### ECONOMICS OF PARADISE. ON THE ONSET OF MODERNITY IN ANTIQUITY, BY

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# CHAPTER 1

## Introduction

[He:] Like a lily among thorns is my darling among the young women.

[She:] Like an apple tree among the trees of the forest is my beloved among the young men.
I delight to sit in his shade,
and his fruit is sweet to my taste.
Let him lead me to the banquet hall,
and let his banner over me be love.
Strengthen me with raisins,
refresh me with apples,
for I am faint with love.
His left arm is under my head,
and his right arm embraces me.

(Song of Songs 2: 2-6)

Why was the Old Testament or *Hebrew Bible* not written as a book of sensuous love poetry? We find such poetry of desire, love, physical sensations, and sexual fantasies 'hidden away' only in the very later books of the Old Testament, such as the Song of Songs, and even there they only occupy a possibly not insignificant but a comparatively minor place in the enormous volume of stories that make up the Old Testament. So, why were not ideas of

love, caring and caressing more prominently set out in the Old Testament in order to

develop and portray a very noble and humane image of humans and society? Why do we

not know the Old Testament as a renowned piece of love lyrics? It is important to raise

these questions at the outset since through discussing what the Old Testament text in its

very essence is *not* about, its contents, intentions, motives and themes can be more clearly

understood.

How shall we handle this finding that the Old Testament was not written as a

collection of stories that only dealt with unconditional love, physical desires and pleasures,

and undisturbed serenity and peacefulness? Why is the opposite in basic the case, the Old

Testament telling on some 1000 pages stories of battles, feuds and wars, with disasters,

dislocation, betrayal, robbery, murder, rape and other atrocities being the norm rather than

the exception? What does this tell us about the society in which the texts of the Old

Testament emerged, and do the texts of the Old Testament in this regard still bear any

significant relevance for our societies today?

In the Song of Songs the allegory to a paradisiacal setting of trees in a garden and an

abundance of fruit is striking – and nearly immediately reminiscent of the Eden story. This

gives even more gravity to the question as to why already the paradise setting, as we find it

at the very outset of the Old Testament in the Book of Genesis, was hardly envisaged by the

Old Testament as an idyllic place of love, tranquillity and a state of unchallenged peace in

social life, so the argument of this book.

Anarchy in Paradise: Key Questions, Themes, and Theses of the Book

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Although fruits and many other 'goods' were abundantly available to Adam and Eve in paradise, the paradise of Genesis was not a place of superabundance or a hyper-paradise: They did encounter scarcity, constraints, and even contests in goods. For one thing, they had to work the Garden of Eden and look after it (Genesis 2: 15; Stordalen 1992; Wagner-Tsukamoto 2009a, 2009b). This instantly reduced Adam and Eve's free time and therefore limited their time capital. It can also be argued, on a related point, that they needed to build up certain knowledge for keeping paradise cultivated; in this latter respect, certain investments in human capital, into learning, were required, which in turn further limited their time capital.

For another thing, Adam and Eve were not allowed to consume certain goods in paradise – fruits from the divine trees in the middle of the garden, these trees being singled out as unavailable to Adam and Eve. These trees were not just two other trees in paradise: They reflected the two most precious types of capital of paradise. In a sense, their very nature defined the essence of paradise, of the two godly privileges of knowledge to everything and of eternal life. Had Adam and Eve succeeded to eat fruits from both trees they would have indeed turned into gods themselves.

Therefore, when looking at the storyline of the paradise events, it may not come as unexpected that ultimately contest, conflict and anarchy in a destructive sense erupt regarding fruits from the divine trees. Godly order was questioned and undermined, and this happened right at the outset of the Old Testament, in the very first story in which social life was depicted. Modern, social economic philosophy, and the kind of constitutional and institutional economics it has given rise to, tends to underestimate this fundamental point. Like much modern philosophy, it tends to claim that only with the coming of the Age of

Enlightenment from the outgoing Middle Age onwards, godly and earthly 'sovereign masters' were challenged and replaced by 'subjects':

Althusius, Spinoza, Locke, and, even more emphatically, Rousseau, commenced and continued to talk about a social contract among independent men, not a Hobbesian slave contract between men and a sovereign master. From contract among free men, all things might emerge, including basic law itself. *For the first time*, man seemed to be offered a prospect for jumping out of his evolutionary history. Man, in concert with his fellows, might change the very structure of social order. (Buchanan 1975: 147-8, emphasis added)

Undeniably, the Old Testament is not the kind of conceptual social philosophical treatise that 'directly' discussed questions of societal organization and how interactions between 'men and a sovereign master' were to be approached. Nevertheless, a key thesis advanced by the present book is here that once the Old Testament's veils of allegory, parables, and symbolism are lifted – through the very employing of modern constitutional economic and institutional economic theory – its 'modern' approach to discussing and advising on questions of anarchy, social order and societal organization shines vividly through.

The success of this project in turn, allows us to fundamentally challenge our understanding of antiquity versus modernity, and of what societal texts of antiquity were about, being supposedly pre-modern, merely mythical, primeval, archaic, primitive, and ancient, in opposition to modern texts, which may be claimed to be enlightened and considered concepts of social order.

The approach of constitutional and institutional economics was pioneered, amongst others, by James Buchanan, Douglas North, and Oliver Williamson especially since the 1950s, with some of Ronald Coase's works dating back to the 1920s and 1930s. Applying the concepts and methods of institutional and constitutional economic reconstruction to the Paradise story yields the fascinating thesis that the ancient text 'Old Testament', with its earliest parts, including the Paradise story, being some 4000-5000 years old, conceptually mirrors modern advances in economic theory. From here, compelling questions and theses arise: Why should this be the case? How did the authors of the Hebrew Bible come to venture in the footsteps of modern economic theory?

A key thesis of the book is here that in an all-encompassing manner and not even with regard to many significant, particular aspects of the project of modernity, a conceptual and practical, normative differentiation of antiquity and ancient times from modernity and modern times cannot be uphold. A key question of the book is in this regard in what respects do we need to revise our understanding of what constitutes 'antiquity' in comparison to 'modernity'?

The book breaks down this investigation into various topics. The central question analysed in chapter two is as to whether the paradise of Genesis reflected a land of Cockaigne – i.e. a land of unlimited luxury and unlimited access to goods and capital with a carefree, easy life for Adam and Eve. The proposed answer is critical and disapproving, outlining that certain capital was highly contested and anything other than abundant to Adam and Eve. This argument is advanced on various grounds, such as labour capital (Adam and Eve having to invest physical labour into the cultivation of paradise); limited time capital for Adam and Eve (their free time being curtailed by God's requirement that Adam and Eve

needed to keep paradise cultivated; Adam and Eve's longevity/eternal life being negated by God's unwillingness to share fruits from the tree of life with them); human capital (i.e. knowledge capital being severely constrained for Adam and Eve through God's reluctance to share fruits from the tree of knowledge with them); or capital understood in terms with regard to essential democratic goods, such as liberty and freedom. Examined in this way, the book effectively dismisses the widely held, intuitive, common sense notion and belief of Adam and Eve's experiencing an easy and carefree life inside paradise, such a paradise mirroring a Land of Cockaigne in which food abundantly presents itself to the inhabitants.

Chapter three moves on to analyse key motivations of the various actors involved in the paradise interactions: God, Adam and Eve, and the serpent. The affinity of their motivations to the model of self-interested, rational choice (homo economicus) is examined, or what Buchanan called 'predation', and Williamson 'opportunism'. The thesis that selfinterested choice was the driving motivation behind the paradise events is specified for Adam and Eve with regard to their theft from the tree of knowledge; for God with respect to his unwillingness to share fruits from the tree of life and the tree of knowledge with Adam and Eve, as well as his expectation that Adam and Eve should work in paradise. For the serpent, a model of self-interest is specified in terms of being a medium that instigates selfinterested choice of a comparatively selfish nature, through Adam and Eve's theft. The chapter discounts criticism that a characterisation of God's, Adam and Eve's, and the serpent's motives as self-interested (or even as opportunistic and predatory) reflects a dark or negative image of decision-making behaviour. The predominantly heuristic, non-empirical nature of the idea of self-interest or the homo economicus in mainstream economic analysis is stressed.

Chapter four analyses interaction conflict and economic structures that invited the breakdown of cooperation in the paradise interactions, i.e. Adam and Eve's theft from the tree of knowledge. Following the approach of institutional and constitutional economics, but more precisely ideas from the principal-agent literature, a defective logic of incentive signals (but not frail human nature) is blamed for causing outcomes of anarchy and turmoil in the paradise scenario. The chapter discusses incentives (expectations of gains) surrounding the tree of knowledge and the tree of life, and how Adam and Eve perceived and valued such incentives, especially in comparison to their decision option 'not to steal fruits' from the divine trees. The economic nature of the decision-making process, which ultimately led to the breakdown of previously cooperative interactions between God and Adam/Eve, is herein reconstructed (in economic terms, drawing in particular on principal-agent theory and its ideas of incomplete contracting, information problems, the delegation problem, risk-taking, residual loss, etc.).

Chapter five reviews the outcomes of the paradise interactions in terms of specific economic gains and losses incurred for the various actors, drawing on economic game theory and here especially the prisoner's dilemma game and economic rational choice theory. For God, the loss of his exclusive access to the tree of knowledge is examined, which partially defined his privilege of being divine. For Adam and Eve, losses such as their expulsion from paradise, but also gains, such as their access to a new, special type of knowledge are reviewed. For the serpent, losses such as physical punishments as well as the expulsion from paradise are discussed. The chapter critically argues that a situation of mutual loss seems to have resulted for all the actors involved in the paradise interactions (the 'war of all' in Hobbes's terms, or even the 'prisoner's dilemma predicament', as

elaborated on in political economics and economic game theory). Economic conditions are delineated that suggest an ambivalent diagnosis of mutual loss as the ultimate outcome of the paradise interactions.

Chapter six turns on the question: why would the Bible choose a discomforting scenario where loss is potentially endemic, as identified in the previous chapters in institutional and constitutional economic terms, for starting a debate on social interactions? The chapter critically questions one-sided, negative evaluations of the paradise outcomes, for instance, as put forward in the philosophical tradition of John Milton's classic poem 'Paradise Lost', or in the tradition of certain branches of theology, which utilise the idea of the 'original sin' in order to negatively judge the paradise events. In this respect, the chapter provides a contrasting constitutional and institutional economic reading of the Old Testament's initial approach for social analysis, as compared with the 'start-up' scenarios that other fields of study, such as social philosophy, or theology, project to the Paradise story.

The key thesis is in this respect that the 'fall' of humans in paradise was necessary, instrumentally useful, and even morally valuable in order to begin a fairer and more equal debate on organising social interactions. This then is visible in the Old Testament in subsequent chapters and books: We find that the stories after the Paradise story were fairer, more open and more mutually advantageous when setting out routes for organising social life. My previous research on stories after the paradise story, as connected to throughout this book, provides back-up for this argument.

The Constitutional and Institutional Economic Approach to Analysing the Breakdown of Cooperation: A Brief Introduction

Put in a nutshell, the research program of constitutional and institutional economics analyses rule structures ('governance structures' in a wide sense) and suggests intervention with them in order to better interaction outcomes amongst a group of actors. Rule structures are conceptualized as 'economic institutions' (Williamson 1985) but not as behavioural institutions that reflected internalized moral precepts or other values held by the individual and shared by a group. Buchanan (1975: 117) clearly distinguishes these two types of approaches to institutional ordering too, when contrasting an approach that draws on systems of (constitutional) rules and basic law as an avenue to institutional ordering with the 'moral precepts' approach to institutional ordering.

From an institutional economic point of view in the tradition of Buchanan, North or Williamson, if problems occur in interactions, constitutional and institutional economics attributes them, in a situational tradition, on economic institutions: Inefficient interaction outcomes or even the break-down of interactions are projected to systemic rules that did not realign self-interests of interacting agents so that cooperation could have emerged.

A key normative purpose of the economic governance of interactions is here to realign self-interests of interacting agents in such a manner so that cooperation emerges (if the generation of cooperation is viewed as desirable). Then, economic institutions need to send incentive signals in such a way to agents that already on grounds of self-interested

choice, agents do cooperate. Williamson (1975, 1985) characterizes such institutions as 'incentive-compatible'.

The kind of economic institutions analyzed by constitutional and institutional economics vary greatly and cover an enormous range. At one extreme, contractual schemes for two-person interactions, in a market context, or in an organisational context, may be looked at. Principal-agent theory covers such issues, although its conceptual focus can be much wider too, especially looking at information problems (information asymmetry) that can undermine cooperative contractual relations (Ross 1973; Jensen and Meckling 1976; Fama 1980; Fama and Jensen 1983; Eisenhardt 1989; Sappington 1991). More complex economic institutions govern group interactions, for instance, in the context of the firm (job allocations schemes, supervision schemes, promotion schemes, etc.). At the other extreme, constitutional structures of the state and even of international political ordering are approached through the very idea of governance by means of economic institutions. Studies in the tradition of constitutional economics, such as Buchanan (1975, 1977, 1987b, 1991),

Heuristic Models of Constitutional and Institutional Economics: Dilemma Structure and
Homo Economicus in the Paradise Scenario

A key idea entertained in this book is that concepts of self-interest and of a dilemmatic model of interest conflicts amongst actors function in 'conventional' economic analysis, as it emerged from the works of Adam Smith or Bernard Mandeville, as mere *heuristics*.

Buchanan's (1987b) constitutional economics is here most explicit, as are many other

economics studies (Becker 1976, 1993; Stigler and Becker 1977; Machlup 1978; Homann and Suchanek 1989; Suchanek 1993; Homann 1994, 1997; Wagner-Tsukamoto 2003, 2008b, 2009a, 2013a; Heyne 2008). A heuristic reading of the homo economics, i.e. a calculus of self-interested choice that optimizes personal gain, as of a dilemmatic model of interest conflict, i.e. abstractly modelled through the prisoner's dilemma or the commons dilemma (Luce and Raiffa 1957; Hardin 1968; Homann 1994; Wagner-Tsukamoto 2003, 2012c), implies that these models are not directly open to empirical or moral scrutiny: Only the economic theory that is abstractly grounded in these heuristic models can be empirically and morally evaluated, such theory being focused on categories and processes of capital exchange, capital production, economic institutions of kind or another, costs that drive economic organization, and normative goals such as mutual gains (as well as 'public good' the 'wealth of nations' in Smith's reading, as the unintended by-product and outcome of economic activity). This list already makes clear that there is plenty of scope for theorizing in conventional economic terms that is open to empirical and moral scrutiny (and I review these empirically 'testable' and morally 'testable' concepts in the next few sections below).

However, as indicated, the models 'homo economicus' and 'dilemma structure' are not concepts that were to be empirically validated or contested. Understood as research heuristics, they locate at an axiomatic, pre-empirical, quasi-tautological plane of analysis.

The philosophies of science of Popper (1977, 1978, 1992, 1995) and Lakatos (1970, 1976, 1978) can be drawn upon to set out this argument in detail (for a review, see Wagner-Tsukamoto 2003, also 2008b, 2011; see also Hands 1993, Suchanek 1994).

#### Organizational/group-based Conflict model

Institutional and constitutional economic analyses draw on a social model to analyse interaction conflict and to conceptualize it along various dimensions. A problem of social contract or what Williamson explicitly calls the 'contracting dilemma' is analysed. A comparable approach sets out principal-agent theory with its focus on problems of incomplete contracting, information problems in relation to the delegation problem in a principal-agent relationship, issues of information asymmetry, etc. In Buchanan's constitutional economics we find a prisoner's dilemma-type situation as start-up topic which agents have to leave through contracting over institutional and constitutional structures.

Such social conflict models are grounding in theoretical terms for institutional and constitutional economics. However, they have in the context of the Old Testament a meta-theoretical function too.

A further key thesis is here that the Paradise story even has to be read as *the* metaheuristic of the Old Testament, as the Old Testament's center of gravity that grounds all other stories. Only through this first story of social conflict, all other subsequent stories about sometimes successful, sometime less successful handling of interaction conflict can be understood. In this interpretation, the Paradise story is the parable of parables through which the other stories derive meaning. This thesis attests to the prominence this story has gained in our cultural heritage and it contests any suggestions that this story were trivial, insignificant, archaic or otherwise linked badly to later stories in the Old Testament. The Paradise story cannot be safely locked away in the box of 'Primeval History' or 'Primordial History', which may even be attempted to be historiographically rationalized (e.g. Mowinckel and Albright 1939; Engnell 1960; Forrest 1994; Anderson 1989 or Steinmetz 1994 review

literature on primordial, primeval readings of the Paradise story; Moye 1990 moves in this direction too). I am generally very critical of such historiographical analysis of the Paradise story (as discussed in detail below).

'Capitalist' Problems Inside Paradise: Capital Constribution/Distribution and Capital

Exchange Issues

The starting point for analysing and the subsequently possibly intervening with constitutional and institutional economic arrangements is the 'status quo' but not some idealistically, utopian state in social affairs. For an interaction situation, existing institutional arrangements are examined how they distribute capital among interacting parties (for example, property rights in capital, but also gains from capital employment), and how and to what extent capital contributions (inputs to the production of goods) are expected by the parties involved. Capital contribution and capital distribution problems can interrelate, for instance, one party producing certain capital by drawing on inputs of other capital – to which it may or may not hold property rights. Depending whether and how property right are set out for capital, productive processes can be more or less efficient. Economic institutions, such as property rights allocation schemes, set out how capital is initially distributed, what capital contributions are expected in the process of production from interacting parties, and how gains from production are distributed once input capital has been transformed and new capital has been produced. The idea of capital has to be widely interpreted in this connection. It does not only cover physical production capital but also

human capital (skills), intellectual capital (knowledge), time as capital, information as capital, etc.

For the paradise story we have to critically examine later on (especially in chapter 2) what capital types were critical and contested. On the one hand, there is the land cultivation problem in paradise, for which capital inputs to production, capital outputs from production, and property rights in capital as such can be reviewed. This raises various interesting capital contribution-distribution issues and property rights distribution problems. Still, the possibly more significant capital 'contest' in paradise surrounded the divine trees. Although no capital production questions could really arise prior to the theft of the divine fruits, questions of fair capital property rights distributions are highly intriguing from the outset due to the very nature of capital the divine trees reflected. Therefore, shifts in property rights distributions need to be examined in depth once the theft had occurred. Also, as a result of the theft a new type of capital production became feasible; for instance, the making of cloth coupled with 'social capital' production that sets out what is morally acceptable in terms of etiquette in a society, e.g. regarding dress codes; and the godly curses in the wake of the theft initiated different capital production processes too (but then outside paradise and 'after' the paradise story). Social ordering that involved humans, as it can be reviewed in an institutional and constitutional economic tradition, was kicked off by the theft as well. Although, this predominantly then happened after the Paradise story in the Old Testament but the theft was instrumental to initializing such new capital production processes that interprets public ordering as capital in itself.

There are at least two dimensions to the problem as to how to effectively govern capital exchange through economic institutions. Buchanan's (1975) constitutional economics makes here the important distinction between the 'protective state' and the 'productive state', which may loosely correspond to the distinction of 'public ordering' and 'private ordering'.

At the level of the protective state, economic institutions and rules themselves are decided through a democratic process by a group of actors. Constitutional and institutional order is in this way approached as a 'public good' (Buchanan 1975; Buchanan and Tullock 1962). This argument not only applies for the entity 'state', where constitutional and institutional order may be comparatively obvious, but, in basic, it can be transferred to any other social entity. Institutional economics, in the tradition of transaction cost economics (Coase 1937, 1984, 1994; Williamson 1975, 1985, 200, 2010) or principal-agent theory (Ross 1973; Jensen and Meckling 1976; Fama 1980; Fama and Jensen 1983; Eisenhardt 1989) may be here less explicit than constitutional economics, the 'protective state' can here be uncovered too: The firm can be approached as a state, as a constitutional contract. Unless this initial contracting problem is resolved – through deciding rules that ensure 'fair' production –, subsequent production processes can be expected to be inefficient or be derailed altogether. What 'fairness' constitutes in a constitutional and institutional context of capital distribution and capital production, I discuss in the next section, when talking about 'mutual gains' as the normative goal of constitutional and institutional economic ordering.

If the status quo is problematic or imperfect, such problems are addressed by constitutional economics and institutional economics by analysing the interaction situation,

that is the system of rules that govern an interaction. It is examined how existing rules distribute rights to capital to interacting parties, and how rules allocate capital costs and capital gains to parties. The problematic nature of such institutional arrangements is conceptualized as contested rights to capital themselves, or intervening factors that make capital exchange and production potentially problematic. For instance, transaction cost economics here looks in particular at features such as 'asset specificity', which makes the transfer of capital from one exchange process to another difficult and thus gives rise to interaction problems; or principal-agent theory has in great detail looked at problems of information asymmetry distribution in an agency relationship which gives rise to interaction problems between principal and agent.

For the paradise, concepts relating to control problems in an 'agency relationship' are relevant for examining 'private ordering' and productive behaviour of Adam and Eve in paradise, especially in relation to the expectation that they should keep paradise cultivated. However, this is possibly not the major issue at stake here. Capital distribution problems regarding property rights allocations for the divine trees may be more significant. For the divine trees, productive capital exchange processes are not really obvious, at least not so before the theft occurred. Therefore, as far as production processes are concerned transaction cost theory or principal-agent theory are less relevant in this regard. In other respects, they can be drawn upon namely when discussing control problems in an agency relationship as such.

In general, Buchanan's constitutional economics is here differently focused – on public ordering, which seems to be one of the key contested issues regarding the divine trees. Establishing public order at the level of the protective state involves the analysis of

problems of distributing rights to capital (property rights in particular) amongst interacting parties when basic rules that govern constitutional contract are decided. Such questions regarding initially fair schemes of property rights distributions are imminently relevant for the paradise story, in particular for the divine trees since these threes at the outset of the story exclusively belonged to God and God appeared as an unwilling trader to make concessions regarding reallocations of property rights in the divine trees. Also, the initial start-up situation of how rights concerning land, land usage and especially regarding the divine trees were distributed between God, on the one side, and Adam and Eve, on the other, had been imposed by God. An authoritarian and possibly even dictatorial ruler or 'principal' can be diagnosed in this respect.

This type of question regarding institutional order as such will be especially looked at in chapter 4. The chapter discusses how existing structures of economic order instigated the break-down of cooperative interactions in the paradise scenario.

#### Costs of Economic Governance and the Generation of Mutual Gains

The approach of institutional and constitutional economics is 'economic' in multiple respects. The brief previous discussion already hinted at this when four 'economic' elements of an economic reconstruction through constitutional and institutional economics were spelled out: an economic, game theoretical dilemma structure; the model of the homo economicus; capital, specifically the distribution of rights to capital, and interacting parties'

expectations regarding capital contributions / distributions in relation to productive processes.

In this section, two more elements are briefly introduced: the normative goal of constitutional and institutional economic ordering – of mutual gains as interaction outcome; and the idea of minimizing certain costs in the wake of institutional ordering. The idea of mutual gains implies that an interaction is only expected to materialize and to be maintained over time if all parties involved do gain. For preventing and resolving interaction conflict, constitutional and institutional economics suggest to change and (re-)design economic institutions ('incentive structures) in such a manner so that conflicting interests are realigned, or what Williamson (1985, pp. 29, 33-34, 76) calls 'equilibrated'. Mutual gains are then to result as interaction outcome for all agents involved (Buchanan 1975, 1999: 36; Pies 1996; Lütge 2005; Vanberg 2006: 3). This normative institutional program is strictly targeted on the 'irrational logic of the situation', as Luce and Raiffa (1957, p. 97) formulated with regard to strategies for resolving the prisoner's dilemma.

Equal gains, in some egalitarian sense, are here not necessarily implied but all parties need to be better off as a result of institutional intervention and as compared to an initially existing 'status quo' (Buchanan 1975: 24). Mutual gains are not 'allocated' to or generated for parties ad hoc. Rather, economic institutions need to credibly signal gains from cooperation and then allocate gains to parties once an interaction has succeeded. Capital is (re-)distributed in this way, and the looming potential dilemma of 'rationally foolish' self-interested choice is resolved through situational intervention. Incentive-compatible institutions are in this respect not only 'resistant' to homo economicus behaviour but also constructively channel such behaviour into mutual gains, win/win outcomes.

For the paradise story, chapter five will here examine to what extent mutual gains or indeed, a situation of mutual loss ultimately characterized the paradise events, and whether possibly mutual gains, as they may have existed at the outset of the paradise interactions were forsaken in consequence of the theft.

In constitutional and institutional economic analysis, there is no 'independent' or moral expectation as such as to why agents should engage in public ordering or private ordering. Constitutional and institutional economics argues here from within its conceptual frame of reference – along the minimization of costs of institutional ordering that initiate and drive processes of institutional ordering. Buchanan's constitutional economics is here very explicit: He conceptualized attack and defense costs that define the initial state of nature, the Hobbesian 'war of all'. In the initial state of nature, interacting parties can claim property rights to basically everything since no order is established. However, this gives rise to costly attack and defense investments which parties shave to undertake, in order to defend what they claim is their own, or to acquire new property which someone else makes claims to. Buchanan's constitutional economics then sets out that this very attack/defense costs step-by-step initiate constitutional ordering: By engaging in constitutional contracting that sets out rights to property and credibly guarantees such rights, interacting parties can lower their personal attack/defense costs and leave the natural distribution state behind.

Mutual gains are contributed to in this way, Buchanan (1975: 39) speaking of pareto-efficient solutions: Rules need to be 'pareto-superior' (also Buchanan and Tullock 1962: 122, 172-4), that means rules needs to generate mutual gains for interacting agents (or interacting principal and agent). Destructive anarchy and the breakdown of interactions are related in this way to institutional rules (incentive structures, 'economic institutions') which

have lost or which never had the ability to generate mutual gains for economic actors (homo economici).

In Williamson's (1975, 1985) institutional economics, we find 'comparable' costs that essentially drive private ordering into states of mutual gains: transaction costs, which are costs of setting up an interaction (e.g. through contract, or through hierarchical organization structures) and of 'controlling' and executing an interaction.

For the paradise story such cost effects are especially examined in chapter 5 and to a lesser degree in chapter 4 too when the questions of incentive-compatible institutional organization are discussed, and how the apparent lack of such institutions in the paradise story invited the break-down of cooperation, with God and Adam & Eve being thrown (back) into the natural distribution state and attack/defense costs (and transaction costs) rising as a result.

#### Constitutional and institutional Economic Research Strategies for the Paradise Story

Summing up, in terms of 'substance' and content, the book traces key concepts of institutional and constitutional economics in the Paradise story, such as a dilemma scenario — a conflict-laden model of social exchange, as it was described by Hobbes as being the 'war of all', or by modern institutional and constitutional economics as the 'natural distribution state' or even the classic 'prisoner's dilemma' predicament. The substance of conflict between God and Adam/Eve is analysed in terms of contested capital contributions and capital distributions, such as social capital ('liberty' in a wide sense), labour capital (cultivation of paradise through Adam and Eve), time capital (free time curtailed through

Adam and Eve's work in paradise; contested longevity/eternal life as reflected by the tree of life), or human capital (particularly contested knowledge in relation to the tree of knowledge). The agents involved in the paradise interactions (God, Adam and Eve, and even the serpent) are reconstructed as homo economici, who act out of self-interest when making choices regarding capital contributions and capital distributions. For instance, God's unwillingness to trade fruits from the tree of life or the tree of knowledge with Adam and Eve is explored as homo economicus behaviour (which subsequently led to the escalation of interaction conflict). The ultimate outcomes of the paradise interactions – for example, Adam and Eve's theft from the tree of knowledge and their subsequent God-forsaken status following expulsion from paradise, as well as God's guarded, monopolistic access to the tree of knowledge – are critically analysed in terms of losses and gains that resulted for the actors involved. Questions of mutual loss (the prisoner's dilemma predicament) are discussed.

Is it permissible to employ 'modern' constitutional economics and institutional economics to this age-old text of antiquity? Various comments apply. Possibly most importantly, this book takes a *moral* stance to advocating economic research on the Old Testament. In the tradition Smith's *Wealth of Nations*, economics is viewed as the 'continuation of ethics' (Homann ...), as a modern moral philosophy that specifically aims to generate mutual gains and public good and that aims to prevent problems of self-interested and even opportunistic, selfish behaviour derailing social interactions. In particular, for the Old Testament text a deep economic humanism can be attested (Wagner-Tsukamoto 2009a), connecting to comparable moral stances of modern constitutional and institutional economics (e.g. Hayek 1960, 1976, 1979; Buchanan 1975, 1977, 1987a, 1991). So, the

purpose of uncovering, for instance, self-interested and possibly selfish actors and a conflict-laden model of social exchange in the Paradise story is to put this into moral contexts of economic reconstruction; the same applies for capital categories or economic institutions that are exposed. The book does not argue for same moral stances of economics or theology, for example (even within theology a diversity of moral meanings that are attributed to the Old Testament is likely to prevail). In this regard, at least plurality of moral meanings is conceded to that different research programs can generate for the Old Testament text but in certain respects competition between the moral positions taken may arise too. The paper here examines in this regard how non-secular or religious concepts of morality can be or cannot be reconciled with economic understandings of morality, and indeed an aspirational utopia too.

The time argument can be easily discounted as well. Just because the Old Testament emerged in a period that is far removed from the time of modern economics, after Smith, cannot imply that modern (economic or other) theory should not be projected back on the Old Testament. Such econo0mic reconstruction cannot be judged as anachronistic in any respect. There is a tradition of psychological or sociological research on the Old Testament, and even within theology 'modern' theological theory has developed. If the time argument were upheld one could basically immunize any 'older' research from more modern, more recent theoretical developments. This cannot foster the growth of knowledge and insights. In this connection, one of the key theses of this book is that the Old Testament easily invites economic reconstruction due a close, conceptual affinity to the economic approach. The rational persuasiveness and insightfulness of such reconstruction has to speak for itself. I

clearly support methodological pluralism in this respect, which explained in more detail in the next section.

There are methodological issues too which justify economic research on the Old Testament. This also links to the next section when I talk about the methodological approach of this book. In the philosophy of science tradition of Popper and Lakatos, I do not view the Old Testament text as belonging to one discipline, e.g. theology. As Popper's and Lakatos's philosophies of science have outlined, research is constituted around problems and subject matter — and many different discipline or research programs can investigate the same problems or subject matter (in our case, the Old Testament text).

#### Methodological Approach of the Book: Textual, Narrative Analysis

The methodological approach taken by the book is grounded in textual, narrative analysis, which disregards actual historic questions that could be projected to the depicted events in the Old Testament. Story-telling as such is analyzed. The Old Testament is interpreted as 'mere text'. For the purpose of interpretation, not social, economic, or political *history* is drawn upon to reconstruct the text but narrative, non-historiographical frameworks form other fields. Previous biblical, narrative research here has drawn on a wide variety of frameworks, for instance, postmodern philosophy (e.g. Parker 1999, 2005; Slivniak 2003), Methodological pluralism and a plurality of reading schemes has here been generally attested to for narrative, textual analysis (Mayes 1993: 18-20; Brett 2000a: 56, 58, 65-66).

As Carroll (2006: 6) put this: 'Under the conditions of modernity the Bible may be freely

used by all-comers, its meanings and significations negotiated under a thousand different reading schemes' (see also Clines 1993: 87; Clines and Exum 1993: 12-14; Brett 2000b: 70, 78, 80; Gunn 2000; Wagner-Tsukamoto 20009b: 151-152).

This pluralistic understanding also is compatible with suggestions, for instance, of postmodern research that the biblical text is generally to be viewed as 'complex' and 'ambiguous' (Sliviniak 2003: 447) — and such complexity and ambiguity can be tackled from many different conceptual directions. My reading schema and theory building strategy for narrative, textual reconstruction for the Paradise story is the institutional and constitutional economic approach. Key concepts of economic reconstruction were briefly set out above, and they introduced in more depth in the chapters that follow.

Clearly, my suggested economic reading strategies are 'complex' in certain regards. I introduced various conceptual, heuristic, and normative elements above. In this attempt to reconstruct the Old Testament text through institutional and constitutional economic theory, complexity in itself is generally unavoidable and can hardly be contested. This is the case when any theoretical framework form a specific research program is applied. The interpretations generated through economic reconstruction should be persuasive and rationally convincing, and at same time as 'simple' and 'parsimonious' as possible. I follow here recommendations from philosophies of science such as Popper and Lakatos (Lakatos 1970, 1976, 1978; Popper 1977, 1978, 1992, 1995; Hands 1993; Suchanek 1994; Wagner-Tsukamoto 2003). Still, I am not generally rejecting the uncovering of complexity or ambiguity in the Old Testament text when following an economic reading strategy. As much as I do not necessarily view the categories of economic meaning which I am projecting to the Old Testament as ambiguous in themselves, I still negotiate, reconcile and also contrast different interpretations as they have been developed by previous research, for instance

'mainstream' theological research as compared to postmodern theological research. And as stated, this happens through economic reconstruction.

Narrative analysis has made very considerable inroads into research in the arts and humanities, and in the social sciences, which in many cases was connected to postmodern research (e.g. Clandinin 2013). There is also a very considerable tradition of narrative research in the field of biblical research and its methodological discussion (e.g. Fokkelman 1975; Clines and Exum 1993; Mayes 1993; Clines 1998; Miscall 1998; Brett 2000a, 2000b; Carroll 2000; Gunn 2000; Rogerson 2000, 2010; Rhoads 2009; Wagner-Tsukamoto 2009a, 2009b; Gerricke 2012a, 2012b; Tov 2012; also Scullion 1984).

Some kind of finality of the biblical text is assumed by narrative analysis when a certain story is analysed. Especially when storylines and entire chapters of the Bible are analyzed, this assumption can be justified. In general, there is agreement that at least for the past 2000 years or so, the biblical text has reached some final form (Fromm 1967: 24; Anderson 1978: 24; Brett 2000a: 51, 68, 74), although redaction may still be going on (Loader 2002). Nevertheless, such more recent redaction is probably minimal, as compared to the kind of extensive, compositional editing that was carried out when the Bible went through an intensive process of redaction in the periods, some centuries prior BC, in which it finally came into being (Brett 2000a; Toorn 2007).

Narrative analysis scrutinizes text and story-telling regarding direct and indirect purposes and intentions of the text. Brett (2000a, 2000b) here set out textual analysis along three lines of inquiry which, however, he admits do blend into each other along a continuum: (a) 'direct intentions' or text content, mirroring what the author says, what the text tells as such; (b) implied or indirect intentions and purposes, reflecting implications

about text content, and having to be derived from text content by means of 'deductions', and 'hypotheses'; (c) motives and themes, referring to reasons as to how and why a text was written and why an author is making a certain statement in the first place. As indicated above, narrative analysis is here pluralistic: no absolute authority is attested to the text itself. In this understanding, the text only derives meaning through reader-centred interpretation and the conceptual schemes the interpreter or 'reader' brings to the text. I am in this regard more cautious than Noble (1994, 1995) who seems to be opposed, in considerable degrees, to reader-centred interpretation, and I would outrightly dispute suggestions that the biblical text had meaning and 'authority' in itself (Wagner-Tsukamoto 2009b, 2012a, 2013a, 2013b).

As fascinating and rich in insight as the economic reconstruction of text content of the Paradise story is in itself, this inevitably raises questions as to reasons how and why we so easily succeed in uncovering an economic rationale for the biblical text. In this latter regards, the present study will, in a first step, generate institutional and constitutional economic deductions and hypotheses about the Paradise story, and, in a subsequent step, further inquire, regarding institutional and constitutional economic themes and motives of this story. In this connection, the book also takes a certain 'canonical' stance, projected in economic terms, and suggesting political economic, normative answers with respect to purposes, reasons, and functions of the biblical text: It is proposed that the text acted as a guide to political leaders, and members of society in general, as far back as in ancient, 'biblical' times, on the nature and purpose of the generation and maintenance of cooperation in social and societal interactions. For example, Snyman (2012: 674-675) suggests that the Old Testament text was initially written by – and written for – the 'upper echelons of society'. An educated audience can be assumed – and this raises nearly

immediately questions regarding societal leadership and societal governance functions that can possibly be attributed to the Old Testament text: when it was communicated to its 'target audience' in proverbially biblical times. In this regard, indirectly, we arrive at some kind of 'historic' assessment for the Old Testament text. Nevertheless, in the case of the present study, these suggestions strictly emerge out of textual analysis and are reconstructed and speculated about only through textual analysis.

These key hypotheses of an economic reconstruction of the Paradise story already suggest that this story centers and give gravity to the entire Old Testament (and other religious texts too which draw on this story), and this is argued for and explored throughout this book. In this respect, I view the term 'primeval historical story', which is often without any questioning attributed to the Paradise story (e.g. Mowinckel and Albright 1939; Anderson 1978; Forrest 1994; Steinmetz 1994; Loader 2003), as more than unfortunate, and as potentially misleading. In my reading, this story is neither 'primeval' nor is it 'historic'. The idea of the 'primeval' comes with connotations such as 'primordial', 'primitive', 'ancient' or 'archaic', to name but a few. Even Brett (2000a: 67-66) who is generally much more critical and open-minded than many other biblical interpreters in this regard at times labels the biblical text as 'ancient' with cultural anthropological, historic connotations in mind. Miller (1994: 755-756, 759) even tries to relegate, in outright 'ancient', 'historic' terms, the Genesis text to an 'Iron Age society', far removed from modernity.

Through the economic reconstruction I undertake in this book, and through the review of literature that accompanies this reconstruction, I fundamentally question notions like the 'primordial', 'primitive', 'ancient' or 'archaic' in relation to the Paradise story. In considerable degrees, I argue for the opposite: this story reflecting complex, modern social

problems. Also, I cannot consider the Paradise story as 'historic' in any space-time related sense. At best, I can regard it as part of a 'textual history' that sets out the textual, chronological storyline in the Old Testament.

#### **Summary and Conclusions**

The Paradise story of Genesis is not only one of the best-known stories of the Old Testament but also of our cultural, global heritage in general. In the present study, I offer a new, unique, interdisciplinary interpretation of the Paradise story, branching out from the social sciences, i.e. from institutional and constitutional economics, into the arts and humanities, i.e. the fields of biblical studies, the scientific study of religion, theology, and social philosophy. The approach and research strategy of the book is based upon methods and conceptual insights originating from my earlier research on the Old Testament, further developing and deepening this research. The project presents a bold vision of a modern start-up scenario, of a debate of social interactions, and social contracting in the Old Testament. The thesis of 'modernity' is projected to the Paradise story, unearthing from the biblical text key themes and key conceptual ideas through constitutional and institutional economics.

The methodological approach of the book is grounded in textual, narrative analysis, which analyses the biblical text independent of questions of authorship (i.e. independent of 'redactional analysis', such as to who wrote different parts and bits of the Bible) and independent of historiographical issues, for instance, regarding questions as to whether events depicted in the Bible reflected actual, historic events in space-time. The story as

drama and plot, and storylines as such are investigated. Compared to most mainstream research on the biblical text, this textual, narrative approach reflects methodological innovation, and it is this methodological innovation, together with conceptual innovation that draws on constitutional and institutional economics to reconstruct the Paradise story, which enables the generation of new insights into the nature, structure, purpose and key motivations of the Paradise story.

A key thesis of the book is here that the Paradise story mirrors concepts and ideas that anticipate modern advances in institutional and constitutional economics. I draw in this connection especially on the works of James Buchanan, Douglas North, and Oliver Williamson, to name but a few. In this way, the book analyses institutional and constitutional economic themes and theses derived from the Paradise story of Genesis. This approach had its origins in my earlier research on the Old Testament and it has been applied in depth to the present study of the Paradise Story. The key thesis put forward has been developed from a five-pronged approach which shows that the Paradise story anticipates and even parallels the approach of modern institutional and constitutional economics in several ways, specifically (a) regarding the contesting of capital contributions and distributions in paradise, (b) regarding the application of a principal-agent model that is brought to life with the model of self-interested choice (homo economicus) for God, Adam and Eve, and the serpent, (c) regarding improperly designed economic institutions that invited the breakdown of cooperation in paradise, ultimately yielding the 'war of all' (the 'natural distribution state'), (d) regarding the potential forsaking of mutual gains as the outcome of the paradise interactions, possibly even yielding 'prisoner's dilemma predicament', and (e) regarding the normative evaluation of the question as to why the loss

of paradise was valuable and needed to happen. In this way, the book fills a gap in the literature regarding modern economic interpretations of the Paradise story.

The book does not contest the relevance or nature of other research and different conceptual approaches on the paradise story. I agree with Brett (2000a: 61) in this regard on critical pluralism. Yet, as Brett (2000a: 61) seems to hint too, there may be 'competition' in certain regards, and such competition is caused in my understanding by the nature of interaction contexts that are analyzed and conceptualized. A key thesis of the book is here that in 'modern' interaction context, as they are set out and conceptualized throughout the book, 'earthly', economic concepts of both humanity and an aspirational, societal utopia may have to be established first in order to protect and support 'more humane', spiritual and godly approaches to humanity and society. The question of the utopian society here looms large in the book: This question was already constitutive for Adam Smith to venture into and pioneer 'economics' as an alternative moral philosophy, and this question will be picked up at various points in the present study too. I interpret in this regard the Old Testament, as initiated by the Paradise story, as a textual economic treatise of how humanity established itself – through the theft – out of divinity and what kind of implications this has for discussing a society in which humans were at least accepted as interaction partners.