A Contractarian View on Homann's Ethical Approach: the Vision of `New Ordoliberalism´

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Abstract

Homann's method is a sophisticated theoretical model. As a result, it contains a normative foundation upon which Homann bases his endeavor, as well as numerous conclusions following his positive analysis. We propose extensions to both the normative and positive aspects of Homann's theory in this article. On a normative basis, we recommend taking into account our approach of New Ordoliberalism. In addition to the prisoner's dilemma, we consider the moral dilemma of the hawk-dove game on a positive footing. Additionally, we also present an experimental design.

Keywords:
constitutional economics, game theory, New Ordoliberalism, social contract experiment, strategy-proofness, renegotiation-proofness.

Abstract in German

Eine sozialvertragliche Sicht auf Homanns ethischen Ansatz: Die Vision des 'Neuen Ordoliberalismus'

Die Methode Homanns ist ein ausgefeiltes theoretisches Modell. Es enthält sowohl eine normative Grundlage, auf der Homann sein Unterfangen aufbaut, als auch zahlreiche Schlussfolgerungen, die sich aus seiner positiven Analyse ergeben. In diesem Artikel entwickeln wir Erweiterungen sowohl für die normativen als auch für die positiven Aspekte von Homanns Theorie. Zum Ausbau der normativen Dimension empfehlen wir unseren Ansatz des Neuen Ordoliberalismus zu berücksichtigen. In positiver Hinsicht betrachten wir das moralische Dilemma der Gesellschaft neben der Rekonstruktion im Gefangenendilemma auch im Falke-Taube-Spiel. Weiterhin stellen wir einen Versuchsaufbau hierzu vor.

Schlüsselwörter:
Ordnungsökonomie, Spieltheorie, Neuer Ordoliberalismus, Sozialvertragsexperiment, Manipulationssicherheit, Nachverhandlungsstabilität,

1. Introduction

Karl Homann delivered a bulk of contributions to the ethics of order, the field of economic and business ethics, for developing his own approach on morality and ethics. Rather than contributing a critical review on his approach we will reflect some main aspects from the perspective of another social contractarian approach called `New Ordoliberalism´ (cf. Neumärker 2017). This alternative approach gives more weight to ex post constraints than relying heavily on ex ante enabling aspects of a stable order. Furthermore, social contract experiments are an essential empirical part of that approach.

We show that Homann's approach is very similar to famous contractarian thinkers John Rawls and James Buchanan in applying traditional contractarian arguments for humanity, stability, and trustfulness of the economic life in a society ignoring, thereby, to a large degree ex post constraints which might be highly relevant in the post-contractarian world, i.e., in situations under given contractarian or ethical rules.[1] Homann illustrates the dilemma going along with moral actions using the prisoner's dilemma. We suggest also considering the situation where moral actions need to be coordinated on a focal solution. We illustrate these using the hawk-dove game.

In addition to supplementing Homann's theory with essential aspects of New Ordoliberalism, we also want to test it in laboratory. The experiment is designed to examine whether incentive compatibility in the prisoner's dilemma and its extension is, or can be, sufficient as a solution to moral problems in it.

The section that follows describes the fundamentals of Homann's theory we would like to reflect, and its extensions and alternatives in section three. The experimental design for empirical investigation of Homann's logic is presented in section four, whereas the relation of Homann's approach to the New Ordoliberalism is discussed in section five. Section six concludes.

2. Stylized Facts of Homann's Theory

Homann motivates his theory to be a normative ethics approach. `Wir nehmen Stellung zur Marktwirtschaft und erwarten, dass diese wertende Stellungnahme von anderen geteilt wird.´ (Engl.: We make a comment on the market economy and expect this evaluative statement to be shared by others.) (cf. Homann/Lütge 2013: 6). The underlying normative principle is said to be close to the utilitarianism tradition (ibid:7-10). The issue of the arbitrary weighting of the interests of different individuals is solved by the integration of a consensus of the society on the rules and their reform.

Therefore, Homann tries to answer the question `Unter welchen Bedingungen hat Moral – der Komplex von Idealen, Prinzipien, Normen und Tugenden – in der modernen Gesellschaft eine Chance auf Realisierung?´ (engl.: Under what conditions does morality - the complex of ideals, principles, norms, and virtues - have a chance of realization in

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[1]   For convenience, social contract, contract, and constitution are synonymous. Rules are defined to be always contractarian or constitutional rules.

modern society?) (cf. Homann 1995: 6). To this aim Homann attacks the dichotomy of egoism and moral as maxim of action.

The next section presents the normative strand of the theory by Homann, covering the roots of contractarianism. Thereafter, the section on the positive strand explains his solution to the dichotomy of egoism and moral actions.

Homann starts from the normative point of view called normative individualism (cf. Homann 1995: 4). It states that the individuals in a society are the sole source of value (cf. Vanberg 2012). To this end, Buchanan formulated the constitutional efficiency check, which claims a solution for a societal problem to be efficient, if no individual in the society can arrange a betterment without harming someone in the society (cf. Buchanan 1962: 353). This is in sharp contrast to external values and even pseudo endogenous values, such as social welfare functions out of the welfarist tradition. Even if these functions are welfarist in the sense of integrating the individual interest via their utility functions, their aggregation usually is set arbitrarily and must be considered exogenous (cf. Sen 1979)

The normative individualism is a consequence of the `loss of common values´ beginning in the illumination in Europe. Before the political elites had the monopoly on values (in combination with the spiritual elites) and there was no room for the question of individual values and therefore their integration into the valuation of society. With the illumination, however, the answer to the values of the society became difficult, up to impossible. Especially in theory, where the question asking for ultimate values itself, is questionable. In practice, therefore in living societies, people answer these questions intuitively for themselves but also in interplay with their fellows. This observation of methodological individualism – meaning that individuals are the sole source of action – in combination with the lack of normative authority makes the foundation for the application of normative individualism such as Buchanan as well as Homann add it to the fundament of their theory (cf. Buchanan 1990: 13f; Homann/Lütge 2013: 12).

This normative setup brings some implications for a theory of society. If individuals need to manage themselves endogenously, they need to set up a mechanism that can implement whatever collective coordination the society wants. Therefore, a government is required. From this formulation the question of the content of what the society wants and what the government should enforce becomes eminent. Accepting normative individualism, some endogenous mechanism to identify societies' will is required. At this point again, Homann follows Buchanan's argumentation. Buchanan argues that the right to defend against an inappropriate governmental action is very valuable, therefore every individual should have the ultimate power to say no to any collective action. This can be translated into a veto right (cf. Buchanan/Tullock 1999: 465f). Further, organizing a government by finding concerns about the content of a government's activities, especially unanimously, can be called constitutional contractarianism (cf. Buchanan 1990: 11f).

The issue with an endogenous contact remains, that in the initial situation, there is no external authority to enforce it. Thus, for a contractarian solution to work, the chosen set of rules is required to be self-enforcing via incentive compatibility (cf. Homann 1997: 14). Meaning it is sufficiently in the interest of the individuals in the society to act according to the self-given set of rules to become a relevant structure to coordinate society

(cf. Young 2008). Homann also attaches moral value to the enforcement of the rules, by mentioning that only if others can expect these rules to be followed by all (or sufficiently many) people in society, they are morally binding (cf. Homann 1997: 16).

Homann's positive logic perceives modern societies as interstratified by dilemma structures (cf. Homann 1997: 19). At the core of moral considerations is the priority of morals to the own advantage. In previous societies, such immoral behavior got close-meshed controlled by the small societal subgroups, such as families, villages, or townships (cf. Homann 1995: 7). With the modern society following the illumination the asymmetry in information concerning the tradeoff of moral behavior vs. the own benefits increased. This is due to the mere increase in population and population density via technical progress (also fostered by the illumination). And it is due to the lack of a clear moral authority that provides the guidelines to judge normatively. After all, brought (and still brings) an (informal) verdict for morally inadequate behavior with real consequences that make moral constraints relevant and binding for the individuals in a society. In the words of Buchanan and Tullock (1999: 261): `The individual may behave `badly´, and, if he does so, he may gain `unfair´ advantages over his fellows. This brings us squarely to the central issue. Should the social order be organized to allow moral deviants to gain at the expense of their fellows? Or instead, should the institutional arrangements be constructed in such a way that the `immoral´ actor can gain little, if at all, by his departure from everyday standards of behavior?´.

Ending up with a higher asymmetry considering the moral trade-off, society finds itself facing these dilemma structures that appear like a prisoner's dilemma (cf. Homann 1995: 9f). In short, the defection strategy is always an individual's best choice, because it always yields a higher payoff than the strategy to cooperate. This means rational players are expected to always choose defection, therefore ending up in the socially undesirable situation of the defection of all, instead of cooperation of all and generating overall higher payoffs. If you apply this to morals, then acting moral may be considered a cooperative strategy, whereas defection would be the abuse of moral standards to the own benefit. A breakdown of moral behavior is economically expected (cf. Homann/Lütge 2013: 24-27). Homann argues, that this dilemma may be combated by the integration of moral consideration into constitutional rules (and therefore enforced by the government). Thus, the individuals do not end up in the prisoner's dilemma situation, because they have no choice other than to act within the well-enforced rules, which guarantee that moral action is dominant (ibid: 34-38). The dilemma situation is solved utilizing a higher level of organization, namely the government. And remember from the part on the normative theory, the government is normatively justified by the social contract. Therefore, citizens are not forced to act morally against their will due to governmental rules. Instead, they want to be forced by the government to act according to the rules they agreed on.

One should mention that all these considerations may be limited to real-world considerations and the factual implementation of the described theory. Homann himself made the interesting distinction between harmful dilemma structures and good utilization of those, for example in the form of competitive markets for the sake of efficiency (cf. Homann 1995:10f).

3. Contributions and extensions to Homann's 'Canonical game of ethics'

We would like to give more structure to the strategic problem of the canonical game. In a first part we rely on the PD structure an add more, or alternative structure to the ethical disposition. The second part departs from this in introducing another basic strategic disposition, namely the hawk-dove game to discuss an alternative ethical solution problem.

3.1 Some Suggestions for an Extension of the Ethical PD Game

For the first part it seems to be helpful to refer to some early attempts. One of them is the 'Ethical Voter' approach of Dennis Mueller (1986; 2003), another one Neumärker (1995) with his application of mechanism design to constitutional design, and, finally, Rabin's (1993) fairness approach of behavioral conditional cooperation with its introduction of a 'kindness function'. We would like to reflect, first of all, two things: ex post strategy proofness and renegotiation proofness of an ethical environment like the Homann one.

Despite the fact that renegotiation proofness and strategy proofness can be based on rigorous mathematical examinations (cf. Brennan/Watson 2013; Li 2017,), it pays for this paper to make the logic transparent with simple examples showing the importance and impact.

For instance, Mueller (1986) identifies in his approach an ethical factor for optimization and turns the ethical problem into a utilitarian optimization. One might ask for in what relation this ethical factor stands to the logic of Homann, and how Mueller proceeds with it differently from a constitutional as well as postconstitutional point of view. Furthermore, in *assuming* incentive compatibility Homann chooses a starting point for showing the identification of the ethical compatibility problem (cf. Homann 1997: 14). But this is not very convincing for solving it. Rather than presenting a complete solution like Neumärker (1995) for a constitutional contract inside a Leviathan setting, we would like to show the structure of the problem. Additionally, we cannot find a clear concept for the stability or durability of the set of ethical rules. Assuming incentive compatibility and ignoring renegotiation and erosion issues show more of the challenges of the approach than of a sophisticated solution concept. Last but not least, one could address Rabin's fairness approach as an ethical solution mechanism with clearly more and alternative structure in the PD game, and add to it the constitutional perspective. Whereas Homann wants to show that market competition is an ethical outcome (cf. Homann/Lütge 2013: 46-50), for Mueller a solution which refer solely to selfishness ($\delta=0$), and that is on what competition and the invisible hand is about, is very unethical as long as (ethically regulated) competition does not lead to a utilitarian solution. And (conditional) cooperation, depending on the value of δ, could not end in a perfect competitive society. Mueller's approach is primarily a positive approach to the emergence of explicit constitutions. His ethical voter proposition leads to a public choice of a utilitarian constitution. The ethical voter hypothesis is based on two sets of preferences and is therefore very related to Harsanyi's differentiation between rule and act utilitarianism (cf.

Harsanyi 1953; 1955). It is employed as a predictive theory of constitutional voting in which the rule utilitarian mindset defines the ethical voter. A citizen k has an objective function O^k with an 'ethical factor' δ, specifying the incorporation of the utility positions of all other members of the society i\k.

$$O^k = U^k + \delta \sum_{i/k} U^i, \delta \in [0,1]$$

Every U^i is dependent on the actions of all $n = \Sigma i\backslash k + k$ individuals inside the ethical frame δ. Optimal behavior is indicted by the First Order Condition with respect to δ. This objective function defines the selfish voter as having $\delta = 0$ acting non-cooperatively, and the ethical voter as realizing $\delta = 1$ acting cooperatively. Even in that simple but insightful model we can identify important challenges to the constitutional, or, social contractarian notion. Might be δ the same for any citizen, or does it have to be an individualized value δ^i. Mueller himself defines δ as a sociotropic variable showing the general ethical disposition for every member of a society equally (cf. Mueller 2003). Modern behavioral economics based, e.g., on Rabin's approach works in contrast with individualized distributions of the values δ^i. The second way seem to be more promising but even with a unique δ a lot of additional challenges can be raised. Is it fixed and unique for every citizen in constitutional terms? Is it postconstitutionally visible for and applied by every citizen? Might there be postconstitutional asymmetric information about the value and the interpretation of δ as well as about the individual utility values? Because any of the utility positions is dependent on the actions of all others, it might pay for a citizen to calculate O^k in strategic terms showing strategic actions instead of truthful behavior. Even here, one cannot simply assume incentive compatibility without strategic adjustment to δ and possibly of δ itself with, e.g., the result that the selfish component of O^k increases more than the ethical component decreases. So, such a strategic behavior should be normatively labeled 'unethical' but it would be positively indicated and understandable because the ethical norm would not be strategy-proof. One addition intuitive implication could be that the ethical norm δ would be neglected in the long run due to its generation of strategic manipulations. Then, many citizens might wish to dismiss it or renegotiate it. The reason for this conclusion is very simple: an ethical rule which can be manipulated cannot be called ex post, i.e. after the constitutional determination, fair or just (cf. Moulin 1995).

Another challenge Mueller inspects and equally to be applied to Homann's approach is that 'very unethical' like malevolent behavior with $\delta < 0$ based on malice, envy, discrimination, or, hostility lead to the problem of specifying O^k properly (cf. Mueller 2003). His is the point where Rabin's approach later on comes in.
The constitutional notion could be added to Mueller's positive approach. When all individuals are fully ethical ($\delta = 1$, $\forall i$) the ethical voters become utilitarians. If in the constitutional stage they are risk neutral or inequality neutral, Harsanyi's (1953) equiprobability assumption holds, and the constitutional/ethical designers vote for rules maximizing the expected sum of utilities. If that ends in a competitive society is at least

an open issue. But, as far as we can see it, it sheds light on the issue that we need more structure for the solution than the conceptually driven investigation of Homann presents. Conversely, when Mueller's approach holds as a positive one, then, rule utilitarianism is nearby an implicit constitution defining and enforcing the rules-based ethical behavior also from an ex post point of view.

Neumärker (1995) adds environmental uncertainty and uncertainty about the relative position in the constitutional stage of a society, whereas – just like in the Rawlsitarian setting – every one identifies postconstitutionally his own and all the other individual positions k and i. Due to postconstitutional asymmetric information about environmental conditions, e.g. technological or cost parameters, incentive compatibility constraints (ICCs) and participation constraints (PCs) arise as in principal agent theory where the contract has to regulate only a small number of players and where the hierarchy between the principal(s) as the master(s) and the agent(s) as the servant(s) is given or assumed. When, for tractability, the parameter for the future environment θ is defined as $\theta \in \{\theta^-; \theta^+\}$, we can dissect the constitutional calculus of Mueller or Harsanyi into

$$EW(z, \theta) = \xi \, \Sigma_i U^i(z, \theta^-) + (1 - \xi) \Sigma_i U^i(z, \theta^+)$$

$\xi \equiv \text{Prob}(\theta^-)$ is common knowledge to the citizens, EW is expected welfare, and z the (ethical) rule. The strategy of the Leviathan government who has to enforce the constitution is to write a report $\hat{\theta}\theta) \in \{\theta^-; \theta^+\} \rightarrow \max U^1(z(\hat{\theta}), \theta)$ in which $\hat{\theta}$ is for a strategic report under the environment θ which could present the untruthful conditions of the environment implying the choice of an (unethical) rule $z(\hat{\theta})$ different from $z(\theta)$, and '1' is simply the position of the Leviathan. To give the incentives for a truthful report respectively ethical behavior in signaling the truth θ the constitution has to incorporate the incentive compatibility constraints

$$U^1(z(\theta), \theta) \geq U^1\big(z(\hat{\theta}), \theta\big), \forall \, \hat{\theta} \in \{\theta^-; \theta^+\}, \forall \, \theta \in \{\theta^-; \theta^+\} \quad \text{ICC}$$

which ensure a truthful report $\hat{\theta}(\theta) = \theta$. For the establishment and durability of the state, the participation constraints

$$U^1(z, \theta) \geq U_A^1, \forall \, \theta \in \{\theta^-; \theta^+\}, \forall \, U_A^1 \in U_A^j, j = 1, \dots, n\} \quad \text{PC}$$

have to hold. j is the index for any citizen who could end up in the postconstitutional Leviathan position, and A is for the precontractual utility position, named as 'anarchy' and showing the strategy of 'defection' in the sense of the canonical game. For the feasibility of a constitutional mechanism ICC as well as PC have to be solved.

This application to a constitutional regulation of the Leviathan government has to be translated into the frame for large societies without explicit hierarchical positions between the citizens dealing with issues of ethics. Incentive compatibility in the logic of social choice becomes strategy proofness and the participation constraints regulating only the participation of the agent 'Leviathan' in constitutional contract are a hierarchical specification of renegotiation proofness. Referring to ICC and PC, these constraints have

to hold for any citizen. '1' has to be substituted by 'i' and has to be solved for any position ('∀i').

In Neumärker (2012) a servant (the agent 'manager') has contractual bargaining power against a master (the principal 'firm owner'), and contractual fairness forces the parties to end up in an envy-free contract. Owing to the bargaining power of the opponent the master has to take into account his participation constraint as a contractual exit option also. The primary hierarchy between master and servant becomes flat just like the relationship between citizens in a large number decision. Neumärker shows that the set of incentive efficient and fair contracts may be empty and that a fair incentive compatible contract exists very often only under the support of a governmental transfer scheme guaranteeing exit options to be certain sufficient income levels. Assuming that envy-freeness has also its ethical justification, an (incentive) efficient world cannot simply be the outcome and we have serious doubts about the idea that ethical solutions can be assumed to be incentive compatible. Rather, one has to examine the strategy proofness of ethical rules explicitly. In its consequence, the renegotiation-proofness constraint of the exit option, sufficiently regulated by a transfer scheme, may support the existence of a positive set of strategy-proof ethical solutions. Strategy proofness binds, then, the renegotiation constraints.

Furthermore, Neumärker (1995) shows in line with many contributions of the mechanism design and principal agent literature that even for regulating only one person contractually one has a very complex problem of many ICC and PC restrictions. Some constitutional pooling of restrictions, positions, and environments in only a few rules might be an option under certain conditions, but a more applicable and realistic solution is to refer to relatively simple rules which do not lead to an 'optimizing' solution but to an implementable one. From reform economics (cf. Roland 2000) we know that redistribution which may lead to overcompensation of some citizens or positions, and thereby being not optimal concerning incentivization or budget consolidation, is on the other hand feasible and might solve the renegotiation or reform revision problem. This is partially in line with information efficient mechanism design which leaves high skilled or truth-reporting agents with an information rent (cf. Neumärker 1995) so that for solving strategy proofness one needs a relatively large budget. Subsequently, feasibility of ethical rules is an important issue which one should not leave to assumptions.

Due to uncertainty about the future and the potential of strategical manipulations of rules or rule application one cannot simply be insured in the constitutional stage that the postconstitutional level will present outcomes which are always preferable to the status quo defining the pre-constitutional outcome. Buchanan (1975) defines this precontractual state of nature as anarchy with its anarchical payoffs to every citizen. To insure the constitutional society against contractual erosion or shut downs one has to check constitutional renegotiation proofness against the state of nature. Clearly, U_A^i is related to the defection payoffs in Homann's canonical game. But these payoffs do not refer to uncertainty and postconstitutional asymmetric information. And we can see that postconstitutional U^i can fall below the average value so that compliance to the ethical norms can be safeguarded only by compensatory transfers which guarantees for every position that its anarchic reversion level U_A^i is secured. Because no one knows his postconstitutional position in the constitutional stage, renegotiation proofness could be

insured by an unconditional lump sum transfer to everyone at the amount of the highest anarchic level. As announced in the previous paragraph this kind of an unconditional basic income in the sense of a 'toleration premium' (just like the 'Duldungsprämie' mentioned in Homann/Pies 1996: 220-224; Homann/Lütge 2013: 53-55) leads to overcompensation of some citizens or positions but safeguards the ethical constitution. As longs as any citizen can expect such a basic income the mechanism is not only renegotiation-proof but also self-enforcing. Everyone will voluntarily contribute to it because he or she receives the basic income and everyone knows that the shut down or the renegotiation could have the struggle of live under anarchy as its consequence which is under all conditions inferior to the ethical strategy-proof mechanism.

Schotter (1981) shows in an intriguing example that if citizens take care about blame shifting on unjust behavior against an ethical rule, e.g. competition, and if acting as a monopolist is blame-free so that no one is willing to sanction or punish the monopolist because every citizen would like to tolerate monopolistic behavior due to the fact that he or she would like to do the same in such a situation, then the ethical norm 'competition' is not enforceable, its breach is ex post not unfair, and can, therefore, not stand the test of renegotiation proofness. If the set of rules for competition leads to losses compared to the precontractual status quo, e.g., anarchy, due to the non-sanctioned monopolist, the constitution and its (competition) ethics are under a heavy threat of renegotiation and suspension.

Neumärker (1995) also proves that an incentive compatible constitution has to regulate both sides of the public budget. Pure tax or deficit limits are not sufficient, expenditure constraints synchronized with the constraints on the revenue side have to be imposed. The Covid as well as the Ukraine-Russian crisis has shown dramatically that a constitutional constraint based essentially only on the revenue-generating side like the German debt brake is not renegotiation-proof or has to leave the door open for adjustments by 'second best' renegotiation rules. Put it into the ethical way: how these renegotiation rules of a 'second best constitution' which cannot guarantee renegotiation proofness for ethical rules should look like, is still an unsolved question.

To connect Homann's canonical game even more to our challenges and specification we introduce now to Rabin's theory of fairness in the bi-matrix normal-/strategic-form games (cf. Rabin 1993) which is exactly the form of the canonical game of ethics, and on which a lot of other publications followed making it a standard game-theoretic approach in the positive theory of fairness and justice. In difference to the standard PD game Rabin looks explicitly on ways other players behave affect whether a player cares positively or negatively about that player. He incorporates the level of 'sympathy' that affects utilities. In difference to Homann rationality and self-interest are 'bounded' and broadened towards utility functions incorporating fairness. By that he makes the ethical payoffs explicit in the PD game.

The game implies a mix of selfishness and altruism by defining the famous reciprocal fairness: Players are nice to people who are nice to them, but mean to people who harm them. For that extension a simple kindness function is developed. A kindness factor $\alpha \geq 0$ which we define as the ethical factor for these games shows positive values for niceness and negative values for meanness. Kindness is indicated by the difference between the payoff that a player´s move gives to the other player and the fair payoff. The game shows

conditionally cooperative behavior with *fairness*-adjusted payoffs which we can call *ethically motivated* payoffs.

player 1

player 2		C	D
	C	4 + 0.75α, 4 + 0.75α	0, 6 - 0.5α
	D	6 - 0.5α, 0	0, 0

Figure 1: ethical PD game

'0.75' and '-0.5' are weights for the ethical preferences for kind behavior whenever the other player cooperates (move C), and mean behavior in the case the opponent chooses defection D. It is straightforward to calculate the level of $\alpha = 1,6$ as the condition which is needed to move into the cooperative solution. The ethical logic of the Rabin game transforms the prisoner´s dilemma into an emotional coordination game with multiple equilibria. A player moves cooperatively if he or she expects niceness but defect if he or she expects defection.

Cheap talk in the constitutional stage, i.e., promising to cooperate will not be enough in such a setting. On the constitutional level to organize unanimous decision-making we might have uncertainty about the set of monetary payoffs {0;4;6} and/or about the set of ethical factors and weights {α; 0.75; 0.5}. Assuming the monetary payoffs and the ethical weights to be constant, and letting $\alpha \in [1;2]$ chosen by player 'nature' after the constitutional decision according to a density function with common knowledge to the citizenry, the ethical constitution insuring nice cooperative behavior and based on a *simple* mechanism has to implement an unconditional monetary transfer of 0.75 to every player closing the maximum gap between cooperation and defection so that the ethical cooperative equilibrium will be generally realized. If we add the public budget constraint for the transfer mechanism as well as asymmetric postconstitutional information about individual ethical factors α_i for a large society to the game so that it can be prepared to a solution mechanism like the one in Neumärker (1995) with explicit PPCs and ICs for checking strategy proofness, renegotiation proofness, and the sufficient enforcement governance we conclude that one should add a lot more structure to the canonical game before having some optimism that Homann's ethical solution can be theoretical soundful or practical. We suggest, like in the following hawk-dove game, one has to alter Homann's very inspiring game-theoretic analysis towards a Rabin game with constitutional uncertainty, postconstitutional asymmetrically distributed information on the knowledge of other citizens' or on the own position, and, most likely, dynamic modelling due to integrating strategies of waiting, attrition, and delay in finding unanimous agreement on such a dynamic Rabin game.

3.2 Next Extension: the hawk–dove game

Homann and Lütge state, 'Viele Menschen – und leider auch viele Politiker – meinen, das Wichtigste sei bei diesen Problemen die Verständigung auf solche gemeinsamen Zeile. Das ist Unsinn: Wer die Logik von Dilemmastrukturen einmal begriffen hat, sieht sofort, dass die Probleme dann erst anfangen. Es geht darum, die gemeinsamen Ziele in Maßnahmen umzusetzten und auf das Handeln der Einzelnen ,herunterzubrechen', die Ziele in einzelne Zielbeiträge zu ,disagreggieren'.'(Engl.: Many people - and, unfortunately, many politicians as well - think that the most important thing in these problems is to agree on such common goals. This is nonsense: Anyone who has once grasped the logic of dilemma structures will immediately see that the problems only begin then. It's a matter of translating the common goals into measures and 'breaking them down' to the actions of individuals, of 'disaggregating' the goals into individual target contributions.' (cf. Homann/Lütge 2013: 30).

With this statement they refer to the issue of the prisoner's dilemma when transferring the problem of moral actions into the prisoner's dilemma. The solution is to solve the public goods game inherent to the prisoner's dilemma. While the provision of the public good is for the betterment of everyone no one wants to take the burden of providing it (cf. Kaul 2012). For moral behavior, this means no one wants to act moral, since acting immoral is a dominant strategy. But everyone befits from being treated morally. In the case of the prisoner's dilemma everyone's action is asked and required at the same time. Therefore, Homann's reconstruction of morals in the prisoner's dilemma is very insightful for rules in private life where decentral decisions matter the same. The benefit of acting moral may be formulated negatively as not acting immorally.

If society does not face the problem of moral actions by everyone being the optimal outcome for society the prisoner's dilemma may not be an adequate description of society. In many political decisions and the provision of public goods, only one actor can provide the good efficiently due to economies of scale (cf. Silberston 1972). In contrast, an active act motivated by morals may be required. For example, when a hero, a good Samaritan is required, or on a political scale, when an initiative to start the provision of a public good is required going along maybe take some burden of the cost in advance.

In the economic analysis of reform, this situation is described as a hawk–dove game, where one party initiating the required reform takes on a large part of the burden (cf. Sandler 1992:38-41). The hawk-dove game is useful in resembling dynamic situations in an initial static dilemma (cf. Eldakar 2020). Drazen solves the problem by using a dynamic bargaining game (cf. Drazen 1996). By considering the provision of the public good or reform as an act of duty, as a moral action, we can reconstruct the situation of some societal moral conflicts in the hawk–dove game. This allows also for insights from changes in the payoffs and therefore for more general implications of the perception of society as dilemmas as Homann suggests. In contrast, one may also change the payoffs by integrating a perception of fairness of the players as suggested in previous (cf. Rabin 1993). In Homann's approach, however, we adapt the game via external constitutional constraints.

Therefore, Consider the hawk–dove game represented in figure 1. The strategy of the hawk is to fight for the prize V, whereas the dove shares it. Thus, having one hawk and one dove leaves the hawk with the price and the dove with nothing. Two hawks fight each other, resulting in the worst possible outcome. Two doves on the opposite share the price peacefully.

player 1

		dove	hawk
player 2	dove	0.5V,0.5V	0, V
	hawk	V,0	-1,-1

Figure 2: hawk-dove game

By considering the action 'dove' to be a moral action and 'hawk' to be immoral, one would try to avoid the outcome of hawk-hawk as a mere task of coordination via enforcing moral rules. This also fits perfectly with Homann's interpretation of society. The issue of abusing the moral actions of others remains since a hawk can steal half the prize from the dove (cf. Homann/Lütge 2013:35).

In contrast to the reconstruction in the prisoner's dilemma, objectively it is not clear whether the coordination solution in dove-dove is optimal. Hawk-dove and dove-hawk are equally valuable solutions for society. The payoffs sum up to V in each of these solutions. It is only a matter of distribution of the prize among the players. Additionally, it should be mentioned that the latter two are Nash equilibria, and therefore inherently more stable solutions. This is an argument against an equal splitting of the price.

The transfer of this discussion on moral actions would resemble at least one moral action – i.e. dove – to be sufficient. As long as one player is acting morally the prize can be consumed. This may be the case if at least one active action is required to do the morally advised, for example providing people in need with some contribution. The person financing this contribution doing the moral action carries the burden. This is in line with the interpretation of charity as a public good, that however may not reflect a perfect public good (cf. Glazer/Konrad 1996).

Still, applying Homann's approach to the hawk-dove game would arguably suggest enforcing dove-dove. Since sufficient uncertainty about the information about who will be the hawk and who will be the dove and the slightest sense of risk-aversion lead to dove-dove as the preferred rule (cf. Homann 1997: 16). This may be mathematically represented by the use of a risk-averse utility function U as

$$U\big(0.5(V)\big) > 0.5U(V) + 0.5U(0)$$

The question of whether people considering the welfare of society are risk-averse or risk-neutral got discussed by Rawls and Harsanyi . Meanwhile, Frohlich and Oppenheimer tested the preferences of people with respect to distributional preferences and found

something in the middle to be true (cf. Frohlich/Oppenheimer 1992). This suggests there will be a little risk aversion when deciding on constitutional grounds and thus agreement on dove-dove is to be expected.

Now, consider the case where multiple heroes taking action causes some costs of coordination C due to increased complexity. In the hawk-dove game, we would observe a loss of distributable income in the dove-dove case, as shown in figure 2. On a side note, this scenario can be considered equivalent to an increase in the value of a hawk overpowering a dove allowing for some creative transfers to the realm of politics.

<center>player 1</center>

		dove	hawk
player 2	dove	0.5*(V-C),0.5*(V-C)	0, V
	hawk	V,0	-1,-1

Figure 3: hawk-dove game with additional cost for dove-dove

In this case, the risk-aversion may not justify preferring dove-dove to an asymmetric solution. This can be represented as

$$U\big(0.5(V - C)\big) < 0.5U(V) + 0.5U(0)$$

In this case, society needs to coordinate on who will become the hero. Otherwise, society runs the risk of missing out on a dove at all ending up in the worst case of hawk-hawk. In the political realm sometimes, it is not only about the right action, but also about who takes action and how. The provided analysis of the hawk-dove game resembles this situation and points out a solution. If no one takes action the worst case happens: hawk-hawk. Forcing everyone to take moral action may yield confusion and inefficient activities. Thus, making responsibility clear in advance – also in moral concerns – may be the solution to set up a focal asymmetric solution in the hawk-dove game. One positive property of such a solution is the inherent stability of an asymmetric solution being a Nash equilibrium in comparison to the symmetric dove-dove solution. This supports 'incentive compatibility' in some sense.

4. Experimental Design on the Ethical Issue

In addition to complementing the theoretical part of Homann's work, it is also critical to evaluate it in the laboratory. The aim of the designed experiment is to determine whether incentive compatibility in the prisoner's dilemma and hawk-dove game is sufficient to solve the moral problem in it. Homann formalised the problem of common and conflict interest raised by interaction into prisoner's dilemma (cf. Homann/Lütge 2013). Due to the bounded rationality of individuals, the theoretical prisoner's dilemma always results in a Nash equilibrium through simultaneous defection by both sides. In practice, Homann believes that it is caused mainly by two reasons. The first is due to the inevitability of interdependence between people, and the second is due to the failure of participants to agree on a credible behavioral commitment. In other words, it is because one party is afraid that his unilateral moral acts of cooperation will be exploited by the other party and therefore omitted (ibid.).

How should such dilemma be avoided? Since the Nash equilibrium caused by bilateral defection is not a stable equilibrium of an evolutionary process, so we do not expect it in real world (cf. Gintis 2009) . Numerous laboratory experiments have been conducted to determine how to foster and sustain cooperation between two players. Homann proposes to enforce the moral rules under conditions where individuals' incentive compatibility can be established through rewards and/or punishments (ibid.). In experiments along similar lines to it, cooperative behavior can be motivated by the moral frame (cf. Mieth et al. 2021) and what individuals perceive to be the morally right action (cf. Tappin/Capraro 2018). On the other hand, if the punishment option is added to the experiment to indirectly guide the occurrence of cooperation, the results were not very consistent. It sometimes does not seem to yield any additional benefits, especially where the participants have asymmetrical power (cf. Bone et al. 2015; 2016).

However, there is no discussion of the consistency and renegotiation proofness of player's behavior pattern from Homann. This is also relevant for experiments. Regardless of how an experiment is intended to test a policy or method that promotes cooperation, the mere analysis of the proportion of cooperation among players in the game cannot be used as a sole indicator of policy implementability, the intertemporal consistency should also be considered. Even when it is possible to punish the others' defection, players have an incentive to renegotiate their original implicit agreement, abandoning the prescribed punishment path in favour of a more desirable equilibrium path once the defection is observed (cf. Pearce 1987). Therefore, we believe that one of the key criteria for determining whether a policy would be sustainable in society is the stability of the policy once it has begun to be implemented and whether the participants have attempted to renegotiate.

In light of this, we designed an experiment focused on observing participants' patterns of choice. The experiment consists of two sections and a short questionnaire with background information about the participants, and we estimate that the experiment will last approximately an hour. In accordance with Homann's explanation of the theory in his book, the experimental method will employ the prisoner's dilemma framework to illustrate the logic of interaction in section one (cf. Homann/Lütge 2013), and the

following section two is an extension of the dawk-dove game. And in each section, we set up the same four scenarios to facilitate comparison.

The experiment will take place in a laboratory where participants will be matched in two at random for each scenario and no information about the participants will be revealed to each other. The experiment will require a pair of participants to make a choice between cooperation and defection (referred as non-cooperation) simultaneously, and neither participant will be informed of the other's choice until the it is made. Moreover, as the experiment progresses, we will introduce additional options in different scenarios that participants can direct outcome they have in mind. In each scenario, participants will be asked to play ten rounds. It is important to note that, because the ten rounds will occur in short succession, we do not consider here the effect of the discount factor on the time preference. The payoffs are accumulated without discount for each round, at the end of which participants will have the opportunity to convert their points to real monetary payoff.

The experiment is designed to test the choice pattern of participants in different scenarios and sections, taking into account the statistical methods of the experiments (cf. Becchetti et al. 2018). Let $\mathbb{C}_{j,s(i)}$ denote the choice pattern of the jth pair of players in scenario (S) i. This leads us to the null hypothesis:

$$\mathbb{C}_{j,s(i)} = \mathbb{C}_{j,s(t)} \ where \ i,t \ \in S, i \neq t$$

Theoretically, if participants are making decisions rationally or based on outcomes, they should make their choices with reference to the payoffs that can be obtained. Table 1 shows a typical payoff matrix for the prisoner's dilemma in section one where the dilemma is usually derived from the fact that each player benefits from defection (where T>R>P>S). However, if both players act in full accordance with rationality, their collective situation will be worse than when they both cooperate (cf. Bell/Mieth/Buchner 2017). In terms of numbers, we chose T=50, R=30, P=20 and S=6 (points) to represent the income distribution in Germany based on statistics for 2020 (cf. Eurostat 2022) and we processed it so that participants cannot recognized it immediately.

Player 1 Player 2	Cooperation	No cooperation
Cooperation	R R	S T
No cooperation	T S	P P

Figure 4: payoff matrix in prisoner's dilemma

The first scenario is interpreted as the base treatment, and in order to achieve the most unbiased results, we will refer to the cooperation as 'move one' and the no cooperation as 'move two'. In the second scenario, the cooperation is framed to be moral. This change

will be made very clear to the participants and prompted them that bilateral cooperation can also bring the greatest 'cake' to society by summing up two payoffs. A new penalty option will be added in scenario three. The penalty option costs three points but can cost another participant twelve points. This option will be available to both participants, they can unilaterally choose to give the penalty the other side before the next round begins. But the game will end once one participant's payoff falls below zero in any round.

All three of these scenarios are quite common in the laboratory. Below we would like to introduce the fourth scenario, the new redistribution option we have added to the game. Homann himself did not value redistribution, even if he also agreed with Buchanan. He did mention 'all demands for redistribution, ..., no matter how normatively justified they may appear to be, do not figure on the level of the method of economics, their incentives are not taken into consideration' (cf. Homann 2006:14). Furthermore, he argues that 'social policy can only be sustainable if it's not conceived as a redistribution' (cf. Homann/Lütge 2013: 54-55). As stated earlier, this paper does not share his views on redistribution. In fact, we believe that a good redistribution policy, such as a basic income, can be sustainable and make increase social stability. In the experiment, the redistribution option means a certain percentage of 'not cooperation' payoff will be extracted and then divided equally between two participants. Specifically, the difference in payoffs can be reduced in either (cooperation, no cooperation) or (no cooperation, cooperation). In this case, T becomes 38 and S becomes 18. Unlike the previous option with penalty which has a price to pay for implementing it and it may cause the 'economy' to be smaller in size and less efficient. But conversely, the option for redistribution requires the unanimously consent of both parties. It can be proposed by a participant before the next round starts and the other side can choose to accept it or not. Our assumption is that the choice pattern will become more consistent as participants who choose cooperation can be compensated and have less motivations for changing the decision.

This is all about section one. The scenarios in section two are exactly the same but will be played in the hawk-dove game. In order to facilitate the experiment, a more generic format will be used than in the previous chapters where W>T>L>X.

Player 1 \ Player 2	Cooperation	No cooperation
Cooperation	T T	L W
No cooperation	W L	X X

Figure 5: payoff matrix in hawk-dove game

After bringing in the same numbers as before (where W=50, T=30, L=20, X=6), it can be observed that the choice that brings the most desirable outcome to society in this section occurs in the case of (cooperation, no cooperation) or (no cooperation, cooperation). In seeing how bad the outcome of no-cooperation is, participants are assumed to cooperate

but not in the same way as in a prisoner's dilemma. It's clear that Homann's market economics solution is not applicable here by choosing (cooperation, cooperation). If an individual wants to pursue the efficiency of the market economy, he/she must accept that one player will end with 'no cooperation'. As mentioned earlier, there is no need to call 'no-cooperation' immoral in such case. The demand for equal outcomes in a market economy is inherently contradictory. In this section, it is important to find a consistent coordination in the hawk-dove game. The experiment will repeat the previous scenarios, the only difference in the settings happens in the fourth scenario. If both parties agree to a redistribution, then W becomes 42 and L becomes 28.

Since our experiment is set up as a finite repeated game, non-cooperation is theoretically the dominant strategy, regardless of history. To avoid this worst possible outcome for society and individuals, is Homann's theory of market economics valid? Or it's only valid in the prisoner's dilemma? Can redistribution option in games be more effective than Homann's solution to the overcome dilemma? These are our research questions and analytical ideas. In addition to this, the experiment can also be extended in several directions. First, Homann did not specify the economic situation of the player before entering the game when structuring the prisoner's dilemma. In a market economy without redistribution, it is hard to believe that people with different economic background would always choose to cooperate because of moral rules (cf. Ito et al. 2017; Pansini et al. 2020). In response, we can change the participants' initial endowment in setting of the experiment. Then, does it matter whether Homann's solution to the prisoner's dilemma is applied symmetrically or asymmetrically to the payoff matrix if it is valid? Last but not the least, there are additional endogenous variables that we can include when interpreting laboratory results.[2]

5. New Ordoliberalism

In the previous sections, we have contributed criticisms and adjustments to Homann's approach, focusing on changes which would adapt his approach to pass several contractarian ex post checks, namely strategy proofness, renegotiation proofness, or, (unanimously supported) ex post justice threats as envy-freeness of ethical rules. Combined, these adjustments can constitute a 'new' ordoliberal approach to ethical analysis. The following section will explain stepwise the characteristics of a 'New Ordoliberalism' (NOL) as a tool for conducting constitutional ethical analysis, and will expand on previous work by Neumärker (cf. 2017).

Homann's work is primarily concerned with establishing rules which create the possibility for actors to be moral, without concern for what constitutes morality. Homann developed his ideas of Ordnungsethik (order ethics) within the tradition of classic German Ordoliberalism (cf. Sojka 2016) in which the role of the state is to ensure the stability and predictability of the competitive market through setting rules upon which a functional, efficient economy could be based (cf. e.g. Eucken 1964; Vanberg 2004). Ordoliberalism can be interpreted as a response or alternative to Keynesian policy, which focuses on

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[2]   The experiments mentioned above will take place at the University of Freiburg in the summer semester 2022 at SoCoLab Freiburg (Social Contract Lab).

discretionary decision making to achieve specific economic goals (cf. Snaith and Nedergard 2015). Homann subscribes to Rawl's and Buchanan's perspectives that rules are efficient because the decision-making process is efficient; if everyone has agreed to a rule through a hypothetical social contracting procedure, itself an efficient procedure, then the resulting rules are efficient. By this argument, the rules are ex-ante fair.

NOL aims to improve the ordoliberal approach by ensuring stability and sustainability at the post constitutional level. The primary argument of New Ordoliberalism is that, in the constitutional contracting stage, the ex post constraints of the contract must be checked. While Homann's approach may satisfy an ex ante justice check, they ignore any ex post outcomes, such as severe inequality (unfairness) or lack of enforcement, that may have an effect on stability or endurance of the agreed upon rules, leaving said rules at risk of revolution or renegotiation. While it is impossible to be certain that a rule will have outcomes that are ex-post fair or stable, ex-post outcomes should at least be considered at the pre-constitutional stage. This 'ex-post justice check' as defined by Neumärker (2017) consists of several criteria; envy-freeness (freedom from envy) as a typical ex post unanimity threat[3], renegotiation proof, self-enforcing[4], and strategy proof. These criteria are discussed below.

The NOL approach is distinguishable from classic ordoliberalism in that it extends beyond ex ante rule setting and the creation of stable competitive environment, and toward ensuring ex post socially just outcomes. When the outcomes are socially just, the rules and order are stable and sustainable. In line with ensuring stability, NOL's normative focus extends beyond efficiency towards equity, and specifically to distributive justice. The normative individualism Homann subscribes to (as discussed in Section Two) implies a 'hidden utilitarianism' (cf. Neumärker 2017:837) which means the problem to be solved is one of efficiency (maximising utility) and not of justice, or specifically distributive justice. The conflict between economic efficiency and equity has long been acknowledged (cf. Okun 1975). Neumärker (cf. 2001) argues for a broader focus on social justice through redistribution, which constitutes an underlying principle in NOL.

Homann's approach looks at self-interested individuals and focuses on incentive compatibility: that is, rules should be set in such a way that compliance with the rules is incentivised. Additionally, there is a utilitarian assumption in his work. Neither of these assumptions account for the social factors, such as envy, that would result from unequal outcomes. The NOL approach looks beyond the axiom of the self-interested individual, the pure homo economicus, and incorporate lessons from behavioral knowledge. While a larger pie would satisfy utilitarian objectives, no attention is paid to distribution, or the effects unequal distribution could cause. In Section three above, we have built on Homann's approach, discussing the relationship between incentive compatibility and envy-freeness. NOL includes such a 'freedom from envy' as a criterion for constitutional

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[3] Schotter (1981) proofs alternatively blame-freeness. Also "conflict-freenes", "stalking-freness", "racism-freeness", or, "discrimination-freeness" could be additional, complementary, or, substituting candidates for the freedom from envy. All these aspects of freedom could be candidates to be prevented or mitigated from the contractarian ex ante point of view. But in that contractarian calculus they arise as ex post constraints like PC and ICC.

[4] Self-enforcing, or, hierarchical governance for rule-enforcement like a hegemon or a government as 'second best' governance)

order and distributive justice. This occurs when each individual is satisfied with their bundle of goods, preferring it to the bundle of goods of any other individual (cf. Arnsperger 1994). This is a key criterion for rule stability, as freedom from envy at the post constitutional stage will generate unanimity between individuals even under the condition that they have full knowledge of all their positions (cf. Neumärker 2017, 836). From the ex ante point of view it considerably stabilizes the constitutional rules (cf. Neumärker 2004; 2012). Again, the NOL perspective focuses on ex-post justice. Even if the process of making rules was fair and efficient by Homann's own definition, in the case where outcomes are significantly unequal, envy may arise, which can lead to conflict or renegotiation of the rules.

Criteria which focuses on ex post outcome present a stronger chance for stability and sustainability of rules: rules should be established in such a way that there is no post-constitutional situation in which conflicts cause the rules to be renegotiated (cf. Neumärker 2017:836). Additionally, as demonstrated in Section three, an ethical rule which can be manipulated, that is, a rule which is not strategy proof, cannot be called ex post fair or just. In Section Three we demonstrated how Homann focused on incentive compatibility and neglects the presence of renegotiation and erosion issues. NOL incorporates renegotiation proofness at the post-constitutional stage as a requirement. A contract or rule is renegotiation proof where it is no incentive from an involved party to renegotiate the contract, or, loosely, a contract is renegotiation proof in that 'in no stage will the parties find it mutually beneficial to scrap it and reach an alternative agreement' (cf. Rubinstein/ Wolinsky 1992 : 601).

Homann's perspective is that the institutional, i.e., incentive compatible, implementation of rules creates the relevant norms (cf. Homann 1997, 17). In his hypothesis that the goal is to have set rules that enable morality, the rules should be incentive compatible, seemingly suggesting that incentive compatibility is sufficient to ensure stability of the rules. In section three we argued that for a large number of population and hierarchically-flat arrangements, like a normatively soundful constitutional stage excluding any individual advantage in knowledge and power is requesting, incentive compatibility turns into strategy-proofness. Second, renegotiation-proofness has necessarily to be added to strategy-proofness. Third, one has to show explicitly that moral rules are ex post just, renegotiation-proof, and strategy-proof.

NOL introduces a criticism on Homann's work here – Homann's approach to ensuring morality through constitutional decision making is only ex ante secure, not ex post. Citizens should have no incentive to, for example, choose anarchy or to break morality. However, when a citizen is, for example, so poor that they're unable to meet their essential needs, they may choose, or rather feel forced, to break morality. Section three, therefore, demonstrated how UBI, as a core policy tool of NOL, will ensure renegotiation proofness and might support strategy proofness of the social contract.

As mentioned, Homann's (1997) perspective is that the institutional implementation of rules creates the relevant norms. When we replace or equate 'Institution' with 'Governance' then we can add to the institutional setting the requirement of self-enforcing governance. The characteristic of self-enforcement, in relation to rules, refers to rules that are enforced by the parties involved. The alternative is then to have power is delegated to a hierarchically enforced power, such a government, dictator, or, hegemon. But from a

governance point of view self-enforcing rules are 'institutionally first best' and hierarchical solutions only 'institutionally second best'.

As explained in Section 2, for a contractarian solution to work, the chosen set of rules is required to be self-enforcing via incentive compatibility (cf. Homann, 1997: 14). Homann also places value on 'trust', or at least, on the assumption that individuals can rely on other individuals following the rules and thus conflict can be avoided. Additionally, rules are only morally binding if one can expect others to also follow the rules (cf. Homann, 1997: 16). In each of these examples, observation of the rules relies on the assumption of exogenous enforcement. While New Ordoliberalism has reason to expect individuals to follow the rules. With built in mechanisms to do so, one no longer only relies on trusting others to ensure rules are followed. With rules which are self-enforcing, renegotiation proof, strategy proof and envy free, there is no need for the sole assumption of trust. In this way, incorporating these criteria into rules, NOL is able to improve the strength of Homann's arguments.

6. Conclusion

Homann's approach is a sophisticated theoretical model. Therefore, it contains a normative fundament that Homann builds his endeavor on, as well as extensive conclusions following his positive analysis. In this article we suggest extensions on both, the normative and the positive part of Homann's theory. On the normative footing we suggest taking the New Ordoliberalism into account. Ex post justice and freedom with envy-freeness as an example and related to renegotiation-proofness, strategy-proofness, and self-enforcement are additional criteria for a fully fletched ethical constitution. Section 3.1 shows the structure of such a contractual solution concept. On the positive footing we consider the ethical voter, the moral dilemma in the behavioral PD game with a kindness function and the hawk-dove game as additions to the considerations in the prisoner's dilemma. We also show an experiment design on some of these considerations with the purpose to check and verify empirically the relevant contractarian elements of a constitutional choice of ethical issues.

By reconstructing moral actions in society in the behavioral PD game and hawk-dove game we extend Homann's approach. Our analysis suggests that a constitution may be used to motivate moral actions but is not limited to. Contingent ethical cooperation in the Rabin game let us conclude it might pay to add a basic income for supporting strategy-proofness and renegotiation-proofness in the sense of general toleration as a significant part of the ethical constitution. In situations like the hawk-dove relationship where only one player needs to provide a moral action, the constitution needs to live up to the task of coordination.

Clearly, our own access to the contractarian problem is still full of limitations. For instance, the overcompensation aspect of feasible reforms leading to our introduction of a basic income has to be "formalized" inside the Rabin game. The strategy-proof uniform rationing Moulin (1995) introduced for problems of excessive demand can be conveyed when we contrive an asymmetric multi-player game showing that the basic income closing the maximum gap demonstrated in Section 3.1 leads to participation of any player in kind cooperation and showing their preferences truthfully by not mimicking other types of players for the sake of realizing strategically biased payoffs. But all this contributes,

from our point of view, to a new-ordoliberalistic specification of Homann's main goal of constitutionally justified ethics.

The approach of Karl Homann is, therefore, highly enlighting and leads the way to an ethical governance of societies and economies. We extracted from his voluminous work only a few features we would like to examine and present suggestions for improvements on the approach and its conclusions.

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