LAW, LEGISLATION, COOPERATION: TOWARDS A GENERAL THEORY OF COOPERATION

***Jerome Nikolai Warren*[1]**

Abstract

This contribution attempts to respond to Antonio Fici's call for increased dialogue between law and economics on the topic of cooperatives. Concretely, it seeks to contribute two things: firstly, to ask what a *general theory* of cooperation might look like and secondly, to outline a framework for *cooperative economics.* It does this by attempting to embed *democracy* in an economic viewpoint, via the notion of a *relational* or *cooperative rent* and discovers that the presently dominant neoclassical model is not in a position to facilitate such a translation. It will be argued that the theory of *legal imputation* can serve as a benchmark for rendering organizational decisions respective of stakeholder status. Lastly, drawing especially on work by the German legal historian Otto von Gierke, it outlines the role of a synthetic "social law" that seeks to embed individuals within a collective, connecting these ideas with contemporary discourse on complexity and cybernetics.

Introduction

Cooperative enterprise has existed for several centuries[2]. While the first "modern" cooperative enterprise is argued to have been founded in 1844, similar efforts have been developed over the centuries. At the same time, thinkers like Pyotr Kropotkin documented untold cases of human, animal and plant life cooperating to meet needs and even wrote a (posthumously published) book on ethics which discussed the possibility of a cooperative ethic evolving[3]. Many of the examples Kropotkin documents existed over long periods of time and entailed a large degree of autonomy on the part of the individuals engaged in cooperation. Later authors like E.O. Wilson followed Kropotkin's innovation and developed entire disciplines, like *sociobiology*, to account for the interactions between genes and culture in producing cooperative behavior, an issue that already concerned Charles Darwin[4]. In subsequent decades, these findings were only reinforced[5].

One promising development in recent decades has been the resurgence of the field of *cooperative law*, thanks in part to the work of individuals like Hans-Hermann Münkner, Hagen Henrÿ and others[6]. The success of academics and multilateral institutions like the International Labor Organization (ILO), International Cooperative Alliance (ICA) and United Nations (UN) in spearheading a revival in cooperative law at numerous international law schools and within policy-making circles should serve as a template for introducing a cooperative logic into other disciplines. The fact remains, however, that, not only has there been less success in developing similar paradigms in other disciplines, like economics. Moreover, most social sciences have been

[1] Schumannstr. 22, 60325 Frankfurt, jerome.warren@academieroyale.be
[2]Cf. Patmore, G. and Balnave, N. (2018). *A global history of co-operative business.* Routledge.
[3]Kropotkin, K. (2021). *Ethics: Origins and development*. Black Rose Books Ltd.
[4]Nowak, M. A., Tarnita, C. E., and Wilson, E. O. (2010). The evolution of eusociality. *Nature*, 466(7310):1057–1062.
[5] Axelrod, R. and Hamilton, W. D. (1981). The evolution of cooperation. S*cience*, 211(4489):1390–1396.
[6] cf. Fici, A., Cracogna, D., and Henry, H. (2013). I*nternational Handbook of Cooperative Law*. Springer-Verlag.

slower to take up either 1) notions of an evolutionary cooperative logic generally, or 2) to develop curricula or paradigms comparable with the still developing corpus of cooperative law. The result is an often truncated view of the topic of cooperation, which is frequently relegated a second-class status in the literature, behind competition[7].

This article therefore hopes to fill this gap by attempting to take lessons from the success of cooperative lawyers in carving out an intellectual space for themselves and their work in order to develop a formal epistemic framework for analyzing, understanding and *contextualizing* cooperation more generally, i.e., for outlining a general theory of cooperation. Secondly, the contribution attempts to sketch out, in anticipation of certain current developments, what a *cooperative economics* would look like, in particular.

The structure of this contribution is as follows.

The article begins by first crystallizing lessons derived from Fici's reading of cooperative law to attempt to derive necessary building blocks of a general theory of cooperation. Completing such a general theory will necessarily be an interdisciplinary endeavor, whose full exposition will necessarily require more space than the present contribution.

Following on and extrapolating from this preliminary exposition, I make some conceptual suggestions as to what a suitable *cooperative economics* framework would look like. This towards the goal of facilitating a respective curriculum on such topics. In particular, I will argue that the notion at the root of much economic reasoning, the principal-agent theory, is in many cases incorrectly applied to what Aristotle would call "moral civic" relations. In keeping with the relational economics literature and Emile Durkheim's famous rejection of contract theory[8], I will argue that the lens best suited to deal with the problems of the coming century, that of information, knowledge, complexity and uncertainty, is that outlined in the framework of *relational economics*, in particular with an emphasis on long-term cooperation[9].

It is exactly by pointing out the weaknesses of the neoclassical model in its impotence with respect to these domains that I and colleagues hope to find a place for a general theory of cooperation. In particular, the inability of the neoclassical model to deal with power asymmetries and conflict make it entirely unsuitable for deriving avenues and corridors for establishing and maintaining cooperation. Just as Aristotle accused those practicing "moral civic" friendships of "wanting to have it both ways"[10], the neoclassical framework on the one hand wishes away conflict, yet is at the same time unable to discover strong and suitable tools for approaching cooperation, as lackluster approaches like "mechanism design" have demonstrated[11].

That is to say, while an unfolding democratic imaginary is traceable during the course of history, and while the movements starting in the Reformation and culminating in the Enlightenment did seek to establish a firm foundation for individual human rights (e.g., Kant), these developments appear not to have unlocked the "iron cage" in which modern economics in its neoclassical guise

[7] In particular, the evolutionary perspective is missing. Cf. Veblen, T. (1898). Why is economics not an evolutionary science? *The quarterly journal of economics*, 12(4):373–397.

[8] Cf. Durkheim, É. (1893). *De la division du travail social*. Ancienne librairie Germer Baillière et cie.

[9] The author is currently (December, 2022) in talks with a major publisher in editing a handbook on *Cooperative Economics*, which would entail a synthesis of many of the issues in this preliminary article.

[10] Cf. Aristotle (2011). The eudemian ethics. Oxford University Press.

[11] Cf. Bowles, S. (2016). *The moral economy: Why good incentives are no substitute for good citizens*. Yale University Press.

has found itself in in the last century. In fact, much of the thinking of neoclassical economics either implicitly – albeit, sometimes rather explicitly – still entertains the distinction Aristotle made[12], of considering master and slave "not two different things" and "the same as that of craft and tools". In the remainder of this article, I attempt to argue why this is the case and point out some basic outlines as to how this can be remedied. I attempt in particular to emphasize how aspects of law and legislation can contribute to a shift towards a more cooperative conception of economy.

Necessary Building Blocks

While the Cooperative Principles and Values[13] are clear candidates for describing cooperation generally, I discuss them elsewhere[14]. In any case, if a *general* theory of cooperation is to be developed, it must include building blocks that go beyond the cooperative principles, which generally restrict themselves to the behavior of cooperative enterprises in the narrow sense of dealing with cooperative enterprise (save for principles 6 and 7). A set of principles for a *general* theory of cooperation must, however, also have room for cooperation or self-organization in a broader sense. This means interpreting cooperation *communicatively* and *evolutionarily*.

This means that the "building blocks" we develop here must necessarily involve at least two distinct aspects: an *institutional* and an *evolutionary* one. While the former entails a focus on the historical development of institutions like the Cooperative Principles and Values, the latter tends to emphasize the communicative structures that impinge upon the former, turning information into meaning and selecting (and deselecting) certain interpretations of events socially (see footnote 14).

While there will be many overlaps between the building blocks proposed below and the cooperative principles (for instance, building block 1 resembles ICA principle 4; building block 2 resembles ICA principle 2; and so on), they are more general in the sense that they attempt to provide a basis, a set of general principles, for introducing, firstly, curricula based on the practices and principles of cooperatives (in the narrower sense) into various social sciences and secondly, for introducing an evolutionary cooperative logic (in the broader sense) generally. This dual focus requires an emphasis on complexity, including incorporating elements like (second-order) feedback effects, synergy and redundancy[15]. For instance, while building blocks 4 and 5 directly refer to the role of government, academics will likely be involved in blocks 6 and 7, and so on. Certain principles may therefore in part be directed at particular actors or "relationholders" (a term borrowed from Thad Metz).

Thus, the following 9 "Principles" (we refer to them as "building blocks") are not to be seen as an alternative to the cooperative principles, but a more general framing of the necessary conditions for promoting and sustaining cooperation that incorporate the agency of "external" stakeholders like policymakers, civil society and researchers.

[12] Frank Knight, for instance, suggested that "there is […] no difference between a worker and a horse, or a slave, for that matter" as regards the going concern.
[13]Cf. https://www.ica.coop/en/cooperatives/cooperative-identity/
[14]Cf. Chapter 6 of my doctoral dissertation: Warren, J. (2022). *The Cooperative Economy: Toward a Stakeholder-led Democracy* (Doctoral dissertation, Universität zu Köln).
[15] Leydesdorff, L. (2021). *The evolutionary dynamics of dis- cursive knowledge: Communication-theoretical perspectives on an empirical philosophy of science.* Springer Nature.

1. Self-Organization, Autonomy

Based on the fourth cooperative principle and the ICA Guidance notes, it would appear that an understanding of the role of *self-organization* in motivating cooperation is required. To be more precise, when reading Gierke, as I do in the last section of this contribution, it becomes clear that one of his main motivating concepts is the contradiction between *heteronomy* and *autonomy*, as seen throughout history in the legal sanctioning of self-organized activities. If, for example, in the ancient world, Roman emperors were ultimately responsible via the principle of *concessio* of legitimating the collective activity of subjects, and the Catholic church later took on this role, sanctioning the establishment of orders, monasteries and other "spiritual cooperatives" in the language of Gierke, then the question of interest for Gierke, and which he at least answers in the affirmative, is whether such cooperatives or associations exist only by means of the consent of the ruler, or whether they have their own existence. Thus, the first essential building block is the question *whether the particular jurisdiction allows an independent existence of collective agency institutions (e.g., cooperatives).*

2. Existence and Promotion of Democratic Choice Mechanisms

The second question is whether, if self-organization is allowed, the mechanism for collective choice is *prevalently* democratic or coercive? Coercive mechanisms can often take the mantle of being democratic (e.g., "*shareholder democracy*") but, in practice, reserve similar requisites for participating as do poll taxes and similar phenomena for political participation[16]. Thus, the second essential building block is *the place and role of democratic choice mechanisms (DCMs) in the context of self-organization.* These must respect that all representation can only ever occur via *concessio* and not via *translatio,* which David Ellerman has argued is a more vital distinction than that between *consent* and *coercion. Hierarchies* must be constructed in such a way as to reflect that. That is, they must be designed to allow both *information* and *accountability* to flow in multiple directions.

3. Cooperative Activity or Enterprise

Cooperation must play a central role in the network or organization. Cooperation

is a characteristic of cooperatives that, when properly understood, significantly contributes to their distinction from companies. In companies, like in any other for-profit entity, the economic activity is simply an instrument for pursuing the entity's final objectives, and it is irrelevant whether this activity is conducted with the members. By way of contrast, cooperatives are formed and exist to run an enterprise that might directly satisfy the interests of their consumer-, provider- or worker-members (who, together, may be referred to as "user-members", since in fact they are the direct recipients of a service provided by the cooperative enterprise). [Fici et al., 2013, pp. 23-4]

Thus, whereas cooperation in the sense of Marx (Chpt. 11, Vol. 1 of *Capital*) is merely incidental in a company, in a cooperative, it is the *raison d'etre* of the enterprise. "This is the reason why in cooperative legal theory these transactions must be kept separate from all others, beginning by giving them a distinct name, as some cooperative laws appropriately do, using formulas such as

[16] Majority voting is a good example of such a mechanism, as Amartya Sen has pointed out and as organizations like DemocracyNext are underlining.

'cooperative acts' or 'mutual relationships'." (*Id.*) *Thus any general theory of cooperation must reserve a place for specifying (a diversity of) unique "cooperative transactions" that distinguish the network from an organization employing cooperation instrumentally.* Notions like "cooperative rents", discussed below, can help shed light on isolating such activities.

4. Legal Architecture Recognizing Special Character of Cooperation

The fourth question is *whether the legal framework recognizes the special character of the cooperative form of self-organizing*. This does not need to entail special privileged status with respect to state contracts or tax exemptions, though it may. It can occasionally merely suffice to recognize cooperation as a legitimate form of organization. The main factor of import is that public and private institutions like banks are familiar with the legal form and convinced in its longevity. State sanctioning helps this cause. Providing programs for Professional Education and Development (PED) for tax advisors, accountants, lawyers and other critical service providers is also a key element of ensuring a robust legal and institutional architecture.

5. Regulatory Oversight

Cooperation *requires both internal (to the interaction or organization) monitoring, as well as external oversight.* This can, for instance, prevent individuals from misusing the legal form of cooperation for unsanctioned ends, and it can provide further stability. State oversight is not the only option, as some countries like Germany and Italy show that auditing and cooperative federations can be effective stewards, when provided sufficient resources for monitoring and also sanctioning. There surely is no single recipe for regulatory oversight, and the focus should always be on balancing a desire for clearing regulatory obstacles for initiating startups and ensuring the integrity of the ecosystem as a whole.

6. Privileged Position of Certain "Fictitious" Commodities

Based on Ellerman's treatment of the centrality of responsible agency in the execution of labor, discussed in section 3 of this article, it would appear that as part of any general theory of cooperation *recognition of the special place of certain commodities*[17] *should be privileged in their rights to self-organize.* In keeping with classical theories of natural rights (*imputation*) and notions of the dignity of personality (*responsibility*) and in recognition of the limited quantity of land available and the special character of money as a circulating medium (both therefore prone to network effects typically referred to as "externalities"), the right to self-organize these commodities in autonomous organizations must be recognized and supported by legal and jurisprudential means.

To rephrase this condition relationally: *in many transactions, an increased focus on social logics, such as balancing private and public interest, arise. It appears reasonable to assume that such transactions particularly lend themselves to cooperative forms of organizing.*

7. Appropriate Balance between ius cogens and ius dispositivum

There is a necessary balance to be struck between individual autonomy of cooperative network, interpreted broadly, and the protection of the identity of cooperatives as a legal form (i.e., in the narrower sense), which is essential for their sanctioning and – occasionally – support by the

[17] E.g., following Polanyi, land, labor and money – in addition to, more recently, data.

state. Thus, *concern needs to be paid for the role of mandatory and discretionary characteristics*. A potential compromising role may be played by so-called “options":

To be sure, cooperative law increasingly comprises a third category of provisions that may be termed “options”. They are different from both mandatory rules, as they provide cooperatives with a choice among two or more alternative specified rules (of which, one would apply by default in the absence of a choice between them by the cooperative), and default rules, since in any event they confine private autonomy to the options provided therein (additional and different arrangements are therefore unavailable). In cooperative law, a trend may be observed in many jurisdictions toward replacing mandatory rules with options, as a result of the relaxation or reinterpretation of some cooperative principles, including the democratic principle “one member, one vote”. [Fici, et al., 2013, p. 13]

Moreover, another approach may be so-called “hybrid” organizations, like the (now-defunct) “Social Purpose Company” (SPC) in Belgian law [Fici et al., 2013, p. 253]

8. Facilitate “Agonic" Freedom

Jacob Burckhardt[18] and Friedrich Nietzsche were both fascinated with the *agonic* in Greek society. The concept, which underlies the modern word *agony* also referred to a form of freedom that is related to, but distinct from, the modern conception of competition.[19]. Thus, as opposed to the modern conception of “competition", the *agonic* refers to an internal struggle for mastery. As is made clear in the discussion of the relational rent in the following section, a relational view is not free from dynamic social processes, conflict or competition. However, it juxtaposes a competitive logic with one of cooperation, with *governance, a forteriori,* management, acting to balance these various logics. Thus, a better notion than “competition" within the framework of cooperative economics is the *agonic.* To remind the reader again:

…*agonic* practice cultivates […] the disposition to develop one’s powers to overcome the challenges posed by mastering the practice, including those challenges to achieving this mastery that are internal to one’s current constitution as an agent. Thus, the praxis of agonic practice cultivates an agonic relationship to oneself, a practical relationship to oneself characterized by a disposition to self-overcoming understood as the disposition to increase one’s powers to act and especially one’s ability to self-direct the exercise of one’s agency.[20]

Thus, *a healthy, accountable level of “coopetition” – even with one’s self in the form of self-mastery – is actually facilitated by taking a relational approach. It should seek to emphasize the foundational nature of cooperation with respect to competition, i.e., that without a foundation of interdependence and what ecologists refer to as “ascendency", competition would not be possible.* This observation should render much of economics rather uncomfortable. It directly contradicts the central role which competition has in social systems like the economy. In fact, according to Robert Ulanowicz, “mutuality manifested at higher levels fosters competition at levels below".[21] Competition arises because two mutualistic ecosystems are competing for the

[18] For an overview of the influence of the *agonic* in Burckhardt’s understanding of democratic practice, cf.
[19] A good example of the agonic is the Olympic games, where players are free to compete in a particular context that is itself contextualized within a greater social cosmos
[20] Owen, D. (2019) “Nietzsche’s antichristian ethics: Renaissance virtu and the project of reevaluation’”. *Nietzsche and The Antichrist: Religion, Politics, and Culture in Late Modernity*, pp. 67–88.
[21] Ulanowicz, R. E. (2009). *A third window: natural life beyond Newton and Darwin.* Templeton Foundation Press. p. 75

same scarce resources. Carrying this observation to its conclusion, it implies that there can be no competitive market without the overarching networks of mutually beneficial relations we call society.

Thus, a general theory of cooperation also must recognize the relation of cooperation to competition and study where these two elements are complementary and where they clash, and to clearly demarcate those corridors, developing strategies and heuristics for stakeholders traversing these corridors. This is of course related to education and training, which already forms the fifth ICA principle.

9. Connect with civil society and so-called “General Interest Cooperatives"

Not all cooperatives are single-member cooperatives. An increasing number of *multi-stakeholder cooperatives* is appearing. *A general theory must recognize logics behind the single-member model: producer, consumer, service, etc. and embrace a polylingual cooperative logic.* This, because the new types pursue the general interest of the community […], and not the interest of their members. They are not mutual cooperatives but *general interest cooperatives*. […] Cooperatives, therefore, are no longer necessarily linked to a mutual purpose, and the law increasingly admits their pursuing the general interest. Cooperative legal theory has to recognize this fact and start also dealing with general interest cooperatives, which relative to mutual cooperatives present different problems of regulation, due to their distinct objective. [Fici et al., 2013, pp. 33-4, own emphasis]

Thus, any *general* theory of cooperation must understand the genealogy, both *Ursprung* and *Entstehung*[22] of cooperative principles and legislation, which are deeply influenced by Webbite social democracy, which had a “tripartite conception of the world of labor"[23], split between producers, consumers and politicians. The Webbs were highly influential in their strategic endeavors to separate the then-still diffuse cooperative and trade union movement in the UK and in channeling much effort to separating out both agency and communication in the tripartite conception. Practically speaking, their focus on “common bonds" like consumption, labor and politicking have had the effect of reducing the *public* orientation – as well as the political impact – cooperatives have had. It thus reduced the immediate impact of the cooperative movement on the unfolding civic imaginary, reducing their role more to parochial self-help societies, as Bull and Ridley-Duff (2016, p. 247)[24] argue.

Before [the Webbs’ “division of labour”] the impulse [. . .] had been to bring such work together in whole people, by means of co-operative mutual associational forms, working [against] capitalist divisions by which they were surrounded. This impulse challenged – and fully realised would have transformed – capitalist divisions of labour, transforming the meaning of, and sites for, government, production and consumption.

Understanding this trajectory is important in terms of changing the regime of cooperation to more actively embracing a “general purpose" vision lodged in multi-stakeholding.

[22] Cf. Foucault, M. (1978). *Nietzsche, genealogy, history*.
[23] Harrison, R. (2016). *The life and times of Sidney and Beatrice Webb: 1858-1905: the formative years*. Springer. p. 177.
[24] Bull, M. and Ridley-Duff, R. (2016). Multi- stakeholder co-operativism: The (hidden) origins of communitarian pluralism in the UK social enterprise movement. EAEPE 2016.

From General to Applied Principles

A general theory of cooperation, as stated, must be able to account for both cooperation in a narrower sense, as well as in a general, evolutionary sense. In other words, it must facilitate "translation" of both those building blocks concerned with institutional and those concerned with evolutionary aspects. It must also be able to accommodate tensions between the various principles. For instance, building blocks 1 (autonomy) and 5 (regulatory oversight), or 8 ("agonic freedom") and 9 ("connecting with general cooperation") are each in tension. Overcoming such tensions in complex settings involves associating priorities with each building block and dealing with the relationship between the elements, i.e., their hierarchy.

The ICA Cooperative Principles and Values offer an empirical example of how to deal with tensions between principles like "democratic member control", "member economic participation", or between "autonomy" and "intercooperation". Resolving them in other domains will involve in particular applying lessons from second-order cybernetics, whose fundamental epistemological framework is designed to emphasize "ubiquitous phenomena of control and communication, learning and adaptation, self-organization, and evolution."[25] These lessons can apply for psychology, sociology, economics, anthropology, biology and various other related disciplines. A recent revival in the fortunes of cybernetics as a research paradigm in the guise of complexity science, among others, is promising in this regard.[26]

The remainder of this contribution will be concerned with interpreting these notions for the case of *cooperative economics.* Ultimately, the connection between cooperation and *economy* must lie in the connection between the institutional practices (environment), persistent norms (preferences) and behavior in achieving the creation of value. This requires studying and understanding how value is created, assigned and distributed, i.e., what institutions exist to constrain the *governance* of value-generating productive undertakings[27]. That is, any cooperative economics at once involves the institutional (i.e., "governance") building blocks, i.e., building blocks 2, 4, 5, 6, and 7.

At the same time, a *cooperative economics,* guided by the experience of the cooperative law corpus introduced above, must seek to understand these institutional dynamics in terms of their transformation over time. This involves incorporating *evolution* and *communication* into the model, embracing, e.g., an evolutionary understanding of ethics that enables a "social imaginary" to develop over time. Such an evolutionary perspective involves building blocks 1, 3, 8 and 9.

In the remainder of this article, I attempt to trace out where these two general perspectives, the institutional and the evolutionary, can be connected at the intersection of *law, labor* and *cooperation.* I begin by developing an appropriate conceptual framework for contextualizing *cooperation,* particularly with the notion of the *relational rent.* Then, in the sequel, we shift our attention to the intersection of *law* and *labor* in the theory of *imputation.* Finally, I try to connect the other two in a triad via the concept of *social law* and finish by drawing preliminary conclusions to this theory-building exercise.

[25] Scott, Bernard. "Cybernetics for the social sciences." *Brill Research Perspectives in Sociocybernetics and Complexity* 1.2 (2021): 1-128.
[26] Id., p. 22
[27] [Bowles et al., 2012] Bowles, S., Fong, C. M., Gintis, H., and Pagano, U. (2012). The new economics of inequality and redistribution. Cambridge University Press.

Hierarchy & Relational Rents

While I alluded above to the potential for frictions to arise between different building blocks, in this section I attempt to move away from general principles to delineating how to navigate such potential conflicts. In particular, juxtaposing lessons from second-order cybernetics regarding issues of control and *autopoesis* with a critical examination of social contract theory, I ask what lessons these fields can offer for organizational cooperation, particularly the distribution of what I later refer to as "cooperative" or "relational rents". The main lesson from this discussion is that the nature of relationships in an organization, including the nature of information flows and what we generally call "hierarchy", matters for the production and distribution of relational rents within organizations.

Redefining the Social Contract

Gierke's juxtaposition of *concessio* and *translatio*[28], which juxtaposes *alienable* and *inalienable relations* makes clear there is a need to define the ability to withdraw from the social contract. Thus, there is a logical error in the assumption of an *implicit* contract. While Grotius and Pufendorf agreed that an explicit agreement had to be made, they assumed such an agreement to have occurred in the past[29]. Hobbes, Locke and Rousseau, on the other hand, saw the social contract largely as a figurative notion (a "regulative ideal", as David Ellerman states). Meanwhile, Kant argued that "The state of peace among men living side by side is not the natural state (*status naturalis*); the natural state is one of war. […] A state of peace, therefore, must be established"[30]. Moreover, Kant addressed in his *Zum ewigen Frieden* the role that *transitions* play in shifting from one constitutional order to another.[31]

In this regard, Kant speaks of *permissive law* (*Erlaubnisgesetze* or *leges permissivae*), by means of which he merely refers to a *transitional regime*. Kant writes, "if cracks or fissures which were unavoidable appear in a state's constitution or its relations internationally, a duty arises, particularly in its rulers, to […] as quickly as possible, concern themselves in repairing these, even should it cost self-sacrifice." (Id., p. 233) Thus, Kant argues, "A state may exercise a republican *rule*, even though by its present constitution it has a *despotic* rule, until gradually the people becomes capable of being influenced simply by the idea of the authority of law" (Id.)

For Kant, there is clearly a benefit in a negotiated settlement to a renewal or reform of the social contract: "for a legal constitution, even though it be right to only a low degree, is better than none at all, the anarchic condition which would result from precipitate reform". Thus Kant supports revolutions which "when nature herself produces them, and where political wisdom will not employ them to legitimize still greater oppression; on the contrary, it will use them as a call of nature for fundamental reforms to produce a lawful constitution founded upon principles of freedom, for only such a constitution is durable." (Id., p. 234, footnote)[32].

[28] Cf. Ellerman (below) on this.
[29] Baynes, K. (1989). Kant on property rights and the social contract. *The Monist*, 72(3):433–453.
[30] Kant, I. (1983). *Werke in sechs bänden*, hg. v. Von W. Weischedel. Darmstadt: wissenschaftliche. Vol. VI, p. 203
[31] For more on Grotius and Pufendorf's theory of the state and social contract, cf. Gierke, O. (1881). Die staats-und korporationslehre des al- tertums und des mittel-alters. Das deutsche Genossenschaftsrecht, III.) Berlin.
[32] A contemporary example of such a negotiated settlement can be found in Chile, where a process to reform a dicatorship-era constitution takes place within the formal framework provided by that same constitution.

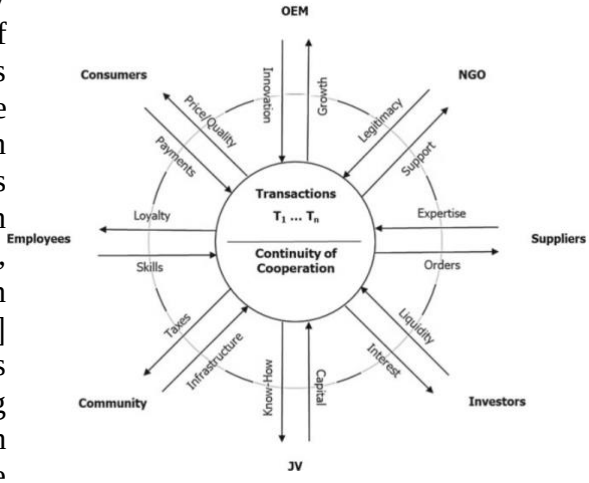
Both the "Indigenous Critique"[33] and the framework of relational economics place an emphasis on rethinking social contract theory, as well as functions like *leadership*. Kant's notion of a transitional order can also help us frame the context of a transition dynamically, from the legal logic of formal social institutions. Viewing such institutions as negotiated or contested terrain emphasizes the contingent nature of what Machiavelli called *legge* and *ordeni*[34]. We see examples of such a *dynamic transition* in cases like the constitutional plebiscite in Chile, a country which has recently begun referring to itself as a "plurinational state".

One of the problems with much of social science, and especially economics, with regards to collective choice, is its instrumental view of democracy. For many social scientists, democratic decision-making is simply a means of realizing private preferences. Or, as [Bowles and Gintis, 1986, p. 17] put it, "democratic institutions are held to be merely instrumental to the exercise of choice: democracy facilitates the satisfaction of perceived needs." This reasoning, it has been repeatedly shown, is mistaken and institutional as well as evolutionary economists regularly abandon it, especially in the growing field of cooperative economics[35].

In particular, as we come to understand firms as social networks, we recognize multiple functions besides a purely instrumental logic. Applying the lessons of second-order cybernetics perceives the relationship between motivation and empowerment and stimulates a progressive reading of social contract theory, rendering the ability to exit the contract explicit, not merely implicit. As Albert Hirschman famously observed, this "exit option" is often not available to firm actors, such as workers. In the remainder of this section, we analyze why it may be vital for the long-term survival of the business enterprise to more explicitly incorporate a cooperative logic.

[33] Graeber, D. and Wengrow, D. (2021). *The Dawn of Everything: A New History of Humanity.* Signal.
[34] Cf. Benner, E. (2009). *Machiavelli's ethics.* Princeton University Press.
[35] The author's own doctoral dissertation serves as an overview of the field. Cf. Chpt. 2 for a literature review.

Firms as Dominant Actors



What is the relevance of social contract theory and notions of "perpetual peace" for the issue of a cooperative economy? In fact, many authors speak of a "post-Westphalian order" where national sovereignty is no longer the common denominator in the international order[36]. In its place, networks of firms have taken an increasingly dominant position. In fact, the firm, not the nation-state, is the dominant actor in today's world. As [Wieland, 2018, p. 77] comments, over 70% of global trade today takes place in intra-firm transfer pricing, meaning markets are no longer the appropriate domain for engaging in economic theory. Their place has been taken by increasingly self-confident, aggressive and powerful networks of firms, which have become "the dominant institutions of the modern world" [Berle and Means, 1932, p. 313][37]. Thus, when governments seek policies to regulate markets, they are often mistaken in their focus. More focus of government policy must be placed in rendering firms more accountable to the communities they serve, and in which they are embedded, and to the stakeholders without whom they cannot exist[38]. This applies in particular to firms' workers and users, who are in most cases, *de facto*, powerless [Hirschman, 1970][39].

[Ferreras, 2017][40] has suggested that the contemporary labor market, dominated by service work, has shifted the domain of labor from the private to the public. It is clear that this is an extension of the argument begun by Marx in Chapter 11 of Vol. 1 of *Capital*. Thus, the fact of cooperation, which has itself acted to shape and redraw the distinction lines according to which the economy is delineated, has increasingly forced a public logic upon the "hidden veil of production". As we move further away from the classical master-slave dynamic, social institutions must catch up to the new facts on the ground. In this vein, the relational view emphasizes that leadership is a *relation* and not merely a role[41].

As a study of the rise of democracy in Athens demonstrates, the role of *citizenship*, i.e., membership in an inclusive collective, was essential[42]. If we view democracy as a progressive ideal, we must abandon the precept, followed by some within both economics and in the history of social thought, of the "partition[ing] of social space arbitrarily exempt[ing] such basic social

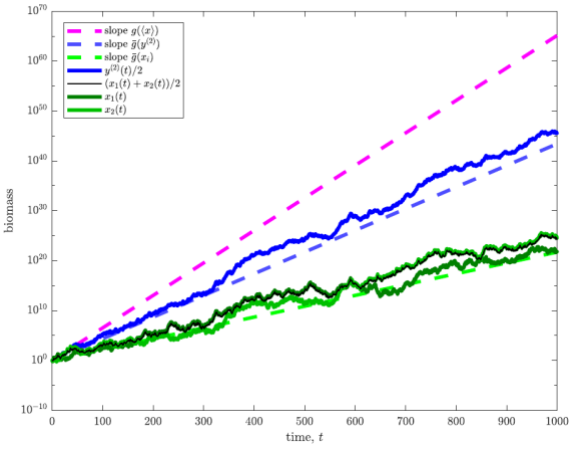
[36] Cf. Rothkopf, D. (2012). *Power, Inc.: The Epic Rivalry Between Big Business and Government–and the Reckoning That Lies Ahead.* Macmillan. or [Schneider and Mannan, 2020] Schneider, N. and Mannan, M. (2020). Exit to community: Strategies for multi-stakeholder ownership in the platform economy. *Georgetown Tech Law Review*.
[37] Berle, A. and Means, G. (2017 [1932]). *The modern corporation and private property*. Routledge.
[38] It is in this regard that the UN SDGs, the EU Sustainability Reporting Directive and other similar phenomena should be interpreted as an improvement over prior iterations of international law and norms.
[39] *Hirschman, A. O. (1970). Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*, volume 25. Harvard university press.
[40] Ferreras, I. (2017). *Firms as political entities: Saving democ- racy through economic bicameralism*. Cambridge University Press.
[41]Cf. Montgomery, D. (1995). *Citizen worker: The experience of workers in the United States with democracy and the free market during the nineteenth century.* Cambridge University Press.
[42] Rhodes, P. et al. (1984). *The Athenian Constitution*, volume 285. Penguin.

spheres as the economy… from scrutiny of democratic institutions" [Bowles and Gintis, 1986, p. 17]. While his view of social ontology was static and negatively impacted millennia of thinkers to Schumpeter, Aristotle's notion of "civic moral partnership" appears one that must necessarily extend progressively to more domains and to include more individuals and groups, if the goal of democracy is to be seen in the progressive elimination of the master-slave relation[43]. Thus, I propose rendering the firm a dynamic "civic moral partnership", a "revolution" which Kant states can occur "even in a despotic constitution".

One way to achieve this is to move to exploit the beneficial outcome of *general cooperation*. As Figure 1 shows, not only employees, investors and suppliers, but also consumers, joint-ventures, NGOs, Original Equipment Manufacturers (OEMs) and the general community are stakeholders in a firm's *running concern* and all provide stakeholder resources. Shifting the stakeholder dialogue in firms to social value-creation can thus manifest the shift to viewing firms as "social institutions". This can be achieved by realizing a social contract between firm and society, by viewing the firm as a "principal of all stakeholders" [Wieland, 2018, p. 76] and by viewing management and leadership as agents, but not agents serving the interests of investors only, but rather as governance relations "identifying resources" and prioritizing these resources with respect to the ongoing concern's transactions[44].

Why Cooperation?

The domain of *ergodicity economics* has revealed many of the contradictions inherent in modern economic theory, particularly its notion of *expected utility*, which is based on an ontological contradiction and an epistemological paradox, which fails to recognize the path-dependent nature of preference development and the fact that individuals simply do not discount the future in the way that neoclassical economists assume[45].



One of the interesting results to come from this discussion, is the provision of a non-normative answer to the question of *why cooperation*? that recalls Robert Axelrod's work on the subject. To remind the reader: all things equal, individuals who share things can reduce the volatility of their endowment over time. Thereby, over time, *ceteris paribus*, individuals who share, also share risks and so have a higher growth in income than those who shoulder risks alone.[46] This point can be seen in Figure 2. This is a very elegant

[43] In fact, Aristotle had a quite "Utilitarian" or instrumental justification for slavery, suggesting that "If every tool, when summoned, or even of its own accord, could do the work that befits it," [Aristotle, 2003, Book I, Chapter IV], cited, e.g., in [Benanav, 2020].

[44] Cooperative principle 1 on "voluntary and open membership" is interesting in this regard. There is a question implicit in the principle, as the *Guidance Notes* specify, of counterbalancing *rights* with *responsibilities*, an issue of central concern to Gierke (see below). At the same time, the notion of "Creating Shared Value" introduced below also juxtaposes the benefits of extending membership with the need for the going concern's continued existence.

[45] In fact, people generally discount "quasi-hyperbolically" Cf. Elster, J. (2001). *Ulysses unbound.* Cambridge University Press, p. 28.

[46] Peters, O. and Adamou, A. (2015). An evolutionary advantage of cooperation. arXiv preprint arXiv:1506.03414.

and non-ethical justification for cooperation that is independent of any notions of *inclusive fitness* from biology, and can serve as an explanation as to *why* notions like altruism and tools like language evolved. It also emphasizes the point that "cooperation is hard to initiate, but easy to sustain" (E.O. Wilson).

The discussion of the relationship between (non)ergodicity and organizations is surely only beginning. In particular, organizations involve complex relationships between multiple resources in different geographical locations and at different times, thus the question of how to enable and sustain cooperation at the (inter)organizational level involves more than merely extrapolating from a simplistic model. However, when one does add an ethical dimension and elements like social learning, this perspective can give us an epistemic basis to the concept of an 'inclusive imaginary': societies developing the ideational infrastructure[47] and sustaining cooperation via appropriate syntactical tools appear to benefit from what we may call a *relational rent*. We introduce this concept below.

Introducing the Relational Rent

A rent "represents a form of free income not based on an additional performance." [Wieland, 2018, p. 122] According to David Ricardo, "rent is always the difference between the produce obtained by the employment of two equal quantities of capital and labour." It thus "costs no additional capital" (Wieland, *supra*, Id.) Thus, the real contribution of capital to the wealth of nations lies in its ability to convert the social process of production cooperatively. Thus, Marx concludes in his *Grundrisse* that cooperation is among "the highest forms of economy" [Marx, 1974, p. 21][48]. Thus, while capital is the necessary condition, it is the social process of organizing production cooperatively that is sufficient, in the form of the "Arbeits- und Verwertungsprozesses des Kapitals".

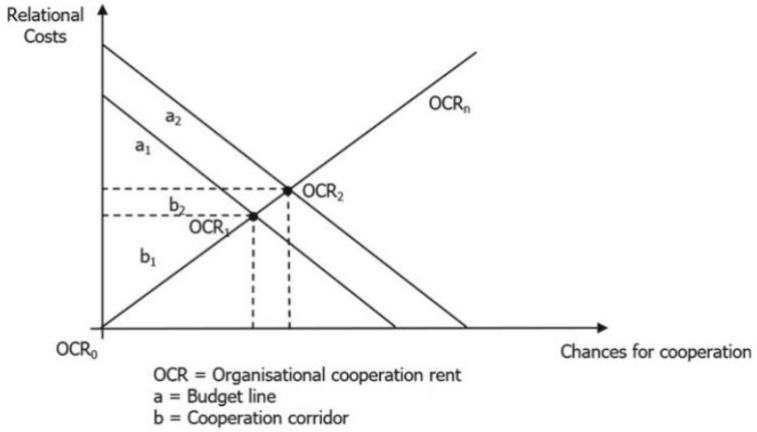
This social process, as trajectory, is influenced by the particular regime in which it is situated. Thus, within a socialized and politicized regime where the firm has become the dominant actor in the world, stakeholder management and governance take on new dimensions from those which, e.g., Schumpeter described in his *Theory of Economic Development*. In such an environment, "it is not only the individual entrepreneur who creates innovation. Companies now provide economic creativity in a collective and systematic manner. To survive in the long term, the company has become a collective entrepreneur." [De Woot, 2017, p. 14] Alternatively, if it is no longer the individual capitalist who (for the reasons explained by Marx) acquires the rent, but rather the organisation itself (the de-personalised organisation, an entity in its own right), it also means that every stakeholder who joins this organisation is not only entitled to a share of the organisation's earnings in the form of his/her factor income, but also to a share of the cooperation rent generated by and through an organisation. This is precisely why resource owners choose to join a given organisation: the return on investment as a combination of factor income and *cooperation rent*. [Wieland, 2018, p. 125, own emphasis]

As Wieland argues, following Barnard, "[i]t is the organisation as a functionally differentiated form that makes economic cooperation and the resultant rent possible" (Id.) In particular, the

[47] [Wilson et al., 2012] speak of "pre-adaptations", which are not necessarily genetic in nature, they can involve behavioral patterns, such as the fact that otherwise individualistic bees behave in cooperative ways in a given context. Moreover, the ecologist Bob Ulanowicz speaks of "propensities", borrowing the term from Popper [Ulanowicz, 2009].
[48] Marx, K. (1974). *Grundrisse der kritik der politischen ökonomie* (rohentwurf): 1857-1858; anh. 1850-1859.

idea of the firm as a nexus of relationships extends beyond the legal form of the firm itself, rendering an approach couched in Pareto optimality "at best a partial solution" (Id., p. 126) and a transaction-specific event. Thus, the relational view posits a firm as a "firm-specific network" with both private and public stakeholders. (Id.) Within this context, the "cooperative rent" should be seen as what the classical political economist James Steuart referred to as a "positive profit", particularly one derived from *differentiation*. It is thus a rent based on a continuing relationship[49].

Wieland speaks here of a *relational* rent, which refers to a jointly produced profit (i.e., Marx, 1910, Chapter 1], profit that could not have been generated in isolation). Transcultural skills, for instance, contribute to such a rent (by generating new conditions for exploiting resources)[50]. From this perspective, the inter-firm *network* is the basic unit of analysis. Within such a context, relational rents are generated from one or more of the four factors: 1) relation-specific assets (these impact the duration and volume of transactions); 2) knowledge-sharing routines (consist of institutions and routines); 3) complementarity of resources (these serve as mechanisms for identifying the above assets); and 4) effective governance (in particular, self-enforcing forms based on *informal* contracts).



Since these factors – and thus different types of relational rent[51] -- *are produced simultaneously*, conflicts necessarily arise as to the just distribution of such rents. It is arguable that, whereas in an era of homogeneous industrial production, these questions could be resolved by fiat. However, the present historical moment is one in which production is increasingly public and *mission*-oriented. Missions constrain organizations in preferring certain paths over others. Certain rules for clearly specifying stakeholder inclusion are therefore desirable.

Shared-Value Creation versus Creating Shared Value

In order to deal with these conflicts, the relational economics domain advocates a framework of *Creating Shared Value*[52]. This framework "approach[es] the societal problems triggered by globalisation, which are addressed, for example, in movements for Corporate Social Responsibility (CSR) and Sustainable Development Goals (SDGs), as opportunities for growth with win-win options for firms and societies". As [Porter et al., 2012, p. 1][53] state,

[49] [Malcomson, 2013, p. 1057]. cited in [Wieland, 2018, p. 127].
[50] For more on this, see [Biggiero, 2022, pp. 97ff.] and [Wieland, 2018, Chapter 8].
[51] cf. Lavie, D. (2006). The competitive advantage of interconnected firms: An extension of the resource-based view. *Academy of management review*, 31(3):638–658.
[52] Kramer, M. R. and Porter, M. (2011). *Creating shared value*, volume 17. FSG Boston, MA, USA.
[53] Porter, M. E., Hills, G., Pfitzer, M., Patscheke, S., and Hawkins, E. (2012). Measuring shared value–how to unlock value by linking business and social results. Foundation Strategy Report, pages 1–20.

More and more, companies are creating shared value by developing profitable business strategies that deliver tangible social benefits. This thinking is creating major new opportunities for profitable and competitive advantage at the same time as it benefits society by unleashing the power of business to help solve fundamental global problems.

The framework, in a nutshell, criticizes the fact that in the standard exchange paradigm of *Shared Value Creation* (SVC)[54], most stakeholders are only included *ex post*, which limits the scope of SVC's impact. CSV attempts to fix this delinquency by adopting a *multi-stakeholder* perspective *ex ante* and allows for non-market approaches for shared value. Moreover, whereas SVC "demands risk neutrality, transparency" and other strong assumptions[55], these "can be systematically ignored for the purposes of modern and global economies. Why? Because cultural diversity, differing risk preferences, contracts that cannot be formally enforced and resource revenues that cannot be separated (or only at a prohibitive cost) are the immutable preconditions for global cooperation and economic networks." (Id.)

In the place of such a reductionist approach, one steeped in a *relational* logic is required, focusing on 1) the willingness, 2) ability and 3) opportunities to cooperate. These three domains involve both psycho-social processes of cultural learning, feature institutional components, multi-level resources, values like reciprocity and organizational standards. As opposed to the *Transaction Cost Economics* (TCE) approach of Oliver Williamson, firms in the CSV approach are not merely focused on minimizing transaction costs, but also on generating shared value. (Id., p. 146)

The decision structure in a CSV approach includes a trade-off between *relational costs* and the *relational rent*. Relational costs consist of 1) *transaction costs* (these are very similar to those perceived by the neoclassical framework); but also 2) *adaptation costs*, which include so-called "bargaining costs" regarding matters like communication, diversity, etc.[56] and which can also be bundled (sub-additivity); 3) *cooperation costs* which are "those incurred in order to undertake a collaborative activity with a partner, separate from those incurred in reducing the threat of opportunism from that same partner" [White and Siu-Yun Lui, 2005, p. 914], (meaning they can be > 0).

According to this view, cooperation occurs if the value of the cooperative rent less the relational costs is greater than 0, or, represented as an equation, if

$$CR_t - RC_t > 0$$

Equation 1, where CR_t is the cooperative rent and RC_t the relational costs, merely represents the above relation mathematically. Figure 3 represents the trade-off visually. The point is that such a relational viewpoint does not act to constrain exchange transaction, instead it actually facilitates and increases the domain where these are possible. As organizational science is "not yet a fully developed field" [Wieland, 2018, p. 155], the strengthening of a relational point of view can only aid in a process of maturation.

Learning the Lessons from Sociocybernetics

[54] For an overview and comparison of each perspective, cf. [Wieland, 2018, p. 133ff.].
[55] Cf. [Wieland, 2018, p. 136].
[56] [Wernerfelt, 2016], cited in [Wieland, 2018, p. 147].

The fact that I have, following Josef Wieland, represented cooperative rents via a mathematical equation should not imply there is a linear relationship between relational rents and costs. Complexity, uncertainty, scarcity and second-order feedback effects can dramatically impact the relationship between the costs and benefits of cooperation. This makes dynamic, non-equilibrium models important. These must increasingly include elements dealing with organizational learning, transition and trans-cultural resource management. Such models will need to include both the institutional and the evolutionary building blocks[57].

In the end, viewing firms as social networks facilitates the importation of logics beyond optimization given constraints[58]. Even considering the present challenge of climate change, it is clear that traditionally node-centric approaches like "science-based transition plans" can only, at best, hope to deal with the institutional dynamics of the economy. In order to shift the evolutionary (or communicative) aspects of the economy towards a situation of "consummate cooperation", the notion of "creating shared value" can be a useful anchoring device.

It should be clear to readers familiar with cooperation in the narrower sense how the paradigm of CSV shares many isomorphic features with the ICA principles. For instance, the idea of viewing the firm as a "firm-specific network" resembles cooperative principles 6 and 7, while the idea of *ex ante* stakeholder engagement in value-creation is similar to principles 1 and 2. The focus on transcultural management resembles principle 5 and the trade-off between relational rents and relational costs is similar to principle 3. While the paradigm of relational economics is, to date, not sufficiently familiar with the "dialect" of the ICA principles and cooperation in the narrower sense, current and future efforts are being directed to closing this gap[59].

One example of a trade-off between a relational rent and costs is the fact that at many Italian cooperatives, elements of what we above called "cooperative costs" are split between the focal organization and the respective cooperative federation. For instance, at the large industrial cooperative CPL Concordia near Modena, courses for leadership trainees are provided both by the company and by Legacoop. This reduces the costs an individual organization must shoulder for training its leaders. The shared training costs can therefore be seen as a relational rent.

Moreover, a member of CPL Concordia's board described her role less in a "charismatic" sense and more in a "representative and networking" sense, in which she is, above all, "concerned with cooperative values and their application", as well as "concerned with finding opportunities for the cooperative" based on her connections and her daily work efforts[60]. This appears to underscore the notion that a cooperative or relational perspective on firm governance views leadership more as a function (a "relation of relations"), rather than a specific role.

Conclusions from The Relational Rent

Ultimately, while this line of reasoning is not extensively developed in this contribution, one conclusion is that a closer dialogue between and analysis of shared attributes between the

[57] One recent example of such a model is Sacchetti, S. and Borzaga, C. (2020). The foundations of the "public organisation": governance failure and the problem of external effects. *Journal of Management and Governance*, pages 1–28.
[58] Cf. Biggiero, L. (2016). Network analysis for economics and management studies. In *Relational Methodologies and Epistemology in Economics and Management Sciences*, pages 1–60. IGI Global.
[59] Cf. Ongoing research endeavors by the author and, e.g., Lucio Biggiero.
[60] Survey conducted in March, 2022.

paradigm of cooperation in the broader (e.g., CSV) and in the narrower sense (e.g., ICA cooperative principles) is necessary. More broadly, the generation of a relational rent is the necessary condition for cooperation. It is clear from the above that the *evolutionary* aspects described in the introduction, i.e., building blocks 1, 3, 8 and 9, are significant contributors to the facilitation of a relational rent. Moreover, it appears that general building blocks 1. (autonomy), 8. ("agonic" freedom) and 9. ("connection with civil society") are the most significant to the above discussion. Why? The discussion above attempted to show the centrality of an unfolding democratic imaginary embracing autonomy (principle 1) in maximizing the relational rent of a particular "society".

Moreover, the "agonic", as introduced above, entails a process of mastery, in the sense of education and training, which can be interpreted in terms of capital investment in codes[61]. This mastery entails certain practices that can be described as "cooperative" or "competitive" depending on the perspective on uses to frame them. Choosing a framing of "Creating Shared Value" will usually emphasize the cooperative aspect. We should remind the reader at present that such a mutualistic reading is only possible when sufficient resources are available so as to prevent a breakdown of cooperation (e.g., the interests of the going concern). Thus, *scarcity* forms the outer bounds of the social reading of the "agonic".

Lastly, the connection with "general purpose cooperation" extends and deepens cooperation to include a multi-stakeholder, relational logic. If firms are indeed dominant actors in the contemporary world, then their role as social – or even *political* [Ferreras, 2017] – institutions should be embraced. This requires moving beyond the framing of firm activities in terms of the rights of *ownership* of shareholders, the *agency* of managers or similar notions attached to either *authority* or *bargaining*, but instead encourages a framing in terms of *discourse.* This framing appears, according to the above discussion, necessary for realizing the promise of "Creating Shared Value".

It is clear that the fields of biology, anthropology and psychology, *inter alia*, can help shed light on the *why* of cooperation, clearly specifying the channels by means of which cooperative behaviors can evolve, even in environments "hostile" to cooperation [Axelrod, 1982]. These channels can connect environmental factors with behavioral and genetic elements and spell out emotional and psychic requisites for such behaviors to sustain themselves, investigating the role of factors like reward, esteem, punishment, monitoring, trust, empathy, etc. in such processes. Much of this work has already been conducted. It is therefore a matter of importing it into disciplines where such developments have been less successful in propagating, notably *law*, *economics* and *organizational theory*

It is to the nexus between these we turn next.

The Importance of Law in Realizing Cooperation

Whitehead in *Process and Reality* suggested the image of the "firm as society", featuring a "common element" that additionally "arises in each member of the nexus". Thus, according to the above view, a firm is a unity of *form*, *relation* and *reproduction*. Not objects (whether masters or servants), but *relations* should take primacy in description and analysis. Thus, the

[61] Arrow, K. J. (1974). *The limits of organization.* WW Norton & Company.

appropriate image for a "fundamental transformation" [Williamson, 2007][62] should be a "going concern" and not a machine. Now that we have established the vitality of such a perspective via the discussion on relational rents, the question is whether the existing framework of neoclassical economics is able to incorporate it or whether attempting to integrate such a view into a neoclassical economics framework resembles more "the complicated reasoning made by Ptolemaic astronomers to account for inexplicable orbits." [Biggiero, 2022, p. 55, footnote] If the latter does obtain, then it wouldn't make sense "[f]or a Copernican astronomer [to learn] the calculations required by the old paradigm [… instead] It [would be] necessary to simply change the paradigm." (Id.)

As Kant emphasizes, the master-servant relation is ultimately a *legal*, not merely a contractual relation [Kant, 1983, Vol. IV, p. 383]. Thus, we now turn to the legal domain, parsing how the dominant neoclassical economic model is unable (and, in fact, *unwilling*) to account for these vital *polycontextual* relations. In fact, one of the main criticisms of neoclassical offshoots like "New Institutional Economics" (e.g., TCE) is that, while some of its entrants do develop a constitutive understanding of either preference formation or contract enforcement [Bowles, et al., 1993][63], it typically does not extend this to the level of the organization.

In fact, the reason for the existence of the firm is frequently ascribed to a distinction between "hierarchy" and "market", without a consideration of qualitative differences in organizational hierarchies. It is here that a closer investigation between the intersection between *law* and *labor* is necessary. I contribute to the closing of this gap below by connecting the economics and law literature in their analyses of these concepts. Drawing on research by David Ellerman, I argue that the concept of *imputation* can serve as a bridge between the legal and economic domains.

Jurisprudence in Economics

Ellerman in his *Putting Jurisprudence Back into Economics* goes to lengths to show that economics did not always look as it did today, a collection of abstract models based on 19th century fluid dynamics, with some vulgar psychology to boot[64]. In fact, the German Historical School, containing such great names as Brentano, Schmoller, Weber, Hildebrandt and others was quite centrally concerned with the interaction between law, jurisprudence and economic outcomes (including distributional questions). However, especially since Alfred Marshall's *Principles of Economics*, this has changed[65]. Writes Ellerman, "John Stuart Mill […] was the last major political economist who considered the study of property rights as an integral part of economic theory." This is all the stranger, remarks Ellerman, as "[t]he property system underlies the price system. There is no market without an underlying system of property and contracts." (*(Id.*)

Moreover, as Ellerman eloquently notes, *property does not appear out of thin air*: "Property and the legal rights to property have a life cycle; they are created, transferred, and eventually

[62] Williamson, O. E. (2007). The economic institutions of capitalism. firms, markets, relational contracting. In *Das Summa Summarum des Management*, pages 61–75. Springer.
[63] Bowles, S., Gintis, H., Gustafsson, B., et al. (1993). *Markets and democracy: participation, accountability and efficiency*. Cambridge University Press.
[64] Mirowski, P. (1991). *More heat than light: economics as social physics, physics as nature's economics*. Cambridge University Press.
[65] Heilbroner, R. L. (1961). *The worldly philosophers: The lives, times and ideas of the great economic thinkers*. Simon and Schuster.

terminated. Market contracts transfer property rights but what is the institution for the legal creation and termination of property rights?" (*Id., p. 3*) In fact, establishes Ellerman, there is virtually no consideration of the question of creating and destroying property. Or, as Ellerman puts it: "It is a remarkable fact—which itself calls for explanation—that the sparse literature on the so-called 'economics of property rights' does not even formulate the question about the mechanism for the initiation and termination of property rights in these normal activities." (Id.)

The fact that this question isn't ordinarily discussed by orthodox economics makes it no less important: "Hence the question before us is *the mechanism for the appropriation of the assets and liabilities created in normal production and consumption activities*."(*Id., p. 4*, own emphasis) It would be a challenge to refer to existing economic texts, as, according to Ellerman, most economics literature "ignores the assignment of initial rights in normal production." (*Id., p. 5*) Thus, mainstream economics deals with a number of *myths* in this regard. For instance, it is rather commonly thought that the product rights are "attached to" or are "part and parcel of" some pre-existing property right such as the ownership of a capital asset, a production set, or, simply, the firm. This idea in various forms is so ubiquitous that it might be termed the *fundamental myth* about the private property system. It is the lodestone that sets so many compasses wrong in neoclassical Economics… (*Id.*)

One example of the "fundamental myth" for Ellerman is the doctrine of *jus fruendi*, usually interpreted as a "right of ownership-over-the-asset's-products." (Id.) In fact, Ellerman comments that the fundamental myth can be found in the writings of modern adherents to *Marginal Productivity*. Paul Samuelson is cited as such an example:

It is the interdependence of productivities of land, labor, and capital that makes the distribution of income a complex topic. Suppose that you were in charge of determining the income distribution of a country. If land had by itself produced so much, and labor had by itself produced so much, and machinery had by itself produced the rest, distribution would be easy. Moreover, under supply and demand, if each factor produced a certain amount by itself, it could enjoy the undivided fruits of its own work. [Samuelson et al., 2010, p. 234], cited in [Ellerman, 2021, p. 5]

With regards to product rights being "attached to" an undertaking, Ellerman coldly reflects that "It is only a tautology to say that a corporation owns 'its products'; the question is how did the products produced in a certain productive opportunity become 'its products.'" (*Id., p. 6*) Moreover, "residual claimancy is contractually determined in a market economy; it is not legally determined by some "product rights" supposedly attached to some already-owned asset." (*(d., p. 7*) A frequently-cited example that gives lie to the fundamental myth is the case of the Studebaker company renting factory space from the Chrysler Corporation. In the early 1950s, the Studebaker-Packard Corporation had the Packard bodies produced in a Detroit Conner Avenue plant of the Briggs Manufacturing Company. After the founder died, all twelve of the U.S. Briggs plants were sold to the Chrysler Corporation in 1953. 'The Conner Ave. plant that had been building all of Packard's bodies was leased to Packard to avoid any conflict of interest.' (Theobald 2004) Then the Studebaker-Packard Corporation would hold the management rights and product rights for the operation of the factory owned by the Chrysler Corporation. (Id., p. 6).

The Failure of Traditional Economic Models to Foreground Property Rights

Ellerman refers to the failure to consider the role of legal regimes in creating property rights. In particular, whereas concepts like "primitive accumulation"[66] discuss the creation or appropriation in the abstract, "It is a remarkable fact… that the sparse literature on the so-called 'economics of property rights' *does not even formulate the question* about the mechanism for the initiation and termination of property rights in these normal activities." (p. 96)

One of the most mystifying concepts in the economics literature – its "sacred cow" – is that of the "invisible hand", typically attributed to Adam Smith. However, as Ellerman argues, this concept completely ignores the background process by means of which property relations emerge. Thus, in order for "the invisible hand" to become a meaningful term, it requires a theory of property as a foundation: "Just as neoclassical economics addresses the question of under what conditions does the price system operate efficiently, so the theory of property must consider when the invisible hand of the property system operates correctly." (p. 9)

Issues like "data capital" reveal in stark terms that "primitive accumulation" does not merely refer to a historical fact in the prehistory of the present era, but is a continuing process of adjudicating on the legality of property claims. Ellerman discusses the creation and termination of claims on property as being a significant aspect of what is referred to as "the invisible hand". According to Ellerman, "Property rights are *defined as much by the inaction of the legal system as by its actions*." (Id., p. 8, own emphasis) Ellerman suggests that this idea can be applied normatively: "The normative principle of appropriation is just the ordinary juridical imputation principle: assign *de jure* (or legal) responsibility in accordance with *de facto* (or factual) responsibility — applied to normal production and consumption instead of being applied by visible judges to torts and crimes."[67] (p. 9)

At this point, Ellerman argues that it is the responsibility of the legal system to ensure that the responsibility principle, consent and no contract broach obtain, for "if the legal authorities just ensure that the contractual machinery works correctly in the external market relationships between parties — no property externalities and no broaches — then the market mechanism of appropriation will indeed satisfy the responsibility principle in the internal activities of the parties" (p. 12). Thus, Ellerman argues that "[t]he 'confused' myth about the 'ownership' of the means of production is not part of the actual legal system where capital goods are just as rentable as people. But it is part of neoclassical capital *theory* and corporate finance *theory*." (p. 99)

These observations raise two questions with reference to the ownership of the assets and liabilities produced in the going concern[68], one descriptive and one normative, so Ellerman: the descriptive question of appropriation is: "How is it that one legal party rather than another ends up legally appropriating (Q, -K,-L)?" The normative question of appropriation is: "What legal party ought to legally appropriate (Q, -K, -L)?"

[66] Cf. [Marx, 1867, Chapter 26] or also work by E.P. Thompson.

[67] Ellerman argues that the principle of imputation could theoretically be applied to the services of non-persons: "However, since the demise of primitive animism as a legal theory (e.g., after the trials of child-killing pigs during the Middle Ages), the law has only recognized persons as being capable of being responsible." [Ellerman, 2021, p. 9].

[68] These assets and liabilities are usually represented as (Q, -K,-L) in economics, referring to an output (Q), less the capital and labor costs (-K and -L, respectively).

The usual neoclassical response ("value-theoretic metaphor", as Ellerman claims) is that "in terms of property rights and liabilities, one legal party appropriates 100% of the input-liabilities (0, -K, -L) as well as 100% of the output-assets (Q, 0, 0) which sum to the whole product (Q, -K, -L)." (p. 100) However, "[a]ll who work in a production opportunity ('Labor', including managers) are *de facto* responsible for using up the inputs K to produce the outputs Q, which is summarized as Labor's product (Q, -K, 0). But Labor (*qua* Labor) only legally appropriates and sells (0, 0, L) in the employment system. *Labor is* de facto *responsible for but does not appropriate the difference* which is the "institutional robbery" of the whole product. This can be represented by Equation 2:

$$(Q,-K,0) - (0,0,0,L) = (Q,,-K,-L)^{69}$$

In unusually candid terms, Ricardo in his *Principles of Political Economy and Taxation* emphasizes the culturally relative content of wages, discounting any real notion of "natural wage rates":

It is not to be understood that the natural price of labour, estimated even in food and necessaries, is absolutely fixed and constant. It varies at different times in the same country, and very materially differs in different countries. *It essentially depends on the habits and customs of the people.* [Ricardo, 1891, Chpt. 5]

Thus, in a society tolerant of slavery (albeit, a very different form of slavery than occurred in the Atlantic slave trade), a different notion of "fair wages" would prevail than in one embracing the principle of general "moral civic" partnerships, or again one with relational contracts, etc.

In fact, neoclassicals are only able to hide behind the market mechanism's operations by equating creative human agency to the operations of machines. In a passage that clearly outlines neoclassical economics' roots in the master-servant ontology of Aristotle, Cicero and Kant, writes neoclassical *Grand homme* Frank Knight: "[i]t is characteristic of the enterprise organization that labor is directed by its employer, not its owner, in a way analogous to material equipment. Certainly there is in this respect *no sharp difference between a free laborer and a horse, not to mention a slave, who would, of course, be property*."[70]

If this observation, which serves a central role in the arguments legitimizing the human rental system, i.e., a system that legitimates the selling (or renting?) of responsible labor, were more prominently reproduced for public consumption, it is certain that the ethical conclusions therein entailed would generate a significant degree of controversy. This controversy is augmented by the above-cited observation of [Ferreras, 2017] of labor relations' increasingly public nature in the contemporary service economy, where any comparison between, e.g., a Starbucks barista or taxi driver and a brewery nag would certainly be unacceptable. Knight's observation also serves to underline the danger in extending the economic logic of (costs-earnings) to ever more domains of life, and also provides evidence for the benefit of a perspective lodged in what Oliver Williamson called "consummate cooperation", contrasting it with "instrumental cooperation".

[69] From [Ellerman, 2021, p.104]
[70] [Knight, 2013, p. 126, own emphasis], cited in [Ellerman, 2021, p. 104].

The Myth of Marginal Productivity Theory

To address the question raised at the outset of this section, namely, whether, with respect to the relational viewpoint, the neoclassical domain should be seen as amendable or rather as a Ptolemaic rigamarole, we now come to the workhorse model of value-creation in that domain: the theory of *marginal productivity* (hereafter, MP). Ellerman argues that "[i]n order to address that question about the actual appropriation of the assets and liabilities created in production, one needs a theory of property, whereas marginal productivity theory is actually *only a theory of the derived demand for inputs*." (p. 110, own emphasis)

Ellerman suggests that MP is faulty, as it rests on "a metaphor, a mistake and a miracle". (p. 106ff.) The "mistake" was actually discussed above in the fact that there is no actual division of property rights entailed in the theory, as represented by Equation 2. Moreover, the "metaphor" can be seen in Frank Knight's above quotation comparing workers to horses and slaves.

Meanwhile, the "miracle" Ellerman speaks of entails the failure to include mutual interdependence of so-called "production factors" in the analysis. Thus, "the ⍙L [that is, an increase in labor inputs] would typically require an increase in the other inputs K in order to produce some extra output ⍙Q at minimum costs" (p. 111), meaning labor's product would equal (Q, -K, 0). (Id.) Thus, labor *uses capital* to engage in the productive process of goods and services, like Ricardo's "cotton stockings"[71].

Attempting to clarify and demystify the supposed "miracle" of an immaculate conception on the part of capital, Ellerman suggests, among others, that "*[o]utputs are not responsible for using up the inputs*; the people who work in the firm are the ones who perform the responsible human actions that use up the inputs in the process of producing the outputs.

"The actual non-metaphorical legal facts are that there is one legal party who stands between the input suppliers and the output buyers, and that one party legally appropriates the whole product, i.e., both the input-liabilities and the output-assets."`(pp. 110-111) In keeping with the relational viewpoint, this party is actually the firm, as we saw above. And the question of the distribution of the rents is a question that, as we saw in the prior section, requires the *ex ante* negotiation between all relevant stakeholders, including the workers who carry out the labor process. Neoclassical theory is not built for this purpose and so must be abandoned. I advocate for a *relational* orientation and next introduce a last epistemological element, the juridical principle of *imputation*, which allows the translation of a relational view into the legal domain.

The Juridical Principle of Imputation

Ellerman (re)introduces the so-called *juridical principle of imputation*, which derives from legal jurisprudence but which has also been accepted by a number of notable economists. The principle, which is common currency in law, merely states "assign legal responsibility in accordance with factual responsibility."; [Ellerman, 2021, p. 102]

Out of this, Ellerman intends to review what he calls the *labor* or *natural rights theory of property.* [Id., pp. 90ff.], also Ellerman [1990][72]. This theory has a long tradition going back in

[71] [Ricardo, 1891, p. 25], cited in [Cockshott et al., 2009, pp. 121ff.].
[72] Ellerman, D. (1990). *The democratic worker-owned firm: A new model for the East and West.* Routledge.

some aspects to antiquity, and found one of its earliest popular formulations – in a weakened form – in Locke's *Second Treatise on Government*. Numerous important economists have expressed support for the theory and its analogue in legal theory is firmly established. Among economists, the influential Friedrich von Wieser, foundational for both Austrian and neoclassical economists, expressed support for the principle. [Ellerman, 2021, p. 165]

As recalled above, Ellerman demonstrates that the neoclassical theory of MP is based on a fundamental error in reasoning. Again, this error has nothing to do with "being unrealistic, hard to measure, involving idealized informational assumptions", etc., but rather, that,

[b]y trying to show that the competitive ideal satisfies the principle of giving to each what it produces, [it] pays silent homage to the natural rights theory of property. Unfortunately for neoclassical theory, *the imputation is only metaphorical in MP theory* [Id., p. 90]

Thus, when neoclassical economists like Milton Friedman [Friedman, 1962, pp. 161–162][73] states his "ethical principle", attributing "[t]o each according to what he and the instruments he owns produces"[74], he is mistaking the *metaphor* of production factors for responsible agency. Ellerman uses the example of slavery to illustrate the logical fallacy of Friedman's and other neoclassicists' thinking and concludes that "[t]he real question is about *rights*, not real income." (Ellerman, *supra*, Id.) And, with respect to this question (i.e., rights), Ellerman suggests that economists have not paid nearly enough attention to this matter. In particular, "It is a remarkable fact—which itself calls for explanation—that economic theory, orthodox or heterodox, does not even formulate the question about the initiation and termination of property rights in these normal activities of production." (Id., p. 97) While termination, according to Ellerman, is considered by select economists working in the so-called "Law and Economics" tradition, these discussions are by no means general and Ellerman argues that the vast majority of economists have never broached the question of "what is the mechanism for assigning the liabilities for the normal deliberate using-up of inputs in production (or consumption)?" (*Id.*)

Again, as pointed out above, the fact of the rental of capital negates any naturalistic explanation, as Ellerman claims. Thus, in order to answer both the descriptive and normative questions, he enlists the services of the principle of imputation. Writes Ellerman, "The imputation principle applies in the first instance to deliberate human actions". (pp. 102-3) Thus, in the case of a productive undertaking (conventionally, a firm):

In factual terms, all who work in a productive opportunity (regardless of their legal role of employer or employee) are jointly *de facto* responsible for using-up the inputs and thus, by the imputation principle, they constitute the legal party who should owe those legal liabilities. And by those same deliberate human actions, they produce the outputs and thus, by the same imputation principle, they should be the legal party who should legally own those assets. Thus, the application of the conventional (i.e., 'bourgeois' in the Marxist sense) principle of imputation to production provides the juridical basis for the old claim of "Labor's right to the whole product"—to the positive and negative fruits of their joint labor. (Id., p. 103)

With regards to the employment contract, Ellerman elicits the *alienation* principle[75], suggesting that while "the owner of [an] instrument can factually fulfill [a rental or purchase] contract by

[73] Friedman, M. (1962). *Capitalism and freedom.* University of Chicago press.
[74] Cited in [Ellerman, 2021, p. 106].
[75] Cf. Also Dow (2018)

turning over the use of the instrument to the buyer or renter so that party can be factually responsible for using it and for whatever is thereby produced [because t]he services of a thing are factually alienable", the same cannot be said of the employment relation. Ellerman: "Responsible human agency is factually inalienable. Hence the contract to rent persons, like the voluntary contract to buy persons, is inherently breached and is thus inherently invalid. To pretend that responsible human agency can be transferred from one person to another is a legalized fraud carried out on an institutional scale in our current economic system, i.e., 'a barefaced though legalised robbery'". (Id.) This paradox can be seen in Figure 4, where the situation is described similarly to a Type I and Type II error in statistics.

Describing a situation of maximum conservatism in the traditional labor relation, Ellerman states that "At most, a person can and typically does voluntarily agree to obey the instructions of the employer, but then, in factual terms, they each share some of the *de facto* responsibility for the results of their joint actions." (p. 104) However, as above, the negative side of the invisible hand – i.e., the non-action of jurisprudence – is present in this circumstance, meaning that in the current scheme, the *de facto* shared responsibility is concealed behind the "legal fiction" of the labor contract. It is only by means of this "obverse invisible hand" that the laborer is considered an external supplier of "labor services". Ellerman concludes that the employment system inherently violates the juridical principle of imputation since one party is factually responsible for the whole product (the party consisting of all who work in the enterprise) while another party legally appropriates the whole product (the legal party playing the role of the employer). (*Id.*)

Table of injustices due to mismatch of factual and legal responsibility		Factual Responsibility	
		Factually responsible for X	Not factually responsible for X
Legal Responsibility	Held legally responsible for X	True positive	Type II injustice: Innocent party legally guilty
	Not held legally responsible for X	Type I injustice: Guilty party legally innocent	True negative

Thus, Ellerman forcefully argues that, if we are to accept the principles which the Enlightenment, the Reformation and modern constitutions and international law enshrine – principles of self-rule, autonomy, the inalienability of reason and responsibility: in short, if we subscribe to the progressive view of democracy outlined by John Dewey, Cornelius Castoriadis and Otto von Gierke, then *we must abandon the contemporary labor contract as not in keeping with the factual self-determination, or with the responsible, creative agency that the labor process naturally entails*. Even Adam Smith understood this, when he stated "[t]he value which the workmen add to the materials ... resolves itself ... into two parts, of which the one pays their wages, the other the profits of their employer'[76].

The Problem is the Human Rental System

If the modern wage contract is jurisprudentially questionable and ethically indefensible, then what should replace it? A natural candidate is the relational perspective advocated for by Biggiero [2022] and Wieland [2018] and introduced in the prior section. Ellerman supplements this view by clarifying the dangers of a pure exchange perspective. Agreeing with the relational

[76] Smith, 1974, p. 151, cited in [Cockshott et al., 2009, p. 121].

perspective's emphasis on informal rather than formal contracts and underlining the *associational* nature of labor relations, he argues

[t]oday, the root of the problem is *the whole institution for the voluntary renting of human beings*, the employment system itself, not the terms or completeness of the contract or the accumulated consequences in the form of the mal-distribution of income and wealth. (Ellerman, *supra*, p. 92)

"Hence," continues Ellerman, "the neo-abolitionist call… for the abolition of the contract to rent, hire, lease, or employ human beings in favor of companies being reconstituted as democratic organizations whose members are the people working in the enterprise" (p 105). Progressive U.S. Supreme Court justice Louis Brandeis[77] wrote that "no remedy can be hopeful which does devolve upon the workers participation in responsibility for the conduct of business; and their aim should be the eventual assumption of full responsibility—as in co-operative enterprises. This participation in and eventual control of industry is likewise an essential of obtaining justice in distributing the fruits of industry."[78]

Conservative thinker Lord Percy framed the issue as follows: Here is the most urgent challenge to political invention ever offered to the jurist and the statesman. The human association which in fact produces and distributes wealth, the association of workmen, managers, technicians and directors, is not an association recognised by the law. The association which the law does recognise—the association of shareholders, creditors and directors—is incapable of production and is not expected by the law to perform these functions. We have to give law to the real association, and to withdraw meaningless privilege from the imaginary one.[79]

Finally, and returning to a point made in the discussion of the rise of wage labor, "the system of economic democracy finally resolves the long-standing conflict between being a citizen whose inalienable rights are recognized in the political sphere and being a rented 'employee' in the workplace." (Id., p. 113) Thus, a relational view enables us to fulfill the demand of democracy as a progressive, emancipatory *process*, attributing dignity to increasing members of the human species and progressively breaking down barriers of translative, historically existent hierarchies.

Conclusions from Imputation

The above discussion has made the argument that the legal principle of *imputation* can serve as a foundation for a framework meeting the need for flexibility in the adjudication of priorities in terms of rights regarding the production and distribution of relational rents. Moreover, in line with this principle, building block 2 ("existence and promotion of democratic choice mechanisms") is significant. Just as there is a normative claim to political participation in the political arena, rendering hierarchies in firms more accountable would serve a role in extending and deepening cooperation. Building block 3 ("Cooperative Activity or Enterprise") makes explicit that not all "cooperation" is equal. Foregrounding cooperation in managing resources is essential to maximizing the relational rent and *imputation* can serve to clarify ambiguities as to which stakeholders are to be included in such activity.

[77] Brandeis served from 1916-1939 and was pivotal in shaping the notion of a "right to privacy" (cf. an eponymous article of his on the topic, published in 1890).
[78] [Brandeis, 1934, p. 270], cited in [Ellerman, 2021c, p. 112].
[79] [Percy, 1944, p. 38], cited in *supra*, Id.

Lastly, building block 6 ("privileged position of certain fictitious commodities") emphasizes the central role of certain resources, like labor, in producing economic value. There is a normative reason based on certain rights and based on the legal principle of imputation that legitimates privileging certain "inputs" to the productive process in terms of legal claims. This hierarchy of claims may create ambiguities. As mentioned above, the historical existence of cooperative principles and values stands as a vital example of how to deal with these ambiguities. There still remains the question of a higher synthesis between this form of cooperation in the narrower sense and the idea of cooperation defined more broadly. A question might be posed as to the potential for a *general* framework, suitable for accounting for both types of cooperation, including both institutions like social and agricultural cooperatives as well as, e.g., cooperation in R&D in the pharmaceutical industry.

Gierke: The Social Function of Private Law

In this concluding discussion, we will be concerned with how the suggestion of employing the imputation principle to generate relational rents can be executed in practice. For this, I turn to German legal scholar Otto von Gierke, who argues in a lecture given to the Vienna Legal Society in 1889 that, while science is obliged to analyze the facts, those studying the law must also study "[law's] purpose, which governs [it] as a […] designer." This, because "the currents of history hurry forwards and, in so doing, bring legal change that point to a future path." Thus, while the study of law may allow the analysis of disconnected parts, the legal corpus becomes over time impacted by "conscious action" (*bewusste That*)[80].

In order to understand, analyze and administer the law, however, "it is not just knowledge (*Wissen*) that is required, but wisdom, practical skill and a prophetic perspective (*prophetischer Blick*)." (Id., p. 4) Gierke addresses his audience on this particular occasion in order to review some criticisms of the draft of the German Civil Code (*Bürgerliches Gesetzbuch*), which he had critiqued previously in his doctoral dissertation, later published as the first volume of *Das Deutsche Genossenschaftsgesetz*, his *magnum opus*.

He introduces the discussion by asking "what is the purpose of private law (*Privatrecht*)?". Referring to the Roman law, Gierke suggests that it is separated into a *jus, quod ad singulorum utilitatem spectat* ("right, which pertains to the interests of the individual") on the one hand and a *publicum jus, quod ad statum rei Romanse spectat*" ("public right, which looks to the state of the Romans") on the other. The distinction in two domains "led [the Romans] to ascribe dissimilar purposes to the two great branches of law. Without a doubt, they had fixed a stationary starting point for every subsequent distinction between private and public law." (p. 5) According to Gierke, for better or worse, the Roman template has been adopted nearly universally subsequently.

Gierke suggests that this distinction is quite natural, "[b]ecause [it] is an expression of the dual determinations of human existence." Humans, as intelligent beings, are both totalities in and of themselves, as the philosopher Herder argued; at the same time, each individual is part of a greater whole. Or, as Gierke puts it, the distinction expresses that "every person lives

[80] One should remark at this point that Gierke is here agreeing with the Historical School's criticism and dismissal of Savigny's takeup of Montesquieu's notion of the "spirit of the law". In place of this concept, members of the Historical School were more adamant about the importance of *conscious* change and introduced evolutionary concepts into their analysis.

simultaneously as oneself and as one of a kind (species), that every individual is a world unto himself, a totality viz. the universe, and yet also a part of a higher unity, transient phenomena in the life process of a common existence. Insofar as the law, as the external world order, encounters this two dimensional content of human life, and accordingly constitutes itself in two distinct empires, on one side it must constrain and protect the external "life world" of individuals, and on the other side its goal must be to build and secure the life of the community as a whole." (Id.)

It is clear, then, that the distinction between the two domains is to some extent arbitrary. As Gierke puts it in his reflections, "unity and individuality are distinct only in our imaginations. What we call the individual and the whole are merely indispensable conceptual abstractions of, what is for us in its totality, the incomprehensible reality of society."

Thus, Gierke suggests, the Roman individualized law had outlived its use by his day and age (Gierke died in 1921), with its complex interdependencies, urban social life and a world guided by principles like the inviolability of human dignity. One particularly prophetic and withering critique Gierke lodges against the Roman law is its treatment of slaves: "Due to its leveling of persons *it did not know how to get beyond slavery*; it had simply drawn a line so that a slave nevertheless ranked *as a thing*". (p. 7, own emphasis) Internal contradictions like this one render the Roman law relatively impotent in many respects: "Built on this tremendous lie, without which it was unthinkable, the individualism of Roman private law stood helpless and powerless in the face of forces destructive of the social fabric of society." (Id.) Similarly, Gierke would argue, the Roman law (and likely all bodies of law merely privileging individual property rights) would not be able to deal with the controversies and dilemmas of the present.

Very much in keeping with contemporary complexity theory and second-order cybernetics' focus on dualism, Gierke advocates for a *synthesis* of public and private law as a solution to the dilemma facing societies dealing with tensions between individualism and collectivism. Accordingly, he develops the category of "synthetic law", which I now introduce.

A Synthetic Law

In keeping with his principle of "Genossenschaft" (cooperation), espoused throughout his oeuvre, Gierke suggests that the only way to supersede a vulgar patchwork of contradictory laws is if "the spirit of community penetrates private law from below". (Id., p. 17) Gierke goes on to list several "legal moments" to illustrate how this might occur. Using the example of property, Gierke argues, "[i]n truth, no law involves unilateral, but always mutual, relationships of wills. Even property law is, in the final analysis, a relationship between the wills of people, not between an isolated person's will and an inanimate object."[81] Due to this inherently *social* nature of property law, Gierke insists that no "duty free" or unlimited right to property exists: But where two persons confront another, contemporary values forbid having proprietary sovereignty without obligation. Thus, even private law appears to follow the phrase: *no rights without duties*. In fact, our contemporary legal order already ties our strongest and fullest rights, those to property, to an array of duties. (Id.)

[81] The similarity between this observation and Marx's discussion of labor's "belonging" in the production process is striking.

Gierke argues that such a dualism of rights and duties is not the result of the "insinuation of 'policing practices'" (p. 18) into the domain of private law. Instead, Gierke argues, such duties are mere "deductions from a higher principle". This principle consists of placing a higher priority on the domain of freedom than that of property (p. 19), particularly emphasizing the *inalienability* of certain fundamental (human, or personal) rights. We are again reminded of Gierke's juxtaposition of *translatio* and *concessio* in his *Das deutsche Genossenschaftsrecht*. Indeed, according to Gierke, "duty free property has no future!" In particular, he argues, the "highest duties" will derive from the domain of *morality* (*Sittlichkeit*). Such duties must necessarily be of both a *positive* and *negative* sort. The former must be anchored in particular stipulations (think of Kant's notion of *leges permissivae*, while the latter case "this requires a general proposition, which limits the misuse of property and the other asset rights to the detriment of others." (p. 18)

Thus, a synthesis requires both positive law and general principles that can be flexibly applied in a changing environment. Such formulations may, on occasion, extend further than merely prohibiting misuse of property and can, in fact, stipulate its "proper use". Mining regulations, law of inventions and hunting law are three examples listed by Gierke, but certainly one could extend this list indefinitely.

Property Law

For Gierke, this circumstance is quite clearly demonstrated in land ownership, which is by its nature "inherently more restricted than for moveable property." Gierke grounds this assertion with the argument referring to the Earth as commons, meaning "all rights in land exist only with the strongest reservation that they be used for the benefit of the community." Therefore, "[t]he idea that a part of our planet could ever belong to a single person, in a manner identical to an umbrella or a piece of currency, is a culturally endangering absurdity (*ein kulturfeindlicher Widersinn*)." (Id.) In particular, Gierke uses the example of air and groundwater rights to illustrate his point. If the exclusive right to dispose of land extends to such derivative domains as the air above and ground below the property, then the result is an "antisocial law" (Id., p. 22). It is worthwhile to quote Gierke at length here: Our planet is divided into parcels from its core of molten fire, to outer space, divided into property rights! The owner of land in the Alps who discovers that a tunnel runs beneath his plot of land may close part of the tunnel. If a telephone-cable runs over a single corner of my land, I may cut it. A pilot of an aircraft must first seek the permission of the landowner whose airspace he wishes to cross. Whoever has no property actually must ask permission even to breathe. (Id.)

Therefore, it is important, so Gierke, to acknowledge that "those in support of a regime of private property in land cannot emphasize enough that one has, not an exclusive and absolute right *ad infinitum*, but in the last instance *nothing but a limited right to use a part of the national territory* (*ein begrenztes Nutzungsrecht an einem Theile des nationalen Gebietes*)." (Id., own emphasis) Moreover, Gierke critiques the "special superstition" of a "dogma" that places property rights on a higher plane than all other rights. (p. 24). We already saw this in his criticism of the Roman "noxal" (i.e., slave) laws. Other planes of law such as *in rem* rights (*begrenzte dingliche rechte*) "are also good and defensible laws, just like those of property itself." (p. 25) In particular, Gierke substantiates this with an appeal to develop notions like third party property rights in the manner

of *usufruct* (*Rechte an fremder Sache*)[82]. This to avoid an "internal colonization (*interne Kolonisation*) towards "atomistic" and "materialistic" ends (p. 26).

In prophetic ways, Gierke anticipates many contemporary debates (e.g., "data sovereignty" or workplace occupations), referring to intellectual property in this regard.

Labor Law

"The most fundamental element of our private law must be a comprehensive law of persons. […]. Only with hesitation, and not without mixing with fiction, did the highest rights of personality – the right to life, body, freedom, and honor – become part of private law, and their protection remains incomplete. "

At the root of labor law, Gierke sees contract law (*Obligationsrecht*). This is another arena where the social dimension of private law becomes clear. Writes Gierke, when modern legal systems introduce the principle of freedom of contract, *this can only signify a reasonable, not an arbitrary, freedom – a* freedom whose moral purpose requires balance, freedom which sets itself boundaries. *Unrestricted freedom of contract destroys itself.* (Id., p. 28, own emphasis)

Thus, not "freedom of contract" should be the guiding principle for contract law, but a search for balance between "legal freedom" and the "moral freedom of personality". It is worth quoting at length from Gierke's talk: The law which, with wanton formalism, allows legally significant consequences to spring out of intentional, or presumptively intentional, conduct, under the pretense of peaceful order creates a *bellum omnium contra omnes* in its legal form. More than ever, it is the task of private law to protect the vulnerable from the strong, the welfare of the whole against the self-interest of the few. Ergo, the long-held common practice that contracts with an immoral content are void has drawn an outermost boundary of legitimacy, which with the development of a moral consciousness has increasingly converged towards a median.[83] (p. 29)

Examples of illegitimate and void contracts are voluntary slavery and the *couverture* marriage contract. (Id.) These examples serve as arguments for the conclusion that "Just the guarantee of an inalienable right to formal freedom does precious little by itself." Gierke argues that such thinking, which extends to the domain of debt law, "demand further evolution." (p. 30) Moreover, the priority of personality over property must extend, so Gierke, to the modern *labor contract*, which he argues is rooted in the Roman tradition of slavery (i.e., property law). Gierke writes prophetically in the year 1889: but where the law of personal relations is concerned, a robust private law must place the concept of personality at the center of everything. *This is especially the case for the regulation of employment contracts, as soon these produce more than a fleeting provision of "one-off" services, and instead subordinate the person to the purpose of the association and determine one's livelihood. It is unthinkable that we continue to adhere to the scheme of renting things that originated in Roman slave law for the hire of services!* (p. 32, own emphasis)

[82] "This is why in our time, as we are threatened by individualism, a private law order that pursues social objectives should never erase rights in things of third parties and without necessity constrain or weaken them."
[83] This argument of Gierke's should remind the reader of Ellerman's charge of the illegitimacy of the labor contract and of Ferreras' notion of the shift towards "public labor".

This is a damning statement, and its relevance shines through into the contemporary world. It captures what some decades later was argued by Berle and Means in their analysis of the modern corporation. In fact, Gierke addresses the implications of the corporation in the life of modern citizens. He adapts his conception of *Herrschaftsverband* to the role: above all, it is the case that charismatic authoritative private law associations small or large, and partly grown enormous, have emerged, in the form of business enterprise, as the standard bearer of our economic life. What is the use of ignoring this fact, which is as clear as day? What can be achieved through our legal system's clinging to the fiction that we are dealing with nothing more than a sum of individual legal obligations between free and equal persons? (p. 40)

Indeed, the contemporary labor contract is much more. According to Gierke, it "integrates the personality itself into an economic organism. Such an association appears internally and externally as if the organisational whole were a monarchy, the sole carrier being the entrepreneur, with the managers and workers belonging as serving organs." (p. 40-1) This unsustainable situation, largely today unresolved, despite certain formal Gierkian revisions like the German law on *co-determination* (*Mitbestimmung*)[84], can be resolved by recognizing the factual character of the corporation as a *collective of persons*:

All future socio-political legislation will only establish ever more clearly, and develop ever further, that the modern business enterprise is a form of association in the law of persons. Does the simplistic private law really resolve its role, if it sticks its head in the ground like an ostrich and clings onto the deceitful scheme of a pure and strictly individualistic law of obligations? (p. 41)

Gierke concludes his speech by appealing to the idea of private and public law as "children of one mother", which "continually re-encounter one another in their common labors." (p. 45)

Closing the Triad

It would appear, then, that Gierke's notion of "social law" is the suitable *legal* framing of what in cybernetics is referred to as the interaction between first- and second-order systems[85]. It appears to be a tool to connect the triad of *law*, *labor* and *cooperation.* If the correct coding for embedding cooperation generally is the *cooperative* or *relational rent*, and the suitable coding for connection *law* and *labor* is *imputation*, then Gierke's concept of *social law* appears to connect these two by establishing certain fundamental principles according to which priorities can be established. The notion of *social law* thus serves as the external recognition of the importance of the interaction between the institutional and evolutionary aspects of cooperation at both individual and social levels.

Gierke's discussion of "social law" is especially valid in so far as it pertains to building block 4 ("Legal Architecture Recognizing Special Character of Cooperation"). This, since any "social law" acknowledges the primacy of a fundamental mutualism undergirding the social fabric. In conflicts between public and private interest, it pragmatically underlines the primacy of the

[84] See [Ferreras, 2017, pp. 48ff]'s discussion of the limitations of the German law on "co-determination".
[85] Scott, Bernard. "Cybernetics for the social sciences." *Brill Research Perspectives in Sociocybernetics and Complexity* 1.2 (2021): pp. 88ff.

public, without however disqualifying the rights of the individual[86]. This balance can be guaranteed with building blocks 5 ("regulatory oversight") and 6 ("Appropriate Balance between *ius cogens* and *ius dispositivum*"), which each emphasize the iterative nature of the interaction between the institutional and the evolutionary perspectives outlined in the introduction. While questions related to what Lewis Mumford called "technics" (e.g., "science-based transition plans") can be solved relatively mechanically, such iterative processes applying what Habermas calls "discourse ethics" are needed when normative questions – for instance regarding distribution, relative intensity of preferences and inclusion in the collective – are posed.

Gierke's work on "cooperative law" should also be a useful reminder to cooperative lawyers that cooperation is not a copyrighted notion, that explicit recognition of the human, i.e., relational dimensions of business stands in the foreground and should be recognized as primary, and not merely incidental, to the business undertaking. That said, the special character of cooperation "in the narrower sense" (i.e., according to the ICA Cooperative Principles) should always be protected as a historically developed system-stabilizing innovation (a "counterveiling force", *a la* J.K. Galbraith). The tradition of cooperative enterprise is too particular to merely "fold it" into a broadened legal corpus.

Conclusion: A General Theory of Cooperation?

"And no one pours new wine into old wineskins. Otherwise, the wine will burst the skins, and both the wine and the wineskins will be ruined. No, they pour new wine into new wineskins." Mark 2:22

The above discussion has attempted to contribute to the development of a general theory of cooperation by pointing out 1) the deep connections between the domains of law and economics and 2) the potentials for developing a cooperative economics corpus along similar lines of the emergent cooperative law paradigm.

I attempted to underline the potential role for the notion of a "relational or "cooperative rent" as a framing device towards this endeavor and subsequently to shed light on why the neoclassical model is unable to accommodate such a relational perspective, in particular because it is designed to ignore such aspects. Finally, we saw the importance of a synthetic vision of law as the handmaiden of economic practice and the arbiter of what has colloquially been referred to as "the invisible hand".

As I conclude the foundational part of this project, we are now in a position to ask the question whether a "general theory" of cooperation is possible.

A general theory of a cooperation as envisioned by Gierke, Kropotkin and others, as I have argued above, is an essential component of any meaningful "cooperative economy", "cooperative political economy" or "cooperative economics", and would essentially seek to undergird the institutional and legal structures necessary to sustain a general degree of cooperation with the behavioral, historical, ethical and other evolutionary components necessary to both initiate and sustain cooperation. Certainly, the legal component can't be forgotten, as it forms a vital

[86]Gierke himself called for a liberal order recognizing the rights of the individual, "with a drop of socialist oil" recognizing the fundamental stake of the community and the collective in each individual. Cf. Also work by ecologist Robert Ulanowicz on mutualism and ascendency.

component of what becomes the "invisible hand", the negative component of an apparently "self-regulating" system of economic transactions:

In other words, when a legal entity, or category of legal entities, has a defining feature that relates to the objective pursued—whether negative (the profit non-distribution constraint that qualifies nonprofit entities) or positive (the mutual purpose that qualifies cooperatives […])—the organizational law of that entity, or category of entities, plays the essential role of defining their particular identity in light of the objective pursued. This applies yet to a greater extent to cooperatives, since their identity is complex and consists of several, at times interrelated, aspects, which do not only pertain to their purpose.[87]

In fact, the special character of cooperative businesses appears to require special recognition before the law. Writes Fici, "while there are legal entities that are 'neutral' as regards the purpose pursued, as is the general case with companies, there are other legal entities, including cooperatives (and nonprofit entities […]), that are not 'neutral' in this respect." [Fici et al., 2013, p. 18] Thus, cooperative businesses operate on the basis of particular values which are perceived as ends, and these operate as coordinating tools (what Karl Popper called "propensities") to achieve outcomes outside of those based on non-cooperation (e.g., Nash equilibrium). In order to achieve these "non-neutral" outcomes, the legal apparatus must recognize whatever the special features of such firm types are. These features, which I have attempted to outline in the 9 building blocks, and which contribute to a certain "rigidity"[88] stipulated by law, "enhance […]—within a jurisdiction recognizing a choice among several types of legal entities—a founder's or member's 'ability to signal, via her choice of form, the terms that the firm offers to other contracting parties, and to make credible [her] commitment not to change those forms'". [Fici et al., 2013, p. 19]

Any "general theory" should be constructed on such foundations. In particular, the general theory imagined here attempts to integrate historical fact, sociobiology, ethics, legal convention and economic activity in a relational ensemble that I tentatively call a *general theory of cooperation.* This contributions has focused especially on outlining a framework for a *cooperative economics* within this domain. In closing this preliminary, theory-building contribution, I reflect on a number of tensions in the nine building blocks. I subsequently close this discussion by asking whether such a general theory is even possible.

The Role of Law

The role of law in realizing a general theory of cooperation relates to Ellerman's observation of the "obverse invisible hand". Legislation and jurisprudence are in practice the "visible" side of the invisible hand. One should imagine a domain of "cooperative law" that extends beyond merely regulating and framing cooperatives as a recognized legal form. Just as the domain of "competition law" deals with individuals, organizations and states in as far as they engage in

[87] Fici writes,
"For example, while in the regulation of the European Company (Societas Europaea—SE)—the European Union law equivalent to a company (or business corporation) established under national law—nothing is stated with regard to the purpose of an SE,52 in the regulation of the European Cooperative Society (Societas Cooperativa Europaea—SCE)—the European Union law equivalent to a cooperative established under national law—the objective of an SCE is stipulated, and accordingly there are specific rules on the allocation of profits." [Fici et al., 2013, p. 17].

[88] One is reminded of paleontologist Steven Jay Gould's notion of "punctuated equilibrium", an idea connecting the flux of evolution with the apparent "rigidities" of biological life and speciation.

market competition, "cooperative law" in the sense outlined above ("broadened" cooperation) should underline the conditions and parameters under which cooperation occurs in the respective domains (sectoral, local, regional, national and international, etc.) context.

As such, we should begin speaking of a "cooperative law" in the *narrower* sense when speaking only of the legal form of cooperatives as recognized by the cooperative principles and values and international norms on cooperatives, such as ILO Recommendation 193. At the same time, we should begin speaking of a "cooperative law" in the *broader* sense to speak of cooperation more generally. This can refer to intra-industry or -firm cooperation on things like research and development, innovation networks, joint ventures, industrial districts, etc. but also to multilateral cooperation among states internationally. The common denominator of these two domains of "cooperative law" should be the connection between *relational rents*, *imputation* and a *social law* that prioritizes a multi-stakeholder or relational logic.

Cooperation vs. Cooperation

It is the last aspect, the prioritization of a multi-stakeholder (read: relational) logic, that displays the limitations of a strict focus on the "narrower" sense of cooperative law. Rory Ridley Duff's discussion of Webbite socialism's influence on the ICA cooperative principles[89] should underline that cooperative law *proper* has historically benefited from synergies and spillovers from the broadened discourse around cooperation in law (i.e., from "general" or "broad" cooperative law). This observation and the fact that many countries' legal codes do not (yet) feature a separate "cooperative law" should be interpreted as opportunities for creating more explicit linkages between the two *corpora*. Ideally, the two would converse with and mutually reinforce one another, both serving the individual communities they represent and at the same time creating opportunities for overlap and increasing synergy. Thus, one form of cooperation can beget another.

In particular, one arena in which there may be a great deal of future interest is the area today referred to as "competition law". In fact, since the Progressive era of the late 19th century, in American jurisprudence, "cooperation" has been associated with so-called "trusts" (cartels)[90]. Cooperation was therefore typically derided as something opposed to the rules of the market. However, in Europe and other jurisdictions (e.g., Japan), cartels were frequently encouraged. Thus, developing more explicit linkages between the two "cooperative laws" may encourage policymakers, educators and others to rethink "competition policy"; or, in the least, encourage a concomitant development of "cooperation policy", or even "coopetition policy".[91]

A number of scholars have been working from traditional competition policy in ways that can in fact be usefully combined with the narrower field of cooperative law. One example of this asymptotic *rapprochement* between the two domains is Kraakman & Armour's *The Anatomy of*

[89] Cf. Chapter 7 of my dissertation, entitled *The Cooperative Economy* (2022) or Ridley-Duff, R. and Bull, M. (2021). Common pool resource institutions: The rise of internet platforms in the social solidarity economy. Business Strategy and the Environment, 30(3):1436– 1453..

[90] Cf. Horwitz, Morton J. (1992). *The transformation of American law, 1870-1960: The crisis of legal orthodoxy*. Oxford University Press

[91] One example where a more granular approach to "competition", "cooperation" and "coopetition" would be helpful is the European Commission's ruling on Italy's Marcora Law, which facilitates "workers buyouts" of failing enterprises, as violating EU competition law. Cf. Gonza, T. , Ellerman, D. , Berkopec, G. , Žgank, T. , & Široka, T. Marcora for Europe: *European State Aid Law Quarterly.* 20: 1 (2021), pp. 61 - 73

Corporate Law (2017), which has interpreted corporate law in general to have two interpretations, one focused on a *prima facie* reading and the second focusing on a more *general* reading, focused on principles like stakeholder inclusion, etc.

In fact, the *prima facie* reading of the corporation, espoused by Milton Friedman's (in)famous dictum that corporations serve the public interest by "maximizing profit" appears untimely in the present era of crises, transformations and epochal shifts. Laws like the EU's Sustainable Finance Directive (SFDR), its Corporate Sustainability Due Diligence Directive (CSDD), its Non-Financial Disclosure Directive (NFDD), or the US SEC's Standardized Climate Risk Disclosure Rules and the Vermont Corporate Business Act show the move toward a more explicitly pro-social framing of corporate law that pushes the latter towards what cooperative lawyers have been advocating for for decades.

At the same time, recent research has shown that particularly younger investors are concerned with *values*[92]. Similarly, Fama & French[93] have found that investment funds provide not only investment, but also consumption, goods. These findings underline the continuing relevance of cooperative law in the narrower sense and also provide opportunities for cooperative lawyers to engage with and influence stakeholders in more traditional arenas like corporate, competition or trade law. Being that the former group have navigated frequently challenging environments, their historically accumulated knowledge may be more timely than ever in a changing world. Thus, interactions between cooperation in the narrower and the broader sense appears a *desideratum*.

Is a "General" Cooperation Possible?

With all the constraints imposed above, the question may be begged, whether it is even possible to craft a *general* theory of cooperation. Antonio Fici in his introductory chapter of *The International Handbook of Cooperative Law* states that the overall understanding of cooperatives, and of their distinct identity, would be greatly facilitated by an interdisciplinary approach to cooperatives, which would include cooperative legal theory and lend more attention and importance to it. For this to happen, it is necessary to strengthen cooperative legal studies and increase their visibility, which in particular would permit bridging the existing gap between economic and legal studies on cooperatives. In many cases, indeed, the cooperatives of economists do not correspond to the cooperatives of jurists. Economists tend to stress some characteristics of cooperatives (for example, their ownership structure) while overlooking others (for example, their solidaristic or altruistic orientation) that are fundamental to the global comprehension of cooperatives and their distinction from companies. On the other hand, legal scholars fail to analyze provisions of cooperative law and/or to compare possible solutions to a particular problem of cooperative regulation (also) in light of the economic theory.

It is my position that such a theory is possible, and that the groundwork for its *economic* manifestation has been laid by past and current initiatives, like the Preference Network at the MacArthur Foundation[94], as well as certain efforts within the domain of *Post-Walrasian*

[92] Barzuza, Curtis, and Webber, *The Millennial Corporation: Strong Stakeholders, Weak Managers* (September 6, 2021). http://dx.doi.org/10.2139/ssrn.3918443

[93] Fama, E. F., & French, K. R. (2007). Disagreement, tastes, and asset prices. *Journal of financial economics*, *83*(3), 667-689.

[94] Cf. Henrich, J. P., Boyd, R., Bowles, S., Fehr, E., Camerer, C., Gintis, H., et al. (2004). Foundations of human sociality: Economic experiments and ethnographic evidence from fifteen small-scale societies. Oxford University Press on Demand.

Economics and by newer theories of the firm, including democratic, bicameral and "needs-based"[95]. It will necessarily be an interdisciplinary undertaking, as Fici and others have suggested, and this article should be read as an attempt to contribute to such an effort from a particular reading of economic theory. This reading suggests that, if we are to devise a *cooperative economics* as part of a general theory of cooperation, it must be lodged in a re-examination of J.S. Mill's dictum that economics must concern itself only with "pecuniary self-interest".

In particular, as the above account has attempted to make clear, there are not only costs associated with cooperation, as Transaction Cost Economics' focus emphasizes. Indeed, there are also benefits to cooperation, in the form of *relational rents*. These may in many cases more than compensate for the costs of cooperation. The point is that both the institutional and the evolutionary requisites for cooperation interact to both enable, sustain and shape cooperation. No single logic or "form of integration", e.g., market-based exchange, should be privileged *ex ante*, as new ones (e.g., commons-based peer production) can enter the fray.

Ultimately, the principle of *imputation* can be employed in order to assign rights in accordance with responsibilities. This may put the legal profession in an uncomfortable position in cases where it involves doing away with convention (e.g., the classical labor contract), but it appears the clearest tool for grounding a *general* theory of cooperation in sound legal principles. As the nascent movement of "law and political economy" and its forebears have observed, law "gives shape to the relations between politics and the economy at every point. It is the mediating institution that ties together politics and economics."[96]

Lastly, a solid framing in a mezzanine of *"social law"* as envisioned by Gierke should be developed in each jurisdiction that places an emphasis on a progressive, emancipatory, multi-stakeholder (relational) logic, clearly outlining the rights not just of persons, but also of other life forms, above property rights. Both "cooperative law" *corporata* (both the "narrower" sense, referring to cooperative enterprise and the "broader" sense, referring to cooperation in the economy, including phenomena like cartels) should fall under the rubric of "social law". Such a development clearly requires a fundamental epistemic shift in thinking. However, past and current examples like Germany's *Mitbestimmung* (co-determination), the Basque country's notion of "associational labor"[97] and certain jurisdictions' decision to extend rights to non-human life, the planet or future generations speak to the contribution law and jurisprudence can make to realizing such a shift.

[95] For an overview, cf. Chapter 2 of my dissertation, *The Cooperative Economy* (2022).
[96] Cf. "LPE Manifesto": https://lpeproject.org/lpe-manifesto/
[97] Cf. Alkorta, A. B. (2021). Employment in worker cooperatives in the framework of spanish cooperative law. *International Journal of Cooperative Law*, (II):72–87.

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