be crucial in the sense of preserving and strengthening the latter, because:

> „The truth, as conceived by modern economists, has not set anyone free. Instead, it brought about the death of the Kantian subject, and a subsequent lifeworld hollowed out the humanist concerns that many people mistakenly think are heart and soul of a science of economics." (Mirowski/Nik-Khah 2017, 2)

With a return to this kind of willful judgement, perhaps economists could again contribute to an awareness of forms of knowledge of the economic, which not least enable a responsible shaping of social processes in a present driven by manifold crises.

Literature

Akyel, Dominic (2013): *Die Ökonomisierung der Pietät: der Wandel des Bestattungsmarkts in Deutschland*, Frankfurt am Main: Campus Verlag.

Bäuerle, Lukas (2017): Die ökonomische Lehrbuchwissenschaft. Zum disziplinären Selbstverständnis der Volkswirtschaftslehre, *Momentum Quarterly* 6 (4), 251–69.

Bäuerle, Lukas (2018): Warum VWL studieren? Sinnangebote ökonomischer Lehrbuchliteratur, *Zeitschrift für Diskursforschung* 3/2018, 306-332.

Bäuerle, Lukas/Pühringer, Stephan/Ötsch, Walter Otto (2019): „Ohne Effizienz geht es nicht". Ergebnisse einer qualitativ-empirischen Erhebung unter Studierenden der Volkswirtschaftslehre. *FGW-Studien. Neues ökonomisches Denken* 13, Düsseldorf: Forschungsinstitut für gesellschaftliche Weiterentwicklung.

Barnett, William A./Samuelson, Paul A. (2007): An Interview with Paul A. Samuelson. In: William A. Barnett/Samuelson, Paul A. (Hg.): *Inside the economist's mind: conversations with eminent economists*, Malden: Blackwell Pub, 143–164.

Brodbeck, Karl-Heinz (2009): *Die Herrschaft des Geldes. Geschichte und Systematik*, Darmstadt: Wissenschaftliche Buchgesellschaft.

Bröckling, Ulrich/Krasmann, Susanne/Lemke, Thomas Lemke (2000): Gouvernementalität, Neoliberalismus und Selbsttechnologien. Eine Einleitung. In: Bröckling,

Ulrich/Krasmann, Susanne/Lemke, Thomas (Hg.): *Gouvernementalität der Gegenwart: Studien zur Ökonomisierung des Sozialen*, Frankfurt am Main: Suhrkamp, 7–40.

Daston, Lorraine/Galison, Peter (2007): *Objektivität*. Übersetzt von Christa Krüger, Frankfurt am Main: Suhrkamp.

Faschingeder, Gerald/Leubolt, Bernhard/ Lichtblau, Pia/Prausmüller, Oliver/Schimmerl, Johannes/Striedinger, Angelika (Hg.) (2005): *Ökonomisierung der Bildung: Tendenzen, Strategien, Alternativen. Gesellschaft, Entwicklung, Politik*, Wien: Mandelbaum Verlag.

Fisher, Irving (1965 [1892]): *Mathematical Investigations in the Theory of Value and Prices*, New York: Kelley.

Foucault, Michel (1974): Nietzsche, die Genealogie, die Historie. In: Foucault, Michel: *Von der Subversion des Wissens*, München: Hanser, 69–90.

Foucault, Michel (1977): *Überwachen und Strafen. Die Geburt des Gefängnisses*, Frankfurt am Main: Suhrkamp.

Foucault, Michel (1987): Das Subjekt und die Macht. In: Dreyfus, Hubert L. Dreyfus/Rabinow, Paul (Hg.): *Michel Foucault: Jenseits von Strukturalismus und Hermeneutik*, Frankfurt am Main: Athenäum, 243–264.

Foucault, Michel (2000): Die Gouvernementalität. In: Bröckling, Ulrich/Krasmann, Susanne/Lemke, Thomas (Hg.): *Gouvernementalität der Gegenwart: Studien zur Ökonomisierung des Sozialen*, Frankfurt am Main: Suhrkamp, 41–67.

Foucault, Michel (2006): *Die Geburt der Biopolitik*: Vorlesung am Collège de France, 1978 – 1979. In: Sennelart, Michel (Hg.): *Geschichte der Gouvernementalität,* Frankfurt am Main: Suhrkamp.

Frank, Robert H./Bernanke, Ben/Johnston, Louis Johnston (2013): *Principles of Economics.* 5. Aufl., New York: McGraw-Hill Irwin.

Gerhardt, Volker (1996): *Vom Willen zur Macht: Anthropologie und Metaphysik der Macht am exemplarischen Fall Friedrich Nietzsches*, Berlin: Walter de Gruyter.

Giraud, Yann (2011): The Political Economy of Textbook Writing: Paul Samuelson and the making of the first Ten Editions of Economics (1945-1976), *Thema Working Paper* 2011–18, http://d.repec.org/n?u=RePEc:ema:worpap:2011-18&r=hpe.

Giraud, Yann (2014): Negotiating the ‚Middle-of-the-Road' Position: Paul Samuelson, MIT, and the Politics of Textbook Writing, 1945-55, *History of Political Economy* 46 (Supplement 1), 134–52.

Graupe, Silja (2017): Beeinflussung und Manipulation in der ökonomischen Bildung – Hintergründe und Beispiele, *FGW-Studie Neues ökonomisches Denken* 5. Düsseldorf: Forschungsinstitut für gesellschaftliche Weiterentwicklung.

Graupe, Silja (2019): "Waging the war of ideas": Economics as a textbook science and its possible influence on human minds". In: Decker, Samuel/ Elsner, Wolfram/Flechtner, Svenja (Hg.): *Advancing pluralism in teaching economics: international perspectives on a textbook science*, London; New York: Routledge, Taylor & Francis Group, 173–190.

Graupe, Silja/ Steffestun, Theresa (2018): "The Market Deals out Profits and Losses" – How Standard Economic Textbooks Promote Uncritical Thinking in Metaphors, *Journal of Social Science Education* 3/2018, November, 5–18.

Hayek, Friedrich (1988): *The Fatal Conceit. The Collected Works of Friedrich August Hayek, I*. London: Routledge.

Jevons, William Stanley (1965 [1871]): *The Theory of Political Economy*, 5th ed., New York: Sentry Press.

Lemke, Thomas (2001): Max Weber, Norbert Elias und Michael Foucault über Macht und Subjektivierung, *Berliner Jahrbuch für Soziologie* 1, 77–95.

Maeße, Jens (2013): Das Feld und der Diskurs der Ökonomie. In: Maeße, Jens (Hg.): *Ökonomie, Diskurs, Regierung*, Wiesbaden: Springer Fachmedien, 241–75.

Mankiw, N. Gregory (2016): The Tradeoff between Nuance and Clarity, *Eastern Economic Journal* 42(2), 169–70.

Mankiw, Gregory/ Taylor, Mark P. (2014): *Economics*. 3. Aufl., Andover: Cengage Learning.

Manzei, Alexandra/Schmiede, Rudi (Hg.) (2014): *20 Jahre Wettbewerb im Gesundheitswesen: theoretische und empirische Analysen zur Ökonomisierung von Medizin und Pflege*, Wiesbaden: Springer VS.

Mirowski, Philip (1989): *More heat than light: economics as social physics, physics as nature's economics*, Cambridge [Mass.]; New York: Cambridge University Press.

Mirowski, Philip/Nik-Khah, Edward M. (2017): *The knowledge we have lost in information: the history of information in modern economics*, New York City: Oxford University Press.

Ötsch, Walter, Otto (2019): *Mythos Markt. Mythos Neoklassik. Das Elend des Marktfundamentalismus*, Marburg: Metropolis.

Pahl, Hanno (2011): Textbook Economics: Zur Wissenschaftssoziologie eines wirtschaftswissenschaftlichen Genres, *PROKLA* 164(41), 369 – 387.

Peukert, Helge (2018a): *Makroökonomische Lehrbücher: Wissenschaft oder Ideologie?,* Marburg: Metropolis.

Peukert, Helge (2018b): *Mikroökonomische Lehrbücher: Wissenschaft oder Ideologie?,* Marburg: Metropolis.

Samuelson, Paul A. (1976): *Economics*, 10. Aufl., New York: McGraw-Hill.

Samuelson, Paul A. (1977): *The collected scientific papers of Paul A. Samuelson*, Vol. 4, Cambridge [Mass.]: MIT Press.

Samuelson, Paul A./Nordhaus, William D. (2010): *Economics*, 19. Aufl., Boston: McGraw-Hill Irwin.

Treeck, Till van/Urban, Janina (2016): *Wirtschaft neu denken. Blinde Flecken in der Lehrbuchökonomie*, Berlin: iRights Media.

Walras, Léon (1965 [1874]): *Elements of Pure Economics*, 2. Aufl., Homewood: Richard D. Irwin, Inc.

Zuidhof, Peter-Wim(2014): Thinking Like an Economist: The Neoliberal Politics of the Economics Textbook, *Review of Social Economy* 72(2), 157–85.