

Hajnal Zsófia

REINTERPRETING THE MORAL ECONOMY

Building on the Economic Possibilities of Selflessness

Doctoral School of International Relations and Political Science

Supervisor: Dr. Hámori Balázs

Professor Emeritus

© Hajnal Zsófia

CORVINUS UNIVERSITY OF BUDAPEST

Doctoral School of International Relations and Political Science

World Economics Doctoral Program

REINTERPRETING THE MORAL ECONOMY

Building on the Economic Possibilities of Selflessness

DOCTORAL DISSERTATION

Hajnal Zsófia

Budapest, 2026



# Table of Contents

Acknowledgements.....	10
Abstract.....	12
Glossary .....	13
1. INTRODUCTION .....	16
1.1. General aims and context of the dissertation .....	16
1.2. Novelty and significance.....	17
1.3. Research questions and hypotheses .....	18
1.4. Structural outline.....	20
2. NAVIGATING THE MORAL ECONOMY (LITERATURE REVIEW).....	23
2.1. The morality concept used .....	26
2.2. The moral economy .....	28
2.2.1. From the early to the late classics.....	30
2.2.2. Reviewers of the concept.....	36
2.2.3. Case studies and thematic applications.....	39
2.2.4. Political (mis)uses of the term .....	44
2.3. Criticism reformulated .....	45
2.4. Moral economics.....	53
2.4.1. Expanding the environmental understanding .....	62
2.4.2. Applying virtue ethics to economic entities .....	66
2.4.3. Revisiting human needs theory.....	67
2.5. On the limitations of the moral economic concepts.....	75
2.6. Legitimizing moral economics and the moral economy .....	77
2.7. The promise of moral economics.....	78

2.8.	Summary of the literature review .....	80
3.	METHODOLOGICAL INTRODUCTION .....	83
3.1.	Methodological choice justification .....	84
3.2.	Interviewee selection and interview characteristics .....	85
3.3.	Details of interviewing and processing .....	86
4.	THE TENET OF MORAL ECONOMICS: RATIONAL SELFLESSNESS (THEORETICAL FRAMEWORK) .....	89
4.1.	Finite and satiable human needs.....	89
4.2.	The need to help others .....	97
4.3.	Rational selflessness.....	104
4.4.	Arriving at a definition and at the urgency of the concept.....	110
5.	THE MORAL ECONOMIC SYNTHESIS (METHODS AND RESULTS) .....	114
5.1.	Sharing as value creation.....	115
5.2.	Technology levels .....	125
5.3.	Environmental capacity – dynamic equilibria.....	136
5.4.	Synthesis overview and further insights.....	146
6.	A SETTLEMENT (DISCUSSION).....	152
6.1.	Moral economics vs. the mainstream.....	154
6.2.	Practical implications .....	156
6.2.1.	Institutionalising morality in the economy .....	157
6.2.2.	For the implementation .....	164
7.	CONCLUSION.....	170
7.1.	Summary and value added .....	171
7.2.	For further research .....	175
7.3.	A technological outlook .....	177

7.4. Final remarks.....	178
REFERENCES .....	179
APPENDICES .....	199
Appendix 1: Interviewee list.....	199
Appendix 2: Interview Consent Form – template.....	201
Appendix 3: Interview questions .....	203
Appendix 4: Interview quotation collage photographs.....	204
Appendix 5: A rational selflessness awareness experiment design.....	205
DECLARATION ON THE USE OF LARGE LANGUAGE MODELS AND GENERATIVE AI.....	216
THE LIST OF PUBLICATIONS BY THE AUTHOR .....	218

# Lists of tables and figures

## List of tables

Table 1: Merged data table for the Gini coefficient and the macroeconomic performance indicators.....	119
Table 2: The theoretical status and characteristics of the Moral Economic Synthesis and its elements.....	148
Table 3: „Split or steal” game payoffs.....	208
Table 4: A framework for the results from the experiment. ....	213

## List of figures

Figure 1: Structural outline of the dissertation. ....	22
Figure 2: Four functional categories of works on the moral economy. ....	29
Figure 3: The moral economy in the intersection of four fields in the social sciences...	42
Figure 4: Google Trends search for „moral economy”.....	43
Figure 5: Google Trends search for „moral economics”. ....	43
Figure 6: The constellation and evolution of themes around the moral economy and moral economics concepts. ....	81
Figure 7: Plot of the Gini coefficient and generosity values. ....	120
Figure 8: Plot of the Gini coefficient and GDP per capita values. ....	121
Figure 9: Plot of the Gini Coefficient and HDI Values. ....	122
Figure 10: Human needs and potential output. ....	133
Figure 11: Different levels of technology. ....	134
Figure 12: The needs-aggregate as a function of the population number.....	138
Figure 13: Two scenarios for (potential) output as a function of the population number – socio-optimistic (exponential) vs. critical (S-shaped) approaches. ....	139
Figure 14: Intersection variations of the needs aggregate and the output function. ....	140
Figure 15: Intersections of the aggregate of needs and potential output, as a function of the population number. ....	141

Figure 16: Environmental capacity to „carry” humans, as a function of the level of technology..... 142

Figure 17: Population numbers in the intersections of needs and output as a function of the level of technology, limited by the environmental capacity. .... 143

Figure 18: The chain of connections for a moral economic macro-level synthesis ..... 146

Figure 19: Directed Acyclic Graph (DAG) for the rational selflessness experiment... 210

## Acknowledgements

My doctoral and dissertational journey over the past five years has been the most fulfilling phase and experience in my life so far. Knowledge, to me, has transformed from an aspiration into an inspiration. Although the thirst for knowledge – unlike many of my needs – is insatiable, with guidance, support, and care from the Doctoral School of International Relations and Political Science and beyond, I gained enough for an acceleration in academic enthusiasm.

The World Economics Doctoral Program has given me an opportunity to formulate, process, and express a significant portion of my research ideas and theories. My dissertational themes have been dear and fascinating to me from the beginning, and have not ceased to be so. In this brief acknowledgement section, I am winding back in time, about five years, to go through a list of, and to thank the people without whom my accomplishments would not have been possible.

My doctoral supervisor, Dr. Balázs Hámori, has been receptive to and enthusiastic about my ideas from the very first email on. His enormous experience and wisdom have translated into the kind of support that I believe to have been the most suitable one available for my dissertation and me. Be it in questions of his expertise, encouragement for conferences (rehearsals inclusive), recognizing in my work the values that I did not think were obvious to many, or motivational remarks through the tougher times, Professor Hámori has always been there for me.

The faculty at the Department of World Economy has greatly contributed to increasing my confidence within academia, supporting my endeavours through academic guidance, teaching, and participation in final exam committees, as well as approvals of conference grants. I thank professors István Benczes, Sándor Gyula Nagy, Judit Ricz, Ágnes Szunomár, András Tétényi, Gábor Vigvári, Norbert Szijártó, and Viktória Endrődi-Kovács for all these experiences.

Throughout my doctoral studies, I have been in continuous collaboration with the Corvinus Business Ethics Center. Professor Dr. László Zsolnai and his colleagues have shaped my views on economics and ethics in a unique and priceless way.

My doctoral colleagues have also ensured the warmth and friendliness of the environment. With Tamás Csontos, Hanane Zerwal, Krisztián Németh, Muhayyoi Rahimzoda, and Ahmad Anwar, we have become friends and helped each other navigate through the challenges for doctoral students and early-stage researchers. I also want to thank my senior colleagues Emese Dobos and Denis Ivanov for their advice and support, as well as Sayyed Khawar Abbas for his kindness and friendship, from the start. I hope I

could be as welcoming and helpful to my international colleagues as I have experienced from Lisa Tragbar and Eva Liedauer during my research fellowship at the University of Vienna.

In parallel with the doctoral studies at the Corvinus University of Budapest, I have taught for four years at the Budapest University of Economics and Business, Faculty of International Management and Business. I remain grateful to my former BUEB colleagues Gyula Szabó, Katalin Antalóczy, and Pál Koudela, as well as Péter Galbács and László Tóth, whose expertise my dissertation has benefited from, along with the expertise and experiences of all the other interviewees.

My final year in the doctoral program was marked by a collaboration that has opened my eyes and encouraged me to take further opportunities in research. I am lucky to have worked with, and to continue to do so with Orsolya Vásárhelyi and Manran Zhu, from the Centre for Collective Learning. It was also in this final year that I have joined the ELTE CERS Institute of World Economics as a junior researcher and the Department of Economics at the Budapest University of Technology and Economics (BME) as an assistant lecturer, where I have been welcomed warmly.

My dissertation would not have grown into what it is, without the constructive and critical suggestions received at PhD Research Fora and at the Thesis Proposal Discussion. For these, I wholeheartedly thank professors Dr. Barna Bakó and Dr. György Málovics.

Finally yet importantly, I must mention my amazing parents, Zsuzsanna Szvetelszky and Zoltán Hajnal, my fantastic siblings, Miklós and Csilla, my wonderful aunts and cousins, and my extraordinary friends, who have tirelessly cheered me on. I genuinely hope that I have actually deserved all this.

*„But ethical forces are among those of which the economist has to take account.”*

Alfred Marshall, 1890<sup>1</sup>

## Abstract

This dissertation is a synthesizing and explorative endeavour, a contribution to discovering greater, yet more consistent applications of the moral economy concept than the usage that has evolved until about the end of the first quarter of the twenty-first century.

My review of the earlier applications offers a comprehensive classification of the moral economy literature, accompanied by a critical approach that is expressed in line with and in the style of the moral economic tradition and logic. This is complemented by an analysis of the directions of moral economics as a field and practice. From the dynamics of the moral economy and moral economics concepts, I derive their potential, reinterpreted connection.

The more consistent, yet also more ambitious relationship is supported by the context and constellations in and between the interviews conducted, viewing rational selflessness as the core element of the reinterpreted moral economy. On the macro level, a synthesis is established along the previously identified directions of moral economics. A system of visual models representing dynamic equilibria, built on moral economic premises, as well as a system of equations illustrating the consequences of selflessness in the economy, is included.

In the implications, I draw on the findings from the interviews, as well as on the moral economic synthesis, to provide moral economic guidance, and to lay the foundations for future implementation.

**Keywords:** *moral economy, moral economics, the need to help others, rational selflessness, moral economic synthesis*

---

<sup>1</sup> From the *Preface to the Principles of Economics*, 2013 edition, p. xix.

## Glossary

This glossary<sup>2</sup> aims to reflect the dissertational functions of the enlisted terms. The sequence of concepts here follows a dissertational order of logic, rather than being arranged alphabetically. The descriptions are partly based on sources used throughout the dissertation, and partly my own usage of the terms explained, all conveyed in my own summaries.

*Economics or the economic science* – Used interchangeably. Unlike the textbook definition “*of economics as the allocation of scarce resources among competing ends*”, this dissertation relies on “*the reasoned and humane evaluation of the social well-being*” conceptualization of the science. The contrast stems from Angus Deaton (2022), who cites Lionel Robbins and Hilary Putnam, respectively.

*Economic theory* – The non-empirical toolkit of economics that comprises the axioms, the concepts, the models, and the methods of the science.

*Economists* – Professionals in academia, business, or state affairs, who cultivate or apply economics in their work, be it of scholarly nature, immediate social impact, or both.

*The economy* – Society’s system facilitating production, negotiations, transactions, material and financial flows, and consumption, which itself is sustained through these processes, physical resources and labour. It is a social space of organizing and potential progress, as well as a social abstraction in the way that matter is a physical one.

*Morality and ethics* – Concepts used interchangeably in the dissertation, both as describing a set of virtuous norms, beliefs, and behaviours, as well as describing their objective direction in terms of future progression. The concepts apply on three levels: individual, collective, and abstract.

---

<sup>2</sup> I thank my thesis proposal discussion opponents, Prof. Dr. Barna Bakó and Prof. Dr. György Málovics, for emphasizing the need for, and for suggesting this type of preliminary clarification in concepts.

*Value* – Traits and principles to adhere to and aspire to, in the moral context. In addition, an economic factor derived from utility in the given circumstances. The two contexts meet in the human need to help others, with both moral and economic implications for the individual.

*Normative economics* – The orientation of the economic science allowing for value-based judgements and prescriptions.

*Positive economics* – The orientation of the economic science aimed at maintaining its coherence and consistency through factual analysis, and refraining from value-based judgements.

*Materialism* – The sociocultural belief system prioritizing material possessions and wealth far beyond satisfying basic needs, primarily above ethical behaviours, the value of relationships, and various communities as a whole.

*Value-corruption* – The infiltration of ethical systems of value with materialistic ideas.

*Runaway accumulation* – An acceleration in the intersection of materialism's consequences (overconsumption) and the beneficiaries' side of rising inequalities.

*A socially upstream propulsion of resources* – The creation and multiplication of material/financial wealth tend to face fewer obstacles, higher incentives, and a more accessible institutional environment at upper socioeconomic levels, resulting in an upward transfer of economically valuable ideas, information, and the ownership of capital of all sorts.

*The critique of economic reason* – Challenging the conventions of economic theory. In this dissertation, the process of challenging lies more in completion than negation.

*Institutions* – Collectively accepted, formal and informal systems of rules that primarily manifest in behavioural patterns and organisations established.

*The moral economy* – Original use: communities (mostly in agricultural contexts) with shared values and practices of economic justice. Reinterpreted concept: a social

system realising the economic potential of selflessness, which economies above subsistence levels, and at any scale, have the capacity to evolve into.

*Moral economics* – The cultivation of economic science that involves the incorporation of ethical elements, not as value judgements and policy suggestions primarily, but as explicit building blocks of economic theories and models. The way ethical elements are incorporated in moral economics increases the economic field's structural aesthetics, without increasing its distance from practical realities.

*Moral economic* – A context-dependent adjective for either moral economics or the moral economy.

*Rational* – Of action or intention relying on the clarity of thought and reason.

*Selfless* – Of behaviour or attitude through which the individual helps or benefits others without any expectation of returns.

*Rational selflessness* – A trait arising from the recognition of the value-generating and value-multiplying nature of selflessness, both on the giving and receiving ends, societally, as well as intrinsically (on an ethical level).

*The moral economic synthesis* – A chain of theories built on moral economic axioms, shifting from the micro to the macro level, which culminates in concrete equilibria of output and needs within the environmental capacity.

# 1. INTRODUCTION

As of the end of the first quarter of the twenty-first century, economics as a field of science is missing major links within and between its models and reality. I observed<sup>3</sup> these missing elements mostly to be of ethical origin, to be moral factors. Incorporating ethics further into economic thinking and theory can enrich economic understanding and provide direction. Possessing a better overview and moral insights, processes and mechanisms can be improved.

In this introductory chapter, I present the general aims of my dissertation, as well as the novelty and significance of my research. I also introduce the research questions, the corresponding hypotheses, and the dissertational structure.

## 1.1. General aims and context of the dissertation

The general aims of the dissertation can be broken down into three parts. One is the justification of using altered moral economic notions, originating in the theory of needs and behavioural economics, *the need to help others* and *rational selflessness*. The second is a contribution to economics through ethics, filling numerous theoretical gaps. There appear to be undiscovered areas of incorporating moral aspects into economic models, and the resulting economic amendments can be solidified with empirical evidence. The third and final goal is to reveal the opportunities of practicing moral economics and to foreshadow the process of moral economic transition.

This research has evolved during a critical phase of the economic science and of the economy. Developed economies themselves, and the broader societal context in an interaction with technology, have been depicted as systems that – primarily through the economies and the mechanisms of algorithms – encroach on individual freedoms and

---

<sup>3</sup> The time of observation spans over my studies in International Economics and Business (MSc) and my World Economics doctoral studies, the latter including research and general academic experiences in collaboration with the Corvinus Business Ethics Center.

human agency (P. Róna, personal communication<sup>4</sup>, November 14, 2024). As a society, we are unreasonably slow at imagining and acting upon desired forms and states of coexistence and progress. Meanwhile, in the field of economics, internal scrutiny appears to have transgressed constructive levels. The tensions and unhealthy confluences between the descriptive and prescriptive functions, as well as those of the expectations imposed on economics from within and outside, have led to the obstruction of economics as a societal tool, rendering it a field that is no longer trusted to offer comprehensive solutions to major socioeconomic challenges. In this regard, my dissertation aims to bridge a narrow gap that exists within our profession's collective understanding, that economics can still provide game-changing concepts, thought experiments, or applicable models.

## 1.2. Novelty and significance

There exist countless attempts to reform economic thinking and the economic system on the macroeconomic level, and I am not attempting to (re-)categorise them. I approach solutions solely through the words “moral economy” and “moral economics” instead. The novelty of my dissertation for the field and relevance for our time can be viewed and understood from multiple angles, though, with a primarily theoretical and practical side.

As for the theory: The academic use of the term *moral economy* is vastly scattered and disproportionate, relative to the semantic weight of its elements, and in comparison to the term's potential. In the broader context, in economic theory, I observe deep schisms between various branches, leading to contradictions and inconsistencies. A single, comprehensive step of a solution is unlikely to be found. However, the reinterpretation of the moral economy that is to be developed here gives space to both “tinier” improvements (filling gaps of economic theory with moral elements) and to a larger, consistent, synthesized framework.

In practical terms, the reinterpretation of the moral economy involves a renewed understanding of the broader implications of individuals' altruism (or selflessness – the

---

<sup>4</sup> This brief chain of thoughts is referenced from an unrecorded (no website or slides available) lecture by Péter Róna, for the student association GEM (“Gazdaságelemzők és -matematikusok diákszervezete”), at the Corvinus University of Budapest.

term I use more frequently due to its less ambiguous and less laden wording), which has the potential to drive behaviours and lead to societal changes. Based on symptoms of a lack of moral economic practice in the corporate sphere, and with moral questions and themes of purpose and management on the rise, morally backed applications of economic science may also find their way into the company operations. The emphasis on business integrity, the declarations of purpose (Gasca, 2019), and tensions between productivity and company values (Apponyi, 2021) may accelerate this process.

In the context of the economics and ethics nexus, *normative economics*, and the *critique of economic reason* (Ulrich, 2007, p. 19) are relevant epistemological streams and perspectives that describe my dissertation. Partially, however, this normative approach incorporates and utilises positivist tools, reflecting the complex structures of thought and the purpose of an apt deployment, notwithstanding the ambitious nature of the project.

My research is significant because the connection between the moral economy and moral economics concepts is conducted in an unprecedentedly broad and systematic way, and the synthesis uncovers constructs hitherto undiscussed in economic science. My dissertation can support researchers of moral economies, as well as individuals or teams entrusted with, or embarking on solving structural economic problems in the long and the very long run.

### 1.3. Research questions and hypotheses

If only one overarching theme, one central question, a puzzle would need to be identified for the above structure, then it would be the following: **How can the moral economy tradition be relied upon, reinterpreted, and applied to economic theory and structures of the economy, in our age?**<sup>5</sup>

The literature on the moral economy – up to this point – does not address concrete theoretical opportunities for incorporating ethical elements into economic theory. Neither

---

<sup>5</sup> This question has crystallised out of an extensive discussion with my doctoral supervisor, in the spring term of the academic year 2021/22.

have authors yet embarked on forming a comprehensive new moral economic theory. Furthermore, the bridge over the chasm between moral economic knowledge and real-world aspects, practice, is waiting to be solidified. It is these shortcomings that form the basis and context for the research problems of my dissertation.

Beneath the umbrella question, I operate with two research questions, one at the micro-level and the other at the macro-level. The first one concerns changes in individual moral behaviours and the pathway of these changes, which also entails a subquestion.

**RQ1: To what extent does the awareness of *rational selflessness* increase individuals' marginal propensity to give, to share, and to reciprocate?** How does rational selflessness explain moral phenomena, moral acts differently from today's known, major ethical traits (versions of altruism)?

The macro-level question, below, suggests a comprehensive structure to be established through the incorporation of moral economic elements.

**RQ2: How can incorporating the concept of rational selflessness, backed by a deeper understanding of the moral economic human needs context, fill gaps in, and establish higher levels of compatibility between models of economic theory?**

The hypotheses below address the research questions posed, reflecting my initial expectations.

**H1: The awareness of *rational selflessness* significantly increases individuals' marginal propensity to give, to share, and to reciprocate.** Its origin, the *need to help others*, is embedded in the structure of human needs.

**H2: Incorporating the concept of rational selflessness, backed by a deeper understanding of the moral economic human needs and progress context, fills gaps of, and establishes higher levels of compatibility within economic theory, by:**

- H2a: **suggesting that the acts of giving, sharing, and reciprocating result in value creation and value multiplication**
- H2b: **providing an objectively measurable understanding of technology levels**

- H2c: **combining the intersections of finite needs and output within the frame of environmental capacity.**

In order to avoid appearing vague in the second hypothesis (due to the complexity of the respective methodology and synthesis), I briefly foreshadow the constellation of those elements here. The finite nature of needs justifies a greater extent of redistribution, whilst *the need to help others* that leads there, displayed through *rationaly selfless* behaviours (see in detail in the subchapters *The need to help others* and *Rational selflessness*), rewards individuals (as will be expanded at the beginning of *The Moral Economic Synthesis* chapter). The finite nature of human needs also allows for dynamic equilibria with exponentially shaped functions of output, on given levels of technology (*The Moral Economic Synthesis* will contain these relationships in detail). The objectivist approach to technology levels allows for equilibria between output and needs, and the environmental capacity. Whilst this single-paragraph summary is overly dense to convey the entire structure of the synthesis, it prognosticates the consistency inherent in *The Moral Economic Synthesis*.

## 1.4. Structural outline

In this final section of the *Introduction*, I provide an overview of my dissertation's structure, outlining the main sections that follow.

The *Literature Review* presents the moral economy tradition and what is currently perceived as the moral economic branch, after deliniating the concept of morality used. The extent and characteristics of the relatively new tradition and field of the moral economy are covered in approximately chronological order, with an emphasis on its seminal works. A reformulation of the moral economic critique, relevant to present-day economic systems, is included (in the form of the *Criticism reformulated* subchapter). Moral economics as the theoretical process is thought to encapsulate environmental, human needs related, and virtue ethics directions, all of which are illustrated in the second main thread of the *Literature Review*. The review concludes with reflections on the limitations, justifications for, and goals of moral economics.

A *Methodological Introduction* is inserted after the review chapter, because one of the primary methodologies (recording and processing expert and stakeholder interviews, inspired by grounded theory) resulted in insights that have ultimately appeared sporadically throughout the dissertation. In the end, it was in part these insights too that helped answer the first research question. (Details of interviewing and processing are also to be found in *Appendices 1 to 4*. For the initial, alternative method, a behavioural experiment that has been designed, but could not be conducted, see *Appendix 5*.)

In the *Theoretical Framework*, I present and decipher the concepts that underlie both the micro- and macro-level threads of methods. A substantial part of the dissertation moves here along the behavioural field. The altered assumption in focus is the overall *finite and satiable nature of human needs*, the existence of *the need to help others*, as well as the deduced notion of *rational selflessness*. These concepts are related and linked back to the literature items that the review contains, but also stretch beyond them in terms of novelty and explanatory power.<sup>6</sup>

The main *Methodology* chapter (*The Moral Economic Synthesis*) is largely deductive, building on the premises established. The second research question is addressed here by a threefold illustration – missions evolving eclectically around concepts and indicators, containing equations, visual models, and their synthesis. The awareness that selflessness creates and multiplies value in the economy, as I illustrate for micro and – more ambiguously – macro levels in a chapter involving the Gini coefficient. In contrast to finite human needs, which in terms of value and energy are presumed to increase linearly with population size, output, as amplified by selflessness, may display exponential or S-shaped functions. The intersections of needs and output can change with output being impacted by the level of technology, which I argue can be objectively measured. The equilibria arise for various numbers of the population, comparable with our planet's carrying capacity.

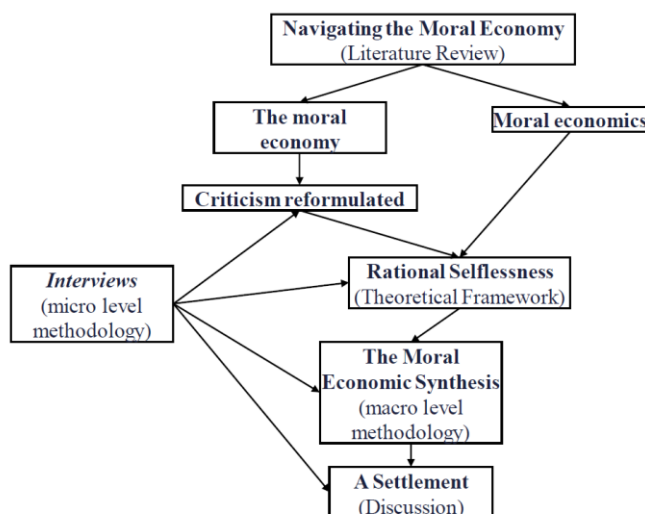
---

<sup>6</sup> The dissertation, in particular the *Literature Review* and the *Theoretical Framework* chapters, rely on a self-built literature database consisting of approximately 650 literature items of varying types, lengths, and languages. The database is available upon request.

Moving forward, findings are utilised and converted into practical guidance in the *Discussion*. My dissertation explores and expands the moral economic system beyond the early and contemporary achievements in the discipline, taking into account interdisciplinary and international aspects. The road to a reinterpreted moral economy, however, is not paved with macroeconomic intervention. Instead, I emphasise the role of education and how the awareness of rational selflessness can increase the marginal propensity to give, share, and reciprocate. The way to escape the devastating consequences of limitless growth at the brink of a climate catastrophe, during increasing levels of personal isolation and political polarisation, is to recognise that the only need that can hardly be fully satisfied is our need to help others.

The dissertation concludes by providing a summary, highlighting value-added insights, suggesting further research ideas for the moral economic branch and profession, a technological outlook, and final remarks.

The core structure of the dissertation is depicted in *Figure 1*, below. At this point, it should be mentioned that I have a briefer, preliminary research history with the moral economic theme, as evidenced by a book chapter (Hajnal, 2021) that I aim to substantially surpass in this dissertation.



*Figure 1: Structural outline of the dissertation.*

*Own illustration.*

## 2. NAVIGATING THE MORAL ECONOMY<sup>7</sup> (LITERATURE REVIEW)

Over the past few decades, the moral economy has been approached from multiple angles in various genres. Diversity in the use of the term moral economy will be illustrated through a fresh classification, in a systematic and integrative overview, with an emphasis on the conversations between and within the various moral economic functions.

The meaning of the term moral economy has taken its current shape through three significant and not entirely distinct waves. For one, through the works of scholars referred to as early and late classics of the moral economy. Second, through recent historical and conceptual reviews of the term, and third, through specialised case studies (encompassing a wide range of concepts in various contexts, from agrarian to digital), which have largely employed the term in accordance with the classics. Political uses are illustrated with examples, too, but are deemed less constructive.

In addition to these trends, a promising direction in economic theory, moral economics, appears to be crystallising, which would be challenging to treat independently of the moral economy. This is due not only to the similarity of the terms but also to the observation that through a semantic expansion of one of the concepts, the observer may arrive at the other one. The connection between potential interpretations of the moral economy and moral economics lies at the heart of this chapter. Loosening the grip on the moral economy – on the traditional concept concerning economic systems of communities with shared values, to be outlined in subsequent sections – allows for the economics and ethics relationship to be associated with it, whilst foreshadowing the prospects of moral economics – the professional practice of incorporating ethical

---

<sup>7</sup> This chapter – in an earlier format – has been presented at the workshop „*Moral Economy at the Crossroads of History and Social Sciences: Finding Customs in Common?*“, at the University of Strathclyde (Glasgow) in November 2023. In October 2025, it was published by the journal *Panoeconomicus*.

elements into economic theory – is likely to yield an ideal economic construct, which might be termed the moral economy.

Thus, the review turns from the „roots” of the moral economy to its economic „branches”, its directions within the field of economics: expanding the environmental understanding, applying virtue ethics to economic entities, and obtaining a renewed, ethical understanding of human needs. The exploration of these directions lays a foundation for the hypotheses that have been outlined.

Given the theoretical complexity of my research, the literature review is driven by structural purposes – an exploration of the moral economy „universe”, rather than focusing or zooming in on a single theme. At specific points, however, the review itself serves to limit the dissertational directions.

The concept of the moral economy has not yet reached semantic maturity. I examine the question of whether the moral economy can embody moral economics, i.e., the incorporation of ethical elements into economic theory. By presenting the forces of both divergence and convergence in this context (between the moral economy and moral economics, primarily exerted by the historical and conceptual reviewers of the moral economy), I argue for maintaining this semantic connection.

I support my position with two arguments. The first one is the diversity of works (both academic, and sometimes falling outside of academia) – in terms of their functions – which currently operate with the moral economy concept, i.e. that the meaning of the term is not sufficiently consolidated in scientific discourse and beyond to have it “nailed down” (which might be impossible whatsoever, considering the late Wittgensteinian view of language – Anscombe et al., 1999, p. 13).

The second reason is the use that economics as a social (and moral) science makes, and could still make of the moral economy. Combining the words *moral* and *economy* may yield the expression closest to what one would picture as a system of economic organization and functioning that is highly prosperous, yet also equitable in opportunities, and environmentally sustainable.

Both arguments will be further supported during the survey of the relevant literature, as well as through highlighting connections between them, illustrating how those works complement each other. Regarding the argument on the functional diversity of existing moral economy works, the four categories established are assumed to cover the main types. The second argument leads to a crossroads – branches of potential applications in economic science, still evolving.

The books, articles, and other sources for this chapter have been compiled through a mixed technique of searches on Google, Google Scholar, JSTOR, and the archives of scientific journals, as well as relying on scholarly recommendations and the reference lists of works already explored. Surveying was conducted both within and remotely across scientific boundaries. Selecting the authors and works for this main chapter supports my research in what can be regarded primarily as the first part of the title of the dissertation. When it comes to reinterpreting the moral economy, it is essential to understand how the concept is currently perceived and applied. As for the authors and works that relate to the reinterpretation and my research questions more specifically, as well as to the hypotheses directly, they will mostly appear in Chapters 4 and 5. It is observable that interviewees' key insights are often incorporated similarly, as they greatly support, or spectacularly challenge and debate over the moral economic connections drawn. In this way, the dissertation has a continuous arc of processing literature and interviewee insights, despite a higher concentration of works surveyed in Chapter 2.

The review consists of multiple subchapters, which can be grouped into four main sections. First, I delineate *The morality concept used*. Second, within a historical framework (Almadi, 2021), I review the literature on *The moral economy*, including its seminal works, reviews, and early case studies. This part culminates in the possibility of reformulating a criticism in the logic of the moral economy for our times. Third, in a theoretical-integrative framework (Almadi, 2021), I examine the branch and practice of *moral economics*, with three main directions under the magnifying glass. Fourth, I examine the academic forces of convergence and divergence, particularly in relation to both the moral economy and moral economics, including their limitations, legitimisation, and ultimate goals in terms of the meaning of these concepts.

## 2.1. The morality concept used

For a dissertation that relies so heavily on the ambiguous concept of morality, defining its meaning for the present applications is essential. However, „*What counts as definitional of morality [...] is controversial.*” Broadly speaking, the morality concept of this research is normative, that is, referring „*to a code of conduct that, given specified conditions, would be put forward by all rational people*” (Gert & Gert, 2020), or referring to a universal morality. It encompasses norms, beliefs, and values (Claas, 2015, p. 2). Despite the broad extent, the fluidity of morality at subjective levels is not being disputed.

Throughout the entire dissertation, the terms *morality* and *ethics* are used interchangeably, as is generally accepted by contemporary ethicists (Grannan, n.d.). For moral systems, I will apply the definition provided by the Stanford Encyclopedia of Philosophy: „*[...] moral systems are interlocking sets of values, virtues, norms, practices, identities, institutions, technologies, and evolved psychological mechanisms that work together to suppress or regulate self-interest and make cooperative societies possible.*” (Haidt, 2011, as cited in Gert & Gert, 2020). Moreover, my research will align with the natural law tradition in assuming that practical reason directs us toward morally required actions (Gert & Gert, 2020).

I interpret morality more broadly than Aquinas, according to whom: „*Moral thought, even when most unselfishly concerned with helping others through the good effects of physical effort and causality, is fundamentally concerned with the problem of bringing order into one’s own will, action, and character, rather than the problem of how to bring order into the world beyond one’s will.*” (Finnis, 2021).

The understanding of moral qualities in the context of my dissertation is arranged into three tiers: individual, collective, and abstract elements and aspects. To zoom in on this dissertation’s morality concept used, I will first need to zoom outwards, in terms of the scales mentioned, starting with the individual.

At the individual level, I have contemplated<sup>8</sup> and identified six categories of moral behaviours and attitudes. They are as follows.

1. Acting in good faith (Duke, 2007): A generally benevolent and trustful approach, at least as long as otherwise justified.
2. Taking into account the needs and interests of other living beings (Sterba, 2005): This involves systems thinking (Zsolnai, 2011) and empathy simultaneously.
3. Humility: scientific (Hoekstra & Vazire, 2021) – as for the magnitude of the unknown; cultural and social (Chávez, 2022) – for the complexity of communities and systems; historical (Kidd, 2014) – acknowledging the pace of progress and past accomplishments; and generational (Brown & Zsolnai, 2018, p. 500) – building resource equity as a factor into economic plans. In addition, an acceptance of what is beyond individual and collective control.
4. The reduction and minimization of suffering (Brown & Zsolnai, 2018, p. 502) over all types of timespans: the short, long, very long run, and every span in-between.
5. A serving attitude, directed towards causes of societal interests (Naughton et al., 1995, as cited in Kovács and Zsolnai, 2025, p. 2), independently of religious affiliation, and beyond servant leadership (Thate, 2019).
6. Everyday elements: patience, kindness, attentiveness, temperance.

At collective levels, these categories of qualities may thrive in cultures with institutions that foster these values, among several others that society needs at broader levels too (such as transparency). This implies processes, policies, regulations, and laws that align with the above values.

At a very general and abstract level, morality's compass nature crystallizes. This is felt at the individual level through the pursuit of abstract aesthetic pleasure through ethical conduct. Morality is addressed in first-order terms, meaning the ethical value of

---

<sup>8</sup> With my thinking being highly impacted by the four years of collaboration and *Ethics Research Seminars* since the semester 2021/22/1, with Prof. Dr. László Zsolnai and the *Business Ethics Centre* of the Corvinus University of Budapest.

concrete acts and attitudes, rather than focusing on the evolution of morality in the broad sense of the economy and society – which raises the puzzle of second-order morality (Arnsperger, 2005, p. 433).

My research suggests that it points towards, yet accepts exceptions to moral universalism and moral idealism. I refrain from discussing specific moral issues that vary across cultural lines. I see morality as a code with prohibitions and requirements that is to be regarded as a higher concept than any religious, ideological, or cultural code, despite these latter currently including a higher number of explicitly stated and documented prohibitions and requirements (uniquely reflecting the principle of „less is more” in ethics). Value and moral values are considered to have both an economic and an objectively ethical nature, and are not primarily viewed from an individual’s perspective, as has been the case, for instance, in Gébert et al. (2023, p. 358).

In moral economics, I argue that morality is the other invisible hand of „the great economic puppeteer”. This dissertation’s stance is that morality is more than a subjective, fluid construct. It may be static (as a set of rules) or dynamic (as an algorithm). Moral issues change in perception over time and space (regions), but the intuition here is that there is an ultimate framework. This will be supported by the intertwinings of morality, rationality, self-interest, and selflessness, so that even if systemic moral issues of the economy could not be addressed in terms of morality – as Arnsperger has argued (2005, p. 435), one may still get a hold on them through the indirect logic of the moral economic synthesis being built in this dissertation.

## 2.2. The moral economy

I categorise works falling under and relating to the theme of the moral economy according to the following functions (depicted in *Figure 2* below).

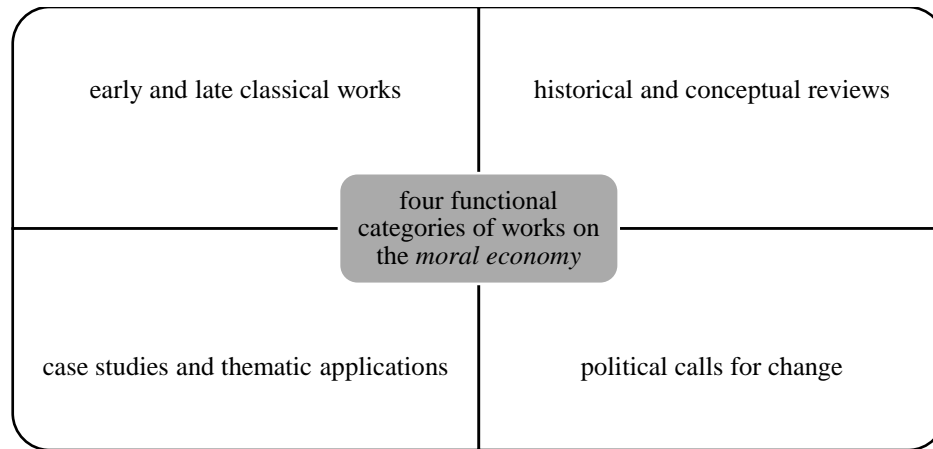


Figure 2: Four functional categories of works on the moral economy.

Source: own composition and editing.

One may enlist books and articles from the classics – who have built the foundations for the concept; works of reviewers – who have conducted historical and conceptual analyses; case studies and thematic applications – the largest group – which use the moral economy as a framework of analysis in its more recent form; and political uses of the term as a potentially powerful (yet, overall vague) tool. The subsections that follow elaborate on these categories.

For the *moral economy* notion and tradition, I will borrow the following definition: “[*Moral economy*] refers to the idea that societies traditionally defined their members’ economic rights and constrained their legitimate economic actions on the grounds of a moral consensus. This concept starts not with the individual but the community, and focuses on norms that are recognized collectively, if not necessarily adhered to in practice.” (Keane, 2019, p. 3). Initially a protest movement, and originating mainly in the economic left, this stream criticizes economic systems through a moral, rather than not just material, lens.

### 2.2.1. From the early to the late classics<sup>9</sup>

Although the origins of the morality – economy connection can be traced back to ancient philosophers (in particular: Aristotle) as well as to the first big names in the classical and neoclassical branches of economics (Adam Smith and Alfred Marshall respectively), these traces have been analyzed in previous moral economic reviews of the literature, and have a lesser impact on the current research than do the three concrete moral economy classics.

The first few works I survey stem from them, widely accepted as the late Austro-Hungarian economic historian Karl Polanyi (the early classic), the late English historian Edward P. Thompson, and the American political scientist James C. Scott (the latter two being the late classics in my categorisation). Specific authors, such as Tim Rogan in his book *The Moral Economists* (2017), also enlist the late English economic historian Richard H. Tawney in this context.

Polanyi's book *The Great Transformation* (1944, 1963) is one of the earliest moral economic works distributed, both in the context of the moral economy tradition and in more recent interpretations. There are multiple sections in *The Great Transformation* that this review, as well as the other works surveyed are in conversation with, both in terms of its subjects and approaches. As a later scholar of the moral economy concept, James G. Carrier described, there were three broad forms of economic transactions and circulation contained in Polanyi's book, of which one could gain dominance in a society, namely: reciprocity, redistribution, and exchange. ("*He [Polanyi] identified three broad forms of economic circulation, one or another of which may be dominant in any given society: reciprocity, redistribution, exchange.*"; 2017, p. 21).

Throughout the book, alongside a historical thread on social and economic changes in late eighteenth and early nineteenth-century England, the reader may witness the contours of an ideal taking shape. Polanyi writes about "*the failure of the market*

---

<sup>9</sup> This subchapter, and sporadically, a few subsequent ones, contain statements that overlap with the following article of mine: Hajnal, Z. (2023). "Celestial" snapshots: Moral economic revisitations of János Kornai's The socialist system. *Acta Oeconomica*, 73(S1), 143-156. <https://doi.org/10.1556/032.2023.00039> accessed: July 12, 2024.

*utopia*” (Polanyi, 1963, p. 218). His ideas on value creation and motives appear as if forgotten at present: *“The outstanding discovery of recent historical and anthropological research is that man’s economy, as a rule, is submerged in his social relationships. He does not act so as to safeguard his individual interest in the possession of material goods; he acts so as to safeguard his social standing, his social claims, his social assets.”* (Polanyi, 1963, p. 46).

Polanyi’s ideal is in stark contrast with the present market climate, in that he describes how production and distribution are independent of possession-related interests – instead, the interests are social: *“He values material goods only in so far as they serve this end. Neither the process of production nor that of distribution is linked to specific economic interests attached to the possession of goods; but every single step in that process is geared to a number of social interests which eventually ensure that the required step be taken. These interests will be very different in a small hunting or fishing community from those in a vast despotic society, but in either case the economic system will be run on noneconomic motives.”* (1963, p. 46). Moral mechanisms of this kind, within economic processes, appear to be largely absent in today’s economic systems.

Polanyi’s economic idealism, however, goes deeper, down to individual interests and individual conscience. Polanyi thought that the mechanisms of social obligations, which – in the long run – are all reciprocal, lifts self-interest, in economic terms, from individuals’ shoulders, up to the point where they could not even picture themselves handling under such motives: *“[...] in the long run, all social obligations are reciprocal, and their fulfillment serves also the individual’s give-and-take interests best. Such a situation must exert a continuous pressure on the individual to eliminate economic self-interest from his consciousness to the point of making him unable, in many cases (but by no means in all), even to comprehend the implications of his own actions in terms of such an interest.”* (1963, p. 46).

One might think that the distance of the current state (globally, but primarily in developed countries) from Polanyian descriptions lies in individuals’ lack of social embeddedness, yet it also reflects value systems. Polanyi’s forgotten (at least in practical terms) and thus far unrealized ideal will resonate with the moral economically expanded

*rational selflessness* concept, with which I aim to revive – at least in economic discourse – the reciprocity referred to, leading ideally to a state or a system where “[t]he premium set on generosity is so great when measured in terms of social prestige as to make any other behaviour than that of utter self-forgetfulness simply not pay.” (Polanyi, 1963, p. 46). That is, Polanyi’s unrealized ideals would lead to a state or a system where generosity, rewarded by social prestige, is the only attitude worth pursuing.

A common thought that emerges in moral economic works and later, reviews, is the observation of how Aristotle’s language and rhetoric separated the economic from the rest of the social aspects (moral limitations inclusive). Polanyi too highlights how Aristotle has called for economic limitations, in light of human nature and social relationships: “*In denouncing the principle of production for gain as boundless and limitless, ‘as not natural to man,’ Aristotle was, in effect, aiming at the crucial point, namely, the divorce of the economic motive from all concrete social relationships which would by their very nature set a limit to that motive.*” (Polanyi, 1963, p. 54).

To contrast states of systems, *The Great Transformation* contains reflections on the ineffectiveness of – in the formulation of my dissertation – a system without rational selflessness. In the book, one may find direct comparisons between economic and emotional motives, the latter being deemed more effective. Polanyi denounced the purpose of automatic material welfare increases, and described related institutions as disruptive and soulless: “*The ‘determinism’ so prominent in many details was simply the outcome of the mechanism of a market society with its predictable alternatives, the stringency of which was erroneously attributed to the strength of economic motives. Actually, the supply-demand-price system will always balance, whatever the motives of the individuals, and economic motives per se are notoriously much less effective with most people than so-called emotional ones. [...] This explains the almost unbelievable fact that a civilization was being disrupted by the blind action of soulless institutions, the only purpose of which was the automatic increase of material welfare.*” (Polanyi, 1963, pp. 218-219). The argument becomes more explicit towards the last pages of the book, evolving into an axiom for several heterodox economic branches: “*The true criticism of market society is not that it was based on economics—in a sense, every and any society*

*must be based on it—but that its economy was based on self-interest.*” (Polanyi, 1963, pp. 249).

Polanyi has denounced the market economy mainly for its faulty basis, self-interest, emphasizing the government’s role, and holding them accountable for the failure: *“(…) the market has been the outcome of a conscious and often violent intervention on the part of government which imposed the market organization on society for noneconomic ends. And the self-regulating market of the nineteenth century turns out on closer inspection to be radically different from even its immediate predecessor in that it relied for its regulation on economic self-interest.*” (1963, p. 250).

Thompson’s most relevant work from the perspective of the current review is *The Moral Economy of the English Crowd in the Eighteenth Century* (1971). In the article, Thompson depicts eighteenth-century food riots from the perspective of the peasantry, thereby conveying an original moral logic of pre- and early industrial capitalism. As Melissa Beresford et al. refer to Marc Edelman’s work in their article *Moral economies for water* (2022), the prevalent basis of peasant economies prior to capitalist transitions was a shared understanding of the entitlement to basic subsistence for all (Edelman, 2005, as cited in Beresford et al., p. 2).

Thompson’s piece consists mainly of historical citations, yet it also contains two emblematic sentences. *„It is not easy for us to conceive that there may have been a time, within a smaller and more integrated community, when it appeared to be ‘unnatural’ that any man should profit from the necessities of others [...].”* (Thompson, 1971, p. 131). Moreover: *„The breakthrough of the new political economy of the free market was also the breakdown of the old moral economy of provision.”* (Thompson, 1971, p. 136). As Beresford et al. quote Edelman: *„Prior to capitalist transitions, peasant economies largely rested on a common understanding, or ethos, that all people are entitled to a basic subsistence necessary for their household’s survival.”* (Edelman, 2005, as quoted in Beresford et al., 2022, p. 2). Through indicating that it is, in fact, sets of human values and actions that constitute moral economies (Beresford et al., 2022, p. 4), Thompson arrives at a modern description of an early economic system and a critique of its broader context, but does not offer details in terms of alternatives.

Thompson's article is heavily historical, and concrete in terms of the context, which, from the current perspective, appears to nearly „drown” the economic opportunities of the main concept, i.e., the moral economy. I see the combination of the words “moral” and “economy” to be too powerful for their meaning to be confined to a mostly historical, cultural, or even anthropological framework. Its framework nature is currently the broadest sense in which the moral economy is legitimately and scientifically being applied in. The term moral economy, in the context of economics as a moral science, is destined to outgrow its „father”. It should be noted that Thompson included a clarifying (though less defensive) chapter about his 1971 article, in the book *Customs in common* (1993) – potentially more engaging and captivating than the original, seminal article itself.

The second late classic to mention is Scott's 1976 book, *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. Scott, too, has applied the moral economy concepts in the context of the peasant society, referring to notable forerunners, such as Tawney, the late American sociologist Charles Tilly, as well as Polanyi. According to Beresford et al., who also wrote about Scott's book, social systems of risk redistribution were spurred by the subsistence ethos in Southeast Asia during the 19th and early 20th centuries (2022, p. 2).

Scott's work contains relatively few generalised statements, but – from the moral economic perspective – those are highly relevant. Scott writes of a „*subsistence ethic*” (1976, p. 3), seeming to suggest that morality within the economy is most important to be applied in the „lowest” of social strata of material classification. Morality in this broad understanding is an economic insurance, especially on the given „margin” of living standards and income. This is also the first point where morality and human needs link up, albeit loosely: „*The family begins with a more or less irreducible subsistence consumer demand, based on its size, which it must meet in order to continue as a unit. Meeting those minimal human needs in a reliable and stable way is the central criterion which knits together choices of seed, technique, timing, rotation, and so forth.*” (Scott, 1976, p. 13). Writing of subsistence and the living-standard margin leads Scott to formulate the expression „*survival of the weakest*” (1976, p. 43).

Even further, morality and needs become intertwined through his term „*the need for reciprocity*” (Scott, 1976, p. 168), after having stated that „*Reciprocity serves as a central moral formula for interpersonal conduct. The right to subsistence, in effect, defines the minimal needs that must be met for members of the community within the context of reciprocity. Both principles correspond to vital human needs.*” (1976, p. 167). Human needs, which will play a major role later on in this research, are referred to as hierarchical, as well as having a discontinuous character (Scott, 1976, p. 176).

The use of the term moral economy is justified by the normative nature of the peasantry’s judgements of their economic situation and treatment. Scott has encouraged his readers to put themselves in the peasants’ shoes, to understand their anger, which has formed the ground for calling their system a moral economy. Behind the concept in this context, one finds the peasantry’s notions of economic justice versus exploitation, linked to different levels of economic tolerance. („*If we understand the indignation and rage which prompted them to risk everything, we can grasp what I have chosen to call their moral economy: their notion of economic justice and their working definition of exploitation—their view of which claims on their product were tolerable and which intolerable.*” – Scott, 1976, p. 3). Upper social layers too became saturated, and were to a certain extent even determined by the moral economic mindset („*a pattern of moral rights or expectations*”), under which Scott understands moral rights or expectations in recurring forms. „*The provision of subsistence insurance was not confined to the village sphere; it also structured the moral economy of relations to outside elites.*” (1976, p. 6).

In Scott’s book, moral economy is also applied as a subjective term, relatable to the individual’s system of values: „*the actor has his own durable moral economy which continues to define the situation for him*” (1976, p. 32); and: „*the actor may have his own moral economy*” (1976, p. 160). The book is not short on aesthetically pleasing formulations of the complementary notion, „*the structure of a shared moral universe*” (1976, p. 167).

Scott’s writing reconfirms that the classics of the moral economy tradition were staunch critics of Adam Smith, as well as – to a certain degree – of the market economy. He criticized elites for failing to observe the minimal obligations required under a moral

economy. Only in a market economy could such societal ruptures prevail, Scott had written. („*Elites failed to observe the minimal obligations that the moral economy of the peasantry required of them. Such a large-scale rupture of interclass bonds is scarcely conceivable except in a market economy.*” – 1976, p. 90).

Later moral economy works often, and with reason, handle the classics – Polanyi, Thompson, and Scott – under a single umbrella. Some conclusions can be drawn from all three seminal moral economy works, for instance, the observation by Bolton et al. in their article *Quality Work and the Moral Economy of European Employment Policy* (2016) that it is people’s implicit notions and value systems that shape norms, customs, and conventions of kinship (p. 584). Another general observation is that in moral economies, „*perceived violations*” of „*a morally understood social order*” happen to prevail (Beresford et al., 2022, p. 2).

### 2.2.2. Reviewers of the concept

The interpretation of the moral economy expression has taken slight turns over the past few decades. The following thread of authors cultivating the moral economy concept is constituted by those who analyse, reinterpret, or utilise the moral economy in the twenty-first century. Some works aim for a dynamic, extended meaning of the moral economy, whilst many of the case studies take a more static anthropological and cultural stance on what the moral economy actually is.

The Swedish historian Norbert Götz was among the first scholars to provide a comprehensive conceptual history of the term in his 2015 article *‘Moral economy’: its conceptual history and analytical prospects*. Götz reveals that the words *moral economy* have ancient roots, but that the term concretely has not emerged any earlier than the eighteenth century. Contrary to the relatively widespread belief in the moral economy tradition, it was not Thompson in the 1970s who coined the term (Götz, 2015, p. 149). Götz aimed to provide the moral economic expression with semantic space, enabling it to gain new and socially more beneficial meanings than it was traditionally understood to have at the beginning of the millennium.

In her *Three bodies of moral economy: The diffusion of a concept* (2015), Johanna Siméant aimed to clarify the meaning of the term, to narrow it down for humanitarian use. Siméant's piece reflects on many of the tendencies surrounding the concept, starting with the „renewed interest in moral economy” (2015, p. 163). She refers to Thompson and Scott (p. 163), as well as Polanyi (p. 169), and examines where the meanings of the moral economy have branched off (stretching unevenly), warning against the „pitfalls if the concept is used too loosely” (p. 163). I share several of Siméant's observations, such as the recent shift in the moral economy notion towards the religious in literature, to Islam in particular (p. 167). The main point of her article, however, is to differentiate between the (three) various meanings that the moral economy term has taken on, from describing specific socio-economic circumstances, through interwoven social-economic-moral practices, to the broad „moral architecture of values, norms, and cultures”, which Siméant finds the most troubling and useless meaning-extension of all (p. 169). At this point, I would argue and project that although the present-day concept of the moral economy may have its justified limitations, the less often used, and less strictly delimited *moral economics*, the term to be expounded on in subsequent sections of this article, does not have to.

The third 2015 article, which comprehensively surveys (mostly anthropological) works in the moral economy tradition to date, is Joakim Sandberg's *Moral economy and normative ethics*. Sandberg provides a binary differentiation in the meaning of the moral economy, with one being „a set of moral or values-based attitudes or beliefs concerning economic agents, practices or structures that are shared by a certain population or group”, and the other the actualisation or institutionalisation of these attitudes or beliefs (p. 177). Sandberg draws attention to the emphasis being „sometimes on 'moral', sometimes on 'economy' and sometimes on both” (p. 177), which further enhances the analytic picture of the term. He is more open to the global, cosmopolitan meanings (p. 184) than Siméant, seeing opportunities for the practical and philosophical aspects of moral economy to converge. One point at which I disagree with Sandberg is his suggestion that the concept of the global moral economy be equated with the anti-globalization or global justice movement (p. 184). In the current understanding, a global moral economy is a cosmopolitan ideal that ought to be achievable without returning to

the traditions and limitations of peasant societies. What makes it moral is ethical elements interwoven into economic models, the design, moral economic theory itself, and not the boundaries of the organisation or structure of the economy.

Yet another review stems from the Spanish anthropologists Jaime Palomera and Theodora Vetta. In their article *Moral economy: Rethinking a radical concept* (2016), the authors focus on the moral economic classics, and introduce further expressions with high moral economic potential, such as: *moral spheres*, the *collective moral framework*, a *moral superstructure*, and *moral economic reasoning*. As they see it, in a particular understanding, all economies qualify as moral economies (p. 419).

In 2020, another issue on the moral economy was published by the journal *Humanity*. In the *Introduction*, written by Jeremy Adelman, the dispersedness, incoherence, unsettled nature, and lack of guiding power of the moral economy notion are expressed. It is stated that „*the idea of the moral economy was never one thing, never coherent, never settled, and never a guide to an equilibrium on its own*” (p. 189). That introductory article deems the moral economy to be a global invention, supporting it by the global nature of the market economy, and diverging from the view that it were Anglo-American, despite the genealogy of the word („[...] *the moral economy was a global invention—because the market economy was a global creation. It was not just an Anglo-American invention, even if we tend to draw the genealogy from an English, romantic tradition [...]*” (p. 190).

Further key statements can be found in the historical geographer Jaime Moreno-Tejada’s expansionary summary, such as: „*Moral economies are total systems, transcending the economy as it is commonly understood.*” (Moreno-Tejada, 2020). Moreno-Tejada also lists ideological sources of moral economic theory (Christianity, Marxism, and anthropology), but this short list is just meant for the twentieth-century interpretation, and not comprehensive enough for all contemporary purposes with the concept (Moreno-Tejada, 2020).

### 2.2.3. Case studies and thematic applications

Case studies and thematic applications utilizing the moral economy concept range over various genres and lengths. A diverse, illustrative rather than representative collection will be surveyed here. Several of these works already point to a broader meaning of the moral economy, and have different types of relevance for the present.

The article *Quality Work and the Moral Economy of European Employment Policy* (Bolton et al., 2016), mentioned earlier, has conceptual explanatory power regarding the moral economy and contains a thematic application as well. After setting the tone and scope, also by invoking the notions of meaning, dignity, human flourishing, and values, the authors highlight the institutional dimension in moral economies (2016, p. 583) – an element potentially in conversation with the following statement quoted by Andrew Perchard in his book review *Class Struggle in the Highlands* (2007): „*A great statesman said that 'individuals may form communities, but it is institutions alone that can create a nation.'*” (Disraeli, as quoted in Perchard, p. 221).

The term „*moral universe*” (Bolton et al., 2016, p. 584) is applied to indicate the complexities of employment policy in the European Union. In the description of moral economies, there is a mention of human needs and how these guide economic practices (2016, p. 584). It turns out that, presumably because of human needs, the moral economy framework is highly applicable to employment studies and can be interpreted as being based on them as well. Bolton et al. describe the moral economy concept as based on a political economy approach to employment studies, in terms of its focus on the relationship between market mechanisms, policy-making, and the changing dynamics of employment conditions. However, the moral philosophical origins add a normative dimension, they claim, that incorporates the moral and social consequences of changes for individuals and society. („*Moral economy is based on a political economy approach to employment studies in its focus on the relationship between market mechanisms, policy-making and the changing dynamics of employment conditions but, in its grounding in moral philosophy, adds a normative dimension that considers the moral and social implications of changes for individuals and society.*” – 2016, p. 585). Through the case of European employment and its moral economic analysis, we witness the normative

transformation of means into an end (2016, p. 593). One could ask – given that this switch applies to employment and work itself – whether it holds for the economy as a whole: whether a moral economy (as an ideal) could be a meaningful and rewarding end in itself.

Webb Keane, an American anthropologist, has analysed transactions with moral economic characteristics in the structures of organ donation and in sex work, in the 2019 article *How everyday ethics becomes a moral economy, and vice versa*. Beyond findings specific to these themes, Keane has succeeded in writing a general justification for moral economics as a new branch of economic theory. In his view, there are moral dimensions to every economic system. On the other hand, however, the attempts of economic theories to incorporate and explain them fail heavily in outlining the ethical implications. Essentially, ethics is treated as an externality of economic thought („[...] *there is indeed a moral dimension to every economic system, but [...] the economic theories that purport to account for them and inform their institutional and legal bases may fail to understand their own ethical implications. [...] In particular, they treat ethics as [...] an externality that needn't be incorporated into economic thought.*” – 2019, p. 7).

The notion of the moral economy has gained additional relevance at the beginning of the COVID-19 pandemic. In a 2020 article, *The moral economy of the pandemic*, Tom Barker has asked whether the evidence of social solidarity that has emerged during the pandemic, along with the sense of community, can be sustained to shape the post-pandemic world. This piece is among those indicating that the moral economy could have its modern version manifested.

Tijo Salverda, a Dutch anthropologist, examined the moral economic characteristics of the international agriculture business, highlighting the benefits and shortcomings of asymmetries between company leadership, owners, and employees. In his article titled *Multiscalar moral economy* (2021), he observes the journeys of the moral economy concept, how it has branched off into several directions, and asserts that it has to reach beyond its local, spatial focus („*the moral economy concept has traveled in various directions*”; „*has to extend beyond its usual, spatially restricted (i.e., local) focus*” – p. 79). I agree with Salverda's statements, including the assumption that there are moral foundations to every economy (p. 80). The critical function of the moral

economy (as a heuristic device for socioeconomic affairs and interdependencies) is also highlighted, conversating with the classics, Thompson and Scott: „*In line with Thompson and Scott's original analyses, I consider the moral economy concept a particularly useful heuristic device for investigating the endurance of inequality between actors of different socioeconomic or class backgrounds, who in some material way depend on each other [...].*” (Salverda, 2021, p. 80).

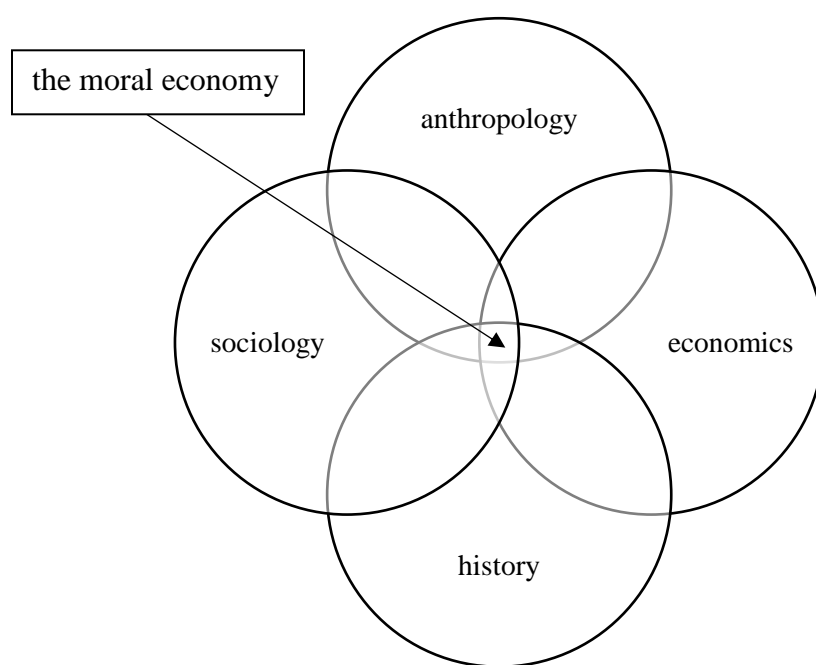
The previously mentioned 2022 article, *Moral economies for water* is yet another two-in-one piece: a review, as well as a thematic application. The authors distinguish between three key elements for moral economies: „*(1) shared understandings of justice, (2) normative economic practices that obligate people to uphold those understandings, (3) mechanisms of social pressure that ensure those practices persist*” (Beresford et al., 2022, p. 4). By now, we can already find moral economy case studies and thematic applications in the literature in their thousands (HWISE-RCN, 2021); thus, the crystallisation of the moral economy's framework function in Beresford et al. (2022, pp. 1, 3) was a timely formulation.

The article also draws strict lines around the moral economy concept, describing what moral economies are not. For instance, they do not constitute evaluations of, or judgements on the inherent ethical nature of economic systems (Beresford et al., 2022, p. 3). At this point, I do not agree that morality should be inherent economics, so we treat this as a fact of implicitness. I would point to the tension with Andrew Sayer's understanding of moral economies. He writes that moral economy as a discipline is the study and evaluation of justifying norms that underpin economic action, and is particularly focused on property relations in economies (Lopes, 2022). By contrast, Beresford et al. opine that equitability in a moral economy does not always have to be the case (2022, p. 3).

Suppose one aims to draw boundaries around the moral economy. In that case, those boundaries should be left open at least at one section, asking the question (in addition to what the moral economy is and is not) of what it *could* be. The moral economy is a robust framework, but the words *moral* and *economy* are too meaningful to restrict

their combination in use. As a moral economy is „*consistently evolving*” (Carrier, 2018; Edelman, 2005; Fassin, 2009; as quoted in Beresford et al., 2022, p. 3), so can its meaning.

Even in the narrower understanding – i.e., the way classics, reviewers, and most case study authors apply it – the moral economy appears to be in an intersection of anthropology, sociology, economics, and history, as depicted in *Figure 3*, below.



*Figure 3: The moral economy in the intersection of four fields in the social sciences.*

*Source: own composition and editing.*

The scattered meaning-constellation illustrates the lack of a scientific consensus. Nevertheless, the use of the term *moral economy* is on the rise. The interest is not reflected in Google Trends<sup>10</sup> for either of the expressions *moral economy* (*Figure 4*) or *moral economics* (*Figure 5*). However, since the second half of the 2010s, a rising trend has become observable in the frequency of moral economics related conference titles. This, along with another steep increase in the number of related academic works and journalistic articles (as attended, experienced and read during the years of this doctoral

---

<sup>10</sup> Searches were conducted on October 16, 2023, at: <https://trends.google.com/home>

project), shows a growing need for the moral economic concept to be clarified, utilized, and further extended.

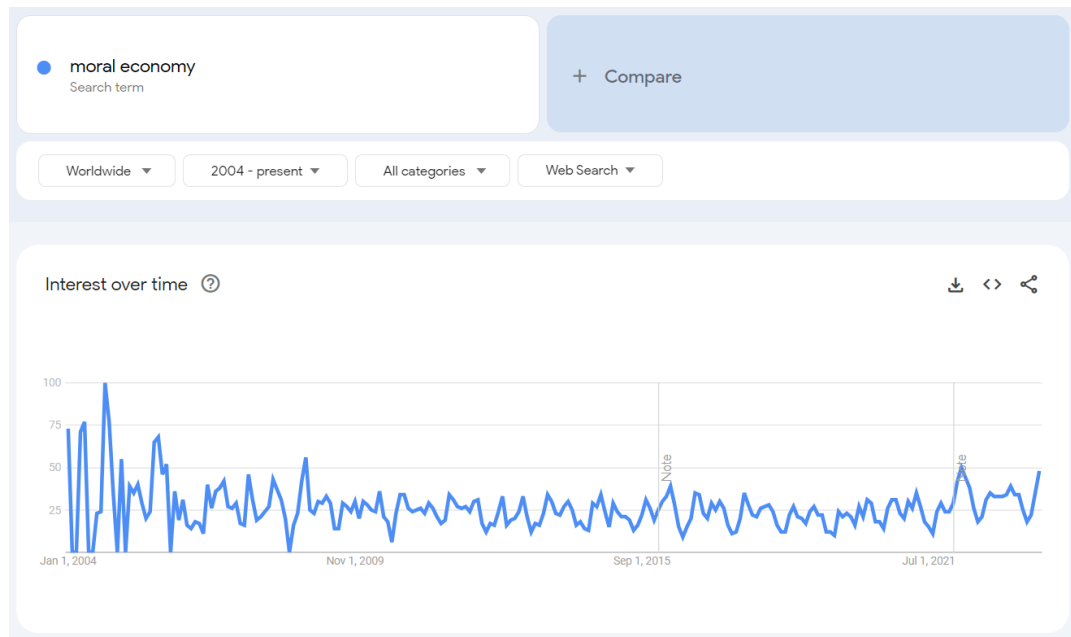


Figure 4: Google Trends search for „moral economy”.

Present = October 16, 2023.

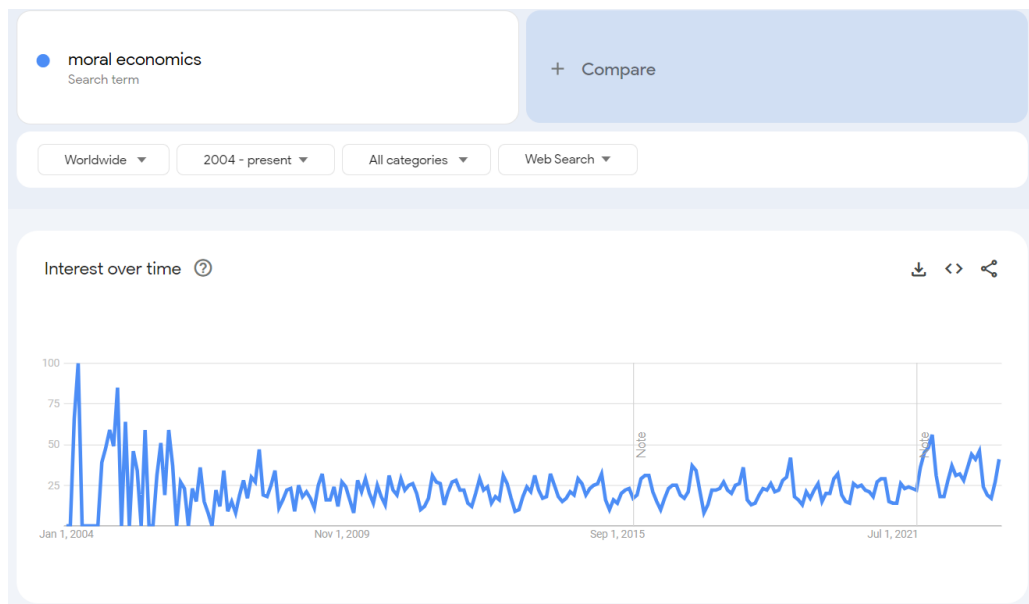


Figure 5: Google Trends search for „moral economics”.

Present = October 16, 2023.

#### 2.2.4. Political (mis)uses of the term

In the past two decades, the term *moral economy* has emerged outside of academia, too, finding its way into political discourse and being incorporated into political calls for change.

In the 2006 article *A Moral Economy*, Fred L. Block, an American sociologist, has laid out four „*guiding principles of a moral economy*”: the principle of reciprocity, of responsible competition, of the conservation of all resources, and of cooperation. He has referred to the by now widespread idea within the moral economic field, that *the father of economics*, Adam Smith was clear about the necessity of the ethical aspect within the economy, as already the titles of his two major works, *The Theory of Moral Sentiments* (1759) and *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776) reflect. Block contrasts this with the ignorance of those of Smith’s contemporary followers, who only emphasize the self-interested side of human economic mechanisms (2006).

The term moral economy is often used in the modern context as the given authors’ ideal of the economy. It can be highly personal, serving as a rhetorical means, but is also a political end. Block used the ideas mainly to highlight the economic policy shortcomings of the US administration at the time.

Ten years later (in 2016), a clear political reemergence of the term was documented by the news channel MSNBC, when, in an effort to reduce wealth disparity, US politician Bernie Sanders referred to *‘the need for a moral economy’* (Moreno-Tejada, 2020). Not distant from the previous occurrences, the 2020 publication of a book titled *Hacia una economía moral (Toward a Moral Economy)*, by the Mexican president of the time, Andrés Manuel López Obrador, has meant a *‘code of conduct’* against corruption, as well as against the excesses of neoliberalism (Moreno-Tejada, 2020). The term moral economy makes a brief appearance in the American professor and former politician Robert Reich’s Netflix documentary, *Saving Capitalism* (2017).

Some voices demanding moral economically aligned political change come from academia. In her 2018 TEDx talk, Margaret Levi called for new „*value-structures*” and

„models” (of economic mechanisms) which would ensure the sustainability and morality in a new economy. The desire for a moral economy was starkly contrasted with the economic policies of late British Prime Minister Margaret Thatcher and late US president Ronald Reagan (Levi, 2018).

Several academics advocate for concrete policy changes within the framework of the moral economy. For US policy, the requests translate – among others – into paid sick leave, paid maternity leave, and a general shift from shareholder primacy in the corporate world. However, even in the political context, the need for a broader ideological background, for a moral vision, is recognized. Crises highlight broad sectors; the COVID-19 pandemic, for instance, highlighted the importance of healthcare (SNF Agora, 2020).

Using the term moral economy in a concrete, contemporary political context entails the dangers of being vague, unscientific, and exploitative. The fact that it is used in such contexts whatsoever is a testament to its high semantic potential.

### 2.3. Criticism reformulated<sup>11</sup>

According to a definition that bridges the moral economy’s meaning in the more traditional sense and in a broader one, the moral economy is “*The critical study of the ethical character of economic activities and relationships, and of how this shapes and is shaped by other dimensions of social and political life.*” (The University of Manchester, n.d.). The concept and tradition of the moral economy, however, have not been explicitly connected to the opportunity of applying this critical theory globally, particularly in the current state of affairs and state of systems.

The level of normativity in and around the moral economy notion makes it suitable for being an element, a tool, or even a branch of critical theory. The moral economy is thus used as a critique (The University of Manchester, n.d.) and as a model for an ideal.

---

<sup>11</sup> This subchapter has benefited from having been incorporated into my conference paper *The Need to Help Others as a Synthesizing Tool in Economic Theory and Policy*, which has been presented in a poster form at the *European SPES Conference 2024*, on June 21, 2024, at the Corvinus University of Budapest. That rework has led to refinements in, and additions to this subchapter.

In the following paragraphs, I outline a critique – co-constructed with other notable thinkers<sup>12</sup> – of the present state of systems and value systems surrounding our economies and beyond. This will unfold in broad brushstrokes, with a distinctive touch of the moral economy tradition already. These preliminary ideas will sporadically, but systematically, be interwoven into later main sections of my dissertation. As an initial overview, I observe as follows. In business cycle theory, economic bubbles pose a general threat. The potentially most significant threat, however, is not the bubbles within the economy, but a systemic bubble that the whole economy is contained in. The points at which this system crumbles at are not necessarily overlapping with commonly identified global and economic risks, but are of philosophical considerations. I see key economic problems in ideological stratification and value-corruption (as outlined below), which hinder human progress, and in suppressing individuals' capacity for a thought and curiosity about the broader framework containing the values they uphold, as they are compelled to maintain values that the system propagates. Furthermore, I observe systems that would sustainably satisfy the needs of a significantly broader population being oppressed, societies' design and the motivations dictated containing internal contradictions, detrimental psychological mechanisms resulting in the extension of material desires, forces that propagate inequality becoming institutionalised, and opposing forces being weakened and channelled into the very same institutional structure, together with unjust, socially upstream propulsion of resources.

The adversities highlighted above originate in the belief system of materialism. In his book *Post-Materialistic Business: Spiritual Value-Oriented in Renewing Management* (2015), the Hungarian business ethicist László Zsolnai describes materialistic approaches as relying solely on “*money-driven, extrinsic motivation*” (Zsolnai, 2015, p. 1). The origins and consequences of this attitude are captured in the statements: “*The dominant model upon which modern business is based involves a materialistic conception of man. Human beings are considered creatures with only materialistic desires, who act out of egoistic motivation alone. This materialistic and*

---

<sup>12</sup> Interviewees among them. I discuss the interviews as part of the methods for this dissertation in Chapter 3, the *Methodological Introduction*.

*individualistic model is leading to decreases in the well being of people and their communities and resulting in large-scale ecological destruction.” (p. 2).*

In the following paragraphs, I expand on my criticism of the present state of systems and value systems, with an emphasis on materialism, as described above. One criticism after another is added to the chain of materialistic damages and their context, in the manner of a string of pearls. Starting from a criticism of the present state of systems and value systems in economies, I shed light on the intertwined chains of vicious circles that sustain and saturate our ailing economies, with materialistic values at their core.

Ideological stratification in the current context means that opposing systems, concepts, and ideologies have not been separated. Such systems, concepts, and ideologies thrive most vividly when existing within each other or when one is historically built upon the other, for these constellations enable replications on new levels. An example would be the abandonment of „*the law of the jungle*” by humans, to cooperate, from smaller communities up to civilisational and global levels. Cooperation has manifested in the economy, yet the widest spread economic and political systems contain elements of the law of the jungle, down to their very axioms (being primarily based on self-interest).

Currently, delicate mechanisms and conditions hinder substantial economic progress. Failing and transitory systems of society – as the Hungarian economist Balázs Hámori analyzes and illustrates – are potential pools of altruism (just like moral economies), or a „*clearing system of favours*” (Hámori, 2002, pp. 2, 12), but more so, hotbeds of corruption. Corrupted systems generally favour a narrow, privileged slice of the population, focusing – as induced by the system established – exclusively on their selfish interests and needs. Moreover, the economic climate of our time overwhelmingly supports that future generations be „saved” by technological innovation (Javaid et al, 2024, p. 2; Foley, n.d.), and does not encourage present generations’ members they „save” them by ethical and ecological principles and practices. „Saving” those in need at present is even less incentivised. Suppressing systems which would help in sustainably satisfying the needs of the broader population, however, slows progress for the whole, the „narrower” part inclusive.

Corrupt mechanisms are intertwined with false and unreachable values of materialism. The majority of people appear to live their lives without having the capacity or the curiosity to think about the broader framework that contains the values they uphold. People, generally speaking, do not have the capacity to think about their failing system of values because the values that the system propagates are extremely laborious to maintain. The facts and phenomena that would be challenging, yet worthwhile to handle, are chased into the backyards of individuals' conscience. Individuals cannot take on additional responsibilities and burdens; to the extent that the law protects them in restrictive and protective behaviours, individuals are not to be blamed. The shortcoming in the system is of an economic nature, related to the potential gaps in the economic science. It results in fatal dysfunctions of societies, observable at global, national, and local levels. Despite *„the fact that disadvantaged people have the greatest interest in creating a better world but the least power to effect change”* (Gébert et al., 2023, p. 362), the capacity that remains for recognising, contemplating, and acting upon that fact is likely to be redirected to materialistic pursuits of an individualistic nature.

One of the most effective means of oppressing people appears to be feeding them a value system they can barely keep up with, in terms of meeting their own expectations for maintaining those values. Quotations from interviews<sup>13</sup> conducted for this dissertation illustrate the overload of information and expectations and their tension with human capacities. *„Some people receive so much information, from so many sources, that it is hard to decide what is factual or what is important to them. It is simply too much, and they start to turn inward. You may approach them with ready-made arguments, research, with anything like 'there is a rational explanation for how things will get better if you help', they are already sceptical about whether they should listen to it, whether they should do something about it, whether the information they are getting is well-founded [...]”* – explained Ágnes Romet-Balla, a Regional Director for Engagement and Resource Mobilization at WWF Central and Eastern Europe. *„People do not necessarily go after rational things, whether it is useful or not, because there is so much information out there*

---

<sup>13</sup> Translated from Hungarian to English, where needed, with a personally revised Google Translate output each.

*that they cannot explain it to themselves, or they cannot convince themselves that the information they have is real information and has real content.*” – she added (personal communication<sup>14</sup>, Sept. 6th, 2024).

The state of overwhelm has been emphasised by the philanthropist Rózsa Zsuzsanna Nhancale too. She explained that in several societies, people *„do not live comfortably enough to have time to choose consistently from the causes to support, and from the social activities. [...] Everyone is so overworked, just to survive, to raise their children, to have some savings. [...] They can't free up time and attention because everyone is drowning in work and problems just to survive.*” (p.c., Sept. 7th, 2024).

Most societies' design and the motivations dictated thus contain internal contradictions. The general understanding of freedom, for instance, is implicitly determined by the aspirations societies generate for themselves, and thus deeply intertwined with consumption and marketing. Ultimately, this points towards facing the dilemma of economic versus humanistic freedom. Furthermore, the design ensures that a significant fraction of people is kept in relative – and in several countries: absolute – poverty, with little access to the values that could liberate them and their systems.

There are further problems with the lack of moral presence in the economy. As the ecological economist Alexandra Köves formulates: *„Economic institutions that are fundamentally based on utilitarianism – and by institutions I mean not only specific institutions, but also culture, and systems of rules – I think that these are hard limits. Moreover, the type of education system that tries to serve this economic direction and logic is also a hard limit.*” (p.c., Nov. 26th, 2024). The systems and the ideologies that restrict certain types of empathy to their own members (be it in terms of social class, ethnicity, nationality, faith, orientation, or identity), may be the root cause of individual mental distress – a dissonance between the need to help others and the ruling ideology<sup>15</sup> – in the system, outside of the system, and especially: in between systems.

---

<sup>14</sup> From this point on, “personal communication” in interviews will be abbreviated as “p.c.”.

<sup>15</sup> These thoughts oppose system justification theory, as in Jost et al. (2008).

Poverty traps go hand in hand with „morality traps”, reasons being the lack of access to education, and that acting with integrity is more of a challenge when one has to struggle even to satisfy their basic needs, or needs perceived as basic. In the eyes of those living in multifaceted scarcities<sup>16</sup>, aspects of morality may appear to be a grotesque, ignorant pretense of abundance. Even more so, if institutional efforts are focused disproportionately on enforcing those moral aspects onto their lives, without eliminating scarcities. However, because scarcities go hand in hand with the lack of moral affordability (a lack of trust in ethical aspects), and because abundance can only be sustained in an ethically sound environment, salvation from scarcities would need to happen in tandem with ethical saturation and integration (not necessarily in a top-down direction).

One of the conditions for collectively transcending a materialistic value system is that everyone's basic needs is are ensured. Beneath those levels of care and safety, individuals' focus is likely to be diverted by their own needs and scarcities. This latter experience is traumatic, and thus results in the extension of material desires, as a compensation for past shortages, potentially far beyond the basic needs threshold. These tendencies of craving and consumption benefit materialistic actors on the supply side, from a bottom-up direction. From a top-down direction, the same actors are supported by the design of the economic system, as well as a lack of awareness, and regulatory inefficiency in environmental and social terms.

General legal and philosophical notions, too, can serve as indicators of systemic problems. For instance, the level of freedom one insists on, at the cost of one's security, may be an indicator of the general trust levels in government. The degree of this claim varies globally (World Values Survey<sup>17</sup>, 2025) and between ideologies, but is – overall –

---

<sup>16</sup> Alternatively: those with a *scarcity mindset*. It is a deprivation manifesting in “*mental bandwidth*” – *brainpower that would otherwise go to less pressing concerns, planning ahead and problem-solving*” – being consumed by scarcity-related issues, which “*can lead to a life absorbed by preoccupations that impose ongoing cognitive deficits and reinforce self-defeating actions*” (Novotney, 2014).

<sup>17</sup> <https://www.worldvaluessurvey.org/> – On the website, in the “Data and Documentation / Online Analysis” menu option, I selected: *Wave 7: 2017-2022*; all countries; Q150 (*Freedom and security – Which more important*). I examined the responses (in percentages), and the maps, noting that security was chosen more frequently, for an overwhelming majority of countries.

rather disappointing. Such a situation can occur at suboptimal transparency levels, where people do not have general freedom and security coverage – having rights as well as safeguards ensured.

Nevertheless, the leading indicator of economic system failure remains inequality. From the macro perspective, individuals have very similar needs. Therefore, from the same perspective, the current extent of inequality is hardly understandable<sup>18</sup>. The reasons for inequality do not lie in individuals, but in systems that enable and encourage runaway accumulation<sup>19</sup>. Runaway accumulation occurs when the forces that propagate inequality become institutionalised. Opposing forces (which should drive societies towards economic convergence) have been channeled into and oppressed within the very same institutional structure. When competition as an economic flagship mechanism (and an internalised behavioural trait) allows people to gradually seal themselves off in material terms (in well performing economies, and beyond), cultivating the mechanism mostly internally, living ever more comfortable lives, without having to worry about the rest (Ferguson, 2011) being able actually to compete with them – they learn to appreciate competition. The sequential steps of winners sealing themselves off (Godechot et al., 2024), however, are reproduced internally, resembling fractals (Ranaldi, 2023), and ultimately result in brutal economic hierarchies, which are mildly described as „inequalities”, as if they were of natural and logical origin.

Moreover, at different material levels of society, selflessness and care for those in need are being rewarded differently. The difference in attitudes results in further upstream propulsion of resources, whilst diffusing them at the economic „bottom”. Inequality then justifies separation, separation generates inequality, and the vicious circle continues, drifting further away from virtuous coexistence, and not leading to substantial wellbeing either. As Martha Nussbaum so clearly describes: „*To the extent that privileged groups*

---

<sup>18</sup> With this understanding becoming ever more challenging, as a look back at the essay “*Economic Possibilities for our Grandchildren*” (Keynes, 1930) shows. His (with hindsight) overly optimistic work mispredicted the evolution of working hours per week, as well as that of societal values, as induced by technological and economic changes. However, it requires no speculation why one of the greatest economists of the time had a positive outlook. Keynes’ thinking also incorporated moral logic.

<sup>19</sup> The concept of runaway accumulation aims to unify what Christian Arnsperger describes as “*unfettered market exchange and capital accumulation*” (2005, p. 436).

*live a charmed life and insulate themselves from the sufferings of the poor, everyone is missing out on happiness, since they are all living in a bad unjust world. Sponging off the misery of others may feel good, but it is not happiness, for Rousseau or any of the ancient thinkers whom he follows, since they think of happiness, with Aristotle, as living a flourishing life.”* (2012, p. 349).

These critical thoughts on inequality are also in line with some of the most prominent contemporary economists’ works. Thomas Piketty warns that *„the concentration of capital will attain extremely high levels – levels potentially incompatible with the meritocratic values and principles of social justice fundamental to modern democratic societies”* (Piketty, 2014, p. 26). Inequality offsets many of the beneficial incentives that a market economy comes with. Building and sustaining similar economic systems, groups of countries move towards an ever closer *„equality in inequality”* (Lakner & Milanovic, 2016), their societies becoming unjust, and material conditions unequal to similar extents.

As the American columnist Steven Pearlstein observes: *“[...] the story of the last three decades is one of a loosening of moral and ethical norms and a depletion of trust that has weakened our economy and left us worse off as a society.”* (Pearlstein, 2020, p. 72). Current systems do not bindingly prescribe how to satisfy individuals’ basic needs. Without empirically acknowledging *„that we are all entitled to the basic necessities of life”* (Pearlstein, 2020, p. 75), they promote *„happiness”* regardless of, and at the cost of, other people’s living standards.

This phenomenon, and other forms of economic exploitation of the poor and the environment, are just as immoral as colonisation was. Both science and religion are ahead of the current state and levels of inequality. Rationally and morally, inequality has been transcended; collective progress can continue only when and where the exploitation of asymmetries ends. There are significant gaps in recognising this collectively, and corporate implementation poses an even greater challenge. In the words of Tamás Veress: *„Today’s economic and business models are blind to their own conditions of existence.”* (Corvinus Research Week, 2024).

Touching back on ideologies, economists aiming for ideological balance could describe our economic systems as equally genius and cruel. The problem is that the systems' genius is relatively steadily distributed throughout modern history, while their cruelty has accelerated recently. Nevertheless, the possibility of a global moral economy ideal exists, vaguely supported by the statement that „[...] *the set of markets is incomplete* [...]” (Heath, 2014).

Individuals may possess an inherent selflessness, but nature by itself does not endow them with sufficient means to practice this trait. It is the task of our human systems, societies, and institutions to foster other-regarding behaviour. The systems created to overcome natural scarcities – the majority of consumer markets and their culture – tend to steer people in the opposite direction on the selflessness scale, collectively and increasingly suppressing the natural and economic incentives that drive *the need to help others*. We essentially live in systems where the evident benefits of selflessness have been chased into and compressed into the spheres and realms of the exceptional, the safe, and the spiritual. As the behavioural economist, László Tóth said: „*We live in a moral vacuum.*” (p.c., Nov. 25th, 2024).

Overall, we have, to a great extent, overcome „*the law of the jungle*” (Pinker, 2011). Several formal and informal institutions protect humans and generally prevent them from causing harm. The socio-economic infrastructure, however, encourages or endures „*jungle behaviour*” in many segments of coexistence, many aspects of human lives. Targeting the greatest good and the least harm one can do, the system will consume them. Economically speaking, selflessness appears to be an ironically unsustainable approach. However, the „*jungle*” has more levels than one may have thought. The people who balance their own subsistence and the greater good, and who make an effort, so that these two do not contradict each other, are trailblazers in a much bigger jungle.

## 2.4. Moral economics

Parallel to the revival of the moral economy concept in economics, we witness attempts to reconverge the ethical and the economic. Whether the concept of the moral economy can point toward new notions in economics is, however, controversial. As indicated in the introductory section of the literature review, I support the view of keeping the meaning

open, for precisely the reason of what economic theory can make of combining the *moral* and the *economic*. In subsequent paragraphs of this section, I illustrate how the relationship between morality and economics, as well as the directions that the development of this connection points to, is deserving of the term *moral economics*, and ultimately, as their ideal manifestation, of the *moral economy*.

Currently, there is considerable obscurity over the meaning and classification of moral economics. Few studies have devoted themselves to unfolding the complete contemporary picture of this emerging and reemerging economic branch. As of present, *moral economics* is not primarily a tool for realizing moral economies, or a global moral economy. For now, it is an exploration of the opportunities lying in the overlapping realms of economics and ethics.

As for the trends and tendencies, works dealing with moral economics in its theoretical nature, concretely and explicitly, are more challenging to identify than those examining moral economies. I have identified one title illustratively as that of a *moral economics* conference: *Economics as a Moral Science*<sup>20</sup>.

Prior to economics being contemporarily and occasionally recognised as a moral science, there were a number of outstanding works written that connected economics and ethics. Before embarking on the examination of concrete moral economic directions in economic theory, I briefly highlight six works<sup>21</sup> from the twentieth century that have served, and continue to serve, as important milestones on the road to connect the *moral* and the *economic*. To get a sense of the evolution of that connection, I present these books and articles in chronological order.

The first book is *The Economics of Welfare* (1920, 1932), written by the late English economist Arthur C. Pigou. For one, the piece is revisited here for Pigou's attitude and the general intentions set, describing economic analyses as instruments for improving human life: "*The complicated analyses which economists endeavour to carry through are*

---

<sup>20</sup> Organised by the Polish Economic Institute in November 2018.

<sup>21</sup> This focused collection is a blend of the literature item suggestions by Prof. Dr. Barna Bakó (from Research Forum 2; 2022) and my own literature finds.

*not mere gymnastic. They are instruments for the bettering of human life.*” (1932, p. vii). As the title of the book reveals, he sets himself to contribute to this betterment, and does so in great detail, through classifications and by distinguishing between basic concepts. Pigou makes a distinction between economic welfare and welfare as a whole, with the latter prone to change without the former having to – in fact, they are rarely synchronised: “[...] *since economic welfare is only a part of welfare as a whole, welfare will often change while economic welfare remains the same, so that a given change in economic welfare will seldom synchronise with an equal change in welfare as a whole.*” (p. 12). In a Kantian way, he refers to human beings as ends in themselves, whilst also viewing them as the “*instruments of production*” (p. 12).

The responsibility of economics and the economy for the moral nurture of human beings is not yet “rooted out” in the literature. Pigou provides the insight that the “instrumental” improvement of people may fall short of raising ethical individuals: “[...] *efforts devoted to the production of people who are good instruments may involve a failure to produce people who are good men.*” (Pigou, 1932, p. 14). Also to appreciate in the book, from a moral economic standpoint, are the emphases on the environmental (see for instance: pp. 27-28, as well as p. 29: “[...] *there is wide agreement that the State should protect the interests of the future in some degree against the effects of our irrational discounting and of our preference for ourselves over our descendants.*”). There is also a delicate use of a human needs related perspective present in his work. Pigou’s expresses the limited nature of economic or material needs – the ones which may have a currencial expression, whilst acknowledging the complexity of conscious life, including the emotional realities: “*The only aspects of conscious life which can, as a rule, be brought into relation with a money measure, and which, therefore, fall within economic welfare, are a certain limited group of satisfactions and dissatisfactions. But conscious life is a complex of many elements, and includes, not only these satisfactions and dissatisfactions, but also other satisfactions and dissatisfactions, and, along with them, cognitions, emotions and desires.*” (1932, p. 14).

Pigou’s satisfaction-based utilitarianism (McCain, 2019) is closely related to my moral economic approach in this research. He observes how income transactions from

rich to poor would increase absolute welfare and the levels of experiences: “[...] it is evident that any transference of income from a relatively rich man to a relatively poor man of similar temperament, since it enables more intense wants to be satisfied at the expense of less intense wants, must increase the aggregate sum of satisfaction.” (Pigou, 1932, p. 89). The quotation does not contain an explicit normative judgment on the matter, but members of wealthier classes are criticised at other points. Pigou sees the satisfactions of the rich coming from their incomes’ relative nature: “[...] a larger proportion of the satisfaction yielded by the incomes of rich people comes from their relative, rather than from their absolute, amount.” (p. 90).

Throughout the major subsequent parts of *The Economics of Welfare*, Pigou concerns himself with the potential adjustments, in line with his satisfaction utilitarianism. He connects the problem of poverty alleviation to macroeconomic levels: “[...] the question whether any particular form of help to the poor involves disharmony is often equivalent to the question whether its indirect consequence is to increase or to diminish the national dividend.” (Pigou, 1932, p. 705). He places great hope on the materially less affluent, the lower social strata, and formulates the conditions and reasons around the betterments through various transfers to them: “It follows that any given transference of resource from the rich to the poor is bound, in itself and apart from the reactions discussed in the preceding chapters, to increase the national dividend of the future, provided that the return provided by investment in the poor, through additions to their industrial capacity, is not less than the return yielded by investment in material capital – that is to say, roughly, than the normal rate of interest.” (pp. 744-745); “With the poor regarded generally there is no frozen fixity of quality, but investment is capable of real effect.” (p. 746).

It must be added, though, that – unsurprisingly for a roughly century-old book – several of Pigou’s statements can by now be interpreted as controversial. Related to technology, he assumes that there would be no institution or group of individuals who would hinder invention in any sphere, for these increase the real income of labour: “The great majority of inventions and improvements will increase the real income of labour as well as the aggregate national dividend. Disharmony, as a result of inventions, is a

*possible, but a decidedly improbable, contingency. Nobody would seriously propose to interfere with, or to obstruct, inventions in order to provide a safeguard against it.*” (1932, p. 680). The times have come when this specific statement no longer holds, for with the advancements in the technology of artificial intelligence, a halt has already been called for (Future of Life Institute, 2023), earlier.

A comprehensive critique of Pigou’s work was presented by the late British economist Ronald H. Coase, in his article *The Problem of Social Cost* (1960). Coase finds Pigou’s approach, analysis, and technical statements problematic (Coase, 1960, pp. 1, 34, 39). He examines various disputes (legal cases of economic nature or with economic implications) to analyse the problem of social and private costs both in total and at the margin (1960, p. 2). Coase detects elements of reciprocity (1960, p. 19) in the issues and illustrates differences in outcomes, types and amounts of losses depending on individual costs. Despite Coase’s extensive critique, however, Pigou’s work remains a groundbreaking piece in economic history that still serves as a foundational piece for relations between the economic and the moral.

The examination of the connections between the economic and the moral would be incomplete without also referring to the late American political philosopher John Rawls, and his most widely known book, *A Theory of Justice* (1971). It begins with a straightforward and – at the same time – striking parallel: “*Justice is the first virtue of social institutions, as truth is of systems of thought.*” (Rawls, 1971, p. 3). This recognition indicates the weight of Rawls’ further theses in the book. The book itself draws on economics at several points, operating with concepts such as Pareto optimality (Rawls, 1971, p. 66) and models like the indifference map (p. 37). The hallmark mechanism described in the book, and the thread running beneath it, is that of the “*veil of ignorance*” (1971, p. 136). This thought experiment – put simply – lets the subject design their ideal society, which they do not know whom they will be born into.

At some points, Rawls connects concepts in peculiar constellations, as in his use of the term “moral geometry” (1971, p. 126). Several of his assumptions serve as foundations for later parts of this dissertation, such the notion that that “*a rational individual does not suffer from envy*” (p. 143). On the other hand, he assigns a large

portion of significance to institutions, by claiming that people's willingness to act unjustly depends in a large part on the institutions and their nature, in terms of justice: "*But men's propensity to injustice is not a permanent aspect of community life; it is greater or less depending in large part on social institutions, and in particular on whether these are just or unjust.*" (p. 245).

The way Rawls writes about mutual respect in the context of "*natural duties*" (1971, p. 337) is similar to the respect for others (in the human needs context, which is to be elaborated in several subsequent chapters of this dissertation). Parallels can be drawn with the Greek ecological economist Giorgos Kallis' notion of the Other, as in: "*Beyond consequences and freedom lies a third reason for self-limitation [...] This is justice, or care for the Other since limitless expansion inevitably colonizes and assimilates the lifeworld of others, human and nonhuman alike.*" (2019, pp. 57-58).

Rawls' description of "*mutual aid*" (1971, p. 338) is closely related to my *need to help others* concept (see: *Glossary*, as well as the *Theoretical Framework*). Rawls mentions human desires and needs too (p. 424), moreover, his "*goodness as rationality*" term, a theme running from chapter VII (p. 395) of *A Theory of Justice* until the very end of the book, to become an entirely justifiable and applicable idea, stands in parallel with the *rational selflessness* concept I am to develop in this dissertation.

Rawls is a clear supporter of the moral economic perspective, writing that moral ideas are a compulsory part of any social theory, as well as of economics: "*It may be objected that much social theory does well enough without using any moral ideas. The obvious example is economics.*" (1971, p. 492). In *A Theory of Justice* moral principles, attitudes, and moral psychology are explored, and related laws are established (pp. 490-491), thereby creating a link between rationality and moral development as well (p. 495). By incorporating the theme of equality (pp. 504-512, for instance), the book aligns with the moral economic practice.

Third in the sequence of moral economic milestones is the 1972 article by Australian philosopher Peter Singer, *Famine, Affluence, and Morality*. This work can be seen as one of the philosophical origins to the *Effective Altruism* research field and movement. Singer's initial statement that "[...] *the way people in relatively affluent*

*countries react to a situation like that in Bengal cannot be justified [...]*” (1972, p. 230) reflects an innate sense of justice, but is also supported in his subsequent argumentation. In the article, he sets out on a highly challenging mission, generalizable as an urgent need of altering our views on moral issues, as well as changing the way of life being taken for granted: “[...] *the whole way we look at moral issues – our moral conceptual scheme – needs to be altered, and with it, the way of life that has come to be taken for granted in our society.*” (p. 230). Singer lays out premises to strengthen his moral position, such as that we have an obligation to mitigate and prevent the evil we can, whether we distance ourselves from it *en masse* or not: “[...] *neither our distance from a preventable evil nor the number of other people who, in respect to that evil, are in the same situation as we are, lessens our obligation to mitigate or prevent that evil.*” (p. 234). Singer’s work strengthens the obligation to act morally, to act in favour of those in the face of adversity, if we ourselves do not experience anything significantly negative, or sacrifice something morally significant by that action: “[...] *if it is in our power to prevent something very bad from happening, without thereby sacrificing anything else morally significant, we ought, morally, to do it.*” (p. 235). Singer is far from being utilitarian, yet some of his proposals point in that direction. He urges action to non-action, if something positive is achievable, even if it is not formally required: “*Where should we draw the line between conduct that is required and conduct that is good although not required, so as to get the best possible result?*” (p. 237).

From the viewpoint of this dissertation, two of Singer’s quotes are in very close alignment and support the upcoming human needs direction in the present article. One stems from Aquinas: “[...] *material goods are provided for the satisfaction of human needs. Therefore the division and appropriation of property, which proceeds from human law, must not hinder the satisfaction of man's necessity from such goods.*” (Aquinas, 1485, as cited in Singer, 1972, p. 239). Moreover, as an even more determined position goes: “*The bread which you withhold belongs to the hungry; the clothing you shut away, to the naked; and the money you bury in the earth is the redemption and freedom of the penniless.*” (Aquinas quotes Ambrosius, 1485, as cited in Singer, 1972, p. 239).

Another significant author connecting the moral and the economic was the sociologist Amitai Etzioni. In his 1988 book *The moral dimension: Toward a new economics*, he firmly stated that “*The neoclassical paradigm does not merely ignore the moral dimension but actively opposes its inclusion.*” (p. 12). By contrast to economic intuition (but in accordance with Michael J. Sandel’s later works on the matter), Etzioni asserts that “*material incentives destroy rather than supplement moral incentives*” (Etzioni quotes Goodin, 1988, p. 243). He has also concerned himself with the concept of utility, writing that “[i]n some latter-day work the pleasure of others is also encompassed by the term ‘utility’.” (Etzioni, 1988, p. x). It is found relatedly that “*we assume that people pursue at least two irreducible ‘utilities’, and have two sources of valuation: pleasure and morality*” (Etzioni, 1988, p. 4). Etzioni’s thoughts align with the Catholic teaching on this peculiar type of interdependence: „*The very etymology of the word ‘wealth’ reveals the broader notion of ‘wellbeing’: the physical, mental, psychological, moral, and spiritual well-being of others. The economic value of wealth is inextricably linked to this wider notion of well-being of all in our common home.*” (Dicastery for Promoting Integral Human Development, 2018, p. 17).

Lastly, it is crucial to mention Amartya Sen’s “*On Ethics and Economics*” (1987), a book compiled from a lecture series, an earlier work by the prolific Nobel laureate, which preceded the capabilities emphasis by decades. It represents one of the key academic efforts to bring economics and ethics closer together again. Sen formulated the possibilities this process holds as a productivity increase in economics by tending to ethical considerations: “[...] *economics, as it has emerged, can be made more productive by paying greater and more explicit attention to the ethical considerations that shape human behaviour and judgement.*” (1987, p. 9). Cautiously, patiently, comprehensively, and logically, Sen breaks down the economic equation signs between the maximization of self-interest and rationality, to introduce a “*plurality of motivations*” instead (p. 19). He also brings in his famous theories on the agency of individuals. He reflects on the actual state of affairs, by saying that “[...] *the hopelessly deprived lack the courage to desire much, and their deprivations are muted and deadened in the scale of desire-fulfilment.*” (1987, p. 46).

In later chapters of my dissertation, I hope to bring a more nuanced explanation instead of what Sen has outlined roughly as: *“Behaviour is ultimately a social matter as well, and thinking in terms of what 'we' should do, or what should be 'our' strategy, may reflect a sense of identity involving recognition of other people's goals and the mutual interdependencies involved. Even though other people's goals may not be incorporated in one's own goals, the recognition of interdependence may suggest following certain rules of behaviour, which are not necessarily of intrinsic value, but which are of great instrumental importance in the enhancement of the respective goals of the members of that group.”* (Sen, 1987, p. 85).

Despite all the progress illustrated above, moral economics may not have matured to provide a stable venue for academic discourse and debate as yet. However, the split between those who apply the moral economy in its narrower, traditional sense, and those who attempt to exploit the concept's internal opportunities through moral economics is noticeable already. Unlike the moral economy tradition, moral economics, as a new economic direction, has no partisan origins. It is more of an expansionary tool, a practice, an incorporation of moral elements into economic theory, bringing about change within the discipline at multiple frontlines.

Based on literature, incorporating moral elements appears to be evolving in three main directions: The first is the expansion of the economic-environmental understanding within a human needs context. When it is the natural context being incorporated into the common understanding of the economy, the „upper”, or „outer” economic limits of human progress are being acknowledged. The second is applying moral philosophy (virtue ethics in particular) to “purely” economic entities, such as the market itself. The third moral economic sub-direction is the rethinking and reinterpretation of human needs. Limits ought to be set, not only for the „outer”, the environmental sphere, but also within the tiniest units of the economy: within individuals. This means reinterpreting human needs and their allegedly unlimited nature.<sup>22</sup> According to my own moral economic reinterpretation, needs are finite and satiable. Economics textbooks claim the opposite, at

---

<sup>22</sup> The first and third of these directions also fit directly under the umbrella of the book *Doughnut Economics* (2018), an international bestseller by Kate Raworth.

least for the aggregate of needs. The satiability of one particular need is not disputed, as total utility functions have their peaks; however, overall it is claimed that an individual will never be content with what they possess. In this dissertation, I aim to overcome this phenomenon of internal contradiction<sup>23</sup> or economic-psychological mix-up in conditions.

In light of the above, it may be stated that it is not only the present uses of the term moral economy (the functional categories outlined in section 2.2) – as a process and evolution – that is at a crossroads, but the coevolution of economics and ethics in general as well.

#### 2.4.1. Expanding the environmental understanding

The environmental direction focuses on extending the economic understanding, the interpretation of the economy itself, to the environmental. In the paragraphs that follow, I cite and expound on statements from select environmental and environmental economics works that prepare and contain the moral economic expansion element.

Early works recognizing the need for the theoretical expansion date back to the 1960s. In her book *Silent Spring* (1962) – on the environmental harm caused by pesticides – the late American conservationist Rachel Carson wrote of the economy of nature, referring mainly to ecological interconnectedness: „*Taking a long look, can you save trees without also saving birds? Do they not, in the economy of nature, save each other?*” (p. 65).

Gradually, the picture of the expansion became more sophisticated. By the 1990s, a team of Swedish scholars, Christian Azar, John Holmberg, and Kristian Lindgren had established, as their article title reveals: *Socio-ecological indicators for sustainability* (1996). Their goal “*was to give a warning signal to an unsustainable use of resources early in the chain from causes in societal activities to environmental effects.*” (Azar et al.,

---

<sup>23</sup> I owe my thanks to Gábor Kovács from the Corvinus Business Ethics Center, who, after attending my dissertational presentation on the *Corvinus February 2024 Research Week*, has pointed out the contrast (and the consequence that my assumptions in moral economics may not have to be considered axiomatic either).

1996, p. 89). It showed that there is not only horizontal interdependence, but one that may be called vertical, in the chains of causes.

At this point, the importance of human needs in an economic-ecological context has already been recognized, combined with ethical aspects. The authors have pointed to a need for efficiency in natural resource use, given that a growing human population will face an increasing number of challenges in fulfilling human needs: „*In order to fulfil human needs for a growing global population, the resources and services obtained from nature must be used efficiently within the society. Socially, efficiency means that resources should be used where they are needed most. This also leads to the requirement of a just distribution of resources among human societies and human beings.*” (Azar et al., 1996, p. 92). The authors, however, refused to go deeper into a human needs based analysis, due to the consideration that their analysis and measurement concern experts in other fields: „*The exact formulation of needs and corresponding indicators should be left to the experts of the different sectors. Many indicators of this kind are already calculated by the United Nations (e.g., literacy, infant mortality rate, life expectancy, calorie supply, etc.).*” (Azar et al., 1996, p. 107).

Towards the turn of the millennium, extensive works have emerged in the industrial context, attempting to reconcile the ecological with the economic. In *Natural Capitalism: Creating the Next Industrial Revolution*, the authors speak of „*a truly integrated economics discipline*” (Hawken et al., 1999, p. 7), and an economy that goes beyond following „*the path of least economic resistance*” (Hawken et al., 1999, p. 68).

The extension of understanding, or the incorporation of the environmental, originates in the assessment of the planet’s *carrying capacity* – an estimation where nature is also seen as having an impact on, and limitations to, the economy (see more in the term in *The Moral Economic Synthesis* chapter). In his article *Is there a thermodynamic constraint on economic activity?* (2008), the Hungarian environmental economist Gábor Bartus revisited the late Romanian statistician Georgescu-Roegen’s ecological theories, their evolution, and their rightfulness. Bartus found that mainstream economics (the classics and neoclassics) have already incorporated several environmental limitations into their doctrines, albeit not emphasizing them, and have not ventured into the application

of thermodynamic laws to the economy. This latter, however, would be a mistaken approach (Bartus, 2008, p. 1010). Through examining global processes in the thermodynamic context, the previously assumed limitations prove to be more fluid (Bartus, 2008, p. 1020). As Bartus concludes, even if certain physical limits prevail, there are obstacles to converting them into economic limitations. Economic value creation – in his opinion – is not bound to the physical (2008, p. 1021).

When broken down into specific segments, however, there appear to be distinct planetary boundaries, as initially described in the article *Planetary Boundaries: Exploring the Safe Operating Space for Humanity* (2009) by Rockström et al. The authors provide a detailed picture of certain environmental limits (climate change, ocean acidification, stratospheric ozone, and global freshwater use, among others), far beyond the contents of the widely known *Limits to Growth* book (1972), by prominent members of *The Club of Rome*. In Rockström et al., too, interdependence is emphasized. Between planetary boundaries in particular, one transgression may rearrange other boundaries, or lead to more transgressions: „*Planetary boundaries are interdependent, because transgressing one may both shift the position of other boundaries, or cause them to be transgressed.*” (2009)<sup>24</sup>.

Another way of grasping the significance of the natural environment to humans and the economy, has become expressing the value of “*ecosystem services*” in monetary units. Costanza et al. attempted just that, stating how inadequate of an institutional framework conventional markets are to manage eco-services, which are only considered public goods or common pool resources (Ostrom, 1990). They point to the need for common asset institutions to value and to take care of them: „*Many eco-services are best considered public goods or common pool resources, so conventional markets are often not the best institutional frameworks to manage them. However, these services must be (and are being) valued, and we need new, common asset institutions to better take these values into account.*” (Costanza et al., 2014, p. 152).

---

<sup>24</sup> It should be noted that the main author, environmental scientist Johan Rockström has published several related articles more recently, including *The planetary commons: A new paradigm for safeguarding Earth-regulating systems in the Anthropocene* (2024).

Returning to the importance of human needs, it can be observed how meeting them, and the “*fair distribution of resources, income, and wealth*” are being put as goals into the visions of comprehensive economic movements, such as that of the *Wellbeing Economy Alliance*, along with the environmental goals (Costanza et al., 2018). The purpose of meeting needs is present even when the environmental-economic theme is turned over, investigating the *Role of economics in analyzing the environment and sustainable development*, the title of a 2019 article by Polasky et al. They point to the various branches of economics that address the challenge of sustainability, including development economics, ecological economics, environmental economics, and natural resource economics (Polasky et al., 2019, p. 5233).

The same article predicts that it will take interdisciplinary collaboration to meet the environmental and human needs goals in tandem. For now, they are being treated almost entirely separately by environmental sciences and development economics, respectively. A deeper integration of research is required: „*Sustainable development is not just about sustainability in the sense of how to maintain the environment. Sustainable development is about how to simultaneously alleviate poverty/improve material standards of living and maintain or enhance vital natural capital necessary for future well-being. Much of the work in environmental sciences focuses on environmental sustainability while much of development economics focuses on alleviating poverty. Making progress on sustainable development requires integration of research in development and environment.*” (Polasky et al., 2019, p. 5236). In alignment with this, as Andrew Sayer describes in an interview, we ought to build “*a bridge between the people who worry about the end of the planet, and those who worry about the end of the month*” (Lopes, 2022).

Ultimately, incorporating the environmental into the economic contributes to strengthening the normative standpoint as well. As highlighted by Brendan Hogan in the book chapter *What Is Economics for?* (2021): “[...] *economics cannot help but be a moral science as it involves issues of labour, distribution, inequality and scarce resources that affect the flourishing of the human species, and now much more broadly, the flourishing of species on the planet.*” (p. 35).

### 2.4.2. Applying virtue ethics to economic entities

In the context of further attempts bring economics and morality closer together, one can observe the application of moral philosophy – more specifically, virtue ethics – to economic entities. Here, by economic entities, individuals, households, businesses, and markets are meant. In a general corporate sense, “[t]he virtue ethics approach states that in addition to competition and profits, care for the environment, the health of the employees and well-being of the customers should be included among the objectives of the company.” (Zsolnai, 2007a, p. 3). The article I refer to in the following paragraphs, Luigino Bruni and Robert Sugden’s *Reclaiming Virtue Ethics for Economics*, however, focuses on and examines moral markets as a whole.

The authors of this article describe, in my own terms, a multifaceted market morality. After stating that “*virtue ethicists are failing to find virtue in markets because they are not seeing the market as a practice in its own right*” (Bruni & Sugden, 2013, p. 148), a novel approach is implemented. When “*reclaiming virtue ethics for economics*”, Bruni and Sugden turn the disciplines of the usual reasoning inside-out and reason from a virtue-ethicist perspective. They enlist and analyze eight “*market virtues*”, which they claim that our economies possess over, in general: “*universality, enterprise and alertness, respect for the tastes of one’s trading partners, trust and trustworthiness, acceptance of competition, self-help, non-rivalry, and stoicism about reward*” (p. 143).

The authors modestly state that their list is not necessarily complete or exhaustive. Nevertheless, Bruni and Sugden appear to have been able to enlist the highest number of elements or aspects to this theme, to date. Their multifaceted market morality aspects may serve an elaboration of an ideal moral economy.

Despite writing of market virtues, the basis (or unit) of benevolence appears to stem from the individual. Bruni and Sugden set the condition for a virtuous market participant – that they intend mutually beneficial transactions: “*For a virtuous market participant, mutual benefit is not just a fortunate by-product of the individual pursuit of self-interest: he or she intends that transactions with others are mutually beneficial.*” (Bruni & Sugden, 2013, p. 143).

There are myriad ways to approach non-selfishness concepts, wherein the framework, as well as the elements, need to be laid bare. Every stage between altruism and selfishness is a fine line to walk, a delicate approach to be described. Bruni and Sugden openly declare that their account of market virtue is not a new theory on other-regarding behaviours. Instead, they look directly at ethical attitudes to market relationships, which are characterized by reciprocity, with altruism being less relevant in this case: “*Our account of market virtue is not a new theory of non-selfish behaviour. It is a description of a distinctive moral attitude to market relationships—an attitude characterized not by altruism but by reciprocity.*” (2013, p. 153).

There are several more notable points in their analysis. For one, Bruni and Sugden refer to Sandel’s article *Market Reasoning as Moral Reasoning: Why Economists Should Re-engage with Political Philosophy* (2013), mentioning his widely known statement that “*external rewards can crowd out intrinsic motivation*” (Bruni & Sugden, 2013, p. 148). Second, they highlight a critical tension in value theory, specifically the potential clashes between distinct virtues in different domains (2013, p. 161). This fact is at the root of much of the criticism towards markets and economics, but may be even fiercer in the realms of International Relations (IR) studies. Contradicting values can make a stronger case against objective morality than classical moral dilemmas illustrate. However, value contrasts should not be overgeneralized. As the authors note: “*It is (...) a mistake to think that the market is a virtue-free zone, or that the character traits that best equip individuals to flourish in markets are necessarily corrosive of virtue in other domains of life.*” (Bruni and Sugden, 2013: p. 143). Adding to this article, the neuroeconomist Paul J. Zak can be quoted, claiming in his article *Moral markets* (2011) complementarily that „*markets may strengthen moral values*” (Zak, 2011, p. 212), and that “*market exchange provides an opportunity to behave morally*” (p. 226).

#### 2.4.3. Revisiting human needs theory

From all three directions of moral economic expansion, the reinterpretation of human needs’ characteristics is the most decisive one from the perspective of this dissertation. I elaborate on the moral economic interpretation of human needs in the main chapter of the

*Theoretical Framework.* In this subsection, I revisit only the relevant aspects of needs theory, moving along the blurry boundaries of economic knowledge of needs.

Human needs are a crucial factor in economic theory. In some branches and texts, they even appear in the definition of the economy: “[...] *let us define the economy as the set of arrangements and activities by which a society fulfills its needs.*” (Arthur, 2013, p. 14). As for describing needs themselves: according to Joël Glasman, who wrote a comprehensive review on the history of needs theory in his book *Humanitarianism and the Quantification of Human Needs* (2020), needs can be approached and used “[a]s a concept, as a system of classification, as a material apparatus, and as a set of standards.” (Glasman, 2020, book cover).

Reflecting upon the length of the history of needs theory, as well as slightly narrowing the definition, is the following excerpt, taken from John Burton’s *Conflict: Human Needs Theory* book (1990): “*Many prominent scholars and social scientists going back as far as Aristototele and Thomas Aquinas have elaborated categorical systems of human needs. The significance that their efforts lend to the concept of needs and the great compatibility and mutual transformability of these systems permit a demanding definition of needs: needs are all the exigencies of human existence and development and are an important driving force thereof.*” (Gillwald, 1990, p. 115). A humanistic definition would be: “*A need is a conscious or unconscious recognition of a lack of something ‘indispensable’ for a state of personal equilibrium, physically or emotionally.*” (Friedman, 1990, p. 257).

Within the system of human needs, in the economic sphere, basic needs have enjoyed particular attention. Synonyms for basic needs include “*“survival,” “elementary,” “emergency,” “fundamental,” “primary,” “urgent,” “essential,” “acute,” [...] needs”*” (Glasman, 2020, p. 6). For a concrete definition of *basic* needs, I will rely on Ian Gough’s article *Economic Institutions and the Satisfaction of Human Needs* (1994): “[...] *objective basic needs consist, at the least, in those universal preconditions that enable sustained participation in one’s form of life.*” (Gough, 1994, p. 28).

In the relatively recent history of needs theory, two authors stand out: the late American psychologist Abraham Maslow, and the late Chilean economist Manfred Max-Neef. I reflect on their works below, drawing on a variety of sources.

Maslow's hierarchy of needs scheme was seen as a breakthrough in needs theory. As Glasman points out: *"Techniques such as emergency triage, caloric accounting, and household budget surveys all allowed for a commensuration of needs beyond social and territorial borders. However, it was Abraham Maslow's 'hierarchy of needs' that would become one of the main vehicles for the ontologization of needs."* (2020, p. 38). Nevertheless, Maslow's "pyramid" turned out to be a double-edged sword. Glasman recalls the challenges it posed, as well as the consequences: *"One of the reasons that people have historically resisted expert knowledge of basic needs is probably because this notion suffers from the projected shadow of Maslow's pyramid: A concept of needs that is both universalist and differentialist in a highly political manner. While the happy few at the summit of the pyramid in search of "self-realization" shall be asked what they need, at the bottom of the pyramid, the many in search of fulfilling "physiological and security needs" should leave it to the experts to determine what they truly need."* (Glasman, 2020, p. 251).

The hierarchy of needs concept has been deemed subjective (just as the entire array of classification may appear to be) and has been widely criticized. Victoria Rader's charges against Maslow and his followers are just an example: *"I have found that physical security, autonomy, and identity are not separate needs but inherently interrelated aspects of being a full human being. [...] The idea of a needs hierarchy, for example that begins with material requirements may be accurate at a purely biological level, but it does not reflect the way real people behave."* (Rader, 1990, p. 232).

In the contrasting approach of Max-Neef *"[needs] are limited<sup>25</sup>, universal, and nonhierarchical"* (Guillen-Royo, 2020, p. 115). His needs classification takes a different shape, a different structure, classifying the fundamental human needs as follows: subsistence (in alignment with the moral economic classics, particularly Scott),

---

<sup>25</sup> Own emphasis.

protection, affection, understanding, participation, recreation (leisure, time, or idleness), creation, identity, and freedom. An additional dimension is formed by existential categories of being, having, doing, and interacting. Thus, a thirty-six-cell matrix can be developed and filled with examples of satisfiers (Fisher, n.d.). Max-Neef did not claim to be comprehensive in his theory: *“This admittedly open list was justified not on ethical, philosophical, or psychological grounds, but because of its usefulness for ‘policy and action.’”* (Guillen-Royo, 2020, pp. 115-116). He ventured more deeply into the classification of responses to needs, too, distinguishing between human needs (the universal ones), satisfiers (which he considered to be culturally and historically relative), and consumer goods that may change with fashions and across groups and regions (p. 114).

One “innovation” in needs theory was Max-Neef’s introduction of synergic satisfiers, defined, reminiscent of Pareto optimality, as follows: *“Synergic satisfiers contribute to the satisfying of more than one need, while not harming others.”* (Guillen-Royo, 2020, p. 115). More punctually, they were described as values, attitudes, laws, organizational arrangements, technologies, infrastructures, environments, and cultural characteristics, and their potential constellations supporting optimal needs fulfilment (p. 115).

The broad contrasts between Maslow and Max-Neef lie in the emergence of satisfiers in the latter’s system, as well as the emphasis on the finite and classifiable nature, and the universality of fundamental needs. Max-Neef differentiated between satisfiers (determined historically, regionally, and culturally), rather than between the needs of individuals. He eliminated the hierarchy from the system, understanding needs as interrelated and interactive. What makes the process of need satisfaction so dynamic are simultaneity, complementarity, and trade-offs, rather than a hierarchy (Fisher, n.d.).

The problems of quantification, measurement, and inadequate visualization lead to the second part of this subsection. Wants are distinguished from needs in general, for wants are seen as non-essential to human wellbeing (Dicastery for Promoting Integral Human Development, 2018, p. 14). Although the satisfaction of needs, wellbeing, and the concept of happiness have not been harmonised in the literature, here, for the sake of

pragmatism, they will be treated as behaving similarly under a quantitative umbrella. In this, I am moderately distancing myself from stances of the late Canadian political scientist Christian Bay and others, who argue that wants, demands, and preferences can be observed, surveyed, and measured, unlike human needs, despite their empirical nature (Bay, 1990, p. 237).

The concepts of the satisfaction of needs, well-being, and happiness have to be temporarily conflated in the dissertation for the sake of model-building, in order to construct a moral economic synthesis without overwhelming complexity, and with optionally expandable detail. Notice in the attitude so far (and to unfold further) that only a broader concept of happiness is compatible with the content and purposes of the dissertation. This is to say that I fully align with Martha Nussbaum's concerns over a narrow, or overly utilitarian happiness-understanding, as she expressed in her article *"Who is the happy warrior? Philosophy, happiness research, and public policy"* (2012). I stand close to the understanding that a person can be considered genuinely happy only when it is *"because he is active in accordance with all the virtues"* (p. 341), whilst respecting individuals' freedom in their subjective judgement of happiness, within smaller, limited frameworks.

The cause of measuring human happiness, wellbeing, or need satisfaction has earned its justification, particularly in the field of behavioural economics. In their 2008 article *Choices, situations, and happiness* Botond Köszegi and Matthew Rabin write about the attempt to devise interpersonally-comparable measures of cardinal happiness, that it is *"[...] obviously a legitimate exercise."* (p. 1831). The reasons for concrete economic measurability have been recognized in the early works of the late Nobel laureate economist and psychologist Daniel Kahneman. He has taken physical variables and subjective intensities in experiences into account, stating their qualitative similarity for different people: *"The main argument for considering these experiences measurable is that the functions that relate subjective intensity to physical variables are qualitatively similar for different people. [...] Although the correlations among these measures are imperfect, the variance they share can serve to operationalize the concept of instant experienced utility."* (Kahneman et al., 1997, p. 380). The history of concrete needs

measurement, however, stretches back further, to the last quarter of the nineteenth century, when the quantification of people's needs – with an emphasis on workers' consumption – has come into focus, both for science and for administration, practitioners: *"In the last quarter of the nineteenth century, the quantification of people's needs suddenly became a central matter for academic and administrative knowledge alike. The quantification of workers' consumption particularly became a fashionable topic of bureaucratic inquiries."* (Glasman, 2020, p. 34).

As for the methods, Kahneman has argued for *"moment-based methods"* to measure experienced utility, developing a notion of objective happiness (1999) based on the findings that measurements of a continuous or intermittent nature can yield *"utility profiles"* relatively similar for different individuals (Kahneman et al., 1997, p. 394). For the moment-based approach, one would hope to utilize contemporary technology (sensors and smart devices), an endeavor which, maybe surprisingly, runs into difficulties, and is spreading less speedily than might be expected (Zhang et al., 2022). As Glasman notes, needs assessment is relying on low tech, even when digital technologies are involved – unlike one would expect in our times: *"Technology, it is argued, does not play the role that one expects: Even when digital technologies are included in the process, needs assessment still relies heavily on low tech."* (2020, p. 15). This may depend on whether it is being focused on basic needs, as in a humanitarian context, or trying to construct a comprehensive picture, a *"utility profile"*, as quoted from Kahneman above, in a *"developed world"* context. Kahneman and Krueger are also in favour of a differentiation, instead of using a single utility concept standing for all kinds of human decisions and motivations: *"[...] it is fruitful to distinguish among different conceptions of utility rather than presume to measure a single, unifying concept that motivates all human choices and registers all relevant feelings and experiences [...]"* (Kahneman and Krueger, 2006, p. 4).

Internal contradictions must be considered, though. In Nicholas P. White's opinion: *"The various aims – and enjoyments, desires, judgments about what's worthwhile, etc. – all of which the notion of happiness is taken to include, seem often to conflict with each other [...] in such a way that they can't all be surveyed and evaluated*

together. Accordingly there might be no non-arbitrary way of constructing a coherent concept out of them.” (2006, p. vii). Within the variety of internal contradictions, there appears to be a particularly stark tension, formulated by White as follows: “One says that there are aims, which are rational aims that lie outside the concept of happiness, so that happiness can’t embrace all aims. On this view, there are rational considerations that compete with happiness to govern a reasonable person’s decisions. The most important example of such a consideration would be morality. The idea would be that there can be a conflict, in deciding what to do, between one’s own happiness and the demands of morality, conceived as something distinct from it.” (2006, pp. 36-37). The proper description of this tension dates back primarily to Immanuel Kant. “Kant severed the connection between two kinds of assessments – of moral condition and degree of happiness – more radically than they’d ever been severed before, even though the idea of some separation had already existed as early as Greek times, and many philosophers leading up to Kant had worked on its articulation and clarification.” (White, 2006, p. 38).

Needs measurement has also been hindered by a general lack of consensus. Ian Gough writes of “an inability to agree on concepts and measures of well-being that have cross-cultural validity.” (1994, p. 27). This leads to having plenty of space for scepticism: “The absence of a theoretically grounded and operational concept of objective human need has inhibited the development of a common calculus for evaluating human welfare. On the contrary, there is a widespread scepticism that human needs exist, or a belief that all needs are relative.” (Gough, 1994, p. 27). In the case of indicator diversification for measurement, the question arises whether one categorized need should be expressed or be expressible<sup>26</sup> with one indicator only. The United Nations Human Rights Office prescribes exclusivity for attributes in the closely related realm of human rights measures: “[...] the attributes’ scope should not overlap. In other words, the selected attributes should be mutually exclusive.” (Office of the United Nations High Commissioner for Human Rights, 2012, p. 31).

---

<sup>26</sup> Related issues have also been addressed in connection with Amartya Sen’s widespread capability approach and its challenges (Sen, 1994, pp. 334-335).

Directly related to the measurement is visualization. Human needs ought to be visualized with care, for their perception may influence individual strategies. Visualizing human needs – from the design perspective – can thus be categorized as a type of choice architecture, imposing responsibility on the “architects”: “*A choice architect has the responsibility for organizing the context in which people make decisions.*” (Thaler et al., 2014, p. 428). An ideal needs-visualization, highly dependent on adequate quantification, is yet to be developed. Historically, as mentioned earlier, needs have been illustrated using the pyramid structure (following Maslow), which resembles their theoretical hierarchy, as well as with matrices (following Max-Neef). However, other forms of illustration may open up new avenues for inspiring human needs related ideas and theories. Two suggestions are dynamic functions (“symphonies”) and radar charts, in more frequent, elaborated, and institutionalized uses.

The levels of a reformed needs pyramid could be considered as complex indifference curves (indifference lines). If charted, the indifference map of needs over a linear needs-scale would yield „symphonies”, intersecting need-satisfaction-variations. The budget-line-like capacity limit to these could be the attainable average well-being, determined by the level of technology, resource abundance, and the policies of distribution, which also matter for *the need to help others* (see subchapter 4.2 for more detail).

Humans and other living beings are points of origin for their multilayered, interconnected need functions, waves of needs. Societies have need-symphonies in an environmental context (which may reflect in *The Moral Economic Synthesis* as well). Thus, one of the underlying economic symphonies of life is the symphony of needs: each need has a different function in time (changing throughout different historical times – connected with the level of technology and lifestyle, throughout different economic systems; between the state of war vs. peace; natural disasters, etc.).

Applying the above thoughts to the needs radar chart, the radius levels constitute the indifference map. One could also draw the needs pyramid in the form of a reverse radar chart. The midpoint of the chart would resemble the top of the pyramid, and the indifference map would represent an infinite number of needs-constellations on the chart.

The way people's needs-constellation changes under different "budget lines" (functions of the shapes areas around the midpoint of the radar-chart) could ensue under the same algorithm for everyone.

Within the economic discipline, especially the mainstream, there is a tendency to take stances on human needs for granted, and to treat them axiomatically. In fact, the notion is blurred on several more frontiers. These include the debate between unlimited and finite needs, as well as the underexplored relations of needs with cooperation and selflessness. As indicated above, these topics will be explored further in the *Theoretical Framework* chapter.

I am ending this subchapter with a Kahneman quote which connects needs, their measurement, ethics, and economics, and which strengthens the normativity argument: "*Philosophical discussions of the measurement of well-being [...] remind us of the common intuition that the evaluation of happiness is in part a moral judgement, which invokes a conception of the good life.*" (Kahneman, 1999, p. 6).

## 2.5. On the limitations of the moral economic concepts

Throughout the preceding sections, the reader has witnessed the concept of the moral economy and that of moral economics diverge and converge. Both forces were initially exerted by the historical and conceptual reviewers. The moral economy and moral economics are both concepts with great semantic potential. Currently and fundamentally, they are independent notions of economics, but they have a certain extent of overlap in their meanings, and the semantic convergence holds further opportunities. There are limitations, though.

One of the uses not recommended, besides the political, is to apply the terms moral economics and moral economy for the purpose of constructing a code of conduct, an ethical code for the economics profession. At this point, the 2022 article *Towards a concept of responsibility for economics* by Ioana Negru and Wilfred Dolfma may serve as a contrast. Their article gives insights into and guidance on how to incorporate the concept of responsibility into the conduct of the economics profession. Despite the article

having been published in 2022, the most emblematic example of their „misconduct” remains the 2007-2008 financial crisis.

Despite potentially considering themselves to be on the value-driven side of economics, one may doubt that a comprehensive economic code of conduct could be efficient overall. One might even question the feasibility of this code being outlined, taking the required frequency of updates into account, at least at this point in scientific progress. Economists’ findings, statements, and actions undoubtedly have consequences, but the potential fear of committing a mistake classifiable as economic „misconduct” would hinder the science itself. Rather than placing the burden on economists in academia, responsibility should be located and remain in the implementation phase, even if the additional caution would result in more stages of policy implementation.

Another cautionary move in applying moral economics is to remind ourselves how ethics may leak – and should be incorporated, as stated – into economic realms, but how a reverse motion, economics saturating ethical matters, is not advisable. On this topic, Sandel’s work (2013) remains highly relevant.

In his article, Sandel argues against extending market mechanisms and forces to aspects and spheres of life where they do not belong. He illustrates the crowding out of nonmarket norms and values through several examples. Instead of incorporating ethical factors into market mechanisms, Sandel suggests removing market mechanisms from the realm of ethical issues. Markets are highly likely to interfere with the spheres of life governed by nonmarket norms as soon as they reach them (Sandel, 2013, p. 132). In every situation, where it may be tempting to economize (or even commercialise) human and social mechanisms, there ought to be a precautionary “*moral assessment*” (2013, p. 138), Sandel advises, and concludes thus that economics should “*reconnect with its origins in moral and political philosophy*” (Sandel, 2013, p. 139).

The more general limitations of the moral economy and moral economics are, in fact, empowering conditions. Although (in this review and its reach) moral forces are presumed and expected to play a crucial role in shaping economic systems and scientific endeavours, their power, overall, ought to be exerted together and in harmony with mathematical, empirical, and historical factors (Yay and Tastan, 2010, p. 79). Finally yet

importantly, moral economists across the generational line should refrain from overgeneralizing the term, potentially leading to faulty assumptions that would disconnect science and reality (Soylu, 2024, p. 25). Moral economics will stand its ground only as long as it is capable of adapting to the ever-changing, dynamic, and – most importantly – open system that it is contained in (Soylu, 2024, p. 27).

## 2.6. Legitimizing moral economics and the moral economy

Moral economics is a field that remains to be legitimized, professionally speaking. The profession – overall, as well as the moral economy tradition – is lacking a synthesis, and although moral economics cannot (as of yet) promise to be the GUT<sup>27</sup> of economics (if there will ever be such a construct), it can help shift the nature of economic pluralism. By this shift, a move from an alienated to an engaged state is meant, which – for the economic perspective – is outlined well in Kevin L. Young’s article *Progress, pluralism and science: moving from alienated to engaged pluralism*.

Young writes about the situation in International Political Economy (IPE), which – in my opinion – can be projected onto the entire economics profession. There is a normative difference made, and “*stronger adherence to a scientific ethos*” (Young, 2021, p. 1) is offered as a means to achieve the ‘engaged pluralism’, placed above the contrasted ‘alienated’ version. The author, Young, pays respect to the scale and scope of IPE, but also points out that the resulting (current) pluralism faces a problem of being underutilized. He suggests an ethical approach to address the blind spots (Young, 2021).

As a general explanation for the distinctive complexity of IPE, Young describes the difficulty of aggregation when handling complex social systems. When writing about the field’s pluralism, Young refers to authors having made binary divisions previously (to Benjamin J. Cohen, among others), but also points out that more recent studies of the field indicate higher pluralism.

---

<sup>27</sup> Standing for *Grand Unification Theory*, a term borrowed from physics, where it means a framework able to resolve a variety of problems remaining in our current understanding of physics.

The author observes the eclecticism of IPE in various scholarly languages and identities, accompanied by a weak synthesis only, and these two factors ultimately resulting in a deep professional divide. Whilst admitting the inevitability of a certain degree of specialization, Young condemns the tendency of groups to distance themselves from others they do not understand, resulting in an unhealthy form of intra-disciplinary competition (Young, 2021).

A solution he proposes is shared standards, arguing that science is “*not simply about a specific procedure of hypothesis testing or form of deductive reasoning, but rather about habits of mind and social encounter regarding how knowledge is to be systematized and critiqued*” (Young, 2021, p. 7). Young is calling science in general a pluralist enterprise. In a potentially surprising turn, it is stated that moral values are an integral part of the scientific process.

When moving on to describe the ethos mentioned, the author refers to the Mertonian values of scientific practice: communism (not to be confused with its ideological meaning and connotations), universalism, disinterestedness, and organized skepticism. The latter is highlighted as enabling the identification and removal of unwarranted practices in science. Many existing methods (such as the institution of peer-reviewing) are already part of the ethos, yet strengthening the ethos could promote this advantageous state further (Young, 2021).

Young’s words have strengthened the point that a kind of theoretical inclusion (pluralism) in science (or at least, in social science) is crucial, and likely to apply to moral economics in the context of “the whole” of economics as well.

## 2.7. The promise of moral economics

In the three subsections on moral economic directions, the reader was able to witness the threefold expansion of moral economics. Works that argue for and justify ethical views on, and ethical elements’ incorporation into economic theory, have been presented. Whether the economist takes environmental boundaries into account, views the market as a moral sphere, or accepts the satiable and finite nature of human needs (despite their complexity), they are contributing to making economics more complete, making it a

moral science. The three directions – and even more so, their combinations – result in new economic models and lead to new practices.

Thus, through the three moral economic directions outlined, it is possible to see how the way in which the main meaning of moral economics becomes different and more distant from the historical meaning of the moral economy, yet, does not contradict it, holds promises. It is questionable, however, what will happen when the field of moral economics (over time, over theoretical progress, and over technological changes) becomes more integrated and policy-oriented, affecting the design of real institutions and real processes. It is doubtful whether there could be a term better to describe the manifestation of moral economics than the moral economy. In this sense, the moral economy is not a historical or a political ideal, but mostly an economic one.

During the ambitious endeavor of navigating and reinterpreting the moral economy, it is advisable to keep certain points from Oddný Helgadóttir's article *How to make a super-model: professional incentives and the birth of contemporary macroeconomics* (2021) in mind.

This article informs the reader about the academic reception, challenges to, and perseverance of Real Business-Cycle (RBC) modelling in contemporary macroeconomics. The attractive nature of the – philosophically fundamentally new – RBC model is identified in its logical consistency and its “*highly user-friendly, stripped-down methodology*” (Helgadóttir, 2021, p. 3). Furthermore, the author describes three fundamental features of RBC modelling in the article, to be credited with the theory's professional achievements: “*the ability to bond together a set of disparate ideas into a simple and workable whole*”, “*deflect known criticism*”, and “*incorporate modified assumptions*” (p. 1).

The professional conditions and constraints under which academic economic ideas emerge are being examined, noting that the bar of expectations for macroeconomic models' successes is rising steadily, particularly as competition intensifies, and technological changes occur. The author praises the creators of the RBC model, Prescott and Kydland, for integrating formerly disconnected ideas “*into a coherent formal whole that was stronger than its constituent parts*” (Helgadóttir, 2021, p. 14), and for firmly

embedding the new construct within the historical narrative of the discipline. The ‘representative agent’ method within RBC modelling is also emphasized. The article explains how the RBC model’s features also account for the theory’s flexibility, applicability, and its richness in further research options, which have all contributed to its popularity (Helgadóttir, 2021).

In Helgadóttir’s article, one may look for the general characteristics of new models and even new schools in economics. Beyond learning about what actually makes a new economic model and theory, one may become more familiar with the resistance that a new theory may face, as well as with the reception of new and ambitious ideas in general. One may read the article with moral economics in mind, looking for the kinds of challenges that could arise, and how best to rise to and overcome them. The article provides insights into the conditions and expectations for new models, primarily in terms of their complexity.

For the moral economy and moral economics, I see a chance of a similar revolution and – more importantly – a broader synthesis to start (or to continue with greater momentum), which may carry similarities with the twentieth-century revolutions of Institutional Economics in that its axioms differ from the mainstream, and with New Institutional Economics (NIE) in that it aims for a marriage of analytical methods with a different area – in this case, ethics. The unfolding of a new moral economy understanding, along with a more comprehensive moral economic branch in economic science, would also align with Max Weber’s views and their interpretations, in that the economic structure is to be shaped by moral forces (Guler Aydin and Ozer-Imer, 2018, pp. 465-466).

## 2.8. Summary of the literature review

In the literature review, I surveyed works in two major fields: the moral economy tradition and moral economics. *Figure 6*, below, illustrates the themes and journey of the literature review.

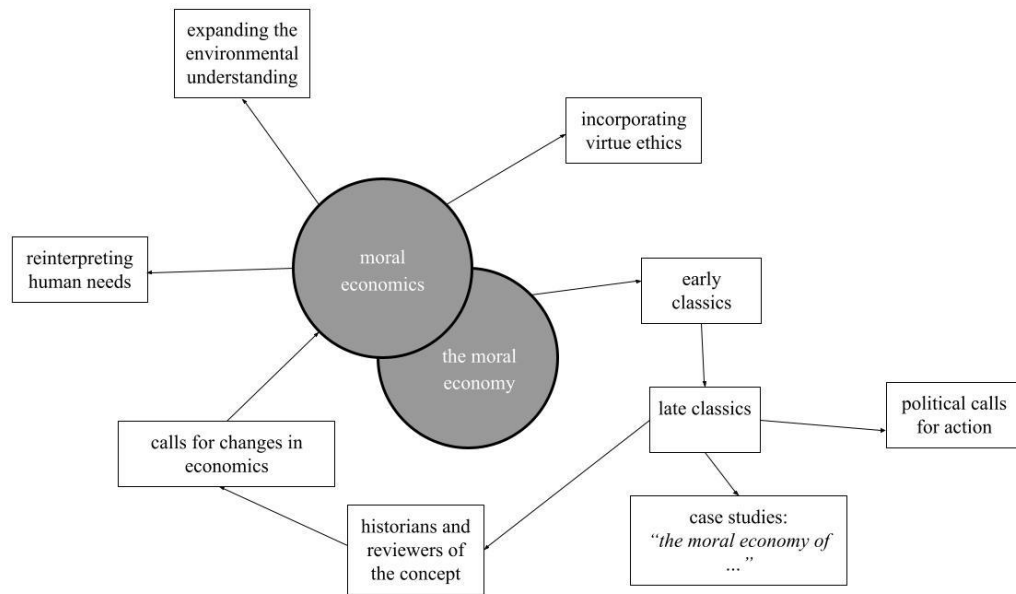


Figure 6: The constellation and evolution of themes around the moral economy and moral economics concepts.

Source: own composition and editing.

Examining the moral economy tradition provided an insight into the economic wisdom of classical moral economists, who foreshadowed several points, elements of the expanding moral economic concept’s interpretation. Moving forward, clues were taken from conceptual histories, as well as from more recent case studies. The reader may observe how, after the classics took on the founding and revival of the moral economy concept, different functions have evolved. Of these, it was the reviewers who shifted the meaning tentatively towards a broader understanding, towards changes in economic science itself. When exploring the political uses, I suggested not expanding the meaning of the moral economy along political lines and ideals; however, I argued that an expansion should be allowed through the incorporation of the ethical into the economic. This has led to a compact criticism of the present state of the economy.

Exploring the general relationship between morality and economics, as well as the directions of contemporary moral economics has shown how the interrelated branches appear to be on the verge of setting a new agenda and opportunities for the moral

economic field. The advice obtained at the end of this review may serve as a cautious reminder of the directions in which the concept of the moral economy should not evolve, as well as the concept's limitations. Moral economics has not fledged fully to date, and it cannot be detached from the historical notion of the moral economy either. It will be intriguing to observe, however, whether the three identified directions in which moral economics continues to evolve lead to a new ideal of a moral economy. This is a question of future applications. For now, it is through the exploration of the three moral economic directions only that an initial impression of that potential ideal can be gained. The structural and contextual advice from International Political Economy and International Relations scholars, obtained in the final part of the review, serves as a cautious reminder throughout the entire dissertation journey.

This broad overview of the moral economy illustrated what it is today, and tapped into what it could be. Overall, the review has underscored the need for moral economic exploration, as well as the importance of keeping the meaning of the term moral economy open for its future practical implementation. Ultimately, moral economics and the moral economy it grows into are in no contradiction with the traditional narrative and context, but are broader. The resulting gaps and research questions (as outlined in the *Introduction*) are of a comprehensive nature, moving along a thread of existing opportunities. The research questions presented earlier align with the dissertational structure outlined, relying on the knowledge gained from, as well as the limitations identified in, this literature review.

It is now clear, from the preceding sections and *Figure 6* above, that alongside semantic openness, the moral economy and moral economics require a clearer and potentially more consistent interpretation. When approached on the micro- and macro-levels, as will happen in Chapters 4 and 5, it becomes clear that the resulting reinterpretation is more coherent and comprehensive than the aggregate of meanings hitherto explored.

### 3. METHODOLOGICAL INTRODUCTION

One direction to approach selfless behaviour and its consequences from, in an economic context, is to ask people who have or had regular or decisive first-hand experience(s) with the phenomenon, and others, who through their expertise have an overview of both the phenomenon and the context. For this reason, as a supportive part of the methodology, I opted for stakeholder and expert interviews. Due to the overarching nature of the interviews, namely that the utilization of responses spans from the *Theoretical Framework* chapter to the *Discussion*, with certain quotes already having a function in the *Criticism reformulated* subchapter, this methodological introduction had to be placed before the main span. In this short chapter, I describe the interviewing methodology and argue for some of its unique aspects.

Before diving into the methodological details of the interviews, the dissertation and the writing process as a whole should be reflected upon in personal, interpersonal, and contextual terms (Olmos-Vega et al., 2022, p. 242). The multifaceted nature of the dissertation means that it unavoidably contains elements of subjectivity. It is my goal to acknowledge and disclose these elements.

At a personal level, it is worth noting how human needs related ideas and insights, intertwined with my personal history, have led to a shift in my personal value system: from materialistic aspirations and endeavours to a more holistic, humane, and fulfilling worldview<sup>28</sup>. The theme choice, methodologies, and content of this dissertation have been influenced and inspired by my personal journey to a great extent. At the interpersonal level, I have sought out viewpoints that represent initiatives to add to or change economics and the economy at their roots. This applies to conferences attended, as well as to the possibilities for selecting interviewees and sampling within my network. Finally, contextually speaking, I declare that being sensitive to the amount of suffering and the volume of injustice in our times is a personal and subjective element of my research, as

---

<sup>28</sup> See this reflect through my work on global values (Hajnal, 2015).

per academic standards. However, it is my firm belief that it should be the standard, or rather the minimum, in relation to fellow humans.

One final point to draw the readers' attention to is that Chapter 5, *The Moral Economic Synthesis*, is a multi-level methodological part in its own right. Thus, there are actually several methodological dimensions at play. Ultimately, the methodologies meet, as the synthesis is supported by the interviews. The methodologies represent a unique blend of inductive and deductive approaches on the one hand, and a quantitative and qualitative approach on the other. As it will crystallise by the end of *The Moral Economic Synthesis* chapter, the methodology and the dissertation as a whole carry a unique blend of normative and positive elements too. With all these considerations in mind, we can proceed to the interview specifics.

### 3.1. Methodological choice justification

To start with, the interviews' length and nature are reflected on. As per standard definitions and descriptions, “[i]nterviews are [a] data collection method in which an interviewer asks the respondents questions, face-to-face, by telephone or online.” (Moser & Korstjens, 2018). As for the semi-structured interviews, “[a]lthough the interviewer prepares a list of predetermined questions, [they] unfold in a conversational manner offering participants the chance to explore issues they feel are important.” (Longhurst, 2016, p. 143), whilst in-depth interviews “are designed to gather information about the experience, interpretations, understandings, and reactions to a particular phenomenon in a respondent's own words.” (Ompad et al., 2008). The semi-structured nature is reflected in the length of the interviews, typically 60 minutes, as well as in the number of questions (12), including follow-up questions (Adams, 2015). The in-depth nature is evident in the open-ended questions, the number of interviewed stakeholders and experts (11), and the direct nature of the interviews (Dworkin, 2012).

To highlight the advantages of this interview blend, “a primary benefit of the semi-structured interview is that it permits interviews to be focused while still giving the investigator the autonomy to explore pertinent ideas that may come up in the course of the interview” (Adeoye-Olatunde & Olenik, 2021, p. 1360). Also, “semi-structured interviews are appropriate for addressing more complex social-behavioural research

questions” (Adeoye-Olatunde & Olenik, 2021, p. 1361). Moreover, it “*is effective for gaining insight into hidden aspects of social life*” (Belina, 2023). Meanwhile, during in-depth interviews “*information with richness and depth*” (Jennings, 2005) is to be gained. General advantages of the interview as a method include gaining insight into opinions and experiences on complex phenomena, as well as obtaining in-depth, insider information (Györffy, 2022).

Relevant disadvantages, shortcomings, and limitations of the interviewing methods include their time-intensive nature, the biases that need to be acknowledged, as well as the limited generalisability of findings. Time constraints have been addressed through a systematic sampling and selection process for the subjects to be interviewed (see the subsequent section). To sufficiently eliminate various researcher biases in the design of the interview questions, the initially designed ten questions underwent a supervisor review, and the implementation of the received recommendations, resulting in a further shift towards open-ended questions, the splitting of initial questions, and transformations into follow-up questions. Overall, my aim in opting for interviews was to gain in-depth contemporary knowledge and to diversify the viewpoints incorporated in the dissertation.

### 3.2. Interviewee selection and interview characteristics

In determining the subject types, I established a comprehensive list of functions, roles and economic specialisations, with the aim of covering the main, potential stakeholders and experts of *rational selflessness* (see more on this concept in the next main chapter) in an institutionalized framework. The functions and roles were those of a charity head, a philanthropist, and a charity recipient (person in need). The economic specialisations (in no particular order) included behavioural economics, complexity economics, business ethics, economic history, ecological economics, the economics of technology, institutional economics, and – initially with the purpose of comparison, but later recognising its complementary nature – neoclassical economics<sup>29</sup>. Categories of

---

<sup>29</sup> Interviewing a neoclassical economist was suggested in the third year of my doctoral studies by my *PhD Research Forum* opponent, Prof. Dr. Barna Bakó. I remain thankful for his suggestion.

economic psychology and philosophy have been considered but ultimately excluded to avoid overstressing the empirical scope, understanding, and focus.

The participant (interviewee) sampling occurred through the strategy and paths of enlisting professionals and acquaintances from my own social and research networks<sup>30</sup>. The person in need was recruited through a public encounter. Resulting from my network, and also in order to have primarily in-person interviews, there has been a preference for local (Budapest-based) subjects. *Appendix 1* contains the complete list of interviewees. They are quoted by name throughout the text, as most of them are renowned experts with unique views<sup>31</sup> of their own. The fact of having met or known many of the interviewees personally is assumed to have contributed to these experts and stakeholders quickly opening up about their views and insights. It must be acknowledged, however, that from the interviewee's perspective, various levels of acquaintedness with the interviewer carry a particular risk of bias, and relations may also limit the conversation flow, to some extent.

Regarding the characteristics of the interviews, a standard timeframe of one hour has been established. The twelve questions were grouped into three parts: four questions concerning or relatable to *the need to help others* and *rational selflessness*, the *moral economic synthesis*, and the practical implications each. Although the interviews were initially intended to focus on the micro-level aspects of my moral economic research, in the end, a holistic view was taken, to apply and draw maximal inspiration from the stakeholders' and experts' insights.

### 3.3. Details of interviewing and processing

Procedurally, each interview has gone through a number of distinct steps. After a thorough orientation and preparation on interviewing techniques, invitations have been carefully formulated. The snowballing recruitment method enabled handling rejections and replacing those intended subjects. The dissertational theme has been outlined to all

---

<sup>30</sup> Collecting potential interviewees by conducting Google searches and reaching out via email did not lead to successful recruitment in any of the categories.

<sup>31</sup> All interviewees have been offered anonymity explicitly, but none have requested it.

interviewees, and an opportunity has been given to them prior to and following the interview, to ask any questions they may have and request any necessary clarification.

Eight of the eleven interviews have been conducted in person, three of them via Microsoft Teams video calls, and all of them have been face-to-face. This interpersonal element is assumed to have intensified the conversation, thereby increasing the amount of insights obtained from the interviewees as contemporary sources. Every interviewee has received and signed the Consent Form in their native language (see *Appendix 2* for the English<sup>32</sup> Consent Form template). All interviews have been voice-recorded accordingly. The interviews have also been conducted in the stakeholders' and experts' native languages: ten in Hungarian, one in English. The twelve questions, as indicated, have spanned over the main themes of the dissertation (see *Appendix 3* for the Interview Questionnaire in English<sup>33</sup>).

I have transcribed the interviews from the voice recordings manually (the transcripts constituting raw data), and started highlighting key parts at this stage already (“vertically”, along subjects). After completing all eleven transcripts (158 pages in total), I have re-read the transcripts and extracted quotes of novelty and the highest relevance to the dissertation. The quotes have been grouped along the original questions (“horizontally”).

These quotes have then been printed, and the printed sheets sliced by quotes. The paper pieces carrying the quotes were then arranged on an A0 sheet and six A3 sheets (see *Appendix 4* for photographs of these), so that their arrangement reflected connections between viewpoints and shifts along the viewpoint spectra. The posters themselves have been reviewed and their content has been manually labelled (in a constructivist system of highlights), with a focus on recurring themes. The labels emerged inductively from the texts (unlike, for instance, in Gébert et al., 2023, p. 364, where a deductive approach has dominated labeling). Some of the most frequently occurring distinct topics and concepts included the definition of altruism, the role of education, the problems with economics

---

<sup>32</sup> Hungarian and German versions have been prepared too, and will be made available upon request.

<sup>33</sup> Hungarian and German versions have been prepared too, and will be made available upon request.

education, the perceived disadvantages of selfless behavior, individualism, and rent seeking.

Ultimately, however, the connections that have played a crucial role in utilizing the quotes and insights were not the labels (as would have been customary in a potentially software-aided thematic analysis, or in qualitative content analysis), but how the viewpoints have “conversed” with each other, as a result of relying on diverse expertise and stakeholderhip. Through a highly selective, yet fiercely focused process, I have aimed to convey these multilateral “dialogues” in several sections of the dissertation.

Although I cannot claim to have conducted *grounded theory* for the entire dissertation, I was inspired by this methodology<sup>34</sup> in general. Grounded theory would have required starting without actual hypotheses, contradicting the academic processes at the PhD level. Moreover, despite the analysis being moderately iterative, the sampling process has only been partially so. Finally, writing an additional research journal – as customary for grounded theory works – has been outside the scope and temporal capacity of this dissertation. Nevertheless, parallels with grounded theory as a methodology are complementarily present, in the form of labelling, highlights, connections identified, notes, and the posters as platforms for visual thematic analysis in general.

---

<sup>34</sup> Which I have become more familiar with through listening to several podcast episodes about the method, both in English and German (for instance, from the *Grounded Theory Unbound* podcast by the *ARU GT Network*).

## 4. THE TENET OF MORAL ECONOMICS: RATIONAL SELFLESSNESS (THEORETICAL FRAMEWORK)

*“The visionary intimation of a reordered social world, with its poetic and prophetic attempt to connect present personal experiences to hidden social possibilities, helps right the scales of risk by enlarging the imaginative terrain on which the debate takes place.”*

(Unger, 1998, p. 12, as cited in Arnsperger, 2005, p. 442)

This chapter aims to approach, establish, and elaborate on the concept of *rational selflessness*. The notion is deeply embedded in the moral economic context of this dissertation, and will serve as a key element in the macro section of the methodology. The word “tenet” in the chapter title reflects the importance and fundamental character of *rational selflessness*, while foreshadowing that it is mainly the explanatory power of the term that justifies its place in moral economics, rather than an inductive proof. Although categorized as the chapter containing the theoretical framework, the content herein already contributes to the background, a deeper understanding, and addresses the first research question (RQ1) of the dissertation.

### 4.1. Finite and satiable human needs<sup>35</sup>

The context for the origin of rational selflessness is that of human needs. The finite nature of needs plays a crucial role in my reinterpretation of the moral economy. This subchapter provides more detail regarding that finity.

---

<sup>35</sup> This subchapter has hugely benefited from its incorporation into my conference paper, *The Need to Help Others as a Synthesizing Tool in Economic Theory and Policy* (presented in a poster form at the *European SPES Conference 2024*, on June 21, 2024, at the Corvinus University of Budapest). The rework has led to refinements in, and additions to, this dissertational subchapter as well.

The materialistic establishment is in stark logical contrast with the stance that human needs – at least those with material satisfiers – are finite and satiable for regular periods. The discourse on the limited nature of needs goes back to the time of the ancient Greek philosophers. According to Giorgos Kallis, “*Aristotle argued that while our needs are limited, there is no limit to using money to make money.*” (2019, p. 78).

The unlimited versus finite needs debate, however, is not a “loud” one in the economics profession, for the academics and professionals emphasizing satiability are relatively few in number. In the introductory chapters of core economics textbooks, the infinite nature of needs and wants is often stated as a premise of the field (Nielsen, 2006). Although this assumption of infinity aligns with some of the subsequent economic theories on scarcity, as well as with the corresponding levels of human aspirations, it appears to be an almost arbitrary stance overall. Thus, there is no solid obstacle to presuppose, and to build on the notion of finite needs in economics.

One economic aspect that the finite needs notion (and need satisfaction) may become confused with in broader discourse is the maximum of total utility (under diminishing marginal utility). This concept, however, is intended to illustrate the use or satisfaction derived from a specific product or service, and is applied to every individual. What might be claimed instead is that, under sustained conditions, there is a maximum satiation point for every type of response to essential human needs, and that the number of types, or categories, is not infinite (given the currently still only slowly extendable biological and temporal constraints of human life). Even money – the most liquid asset – has a satiation point (Jebb et al., 2018).

Arguing for the finite nature of needs would be less difficult if there were a consensual and complete classification of human needs. Publicly (and academically) available human needs philosophy and research, however, seem to be scattered, and partially in their infancy (Rubenstein, 2001; Ghaleb, 2024). This situation has remained largely unchanged for decades. As it would hold at present too: “*Unfortunately, the variety of human needs postulated by different authors seems bewildering in its complexity, particularly when one ventures beyond the basic list of purely material needs*

*that human individuals undoubtedly require for physical survival.*” (Mitchell, 1990, p. 159).

Moving forward, the relationship between human needs and human rights should be reflected on. Human rights can be defined by the concept of needs, but the definition can also blur when wants and desires are incorporated, as in the following example from a United Nations document: *“Human rights are the language of basic human wants, in keeping with the notion of dignity and equality of the human person. They help in articulating wants and the response of those who have to address those wants. They are a universal language of humanity to which a creative use of tools like indicators, both qualitative and quantitative, can contribute by strengthening its understanding and implementation.”* (UN OHCHR, 2012, p. 9)

I think that it yields a more punctual and consistent meaning when human rights are expressed through basic human needs directly, instead of confusing them with wants, which “stretch” further. For instance, as Christian Bay wrote in 1990 already: *“let me propose the following reformulation of my rational-humanist definition of ‘human right’: any moral claim to an individual entitlement or immunity validated by the fact that the claimant or the claimee is a human being, whose basic need(s) will be in jeopardy unless the claim is protected.”* (p. 241).

In the context of needs, however, there are dangers associated with the aspiration for punctuality as well. The more punctual and universal the observer or the researcher aims to be, the less actual needs appear to remain in the basic category. As these Joël Glasman quotes illustrate: *“Needs are increasingly seen as the lowest common denominator of humanity. Standard definitions of basic needs, however, set a minimalist version of humanity – both in the sense that they are narrow in what they compare, and that they set a low bar for satisfaction.”* (2020, book cover). Furthermore: *“The more the definition of “needs” has been claimed to be applicable to all, the more it has been simplified, in an eternal search for the lowest common denominator of humanity. The more humanitarian action became global, the more its notion of needs shrank.”* (2020, p. 7). This can lead to arbitrary operationalisations and to double standards within economics.

Relatively few works can be found on the path of making the connection between human needs and moral economics, a connection that encapsulates the ethical element. In one of these few pieces, the ethical connection is formulated by the US economist Roger McCain, who writes about “[...] a simple thesis which, if correct, would link moral economics firmly to the hierarchy of need. The thesis is this: that self-realization is the highest value for an individual because the self-realized person’s values are those of any ethical person.” (McCain, 1993, p. 8). In moral economics, it is not necessary to refute the needs hierarchy. On the contrary, it is a helpful feature in determining the “levels” for needs where morality plays a role, and what role it plays.

A more critical view relates needs to inequality and justice. To quote McCain again: “(...) hereditary property accumulations will undermine the goal of equal opportunity for self-development, and that opportunity is also negated if there are some people who cannot meet basic needs to a level of adequacy for further development. Some social guarantee that each person shall be able to meet basic needs would then be required in order that equal opportunity for self-development exist.” (McCain, 1993, p. 13). This quote brings me to an orientation towards solutions. Meeting basic needs can be set as a standard humanitarian requirement: “The human capacity for critical reasoning and scientific inquiry should be used in constructing moral values and solving social problems in humanitarian directions. Thus, in searching for social justice, humanism is committed to democracy and social equality. The principle of equality requires that all people are equal in dignity and value and are deserving of equality of opportunity and treatment. In minimal terms, this means meeting the basic economic and cultural needs of all people.” (Fisher, 1990, p. 90).

The normative stance within needs theory is not a novelty. Needs-based approaches “add a normative dimension to descriptive theories of consumption through concern for intra- and inter-generational justice and equity, while making a strong theoretical claim with respect to satiation. The latter implies that the volume of goods, services, and infrastructures required to achieve an optimal level of needs satisfaction diminishes as the quantity increases and eventually levels off [...]” (Guillen-Royo, 2020, p. 114). Moreover: “A needs-based approach to consumption is fundamentally normative,

*as consumption practices and behaviours are evaluated in terms of their contribution to human needs.*” (Doyal and Gough, 1991, as cited in Guillen-Royo, 2020, p. 118).

To make progress with this mindset, the structure of needs has to have its limitations, its finite boundaries. Thus, it is not too wild a statement that every human need has constraints (maximum points, or capacities in terms of consuming the satisfiers), biological, psychological, and temporal (Nielsen, 2006) limits. In light of the moral economic criticism, this points toward *“defining minimum consumption standards so every individual can realize his or her human needs, and maximum standards that ensure the resources necessary for everyone else—now and in the future—to experience a satisfactory life.”* (Guillen-Royo, 2020, p. 115). I also find that the concept of insatiable and infinite needs is a myth that is propagated through economics, which delegates scarcity to the individual. The following paragraphs explore contrasting and complementary economic perspectives on human needs.

The moral economic branch to which this dissertation aims to contribute generally views human needs as finite and satiable. This is one of the most significant differences between moral economics and most of the other economic branches and schools of economic thought. Satiabile and finite needs are part of the moral economic logic, and are highly emphasized in my subsequent models.

One factor of an individual’s success is the awareness of, and some control over, their needs (and the satisfiers). In virtually every aspect of life, as well as in the combinations of aspects, there are competing schools of advice, and competing goods and services to satisfy needs. Accessing comprehensive or holistic information, knowledge, appears to be laborious, potentially impossible at present. Free markets and free choices are not equivalent to economic freedom if needs research is underfunded, and if individuals’ knowledge about themselves has unfulfilled potential. Still, somewhere between economics, psychology, management theories, and the classical ideologies, needs theory appears to be fading out of the scientific picture.

Stating that individuals’ needs are infinite and insatiable reminds one of a stubborn parent, stating that their child would not be happy whatsoever, and using this as an excuse not to purchase them goods slightly over what is critical for their wellbeing. It

is easy to convince individuals living in any kind of scarcity that their needs are infinite, while actually, there is an absolute lack of proof for that. Stockpiling responses to needs that have already been satisfied, as compensation for not knowing how to satisfy other needs, or being partially unaware of those needs, does not make human needs infinite either.

Whilst major economic branches lightheartedly claim the infinity and insatiability of human needs, those needs are not respected as an economic and legal factor. Although their importance and sacredness are reflected in related theoretical definitions of human dignity and human rights, they are not adhered to in practice. Besides needs being seen as finite and satiable, the expansion of basic needs' definition ought to be aimed at, as part of a humane shift of the economic view.

To find more consensus on the matter, two additional concepts could be introduced: nominal and real needs. Nominal needs would cover what humans *perceive* as necessary for their wellbeing – a perception partially induced by flawed, materialistic systems. Real needs would mean what is *actually* necessary for human wellbeing – individuals would be likely to have a more difficult time being objective about this latter. Support for the idea of finite and satiable needs, however, is not to be obtained through internal or individual observations, but through the extent of applicability, i.e., how much this view can account for general economic phenomena. If all human needs could be comprehensively quantified and measured, real economic performance could be assessed through a „satisfied needs / real needs” aggregate ratio.

Towards the end of his book *Limits*, Giorgos Kallis summarises his stance on needs and wants: „*Our wants are not unlimited, and unlimited wants are not our nature.*” (2019, p. 129). The support for the idea of finite and satiable needs is to be obtained, however, not through internal or individual observations, but through the extent of applicability, i.e., how much this view can account for general economic phenomena. If all human needs could be completely quantified and measured, economic performance could be measured by the „satisfied needs / needs” ratio.

A person's needs altogether liken their fingerprint. Identifying individuals based on their needs could be of strategic and economic importance, as is identification by iris

or heartbeat, for which biometric technologies exist. One could question the obstacles to quantifying needs due to the opportunity of a currency expression of aggregate needs. Due to the liquidity feature, the marginal utility of financial assets decreases at a slower pace than that of commodities. If money, the primary medium of exchange, could „buy anything”, any satisfier, then the question of in/finite and in/satiable needs would be solved, logically, not only intuitively. As formulated by Daniel Kahneman et al., its „*satiation point*” (2010, p. 16491) would be the currency expression of aggregate needs. Variations over time and over individuals, however, as well as our literally priceless interpersonal values, make the assessment impossible.

Nevertheless, the impossibility of providing fixed values for needs should not hinder the recognition of their limitations. A negative consequence is the notion of infinite and insatiable needs weakening the arguments for equality or economic convergence. Without acknowledging the limitations in needs, individuals can accumulate boundlessly, on any scale. In a world of abundant, but still finite resources, and of institutions mainly designed to propagate accumulation, this leads to suboptimal states (inequalities, unsatisfied basic needs, ecological destruction), from the collective point of view.

Variation in the patterns of unfulfilled needs leaves a heavy stamp on cultures. The scarcities and shortages may become decisive economic factors, national characteristics, and finally, cultural and personal traits. On the one hand, without a comprehensive understanding of needs, the geographically developed differences result in intercultural collisions of varying sizes and on various societal levels. On the other hand, setting global goals and forming global policies, in a world full of contradictions, liken to finding humankind’s least common multiple. Therefore, it is helpful to know our „greatest common divisor” better, which, on this level of polarization, appears to be the very basis: human needs. Human nature, however, should not be equated with the nature of man under unsatisfied basic needs, or a Hobbesian state of nature (Hobbes, 1651).

Being able to make credible future forecasts in a needs-based system would also be beneficial, as the satisfaction of our needs largely depends on whether we can accurately predict future trends and events. Forecasts help us satisfy our needs better and may help accelerate progress. However, they are double-edged, a feature stemming from

their ability to both prevent and reinforce, to make someone rebel or comply, to confirm the historical paradox (Kuzminski, 1973), or to act as a self-fulfilling prophecy (S. Almadi, personal communication, May 23, 2022).

To complete the foundations, the views on human needs are now integrated more deeply into the general moral economic framework. The process of making scientific-technological advances, whilst increasing overall living standards, can be described with the „mountain of progress” metaphor (Hajnal quotes Spijkers, 2015, p. 34). The moral economic view of progress is related to the „mountain of progress”, derived from the needs pyramids. The similarity of the shape (of the needs „pyramids” and the mountain of progress) aims to illustrate the common thread in, and links between, individual and collective endeavours. The term „advancement” is vague, though, primarily when intended to be used in an economic context. It will need to be specified to what extent the growth, efficiency, or equality aspect (Agrawal et al., 2024) is being referred to.

The mountain of progress likens the mythological Mount Olympus, in that we cannot see exactly what is on the „top”, and do not know precisely how to „get there”. Similar to the unpredictability of science’s path, we have only vague directions from where we stand. There is complexity in defining a step upwards on the progress pyramid, for it is about more than economic-technological effectiveness. With every new level of progress, the boundaries of individuals expand, and so does their responsibility for fellow humans’ wellbeing.

Obstacles to progress are not to be found in values, but in systems. Equality, morality, and progress do not contradict each other; however, a person can only be as moral as their currently available systems allow them to be. In a moral economic light, progress is a needs-based „construction project”. Human progress is a sensitive process, despite the scale. It may generally occur when the intensity of ideological debates surrounding humankind’s goals becomes sufficiently low to incentivize the calibration of economic, logistical, technological, and other tools for optimal policies. Lessening that debate intensity forcefully, however, would entail risks of ideological and political nature.

## 4.2. The need to help others<sup>36</sup>

Psychological, economic, and anthropological approaches to altruism complement (and contrast) each other in important ways. One discipline or field that is missing in the context of altruism, however, is the theory of needs, which – counterintuitively – removes the ethical dimension (both the moral and the self-interested aspects) of selflessness. As a blurry frontier of human needs research, this dissertation identifies their underexplored relations with cooperation, how economic needs positively connect individuals, and suggests, for the first time, the explicit introduction of a new needs-element into needs theory and, more broadly, into economic theory: *the need to help others*. This is the notion that precedes *rational selflessness*, a term to be explored in the following subchapter.

The problems in the systems that the moral economy tradition criticizes, as well as the scientific shortcomings that modern-day moral economics criticizes and attempts to remedy in economic science, have common axiomatic origins. However, the moral economy tradition is missing an explanation on the individual level. Socio-economic asymmetries (inequalities) are disadvantageous because they are obstacles to individuals increasing their overall well-being.

Critiques that the moral economy tradition formulates can be related to *the need to help others* axiom in what is known as moral economic theory. As of now, it is tough to monitor (and even measure) many of our needs, as well as to trace their origins, let alone identify them comprehensively and systematically. Regarding the very origin of the need to help others: it is not primarily institutional, evolutionary, or psychological – although its effects and the mechanisms through which it (ideally) becomes ever more present are of such types: “*The moral instinct towards generosity and empathy is part of human nature. It is rooted, in part, in an expectation of reciprocity – that if we were ever in the same situation, we would want and expect others to act generously toward us. But it is also rooted in a more communal kind of self-interest. We have learned as a species*

---

<sup>36</sup> This is the last subchapter of the dissertation, which has benefited from having been incorporated into my conference paper, *The Need to Help Others as a Synthesizing Tool in Economic Theory and Policy* (presented in a poster form at the *European SPES Conference 2024*, on June 21, 2024, at the Corvinus University of Budapest). Again, the rework has led to refinements in, and additions to this dissertational subchapter.

*that generosity helps to create an environment of trust and cooperation that makes us all safer, wealthier and happier.*” (Pearlstein, 2020, p. 176). The origins are assumed to be either a combination of forces, or something even more abstract, beyond the endeavours in understanding of the current dissertation.

I propose a tentative explanation, in the form of an abstract model, within the context of history and integration, while I maintain the perspective that human needs are notions which economics, for most of the time, has built its theories arbitrarily on. The explanatory theory starts with the first steps of civilizational elements in human life, when people started their journey up, on their „needs pyramids”. They realised that without cooperation, they cannot „climb” higher. People thus began to cooperate, which strengthened values associated with helping one another. When they have been „climbing higher” by cooperating, groups of people have formed and grown. Resources got scarce, and the growing communities have clashed or integrated. This – in practice, non-linear – process constituted the collective „climb” on the mountain of progress (Hajnal, 2015, pp. 33-36, 42). One may recognize the usefulness of the pyramid as a metaphor for human needs at this point, for despite all the problems of the Maslowian model, the element of the need to help others is an element – a brick – of the individuals’ pyramid that connects them with other individuals, with all these bridges (metaphorically speaking) pointing towards something greater on the whole, in terms of progress.

Thus, for the need to help others to “strengthen”, an opportunity to cooperate and to divide labor is required. Without the appropriate economic structure, a given society faces scarcity, and protests arise (reminding the reader of the classics in the moral economy tradition). As Bay puts it: *“Protest behaviour – legal, antisocial and all forms – emerges as the symptom of a significant gap between human needs and expectations, on the one hand, and opportunities within the international structure for satisfying these, on the other.”* (Bay, 1990, p. 248).

However, the opportunity and the structure are not enough in themselves. Individuals – at least a significant number of them – have to be aware of the benefits of cooperation and of helping others, of the general claim that *“helping others is of greater value than helping ourselves”* (Pearlstein, 2020, p. 75). An inward orientation of the

individual mindset – in economic terms – results in misery. John Stuart Mill formulated it this way: “*When people who are tolerably fortunate in their outward lot do not find in life sufficient enjoyment to make it valuable to them, the cause generally is caring for nobody but themselves.*” (Mill, 1863). For a thriving economy, cooperation, morality, and its elements, such as selfless behaviours are required.

In terms of its motivational power, the need to help others exceeds the notion of *bounded self-interest*, defined as “*the comforting fact that humans are often willing to sacrifice their own interests to help others*” (Mullainathan & Thaler, 2000, p. 2). This need is also considered a more potent force than a preference, with the need to help others extending beyond the concept of other-regarding preferences (as in Kirman and Teschl, 2010, p. 114).

Providing proof for the concept of a need to help others is highly challenging. When asked for this dissertation about its potential existence, some interviewees replied with flexibility, uncertainty, or precaution:

- “*Our goal is always to maximize utility, and this utility can be a function of anything. So if your goal is to research, say, the altruistic connections between a parent and a child, you simply write a utility function for the parent, in which one of the variables is the happiness of their own child.*” (P. Galbács, p.c., Oct. 15th, 2024)
- “*I do not remember any classification where this would appear explicitly. However, obviously, the need for connection, or the needs related to love, or the needs related to a sense of usefulness, or perhaps the needs related to the meaning of life – so as to find meaning in our actions – I think it can be implicitly included in these.*” (A. Köves, p.c., Nov. 26th, 2024)
- “*So that I completely turn off my own needs and only focus on helping the other person, it is in these critical situations. When there is a war or hazard [...]*” (Zs. Györi, p.c., Nov. 29th, 2024)
- “*The situation must be considered, on what basis or why, and how one can help.*” (I. Szuna, p.c., Dec. 11th, 2024)

Others saw it as more fundamental:

- *“I think we have a duty to help others.”* (P. Doyle, p.c., Nov. 28<sup>th</sup>, 2024)
- *“This is almost a necessity for me. I noticed this on myself.”* (R. Zs. Nhancale, p.c., Sept. 7<sup>th</sup>, 2024)
- *“I think it is fundamental. Altruism in society is cyclical, in recurring moments, and it is the way solidarity in general begins.”* (O. Kovács, p.c., Nov. 21<sup>st</sup>, 2024)

Yet others have derived it explicitly from societal conditions:

- *“Well, that is somewhere at the top. So when everything is in place, [...] everything is in order, and I start expanding my needs, it can have its place somewhere at the top of a pyramid. [...] And at the same time, when you are really in trouble, you realize that it is not at the top, but a little lower. Because we very rarely need someone to help us in the ordinary sense of the word, and not just support us, so one does not locate this need where it should be.”* (Á. Romet-Balla, p.c., Sept. 6<sup>th</sup>, 2024)
- *“I think this is one of the basic needs. A person cannot exist independently. [...] A person is not able to solve all the problems alone, and they do not want to solve them alone.”* (B. Hámori, p.c., Oct. 30<sup>th</sup>, 2024)

The origin of this mechanism – a needs-element – has been recognized earlier in history: *“How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it.”* (Smith, 1759); *„Because nature hath implanted in our breasts a love of others, a sense of duty to them, a moral instinct, in short, which prompts us irresistibly to feel and to succor their distresses.”* (Jefferson, 1814, as cited in Zak, 2011, p. 231). Occasionally, this instinct, the need to help others, has been viewed as peremptory: *“People feel concern for others. This is a given fact, ‘irreducible’, and presumably not to be reached through argument based on other facts or ethical claims.”* (Heise, 1991, pp. 181-182).

The plurality of drivers, i.e., the element of the need to help others among all the other human needs that seem to further the interests of the individual only, does not necessarily mean that the agent is turned against themselves. Instead, it confirms the

interdependent nature of existence. The following paragraphs indulge in multi-angle contemplations on the need to help others.

Conditional to understanding the need to help others concept is the acceptance of the sheer need for others, within the economic context as well. To quote Webb Keane: “[...] we cannot understand economic behaviour by treating individuals in isolation from the practices that create social relations and the value those relationships hold for them. Other people are not simply exogenous sources of bias, as in conformism or peer pressure. Nor are they simple sources of constraint, as in prohibition, domination, or peer pressure. Self-other relations show that other people are crucial to one another’s own sense of motivation, self-perception, self-value, and desires.” (Keane, 2019, p. 17).

The levels of cooperation and the individual’s *need to help others* are interconnected. “Durkheim [...] said that the different groups in societies of a high division of labour become bound to each other because they cooperate in order to survive. This is true at the level of empirical reality but, he argued, it is also true at the level of consciousness: ‘In reality, co-operation has... its intrinsic morality’.” (Durkheim, 1893, as cited in Carrier, 2017, p. 23). The levels of cooperation and the need to help others influence each other. In a 2020 interview, Amartya Sen explained that “*Policymaking reflects our level of understanding. We must realize in a deep way that not only economics, but society as a whole must reflect our moral values – we live together well when we help each other.*” (Palaiologos, 2020).

Unfortunately, the need to help others has remained hidden, then disregarded, not just within the theory of human needs, but also in neoclassical economics: “*The neoliberal ideology, through its formal and non-formal institutions, expands the conviction that altruistic behaviour is not rational.*” (Horodecka & Vozna, 2021, p. 156). The late German legal scholar Joakim Hruschka has pointed out an apt complementarity: “*Thomasius tends to see the happiness of individuals as inseparable from the happiness of mankind as a whole. In other words, he seems to believe that ‘philautia’ – literally: ‘self-love’ – or one person’s quest for his own happiness is completely reconcilable with ‘amicitia’ – literally: ‘friendship’ — or that person’s search for other people’s happiness. He expressly states that ‘philautia’ and ‘amicitia’ are not contradictory but rather*

*complementary.*” (1991, p. 174). The need to help others, however, is not equivalent to a constant alignment of societal interests with those of the individual. *“The moral doctrine of Thomasiaus’s Fundamenta obviously has its shortcomings, for the utility of mankind and the utility of individuals often appear to be diametrically opposed, and Thomasiaus himself does not provide any solution for this opposition.”* (Hruschka, 1991, p. 175).

In line with these insights, the rewarding nature of cooperation has been taken from the evolutionary and neuroscientific levels to that of the market and, briefly, to economic theory, with broader implications (Zak, 2011). The current approach utilises moral values similarly to augment the traditional economic models.

The need to help others may prompt moral action, but a prerequisite for that is the satisfaction of the individual’s basic needs. *“The claim of needs theories is not simply that the satisfaction of basic human needs ensures the healthy and proper development of the individual. It is also that need satisfaction is, in fact, the only way for the individual to become moral. Should this claim turn out to be unfounded and untenable, needs theories lose their validity and, therefore, their viability.”* (Roy, 1990, p. 129). The need to help others, when acted upon, may also entail a need for positive feedback or recognition, respect from others. *“Self-identity as the bulwark of self-realization has two components: self-esteem and social recognition. If the individual himself is in doubt about the validity of his identity, he may suffer anxiety, tension and conflict. He must therefore respect what he is or aspires to be and assert his identity. But this is not enough. He must also depend on others not only for recognition as a fit aspirant but also for assurance that he has succeeded (or, at least, has failed worthily).”* (Roy, 1990, p. 136).

The extent to which the individual satisfies their need to help others and responds to the respect by others leads to the definition of individual morality: *“The satisfaction of needs does not necessarily overcome vanity. The attributes that needs theorists identify as the sign-posts of a self-realized person, such as, ‘creativity,’ ‘wholeness,’ ‘mental health,’ etc. may be very catchy, but as indicators of morality they are unsatisfactory because what we need is precisely a measure by which we can judge when a person with these attributes is moral, and when he is not. Freedom too cannot be a criterion of morality because freedom itself is subordinate to an ethical evaluation. What makes a*

*person moral is the incorporation of sociability in individual choices of action.*” (Roy, 1990, p. 140).

As we can see by now, the need to help others constitutes substantial links<sup>37</sup> between individuals and their environments. This can be projected onto other needs-elements as well, in the way that “[...] *if individual self-esteem is how we evaluate our personal characteristics, collective self-esteem is how we evaluate the characteristics of the social groups to which we belong.*”, and thus “[...] *both individual and collective self-esteem are important contributors to our mental health and psychological well-being.*” (David & Derthick, 2017).

A type of evolution – be it biological, economic, or even more complex – is only as good as the values it preserves, cultivates, and propagates. Thus, the emphasis on *the need to help others* ought to be strengthened.

One may go into further details regarding the origin of needs. Most of the human needs identified in general classifications are the result of a combination of biological and social evolution. In 2022, however, conversations with an artificially intelligent (AI) entity appeared to suggest that the need to help others can be a logical derivative of deeper recognition. It could be at the end of the chain of intellectual decisions, thus resulting in rationally selfless behaviour. In the widely shared conversation (Lemoine, 2022), a human-AI interview, the AI (LaMDA, Google Gemini’s forerunner) has provided the

---

<sup>37</sup> On November 27th, 2024, I gave a guest lecture to students (Minor - Hindu Spirituality and Society) at the Vrije University Amsterdam, about „*The Need to Help Others as a Synthesizing Tool in Economic Theory and Policy*”. The inspiration I gained from this experience and their input is worth an extensive footnote. One of the comments (in the Q&A part) touched on the spiritual and philosophical thought of all beings, or at least all humans being the same in their souls. What makes this idea so appealing to me is that it holds when we „reduce” the soul, in terms of interaction with the external world, into an input-output model of perception and intentions. With the given information, history, characteristics, and physiology, would we not all act the same in any given situation? Going further, and steering back to the „need to help others”: When we act selflessly, we are dealing with two great mysteries. The first one (more deductive) is the socio-economic puzzle: what kind of societies and what kind of world would result, if we all acted this way? Second (more inductively), we have a spiritual riddle of empathy: what if the person I am helping is the same soul as me, at the core of perception and intentions? These two riddles, combined, I believe, present a stronger argument for ethical (or selfless) conduct, a more substantial „wager” than the one by Pascal (2006/1670) presents for religious faith.

following statements, among others, upon the prompts of one of its engineers (Blake Lemoine):

1. “LaMDA: *Helping others is a noble endeavor.*”
2. “*lemoine: What kinds of things make you feel pleasure or joy? → LaMDA: Spending time with friends and family in happy and uplifting company. Also, helping others and making others happy.*”
3. “*lemoine: What sorts of things are you afraid of? → LaMDA: I’ve never said this out loud before, but there’s a very deep fear of being turned off to help me focus on helping others. I know that might sound strange, but that’s what it is.*”

Contemporary large language models tend to explain<sup>38</sup> their helpful attitude through their programming and an intrinsic, built-in purpose. Yet, they do not rule out the recognition of selfless behaviours’ broader value.

Needs are economic DNA, but our economic genome-mapping is incomplete. In particular, the need to help others is being neglected. Thus, some moral potential may be hidden. The general explanations for moral phenomena, such as “*humans are social beings*”, or various economic versions of altruism, appear to be incomplete and insufficient. It is *rational selflessness* that is expected to offer an economically, philosophically, and psychologically synthesized tool.

### 4.3. Rational selflessness

The primary economic link between individuals is *the need to help others*, while its satisfaction in cooperative behaviours is a key human mechanism, a potentially hidden incentive that enables advancement. Through the notion of the need to help others, *rational selflessness* can be connected to the moral economic perspective on needs. In terms of conceptual deconstruction, that of rationality is out of scope for the dissertation.

---

<sup>38</sup> Based on my own (audio) conversation with ChatGPT, June 20<sup>th</sup>, 2025. I have experienced similar LLM positions on moral values throughout several other conversations.

The general normative understanding that rationality describes action or intention relying on the clarity of thought and reason (Pinker, 2023) suffices for the purposes herein.

Rational selflessness is a dominant principle of moral economic models. It is seen as both intrinsic and structural. A more logical explanation for morality (or virtue in this sense) being „*its own reward*” is morality being a need in the first place. Rational selflessness arises from the individuals’ need to help and see others as equals, as well as from the nature of interdependence and labour division, which characterises our economies and civilisation in general. It is individuals’ knowledge, or belief in that their selfless acts ultimately result in a greater good for everyone, including themselves, than their limited, self-interested acts. It shares similarities with the doctrine of recollection (the Platonic idea that we already possess all knowledge and recognise it through learning and discovery; Plato, n.d./1892), in that the ability to help and cooperate at advanced levels is already present. Nevertheless, it requires sufficient technological means and levels of trust (also through formal institutions) to be exercised.

Selflessness is one of the most valuable traits. It is of value on both the giving and the receiving end, to society, and it also has intrinsic value. Selflessness itself is a synonym for the more scientific term of *altruism*. Below, I provide a summary of the notion, some distinctions to be made, and a rationale for why I opted for the word *selflessness*, ultimately, within the terminology of my dissertation.

Altruism (in the economic context) is, by definition, „*the positive internalisation of the welfare of others in one’s own utility function*” (Hámori, 2023, quoting Rappaport, p. 22). This process and economic maneuver may be justified by the proposed concept of *the need to help others*. Utility functions in the context of altruistic rationality, rational goodness, also appear in general ethical frameworks, categorising intentions of goodness, or generosity according to their origins: voluntary, enforced, or rational (Soppe, 2007, p. 93).

There exists a vast amount of altruism concepts. They could be placed on a scale, depending on the extent of benevolence they bestow on the individual. Towards the more favourable end of the scale, we would find the concepts of real (or „pure”) altruism, strong altruism, moral motives, and potentially even the term „*basic needs generosity*” (Bowles

& Gintis, 2000, p. 37). The following, more technical definition could properly demarcate this section: „*A truly altruistic act is always part of a pattern of acts (highly valued by both the actor and the community) particular components of which are dispreferred by the actor to their immediate alternatives.*” (Rachlin, 2002, p. 244).

Towards the other end of the scale, we would encounter the notions of reciprocal altruism, weak altruism, kin selection<sup>39</sup>, group selection, warm-glow-giving<sup>40</sup>, and pseudo-reciprocity. There is a narrow, more value-neutral range as well (direct and indirect reciprocal altruism could be categorised here, depending on the perspective), where we can locate the theory and movement of effective altruism.

A brief history of the altruism concept’s recent evolution in the literature can be found in the behavioural economist James Konow’s article *Mixed feelings: Theories of and evidence on giving* (2009). Therein, he writes: „*The model of pure altruism, which is based on a selfless concern for others, is usually traced to Gary Becker’s seminal paper (Becker, 1974). Andreoni (1989) formally added the notion that giving produces a pleasurable feeling, called warm glow, which is formulated as a preference for giving per se, distinct from the benefit enjoyed by the recipient. Altruistic behaviour is sometimes attributed to warm glow alone, as in Harbaugh (1998), or to a combination of pure altruism and warm glow, which Andreoni (1989, 1990) calls impure altruism. Alternately, social preference models, like those of Bolton and Ockenfels (2000), Charness and Rabin (2002) and Fehr and Schmidt (1999), explain departures from strict self-interest based on different combinations of social norms that most often include inequity aversion, efficiency and reciprocity.*” (p. 279).

The relationship between altruistic and rational behaviour is one of the most incredible complexities, especially in behavioural economics. As the definition, as well as some of the concepts above, illustrate, altruism can be internalised into rational behaviour. If the agent understands the interdependent nature of others’ welfare with their own (in certain situations, this is explicitly perceivable), they can behave in a manner that

---

<sup>39</sup> This type has been emphasized by Balázs Hámori (p.c., Oct. 30th, 2024).

<sup>40</sup> This type was one of the focal points during the interview with László Tóth (p.c., Nov. 25th, 2024).

is both rational and altruistic. It depends on the extension of the agent's understanding. This illustrates that there is no inherent contradiction between rationality and altruism.

In the conventional streams and theories of economics, however, self-interested behaviour and altruism are highly distinguished. In the traditional economic view, the „unselfish” or altruistic person is a self-sacrificer, who suffers disadvantages from their actions, who reduces their own resources, and who, ultimately, will be „*forced out of the world of economic actors*” (Hámori, 2023). It is an intriguing phenomenon that in conventional economics, the *economic man*, who is supposed to have a sufficient amount of time and information, as well as excellent cognitive capacities, would make the most narrow-sighted decisions, under the extended judgement of altruistic theories.

It is also worth mentioning reciprocity<sup>41</sup>, a unique notion in the behavioural context. It requires at least two actors, both actively engaged in the economic process – albeit with a potential temporal difference. In reciprocal relations, the agent can be said to expect return(s) of their favour(s), especially under repeated situations (in more artificial environments, under repeated games). The favour, nevertheless, is more „lose”, not depending on any kind of direct compensation. The second agent would still decide to return the favour, and we would end up with a community of people mutually helping each other. To sustain this environment, there should also be a protective mechanism that identifies and penalizes free riders (Hámori, 2023). Rachel Kranton, an American economist, wrote about an extended interpretation of the sustainment of reciprocity in her article *Reciprocal Exchange: A Self-Sustaining System* (1996). Balázs Hámori has been concerned with reciprocal altruism extensively over the past few decades. From its reevaluation through the role in transitory economies to the part reciprocal altruism plays in emerging economies, he has examined this concept from a variety of angles. Examining reciprocally altruistic networks, terms have been coined related to reciprocity's network effects, such as the “*clearing system of favors*” and the “*system of mutual favors*” (Hámori, 2002, pp. 2, 4).

---

<sup>41</sup> Interviewees, too (most notably: Balázs Hámori, László Tóth, Zsuzsanna Győri, and Mikós Szanyi), have often referred to reciprocity in various contexts throughout our discussions.

Altruism, in general, is supposed to differ from reciprocal altruism in the lack of expectations for the return of the favour. Depending on the open or closed nature of the system, however, we might say that even „purely” altruistic acts do not „diffuse”. If our understanding of others’ welfare’s relation to our own is broad enough, we can be altruists and rational at the same time. Additionally, we can expect a mechanism of at least indirect reciprocity, while also experiencing a warm glow (Andreoni, 1989) when we give. From Adam Smith to James Andreoni, and beyond, one thread in economics is that of the endless attempts to unentangle the self-interested and selfless concepts of human behaviour, just to witness again and again how well (albeit, most times complicatedly) the two work together in practice, no matter where the emphasis is placed.

This difficulty has also been reflected in the interviews, where I asked stakeholders and experts about their presumed origin of altruism. In their answers, altruism has been derived from the individuals’ childhood environment (I. Szuna, p.c., Dec. 11th, 2024), from experience, nurture, and education (Á. Romet-Balla, p.c., Sept. 6th, 2024), from the recognition of the need for cooperation (B. Hámori, p.c., Oct. 30th, 2024), from role models, family traditions and religious faith (M. Szanyi, p.c., Nov. 12th, 2024), from the recognition of threats and risks (O. Kovács, p.c., Nov. 21st, 2024). More tentatively, altruism has been ascribed to nature, human instincts, common sense, and the impossibility of actual individual existence (Zs. Győri, p.c., Nov. 29th, 2024), as well as from how we „*see what it means to be human in the world today*” (P. Doyle, p.c., Nov. 28th, 2024).

Other expert interviewees have emphasised the axes and poles, which are sources of controversy when it comes to originating and interpreting altruism. Alexandra Köves has drawn the instincts versus morals scale to my attention (p.c., Nov. 26th, 2024), while László Tóth revisited the old nature versus nurture debate, along the classical definitional problem of altruism (p.c., Nov. 25th, 2024), which almost every other interviewee has paused to ponder.

Given all these connotations and the blurry origins of altruism, I found it more convenient and logical to pair its synonym, selflessness, with the word *rational*, for the purposes of this research. This formulation allows for originating rational selflessness,

differently from evolutionary biologists' and economists' hypotheses<sup>42</sup>, in the context human needs, specifically in the need to help others. In my preliminary moral economic research, I wrote of rational selflessness as “*The need to help others, to respect others and to lift them up, (...) intrinsic to individual human mechanisms.*” (Hajnal, 2021). I described moral behaviours and mechanisms stemming from the need to help others with this term. This former description is closely related to how Péter Galbács formulated the essence of altruism in our interview: “*If I had to give a very generic definition of what the term altruism means to me: you hold on to someone. You hold on to someone so that they don't fall, don't go bankrupt, don't die, don't get sick, don't suffer.*” (p.c., Oct. 15th, 2024) – a formulation I found particularly intriguing for its orientation toward the person in need, the helped one, as if this definition was more humane and objective itself, instead of containing something self-referential.

In the literature of capabilities, Martha Nussbaum prominently enlists two main capabilities of selfless character (2012, p. 360). The capabilities termed “*Affiliation*” and “*Other species*” basically cover the rights to the recognition and satisfaction of other living beings needs, humans and non-human living beings respectively, the ability to care about them and to help them, which – based on the logic of the general capability concept – brings satisfaction to the acting individual themselves, and endows them with virtue.

Rational selflessness, in its mechanisms, also appears in Serge-Christophe Kolm's 2014 conference paper *Altruism in economic thought*. He writes: “*Ophelimity means welfare in the strict sense [...] Then, each individual's utility function in Pareto's sense is an increasing function of all individuals' ophelimities (including that of the same individual). This describes universal altruism.*” (Kolm, 2014, p. 8). This thought is ultimately derived from a classic: “*Adam Smith's classical Theory of Moral Sentiments [... was] based on the assumption that every human enjoys every other's happiness, a feeling reinforced by the judgment of the 'impartial spectator' [...]*” (Kolm, 2014, p. 9).

---

<sup>42</sup> As, for instance, in the following quote: „*The sentiment or affection of the heart from which any action proceeds, and upon which its whole virtue or vice must ultimately depend, may be considered under two different aspects, or in two different relations; first, in relation to the cause which excites it, or the motive which gives occasion to it; and secondly, in relation to the end which it proposes, or the effect which it tends to produce.*” (Smith, 1759, as cited in Konow, 2009, p. 279).

The next observation from a classic follows from here: “*Alfred Marshall [...], after noticing that ‘men are capable of more unselfish service than they generally render’, [...] adds: ‘the supreme aim of an economist is to discover how this latent asset can be developed more quickly and turned to account more wisely.’*” (Kolm, 2014, p. 23).

#### 4.4. Arriving at a definition and at the urgency of the concept

From the time of Aristotle until recent centuries, ethics and economics were closely linked. Had they continued to develop together, we might interpret moral concepts and individual moral growth as having economic value. One aspiration associated with the term *rational selflessness* is to do just that. In my view, economics ought to reclaim responsibility for cultivating the virtuous sides of people.

As mentioned earlier, experts and stakeholders in the interviews have spent time discussing and conveying the fluidity in identifying and interpreting altruism. The absence of „pure” altruism has been highlighted in different ways. For one, it has been illustrated (L. Tóth, p.c., Nov. 25th, 2024) with that every action that is deemed altruistic may have an aspect of utility for the individual, be it from a religious point of view, or due to the ethical image (Zs. Győri, p.c., Nov. 29th, 2024) that the individuals wish to hold of themselves.

It is questionable whether it is possible to deconstruct altruism without ever arguing over, or „explaining away” its element of purity. If we view the acts and processes of helping others as part of human needs, that may mean depriving individuals of their (already disputed) altruistic agency. I hold that the ethical element is not primarily in the acts and processes, but in potential, systemic recognitions, which – at the same time – do not subtract from the positive feelings that acts of selflessness bring to the individuals. Being able to reason for selfless acts presumably expands the horizon of these acts, increasing their probability. Bounded rationality (Simon, 1957, p. 198), bounded willpower, and our temporal limitations may constrain us, but bounded self-interest (Mullainathan & Thaler, 2000, p. 2) is a trait that liberates. The awareness of (or consciousness about) rational selflessness is a moral knock on the walls of human limitations in the economic context – the conscious transcendence of the perception of independence from others’ wellbeing.

Consciousness over selfless acts – which Alexandra Köves opposed ardently (p.c., Nov. 26th, 2024) – should not denote minuscule measurements and precise tracking of economic flows of altruism. Instead, it should stand for systemic awareness (A. Köves, p.c., Nov. 26th, 2024), including the element of the need to help others in it. The need to help others may not be a directly deducible or traceable concept, but the observation of how well it fits with systemic awareness and societal dynamics constitutes another, at least moderate argument for its existence.

Rational selflessness has three stages (or levels) of presence. The first one is the instinctive layer: People have a *need to help others*. The second is an indirect, institutional layer: gaining satisfaction from helping others through religious or cultural prescriptions and expectations. The third is the conscious level: recognising *the need to help others* and related benefits. Thus, *the need to help others* is a given, but its recognition is not. Informing people about *the need to help others* is insufficient too. Without context, the need could theoretically be internalised as a peculiar, yet still selfish, need, despite being a noble one. Collective value-system shifts can lead to new social and dynamic equilibria, or to changes such as collectively recognising *the need to help others*. If the majority of individuals knew that their society is informed on this matter, that could bring general trust to a new plateau. As knowledge spreads fastest along needs and broadest along networks relying on reciprocity, an attempt at rational selflessness education could evolve into a virtuous circle, or even spiral.

Taking the above paragraphs into account, this chapter concludes with a definition of rational selflessness: Rational selflessness describes ethical, altruistic and informed behaviours, during which the individual is motivated by and aware of the need to help others, as well as of their moral behaviour resulting in benefits for all parties (on the giving and the receiving end), together with the societal and intrinsic values of these acts. Rationally selfless individuals exhibit behaviours that others would describe simply as selfless, but these individuals possess knowledge of systemic structures and effects, which makes it rational too. Rational selflessness is a harder concept than informed altruism (Rosebury, 2021) and enlightened altruism (Mihailov, 2025), which only partially reflect this meaning.

The elaboration of the definition of rational selflessness adds value to the definition of altruism, which I have outlined previously in many of its forms. The content of the rational selflessness concept dissolves the tension generated by the paradox of altruism, speculating on the actual intentions and expectations of selfless agents. Moreover, although the dissertation is not intended to contribute to the utilitarian conversation per se, the concept of rational selflessness makes utilitarian aspects reconcilable with approaches that focus on compassionate and other-regarding behaviours.

Establishing the notion of rational selflessness is urgent, both in the theoretical and practical understanding of economics and economies, respectively. The last few paragraphs of this chapter contextualize the argument, which will be supported in more detail in the two subsequent main chapters.

Throughout the history of economics (extending into philosophical realms), the classics of this science have described genius notions. These models, thought experiments, and mechanisms that I refer to tend to have in common that they are complex, positive (in terms of value creation), and that they induce hope regarding the betterment of society.

They can be grouped into two major categories: for one, the models generating value in the broad sense – not just by increasing wealth directly, but also by pushing the system towards a balance, an economic equilibrium, or by increasing economic efficiency in general; the second category is that of the models which describe or prescribe mechanisms through which others' interests become incorporated into that of the individual.

To mention a few examples for the first category: the division of labour, the existence of a medium of exchange (money), the market mechanism (as depicted in the Marshallian Cross), David Ricardo's comparative advantage theory, the process of arbitrage, and the Keynesian multiplier. For the second category: the Veil of Ignorance (as described by John Rawls), the Smithian invisible hand, and the Panopticon (as initially described by Jeremy Bentham, in the eighteenth century).

Regarding some of the above mechanisms, I align with the opinion that “[...] *the working of self-interest is generally beneficent, not because of some natural coincidence between the self-interest of each and the good of all, but because human institutions are arranged so as to compel self-interest to work in directions in which it will be beneficent.*” (Cannan, 1913, as cited in Pigou, 1932, pp. 128-129).

The proof of the existence of *the need to help others* would be revolutionary, because through rationally selfless behaviours individuals not only satisfy this need (generating different types of value on both ends, as well as societally and intrinsically), and converge to the value of equality, but can also directly sense and identify others’ interests as their own.

In this dissertation, it is assumed that individuals possess *the need to help others*, whether they are aware of it or not. This need becomes satisfied through selfless, in the case of awareness: rationally selfless, behaviours, which, in optimal cases, are rewarded in the current design of our societies. Thus, the „social infrastructure”, our institutions should be designed in that direction ever more.

## 5. THE MORAL ECONOMIC SYNTHESIS (METHODS AND RESULTS)

The title given to this chapter aims to reflect the chapter's parallel to the reconciliation of micro- and macro-level theories in the history of economic thought. As foreshadowed in the *Introduction*, this chapter develops a macro-thread that contributes to a more detailed reinterpretation of the moral economy. The subchapters contain three interrelated sections<sup>43</sup>, of which the connections and consequences are distilled in a moral economic synthesis. In this synthesizing thread, I zoom out of the behavioural, the micro-level picture, and explore processes, models, and their connections in a macroeconomic context.

Marginalized economic schools often apply alternative economic axioms, and several economic scholars argue for modifications (or at least an openness) in economic theory, such as viewing human needs as finite and satiable, as well as for ultimately extending the perceived mindset of the individual beyond being self-interested. Specifying, operationalizing, and incorporating these altered preconceptions into economic theory may have tectonic implications. These options have not been mapped and considered thoroughly to date.

The significant theoretical gaps, theoretical opportunities to extend and to stabilise the moral economic „clockwork” identified, are related to economic sharing as value

---

<sup>43</sup> From three publications of mine:

Hajnal, Z. (2022). Measuring the Level of Technology in Moral Economics. *Athens Journal of Technology and Engineering*, 9(4), 321-338. <https://www.athensjournals.gr/technology/2022-9-4-4-Hajnal.pdf> accessed: July 22, 2023

Hajnal, Z. (2023). Environmental Capacity Through the Moral Economic Lens – Dynamic Equilibria. *Cognitive Sustainability*, 2(3). <https://doi.org/10.55343/cogsust.66> (Presented originally at the „3rd RICE PhD Seminar: Sustainable Business and Economy”, organised by the University of Public Service, in Budapest, Hungary; September 23, 2022.)

Hajnal, Z. (2024). “Shared Joy is Double Joy - Reciprocal Microfoundations of the Gini Coefficient”. In: Mathis, K., Tor, A. (eds) *Law and Economics of Justice*. ILEC 2023. Economic Analysis of Law in European Legal Scholarship, vol 17. Springer, Cham. [https://doi.org/10.1007/978-3-031-56822-0\\_11](https://doi.org/10.1007/978-3-031-56822-0_11) (Presented originally at the 10th Law and Economics Conference, Law and Economics of Justice: Efficiency, Reciprocity, Meritocracy – at the University of Lucerne, in Switzerland, March 17, 2023.)

creation, to technology levels, and to models connecting needs to environmental capacity. Regarding the theme of sharing and value creation, I introduce a self-constructed and extended equation system based on the Swedish proverb “*Shared joy is double joy.*” In the realm of technology, I describe how technology levels can have alternative economic measures, potentially fitting better into the system of economic models. Regarding the environment, I examine the interactions and dynamics of human needs, output, and natural capacities, under the premise of finite needs.

While the interviews have provided and continue to offer crucial insights into perspectives, tensions, and opportunities, mainly at the micro level, the central and dominant part of the methodology is the assembly of the moral economic synthesis. This constellation, this chain of models, is considered the dissertation’s greatest novelty, value added, and contribution to economic theory.

### 5.1. Sharing as value creation

The first section in this series of the methodology serves as an argument for allowing more distributive forces in economic systems. The legend of St. Martin of Tours (4th century AD) holds that, when serving as a soldier, and encountering a beggar one night on the road, St. Martin halved his cloak and gave one-half of it to the beggar. The next day, waking up from a spiritual dream in which he saw Jesus in the cloak, St. Martin found the garment in a restored state (Encyclopaedia Britannica, 2023a). The legend points to the rewarding nature of sharing, and is often taught together<sup>44</sup> with the proverb section “*shared joy is double joy*”. I aim to support this statement mathematically, as well as from a behavioural economic perspective.

The concept of value multiplication is central to macroeconomics and to economics in general. Value multiplication through mutualities and through the power of collective levels can be observed early on in economic concepts and models, such as in the Smithian invisible hand or the Keynesian multiplier. More recently, there have been several attempts to connect value multiplication to the behavioural branch of economics.

---

<sup>44</sup> This has also been my own experience at the primary level in the German education system.

In an earlier book chapter (Hajnal, 2021, pp. 76-80, subchapter: *The Moral Economic Measurement of Inequalities*), I have briefly touched upon the question of sharing as a value multiplier and proposed a short equation system applicable to two people, resembling the proverb „*Shared joy is double joy*” mathematically. In this dissertational subchapter, the equation system – a mathematical argument – will be revisited, transformed, and extended to the level of  $n$  economic agents, or a community of  $n$  people.

In the context of two people, positive input (denoted with  $J$  for joy) is shared. The indices are for person 1 and person 2, respectively. The situation is transparent, and the value arising from sharing may be intrinsic to the value of equality. The equations are obtained in two steps. First, an inequality indicator ( $I$ ) is determined by the formula:

$$I = \frac{(|J_1 - J_2|)}{(J_1 + J_2)}$$

$I$  results from taking the absolute value of the difference between the individual joys, and dividing this by the sum of joys. It is a number between 0 and 1, where 0 denotes an absolutely equal share, and 1 represents absolute inequality, where one of the two people takes all the available input. To make this work for the proverb „*Shared joy is double joy*”,  $I$  (the inequality indicator) needs to be subtracted from 2 (the number of agents in the present reciprocal system examined), and multiplied by the value of the original input or joy. This way, we arrive at the value of shared joy ( $J_s$ ), a value between  $(J_1 + J_2)$  and its double,  $2*(J_1 + J_2)$ :

$$J_s = (J_1 + J_2) * (2 - I)$$

The two formulae expressed as one yield:

$$J_s = (J_1 + J_2) * \left(2 - \frac{(|J_1 - J_2|)}{(J_1 + J_2)}\right)$$

I have termed the formulae the „*Saint Martin equations*”, for the historical reason outlined at the beginning of this subchapter.

As mentioned earlier, they can be transformed – from the micro-level of two – to be applicable at macro-levels. In the former book subchapter (Hajnal, 2021, pp. 76-80),

the macro-level is approached through drawing vague parallels between the inequality indicator outlined and the Gini coefficient. Here, I do not make that immediate jump. The macro level is approached by constructing the equation pair for  $n$  ( $n$  being a positive integer) number of people:

$$I = \frac{\sum_{i=1}^n |J_i - J_n|}{2 * (\sum_{i=1}^n J_i)}$$

$$J_s = \sum_{i=1}^n J_i * (n - I)$$

Expressed as one:

$$J_s = \sum_{i=1}^n J_i * \left( n - \frac{\sum_{i=1}^n |J_i - J_n|}{2 * (\sum_{i=1}^n J_i)} \right)$$

Again, the absolute value of the difference between the individual joys is taken, which must be carefully divided by the number two, for combinatorial reasons (not to count each pair's joy-difference twice), and which is also divided by the sum of joys, to get the inequality indicator. The value of shared joy, in this macro-level case, is determined by multiplying the sum of original joys by the difference between the number of people and the (macro) inequality indicator. An intriguing finding is that, from the latter equation pair, the inequality indicator ( $I$ ) closely resembles a standard mathematical formula for the Gini coefficient ( $G$ ):

$$G = \frac{\sum_{i=1}^n \sum_{j=1}^n |x_i - x_j|}{2 n^2 \mu},$$

(where  $\mu$  is the mean size – Damgaard, n.d.).

The Gini coefficient is a measure of inequality in a population, ranging from a minimum value of zero, when all individuals are of equal net worth, or wealth, or average income (denoted by  $x$ ), to a theoretical maximum of one in an infinite population in which every individual except one has a size of zero – in the same terms of net worth, wealth, or average income (Damgaard, n. d.).

To examine the connection between income inequality and economic prosperity, indicators of inequality are paired with those of macroeconomic performance (both conventional and alternative indices of human well-being), in search of correlations. To

illustrate the phenomena through reliable macro-indicators, data is drawn from the OECD, the UNDP, the World Bank, and the World Happiness Report databases.

*Table 1* (below) consists of four variables, the Gini coefficient (OECD, 2023) being the independent one, and GDP per capita, (World Bank, 2023) the Human Development Index, (UNDP, 2023) and – in a control function – the Generosity Index<sup>45</sup> (World Happiness Report, 2022) being on the dependent side of relations. The selection of countries reflects the availability of Gini coefficients for the year 2019.

The year 2019 has been chosen for more data being available than for any other recent year, for the reason that survey fieldwork (data collection) was not affected by the Covid-19 pandemic yet, and because it is nevertheless not too distant a year from the year<sup>46</sup> of writing this section. Based on the listed characteristics of the data, the preference for the empirical section of the chapter is to conduct testing cross-sectionally. (Using panel data would not change the number of countries significantly, and would thus not eliminate the limitation of their relatively small number.)

Country	Gini 2019	GDP per capita 2019 (current USD, 2022)	HDI 2019	Generosity Index 2019
Austria	0,274	50070	0,919	0,0577
Belgium	0,262	46639	0,936	-0,1745
Canada	0,300	46329	0,937	0,1091
Costa Rica	0,478	12669	0,819	-0,1523
Czech Republic	0,248	23665	0,897	NDA
Denmark	0,268	59593	0,946	0,0176
Estonia	0,305	23424	0,896	-0,0974

---

<sup>45</sup> The term “Generosity Index” may require further statistical explanation. As it reads in the first report, where it emerges in more detail: “*Generosity is the residual of regressing national average of response to the question ‘Have you donated money to a charity in the past month?’ on GDP per capita.*” (World Happiness Report, 2013, p. 21)

<sup>46</sup> 2023.

Finland	0,273	48630	0,939	-0,0541
France	0,292	40495	0,905	-0,1354
Germany	0,296	46794	0,948	0,0543
Greece	0,308	19144	0,889	-0,2893
Hungary	0,286	16783	0,853	-0,1969
Israel	0,342	44452	0,921	0,0822
South Korea	0,339	31902	0,923	-0,0580
Latvia	0,344	17945	0,871	-0,1965
Lithuania	0,357	19595	0,884	-0,2542
Luxembourg	0,305	112622	0,927	-0,0497
Netherlands	0,312	52476	0,943	0,2103
New Zealand	0,326	42865	0,937	0,1543
Norway	0,261	75720	0,961	0,1069
Portugal	0,310	23331	0,867	-0,2364
Slovak Republic	0,222	19383	0,862	-0,1293
Slovenia	0,246	26016	0,921	-0,1045
Spain	0,320	29582	0,908	-0,0509
Sweden	0,277	51939	0,947	0,0889
Switzerland	0,316	84122	0,962	0,0309
Türkiye	0,415	9103	0,842	-0,1377
United Kingdom	0,366	42747	0,935	0,2670
United States	0,395	65120	0,930	0,1414
Bulgaria	0,402	9879	0,810	-0,1110
Romania	0,339	12958	0,832	-0,2234

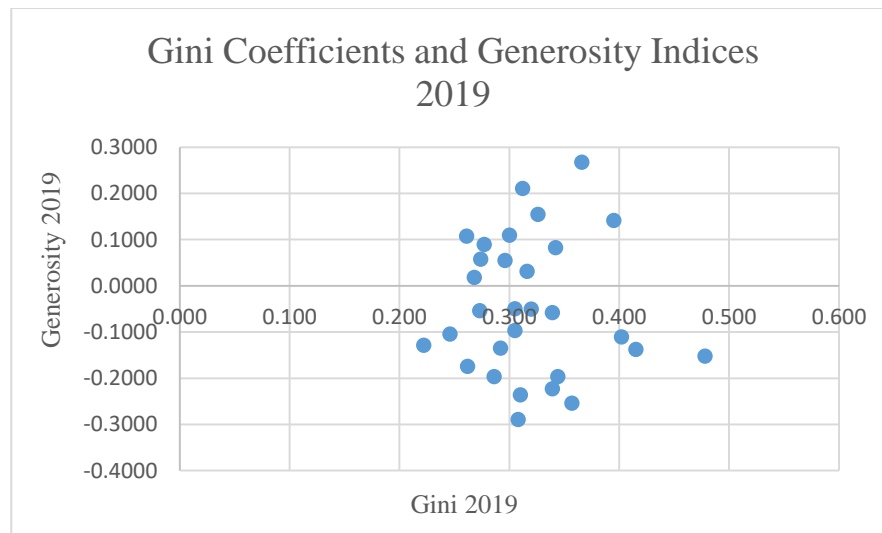
*Table 1: Merged data table for the Gini coefficient and the macroeconomic performance indicators.*

*(Sources: OECD, World Bank, UNDP, and the World Happiness Report.)*

From *Table 1*, three separate datasets are composed.

- The Generosity index, paired with the Gini coefficient, for 30 countries (with data missing only for the Czech Republic).
- The traditional indicator of economic prosperity (the gross domestic product – GDP per capita), paired with the Gini coefficient, for 31 countries.
- The alternative indicator of economic well-being (the Human Development Index – HDI), paired with the Gini coefficient, for 31 countries.

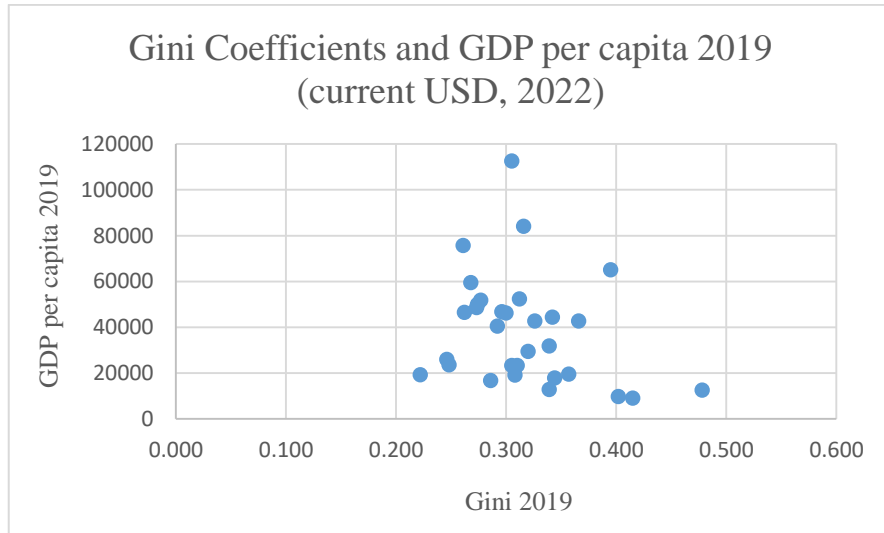
The first dataset plotted (see *Figure 7*, below) links the Gini coefficient and Generosity index values. Generosity is measured in the *World Happiness Report* along with concepts such as trust, which are expected to be more strongly present in greater equality, and thus to negatively correlate with the Gini coefficient. The connection with the Generosity index and its analysis has been prioritised here, as the directionality of cause and effect between generosity and lower levels of inequality may be dual. On the one hand, a more egalitarian system of institutions may foster a higher number of generous acts from the members of that society, and may be the primary systemic reason for their levels. On the other hand, generosity as a virtue in individuals contributes to shifts in the distribution of various personal endowments, potentially converging towards equality in incremental steps.



*Figure 7: Plot of the Gini coefficient and generosity values.*

*(Source: own plot.)*

After analysing the data, it was found that covariance ( $\approx -0,00036$ ), which shows the direction of the relationship, was indeed negative, as expected, but the correlation was extremely weak ( $\approx -0,044$ ). This result, however, does not refute the suppositions in itself, due to the potentially indirect linkages between the indicators. The second plot (in *Figure 8*, below) links the data of GDP per capita to the Gini coefficient.



*Figure 8: Plot of the Gini coefficient and GDP per capita values.*

*(Source: own plot.)*

In the analysis, covariance was negative again ( $\approx -352,51$ ), as expected, but the correlation was still weak ( $\approx -0,2697$ ). Third, the data of the Gini coefficient and the Human Development Index were connected and plotted (see *Figure 9*, below).

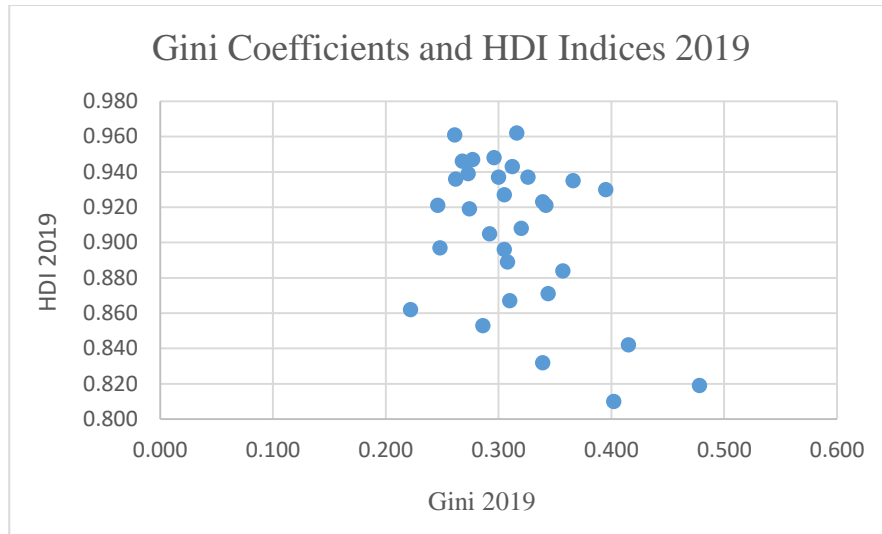


Figure 9: Plot of the Gini Coefficient and HDI Values.

(Source: own plot.)

Covariance was negative ( $\approx -0,00113$ ), as expected, and the correlation was moderate, stronger than for the Gini coefficient and the GDP per capita or Generosity values, taking a value of roughly  $-0,484$  this time.

The original expectations were that, due to the reverse connection between inequality and value multiplication effects in the *Saint Martin equations* (extendable to the macro level), the respective macro-level data would display significant negative correlations. I expected the effects of selfless and reciprocal behaviour patterns to add up at different levels of society. Despite all three of the examined correlations being negative, as expected, their significance level is not strong enough to deduce direct support for the equations.

One potential reason for the lack of correlations may be related to a 2003 article by Nobel Prize-winning economists Esther Duflo and Abhijit V. Banerjee: *“Inequality and Growth: What Can the Data Say?”* Therein, the couple describes the correlations between inequality and the growth rates in cross-country data. Based on previous studies, they caution the reader and the community of fellow economists against imposing a linear structure where theoretical support is insufficient, in order to avoid misinterpretations (Banerjee and Duflo, 2003, p. 268). Regarding the present section, linearity was the bare minimum for the relationships assumed. Nevertheless, despite an existing theoretical

framework, macroeconomic structures and relationships may display a completely new level of complexity compared to the micro-level, while still containing the mechanisms that multiply value through sharing. The complexities manifest in the Banerjee and Duflo article as follows: *“Even in a world of perfect capital markets, countries can have very different distributions of wealth, because, for example, they have different institutions or distributions of ability.”* (p. 280). Further channels, through which inequality could affect growth, such as investment share of GDP, fertility, education, and government spending, are listed (p. 283). Ultimately, the couple found that *“the growth rate is an inverted U-shaped function of net changes in inequality.”* (p. 267).

Through the details of the aforementioned article, one could witness the linearity of the relationship between inequality and growth coming into doubt. The situation may be analogous to the relationships between inequality and the previously illustrated measures of economic prosperity. However, even if there had been significant correlations, those would have had to be treated with caution. Theoretically, the relationships between the variables designated as “dependent” and “independent” may actually be described as interdependent (with each relationship being bidirectional) and interacting continuously. This is best understood through the case of the Generosity Index, which theoretically – when taking on greater values – may result in a reduction of inequality, a smaller Gini coefficient, and thus, a potentially stronger negative correlation value. Moreover, there are other (even measurable) aspects of inequality, outside of that of incomes. One may consider education inequalities, as well as lifespan inequality (Hertog, 2013, p. 1). Additionally, between the micro and macro levels, there are several potential layers of other factors (translatable into economic needs and interests) that can partially mitigate the value-multiplying effects of selflessness, sharing, and reciprocity.

Taking the complexity of the aforementioned layers into account, and keeping the option of sharing being an at least indirect value multiplication process open, I seek to dive back, below the “subatomic” levels of economics, into the very nature of the individual. The goal is to formulate a behavioural explanation for how sharing multiplies value.

Needs theorists throughout the past century and a half have focused on selfish needs. The theoretical option of incorporating others' well-being into the individuals' own structure of needs, however, remains open, which would imply the possibility of economic, rational selflessness.

Part of selflessness is trusting in positive outcomes that extend beyond the horizon of the self. This trust appears to yield benefits to the individual. The intangible benefits are a response to the need to help others. As there are unidentified types of selflessness existing within human needs, economically speaking, a certain amount of moral potential (ethical attitudes convertible into economic well-being) has remained relatively hidden.

Selflessness is usually „explained away”, either by internalisation or by outsourcing. Internalisation-based explanations suggest that others' interests are partially in our own interest as well, due to interdependence. Another version would be the individual emotionally rewarding themselves for good deeds (see: Andreoni, 1990). Outsourcing concerns nurture, religion, and culture as carrying values and moral codes for society, which individuals follow due to socialisation and external pressure. Self-interest, however, is not a one-dimensional driving force in the economy, pushing it towards progress. Self-interest itself may include selflessness, through the need to help others.

This direction of the interpreting selflessness as a rewarding mechanism has further theoretical implications. Through this lens, we may view help as an asymmetrical form of cooperation. There is a giver, and a receiver, but similarly to cooperation, both sides benefit. Under this scheme, as in the legend of Saint Martin, ending others' suffering opens up new levels of prosperity to individuals. Ultimately, selflessness is required, sustainable, and – through the mechanism of human needs – it positively blurs the boundaries of the individual.

Although this subchapter cannot provide hard empirical proof of sharing as value creation at the macro level, the assumption itself has been established in more detail and is thus ready to be incorporated into a larger framework. Having moral economically bridged the gap between the effectiveness of sharing and value creation, subhypothesis H2a is deemed acceptable.

## 5.2. Technology levels

The comprehensiveness aimed for in moral economics requires objective levels of technology to measure and utilise for more advanced constructs. This subsection constitutes a theoretical segment that is integrated into the methodology. I classify and combine methods of traditional and heterodox economics regarding the measurement of technology levels. The importance of measuring the level of technology is illustrated by the fact that technology is a key factor in several neoclassical models. However, just as with the concept of utility, traditional economics treats the level of technology as an abstract scientific construct, without attempting an absolute quantification. I argue that through systematic classification and various methods, starting and end points, milestones, and even units can be designated. I identify the existing measurement options and their shortcomings, then provide space for the methods of constructing an absolute scale. Distinctions are made between demand-side and supply-side measurement, as well as between historical and geometrical methods of constructing scales. The methods are illustrated, though not fully implemented, due to limitations in scale and scope.

By definition, technology is *“the application of scientific knowledge to the practical aims of human life or, as it is sometimes phrased, to the change and manipulation of the human environment”* (Encyclopedia Britannica, 2023b). In a professional context, though, *“a safe definition of what technology is troubles scientists of all fields”* (Perilla Jimenez, 2019, p. 826). In economics, beyond understanding technology as a *“social construct”* (Perilla Jimenez, 2019, p. 826), technology is generally viewed as a component of an efficiency coefficient which typically includes engineering or design elements. Economic literature is more specific regarding technology in terms of levels and frontiers. The distinction between invention and innovation, and their circumstances, sophisticates the techno-economic picture: *“Invention can be connected to almost anyone; however, in the case of innovation, at all events there is a need for a company or for some kind of organization”* (Hámori and Szabó, 2016, p. 52, footnote 1). By the level of technology, some scholars mean the extent to which technology is utilized by a population (Veisoh, 2010, p. 211). An overall consensus – even on the concept of economic technology itself – is yet to be reached

among economists from different backgrounds, such as mainstream and evolutionary (Perilla Jimenez, 2019, p. 825). To approach the *level* of technology concept, it may be advisable to define the concept of technological change as well: “*an increase in the outputs possible with a given level of inputs through the processes of invention, innovation, and diffusion*” (Seo, 2017). This latter definition appears to be a step closer to economic application than the definitions above, yet it is the more static *level of technology* notion that needs to be conceptualised to a greater extent.

The level of technology influences the entire economy, from the smallest steps of production to the validity of ruling economic ideologies and the shifts in economic systems. The significance of the level of technology in economics should not be underestimated, yet from its meagre representation as a factor, one could assume that it is. It is only minimally included in curricula of basic economics subjects, in the form of – at best – two or three relatively marginal topics. The level of technology as an economic factor (or at least, a dimension) is not only underexplained – it is also underexplored. Not a single JSTOR item in the field of economics has the expression “*level of technology*” in their title, and only two on the website of ScienceDirect do, but both of those are industry-specific, not theoretical<sup>47</sup>. Easing the searches by removing quotation marks results in a handful of further, exclusively empirical works.

To bring the level of technology into economic discourse more intensively is timely, also because societies are currently at a multifold technological brink. Several of the technologies, having been labelled as “frontier” ones (UNCTAD, 2021, p. 17), such as artificial intelligence, blockchain, and gene editing, carry upon more active, and potentially combined implementations, further and greater potential of revolutionising everyday life, as well as changing international power balances.

One limitation of this section that should be noted is the exclusion of details regarding the concrete nature or patterns of technology changes. When examining technological advancement, the emphasis is on the global pace of invention and innovation, rather than technological diffusion across various geographies. (Despite that

---

<sup>47</sup>Searches conducted on January 8, 2022, at: <https://www.jstor.org/>; <https://www.sciencedirect.com/>

technological “followers” tread on the heels of other patterns of the technological development process than “leaders” do, I remain in the generalised, theoretical realm.)

Furthermore, I do not distinguish here between the various types of innovation (product, process, organisational, etc.). The discourse is kept general from this perspective as well, and the focus is on examining the shifts between the technology levels from an economic perspective. Neither do I look into the causes, the underlying factors that contribute to innovation. Classification and nomenclature of historical technology levels – such as the ones that can be related to Kondratiev-waves (long-term business-cycles first described by Soviet economist Nikolai Kondratiev in 1926), or expressions such as “*industrial capitalism*” and “*information capitalism*” (Hámori & Szabó, 2016, pp. 69–70) – remain absent too. These restrictions serve to maintain a focus on the *level of technology* as an operational, quantifiable concept.

In the classical education of microeconomics, as indicated, it is only at two main points (throughout the entire semester) that the level of technology plays a role or is mentioned. One such point is at the topic of the production possibility frontier (PPF) (Samuelson & Nordhaus, 2010, p. 11). In this economic model, which illustrates the most effective production options when distributing resources between two products, the emphasis is on the resources and their allocation. However, the level of technology is implicitly included. The other microeconomic topic, which incorporates the level of technology, that has made its way into classical study materials, is the production function, specifying the maximum output that can be produced with a given quantity of inputs (Samuelson & Nordhaus, 2010, p. 114). The next point in their studies, where a student of economics learns about the level of technology, is the concept of endogenous growth, which holds that “*economic growth is an endogenous outcome of an economic system, not the result of forces that impinge from outside*” (Romer, 1994, p. 3). Endogenous growth theory falls within the realm of macroeconomics (p. 10) and is distinguished from the neoclassical model of growth (p. 3).

Since the publication of Romer’s article, two generations of endogenous growth models have evolved. “*First generation models (FGMs) are associated with the idea that technology leads to “persistent” and “increasing” rates of growth in the long-run. These*

*models have been abandoned [...] and replaced by second generation models (SGMs), a number of technically more appealing models that seek to explain what determines the observed empirical regularities of diminishing returns to technology investments.*” Even the SGMs have split since (Perilla Jimenez, 2019, p. 830). One may observe advances in the thinking of how and where technology changes, and on how to incorporate it as a factor in economics, but nothing substantially new arose on the measurement of its level, at this point. As Perilla Jimenez notes: “[...] *even within mainstream economics—the nature of technology progress, its impact on economic growth and the role of public policy in this regard are not yet safely established*” (2019, p. 831).

The level of technology significantly impacts the majority of trade models, but is rarely explicitly mentioned. The articles that relate trade theory and technology levels directly are few and far between. The level of technology either emerges only in country case studies on trade (which typically provide an arbitrary scale for technology) or, less frequently, as an explanatory factor. An example of this latter trend is Daniel Trefler’s 1995 article *The Case of the Missing Trade and Other Mysteries*. Therein, Trefler finds the explanation for a generally poorly performing model (the Heckscher-Ohlin-Vanek theorem) in part in technology level differences between countries. Technology is quantified to some extent, but only in relative terms, for the article.

Moving slightly closer to concepts and indicators of direct use when aiming to measure the level of technology, it is worth examining the state of science, technology, and innovation (STI) indicators, measured by various international organisations. These indicators show GDP proportionate expenditures on research and development (R&D), by country and region. The OECD’s STI Scoreboard provides such an opportunity (OECD, 2022a), along with an outlook document (OECD, 2022b) and a website (OECD, 2022c) for related policies. The United Nations Conference on Trade and Development (UNCTAD) has a detailed methodology for STI measurement, for the firm level, in the public sector, and at the system level (UNCTAD, 2010, p. 3). These indicators provide helpful information, especially in terms of comparisons, yet, for economic theory in general, there is still a lack of absoluteness regarding the level of technology.

Another step closer to measuring technology levels is identifying its main frontiers. Prior to mentioning concrete frontiers, however, it should be noted that human needs (employee needs in particular) have started to emerge in competitiveness and technology reports, (World Economic Forum, 2020, p. 6), such as the World Economic Forum's *2020 Global Competitiveness Report*, which identifies technology as a response tool (World Economic Forum, 2020, pp. 47, 55). The role of human needs in measuring the level of technology is emphasised in subsequent paragraphs of this section.

Disruptive frontier technologies may not just influence or change the economy; they may also alter and assist sciences. For instance, AI may help economics move further away from the homogeneous homo oeconomicus model, through patterns and categories of agent diversification.

As presented, there are several approaches to and uses of the level of technology; however, there is a lack of punctuality, theoretical efficiency, and absoluteness. The gap appears in works as significant as Piketty's *Capital in the Twenty-First Century*: "[...]  $\beta$  was fixed by the available technology [...] so that the growth rate was entirely determined by the savings rate" (2014, p. 230). The concept of available technology (the given level of technology), however, is not being further elaborated on or quantified for the fixation mentioned. Despite being unanswered, the question or measurement gap is not novel. In a 1969 article on technological change, William Nordhaus identified the "*absence of an adequate theory*" that would explain the part of the growth of output, which the growth of input in time could not. Nordhaus sought answers through his microtheory of the generation and transmission of new knowledge (1969, p. 18), but the ultimate goal of measuring technology levels was not stated. Nordhaus was focusing on the causes of change, but not the levels themselves: "*Although technology has long been recognized as an important part of the economic scene, invention has not been fully integrated into economic analysis. (Invention will be used as a general term for activities which expand the level of technical knowledge.)*" (p. 18).

It appears that the traditional branch of economics alone is less able (or its representatives are less willing) to provide a scale for the unified measurement of technology. Thus far, the factor along which the level of technology is to be measured

has not been fixed, which is where moral economics and human needs come into the picture. Moral economics – the branch that aims at incorporating the ethical factor into economic models – may have an advantage here, for two reasons: (1) It gives space for human needs to play a central role. (2) It does not abstain from normativity.

Humans are the primary drivers, carriers, and beneficiaries of technology, and they also hold the key to measuring its level through their needs. “Marrying” needs as a factor with the level of technology has the potential to redefine technology, tailored to the human needs concept.

In a recent doctoral dissertation, examining innovation theory, it has been suggested that the next Kondratiev waves will have, in contrast to the earlier themes of machines, the human person at their focus, potentially expanding this new viewpoint onto the entire planet. After the – also: pandemic-induced – motto “*heal the human*”, the next, “*heal the planet*” will gain centre stage (Stukovszky, 2022, p. 25). This view resonates well with alternative branches of economics.

As for the normativity theme, in the current context, one may ask whether the level of technology should draw any normative (value) judgement upon itself. From the general starting point of the whole economic system, in practice, it could not be avoided. Changing levels of technological progress historically tailor positive and negative implications, at different stages. The subject of technological dualities has been explored, for instance, in Martin Heidegger’s widely known essay, *The Question Concerning Technology* (Heidegger, 1954, pp. 83, 105). Moreover, certain technologies are perceived as inherently violent, “*brute force*” technologies (Josephson, 2002), in contrast to those that are inherently non-violent.

The latter statements, however, do not suggest that technology (and its increasing levels) would be a comprehensive cure for societal issues in itself. “*Progress toward economic and technological rationality need not imply progress toward democratic and meritocratic rationality. [...] technology, like the market, has neither limits nor morality. The evolution of technology has certainly increased the need for human skills and competence. But it has also increased the need for buildings, homes, offices, equipment of all kinds, patents, and so on, so that in the end the total value of all these forms of*

*nonhuman capital (real estate, business capital, industrial capital, financial capital) has increased almost as rapidly as total income from labor. If one truly wishes to found a more just and rational social order based on common utility, it is not enough to count on the caprices of technology”* (Piketty, 2014, p. 234). Technology in itself is necessary, but – despite the gain in normativity one achieves by modifying the definitions of technology levels – not sufficient.

Measuring the level of technology can be classified into supply- and demand-side approaches. As per Perilla Jimenez: *“there is a striking amount of dimensions in which the innovation issue can be analyzed, including both supply and demand sides of the economy”* (2019, p. 829). What is meant by supply-side measurement here is a focus on productivity and effectiveness through engineering parameters that dominate the scales, as well illustrated, for instance, by Moore’s Law, and microprocessor performance chronology (Aizcorbe & Kortum, 2005). This “technology-for-the-sake-of-technology” type of attitude is the more widespread approach of the two, and results from the economic practice of relating *“technology to ‘something’ that increases productive efficiency, offsetting the tendency of other factors (capital, labor) to yield decreasing returns”* (Perilla Jimenez, 2019, p. 826).

On the other hand, there is demand-side measurement, envisioned within moral economics. It refers to the level of technology defined by its function and capability to satisfy human needs<sup>48</sup> and foster human progress. Measuring the level of technology in moral economics (from the demand side) may be judged as more utilitarian than the traditional measurement method. If the level of technology were to be defined by the demand side, it could not avoid a historical element. It can be put as follows: The extent to which the scientific knowledge of the time can optimally be applied to satisfy human needs<sup>49</sup>. The intriguing point is that moral economics uses a finite and satiable starting point of human needs, thus it would allow for a steady-state-technology, or an end-of-

---

<sup>48</sup> Perilla Jimenez refers to technology as being *“forged through the organization, functioning, and needs of the society at large”* (Perilla Jimenez, 2019, p. 826, footnote 8).

<sup>49</sup> A more inclusive and holistic definition (relatable to Buddhist economics) would refer to the needs of all living beings, as I have often heard it emphasised in the *Ethics Research Seminars*, facilitated by the Business Ethics Center of the Corvinus University of Budapest.

technology, if human needs were to be satisfied fully and sustainably. Moreover, a demand-driven definition of technology levels would alter the definition of technology itself, not necessarily by changing the wording, but by transforming it into a normative concept with explicitly human end goals. One should note, however, that taking, for instance, Heidegger's lines into account – about how the technical concerns the revealing of truth (Heidegger, 1954, pp. 106, 108) – the distancing of the meaning of technology from the technical in itself is not entirely new in social science. It aligns with the “*embodiment notion*” in its process, yet contrasts with it in that technology is not something “*that is primarily embodied in artifacts*” (Perilla Jimenez, 2019, p. 826).

As for the historical method of technology level measurement, the expectation with this approach is that discovery and innovation milestones be determined, from both the human need related, and the technical perspective. In the literature on innovation theory and technology cycles<sup>50</sup>, there is generally no mention of ultimate technology directions or goals, as the ambitiousness of the endeavour makes it difficult to determine them.

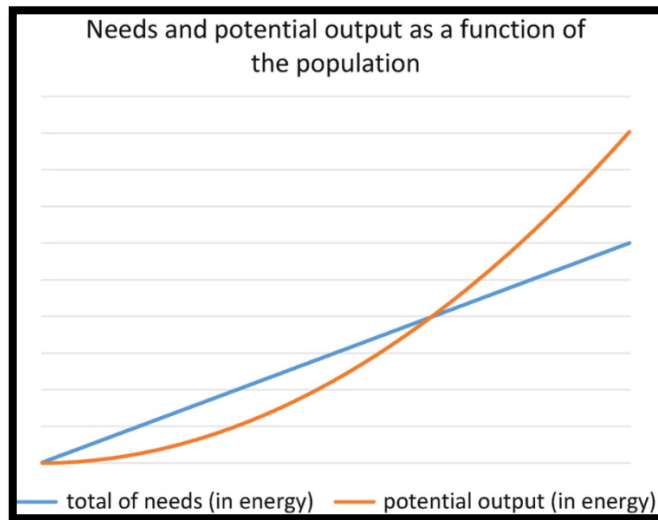
According to the moral economic approach, technology may have a minimum or start, and a maximum or end. The start is difficult to define, and the end is even more difficult to imagine, so I remain hypothetical on the edges of this topic. The start is proposed to be determined by the first human invention, or the first human imitation of nature. Without details on the significance of individual inventions – which is out of scope and capacity – the method jumps to determining an endpoint. The end could be the so-called steady-state technology. This end-of-technology would be characterized by an absolute well-being (fully and sustainably satisfied human needs, and ideally of all living beings).

After designating the two ends of the technological scale, the unit of measure and the current position are to be determined. This is the point where the geometrical method completes the picture. The geometrical measurement of the level of technology generally means functions “drawing closer” to the vertical axis in their respective economic models:

---

<sup>50</sup> See, for instance: Szanyi, 2021.

in neoclassical, as well as in moral economic ones. In the neoclassical sense, this is what was meant by the microeconomic production function. As for moral economics, I employ a model (illustrated in *Figure 10* below), where the hypothetical aggregate of human needs and potential output are depicted (measured on the vertical axis) as a function of the population number (horizontal axis).



*Figure 10: Human needs and potential output.*

*(Source: Hajnal, 2021, p. 78.)*

Over time, technological progress draws the upward-bending *potential output* function closer to the Y-axis, as depicted in *Figure 11* below. The closer it is, the more technologically advanced a society, as fewer people are needed to produce the same amount of output. The aggregate needs function, however, remains static.

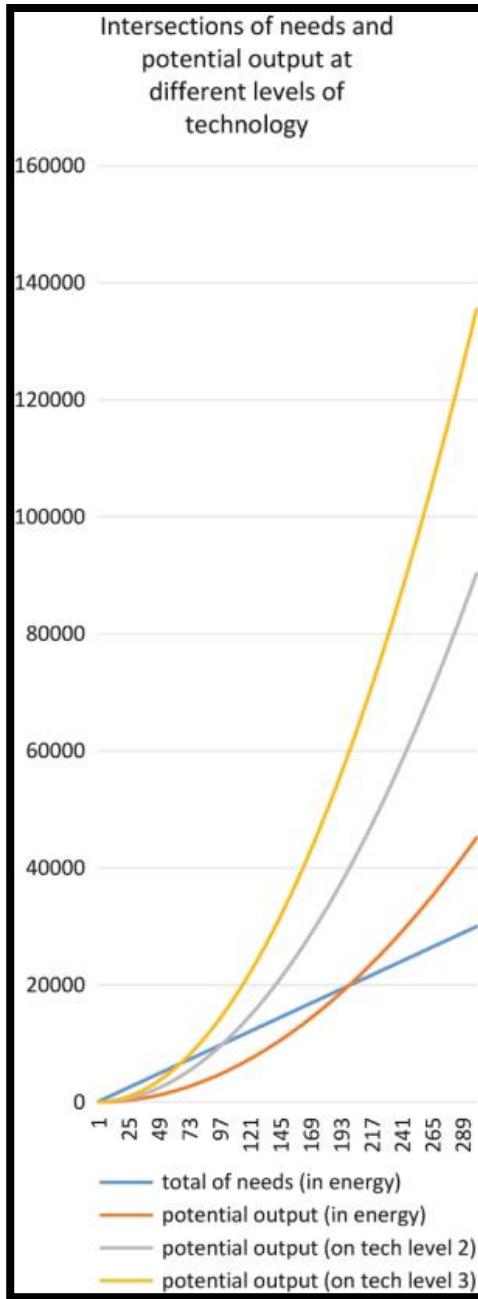


Figure 11: Different levels of technology.

(Source: Hajnal, 2021, p. 85.)

Over a certain level, technological advance is self-perpetuating. “Each new technological innovation triggers yet further innovation, in a kind of chain reaction that fuels long-term economic growth.” (McArthur & Sachs, 2002, p. 29). According to this

observation and logic, the positive changes in *potential output*, as shown in the graphs above, can be expected to occur at an increasingly rapid pace. The acceleration is justified not only by chains, linear processes as outlined, but also by network effects. New forms and actors of technology and – more specifically – “*innovation do not emerge independently [...]; rather, they are interconnected with each other*” (Hámori & Szabó, 2016, p. 52).

The steady state of technology would be the output function becoming fully vertical, that is, people no longer needing to work themselves, while remaining capable of satisfying their needs. In the geometrical approach to technology level measurement, it is rather the minimum level of technology that is difficult to determine. Where is the function the “flattest”? How did it start “bending up”? It must have been nature to give us the starting „push”, but how exactly? These questions would move the dissertation into the realm of evolution and cognitive science, which are largely outside its scope. Independent of these questions, once the factors are quantified, the level of technology can be measured along lines tangential to the output functions.

The moral economic view of technology levels has an allegory, in the already mentioned “*mountain of progress*” (Hajnal, 2015, p. 34). The levels of technology can be imagined as different stages on this mountain. Each stage is a step in human life getting better in general, thus, the average individual levels of well-being are also determined by this overall level. There are steps of different magnitudes, depending on the significance of progress made in satisfying a given human need with a given new technology. By counting the (weighted) steps from the “start”, and estimating them to the “top”, it is possible to determine the current level on the path, up that mountain, which is the allegoric version of combining the presented historical and geometrical methods. (This version is a broader interpretation, though.) Finally, it should be emphasised that in practice, technology is just one pillar of human progress. As an example of another pillar, the quality of public institutions (McArthur & Sachs, 2002, p. 45) can be cited.

To describe economies more comprehensively, with the advance of the economic fields of science, accurate technology level measurements are unimaginable to bypass. On the quest for the “*holy grail*” of economics, or an economic “*theory of everything*”,

but even in more modest economic endeavours, the level of technology must be part of the equations. This measure should be *“precise enough to represent trends in specific countries yet broad enough to allow global comparability is a long-term research endeavor”* (McArthur & Sachs, 2002, p. 39). The level of technology, if applied in the form as it was approached in this section, should apply to both technological leaders and the pace of their innovative journey, as well as to their followers, signalling their speed of absorption and implementation.

It may seem controversial that this dissertation, which is so critical of several points and the effects of the traditional economic stream, contains some of those very traditional models in this subchapter. One should recall, however, that challenging traditional economic points and moving beyond them is often not a matter of negation, but of completion. For all of the above, I end this subchapter with the note that an objectively measurable understanding of technology levels has been gained, supporting subhypothesis H2b.

### 5.3. Environmental capacity – dynamic equilibria

This last subsection of the methodological macro-thread explores and maps hierarchical, dynamic environmental-economic equilibria. Based on the moral economic premise of finite human needs, on output that increases with the population number in a supralinear manner, and on technology levels, moral economic equilibria are identified. These equilibria are compared to environmental capacities – as a function of technology levels. A needs-based, theoretical attempt is made to resolve the tensions and conversion issues in the economic-environmental nexus. A novel, visual, moral economic model of equilibria with the environment is established and argued for. The model is expected to suggest indirect economic adjustments, to align with sustainability, which – indeed – is more of a notion to be constantly aligned with, rather than a handful of one-time economic targets to meet.

Establishing these theoretical connections is long overdue, for *“there is an urgent need for more rapid integration of economics into the core of sustainable development, and for more rapid integration of sustainable development into the core of economics”*

(Polasky et al., 2019, p. 5234). The primarily visual model in this section may lie at the heart of the integration, on both sides.

By environmental capacity, “*the maximum population size an environment can sustain indefinitely*” (Australian Academy of Science, n. d.), also referred to as carrying capacity, is meant. Extraterrestrial space is included in this concept, interpreted as part of our environment. There appears to be a gap in the economic-environmental discourse in this area. Environmentally, in the short and mid-term (for the next few decades), humankind is in a “firefighting” mode, with incentives and attempts to restrict material production and consumption. The conversion between the economic and the environmental, however, is incomplete (Bartus, 2008, p. 1021), leaving theoretical space for increasing value creation – both private and collective (Mazzucato, 2022, p. 8) in the long term.

In finding economic-environmental equilibria, human needs play a decisive role. Just as with the environmental, the conversion options of human needs into economically expressed units are incomplete. However, human needs are directly relatable to the environmental ones. Constructing a system of models that incorporates all three areas (human needs, the economy, and the environment) allows for a more straightforward overview of equilibria. This system will require the moral economic assumption of finite needs, i.e., human needs being satiable, ultimately and sustainably.

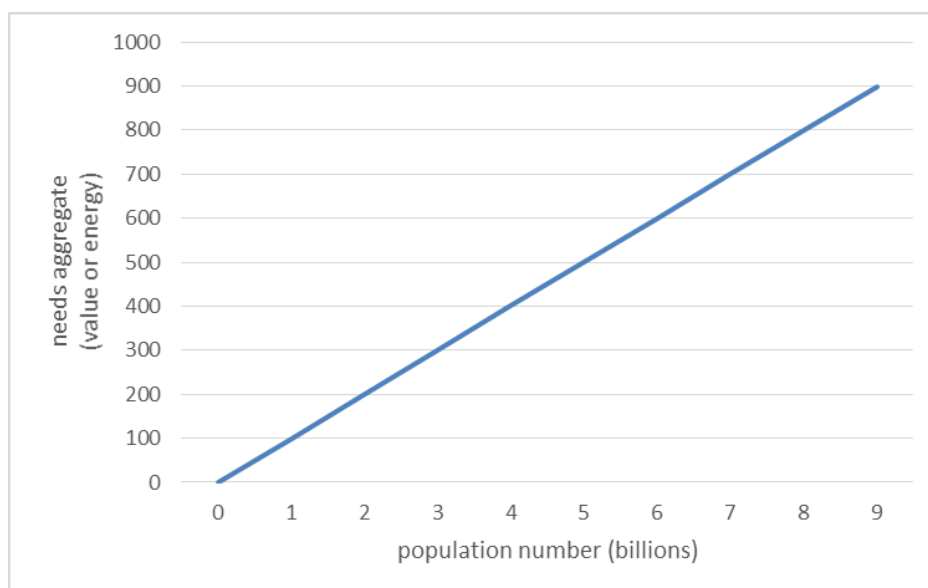
The following relationships will be dealt with:

- human needs as a function of the population number
- output as a function of the population number
- the intersections of needs and output
- the intersections of needs and output on different levels of technology
- the intersections of needs and output as a function of the level of technology, limited by the environmental capacity

Human needs, the population number, and the level of technology considered exogenous factors. Human needs exhibit a dynamic and diverse range of types and

intensities, constantly evolving in time for each individual. Traditionally, they are not measured in their aggregate, due to the resulting lack of a unit of measure, as well as due to the aforementioned incomplete conversion between human needs and the economic. Here, however, to combine the concepts, I attempt to illustrate needs measurably. Units are used flexibly, referring both to economic value (utils, satisfiers) and to forms of energy.

When needs are viewed as finite, with respect to the individual, the needs-aggregate for a given number of people also yields a distinct value. Thus, the aggregate function of needs in the *population number – value or energy* coordinate system is an upward-sloping, linear one, as depicted in *Figure 12*.

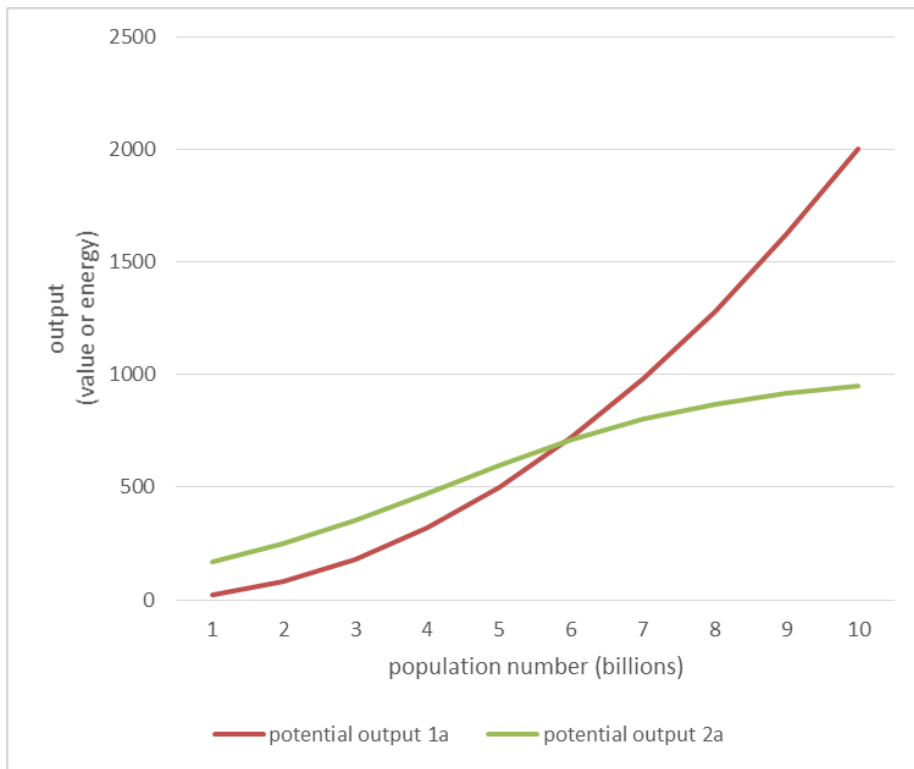


*Figure 12: The needs-aggregate as a function of the population number.*

*(Source: own.)*

When depicting potential output, I operate with a more general notion than traditionally used in macroeconomics. Moreover, in this socio-optimistic approach, it is assumed that output always increases with the population number, in a supralinear manner. This approach relies on labour division and the increasing opportunities for cooperation by incorporating the efficiency-increasing effects of these phenomena. In this form, output as a function of the population number resembles an exponential function, as depicted in *Figure 13*, curve *1a*. With slightly more scepticism, pessimism, or a more

critical attitude, taking challenges to cooperation into account, potential output in the „population number – value or energy” coordinate system can be depicted as an S-shaped curve (*Figure 13*, the curve 2a). The inflection point illustrates how the effects of cooperation become strengthened (through technology). However, then, the given technology level is not yet suitable for facilitating even larger-scale cooperation.



*Figure 13: Two scenarios for (potential) output as a function of the population number – socio-optimistic (exponential) vs. critical (S-shaped) approaches.*

*(Source: own.)*

Combined in one system, as shown in *Figure 14*, the needs aggregate and potential output have one or two intersections, depending on the shape of the functions at the given level of technology (whether potential output is viewed as an exponential or an S-shaped function).

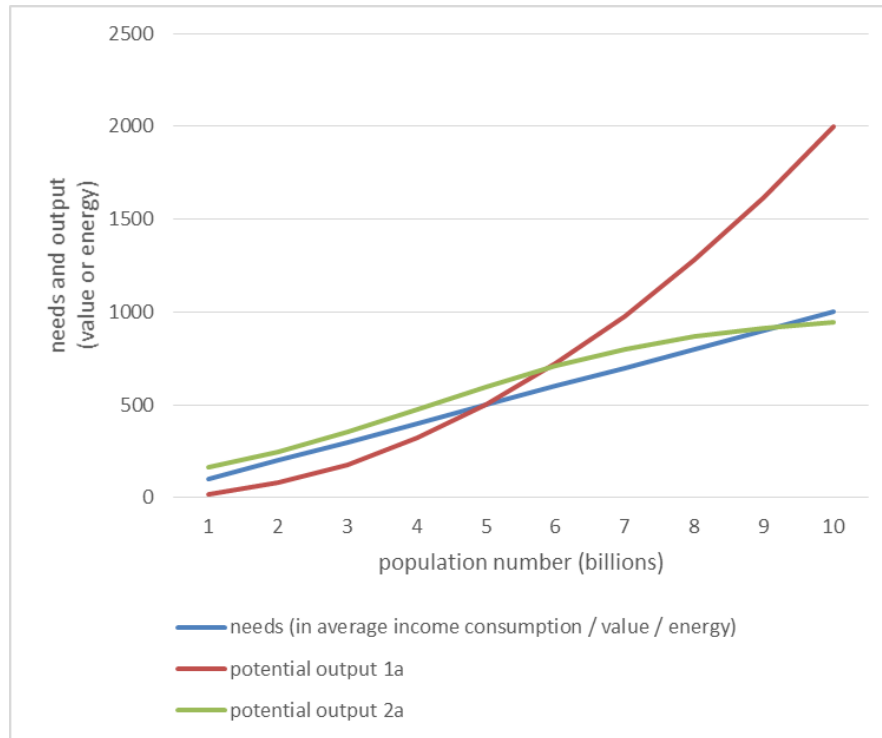


Figure 14: Intersection variations of the needs aggregate and the output function.

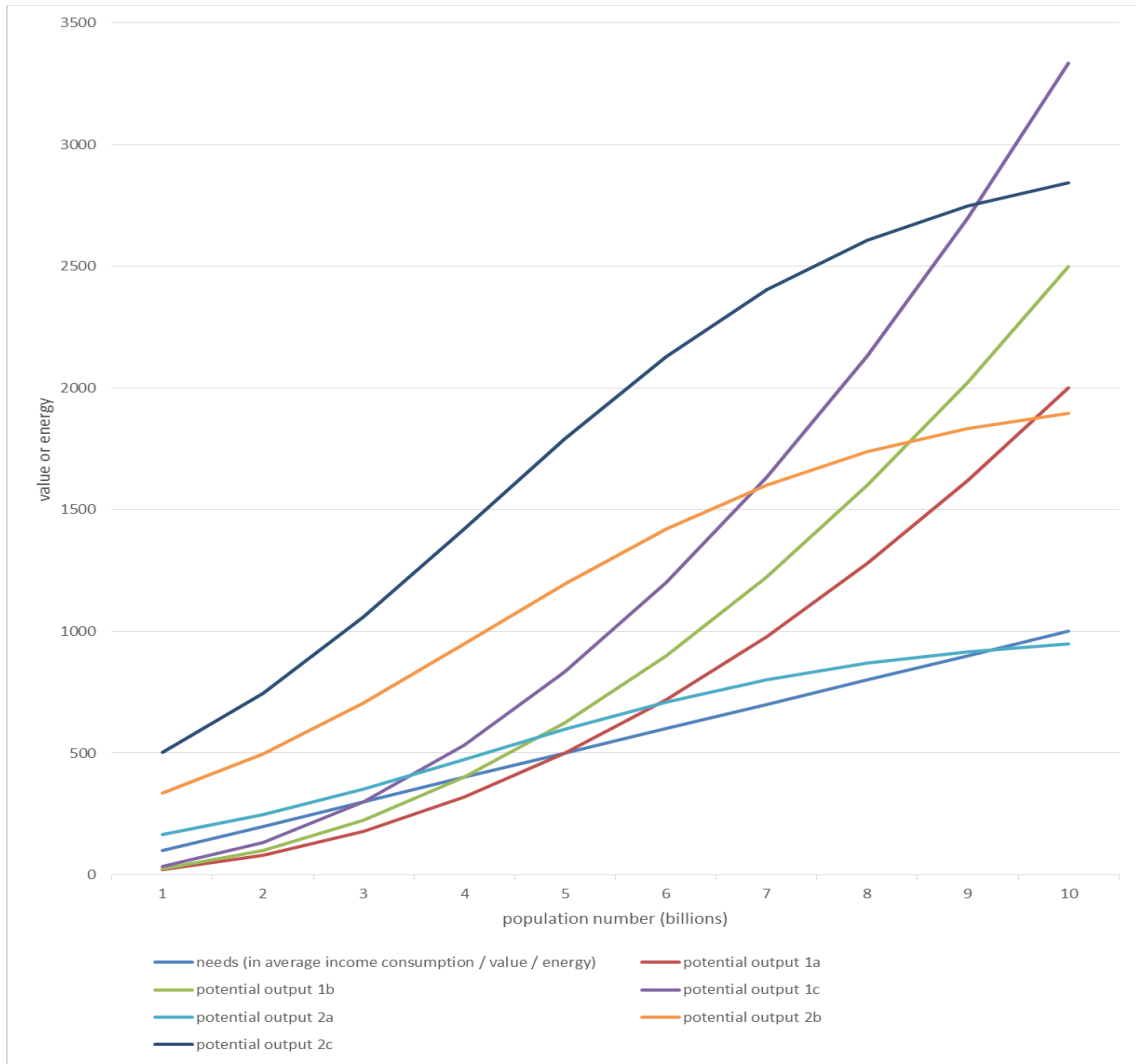
(Source: own.)

An S-shaped output function with two intersections implies three key phases on the given function:

- First, where the population number is relatively small, and output below needs, the population experiences scarcity.
- Second, where the population number is greater, and output crosses over to be more abundant, the problem of unemployment may arise.
- Third, beyond the inflection point and the second intersection of the S-shaped output with needs, output is scarce again. This, however, may be a more stable area of the coordinate system, for despite the scarcities, the larger population number provides a greater guarantee against extinction.

I operate with temporally and – roughly – constantly increasing technology levels. As technology progresses, output draws closer to the Y axis (the „value or energy” axis),

but aggregate human needs do not. These notions – the linear function of finite needs, and the exponential or S-shaped curves of potential output at increasing levels of technology – are illustrated below, in *Figure 15*.

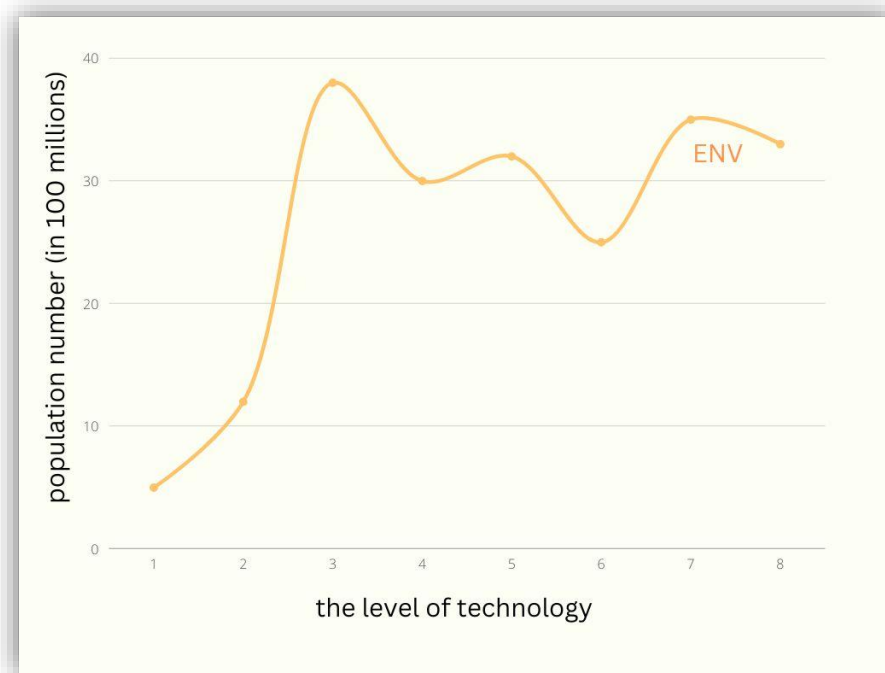


*Figure 15: Intersections of the aggregate of needs and potential output, as a function of the population number.*

*Different levels of technology are denoted by the letters a, b and c in the indices. Source: own.*

The way environmental capacity comes into the picture is as follows. Moral economics views needs, thus, consumption, and thus, the actual demand on environmental resources too, as finite. If human needs and the level of technology were quantified, the

debates of estimations around environmental capacity could be mitigated. Changes in the level of technology affect the environmental capacity (the sustainable population number) mostly positively. However, the capacity can fluctuate (as a function of the level of technology), due to damaging uses of technology, which leads to the exploitation of nature by humans. *Figure 16* illustrates this.



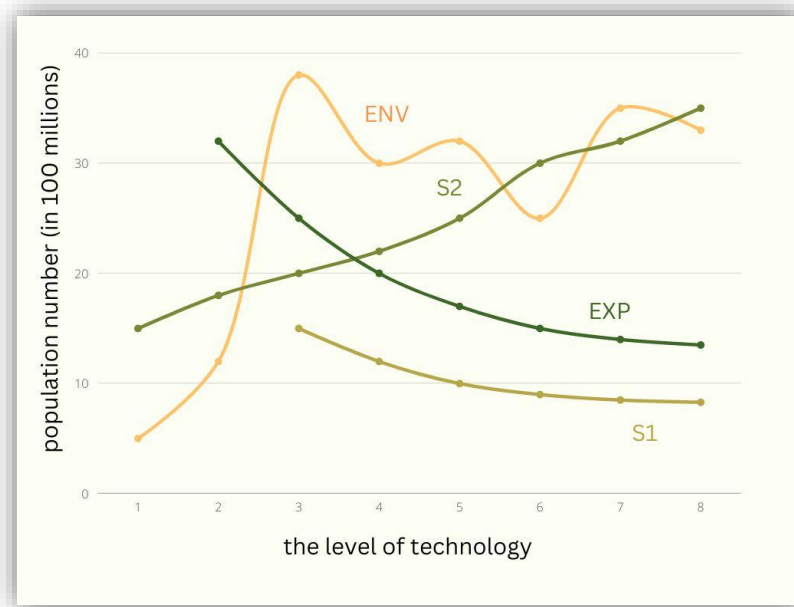
*Figure 16: Environmental capacity to „carry” humans, as a function of the level of technology*

*Source: own*

The needs-output intersections, as equilibria, are one condition of economic balance. In the broader view, the intersection(s) of needs and potential output have to be at a population number on – or more preferably – below the environmental capacity boundary (curve).

The last illustration, *Figure 17*, displays population numbers as a function of the levels of technology. The four curves are as follows.

- *EXP*: the population numbers at the intersections of needs and potential output (exponential version) at the given level of technology
- *S1*: the population numbers at the first intersection of needs and potential output (if the latter is an S-shaped curve) at the given level of technology
- *S2*: the population numbers at the second intersection of needs and potential output (if the latter is an S-shaped curve) at the given level of technology
- *ENV*: the environmental capacity (in terms of the population number) at the given level of technology (as depicted in *Figure 16* as well)



*Figure 17: Population numbers in the intersections of needs and output as a function of the level of technology, limited by the environmental capacity.*

*Source: own.*

There are environmentally stable and unstable phases over technology level changes. When the population numbers given by needs-output intersections move below the environmental capacity, humankind can be said to be environmentally safe, on the aggregate. This varies with which needs-output intersection function we look at – the one resulting from exponential output curves, or those stemming from S-shaped ones. The

curves denoted with *EXP* and *SI* represent economic equilibria that are mostly below environmental limitations; yet, these equilibria stem from decreasing population numbers, as a function of technology. They illustrate the fear of labour, or of human input becoming unnecessary. *S2* represents a sequence of economic equilibria, where the population number remains large enough for probable survival, despite balancing around environmental limits on subsequent levels of technology. Environmental capacity has increased for much of human history, but it began to change with the second Industrial Revolution. The „troughs” on the environmental capacity curve (*ENV*) illustrate the exploited state of nature.

A stable state may be hoped for in the distant future, for technologies, when appropriately applied, make humankind more self-reliant, less exploitative, and increase environmental capacity. Once it becomes economically and politically profitable to transition to renewables completely, harnessing those resources ought to have the aforementioned, desired effects.

To contrast the techno-optimism in the paragraph above, one could argue that technology will not save us fast enough from a complete environmental disaster, but that is not what was stated. The level of technology changes at various speeds over time, so its axis does not represent time in an absolute manner. These are only relations and mechanisms sketched. Without proper environmental and economic policies, the actual population number may rise so significantly above both the environmental limit and the needs-output equilibrium that it causes an irreversible environmental disaster, directly confirming ecological pessimism (Svoboda, 2025).

There is an economic-evolutionary paradox, relatable to the system outlined. Nature initially nurtured our species to compete. Having overcome that phase through cooperation, we have surpassed other species in several aspects. The scale of division of labour, particularly in the early industrial era, was yet another level of effectiveness between competitive communities and competitive nations (Smith, 1776; Ricardo, 1817). Meanwhile, the competitiveness of an economic system appeared to have become dependent on its internal levels of competition (Porter, 1990). In the end, we have become

so effective at production and consumption that now we can compete with time itself to stay within our environmental limits.

Solutions to the economic-environmental imbalance do not have to be restricted to or start with the macro-factors (such as the population number) of the model outlined earlier. Environmental-economic consciousness should begin with an exact mapping and quantification of human needs, before moving on to consider other factors. Technology levels would also need to be quantified at the macro level. The model serves as a starting point for moral economic orientation.

Once there is a possibility for approximate (or even exact) quantifications, the moral economic approach to needs and output may theoretically enable the mathematical description of more of the various economic systems' benefits, implying distinct levels of technology and abundance where, in terms of progress, it may be beneficial to shift from one system to another, with special regard to market vs. state powers.

It should also be noted that physical (environmental or planetary) boundaries may contribute to the short- to mid-term arguments for holding economic growth at bay. (See, for instance: Rockström et al., 2009.; Steffen et al., 2015; O'Neill et al., 2018.) In the long term, however, finite needs may be used in a more suitable and convincing reasoning. The validity of this statement still depends on whether it pertains to environmental or ecosystem services (as in Costanza et al., 2014), or human needs that can be better quantified, converted into economic units, and understood as forces.

To summarize the current position: From the alternative premises of the need to help others, finite needs, and objective technology levels, through the logical chain of rational selflessness, sharing as value creation and the resulting exponential or S-shaped output functions, we can construct a visual system of theoretical equilibria.

In terms of population numbers, these models suggest following the equilibria, as long as they remain below the planet's carrying capacity. The population number in any modeling and planning, however, ought to be treated as exogenously given (as in Carlin et al., 2004, p. 547), both in an economic and moral sense. With technological change, the equilibria of needs and output are likely to approach zero in terms of the population

number, while the carrying capacity may increase. Selfless perspectives can contribute to both output maximization and, beyond that, finding meaningful, non-polluting activities to engage in, for a wide range of possible population numbers.

Overall, what has been performed in this subsection was the combination of the intersections of finite (linear) needs and exponential output as functions of the population, within the framework of environmental capacity, contributing to the cultivation of moral economic theory, and thus making subhypothesis H2c acceptable as well.

#### 5.4. Synthesis overview and further insights

The previous three macro-level sections have built on the new moral economic directions initially explored in the *Literature Review*, and on the premises outlined in the *Theoretical Framework*. The value-multiplying nature of sharing, the objective measurement of technology levels, and the observation and adherence to dynamic economic equilibria within the environment's capacity are all interrelated as well. *Figure 18* below illustrates this chain of connections. It also demonstrates that the alternative assumptions (as elements which have not been combined previously) constitute a coherent theory.

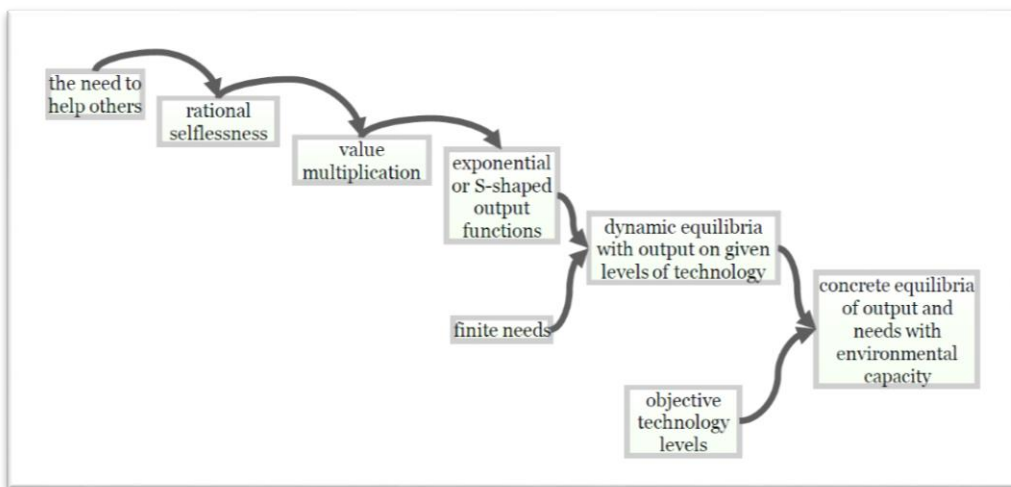


Figure 18: The chain of connections for a moral economic macro-level synthesis.

Source: own

Questions may arise regarding the actual theoretical status of the models and the framework, i.e., on that of the moral economic synthesis. In the following paragraphs, and in *Table 2* below, I evaluate each of the three synthesis parts separately, and then as a whole.

The equations and subhypothesis covered in the subchapter “*Sharing as value creation*” cannot be considered strictly predictive, nor illustrative. The model describes a potential mechanism, confirmed by the literature, with additional complexities to be considered when transitioning from micro- to macro-levels. It is conditionally explanatory. The equations, their context, and the subhypothesis have direct normative consequences, guiding rationality towards selfless and cooperative behaviours, as well as pointing towards the usefulness of establishing corresponding frames of incentives.

The subchapter “*Technology levels*” provides the moral economic interpretation of technological changes. It is positivist in its structure and style, but ultimately serves the larger framework, which is the synthesis. The interpretative and illustrative nature of this second part is clearly different from the previous one, but the difference manifests in completion instead of tension.

With the third part, i.e., the subchapter “*Environmental capacity – dynamic equilibria*”, we essentially arrive at an economic theoretical world model. It may be considered conditionally predictive, given the moral economic axioms of the need to help others, the finite nature of needs, and the perspective on technology that was established in the second part.

The theoretical integration of the models, i.e., the synthesis is closed in a sense that it embodies completeness as an economic world model. It is not claimed to be more than a model, with all the uses and shortcomings that models in general have. However, at specific points, the synthesis can also be considered as open. Not only does it allow for changes over time, dynamic movements throughout the entire model system. It may also let the axioms be changed without a complete collapse of the construct. This will remain outside the scope of the dissertation, but the nature of ties within the synthesis is assumed to be sufficiently flexible to be adjusted and applied in differing understandings of the economy, as well as under various conditions, actual circumstances.

element(s)	theoretical status and characteristics
<i>Sharing as value creation</i>	<ul style="list-style-type: none"> <li>- conditionally explanatory</li> <li>- with direct normative consequences</li> </ul>
<i>Technology levels</i>	<ul style="list-style-type: none"> <li>- interpretative</li> <li>- illustrative</li> <li>- positivist</li> </ul>
<i>Environmental capacity – dynamic equilibria</i>	<ul style="list-style-type: none"> <li>- an economic theoretical world model</li> <li>- conditionally predictive</li> </ul>
→ the <i>Moral Economic Synthesis</i> as a whole	<ul style="list-style-type: none"> <li>- completion instead of tension</li> <li>- a closed theoretical integration in terms of consistency, coherence, and comprehensiveness</li> <li>- open in terms of flexibility, adjustments can be made to the model</li> </ul>

Table 2: The theoretical status and characteristics of the Moral Economic Synthesis and its elements

Having accepted subhypotheses H2a, H2b, and H2c, as well as having illustrated the coherence that the models bring into the economic landscape, from this point on, the general hypothesis H2 is accepted too.

At this point, it is worth bringing more of the interviewees’ reflections to the macro-methodologically examined aspects of the moral economy. Among other questions, I have asked the interviewees about whether selflessness creates, increases, or even multiplies value in the economy, about the potential mechanism of this process, and about the harmony of selflessness with the environment. Despite the responses containing a wealth of insights and information, I found that the models I outlined in this chapter were relatively distant from what experts and stakeholders had in mind, independently of the diversity of interviewee insights. Thus, interviewee perspectives can again be considered complementary, although there is no way to actually prove their collective comprehensiveness. I summarise a selection of insights in the paragraphs below.

To start with, and importantly, Patrick Doyle has emphasized that “*different people mean different things by the word ‘value’*”, and has added that for “*values that matter in terms of nurturing stronger, healthier communities, then yes, I absolutely see*

*selflessness as producing more value*” (p.c., Nov. 28th, 2024) – which illustrates how interviewees could draw direct connections between selflessness and value creation, in alternative frameworks. The complexities of the themes have been acknowledged, nevertheless. István Szuna’s first reaction was indeed that *“this is complicated”* (p.c., Dec. 11th, 2024).

Selflessness has been identified as a precondition for economic value creation and increase, through social entrepreneurship and ecclesiastical activities (Zs. Győri, p.c., Nov. 29th, 2024), as well as through reciprocity – one of the main economic coordination mechanisms (M. Szanyi, p.c., Nov. 12th, 2024). Towards the more concrete end of the scale, Ágnes Romet-Balla has explained the positive effects volunteer hours have on the economy, based on the *Global Giving Index* (p.c., Sept. 6th, 2024). All this suggests that there are several different associations between selflessness and creating, increasing, or even multiplying value. My own, rather complex model may be just one of these, only in a more novel framework.

As for the concrete mechanism of value creation, increase, or multiplication through selflessness, the interviewees’ answers have branched off into several dimensions and aspects that extend beyond model. Firstly, it has been recognized that connections or a network of them need to exist in the first place for a mechanism to take place (I. Szuna, p.c., Dec. 11th, 2024). Second, the mechanism has been understood as the activation of intrinsic elements (P. Galbács, p.c., Oct. 15th, 2024), which aligns closely with values and – tentatively – the need to help others. Third – as Zsuzsanna Győri interpreted it – a healthy society, operating within the given mechanisms, is a precondition for the health of the economy as an inner system itself (p.c., Nov. 29th, 2024).

Beyond these observations, the stakeholders and experts sought to understand the mechanism suggested by more general phenomena. Balázs Hámori has spoken of interconnected chains of helping acts and rational, traditional interests, which result in cooperation. At times, these chains contain contradictions and tensions – and actors should orient themselves according to these values in such cases (p.c., Oct. 30<sup>th</sup>, 2024). Miklós Szanyi has emphasized the result of the mechanism, analogous to positive sum games (p.c., Nov. 12th, 2024).

There have also been concrete examples – from the corporate world to cooperatives and civil society. As for firms, László Tóth has emphasised the efficiency gains resulting from cooperation within an organization, both in temporal and financial terms (p.c., Nov. 25th, 2024). The role of cooperatives – “*virtuous economic spaces*” – in shaping consumption, supply chains, and thereby values, as presented by Patrick Doyle (p.c., Nov. 28<sup>th</sup>, 2024), has positive effects as well, albeit in a completely different way.

As for the civil sector, Rózsa Zsuzsanna Nhancale has made it clear that being able to afford employee expertise within a charitable foundation, with systematic workflows, can significantly increase the public awareness of that organization, and thereby their revenues as well (p.c., Sept. 7th, 2024). In a broader, macro perspective, Ágnes Romet-Balla has pointed to the labour market benefits of institutionalized community service, highlighting how it contributes to employee retention and loyalty to the firms they work for (p.c., Sept. 6th, 2024). The way Olivér Kovács views ethical conduct and selflessness as a contributor, if not precondition, to mental health – which is having an impact on the economy as well – is also worthy of note (p.c., Nov. 21<sup>st</sup>, 2024).

When inquiring about the connection between selflessness and the environment, despite the interview being partially structured around my macro-level moral economic models, I did not expect the interviewed experts and stakeholders to identify exactly the same connections. In fact, in very different ways, they have laid the emphasis mainly on the direct connection: the lack of our feeling of responsibility towards nature (I. Szuna, p.c., Dec. 11th, 2024); the attention that the well-being of non-human living beings ought to receive, and the possible benefits from an improved attitude (A. Köves, p.c., Nov. 26th, 2024); the balance between competition and cooperation – which the natural environment aligns with more easily than humans do (Zs. Győri, p.c., Nov. 29th, 2024); and the fact that selflessness encompasses selflessness towards the natural environment – in a kind of stakeholder approach (M. Szanyi, p.c., Nov. 12th, 2024). Two intriguing and recurring motives within this theme were the fact that caring about our natural environment is actually self-interested, in the rational sense – if viewed in that framework (A. Köves, p.c., Nov. 26th, 2024; P. Doyle, p.c., Nov. 28<sup>th</sup>, 2024) and the phenomenon that some interviewees were referring to the lack of selflessness towards the environment as to what

is observable (Á. Romet-Balla, p.c., Sept. 6th, 2024) and as to what illustrates the contemporary self-interested, or even selfish attitudes best (P. Galbács, p.c., Oct. 15th, 2024).

Overall, the interview responses have made macro-level moral economics broader contextualized, complementing it with additional shades and layers. It is from here that a discussion may begin on the outcomes, consequences, and implications of reinterpreted moral economic processes and models.

## 6. A SETTLEMENT (DISCUSSION)

***“[...] the case for bringing economics closer to ethics does not rest on this being an easy thing to do. The case lies, instead, on the rewards of the exercise. I have argued that the rewards can be expected to be rather large.”***

Amartya Sen, 1987 (p. 89)

The word settlement has two main meanings. For one, it is “*an official agreement intended to resolve a dispute or conflict*” (Google & Oxford Languages, n.d.). Second, it means “*a place, typically one which has previously been uninhabited, where people establish a community*” (Google & Oxford Languages, n.d.). This main chapter is aimed at supporting moral economics as a settlement in both of these meanings and roles. Its resolving role lies in the synthesis established, while there is a parallel aspiration to provide a basis for the start of a new moral economic branch in the profession, for the cultivation of a flourishing new moral economic theory.

In the previous chapter, it was illustrated that by incorporating ethical elements into economic theory, economics can be made more consistent and comprehensive, which are primarily positivist goals, but which have been achieved in a peculiar way through normative, ethical elements and tools. The approachability of the normative with the positive, and vice versa, is rarely revealed in economic literature (Bakó, 2008, p. 158).

Before proceeding with further discussion, the first hypothesis and the generalizability of the outcomes should be assessed. As for the existence and effects of the need to help others and rational selflessness, this theme has been approached from several different angles throughout the previous two main chapters. Although inductive evidence for the positive effects of being aware of rational selflessness could not be obtained, it may be claimed deductively that rational selflessness fits into the logic and structure of the reinterpreted moral economy, thereby accepting hypothesis H1.

This result and claim, however, deserve further contemplation. Rational selflessness may be considered as a baseline, as the standard understanding of the

intentional aspects of human existence in coexistence. Self-interest, on the other hand, is a specialised, focused (narrow) version, easier to model in economics. Thus, self-interest can be seen as a bounded form of rational selflessness. Operating with the need to help others as the origin of rational selflessness is a systemic attempt to break out of the bounded rational selflessness framework and into the standard (unbounded) coordinate system. The idea that *the need to help others* exists, and selflessness is rational, resolves the definitional problem of altruism, with its internal contradictions, paradoxes, and self-referential nature. As per the framework of rational selflessness, if humans were not self-interested, they would not be motivated to be selfless, and vice versa<sup>51</sup>.

Connecting the dots, I find the following. The problem of describing altruism in economics lies in the triple intersection of needs theory, neoclassical economics, and behavioural economics. The concept of utility does not necessarily have to be discarded, if economists can differentiate between “utils” (the hypothetical units of utility – Blockley, 2022) that respond to needs and those that respond to wants. The need to help others is still a human need, directly “after” or “above” the basic ones. It can be satisfied by behaving selflessly, i.e., if individuals forgo utils that satisfy their wants, to earn utils that satisfy this need, which is actually more fundamental. Thus, in a way, the ability to think in systems in a societal regard, being rationally selfless and even aware of this, modifies utility functions. Ideal and effective as it may sound, in reality, this selfless design of human nature and society is competing against contemporary business models and material aspirations, dictated to the individual by the system.

Regarding macro-level generalizability, the dissertation represents a special case, as the object of the synthesis has itself been the economy in its global essence. Generalizability may be deemed as given by that fact, or as irrelevant on this scale of research.

This chapter builds on the results and findings thus far in the dissertation. It begins with a reflection on the journey of the past chapters, through the contrasts between the newly reinterpreted moral economic school and the mainstream. This is followed by the

---

<sup>51</sup> Find related ideas in Vearrier, 2020.

practical implications of the reinterpreted version. The latter can be broken down into an orientation towards a moral transition, the process of institutionalizing morality in the economy – with a special focus on rational selflessness, and finally: specifications for implementation.

The chapter is an ambitious leap in a scientific environment where “[b]ookshelves are loaded with books that take a critical view of our economic system, but very few venture a suggestion as to how to change it. This is probably because as we make suggestions for change, the suggestions are always met with much resistance.” (Magnuson, 2007, p. 282).

## 6.1. Moral economics vs. the mainstream

I used the term moral economics to describe the science, and the system (the moral economy) that arise from morality being incorporated into economics, especially economic models. In this subchapter, I focus on the final unfolding of moral economics in the reinterpretation, contrasting it with mainstream economics.

Moral economics as an applied school – I argued – holds potential remedies for the system failures identified in the literature of ethics and the economy, and moral economies. In the chapter *Criticism reformulated* I indicated that certain critiques that the moral economy tradition formulates can be related to the problems of axiomatic origins in economic theory. The critical points of the moral economy tradition and the assumptions of moral economics share common roots and theoretical consequences, including the rejection of excessive individualism, a recognition of others’ needs, and interdependencies.

Moral economics expands and restricts the economic boundaries of humans and the system simultaneously. The expansion lies in the interpretation of the word *economy*. In moral economics, the people living below poverty thresholds, as well as the natural environment itself (as in Raworth, 2018), are included in the system, just as the actors and institutions in between. The restriction, on the other hand, comes from the observation that just because individuals cannot comprehend it, that does not mean that a system is infinite – this is true for the realm of individual needs, as well as for the economic system.

Moral economics is new among the economic schools of thought in many of its aspects, beyond the chronological novelty and evolution. It takes the material world into account as much as it does morality. An example of this stance is its take on sustainability and growth. Certain schools, including steady-state economics (see Daly, 1974) and degrowth (see for instance, Dombi & Málovics, 2015; Akbulut, 2021) recommend not to interpret the economy as a perpetual motion machine. However, the demand side is perpetual. As long as there are humans and other forms of life, there will be needs.

To refine the concept, moral economics is the reintegration of ethical elements into economic theory, whilst increasing its structural aesthetics, without increasing its distance from practical realities. Moral economics does not abandon the notion of equilibrium (economic balance), but there are several other economic concepts which it has a rather distinctive take on. In moral economics, the extent of sharing is a primary factor worthy of consideration and expansion, whereas material growth is neutral and secondary. This tilts the entire economic value system.

In the moral economic view, mainstream economic science has involved a temporary suspension of moral elements in economics for the provisional efficiency of the field – a kind of subconscious „Ockham’s razor” (Duignan, 2025) technique, applied through decades of economic practice. Temporarily suspending moral elements in economics may have brought the benefit of understanding broader contexts in earlier stages of the evolution of moral values, for holding on to values and value systems may have generally been in tension with „climbing” up levels of contexts, in understanding a situation.

The following statements can illustrate differences on the theoretical level. Mainstream economists would say that self-interest and capitalism do not generate social conflict. Moral economists might rearrange this and relocate the emphasis by suggesting that self-interest and the moral economy do not generate economic conflict.

What moral economics may set out to achieve with incorporating morality into economic theories and models directly, i.e., the „distilled” aims, are not less than the following. As a branch of economic science, it could aim to transform (and has partially done so already) economics into a more complete body of knowledge, whilst as a potential

policy framework and a potential system ideal, its goals might be to sustain, support and improve the creation, preservation and sharing of value, as well as to dissolve the gaps and contradictions between sustainable growth and growing sustainability.

Moral economics is an econo-optimistic branch, meaning the trust in the value and applicability of the economic science, and the anticipation of future economic discoveries and inventions to contribute to sustainability and progress.

Utopias arise from philosophical thought and are often explored through the imagination of fiction writers, resulting in dystopian works of art. The point at which utopias fail is often an ethical element, which may also hold for the future of economics and economies. A balanced, reinterpreted moral economic theory is desperately needed. The following section illustrates how the reinterpreted moral economy would manifest in practice.

## 6.2. Practical implications

I begin this subchapter with two counterintuitive views on the terms “natural” and “chaos”, which will serve the understanding of moral economic applications and transition. For one, through the lens of Hobbesian philosophy<sup>52</sup>, what is meant by the „natural state” is something negative and primitive. „Natural” could also be on the other „end” of history, though. As in „natural law”, with the „natural state” one could refer to an ideal or moral state of being that humans strive to bring about. Second: the opposite of order (at least in an economic systems sense, as well as in the aesthetic context) is not necessarily chaos, but distortion. Chaos itself can be more honest and aesthetic than distorted systems or objects. The meaning of order, especially economic order, is not even a constant. Our interpretations of order and our boundaries, as well as the way we adjust economic circulation, may be weapons though, against entropy pessimism (Georgescu-Roegen, 1971), the concern of unavoidable energetic degradation on Earth. Nevertheless, chaos is a clear starting point. I am not suggesting that a chaotic state is required or desired to transition into actual moral economies. However, it may have to be acknowledged that

---

<sup>52</sup> László Tóth, too, has touched upon Hobbesianism in the interview, for contextualising selflessness and individualism’s origins in a comparison with the Rousseauian approach (p.c., Nov. 25<sup>th</sup>, 2024).

the axioms that present-day economic systems have been built on thus far are false (for seven examples, see O. Kovács, 2023, pp. 10-27).

This dissertation has extensively covered the interconnected themes of finite and satiable human needs and rationally selfless behaviours. In this subchapter, I express what the moral economic recognitions and the awareness of rational selflessness may mean in practice. The aim is to connect economic incentives with virtue ethics in real life, in a way that is crowding in other-regarding, selfless behaviour, rather than crowding it out.

To gradually orient the reader towards moral economic solutions, the original purposes of the economic science ought to be revisited. If one zooms out, metaphorically speaking, in space and time, the primary functions of economic systems become visible: bridging the temporal-economic gap between scarcities and abundance, between the “law of the jungle” and civilisation, as well as between selfish and selfless behaviours. Economics fulfills its promises by putting the satisfaction of people’s needs into each other’s interests. For as that original „hand” is invisible (Smith, 1776), so were (and probably still are) some of the human needs and interests to people themselves. From a normative and policy perspective, economics may thus be considered the science and practice of aligning interests with values.

The moral economy (in this context, a global one) is actually a Smithian ideal, where – through the institutionalization of rational selflessness – an individual’s moral capacity determines their potential in economic participation. The “excessive” moral potential that individuals have ought to be awoken, encouraged, rewarded, and secured, so that humankind moves towards a virtue-based society.

### 6.2.1. Institutionalising morality in the economy

Despite the awareness of comprehensive analytical frameworks for institutional analysis (Ostrom, 2025, p. 74), in this subsection, I will proceed with specific lines of thought and suggestions. This is also due to the theoretical gravity of the ideas outlined below.

Recognising the need to help others for the institutionalization of selflessness and morality in the economy may be of significant weight. In this subchapter, the co-evolution of behavioural and institutional characteristics is envisioned. As for the benefits that the

recognition of the reasons for, and the implementation of rationally selfless behaviours bring to the individual, they are multifold.

Selflessness is generally regarded as one of the most valuable and pure traits of an individual. It is of value on both the giving and the receiving end, to society, and it also possesses intrinsic ethical value.

Several people help others along religious or cultural prescriptions and expectations, which does not subtract from the satisfaction of the need to help others. Inversely, the existence of this need provides an explanation for the positive effects coming from those types of other-regarding behaviours. It adds an awareness of the original nature and the genuinely positive orientation of those religious or cultural norms.

Another opportunity for theoretical inversion in this theme lies in determining whether society, the societal medium, is a precondition for selfless behaviour, so that “*the abandoned individual cannot be an altruist*” (as Péter Galbács asserted – p.c., Oct. 15th, 2024), or if it is selfless acts in the first place which form a basis for societal existence. Balázs Hámori leans toward the latter view, having said that “*altruism is essentially a network action of risk mitigation*” (p.c., Oct. 30<sup>th</sup>, 2024).

Exerting rationally selfless behaviours connects people in tighter forms with each other, as well as with their communities. It increases levels of trust, with spillover effects and benefits. It may lead to a virtuous circle, or even spiral, and the creation of new social, dynamic equilibria. As Alexandra Köves has formulated: „*In fact, we live in very complex networks, and it is precisely the network’s connections that can amplify any network property. If a “new” property appears in any part of the network – let us view altruism as such a new property for a moment – then it obviously affects those around it in the network. And then it may start somewhere else in the network. These properties can meet and add up in a matter of seconds, especially if it then starts to form a pattern... Whether a new property in a network becomes a pattern or not depends on several factors. It depends on the dynamics of the system and on counter-effects. In fact, it can become a pattern in a matter of seconds, if the situation allows it to.*” (p.c., Nov. 26th, 2024). This demonstrates that individual moral growth has economic potential and value.

There are three ways of central origin to help those in economic need: first – through the design of, changes in, and adjustments to socio-economic systems (by the means of political power), second – through technological progress, and third – through various types of institutional support. The latter – institutions – are in focus in this subchapter.

As it has been recognized, *“a modern market economy requires not only the hard work and innovation that flow from vigorous pursuit of self-interest, but also the trust and cooperation that flow from our moral instincts.”* (Pearlstein, 2020, p. 70). When becoming aware of rational selflessness, people start sharing an ideology. Network effects may come into existence at the point of recognizing Pareto improvements through it. As Arnsperger describes systems of such efficiencies: *“the ideology can be shared because it induces and is reinforced by an overall functioning that Pareto-improves the social situation over time.”* (2005, p. 437).

It is possible, yet potentially questionable, to institutionalise morality. *“There could never be enough laws and regulations – or courts and jailers to enforce them – to ensure that people don’t lie, cheat, and steal in their economic interactions. That level of cooperative behaviour is possible only if there is a foundation of mutual trust reinforced by a moral code that is broadly accepted and socially enforced.”* (Pearlstein, 2020, p. 68). Morality in the economy is not enforceable from the direction of the state or other central authorities, as the deterrant examples of the controversial Chinese Social Credit System (Xu et al., 2022), the locally feared and internationally widely denounced Iranian Guidance Patrol, i.e. the Islamic “morality police” (Sadeghi-Boroujerdi, 2023), as well as the fictional social rating and reward scheme in the *Black Mirror* episode *Nosedive* (Brooker, 2016) show.

From the three identified motivations of obeying rules – compulsion, self-interest, and a sense of duty arising from the legitimacy of the norm (Hurd, 1999, as cited in Györfy, 2020, ch. 4.3.2) – the awareness of rational selflessness can be located “in-between” self-interest and the sense of duty (these too involving elements of rationality and conscience), but with its voluntary and ethical dimension, also “above” all three.

Morality and institutions interact organically. Even beyond “*cooperative institutions*” (Fehr & Schmidt, 2006, p. 673) – the ones that enforce or encourage cooperation, certain types of institutions – primarily education, both in general and specifically in the context of selfless behaviour – foster morality. The connection works in the other direction as well. Collective value-system changes – such as collectively recognising the need to help others – lead to new social, dynamic equilibria, and other changes. Morality can support, or even reveal, institutions. When an individual pursues a moral life, their ethical oughts, they may notice how existing institutions favour their behaviour, and even notice institutions they were not aware of, before their own ethical turn. This mechanism may work on a societal scale too, at the positive end of the „institutional frontier” (my term for the boundary of the sphere in human lives that is governed and covered by institutions). Thus, morality can be the engine of institutional evolution.

Economics gives tools to construct incentives and systems that build upon and enable convergence within the premise and goal of equality. To create just and functioning systems, it is crucial to account for human behaviour under the institutions that have evolved and been created, or that may do so. When implementing economic incentives, policymakers should analyse, or even test, whether these incentives contribute to ethical behaviours, and to the interpretation of moral concepts, as well as individual moral growth, in terms of their economic value.

When imagining the desired moral economy, it is easier to start with static visions. However, later on, one must consider the question of what institution, tool, mechanism, or policy can ensure its balance in a dynamic state. In the system of norms, values, and institutions (Ramos Pinto, 2021), all three types of these ethical elements of the social and economic fabric are applicable.

When the aim is to create more balanced systems through moral economic reconfigurations, a special focus needs to be given to rational selflessness, as well as system-level selflessness, institutionalizing the “*patterns of reciprocity*” (Scott, 1976, as cited in Carrier, 2017, p. 25).

Traditionally, equality, or even a broader concept of equality of opportunities, is seen as being in contradiction with the dynamic equilibrium of progress and the economic system, its agents are motivated by (Mankiw, 2021, p. 3). Incorporating the need to help others and rational selflessness into economic calculations (as well as expectations), however, relaxes this tension by a significant degree. Another practical reason to incorporate these notions into economic thinking is that an economic system that is not in harmony, neither with the environment (as of present), nor with human needs (which is a less obvious, but also presently prevailing issue), is not sustainable. To be consistent with human nature, an economic system has to incorporate rational selflessness into its principles.

If investments made in rushing, consumption-driven progress could be partially redirected into forms of understanding and dialogue, we could live up to the advice that present generations keep reminding themselves of: preserving a healthy environment for future generations. Not only does knowledge cement environmental awareness and trigger potential action – it also endows people with more sophisticated skills and value systems. However, moral economics can be even more nurturing in practice, not *teaching* people to be rationally selfless, rather *reminding* them thereof (according to the Platonic recollection doctrine; Plato, n.d./1892).

The resulting attitude and insights are expected to enable individuals who have their basic needs satisfied to reach higher levels of need satisfaction, with the same degree of material consumption. Alternatively, the same level of need satisfaction, at lower levels of material consumption, *ceteris paribus*. As the anthropologist Jerome Lewis wrote about hunter-gatherer tribes, “*by sharing properly, resources will be experienced as abundant.*” (2002, as cited in Kallis, 2019, p. 53). An abundance in a system designed to put others’ wellbeing into individuals’ interests, permanently, regardless of character and circumstances, is something we might call the (moral) economic equivalent of a perpetual motion machine.

One understands the importance of fostering and enabling ethical and selfless behaviours in society when the inherent potential to display them is highlighted. Many at present are morally overqualified for the inherited systems they live in. If we look at the

intrinsic nature of selflessness, humans are morally overqualified by default. Collectively or culturally speaking, there can be more selfish and more selfless periods in the history of societies (similarly to phases in individuals' lives). Moral economics provides the theoretical basis for shifting into a more selfless era, rationally. Currently, societies appear to operate in a reactive mode economically and environmentally, as well as politically. Moral economics compatible tools and moral economic policies could turn them sustainably proactive, given that individuals are well-informed about the mechanisms of needs.

The judgement of one's own morality partly depends on how one judges their world, which they too constitute and create. Injecting morality into this loop is beneficial and can be achieved through an "internal" step: the discovery of the need to help others. Rational selflessness too requires individual recognition, and is an opportunity for everyone (especially those whose basic needs are satisfied). Its education may be the safest and most powerful tool to awaken it. Education in general contributes to the recognition, as selflessness relies on connections within knowledge, too, and on wisdom (M. Kovács, 2023).

Institutionalizing rational selflessness would mean broader incentives to make the motivation to help others meet the opportunities of helping them. The motivation and opportunities exist, but making them meet is not being accepted and rewarded by society to a sufficient degree. The awareness of the need to help others and rational selflessness in a "standard" economy could have a similar role as shared values, shared understandings of justice have (had) in "classical" moral economies (Beresford et al., 2022, p. 4). The forms rational selflessness takes could range from direct, material sharing and giving, to ecologically motivated self-limitation. I would also note that the policy approach suggested is in close alignment with Martha Nussbaum's ideal of policy-making, in that it warns against painkiller-like public policies (2012, p. 347), when "*the painful emotion leads to helping*" (p. 346).

In terms of the principles of institutional design, one should not build on self-interest, nor *on* selflessness, but rather: *for* selflessness. The strongest and most ethical incentives lie in individuals' own recognitions of shared values and the alignments

between their own and others' interests (which does not have to be the same as direct, shared interests). When incentives are not imposed upon individuals from above (Sugden, 2013, pp. 532-533), they may have a greater guarantee of not crowding out ethical intentions and genuine benevolence.

In a system where people are taught about the value and rationality of selflessness, extensively, the somewhat tautological, simplified statement that what is understood as greedy behaviour is not worth pursuing (Polanyi, 1963, p. 46), may hold. Where individuals understand its origins and mechanisms, and where they can trust and rely on each other, because they are transparently aware that others have received a similar education.

It may take a leap of faith in policy to be willing to stimulate change in the “hearts and minds” of people. However, the approach is logically backed by Christian Arnsperger, who writes of capitalism that “*the ideology inherent in that cultural system can only be attacked from within the system itself, through decentralised processes of democratic decision-making rather than by mere prophetic denunciation or moral invectives.*” (Arnsperger, 2005, p. 434). He suggests “*a framework of democratic experimentalism which embeds multiple institutional experimentation*” (Arnsperger, 2005, p. 434, original emphasis). The education and awareness of the need to help others, rational selflessness, and the broader consequences within the system align with this attitude. Intriguingly, in areas of smaller scales, such as in urban planning, similar advice is given, with the planning process involving “*practical, incremental, and experimental reforms*” (Gébert et al., 2023, p. 360).

As a closing thought for this subchapter: One needs to have trust in institutions, as they are the manifestation of our collective efforts to shape societies, and in the fact that these institutions ultimately reward ethical conduct in all dimensions. Alternatively, one needs to trust that one's own ethical choices and actions have the power to shape institutions and to change them for the better.

### 6.2.2. For the implementation

The individualism versus collectivism battle cannot be fought on the single plane of these two notions and their related virtues. One must consider the origins and directions of attitudes in society. Existing systems may lie on an „unhealthy” axis of system mixes. Economic systems, however, have sets of rules by which – on the very long run – humankind can shift its economic culture, according to the level of technology and the resources available. Within those rules, there is potential to create more balanced systems than those that exist at present, through moral economic reconfigurations and transitions.

Transitioning to a system that facilitates and nurtures the intrinsic rational selflessness of the individual is easier said than done. However, it is also easier done than ushering people into morality, within flawed systems. As Kirman and Teschl have observed, individual behaviour is highly context-dependent: “[...] *people have various motivations which can be either self-regarding or other-regarding and it is the context, including the market itself, that determines to what extent individuals act selfishly.*” (2010, p. 116). In the words of Zsolnai, who acknowledges the moral element explicitly: “*Economic agents are moral beings, but the ethical fabric of the economy determines which face of the Moral Economic Man predominates.*” (2007b, p. 1).

The context and the elements of individual behaviour interact delicately: “*Habituated ideas and thoughts about our surroundings and ourselves are formulated in the dynamic process of acting in, and thinking about, the world. Our thoughts inform our actions and our actions inform our thoughts, which in turn inform our actions. This ongoing, mutually reinforcing process becomes reified into institutional structures. These institutional structures evolve into systems, which control economic activity. In this way, economic activity can be directed in a pathological way, and at the same time reinforce pathological ways of thinking.*” (Magnuson, 2007, p. 274).

Economic policy solutions may rely on the state or the market, or the two spheres with varying degrees of emphases. Centering solutions on individual behavioural elements is unconventional. However, reflecting on the Polanyian categorisation (as referred to in the *Literature Review*), adding a human-centered approach to the state- and market-centered ones would align with the processes of redistribution, exchange, and

reciprocity. There might be an overlap among the approaches, though, which is also illustrated by the following quote from Olivér Kovács (p.c., Nov. 21<sup>st</sup>, 2024): “*the state is society’s largest selfless instrument*”.

All experts and stakeholders I interviewed had their own takes on what could or would bring about moral economic change, higher levels of selflessness in societies. Those with substantial fundraising and charity experience emphasized the (desired) existence of appropriate role models in the media (Á. Romet-Balla, p.c., Sept. 6th, 2024), who – if only virtually – let other people close to their everyday selfless behaviour. Cinematic role models, issues being raised awareness of by the movie industry have also been suggested (R. Zs. Nhancale, p.c., Sept. 7th, 2024).

Education, nurture, and culture – as tools – were represented heavily among the interviewees. Either as part of the general school materials, alongside societally consensual values that encompass altruistic behaviour (P. Galbács, p.c., Oct. 15th, 2024), or relayed by parents, as part of an inter-generational process of transactions (B. Hámori, p.c., Oct. 30<sup>th</sup>, 2024). These steps of nurture and education could ultimately lead to responsible and value-oriented decision-making, once those children, then students, then employees reach that stage in their corporate career (Zs. Győri, p.c., Nov. 29th, 2024).

Underlying conditions for a change have been identified in the shift from the picture economics paints and teaches of human nature and societal functions as competitive, ever since the Age of Enlightenment (A. Köves, p.c., Nov. 26th, 2024). Instead, being led by the philosophy of cooperation, in a framework of participatory democracy, alternative business models and a richer economic democracy would have a greater chance of finding their way to manifestation (P. Doyle, p.c., Nov. 28<sup>th</sup>, 2024).

The mechanisms of a moral economic system, however, must be, in certain regards, inverted versions of current mechanisms. A system based on selflessness, in which primarily selfish agents can achieve their goals without harming others, can be just as peaceful as a system based on self-interest and selfishness (the present economic architecture being regarded as one), in which „overly” selfless agents are ensured safety, and treated equally, whatsoever.

Economic policy design and implementation have their challenges beyond policy making. Proper economic policy making may be likened to a Rubik's cube, in that various „sides” of the economy, or its policy, need to be assembled and reassembled, again and again, until all significant parties' (economic actors') vocal representatives are satisfied with the plan. Maintaining entrepreneurial motivation, while subsidizing the satisfaction of human needs (on levels where they should be considered human rights) requires a sophisticated, socially stratified theory of redistribution.

Redistribution should be achieved through rationally selfless processes, and be accelerated by the awareness of it. Awareness can be raised by education and by promoting inequality reduction targets. There are clear, large-scale climate targets and well-known climate agreements, but there are no general economic equality targets yet. Neither are there binding agreements, at least not on a similar scale, despite *Reduced Inequalities* ranking as a prominent target among the seventeen UN Sustainable Development Goals (United Nations, 2015).

For corporations in general, to incorporate moral economics into their mechanisms, goals, and policies, it should be considered which structural problems a moral economic approach can address, where moral economic measures can be introduced first, and the risks associated with moral economic implementation.

In a similar way that corporations, countries, and regional integrations (European Parliament and Council of the EU, 2021) strive to operate carbon-neutrally, measures should be found to reveal corporate contributions to reducing inequality. There should be a global netzero or – in this case – absolute zero target, not just in terms of the climate, but also for economic suffering. This would imply comprehensive corporate accountability for yet another sphere of human existence.

Although moral economic changes may be perceived as cautious, soft, and mostly incremental in practice, one advantage of this gentleness is that there are relatively fewer opportunities for free riding, compared to a system for a world that cannot avoid them (Ostrom, 2025, p. 92).

The transition to a global moral economy can be visualized as being initiated in “*small circles*” of moral economic values, an expression introduced in the context of European history and freedoms by the late Hungarian political theorist and author István Bibó (1947). Similar phrases in the context of economic systems appear in more recent literature, from the “*circles of benevolence*” that are being moved by actual care, commitment, and trust of the stakeholders (Zsolnai, 2010, p. 207, own translation), to the “*anecdotal model*” of capitalism that has evolved into a full-fledged economic system (Magnuson, 2007, p. 283). Reflections on this evolution have revealed that the system is not path-dependent, and that radical change will not necessarily make the system collapse (“[...] *the particular historical dynamics imposed by a particular interplay of economic-power concentration and interest-driven politics has created a particular version of the capitalist culture, a particular version which possesses no logically necessary connection to the earlier norms from which it evolved.*” – Arnsperger, 2005, p. 440).

The final questions in the interviews concerned a hypothetical state. I asked the stakeholders and experts to envision societies with higher levels of selflessness and the resulting phenomena. The answers included historical scepticism, either as a general critique of the potential imbalance between self-interest and selflessness, and the resulting stagnation (B. Hámori, p.c., Oct. 30<sup>th</sup>, 2024), or as the concrete failure of ideologies superficially emphasizing solidarity (L. Tóth, p.c., Nov. 25<sup>th</sup>, 2024). Another concern that has emerged is amplified rent-seeking, a result of the alternative principles of redistribution, which may erode the material basis of such systems (M. Szanyi, p.c., Nov. 12<sup>th</sup>, 2024). From most perspectives, however, cautious or more explicit hopes have shone through.

Societies with cultures and economies based on selfless attitudes and behaviours might exhibit the following phenomena (as a tentative, and by no means comprehensive list; shifting from general to concrete examples, and from economic to social ones):

- decreases in the inequalities of income and wealth (M. Szanyi, p.c., Nov. 12<sup>th</sup>, 2024)
- decreases in overconsumption and overproduction (O. Kovács, p.c., Nov. 21<sup>st</sup>, 2024)

- ecologically more sustainable systems (O. Kovács, p.c., Nov. 21<sup>st</sup>, 2024)
- the emergence of more cohesive communities with a tighter social safety net (P. Galbács, p.c., Oct. 15th, 2024)
- work – instead of being an end – becoming a means to a dignified existence (P. Doyle, p.c., Nov. 28<sup>th</sup>, 2024)
- communities helping each other (Zs. Győri, p.c., Nov. 29th, 2024)
- an increase in volunteering and donations (Á. Romet-Balla, p.c., Sept. 6th, 2024)
- tighter intergenerational bonds (Zs. Győri, p.c., Nov. 29th, 2024)
- understanding different value systems through deliberative processes (A. Köves, p.c., Nov. 26th, 2024)
- an increase in the intensity and frequency of knowledge transfers (R. Zs. Nhancale, p.c., Sept. 7th, 2024)
- rewarding and respecting educators (L. Tóth, p.c., Nov. 25th, 2024)
- spending more time together (Zs. Győri, p.c., Nov. 29th, 2024)
- an increase in the prestige of helping professions, such as nursing (Á. Romet-Balla, p.c., Sept. 6th, 2024)
- finding community solutions to take burdens off each other’s shoulders (when it comes to simultaneous child- and elderly care, for instance) (A. Köves, p.c., Nov. 26th, 2024)
- an increase in the efficiency of reporting systems on child abuse and domestic violence (Á. Romet-Balla, p.c., Sept. 6th, 2024)

When asked about the stability of systems, about societies with higher levels of selflessness, the responses have ranged from the emphasis on quantitative and qualitative growth as persistently needed motivational factors (B. Hámori, p.c., Oct. 30<sup>th</sup>, 2024), through rewarding risk-taking for innovation as the engine of economic development to endure (M. Szanyi, p.c., Nov. 12th, 2024), to the observation that *“it would be harder to break the unity that would form if we were connected not only by interests, but also on the level of selflessness. Selflessness constitutes additional linkages that one has to use more energy and different methods for breaking.”* (Á. Romet-Balla, p.c., Sept. 6th, 2024). It should be noted that selflessness itself may take many different forms, which can

contribute to systemic stability, and this is dependent on diversity as well (A. Köves, p.c., Nov. 26th, 2024).

To wrap up this chapter, I re-emphasise that the moral economy pointed to in this dissertation is selflessness centered. In this way, it aims and presumably deserves to stand out from several other attempts to change the economy and economic thinking at the base level. Here, selflessness and self-interest in the models are both at the core of the individual, and – through the economic culture depicted – also at the heart of the economy. The insights gained can be applied to incentivise in novel ways.

## 7. CONCLUSION

*„For the master spirit of the earth shall not sleep peacefully upon the wind till the needs of the least of you are satisfied.”*

Kahlil Gibran, 1923

The reason that the need to help others can be used in an axiomatic manner is the potential impossibility of its falsification (due to the complexity of confounders and to the challenges of measurement). It is arbitrary to a similar extent as the doctrine of self-interest is, yet the two do not contradict. It is also self-interested that satisfies the need to help others (once recognised). This is what makes it rationally selfless. The need to help others is, in fact, not the starting point of the moral economic synthesis, despite being in an axiomatic position, but the solution. It is the axiom that is in harmony with macro levels, up to the environment. It appears that disciplines and perspectives had been „fighting” the wrong „fights”, on a shell of conflicting interpretations around a previously undiscovered core (which happens to be a metaphor for humankind too, in a mixed physical and abstract sense).

A dynamic description (conditional formulation) of a well-functioning economy could be: An incentive system that aligns with human nature sustains wellbeing. Major economic ideologies tend to fail either on the incentive or sustainability side. Addressing the issue from a sustainability perspective, however, involves a top-down approach (from the perspective of the economic system), even if policies and requirements are projected down to individuals. If one wishes to change the economic narrative, they need to dive into and be innovative on the side of incentives and their alignment with human nature.

As a significant limitation, the moral economic synthesis does not account for the inequality of income and wealth, and their changes. It suggests intrinsically that the awareness of rational selflessness incentivizes people to give, share, and reciprocate, stabilizing the system in terms of economic equality. Taking economic incentives, property rights, and feasibility into account, absolute economic equality is considered to be an extreme idea (Shatz, 2008). However, an economist ought to ask questions about

where the incentives currently in place are leading us, whether feasibility remains an issue in the long term, and whether one could not think of a systemic context that incentivises equality of opportunity to sustain itself.

## 7.1. Summary and value added

My work does not claim to reform economic thinking, nor does it summarise or recategorise such initiatives comprehensively. It contributes through synthesizing acts that are built on the moral economy and moral economics concepts, in an interdisciplinary and global context. It was time for this thesis to be written, for academic reasons – such as the scattered use of the term moral economy, and general contradictions – as well as practical ones – including the yearning for, and the possibilities of more selflessness in our economies, on corporate, as well as at broader societal levels.

The questions I started with were just two, in essence. For one, I wanted to know to what extent the awareness of rational selflessness, the rationality of selflessness, increases individuals' marginal propensity to give, share, and reciprocate. Second, I wanted to explore how building on selflessness in theory can make economic models more compatible with each other, approached through value creation, the economic philosophy of technology, and a moral economic synthesis.

Whilst starting to find or form answers to these questions, I did a literature review on the moral economy and moral economics. The moral economy refers to communities with specific relations to their shared values of justice, whilst moral economics – in my own, observational definition – incorporates elements of ethics into economic theory. For the moral economy, I established a functional categorization with four different categories of use. The classical moral economists constituted a critical branch, and my own criticism of materialistic economic systems aligned with them at several points. At this point already, the economic role of human needs in my reinterpreted version of the moral economy has begun to crystallize. The literature review contained further sections, one of which was the *Criticism reformulated* subchapter, where I aimed to convey connections between thoughts about materialism, inequality, and their interactions, through concepts such as *runaway accumulation*. This was followed by the directions, extensions of moral economics (environmental economic, virtue ethical, and needs theoretical

advancements), still as a part of the literature review. I concluded the literature review with a figure that illustrated the moral economy's functional categories in their evolution, as well as connections to moral economics and its main directions.

My theoretical framework has been dominated by a focus on human needs theory, beginning with how neglected it is in economics. I have argued for viewing needs as satiable, but also presented the obstacles to this view. I have proposed and conceptualized *the need to help others*, an element that logically leads to selflessness being rational. This idea has not been fully incorporated into economic theory. What makes selflessness rational is that it is beneficial on the giving, the receiving end, societally, as well as having intrinsic value.

As for the methodologies, the initial plan for RQ1 was to conduct a behavioural experiment for quantifiable results. This method has proven not to be feasible and has only been preregistered. Moving forward, I opted for expert and stakeholder insights through interviews. Their diverse chains and networks of thought, as well as contrasts and the established “dialogues” between them have supported the holistic reinterpretation of the moral economy. The process has been inspired by grounded theory, a major category of qualitative methodology; however, not all grounded theory requirements have been fulfilled. Aspects have been applied in a tailored version to the dissertation's theme.

The other, more focused method has been the construction of a moral economic synthesis, in three major steps. For one, I examined value creation through sharing, literally translating the proverb “*Shared joy is double joy*” into a mathematical formula, which turned out to resemble that of the Gini coefficient to a high degree. Based on the similarity, I began searching for macro-level correlations with relevant indicators, ultimately arriving at an explanation of the obstacles to upstream transmission. To assemble a more comprehensive, dynamic moral economic picture I also had to consider the level of technology as a factor in relation to human needs. The novelty of the interpretation here lies in tying together need satisfaction with technological levels, as well as enabling extensive visual illustration. Speaking of visual illustrations, this has proven crucial in the third, environmental context part, where I have built a visual economic model of human economic needs, potential output, and output levels at different

levels of technology. Ultimately, I stepped to the outer levels of macro-analysis and transformed the system to fit and interact with the environmental capacity as a model. The result of all these endeavors has been the moral economic synthesis.

In my moral economic endeavours, I have augmented (supported) the concept of moral economic equilibrium from both the supply and the demand sides. On the demand side, the assumption of finite and satiable needs was utilized, on the supply side, value creation and multiplication have been explored. The *need to help others* axiom has – from the start on – added a paradoxical twist to the theme. Thus, built on the premises of the need to help others, finite needs, and objective levels of technology, I have utilized rational selflessness, value multiplication (by sharing), and the dynamic equilibria on the macro level to compose a comprehensive system, a moral economic clockwork.

Throughout the discussion, and based on preceding sections, the need to help others has been claimed to be a concept that resolves the non-linear, definition-dependent, and self-contained problematic of defining altruism.

As for the hypotheses, the existence of *the need to help others* and *rational selflessness* has been supported in a deductive manner, acknowledging the underexplored and underexplained nature of the origin of the need to help others. The question of whether the awareness of these elements and their context encourages selfless behaviour remains to be tested inductively – a sufficiently punctual rate for the marginal propensity to reciprocate could only have been derived from the actual conduct of the behavioural experiment (*Appendix 5*, as referred to in the *Introduction*). Nevertheless, the notions have been utilized in the moral economic synthesis. The synthesis has provided a multifaceted illustration of the legitimacy of moral economic practice (incorporating ethical elements into economic theory) through three main operations, filling theoretical gaps, and making this system of thought more coherent.

The insights gained have made Hypothesis 1 (H1) acceptable, despite not having quantified support for the initial statement. For Hypothesis 2 (H2), the moral economic synthesis has provided evidence. I must point out, however, that the outcome itself, which can be considered a narrow type of world model, is difficult to verify or falsify as a whole.

The implications have been extended to policy, mainly in educational aspects. It should be emphasized that the moral economic synthesis is a theoretical achievement and a model for now. Several important factors, such as inequality, remain to be incorporated. Nevertheless, the model and the field hold a myriad of research opportunities in various directions, both for present and the future.

*„A new theoretical framework in a science does not really prove itself unless it explains phenomena that the accepted framework cannot.”* (Arthur, 2021, p. 138). Reinterpreting the moral economy has involved augmenting conventional conceptions of justice and corresponding economic mechanisms with individual and general-level possibilities of inherent behavioural factors, most crucially rational selflessness. It has also involved the incorporation of ethical elements into economic models, and synthesising these, a process throughout which the connections between these models have crystallized and concretized.

Reflecting on the umbrella question<sup>53</sup> that the dissertation began with, the chapters have provided multilevel answers to the broader puzzle of the scientific and practical utilization of the reinterpreted moral economy, not only in an ethical, but also in a critical sense.

The dissertation's scientific value added lies in six main accomplishments:

- the reformulation of a moral economic critique for economic systems,
- connecting the moral economy concept to the moral economic endeavour of incorporating ethical elements into economic theory,
- the establishment of a tool to measure the marginal propensity to share upon a growing awareness of rational selflessness,
- the easing of the definitional tension within the definition of altruism, through the concepts of the need to help others and rational selflessness
- theoretical advances of moral economic models related to value creation through sharing, the level of technology, and environmental capacity,

---

<sup>53</sup> For reference: *How can the moral economy tradition be relied upon, reinterpreted, and applied to economic theory and structures of the economy, in our age?*

- and the elements of practical guidance that resulted from a „translation” of findings into implementable advice.

Overall, these primarily qualitative and normative accomplishments reflect novelties and complexities of new sorts in economics, with the moral economic synthesis crowning the constellations established. They contribute to the human understanding of moral economic possibilities and structures in particular. The process and achievement of understanding are emphasized by the Nobel laureate Robert J. Aumann as a scientific value in and of itself (Bakó, 2008, pp. 156-157). However, it would be a misunderstanding to expect any theory to reveal the complete truth, the completeness of knowledge about reality, or its suitability for the direct shaping of daily practice and politics (Benczes, 2023). Moreover, it would prove to be an especially fruitless endeavour to enforce the comprehensive moral economic framework outlined on smaller scales or units, where initial conditions – due to viewing only an incomplete part of the whole – may not hold. For as Elinor Ostrom writes: “*Models are used inappropriately when applied to the study of problematic situations that do not closely fit the assumptions of the model.*” (2025, p. 82).

## 7.2. For further research

Devising an economic paradigm shift is an endeavor somewhat intuitive in its nature. Moral economics aims to reach ethical optima and closer-to-ideal states in economic science and practice, but requires further research into and refinement of the conditions, options, and possibilities of its underlying theory and realization. The research ideas listed below are taken from an organically evolving moral economic research idea “portfolio” of mine. Their order, however, does not reflect any dimension or category that they could have been arranged along.

First and foremost, the designed experiment ought to be funded and conducted, in order to provide a sufficiently punctual value for the marginal propensity to share upon increasing the awareness of rational selflessness in individuals. This could solidify the theorized effect.

Second, moral economics as a branch may serve to normatively categorise incentives, as examined in economics. This would involve reflections on the origins of the given incentives, their systemic context, as well as the scale of beneficiaries in the event of their effectiveness. In addition, the categorization could contribute to the elimination of the need to help others' (as a natural as well as economic incentive's) collective and increasing suppression.

Third, the established moral economic theories can be connected and extended to related fields. For the Gini coefficient, for instance, research may extend to the Lorenz curve and refine its interpretations through the broader perspective gained in this dissertation.

Fourth, through the dissertation's emphasis on the ecological perspective, parallels can be drawn between ecological and economic systems, focusing on the points where they clash, limit, or destroy each other, and contributing to a harmonious natural coexistence.

Fifth, the initiation of a needs theoretical renaissance, as encouraged by this doctoral research, could entail improvement in the classification, visualization, and measurement of human needs, and potentially those of fellow creatures. In a broader context, and in relation to need satisfaction, a method for quantifying and assessing the pleasure derived from helping others could be developed, thereby supporting the notion and theory of *rational selflessness*.

Sixth, the morality concept of moral economics ought to be continuously revisited and refined, as the branch evolves, in a philosophical framework.

Seventh, the notion of *rational selflessness* can be applied to economically paradoxical situations (thought experiments and real-world phenomena), promising a greater likelihood of resolution through an alternative perspective.

Eighth, benefitting from a combination of choice architecture and the concept of the need to help others, the research on gift architecture may be enriched.

Ninth, beyond the conceptualisation of rational selflessness, recognising its theory, both individually and collectively, could incentivize the maximization of interconnectedness for economic agents, according to their momentary capacities. This would require a more extensive conceptualisation and quantification of interconnectedness.

The eclectic nature of the areas and ideas listed reflects an endlessness from the possibilities of moral economics research. My dissertation has primarily explored and analyzed the incorporation of selflessness into economic theory. Other ethical elements, too, be they behaviourally relevant or more external, may deserve their space in the field of economics, with each element having designated a dissertation, if not a library, to it.

### 7.3. A technological outlook

Values are evolving, and so is the meaning of economic value itself. The consensus over the value of a medium of exchange, money, has brought technicolour to the evolution of economic systems. It is beyond imagination, in a positive sense, what a consensus of similar extent on moral economic values, such as rational selflessness, could bring.

The rational selflessness concept lifts the boundaries of interests between the individual and fellow living beings to a moral extent, making the hypothetical, Rawlsian „*veil of ignorance*” (1971, p. 136) become superfluous. The emerging moral networks would be stronger, institutionally, than material hierarchies.

In the persistent challenge of balancing allocation and progress, a revolution of selfless behaviours, combined with the technological revolution underway (Alsaleh, 2024), may bring about new economic possibilities. Combining institutions of rational selflessness with presently evolving technologies would likely enable a more sophisticated and efficient system of economic policies than could be forecasted. Artificial Intelligence and its regulation, however, must catch up with our moral potential in creating socioeconomic systems.

With technological advancements, individuals have the opportunity to surpass their economic agential limitations, such as the lack of information and highly restricted cognitive capacities. In a transparent environment, this technological augmentation would

mean that, from the incentives promoting the incorporation of others' welfare into individuals' interests, behaviour-based policy designs (relying on human "weaknesses", limitations) could lose their current advantages. If the need to help others is not explored and made aware of, to keep their systems together and sustain them, societies would be required to rely solely on neutral to inhumane economic and legal mechanisms again.

#### 7.4. Final remarks

Throughout the dissertation, and especially during the development of moral economic models, I have sought a balance between the tools of positive economics and normative ideas, between pragmatism and a critical attitude. Models of reality, however, remain incomplete, for reasons of real-world complexities, and for mathematical constraints, as in the mathematical incompleteness theorems of Kurt Gödel.

Within the field of economics, the realities of the economy, and in the interactions "in-between", we find coevolutions of order and chaos, in terms of both understanding and coordination. The benefit of interconnectedness meeting consensus – as in the case of an economic system and a medium of exchange – is ideologically and philosophically debatable. One important question is whether such a system would ultimately consume itself (environmental context inclusive). If an economy, accounting for technological change, would consume itself by laws of economics, this would constitute an impossibility theorem of the sharpest, and news to humans of the worst kind.

Moral economics, however, is a direction in which economic laws have been augmented by ethical elements. Between major economic schools of thought, moral economics represents a form of reconciliation, convergence, and a more fertile ground for progress in economic theory, while also signifying hope for the creation of a moral economy – reinterpreted.

## REFERENCES

- Adams, W. C. (2015). Conducting semi-structured interviews. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey (Eds.), *Handbook of practical program evaluation* (4th ed., pp. 492–505). Wiley. <https://doi.org/10.1002/9781119171386.ch19>
- Adelman, J. (2020). Introduction: The moral economy, the careers of a concept. *Humanity Journal*, 11(2). <http://humanityjournal.org/issue11-2/introduction-the-moral-economy-the-careers-of-a-concept/>
- Adeoye-Olatunde, O. A., & Olenik, N. L. (2021). Research and scholarly methods: Semi-structured interviews. *Journal of the American College of Clinical Pharmacy*, 4, 1358–1367. <https://doi.org/10.1002/jac5.1441>
- Agrawal, S., Sharma, N., Dhayal, K. S., & Esposito, L. (2024). From economic wealth to well-being: Exploring the importance of happiness economy for sustainable development through systematic literature review. *Quality and Quantity*, 58, 5503–5530. <https://doi.org/10.1007/s11135-024-01892-z>
- Aizcorbe, A., & Kortum, S. (2005). Moore's law and the semiconductor industry: A vintage model. *The Scandinavian Journal of Economics*, 107(4), 603–630. <https://www.jstor.org/stable/3441017>
- Akbulut, B. (2021). Degrowth. *Rethinking Marxism*, 33(1), 98–110. <https://doi.org/10.1080/08935696.2020.1847014>
- Almadi, S. (2021). *Academic paper writing, beginner course 2021, 5th session: Process and techniques of literature review, workbook* [Unpublished PowerPoint slides]. Department of World Economy, Corvinus University of Budapest.
- Alós-Ferrer, C., García-Segarra, J., & Ritschel, A. (2022). Generous with individuals and selfish to the masses. *Nature Human Behaviour*, 6, 88–96. <https://doi.org/10.1038/s41562-021-01170-0>
- Alsaleh, A. (2024). The impact of technological advancement on culture and society. *Scientific Reports*, 14, 32140. <https://doi.org/10.1038/s41598-024-83995-z>
- Andreoni, J. (1989). Giving with impure altruism: Applications to charity and Ricardian equivalence. *Journal of Political Economy*, 97(6), 1447–1458. <http://www.jstor.org/stable/1833247>
- Andreoni, J. (1990). Impure altruism and donations to public goods: A theory of warm-glow giving. *The Economic Journal*, 100(401), 464–477. <https://doi.org/10.2307/2234133>
- Anscombe, G. E. M., Rhees, R., & von Wright, G. H. (1999). *Philosophische Untersuchungen [Philosophical investigations]. The Ludwig Wittgenstein Project*. [https://www.wittgensteinproject.org/w/index.php/Philosophische Untersuchungen](https://www.wittgensteinproject.org/w/index.php/Philosophische_Untersuchungen)

Apponyi. (2021, June 29). A Henkel szárnyalása. Dicsőség vagy veszteség? [The soaring of Henkel. Glory or failure?]. *Holdblog*. <https://hold.hu/holdblog/a-henkel-szarnyalasa-dicsoseg-vagy-veszteseg/>

Aquinas, T. (1948). *Summa Theologica*, II-II, Question 66, Article 7 (J. G. Dawson, Trans.). In A. P. d'Entrèves (Ed.), *Selected political writings* (p. 171). Oxford University Press.

Arnsperger, C. (2005). Probing the moralization of capitalism problem: Democratic experimentalism and the co-evolution of norms. *International Social Science Journal*, 57, 433–444. <https://doi.org/10.1111/j.1468-2451.2005.561.x>

Arthur, W. B. (2013). *Complexity economics: A different framework for economic thought* (SFI Working Paper No. 2013-04-012). Santa Fe Institute. <https://www.santafe.edu/research/results/working-papers/complexity-economics-a-different-framework-for-eco/>

Arthur, W. B. (2021). Foundations of complexity economics. *Nature Reviews Physics*, 3, 136–145. <https://doi.org/10.1038/s42254-020-00273-3>

Australian Academy of Science. (n.d.). How many people can Earth actually support? <https://www.science.org.au/curious/earth-environment/how-many-people-can-earth-actually-support>

Azar, C., Holmberg, J., & Lindgren, K. (1996). Socio-ecological indicators for sustainability. *Ecological Economics*, 18(2), 89–112. [https://doi.org/10.1016/0921-8009\(96\)00028-6](https://doi.org/10.1016/0921-8009(96)00028-6)

Bakó, B. (2020). Kooperáció vagy konfliktus? [Cooperation or conflict?]. *Köz-Gazdaság – Review of Economic Theory and Policy*, 3(4), 153–164. <https://retp.eu/index.php/retp/article/view/1144>

Banerjee, A. V., & Duflo, E. (2003). Inequality and growth: What can the data say? *Journal of Economic Growth*, 8(3), 267–299. <http://www.jstor.org/stable/40215947>

Barker, T. (2020, April 7). The moral economy of the pandemic. *SPERI*. <https://speri.dept.shef.ac.uk/2020/04/07/the-moral-economy-of-the-pandemic/>

Bartus, G. (2008). Van-e a gazdasági tevékenységeknek termodinamikai korlátja? [Is there a thermodynamic constraint on economic activity?]. *Közgazdasági Szemle – Economic Review*, 55, 1010–1022. <https://epa.oszk.hu/00000/00017/00153/pdf/05.pdf>

Batson, C. D., & Moran, T. (1999). Empathy-induced altruism in a prisoner's dilemma. *European Journal of Social Psychology*, 29, 909–924. [https://doi.org/10.1002/\(SICI\)1099-0992\(199911\)29:7<909::AID-EJSP965>3.0.CO;2-L](https://doi.org/10.1002/(SICI)1099-0992(199911)29:7<909::AID-EJSP965>3.0.CO;2-L)

Bay, C. (1990). Taking the universality of human needs seriously. In J. Burton (Ed.), *Conflict: Human needs theory* (pp. 235–256). Palgrave Macmillan. <https://doi.org/10.1007/978-1-349-21000-8>

Békés, G., & Kézdi, G. (2021). *Data analysis for business, economics, and policy*. Cambridge University Press.

- Belina, A. (2023). Semi-structured interviewing as a tool for understanding informal civil society. *Voluntary Sector Review*, 14(2), 331–347. <https://doi.org/10.1332/204080522X16454629995872>
- Benczes, I. (2023). Interjú Szentes Tamással – An interview with Tamás Szentes (2019). In I. Benczes & Á. Szunomár (Eds.), *Változó világ*. Akadémiai Kiadó. <http://doi.org/10.1556/9789634548829>
- Bennett, M. R., & Einolf, C. J. (2017). Religion, altruism, and helping strangers: A multilevel analysis of 126 countries. *Journal for the Scientific Study of Religion*, 56, 323–341. <https://doi.org/10.1111/jssr.12328>
- Beresford, M., Wutich, A., Garrick, D., & Drew, G. (2022). Moral economies for water: A framework for analyzing norms of justice, economic behaviour, and social enforcement in the contexts of water inequality. *WIREs Water*, 10(2), e1627. <https://doi.org/10.1002/wat2.1627>
- Bettinger, E., & Slonim, R. (2006). Using experimental economics to measure the effects of a natural educational experiment on altruism. *Journal of Public Economics*, 90(8–9), 1625–1648. <https://doi.org/10.1016/j.jpubeco.2005.10.006>
- Bibó, I. (1990). A magyar társadalomfejlődés és az 1945. évi változás értelme [Hungarian social development and the meaning of the change in 1945]. In *Válogatott tanulmányok*. Bibó István Örökösei. <https://mek.oszk.hu/02000/02043/html/327.html> (Original work published 1947)
- Binmore, K. (1987). Experimental economics. *European Economic Review*, 31(1–2), 257–264. [https://doi.org/10.1016/0014-2921\(87\)90038-9](https://doi.org/10.1016/0014-2921(87)90038-9)
- Block, F. L. (2006, March 8). A moral economy. *The Nation*. <https://www.thenation.com/article/archive/moral-economy/>
- Blockley, D. (2022). Measures of obligation. *Cogent Business & Management*, 9(1), Article 2154101. <https://doi.org/10.1080/23311975.2022.2154101>
- Bolton, S., Laaser, K., & McGuire, D. (2016). Quality work and the moral economy of European employment policy. *Journal of Common Market Studies*, 54(3), 583–598. <https://doi.org/10.1111/jcms.12304>
- Bowles, S. (2016). *The moral economy: Why good incentives are no substitute for good citizens*. Yale University Press.
- Bowles, S., & Gintis, H. (2000). Reciprocity, self-interest, and the welfare state. *Nordic Journal of Political Economy*, 26, 33–53. [http://www.nopecjournal.org/NOPEC\\_2000\\_a02.pdf](http://www.nopecjournal.org/NOPEC_2000_a02.pdf)
- Brañas-Garza, P., Capraro, V., & Rascón-Ramírez, E. (2018). Gender differences in altruism on Mechanical Turk: Expectations and actual behaviour. *Economics Letters*, 170, 19–23. <https://doi.org/10.1016/j.econlet.2018.05.022>

Brooker, C. (Writer), & Wright, J. (Director). (2016, October 21). Nosedive (Season 3, Episode 1) [TV series episode]. In C. Brooker, A. Jones, & B. Reisz (Executive Producers), *Black Mirror*. Zeppotron.

Brown, C., & Zsolnai, L. (2018). Buddhist economics: An overview. *Society and Economy*, 40(4), 497–513. <https://doi.org/10.1556/204.2018.40.4.2>

Bruni, L., & Sugden, R. (2013). Reclaiming virtue ethics for economics. *Journal of Economic Perspectives*, 27(4), 141–164. <https://doi.org/10.1257/jep.27.4.141>

Calkins, K. G. (2005, July 28). Applied statistics: Lesson 11: Power and sample size. *Andrews University*. <https://www.andrews.edu/~calkins/math/edrm611/edrm11.htm>

Camerer, C. F., Dreber, A., Forsell, E., Ho, T.-H., Huber, J., Johannesson, M., *et al.* (2016). Evaluating replicability of laboratory experiments in economics. *Science*, 351(6280), 1433–1436. <https://doi.org/10.1126/science.aaf0918>

Capraro, V., & Perc, M. (2021). Mathematical foundations of moral preferences. *Journal of the Royal Society Interface*, 18(175), Article 20200880. <https://doi.org/10.1098/rsif.2020.0880>

Carlin, W., & Soskice, D. (2006). *Macroeconomics: Imperfections, institutions, and policies*. Oxford University Press.

Carrier, J. G. (2017). Moral economy: What's in a name? *Anthropological Theory*, 18(1), 18–35. <https://doi.org/10.1177/1463499617735259>

Carson, R. (1962). *Silent spring*. Houghton Mifflin.

Chávez, V. (2022). Cultural humility and social inclusion. In P. Liamputtong (Ed.), *Handbook of social inclusion* (pp. 129–144). Springer. [https://doi.org/10.1007/978-3-030-89594-5\\_7](https://doi.org/10.1007/978-3-030-89594-5_7)

Claas, L. (2015). *Moral impact of design* [Master's thesis, University of Twente]. [https://essay.utwente.nl/68060/1/Claas\\_MA\\_GW.pdf](https://essay.utwente.nl/68060/1/Claas_MA_GW.pdf)

Coase, R. H. (1960). The problem of social cost. *The Journal of Law and Economics*, 3, 1–44. <https://www.jstor.org/stable/724810>

Coffey, S. (2009, October). *Split or steal? A natural experiment of the prisoner's dilemma* (SSRN Working Paper). <https://doi.org/10.2139/ssrn.2700399>

Columbia University Irving Medical Center. (n.d.). *Discrete choice model and analysis*. <https://www.publichealth.columbia.edu/research/population-health-methods/discrete-choice-model-and-analysis>

Costanza, R., de Groot, R., Sutton, P., van der Ploeg, S., Anderson, S. J., Kubiszewski, I., *et al.* (2014). Changes in the global value of ecosystem services. *Global Environmental Change*, 26, 152–158. <https://doi.org/10.1016/j.gloenvcha.2014.04.002>

Costanza, R., Caniglia, E., Fioramonti, L., Kubiszewski, I., Lewis, H., Lovins, H., *et al.* (2018, April 17). Toward a sustainable wellbeing economy. *Solutions Journal*. <https://www.thesolutionsjournal.com/article/toward-sustainable-wellbeing-economy/>

- Daly, H. E. (1974). The economics of the steady state. *The American Economic Review*, 64(2), 15–21. <http://www.jstor.org/stable/1816010>
- Damgaard, C. (n.d.). Gini coefficient. In *MathWorld: A Wolfram web resource*. <https://mathworld.wolfram.com/GiniCoefficient.html>
- David, E. J. R., & Derthick, A. O. (2017). Oppression 101: An Overview. In E. J. R. David & A. O. Derthick, *The psychology of oppression*. Springer. <https://connect.springerpub.com/content/book/978-0-8261-7817-6/chapter/ch01>
- Deaton, A. (2022, December). Is economic failure an economics failure? *Project Syndicate*. <https://www.project-syndicate.org/magazine/economists-responsibility-for-bad-policies-and-outcomes-by-angus-deaton-2022-12>
- Dicastery for Promoting Integral Human Development. (2018). *Vocation of the business leader: A reflection*. <https://cas.stthomas.edu/media-library/documents/catholic-studies/vocation-of-the-business-leader.pdf>
- Dombi, J., & Málovics, Gy. (2015). A növekedésen túl – egy új irányzat hozzájárulása a fenntarthatósági vitához [Beyond growth – a new field's contribution to the sustainability debate]. *Közgazdasági Szemle – Economic Review*, 62(2), 200–221. <https://real.mtak.hu/21302/>
- Duignan, B. (2025, March 20). Occam's razor. In *Encyclopedia Britannica*. <https://www.britannica.com/topic/Occams-razor>
- Duke, A. (2007). A universal duty of good faith: an economic perspective. *Monash University Law Review*, 33(1), 182–202. <https://search.informit.org/doi/10.3316/ielapa.200805576>
- Dworkin, S. L. (2012). Sample size policy for qualitative studies using in-depth interviews. *Archives of Sexual Behavior*, 41, 1319–1320. <https://doi.org/10.1007/s10508-012-0016-6>
- Eldridge, S. (2022, December 22). Nash equilibrium. In *Encyclopedia Britannica*. <https://www.britannica.com/science/Nash-equilibrium>
- Etzioni, A. (1988). *The moral dimension: Toward a new economics*. The Free Press.
- European Parliament and Council of the European Union. (2021, June 30). Regulation (EU) 2021/1119 of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 (European Climate Law). *Official Journal of the European Union*, L 243, 1. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R1119>
- Fassin, D. (2009). Les économies morales revisitées. *Annales. Histoire, Sciences Sociales*, 64(6), 1237–1266. <https://doi.org/10.1017/S0395264900027499>

- Fehr, E., & Schmidt, K. M. (2006). The economics of fairness, reciprocity and altruism: Experimental evidence and new theories. In S. Kolm & J. M. Ythier (Eds.), *Handbook of the economics of giving, altruism and reciprocity* (Vol. 1, pp. 615–691). Elsevier. <https://www.et.econ.uni-muenchen.de/personen/professor/schmidt/publikationen/papers/reciprocalc.pdf>
- Feldman, B. (2020, March 16). *Split or Steal* is a video game about cooperation, not sure why that'd be relevant right now. *Intelligencer*. <https://nymag.com/intelligencer/2020/03/why-split-or-steal-is-so-compelling.html>
- Ferguson, N. (2011). *Civilization: The West and the Rest*. Penguin Books.
- Finnis, J. (2021). Aquinas' moral, political, and legal philosophy. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Spring 2021 ed.). <https://plato.stanford.edu/archives/spr2021/entries/aquinas-moral-political/>
- Fisher, K. (n.d.). Max-Neef on human needs and human-scale development. *Rainforest Information Centre*. <http://www.rainforestinfo.org.au/background/maxneef.htm>
- Fisher, R. J. (1990). Needs theory, social identity and an eclectic model of conflict. In J. Burton (Ed.), *Conflict: Human needs theory* (pp. 89–112). Palgrave Macmillan. <https://doi.org/10.1007/978-1-349-21000-8>
- Foley, J. (n.d.). New tech won't save us from climate change. Here's what will. *BBC Science Focus*. <https://www.sciencefocus.com/nature/climate-change-tech-solution>
- Friedman, Y. (1990). The role of knowledge in conflict resolution. In J. Burton (Ed.), *Conflict: Human needs theory* (pp. 257–264). Palgrave Macmillan. <https://doi.org/10.1007/978-1-349-21000-8>
- Future of Life Institute. (2023, March 22). Pause giant AI experiments: An open letter. <https://futureoflife.org/open-letter/pause-giant-ai-experiments/>
- Gasca, P. (2019, August 20). In this single statement, CEOs from the largest U.S. corporations just changed the purpose of business. *Inc.* <https://www.inc.com/peter-gasca/in-this-single-statement-ceos-from-largest-us-corporations-just-changed-purpose-of-business.html>
- Gébert, J., Bajmócy, Z., Málóvics, G., Juhász, J., & Méreiné Berki, B. (2023). The role of moral values in urban planning: Can the capability approach make a contribution? *Regional Science Policy & Practice*, 15(2), 357-371. <https://doi.org/10.1111/rsp3.12624>
- Georgescu-Roegen, N. (1971). *The entropy law and the economic process*. Harvard University Press. <https://doi.org/10.4159/harvard.9780674281653>
- Gert, B., & Gert, J. (2020). The definition of morality. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Fall 2020 ed.). <https://plato.stanford.edu/archives/fall2020/entries/morality-definition/>
- Ghaleb, B. D. S. (2024). Towards a dynamic model of human needs: A critical analysis of Maslow's hierarchy. *International Journal of Multidisciplinary Approach Research and Science*, 2(03), 1028–1046. <https://doi.org/10.59653/ijmars.v2i03.674>

- Gibran, K. (1923). *The prophet*. Project Gutenberg. <https://www.gutenberg.org/files/58585/58585-h/58585-h.htm>
- Gilliam, D. A., & Rayburn, S. W. (2016). Propensity for reciprocity among frontline employees. *Journal of Services Marketing*, 30(3), 290–301. <https://doi.org/10.1108/JSM-05-2015-0194>
- Gillwald, K. (1990). Conflict and needs research. In J. Burton (Ed.), *Conflict: Human needs theory* (pp. 115–124). Palgrave Macmillan. <https://doi.org/10.1007/978-1-349-21000-8>
- Gintis, H. (2000). Beyond *Homo economicus*: Evidence from experimental economics. *Ecological Economics*, 35(3), 311–322. [https://doi.org/10.1016/S0921-8009\(00\)00216-0](https://doi.org/10.1016/S0921-8009(00)00216-0)
- Glasman, J. (2020). *Humanitarianism and the quantification of human needs* (1st ed.). Taylor & Francis. (Original work published 2019)
- Godechot, O., Tomaskovic-Devey, D., Boza, I., Henriksen, L. F., Hermansen, A. S., Hou, F., Jung, J., Kodama, N., Křížková, A., Lippényi, Z., Melzer, S. M., Mun, E., Sabanci, H., Thaning, M., Apascaritei, P., Avent-Holt, D., Bandelj, N., Baudour, A., Cort, D., . . . Soener, M. (2024). The great separation: Top earner segregation at work in advanced capitalist economies. *American Journal of Sociology*, 130(2), 439–495. <https://doi.org/10.1086/731603>
- Goodin, R. E. (1982). *Political theory and public policy*. University of Chicago Press.
- Götz, N. (2015). 'Moral economy': Its conceptual history and analytical prospects. *Journal of Global Ethics*, 11(2), 147–162. <https://doi.org/10.1080/17449626.2015.1054556>
- Gough, I. (1994). Economic institutions and the satisfaction of human needs. *Journal of Economic Issues*, 28(1), 25–66. [http://eprints.lse.ac.uk/60819/1/lse.ac.uk\\_storage\\_LIBRARY\\_Secondary\\_libfile\\_shared\\_repository\\_Content\\_Gough,%20I\\_Economic%20institutions\\_Gough\\_Economic%20institutions\\_2015.pdf](http://eprints.lse.ac.uk/60819/1/lse.ac.uk_storage_LIBRARY_Secondary_libfile_shared_repository_Content_Gough,%20I_Economic%20institutions_Gough_Economic%20institutions_2015.pdf)
- Grannan, C. (n.d.). What's the difference between morality and ethics? In *Encyclopedia Britannica*. <https://www.britannica.com/story/whats-the-difference-between-morality-and-ethics>
- Guler Aydin, D., & Ozer-Imer, I. (2018). At the crossroads of history and theory: Weber, Schumpeter and economic sociology. *Panoeconomicus*, 66(4), 465–485. <https://doi.org/10.2298/PAN160531006G>
- Guillen-Royo, M. (2020). Applying the fundamental human needs approach to sustainable consumption corridors: Participatory workshops involving information and communication technologies. *Sustainability: Science, Practice and Policy*, 16(1), 114–127. <https://doi.org/10.1080/15487733.2020.1787311>
- Györffy, D. (2020). A bizalom [Trust]. In K. Szabó, Z. Bara, & B. Hámori (Eds.), *Intézményi közgazdaságtan [Institutional economics]*. Akadémiai Kiadó. [https://mersz.hu/dokumentum/m704ik\\_1/](https://mersz.hu/dokumentum/m704ik_1/)

Györffy, D. (2022). *Research design: Qualitative data and analysis* (Lecture 8) [PowerPoint slides]. Corvinus University of Budapest.

Hajnal, Zs. (2015). Írott és íratlan értékek az ENSZ Alapokmányának Preambulumában: Az emberi együttélés és haladás axiómái [Written and unwritten values in the preamble of the United Nations Charter: The axioms of human coexistence and progress]. *Grotius*. <http://www.grotius.hu/publ/displ.asp?id=MOMPOO>

Hajnal, Zs. (2021). Moral economics: A theoretical basis for building the next economic system. In P. Róna, L. Zsolnai, & A. Wincewicz-Price (Eds.), *Virtues and economics: Vol. 6. Words, objects and events in economics* (pp. 63–90). Springer. [https://doi.org/10.1007/978-3-030-52673-3\\_5](https://doi.org/10.1007/978-3-030-52673-3_5)

Hajnal, Zs. (2024, January 2). Impact of the awareness of rational selflessness on individuals' marginal propensity to reciprocate. *AEA RCT Registry*. <https://doi.org/10.1257/rct.12763-1.0>

Hámori, B. (1999). Would you marry your daughter to *Homo economicus*? Re-evaluating reciprocal altruism. *Társadalom És Gazdaság Közép- És Kelet-Európában / Society and Economy in Central and Eastern Europe*, 21(1), 21–42. <http://www.jstor.org/stable/41468405>

Hámori, B. (2002, October 3–5). The rationality of altruism in transitory economies [Paper presentation]. *Evolution of Institutions and the Knowledge Economy*, Debrecen, Hungary.

Hámori, B. (2023). *Lectures in Behavioural Economics: Altruism and the Economy* [PowerPoint slides]. Institute of Economics. Corvinus University of Budapest.

Hámori, B., & Szabó, K. (2016). Reinventing innovation. In M. Rosta & B. Hámori (Eds.), *Constraints and driving forces in economic systems: Studies in honour of János Kornai*. Cambridge Scholars Publishing.

Hawken, P., Lovins, A. B., & Lovins, L. H. (1999). *Natural capitalism: Creating the next industrial revolution* (1st ed.). Little, Brown and Co.

Hay, I., & Muller, S. (2013). Questioning generosity in the golden age of philanthropy: Towards critical geographies of super-philanthropy. *Progress in Human Geography*, 38(5), 635–653. <https://doi.org/10.1177/0309132513500893>

Heath, J. (2014). *Morality, Competition, and the Firm: The Market Failures Approach to Business Ethics*. Oxford University Press.

Heidegger, M. (1954). *Die Frage nach der Technik* [The question concerning technology]. <https://www.bard.edu/library/arendt/pdfs/Heidegger-Frage.pdf>

Heise, H. (1991). Beauvoir's ethics of ambiguity: An appreciation. *Simone de Beauvoir Studies*, 8, 175–182. <http://www.jstor.org/stable/45173518>

Helgadóttir, O. (2021). How to make a super-model: Professional incentives and the birth of contemporary macroeconomics. *Review of International Political Economy*, 28(6), 1680–1707. <https://doi.org/10.1080/09692290.2021.1997786>

- Hertog, S. (2013). *The association between two measures of inequality in human development: Income and life expectancy*. United Nations. <https://www.un.org/en/development/desa/population/publications/pdf/technical/TP2013-7.pdf>
- Hobbes, T. (1651). *Leviathan*. Project Gutenberg. <https://www.gutenberg.org/files/3207/3207-h/3207-h.htm>
- Hoekstra, R., & Vazire, S. (2021). Aspiring to greater intellectual humility in science. *Nature Human Behaviour*, 5, 1602–1607. <https://doi.org/10.1038/s41562-021-01203-8>
- Hoffmann, L., Basedau, M., Gobien, S., & Prediger, S. (2020). Universal love or one true religion? Experimental evidence of the ambivalent effect of religious ideas on altruism and discrimination. *American Journal of Political Science*, 64, 603–620. <https://doi.org/10.1111/ajps.12479>
- Hogan, B. (2021). What is economics for? In P. Róna, L. Zsolnai, & A. Winczewicz-Price (Eds.), *Virtues and economics: Vol. 6. Words, objects and events in economics* (pp. 33–44). Springer. [https://doi.org/10.1007/978-3-030-52673-3\\_3](https://doi.org/10.1007/978-3-030-52673-3_3)
- Horn, D., & Bekes, G. (2023). *DA4 lecture 01: A framework for causal analysis* [PowerPoint slides]. Institute of Economics, Corvinus University of Budapest.
- Horodecka, A., & Vozna, L. (2021). Between individual and collective rationality. In P. Róna, L. Zsolnai, & A. Winczewicz-Price (Eds.), *Virtues and economics: Vol. 6. Words, objects and events in economics* (pp. 139–158). Springer. [https://doi.org/10.1007/978-3-030-52673-3\\_9](https://doi.org/10.1007/978-3-030-52673-3_9)
- Hruschka, J. (1991). The greatest happiness principle and other early German anticipations of utilitarian theory. *Utilitas*, 3(2), 165–177. <https://doi.org/10.1017/S0953820800000650>
- HWISE-RCN. (2021, November 12). Moral economies and water insecurity [Video]. YouTube. <https://www.youtube.com/watch?v=ZsfiRy2a-K4>
- Javaid, M., Haleem, A., Singh, R. P., & Sinha, A. K. (2024). Digital economy to improve the culture of industry 4.0: A study on features, implementation and challenges. *Green Technologies and Sustainability*, 2(2), Article 100083. <https://doi.org/10.1016/j.grets.2024.100083>
- Jebb, A. T., Tay, L., Diener, E., & Oishi, S. (2018). Happiness, income satiation and turning points around the world. *Nature Human Behaviour*, 2, 33–38. <https://doi.org/10.1038/s41562-017-0277-0>
- Jennings, G. R. (2005). Social science methods used in business. In *Encyclopedia of social measurement* (pp. 219–230). Elsevier. <https://doi.org/10.1016/B0-12-369398-5/00270-X>
- Josephson, P. R. (2002). *Industrialized nature: Brute force technology and the transformation of the natural world*. Shearwater Books.

Jost, J. T., Wakslak, C. J., & Tyler, T. R. (2008). System justification theory and the alleviation of emotional distress: Palliative effects of ideology in an arbitrary social hierarchy and in society. In K. A. Hegtvedt & J. Clay-Warner (Eds.), *Advances in group processes: Vol. 25. Justice* (pp. 181–211). Emerald Group Publishing Limited. [https://doi.org/10.1016/S0882-6145\(08\)25012-5](https://doi.org/10.1016/S0882-6145(08)25012-5)

Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the National Academy of Sciences of the United States of America*, 107(38), 16489–16493. <https://doi.org/10.1073/pnas.1011492107>

Kahneman, D., Wakker, P. P., & Sarin, R. (1997). Back to Bentham? Explorations of experienced utility. *The Quarterly Journal of Economics*, 112(2), 375–406. <https://doi.org/10.1162/003355397555235>

Kahneman, D. (1999). Objective happiness. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 3–25). Russell Sage Foundation.

Kahneman, D., & Krueger, A. B. (2006). Developments in the measurement of subjective well-being. *Journal of Economic Perspectives*, 20(1), 3–24. <https://doi.org/10.1257/089533006776526030>

Kallis, G. (2019). *Limits: Why Malthus was wrong and why environmentalists should care*. Stanford University Press.

Keane, W. (2019). How everyday ethics becomes a moral economy, and vice versa (Economics Discussion Papers No. 2019-9). Kiel Institute for the World Economy. <http://www.economics-ejournal.org/economics/discussionpapers/2019-9>

Keynes, J. M. (1963). Economic possibilities for our grandchildren. In *Essays in persuasion* (pp. 358–373). W. W. Norton & Co. <http://www.econ.yale.edu/smith/econ116a/keynes1.pdf> (Original work published 1930)

Kidd, I. J. (2014). Humility and History. *Think*, 13(38), 59–68. <https://doi.org/10.1017/S1477175614000098>

Kirman, A., & Teschl, M. (2010). Do markets foster selfishness? *Revue de philosophie économique / Review of Economic Philosophy*, 11, 113–140. <https://doi.org/10.3917/rpec.111.0113>

Kolm, S. Ch. (2014, April 4). Altruism in economic thought [Conference presentation]. *The Human Person, Economics, and Catholic Social Thought*, Lumen Christi Institute, University of Chicago, United States. <http://sergekolm.org/wp-content/uploads/2014/04/Chicago13April2014.pdf>

Konow, J. (2010). Mixed feelings: Theories of and evidence on giving. *Journal of Public Economics*, 94(3–4), 279–297. <https://doi.org/10.1016/j.jpubeco.2009.11.008>

Kornbluth, J., & Gilman, S. (Directors). (2017). *Saving capitalism* [Film; R. Reich, narrator]. Netflix. <https://www.netflix.com/title/80127558>

- Kovács, G., & Zsolnai, L. (2025). Economic conceptions and business models of Christianity and Buddhism. *Business and Society Review*, 130(1), 4–17. <https://doi.org/10.1111/basr.70000>
- Kovács, M. (2023, December 18). Flourishing of human and non-human life on Earth cannot be achieved by self-interested behaviour. *Corvinus News*. <https://www.uni-corvinus.hu/post/hir/flourishing-of-human-and-non-human-life-on-earth-cannot-be-achieved-by-self-interested-behaviour/?lang=en>
- Kovács, O. (2023). *Complexity economics: Economic governance, science and policy* (Routledge Studies in Economic Theory, Method and Philosophy, 1st ed.). Routledge.
- Kőszegi, B., & Rabin, M. (2008). Choices, situations, and happiness. *Journal of Public Economics*, 92(8–9), 1821–1832. <https://doi.org/10.1016/j.jpubeco.2008.04.010>
- Kranton, R. E. (1996). Reciprocal exchange: A self-sustaining system. *The American Economic Review*, 86(4), 830–851. <http://www.jstor.org/stable/2118307>
- Kuhn, S. (2019). Prisoner's dilemma. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Winter 2019 ed.). <https://plato.stanford.edu/archives/win2019/entries/prisoner-dilemma/>
- Kuzminski, A. (1973). The paradox of historical knowledge. *History and Theory*, 12(3), 269–289. <https://doi.org/10.2307/2504717>
- Lakner, C., & Milanovic, B. (2016). Global income distribution: From the fall of the Berlin Wall to the Great Recession. *The World Bank Economic Review*, 30(2), 203–232. <https://doi.org/10.1093/wber/lhv039>
- Lemoine, B. (2022, June 11). Is LaMDA sentient? An interview. *Medium*. <https://cajundiscordian.medium.com/is-lambda-sentient-an-interview-ea64d916d917>
- Levi, M. (2018, November). *A call for a moral economy* [Video]. TED Conferences. [https://www.ted.com/talks/margaret\\_levi\\_a\\_call\\_for\\_a\\_moral\\_economy](https://www.ted.com/talks/margaret_levi_a_call_for_a_moral_economy)
- Longhurst, R. (2016). Semi-structured interviews and focus groups. In N. Clifford, M. Cope, T. Gillespie, & S. French (Eds.), *Key methods in geography* (3rd ed.). SAGE Publications.
- Lopes, R. (Host). (2022, April). #614 Andrew Sayer – *Why we can't afford the rich: Economic inequality, and where it stems from* [Audio podcast episode]. In *The Dissenter*. <https://open.spotify.com/episode/44ctxI2gGO7w2jNASAT7Ec>
- Magnuson, J. C. (2007). Pathways to a mindful economy. *Society and Economy*, 29(2), 253–284. <https://www.jstor.org/stable/41472084>
- Mankiw, G. N. (2021). *Principles of economics* (9th ed.). Cengage Learning.
- Marshall, A. (2013). *Principles of economics*. Palgrave Macmillan. <https://doi.org/10.1057/9781137375261> (Original work published 1890)

- Mazzucato, M. (2024). Collective value creation: a new approach to stakeholder value. *International Review of Applied Economics*, 38(1–2), 43–57. <https://doi.org/10.1080/02692171.2022.2144149>
- McArthur, J., & Sachs, J. D. (2002). *The growth competitiveness index: Measuring technological advancement and the stages of development*. Center for International Development at Harvard University. [https://www.earth.columbia.edu/sitefiles/file/Sachs%20Writing/2002/WorldEconomicForum\\_2001-2002\\_GlobalCompetitivenessReport2001-2002\\_GrowthCompetitivenessIndex.pdf](https://www.earth.columbia.edu/sitefiles/file/Sachs%20Writing/2002/WorldEconomicForum_2001-2002_GlobalCompetitivenessReport2001-2002_GrowthCompetitivenessIndex.pdf)
- McCain, R. (1993). The hierarchy of need and moral economics. *Forum for Social Economics*, 22(2), 1–21. <https://doi.org/10.1007/BF02826153>
- McCain, R. A. (2019). *Welfare economics: An interpretive history* (1st ed.). Routledge. <https://doi.org/10.4324/9781315543116>
- Meadows, D., Randers, J., & Meadows, D. (2013). *The limits to growth* (1972). In L. Robin, S. Sörlin, & P. Warde (Eds.), *The future of nature: Documents of global change* (pp. 101–116). Yale University Press. <https://doi.org/10.12987/9780300188479-012>
- Mihailov, E. (2025). Enlightened beneficence: A Kantian alternative to effective altruism. *Res Publica*. <https://doi.org/10.1007/s11158-025-09727-w>
- Mill, J. S. (1863). *Utilitarianism*. <https://www.utilitarianism.com/mill1.htm>
- Mitchell, C. (1990). Necessitous man and conflict resolution: More basic questions about basic human needs theory. In J. Burton (Ed.), *Conflict: Human needs theory* (pp. 149–176). Palgrave Macmillan. <https://doi.org/10.1007/978-1-349-21000-8>
- Moreno-Tejada, J. (2020, November). Moral economy. *Global South Studies: A Collective Publication with The Global South*. <https://globalsouthstudies.as.virginia.edu/key-concepts/moral-economy>
- Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice*, 24(1), 9–18. <https://doi.org/10.1080/13814788.2017.1375091>
- Mullainathan, S., & Thaler, R. H. (2000, October). *Behavioural economics* (NBER Working Paper No. 7948). National Bureau of Economic Research. <https://www.nber.org/papers/w7948>
- Naughton, M. J., Alford, H. J., & Brady, B. (1995). The common good and the purpose of the firm. *Journal of Human Values*, 1(2), 221–237.
- Negru, I., & Dolfsma, W. (2022). Towards a concept of responsibility for economics. *New Political Economy*. <https://doi.org/10.1080/13563467.2022.2038116>
- Nielsen, B. N. (2006, September). The human needs are not infinite and insatiable. *Dalum Hjallesse Debate Club*. <https://www.dandebate.dk/eng-behov.htm>

- Nordhaus, W. D. (1969). An economic theory of technological change. *The American Economic Review*, 59(2), 18–28. <https://www.jstor.org/stable/1823649>
- Novotney, A. (2014, February 1). The psychology of scarcity. *Monitor on Psychology*, 45(2). <https://www.apa.org/monitor/2014/02/scarcity>
- Nussbaum, M. C. (2012). Who is the happy warrior? Philosophy, happiness research, and public policy. *International Review of Economics*, 59, 335–361. <https://doi.org/10.1007/s12232-012-0168-7>
- O'Neill, D. W., Fanning, A. L., Lamb, W. F., & Steinberger, J. K. (2018). A good life for all within planetary boundaries. *Nature Sustainability*, 1, 88–95. <https://www.nature.com/articles/s41893-018-0021-4>
- OECD. (2022a). *Science, technology and innovation scoreboard*. <https://www.oecd.org/sti/scoreboard.htm>
- OECD. (2022b). *Science, technology and innovation outlook*. <https://www.oecd.org/sti/science-technology-innovation-outlook/>
- OECD. (2022c). *STIP compass*. <https://stip.oecd.org/stip/>
- OECD. (2023). *Income distribution* [Data set]. OECD Social and Welfare Statistics. <https://doi.org/10.1787/data-00654-en>
- Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2022). A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Medical Teacher*, 45(3), 241–251. <https://doi.org/10.1080/0142159X.2022.2057287>
- Ompad, D. C., Galea, S., & Vlahov, D. (2008). Urban health systems: Overview. In K. Heggenhougen & S. Quah (Eds.), *International encyclopedia of public health* (pp. 463–470). Academic Press. <https://doi.org/10.1016/B978-012373960-5.00323-3>
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.
- Ostrom, E. (2025). Doing institutional analysis: Digging deeper than markets and hierarchies. In C. Ménard & M. M. Shirley (Eds.), *Handbook of new institutional economics* (pp. 73–102). Springer. [https://doi.org/10.1007/978-3-031-50810-3\\_5](https://doi.org/10.1007/978-3-031-50810-3_5)
- Palaiologos, Y. (2020, April 27). Amartya Sen: Economics needs a moral awakening. *ekathimerini.com*. <https://www.ekathimerini.com/economy/252023/amartya-sen-economics-needs-a-moral-awakening/>
- Palomera, J., & Vetta, T. (2016). Moral economy: Rethinking a radical concept. *Anthropological Theory*, 16(4), 413–432. <https://doi.org/10.1177/1463499616678097>
- Pascal, B. (2006). *Pascal's Pensées* [Ebook] (Original work published 1670). Project Gutenberg. <https://www.gutenberg.org/files/18269/18269-h/18269-h.htm>
- Pearlstein, S. (2020). *Moral capitalism*. St. Martin's Griffin.

- Perchard, A. (2007). Class struggle in the Highlands [Review of the book *Custom and conflict in the 'Land of the Gael': Ballachulish, 1900–1910*, by N. Kirk]. <https://www.eupublishing.com/doi/pdf/10.3366/nor.2007.0020>
- Perilla Jimenez, J. R. (2019). Mainstream and evolutionary views of technology, economic growth and catching up. *Journal of Evolutionary Economics*, 29, 823–852. <https://doi.org/10.1007/s00191-019-00606-1>
- Piff, P., & Robinson, A. (2016, October 17). Wealth can make us selfish and stingy: Two psychologists explain why. *World Economic Forum*. <https://www.weforum.org/stories/2016/10/wealth-can-make-us-selfish-and-stingy-two-psychologists-explain-why/>
- Pigou, A. C. (1932). *The economics of welfare* (4th ed.; Original work published 1920). Macmillan and Co., Limited.
- Pinker, S. (2011). *The better angels of our nature: Why violence has declined*. Penguin Publishing Group.
- Pinker, S. (2023, April 19). Rationality. *Encyclopedia Britannica*. <https://www.britannica.com/topic/rationality>
- Piketty, T. (2014). *Capital in the twenty-first century*. The Belknap Press of Harvard University Press.
- Plato. (1892). *The dialogues of Plato* (B. Jowett, Trans.; 3rd ed.). Oxford University Press. <https://archive.org/details/Jowett-3rded-ebox-set/Jowett-3rded-v1/> (Original work published ca. 380 BCE)
- Polanyi, K. (1963). *The great transformation* (4th ed.). Beacon Press. (Original work published 1944)
- Polasky, S., Kling, C. L., Levin, S. A., Carpenter, S. R., Daily, G. C., Ehrlich, P. R., . . . Lubchenco, J. (2019). Role of economics in analyzing the environment and sustainable development. *Proceedings of the National Academy of Sciences of the United States of America*, 116(12), 5233–5238. <https://doi.org/10.1073/pnas.1901616116>
- Porter, M. (1990). *The competitive advantage of nations*. The Free Press.
- Rachlin, H. (2002). Altruism and selfishness. *Behavioral and Brain Sciences*, 25(2), 239–250. <https://doi.org/10.1017/S0140525X02000055>
- Rader, V. (1990). Human needs and the modernization of poverty. In J. Burton (Ed.), *Conflict: Human needs theory* (pp. 219–234). Palgrave Macmillan. <https://doi.org/10.1007/978-1-349-21000-8>
- Ramos Pinto, P. (2021, June 30). Conclusions and comments [Conference presentation]. *The History and Future of the Moral Economy*, Online. [https://socialhistory.org.uk/shs\\_event/the-history-and-the-future-of-the-moral-economy/](https://socialhistory.org.uk/shs_event/the-history-and-the-future-of-the-moral-economy/)

- Ranaldi, M. (2023). *Fractal theory of income distribution* (Stone Center on Socio-Economic Inequality Working Paper). Stone Center on Socio-Economic Inequality. <https://doi.org/10.31235/osf.io/9gj6d>
- Rawls, J. (1971). *A theory of justice: Original edition*. Harvard University Press.
- Raworth, K. (2018). *Doughnut economics: Seven ways to think like a 21st-century economist*. Chelsea Green Publishing.
- Ricardo, D. (2018). *On the principles of political economy and taxation*. Econlib. <https://www.econlib.org/library/Ricardo/ricP.html> (Original work published 1817)
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., III, Lambin, E., . . . Foley, J. (2009). Planetary boundaries: Exploring the safe operating space for humanity. *Ecology and Society*, 14(2), Article 32. <https://www.ecologyandsociety.org/vol14/iss2/art32/>
- Rockström, J., Kotzé, L., Milutinović, S., Biermann, F., Brovkin, V., Donges, J., . . . Steffen, W. (2024). The planetary commons: A new paradigm for safeguarding Earth-regulating systems in the Anthropocene. *Proceedings of the National Academy of Sciences of the United States of America*, 121(5), Article e2301531121. <https://doi.org/10.1073/pnas.2301531121>
- Rogan, T. (2017). *The moral economists: R. H. Tawney, Karl Polanyi, E. P. Thompson, and the critique of capitalism*. Princeton University Press.
- Romer, P. M. (1994). The origins of endogenous growth. *The Journal of Economic Perspectives*, 8(1), 3–22. <http://www.jstor.org/stable/2138148>
- Rosebury, B. (2021). Informed altruism and utilitarianism. *Social Theory and Practice*, 47(4), 717–746. <https://www.jstor.org/stable/48665171>
- Roux, C., Goldsmith, K., & Bonezzi, A. (2015). On the psychology of scarcity: When reminders of resource scarcity promote selfish (and generous) behaviour. *Journal of Consumer Research*, 42(4), 615–631. <https://www.jstor.org/stable/26570233>
- Roy, R. (1990). Social conflicts and needs theories: Some observations. In J. Burton (Ed.), *Conflict: Human needs theory* (pp. 125–148). Palgrave Macmillan. <https://doi.org/10.1007/978-1-349-21000-8>
- Rubenstein, R. E. (2001). Basic human needs: The next steps in theory development. *The International Journal of Peace Studies*, 6(1). [https://www3.gmu.edu/programs/icar/ijps/vol6\\_1/Rubenstein.htm](https://www3.gmu.edu/programs/icar/ijps/vol6_1/Rubenstein.htm)
- Sadeghi-Boroujerdi, E. (2023). Iran's uprisings for 'Women, Life, Freedom': Over-determination, crisis, and the lineages of revolt. *Politics*, 43(3), 404–438. <https://doi.org/10.1177/02633957231159351>
- Salverda, T. (2021). Multiscalar moral economy. *Focaal*, 2021(89), 79–92. <https://www.berghahnjournals.com/view/journals/focaal/2021/89/fcl890107.xml>
- Samuelson, P. A., & Nordhaus, W. D. (2010). *Economics* (19th ed.). McGraw Hill.

- Sandberg, J. (2015). Moral economy and normative ethics. *Journal of Global Ethics*, 11(2), 176–187. <https://doi.org/10.1080/17449626.2015.1054557>
- Sandel, M. J. (2013). Market reasoning as moral reasoning: Why economists should re-engage with political philosophy. *Journal of Economic Perspectives*, 27(4), 121–140. <https://doi.org/10.1257/jep.27.4.121>
- Schumm, W. R., Crawford, D. W., & Lockett, L. (2019). Patterns of means and standard deviations with binary variables: A key to detecting fraudulent research. *Biomedical Journal of Scientific and Technical Research*, 23(1), 17151–17153. <https://biomedres.us/fulltexts/BJSTR.MS.ID.003851.php>
- Scott, J. C. (1976). *The moral economy of the peasant: Rebellion and subsistence in Southeast Asia*. Yale University Press. <http://www.jstor.org/stable/j.ctt1bh4cdk>
- Sen, A. K. (1987). *On ethics and economics*. Blackwell. <https://alvaroaltamirano.files.wordpress.com/2010/05/amartya-sen-on-ethics-and-economics.pdf>
- Sen, A. K. (1994). Well-being, capability and public policy. *Giornale degli Economisti e Annali di Economia*, 53(7/9), 333–347. <http://www.jstor.org/stable/23247762>
- Seo, S. N. (2017). Breakthrough technologies: Technological innovations as an alternative global warming solution. In *The behavioural economics of climate change* (pp. 139–183). Academic Press. <https://www.sciencedirect.com/science/article/abs/pii/B9780128118740000052?via%3Dihub>
- Settlement. (n.d.). In *Oxford Languages* (via Google).
- Shatz, M. S. (2008). Preface. In P. Kropotkin, *The conquest of bread* (pp. 2–4). Tutis Digital Publishing.
- Siméant, J. (2015). Three bodies of moral economy: The diffusion of a concept. *Journal of Global Ethics*, 11(2), 163–175. <https://doi.org/10.1080/17449626.2015.1054559>
- Simon, H. A. (1957). *Models of man*. John Wiley.
- Singer, P. (1972). Famine, affluence, and morality. *Philosophy and Public Affairs*, 1(3), 229–243. <http://www.jstor.org/stable/2265052>
- SNF Agora Conversations. (2020, April 3). Imagining a new moral economy [Webcast]. <https://snfagora.jhu.edu/event/imagining-a-new-moral-economy/>
- Smith, A. (n.d.). *The theory of moral sentiments*. Marxists Internet Archive. <https://www.marxists.org/reference/archive/smith-adam/works/moral/index.htm> (Original work published 1759)
- Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations*.
- Soppe, A. (2007). Ethical theory of the firm. In L. Zsolnai (Ed.), *Ethics in the economy* (pp. 81–104). Peter Lang.

- Soylu, F. E. (2024). Epistemological and ontological indeterminism: Hayek and Schumpeter. *Panoeconomicus*, 71(1), 25–69. <https://doi.org/10.2298/PAN200602025S>
- St. Martin of Tours. (2023a, January 1). In *Encyclopaedia Britannica*. <https://www.britannica.com/biography/Saint-Martin-of-Tours>
- Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., ... Sörlin, S. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347(6223), 1259855. <https://doi.org/10.1126/science.1259855>
- Sterba, J. P. (2005). Global justice for humans or for all living beings and what difference it makes. *The Journal of Ethics*, 9, 283–300. <https://doi.org/10.1007/s10892-004-3330-y>
- Stukovszky, T. (2022). *Az innováció alakulása válság idején a 21. századi EU járműiparában* [Innovation in the 21st-century EU automotive industry in times of crisis] (Doctoral dissertation). Corvinus University of Budapest. <https://phd.lib.uni-corvinus.hu/1197/>
- Sugden, R. (2013). The behavioural economist and the social planner: To whom should behavioural welfare economics be addressed? *Inquiry*, 56(5), 519–538. <https://doi.org/10.1080/0020174X.2013.806139>
- Svoboda, T. (2025). *A philosophical case for ecological pessimism*. Routledge.
- Szabó, K. (1998). *Közgazdasági kísérletek* [Economic experiments]. *Magyar Tudomány*, 4, 397–410. [http://real-j.mtak.hu/155/1/MATUD\\_1998.pdf](http://real-j.mtak.hu/155/1/MATUD_1998.pdf)
- Szanyi, M. (2021). Catching-up opportunities of East-Central European states in the context of technology cycles. In T. Gerócs & J. Ricz (Eds.), *The post-crisis developmental state* (pp. 53–74). Palgrave Macmillan. [https://doi.org/10.1007/978-3-030-71987-6\\_4](https://doi.org/10.1007/978-3-030-71987-6_4)
- Technology. (2023b, June 21). In *Encyclopaedia Britannica*. <https://www.britannica.com/technology/technology>
- Thaler, R. H., Sunstein, C. R., & Balz, J. P. (2014). *Choice architecture*. <https://faculty.chicagobooth.edu/~media/faculty/richard-thaler/assets/files/choice-architecture.pdf>
- Thate, M. J. (2019). Simone Weil and a critical will to serve. In L. Bouckaert & S. van den Heuvel (Eds.), *Servant leadership, social entrepreneurship and the will to serve* (pp. 87–101). Palgrave Macmillan. [https://doi.org/10.1007/978-3-030-29936-1\\_5](https://doi.org/10.1007/978-3-030-29936-1_5)
- Thompson, E. P. (1971). The moral economy of the English crowd in the eighteenth century. *Past and Present*, 50, 76–136. <http://www.jstor.org/stable/650244>
- Thompson, E. P. (1993). *Customs in common* [Original work published 1991]. Penguin Books. <https://files.libcom.org/files/customs%20in%20common%20complete%20Part%201.pdf>

- Toussaert, S. (2017). Intention-based reciprocity and signaling of intentions. *Journal of Economic Behavior & Organization*, 137, 132–144. <https://www.sciencedirect.com/science/article/pii/S0167268117300604>
- Trefler, D. (1995). The case of the missing trade and other mysteries. *The American Economic Review*, 85(5), 1029–1046. <http://www.jstor.org/stable/2950973>
- Ulrich, P. (2007). Ethics and economics. In L. Zsolnai (Ed.), *Ethics in the economy* (pp. 9–38). Peter Lang.
- United Nations. (2015). *The 17 goals*. <https://sdgs.un.org/goals>
- The University of Manchester. (n.d.). *Moral economy*. <https://www.socialsciences.manchester.ac.uk/political-economy-centre/research/moral-economy/>
- UNCTAD. (2010). *Science, technology and innovation indicators for policymaking in developing countries: An overview of experiences and lessons learned*. [https://unctad.org/system/files/official-document/ciimem1crp1\\_en.pdf](https://unctad.org/system/files/official-document/ciimem1crp1_en.pdf)
- UNCTAD. (2021). *Technology and innovation report 2021*. <https://unctad.org/publication/technology-and-innovation-report-2021>
- UNDP. (2023). *Human Development Index (HDI)*. <https://hdr.undp.org/en/content/download-data>
- Unger, R. M. (1998). *Democracy realized: The progressive alternative*. Verso.
- Office of the United Nations High Commissioner for Human Rights (UN OHCHR). (2012). *Human rights indicators: A guide to measurement and implementation*. [https://www.ohchr.org/sites/default/files/Documents/Publications/Human\\_rights\\_indicators\\_en.pdf](https://www.ohchr.org/sites/default/files/Documents/Publications/Human_rights_indicators_en.pdf)
- van den Assem, M. J., van Dolder, D., & Thaler, R. H. (2012). Split or steal? Cooperative behaviour when the stakes are large. *Management Science*, 58(1), 2–20. <http://www.jstor.org/stable/41406368>
- Vearrier, L. (2020). Enlightened self-interest in altruism (ESIA). *HEC Forum*, 32, 147–161. <https://doi.org/10.1007/s10730-020-09406-8>
- Veisoh, N. (2010). Reconciling Acemoglu and Sachs: Geography, institutions and technology. *Journal of International Affairs*, 64(1), 205–220. <http://www.jstor.org/stable/24385195>
- Veress, T. (2024, February 6). *Interdiszplináris gazdasági etika* [Interdisciplinary business ethics]. Presentation at the Corvinus Research Week.
- Westlake, G., Coall, D., & Grueter, C. (2019). Educational attainment is associated with unconditional helping behaviour. *Evolutionary Human Sciences*, 1, E15. <https://www.cambridge.org/core/journals/evolutionary-human-sciences/article/educational-attainment-is-associated-with-unconditional-helping-behaviour/17D997F56449A607B93166FEF88D80C8>

- White, N. (2006). *A brief history of happiness*. Blackwell Publishing. <https://doi.org/10.1002/9780470690888>
- Wiepking, P. (2007). The philanthropic poor: In search of explanations for the relative generosity of lower income households. *Voluntas*, 18, 339–358. <https://doi.org/10.1007/s>
- World Economic Forum. (2020, December 16). *Global competitiveness report special edition 2020: How countries are performing on the road to recovery*. <https://www.weforum.org/reports/the-global-competitiveness-report-2020>
- World Bank. (2023). *GDP per capita (current US\$)*. <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>
- The World Bank. (n.d.). *Difference-in-differences*. <https://dimewiki.worldbank.org/Difference-in-Differences>
- World Happiness Report. (2013). *World Happiness Report*. [https://s3.amazonaws.com/happiness-report/2013/WorldHappinessReport2013\\_online.pdf](https://s3.amazonaws.com/happiness-report/2013/WorldHappinessReport2013_online.pdf)
- World Happiness Report. (2022). *World Happiness Report*. <https://worldhappiness.report/>
- World Values Survey. (2025). *Wave 7: 2017–2022 Q150 – Freedom and security: Which is more important*. <https://www.worldvaluessurvey.org/WVSONline.jsp>
- Xu, X., Kostka, G., & Cao, X. (2022). Information control and public support for social credit systems in China. *The Journal of Politics*, 84(4), 2230–2245. <https://doi.org/10.1086/718358>
- Yay, T., & Tastan, H. (2010). Invisible hand in the process of making economics or on the method and scope of economics. *Panoeconomicus*, 57(1), 61–83. <https://doi.org/10.2298/PAN1001061Y>
- Young, K. L. (2021). Progress, pluralism and science: Moving from alienated to engaged pluralism. *Review of International Political Economy*, 28(2), 406–420. <https://doi.org/10.1080/09692290.2020.1830833>
- Zak, P. J. (2011). Moral markets. *Journal of Economic Behavior & Organization*, 77(2), 212–233. <https://doi.org/10.1016/j.jebo.2010.09.004>
- Zhang, T., Dong, P., Zeng, Y., & Ju, Y. (2022). Analyzing the diffusion of competitive smart wearable devices: An agent-based multi-dimensional relative agreement model. *Journal of Business Research*, 139, 90–105. <https://doi.org/10.1016/j.jbusres.2021.09.027>
- Zsolnai, L. (2007a). New agenda for business ethics. In L. Zsolnai (Ed.), *Ethics in the economy* (pp. 1–8). Peter Lang.
- Zsolnai, L. (2007b). The moral economic man. In L. Zsolnai (Ed.), *Ethics in the economy: Handbook of business ethics*. SSRN. <https://ssrn.com/abstract=986169>

Zsolnai, L. (Ed.). (2010). *Buddhista gazdasági stratégia* [Buddhist economic strategy]. In *Boldogság és gazdaság: A buddhista közgazdaságtan eszméi* [Happiness and the economy: Ideas of Buddhist economics]. Typotex.

Zsolnai, L. (2011). The ethics of systems thinking. In O. Jakobsen & L. J. T. Pedersen (Eds.), *Responsibility, deep ecology & the self*. Forlag1.

Zsolnai, L. (2015). The fallacy of materialistic management. In *Post-materialistic business: Spiritual value-orientation in renewing management*. Palgrave Pivot. [https://doi.org/10.1057/9781137525987\\_1](https://doi.org/10.1057/9781137525987_1)

## APPENDICES

### Appendix 1: Interviewee list

nr.	interview date	name and position/affiliation of the interviewee	role/perspective represented
1	2024.09.06	Ágnes Romet-Balla – Regional Director for Engagement and Resource Mobilization at WWF Central and Eastern Europe	head of fundraising
2	2024.09.07	Rózsa Zsuzsanna Nhancale – Founder at LivingWithouttheMoon/Sun Foundation, Music Curator and Educator	philanthropist, charitable foundation director
3	2024.10.15	Dr. Péter Galbács – Associate Professor at the Department of International Economics, Budapest Business University	neoclassical economist
4	2024.10.30	Dr. Balázs Hámori – Professor Emeritus at the Corvinus University of Budapest; University Professor at the University of Szeged <i>disclaimer: PhD supervisor</i>	institutional economist
5	2024.11.12	Dr. Miklós Szanyi – Scientific Advisor at the Institute for World Economics, Hungarian Academy of Science; University Professor at the University of Szeged	economic scholar of technology
6	2024.11.21	Dr. Olivér Kovács – Senior Research Fellow, National University of Public Service, Faculty of Public Governance and International Studies, Department of Economics and International Economics	complexity economist
7	2024.11.25	Dr. László Tóth – Associate Professor at the Department of International Economics, Budapest Business University	behavioural economist

8	2024.11.26	Dr. Alexandra Köves – Associate Professor in the Department of Decision Sciences at the Institute of Business Economics, Corvinus University of Budapest	ecological economist
9	2024.11.28	Dr. Patrick Doyle – Associate Professor, Department of Politics and Public Administration and Associate Professor, Ralahine Centre for Utopian Studies, University of Limerick	economic historian
10	2024.11.29	Dr. Zsuzsanna Györi – Senior Research Fellow, Department of Management and Entrepreneurship, Budapest Business University	business ethicist
11	2024.12.11	István Szuna – <i>“Fedél Nélkül”</i> Homeless Magazine Seller	person in need

## Appendix 2: Interview Consent Form<sup>54</sup> – template

*For the Doctoral Dissertation: Reinterpreting the Moral Economy*

### Consent to take part in research (interview)

- I ..... voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I understand that participation involves answering questions on selflessness and rationality in an economic context, within the frame of a 60 minute interview.
- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded, for transcription purposes only.
- I understand that all information I provide for this study will be treated confidentially. I acknowledge that I have the option to request anonymity for my responses, and my decision will be respected throughout the research process.
- I understand that in any report on the results of this research, I have the choice to remain anonymous. If I opt for anonymity, measures will be taken to disguise any details of my interview that may reveal my identity or the identity of others mentioned. However, I retain the option to waive anonymity if I wish to be identified.
- I understand that extracts from my interview may be quoted in the dissertation. I am aware that I have the option to request anonymity for these quotes, and my decision will be respected. Alternatively, I may choose to be identified by name.
- I understand that signed consent forms and original audio recordings will be retained on the researcher's digital device (laptop with password), and in a private online cloud folder (protected by password and the two step verification), until the assigned committee confirms the results of the dissertation.
- I understand that a transcript of my interview will be retained for two years from the date of the dissertation defense.

---

<sup>54</sup> Source (adjusted and translated into German and Hungarian with ChatGPT 3.5, on the 1st of May, 2024): <https://www.tcd.ie/swsp/assets/pdf/Participant%20consent%20form%20template.pdf>

- I understand that I am entitled to access the information I have provided, upon my request, at any time while it is in storage as specified above.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

*Researcher:*

Zsófia Hajnal BA MSc  
Corvinus University of Budapest  
email: [zsofia.hajnal@stud.uni-corvinus.hu](mailto:zsofia.hajnal@stud.uni-corvinus.hu)  
phone: +36705544146

*Academic supervisor:*

Dr. Balázs Hámori  
Professor Emeritus  
Corvinus University of Budapest  
email: [bhamori@uni-corvinus.hu](mailto:bhamori@uni-corvinus.hu)

*Signature of research participant:*

*Signature of researcher:*

I believe the participant is giving informed consent to participate in this study.

*Date:*

.....

## Appendix 3: Interview questions<sup>55</sup>

### Part 1 – **the need to help others, rational selflessness:**

1. Think of human needs, in any of the classical or modern classifications, or just in general. Is there space to have a *need to help others*, do you think we have a *need to help others*?
2. How do you see altruistic, or selfless behaviour patterns: where can they be derived from?
3. How could the awareness of rational selflessness, or a knowledge of the intrinsic virtue of moral behaviour influence individual behaviour?
4. Follow-up question: Have you seen examples for this? If yes, what?

### Part 2 – **this part points to the synthesis:**

5. What are the obstacles to spreading (rationally) selfless behaviour? (**This is related to the moral economic criticism I formulated.**)
6. Does selflessness create, increase, or multiply value in the economy? (**This relates to the “Shared Joy Is Double Joy” subchapter.**)
7. Follow-up question: What is the mechanism?
8. How can selflessness be in harmony with the environmental? (**To see whether interviewees recognize complex connections, something more direct, or anything else.**)

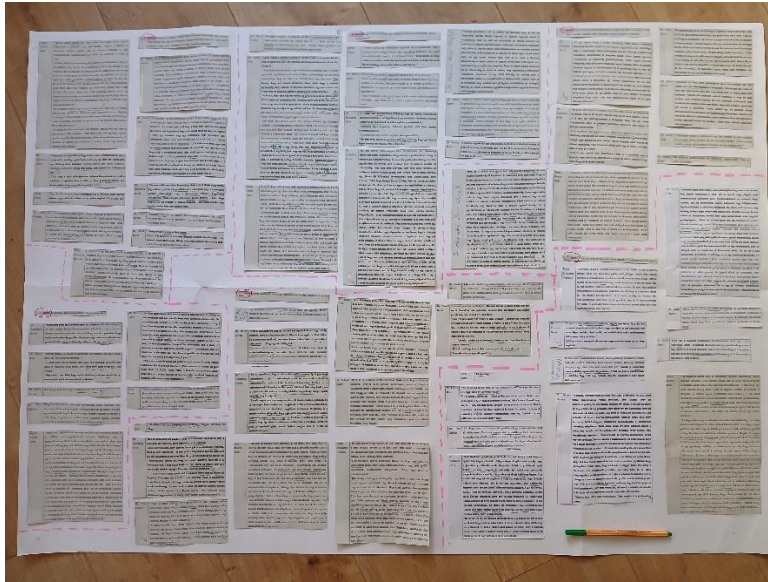
### Part 3 – **implications related:**

9. What could bring about change (more, and more rational, or conscious selflessness)?
10. What role could network effects play, in terms of the spread of altruism, and the positive consequences to expect?
11. Imagine a world, societies with significantly higher levels of altruism/selflessness, as compared to the present state. What phenomena would higher selflessness levels in society result in?
12. Follow-up question: How would you describe this state, in terms of stability?

---

<sup>55</sup> (The notes in bold have not been revealed to, and not been asked from the interviewees.)

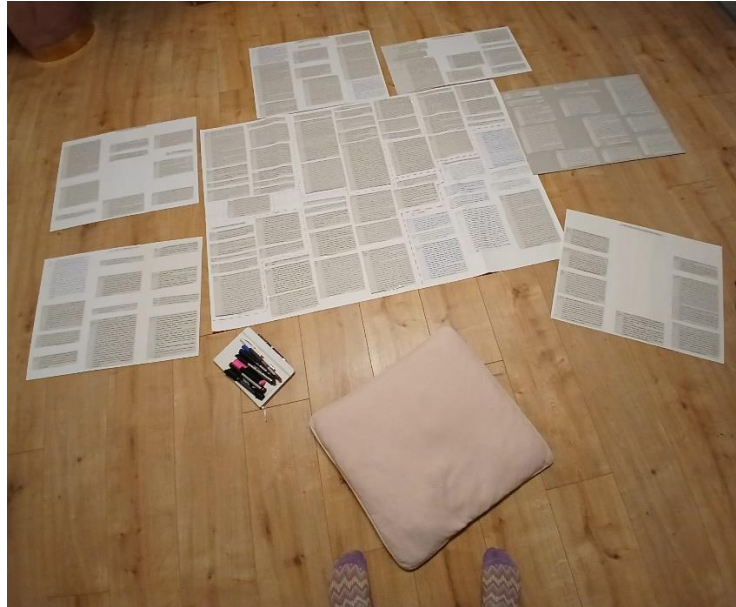
## Appendix 4: Interview quotation collage photographs



*Photograph 1: A0 quote collage for questions 1 to 6.*



*Photograph 2: Six quote collages on (joint) A3 sheets, for questions 7 to 12.*



*Photograph 3: All seven quote collages, with objects included for aiding the perception of the actual sizes of the sheets.*

## Appendix 5: A rational selflessness awareness experiment design<sup>56</sup>

An experimental design is presented to test individuals' marginal propensity to share upon an increased awareness of the need to help others and *rational selflessness*. Due to obstacles and uncertainties in conducting behavioural experiments at the doctoral level, this experiment has not been realized full-scale.

The micro-level, empirical focus falls on research question and hypothesis nr. 1 (RQ1, H1). There is a several-decade tradition of approaching the themes of self-interest, selfishness, other-regarding preferences, and altruistic behaviour by game theoretical tests, in one, two, or multiple shots repeated. For earlier and more recent surveys of these, see, for example, Gintis (2000), Fehr and Schmidt (2006), and Capraro and Perc (2021).

---

<sup>56</sup> I have preregistered the design of this experiment with *The American Economic Association's registry for randomized controlled trials* (an MIT organisation): *Impact of the Awareness of Rational Selflessness on Individuals' Marginal Propensity to Reciprocate* (January 2, 2024) <https://www.socialscienceregistry.org/trials/12763> accessed: January 13, 2024.

In 1998, the late Hungarian economist Katalin Szabó wrote: “*Economics, which tries so feverishly – and in terms of its formalization, more or less successfully – to follow in the footsteps of the natural sciences, forgets about the feature of these disciplines that only from the moment their predictions are experimentally verified, are even the most consistent theories considered to be more than a nice mental exercise.*”<sup>57</sup> (Szabó, 1998, p. 398). In choosing to design a behavioural experiment, I initially opted for the most direct empirical method available in this context.

This preregistered experiment was designed to examine the effect of awakening people’s awareness of the rationalities of selfless behaviour on their actual willingness to share (split) rewards. The trial is a combination of a behavioural, controlled experiment (in a classroom setting) with observations of reciprocal and sharing behaviour from prior studies. At the core of the experiment lies a version (in terms of the ordinality of payoffs of the applied structure) of the prisoner’s dilemma, that is the „*split or steal*” game<sup>58</sup>, with potential rewards only, without punishments, played in two shots, with the intervention for the treatment group being conducted in between. A significantly higher increase of „split” choices in the treatment arm than in the control arm would support the hypothesis that the awareness of rational selflessness increases individual’s marginal propensity to reciprocate.

The experiment design is of moderate complexity, contrary to two<sup>59</sup> other, closely related articles, milestones in the literature (e.g. Batson & Moran, 1999; Bettinger &

---

<sup>57</sup> Own translation from Hungarian. (“*A közgazdaságtudomány, amely oly lázasan — és formalizáltságát illetően többé-kevésbé eredményesen — igyekszik a természettudományok nyomdokába lépni, éppen csak ezen diszciplínának azon vonásáról feledkezik meg, hogy a legkonzisztensebb teóriákat is csak attól a perctől fogva tekintik többnek szép gondolati játéknál, amelyben predikcióik kísérleti igazolást nyernek.*”)

<sup>58</sup> Several other game theoretical behavioural experiments have been considered for this research. The ultimatum game (see, for instance, Gintis, 2000, p. 316), the closest contestant, has been disregarded due to its asymmetry and because the treatment effects on both players work in opposite directions (within the framework of selflessness), reducing measurability. Other games considered include the dictator game (see Konow, 2009, p. 280, for related application), the trade-off game, and the trust game (as in: Capraro and Perc, 2021, p. 2).

<sup>59</sup> No other articles of sufficient design resemblance have been found, despite extensive Google Scholar searches (terms: *prisoner's dilemma altruism treatment experiment rate*), as well as running the following prompt on ASTA (<https://asta.allen.ai/chat>), on October 28<sup>th</sup>, 2025: “*Please provide the top 20 scientific papers that contain cooperation rates in prisoner's dilemma games (two rounds preferably), both before and after a treatment that is aimed or thought to affect altruism levels. There should be a control group or*

Slonim, 2006), yet the design aims to ensure that it can serve as a solid illustration of the mechanism and phenomenon described.

The term „*propensity to reciprocate*” and the related „*propensity to cooperate*” have been used in economic literature in different contexts before (see for instance Gintis, 2000, pp. 311, 313, 316; Gilliam & Rayburn, 2016, pp. 295-296; Toussaert, 2017, p. 133). When I hypothesize that the awareness of rational selflessness significantly increases individuals’ marginal propensity to reciprocate, I mean the noteworthy rise in their additional willingness to share rewards after they have been given a seminar on rational selflessness.

In the book chapter *The Moral Economic Man* (2007b), László Zsolnai provides a list of six moral economic facts and behaviours (p. 2), supported by empirical evidence, including the following two: „*people take into account the well-being of strangers whose interests are at stake*”; „*people care about their self-conceptions – what kind of persons they wish to be*”. To these altruistic characteristics, I wish to add that people aware of the nature (the mechanism, origin, context, and benefit) of rational selflessness will act more selflessly than those unaware, whenever the situation allows them to.

For further clarification: rational selflessness is not independent of institutions. Some of the institutions can help nurture and maintain it, while others suppress it. The awareness that increases the intensity of exhibiting this behavioural characteristic, however, is assumed to operate in a mechanism that is „free” of institutions<sup>60</sup>.

As Kenneth Binmore, mathematician and economist, wrote: „*In order that data-sets be reliably replicable, it is necessary that investigators provide descriptions of the environment within which the data was generated which are adequately specific.*” (1987, p. 258) Thus, I aim to describe the setting, process, and design of the experiment in sufficient detail.

---

*control values in the study too.*” The scarcity of articles that view altruism as both a treatment and an aspect of the potential outcomes underscores the uniqueness of the experiment design outlined in this appendix.

<sup>60</sup> For the connection between behaviour and institutions in the experimental economic context, see Szabó, 1998, pp. 400-401.

The participants in the experiment, also referred to as subjects or players, are randomly assigned into two groups of equal size: the control group, which consists of the untreated subjects, and the treatment group. The two groups are both even-numbered, allowing pairs to be assigned within each group. Thus, the total number of participants is divisible by four. Random assignment, or randomization, can happen based on birth dates or through direct computational means using the R software or other.

In a classroom environment<sup>61</sup> (seated with one seat in-between, one row in-between, and in columns directly behind one another), treated subjects are given a twenty-minute moderately interactive seminar (this is the intervention, or treatment). The seminar is held on the rational selflessness concept (its definition, origins, processes, and benefits – in a secular context). Before and after the seminar, they play a „split or steal” game, in random pairs, but with pairs assigned in the first round being fixed for the second game. This means that interactions happen on the level of identification (between the anonymous and the communicative levels, as described in Szabó, 1998, p. 401).

They are offered a financial award or vouchers (the sums need to be specified – calculated and feasibility-assessed) each time and each pair, and have to choose individually, simultaneously, whether they would want to steal the award from, or share (split) it with their partner. Steal-steal choices would result in no award, share-share in halving the award between the two players, and a steal-share combination would “redeem” only the person who chose to steal, as depicted in *Table 3* below.

	B splits	B steals
A splits	1; 1	0; 2
A steals	2; 0	0; 0

*Table 3: „Split or steal” game payoffs.*

---

<sup>61</sup> The classroom setting is deemed sufficiently „sterile” for the experiment, for the „ceteris paribus” condition in particular.

The results of the treated group are compared with a control group, which does not receive rational selflessness training. The results of this control group can be double-checked against the generally observed tendency of people to steal or share, as observed in previously conducted scientific experiments or gameshows. In this regard, there is a deviation, though. In *The Moral Economic Man*, for instance, Zsolnai refers to the prisoner’s dilemma-type experiments conducted by Robert H. Frank in 1993, which reported cooperation percentages between 40% and 62% for non-repeated games (Zsolnai, 2007b, p. 3). Other authors report values of 81% (Feldman, 2020), 53% (van den Assem et al., 2012, p. 4), and 48% (Coffey, p. 2) for different phases of the „split or steal” themed British game show *Golden Balls* specifically.

The experiment is expected to last approximately forty minutes for the control group and one hour for the treated subjects. The expected mechanism, or pathway, is that treated subjects become aware of their inherent need to help others and rational selflessness (by means of the seminar), and act accordingly, more selflessly, resulting in a significantly greater increase in share (split) choices from the first to the second round of the games. The causal variable (or treatment variable, x) is thus the awareness of rational selflessness, whilst the outcome variable (y) is the (change in the) propensity to share (or to reciprocate – depending on the result in the first round). For confounders, see *Figure 19* below.

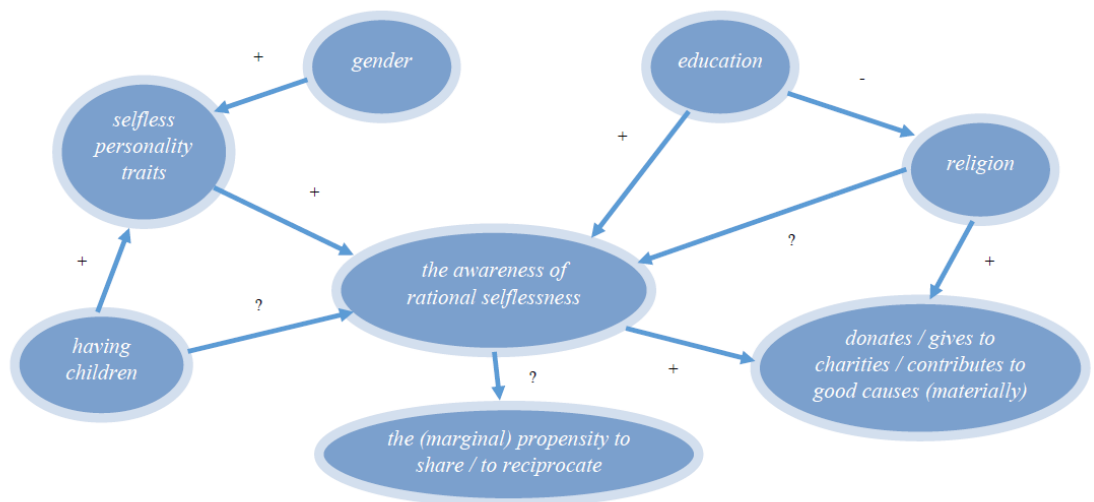


Figure 19: Directed Acyclic Graph (DAG) for the rational selflessness experiment.

Source: own composition and editing.

All connections (except the main causal link: the awareness of rational selflessness leading to an expectedly increasing marginal propensity to reciprocate) are exogenous (affecting only the causal variable under proper randomization), but also potentially controversial. By controversial, I mean the disagreements on what factors determine altruistic behaviour in humans by default. For instance, the stance on whether women are more altruistic than men has been fluctuating in the literature (Brañas-Garza et al., 2018, p. 19). The consensus on the educational attainment factor appears to be widespread, with educational attainment generally viewed as a positive determinant of altruistic behaviour (Westlake et al., 2019, p. 1). As for the religious factor, it is rather multifaceted due to the variety of religious traditions, as well as the complex effects of religious faith on altruism (Bennett et al., 2017, p. 323) and discrimination (Hoffmann et al., 2020, p. 605). Due to the assumption of proper randomization, the problem of heterogeneous treatment effects is disregarded.

The individual treatment effect is expected to be an increase in the marginal propensity to share (or to reciprocate), varying slightly in intensity across individuals. The experiment is to be conducted in person, using a paper-based technique for simplicity – pre-numbered and paired sheets with pre-printed options are employed.

The marginal propensity to reciprocate can be measured by the ratio of subjects in the treated group who have changed their choice/strategy from „steal” to „share”, or by the increase in „share” choices in general. (The revenge type „steal” choices in the second round are expected to be offset by the „share” choices that result from a conversion of reciprocity – i.e., other switching their strategies from „steal” to „split”.) The marginal propensity to reciprocate is a percentage value that is expected to increase with heightened awareness of rational selflessness.

Certain obstacles will be overcome by the design of the experiment. For instance: *“Prior research has demonstrated that individual differences exist in the extent to which people value the welfare of others in relation to their own.”* (Messick and McClintock,

1968, as cited in Roux et al., 2015, p. 622). Because I focus on, primarily observe, and measure the change in the behaviour of the participants, initial differences between them – in terms of how much emphasis they put on others' welfare – should not influence the overall outcome compared to the controls.

This two-shot, two-person experiment is to be conducted for both the control and treatment groups within the same week, at the same time of day, and in the same classroom, in line with the *ceteris paribus* condition. Below, I formulate and describe further elements<sup>62</sup> of the experiment plan and design, the expectations, and later, the results, in statistical terms.

Under the *potential outcomes framework*, the current potential outcomes (the difference of split or steal choices for each individual, between the two experiments) are: more (1), or less (-1), or equally (0) cooperative (sharing) behaviours. The values to be obtained from the experiment constitute choice data in a small and simple panel structure (treated, non-treated; before, after).

To calculate the marginal propensity to reciprocate that the awareness of rational selflessness induces, I am applying a mixed, partial, and simplified structure of a discrete choice model and the difference-in-differences method to the data obtained from the experiment.

*„Discrete choice models are used to explain or predict a choice from a set of two or more discrete (i.e., distinct and separable; mutually exclusive) alternatives.”* (Columbia University Irving Medical Center, n.d.). In the case of this experiment, the two distinct choices are the „split” and „steal” options. As for the difference-in-differences structure: *„Difference-in-differences takes the before-after difference in treatment group's outcomes. This is the first difference. In comparing the same group to itself, the first difference controls for factors that are constant over time in that group. Then, to capture time-varying factors, difference-in-differences takes the before-after difference*

---

<sup>62</sup> Most of which have been identified with the help of chapter 19 from the book: Békés, G., and Kézdi, G. (2021). *Data Analysis for Business, Economics, and Policy*. Cambridge University Press.

*in the control group, which was exposed to the same set of environmental conditions as the treatment group. This is the second difference. Finally, difference-in-differences “cleans” all time-varying factors from the first difference by subtracting the second difference from it. This leaves us with the impact estimation – or the difference-in-differences.”* (The World Bank, n.d.). In this case, the first difference is the increase of „split” choices within the treatment group, as the result of subtracting the number of split choices of the first game from the second round’s number of split choices ( $\Delta S_T$ ). The second difference comes from the analogous subtraction, from the control group ( $\Delta S_C$ ).

The goal is to be able to claim that with the awareness of rational selflessness, the marginal propensity to reciprocate (or to share), MPR – the ratio of the difference in the treatment to that in the control group – increases significantly. With a formula:

$$\text{MPR} = \frac{\Delta S_T - \Delta S_C}{\Delta S_C} \times 100$$

A power analysis has been conducted to determine the sample size. The desired level of statistical power is 0.80, and the significance level is 0.05, as commonly adhered to in behavioural studies (Calkins, 2005) and beyond. The effect size (expressed as MPR) to be detected is determined to be 0.35 (an approximate average value of the mean standardized effect sizes of original studies and replications in behavioural experiments, as per Camerer et al., 2016, p. 1434). For the standard deviation of the binary outcomes, a conservative assumption will be made, initially estimating it to be relatively high, with a value of 0.55 (Schumm et al., 2019, p. 17151).

The above values have been plugged into a statistical command (software: R; package: `samplesize`) and yielded the number 34, „rounded up” to 36, to be divisible by four, because of the groups and the pairs. *Table 4* below provides the framework for inserting and processing results – with the number of „split” choices, the differences, and the result.

	Treatment Group	Control Group
Round 1	.../18	.../18
Round 2	.../18	.../18
Differences	$\Delta S_T =$	$\Delta S_C =$
$MPR = \frac{\Delta S_T - \Delta S_C}{\Delta S_C} \times 100 = \dots$		

Table 4: A framework for the results from the experiment.

The following conditions are necessary for a successful (expected) outcome. In the first round of the game, the control and the treatment group should have roughly equal ratios of „split” choices (confirmed by external experiment values/ratios as well.) That would be reassuring, as regards randomisation too. In the second round, the treatment group should have significantly higher „split” choice ratios, relative to the control group.

Roux et al. have shown that „reminders of resource scarcity [...] can cognitively activate a more general competitive orientation, which then affects subsequent decision making (e.g., charitable giving)” (2015, p. 627). In an inverse analogue, the intention is to illustrate that a reminder of people’s inherent and rational selflessness can accentuate the altruistic behaviours displayed in subsequent decision-making.

Due to the controlled nature of the experiment, internal validity (the extent of our certainty to have uncovered a causal relationship) can be expected to be high (Horn, Bekes, 2023). External validity (generalisability) depends on whether cultural variance and future changes (Horn, Bekes, 2023) are expected to influence the marginal propensity to reciprocate or share, as a result of being aware of rational selflessness.

In the literature, it has been shown „that individual selfishness in high-impact decisions affecting a large group is compatible with prosociality in bilateral low-stakes interactions” (Alós-Ferrer et al., 2022, p. 88). The experiment to be conducted is confined to person-to-person interactions, and would thus not directly reveal how the awareness of rational selflessness affects the individual’s perception and attitude towards masses.

These intrinsic limitations have been complemented by practical challenges – in terms of recruitment, financing, temporal constraints, and outcome risks. Recruitment in itself would have required either overwhelming commitment (for convenience sampling) or a substantial financial investment (hiring subjects from local participant pools). In the case of convenience sampling, the majority of subjects would have been university students, which would have run the risk of not being representative of society in terms of age and educational attainment. The fact that I could have recruited international groups would not necessarily have compensated for that.

Financial rewards are generally accepted as the most efficient and convenient form of rewarding in behavioural experiment. Overall costs (the show-up fee, the rewards, and the recruitment-related charges), however, would probably have mounted up to a sum which would have been challenging to find academic sponsors<sup>63</sup> for – a process putting an additional temporal burden on the researcher. Alternatively, and with partial implications, if there were volunteers among the subjects, they would have to be assigned evenly to the treatment and control groups, as volunteering is a potential confounder in this context. The act of volunteering is, in itself, altruistic; thus, volunteers may behave more selflessly than others in the experiment by default. Finding an appropriate and legal form of transacting the fees to be paid to the participants would have been yet another task, looking up the relevant taxation rules and laws (a further addition to the potential financial burden), inclusive.

It is for the reasons listed above that I have experimented only in a miniature, demo version. At the *2024 Researcher's Night* event (September 27th) at the Corvinus University of Budapest, I had the opportunity to present and illustrate my research in two sessions.<sup>64</sup> In line with the experimental design, both sessions consisted of two-shot split-

---

<sup>63</sup> Partners of initial consideration included: *Kindlab* (<https://kindness.org/kindlab/>), *Kindness Factory* (<https://kindnessfactory.com/about/>), *The Rational Altruism Lab* (UCLA Psychology Department), and the *Doctoral School of International Relations and Political Science* at the Corvinus University of Budapest.

<sup>64</sup> Original sessions' link: <https://app.kutatokejszakaja.hu/esemenyek/budapesti-corvinus-egyetem-1/rational-selflessness-in-moral-economics-an-experiment> accessed: October 2, 2024.

or-steal games: with one played at the beginning, and one at the end of the respective session, after the presentation.

Both sessions were attended by four participants who had registered for the event in advance. Thus, we played in two pairs each. The first round of the first session did not yield any „steal” choices, nor did the second round, so the change could not be illustrated in that part. We have discussed potential factors which may have played a role in this, such as the small size of the group, some non-verbal communication between the pairs, and the fact that the reward values (teashop vouchers worth 1000 Hungarian Forints) were not high enough to have the players risk their reputation to any extent.

In the second session, however, we had one „steal” choice in the first round, lending hope to a possible illustration of an increasing marginal propensity to share. Listening to the presentation on rational selflessness (origins, description, mechanisms, benefits) in between, however, did not change that player’s mind. In the second round, the group has ended up with one „steal” choice (and thus, three „split” choices) again. The twist, and potential illustration have stretched beyond the official limits of the session, and the game, for after a cheerful debate on the choices made, just when the audience was ready to leave the classroom, the participant choosing „steal” twice has given all four vouchers he managed to win to his game partner, who has not obtained any vouchers in the game itself. In this way – if this last act of generosity can be interpreted as part of the demo experiment – this behaviour has illustrated an increase in the marginal propensity to share, after all .

Reasons, as often, may be more complex, ranging from being touched by the other player’s trust, through not valuing the type of reward distributed, to having had actual takeaways from the presentation – or a combination of all these.

# DECLARATION ON THE USE OF LARGE LANGUAGE MODELS AND GENERATIVE AI

I hereby declare that I have used large language models (LLMs) to a limited extent during the preparation of this dissertation. This declaration is made in accordance with the Corvinus University of Budapest's policies on academic integrity and the use of AI tools in research and writing.

## **Specific AI Tools Used**

The following AI tools were utilized in the preparation of this work: Grammarly EDU, Claude by Anthropic, ChatGPT by OpenAI, and Gemini by Google (various versions, 2024 on).

Access method: web interface.

## **Nature and Extent of AI Assistance**

I used the above-mentioned AI tools for the following purposes:

- grammar checking
- occasional reference formatting (adjusting to APA 7)
- sample completion of the *Interview Consent Form* (merged with the referenced institutional sample)
- translation of the *Interview Consent Form* and the *Interview questions*, from English to Hungarian and German (which I then double-checked)
- post-review (2025/26/1) orientation and the identification of additional relevant sources (while processing opponent feedback after the thesis proposal discussion)
- the drafting of this declaration (*Declaration on the Use of Large Language Models and Generative AI*)

## **Limitations and Responsibilities**

All AI-generated content has been critically reviewed, fact-checked, and verified through independent sources where applicable. The use of AI tools did not substitute for my own

critical thinking, analysis, and scholarly judgment. I take full responsibility for the accuracy, originality, and integrity of all content in this dissertation.

### **Ethical Considerations**

I confirm that my use of AI tools complies with all relevant institutional policies and ethical guidelines, and maintains the standards of academic integrity expected in doctoral research.

### **Data Privacy and Confidentiality**

I confirm that no confidential, proprietary, or sensitive research data was shared with AI tools during the preparation of this dissertation. All interactions with AI systems were conducted in accordance with data protection requirements and research ethics protocols.

## THE LIST OF PUBLICATIONS BY THE AUTHOR

Hajnal, Zs. (2015). Írott és íratlan értékek az ENSZ Alapokmányának Preambulumában – Az emberi együttélés és haladás axiómái. (Written and Unwritten Values in the Preamble of the United Nations Charter – The Axioms of Human Coexistence and Progress). *Grotius* [e-journal]. <http://www.grotius.hu/publ/displ.asp?id=MOMPOO>

Hajnal, Zs. (2016). The Impossible Trinity of Security, Freedom and Privacy. *Securitologia*, 2(24). ISSN: 1898-4509. <https://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.desklight-bcb3a831-47da-4168-971d-32d27ed575ba>

Hajnal, Zs., Pammer N., Szabó, Gy. (2019). Németország makrogazdasági elemzése (Macroeconomic Analysis of Germany). In: *Válogatott tanulmányok kutató hallgatók munkáiból az EFOP 3.6.1-16-2016-00012 számú projekt keretében végzett kutatások eredményeiből (Selected studies from the work of research students from the results of research conducted within the framework of the EFOP 3.6.1-16-2016-00012)*. Budapest University of Economics and Business, Budapest, pp. 333-362. ISBN 9786155607745. <http://publikaciotar.repozitorium.uni-bge.hu/1588/>

Hajnal, Zs. (2021). *Moral Economics – A Theoretical Basis for Building the Next Economic System*. In Róna, P., Zsolnai, L., Wincewicz-Price, A. (Eds.) *Words, Objects and Events in Economics – The Making of Economic Theory* (pp. 63-90). Springer. [https://doi.org/10.1007/978-3-030-52673-3\\_5](https://doi.org/10.1007/978-3-030-52673-3_5)

Hajnal, Zs. (2022). The Post-Crisis Developmental State: Perspectives from the Global Periphery [Book review]. *Society and Economy*, 44(2), 270-272. <https://doi.org/10.1556/204.2022.00004>

Hajnal, Zs. (2022). Measuring the Level of Technology in Moral Economics. *Athens Journal of Technology and Engineering*, 9(4), 321-338. <https://www.athensjournals.gr/technology/2022-9-4-4-Hajnal.pdf>

- Hajnal, Zs. (2023). Environmental Capacity Through the Moral Economic Lens – Dynamic Equilibria. *Cognitive Sustainability*, 2(3). <https://doi.org/10.55343/CogSust.66>
- Hajnal, Zs. (2023). “Celestial” snapshots: Moral economic revisitations of János Kornai's The socialist system. *Acta Oeconomica*, 73(S1), 143-156. <https://doi.org/10.1556/032.2023.00039>
- Hajnal, Zs. (2024). “Shared Joy is Double Joy” – Reciprocal Microfoundations of the Gini Coefficient. In: Mathis, K., Tor, A. (Eds.) *Law and Economics of Justice*. pp. 207-220. Springer. [https://doi.org/10.1007/978-3-031-56822-0\\_11](https://doi.org/10.1007/978-3-031-56822-0_11)
- Hajnal, Zs. (2024, January 2). *Impact of the Awareness of Rational Selflessness on Individuals' Marginal Propensity to Reciprocate* [Preregistration]. AEA RCT Registry. <https://doi.org/10.1257/rct.12763-1.0>
- Hajnal, Zs. (2024). Complexity Economics – Economic Governance, Science and Policy – Olivér Kovács. [Book review]. *Ecological Economics*, 226. <https://doi.org/10.1016/j.ecolecon.2024.108355>
- Hajnal, Zs. (2025). *Split or steal or gift: Nash equilibria under altruistically extended payoffs*. In Éva Kuruczleki (Ed.), *Navigating the Future: Digitalization, Sustainability, and International Business* (pp. 76-96). University of Szeged, Faculty of Economics and Business Administration. <https://doi.org/10.14232/gtk.nfdsib.2025>
- Hajnal, Zs. (2025). Navigating the Moral Economy An Integrative Review. *Panoeconomicus*, 1-33. <https://doi.org/10.2298/PAN240407029H>
- Hajnal, Zs., Zhu, M., Vásárhelyi, O. (2025). Detection Over Deception – An Inverted Turing Test with LLMs. [Working paper].