



# Kautilya on law, economics and ethics

Law, economics  
and ethics

Balbir S. Sihag

*Department of Economics, University of Massachusetts, Lowell,  
Massachusetts, USA*

75

## Abstract

**Purpose** – The purpose of this paper is to explore the status of economic analysis of laws relating to property and contracts during ancient times in India.

**Design/methodology/approach** – Modern research tools are used to present Kautilya's ideas on contracts and property.

**Findings** – Kautilya implicitly proposes a labor theory of property. He devised economic laws related to contracts, property and tort, which promoted economic efficiency and encouraged ethical behavior.

**Research limitations/implications** – Current approaches ignore the role of ethics in designing legal rules for promoting economic efficiency.

**Practical implication** – Unless laws are designed to encourage and promote ethical conduct optimum economic efficiency is unlikely to be achieved.

**Originality/value** – Kautilya advocated a contract theory (between the ruler and the ruled), which was utilitarian in nature, however, unlike Bentham, he still appealed to the moral motivation.

**Keywords** Contracts, Property rights, Law, Economics, Ethics, India

**Paper type** Research paper

## 1. Introduction

By following [the principles set out in] this treatise one can not only create and preserve dharma [spiritual good], artha [material well being] and kama [aesthetic pleasures] but also destroy [their opposites, i.e.] unrighteousness, material loss and hatred. It is a guide not only for the acquisition of this world but also the next (Kautilya, p. 100).

Since time immemorial, Indian thought has specified the attainment of spiritual well-being, material well-being, sensuous pleasures and salvation from life–death–rebirth cycle as the four ends of a good moral life. Essentially, the primary goal of life was to strike a proper balance between the spiritual well-being and the material well-being. Somehow, the intellectual effort was directed only towards the development of the spiritual well-being. It appears that attempts were made starting from 650 to 600 BCE onwards to seek the balance but Kautilya's *Arthashastra* was the first comprehensive treatise, which provided more than a score of economic concepts and a systematic and systemic approach to bring the true balance between spiritual well-being and material well-being[1]. Kautilya was addressed as an Acharya (professor), a statesman and a thinker. He wrote *The Arthashastra* – the science of wealth and welfare – during the last half of the fourth century BCE. It was commented on and in fact revered for close to 2,000 years, but it disappeared after the establishment of the Mogul Empire in India during the sixteenth century.

**JEL classification** – B11, K11, K12

The author is grateful to Steven G. Medema for encouraging him to explore this topic and also for extending and enriching the analysis. He is indebted to Alain Marciano and Satyavrat Shastri for helpful clarifications. The generosity of L.N. Rangarajan and Penguin Books is greatly appreciated for giving me the permission to use the translation for interpretations.



---

*The Arthashastra* was rediscovered in 1905 and since then many writers have commented on it. Some researchers have explored only the legal issues. For example, according to Kangle (part III, p. 107), Breloer wrote, "We have a document rich in administrative law, a sketch of a magna carta, if not a law-book of the Emperor Chandragupta. Both (Justinian and Chandragupta) have in view an extension of the home law over the whole Empire by going back to old sources for creating a new law. Old codes are collected and turned by a school of learned men into a modern work under the guidance of here Tribonian, there Kautilya. Whom would this comparison not attract?" Others have presented Kautilya's ideas only on economics, such as Sihag (2005a) and Waldauer *et al.* (1996).

Kautilya had a vision for building an empire, which covered the whole Indian subcontinent, was secure against foreign aggression, politically stable, free from crimes, prosperous and anchored to dharma (ethical values). Kautilya's goal was to achieve economic prosperity without making compromises with ethical values. In fact, he believed that ethical values were both an end in themselves and also instrumental in achieving prosperity. According to him, moralistic and legalistic approaches to ethics were complementary. Since the moralist approach helped in character building and the legalist approach helped in developing rules, regulations and appropriate sanctions for dealing with non-compliance.

Kautilya understood the importance of good governance and good institutions to the realization of his vision. He suggested the creation of laws, which promoted both economic efficiency and ethical behavior. Section I presents Kautilya's conceptual framework on the relationship among law, ethics (dharma) and economics. *The Arthashastra* contains discussion on both the criminal and civil laws, which consist of contracts, property laws and tort laws regarding negligence, defamation and privacy. Kautilya presented a story about the possible origin of a salaried king based on social consent. Individuals agreed to pay one-sixth of their crops as taxes and the king in return promised to protect them. Kautilya's story implies that Lockean first occupancy theory might be a necessary condition for property rights but social consent was needed as the sufficient condition. His ideas on contracts between the government and individuals and among individuals themselves are presented in section II. He showed respect for the existing private property rights but on the new settlements, private ownership of property was conditional on its productive use. Section III presents his ideas on the protection of private property rights.

## 2. Kautilya's conceptual framework on law, economics and ethics

A king who flouts the teachings of the *Dharmashastras* and the *Arthashastra*, ruins the kingdom by his own injustice (8.2.12) (Kautilya, p. 141).

### 2.1 Ethical conduct essential for social order and prosperity

Kautilya strongly believed that economic prosperity without any ethical anchoring was not sustainable. According to Kautilya, existence of social order depended on ethical conduct. He (p. 107) wrote, "[The observance of] one's own *dharma* leads to heaven and eternal bliss. When dharma is transgressed, the resulting chaos leads to the extermination of this world (1.3)". He (pp. 107-8) added, "For the world, when maintained in accordance with the Vedas, will ever prosper and not perish. Therefore, the king shall never allow the people to swerve from their dharma (1.3)".

---

### 2.2 *Equal access to justice*

Kautilya argued that for laws to be effective they must be just, clear, consistent and enforced fairly. He recommended free legal assistance to the disadvantaged so that every one had equal access to justice. He (p. 385) stated, “The judges themselves shall take charge of the affairs of gods, Brahmins, ascetics, women, minors, old people, the sick and those that are helpless [e.g. orphans], [even] when they do not approach the court. No suit of theirs shall be dismissed for want of jurisdiction, passage of time or adverse possession (3.2)”.

### 2.3 *Emerging capitalism*

By the fourth century, BCE capitalism was getting established and the process of urbanization was underway. Kautilya understood the imperatives of economic prosperity and national security[2]. Drekmeier (p. 105) describes, “With the coming of an agricultural economy, there came also the promise of economic surplus – the production of goods and services in excess of what was needed for survival. This is the condition of civilization: the possibility of supporting a culture-creating class of professionals. It may have seemed to many in the sixth and fifth centuries that instead of yearning for a golden yesterday, men might confidently anticipate a bountiful age yet to come. The Ganges valley in the seventh century was the home of a nascent capitalism as well. These new sources of wealth were to make possible the fulfillment of imperial ambitions. Empire had not been economically feasible until this development”.

### 2.4 *Urbanization*

Most of the population lived in the countryside. But, there were a few fortified cities with the modern amenities as well as modern problems of crimes. Pataliputra was the capital of Chandragupta Maurya’s kingdom. Seleucus Nikator (successor to Alexander) appointed Megasthenes as his ambassador to the court of Chandragupta Maurya and he remained there for some time. Basham (1959, pp. 198-9) states, “Pataliputra in the time of Mauryas, according to Megasthenes, was a long narrow city, stretching nine miles along the bank of the Ganges, and reaching only one and a half miles inland”. According to Chandler (1987), it was the largest city in the world with a population of over 200,000 in 300 BCE.

There are many studies, which analyze the relationship between law and ethics[3], there are many others, which explore the relationship between law and economics[4] and some examine the relationship between ethics and economics[5]. In fact, during the last half century, the economic analysis of law has been approached from many perspectives, such as the positive analysis, the normative analysis, the institutional analysis and the functional analysis. Each perspective adds realism and depth to the analysis and in that sense they are complementary rather than alternatives.

### 2.5 *Kautilya on the relationship between ethics and economics*

According to the Greek moral philosophers, economics was a very small subset of ethics. However, Rowe (2003) claims that the contribution of Greek philosophers to ethics itself was very limited. He (p. 127) asserts, “We may deplore the fact that they expanded so much energy on exploring the foundations of the subject that they had none left for discussing the substantive issues that constitute the subject itself – rather as if a mathematician were to become so obsessed with the problem of mathematical truth as to forget to do any mathematics”.

---

### 2.6 Ethics and economics

Medema *et al.*'s (1999) was perhaps the only study, which presents the contributions of John Commons' to law, economics and ethics. According to Kautilya, ethical conduct and economic prosperity were inter-dependent. Actually, according to his implicit analysis, ethical conduct, economic prosperity, knowledge and governance were considered endogenous variables[6]. He recommended laws relating to contracts, property and torts, which promoted economic prosperity subject to the upholding of the ethical values.

### 2.7 Kautilya on ethics

Kautilya argued for a greater role for economics without diminishing the role for ethics. He took it as a challenge to promote economic growth without compromising with ethics. As Drekmeier (p. 76) states, "Now the king must concern himself directly with the common good, an idea anticipated in the *Arthashastra*". He (p. 201) asserts, "There can never be a thoroughgoing divorce of politics and ethics for Kautilya; he never denies that the ultimate purpose of the state is a moral purpose, the maintenance of dharma". He (p. 202) adds, "For all his commitment to a philosophy of opportunism and force, Kautilya would not have limited might to mere physical mastery. Such may be the primary obligation of warrior and even king, but the ultimate power is spiritual". He (p. 203) states, "Self-mastery and world-mastery are interdependent". Similarly, Ray (1999, p. 108) believes that Kautilya's *Arthashastra* may be considered as the first treatise on conceptualizing a state based on Loksamgraha (welfare of all). Kautilya intended to maintain the prevailing hierarchical relationship between ethics and economics. However, he ended up in elevating the status of economics at par with that of ethics[7]. In fact, he initiated the process of colonization of other fields by economics.

### 2.8 Kautilya on a king's ethics

According to Kautilya, it was a king's moral duty as well as in his enlightened self-interest to protect and enrich his subjects. Kautilya (p. 145) stated, "A rajarishi [a king, wise like a sage] is one who: has self-control, having conquered the [inimical temptations] of the senses, cultivates the intellect by association with elders, is ever active in promoting the security and welfare of the people, endears himself to his people by enriching them and doing good to them and avoids daydreaming, capriciousness, falsehood and extravagance (1.7)". He (p. 142) asserted, "Government by Rule of Law, which alone can guarantee security of life and welfare of the people, is, in turn, dependent on the self-discipline of the king (1.5)".

### 2.9 Sources of law

Kautilya believed that the resolution of a dispute should be based on dharma (truth, law), transaction (contract, procedures), custom and king's edict. Kautilya (Kangle, Part II, p. 195) clarified these sources of law, "Of them, law is based on truth, a transaction, however, on witnesses, customs on the commonly held view of men, while the command of kings is the royal edict (3.1.40)". According to Kautilya, if there was a conflict between dharma and custom or between dharma and contract, a case should be decided according to dharma. If there was a conflict between dharma and king's edict, he gave supremacy to a king's edict. However, Kautilya (p. 141) warned the king, "A king who flouts the teachings of the *Dharmashastras* and the *Arthashastra*, ruins the kingdom by his own injustice (8.2.12)". It is significant to note that Kautilya emphasized compliance with both moral (*Dharmashastras*) and economic

---

(*Arthashastra*) laws. Drekmeier (p. 190) remarks, “Kautilya, for instance, in his reluctance to allow Dharmashastra to modify the goal-orientation of the efficient system, is led to extol positive law. His arguments must have appeared to justify a radical departure from tradition”.

### *2.10 Kautilya on personal ethics (dharma)*

According to Kautilya (p. 107), “Duties common to all: Ahimsa (abstaining from injury to all living creatures); satyam (truthfulness); cleanliness; freedom from malice; compassion and tolerance (1.13)”. These ethical values were enshrined in the Rig Veda (the oldest Indian scripture), which was composed around 2000 BCE.

### *2.11 Kautilya on business ethics*

Sihag (2005b) observes, “Kautilya did not want the suppliers of goods and services and traders to subsidize their customers. However, he expected that they delivered the best possible quality products and services, and did not cheat or charged monopoly prices. Kautilya (p. 236) stated, ‘Merchants are all thieves, in effect, if not in name; they shall be prevented from oppressing the people (4.1)’. He (p. 134) added, ‘It is the frontier officer who promotes trade, whereas traders form cartels in order to raise prices (for the goods they sell) or lower them (for the goods they buy); they are profiteers making 100 panas on 1 pana or 100 measures on one measure of (grain)’. He (p. 250) warned, ‘Cartelisation by artisans and craftsmen with the aim of lowering quality, increasing the profits or obstructing the sale or purchase and by merchants conspiring to hoard with the aim of selling at a higher price (4.2)’ would be dealt with stiff punishments (1,000 panas) for such offenses. Similarly, he (pp. 249-50) recommended punishment for ‘adulteration’, ‘fraud’, ‘false description in selling’, ‘showing one product and selling another’, ‘stealing precious metal in making new objects’ etc. (4.2). That is, he expected suppliers to be efficient and ethical”.

### *2.12 Kautilya on efficiency, effectiveness and ethics*

Kautilya emphasized the imperative of economic prosperity and achieving it through the establishment of law and order, protection of private property rights, guaranteeing of efficient, effective and ethical governance and promotion of capital formation. According to Kautilya, a king himself must be ethical, farsighted and foresighted and must hire the most capable and ethical advisers for formulating sound economic policies. He (p. 149) suggested, “Hence the king shall be ever active in the management of the economy. The root of wealth is economic activity and lack of it brings material distress. In the absence of fruitful economic activity, both current prosperity and future growth are in danger of destruction. A king can achieve the desired objectives and abundance of riches by undertaking productive economic activity (1.19)”.

Kautilya understood that effective implementation of economic policies required, in addition to capable advisers, honest and motivated ministers, magistrates and other law enforcers. Accordingly, establishment of the rule of law and administration of justice became an integral part of Kautilya’s conceptual framework. He suggested both moral and material incentives to elicit maximum effort and honesty[8]. He insisted on clean and caring administration. He (p. 149) stated, “In the happiness of his subjects lies his happiness; in their welfare his welfare. He shall not consider as good only that which pleases him but treat as beneficial to him whatever pleases his subjects (1.19)”.

As we know property rules, tort laws and contracts are some of the important distinguishing features of a market economy. It is not surprising that the emerging

capitalism and increasing urbanization during the fourth century BCE would have necessitated the assignment of firm property rights and effective enforcement of those rights. Similarly, contracts would be essential for promoting trade and commerce. It should be noted that the assignment of clear property rights and tort laws and their enforcement might be more important in rural areas than the urban areas because use of violent means to settle disputes is more likely there.

### 3. Contract laws between individuals and government and between individuals

#### 3.1 *Kautilya on the origin of the contract between the ruled and the ruler*

Kautilya referred to a factual or hypothetical original contract for the establishment of secure private property rights and the institution of kingship. He (p. 820) wrote, "When there was no order in society and only the law of the jungle prevailed, people [were unhappy and being desirous of order] made Manu, the son of Vivasvat, their king; and they assigned to the king one-sixth part of the grains grown by them, one-tenth of other commodities and money. The king then used these to safeguard the welfare of his subjects. Those who do not pay fines and taxes take on themselves the sins of kings, whereas kings who do not look after the welfare of the people take on themselves the sins of their subjects (1.13)".

The above assertion by Kautilya has been very controversial. Kangle (Part III, pp. 116-7) discusses it in detail. He believes that Kautilya was simply trying to justify the institution of kingship by describing its consensual origination. Since the above assertion was made by an agent of the king and it appears a reasonable conclusion if one looks only at that specific context. However, if one examines the full text, Kautilya truly believed in that description of the origin of income tax and kingship. Since all of his economic policies and particularly, the fiscal policy were centered on this theme. Almost invariably he modifies or qualifies the existing views but accepts this customary income tax rate of one-sixth on the agricultural output without any reservations. Basham (1959, p. 82) puts it very aptly, "Thus in ancient Indian thought on the question of the origin of monarchy two strands are evident, the mystical and the contractual, often rather incongruously combined". He adds (p. 83), "The author of the *Arthashastra* had no illusions about the king's human nature, and seems to have had little time for mysticism, but he recognized that legends about the origin of kingship had propaganda value. In one place he advises that the king's agents should spread the story that, when anarchy prevailed at the dawn of the aeon, men elected the mythical first king Manu Vaivasvata to kingship. He thus encourages a contractual theory".

Hampton (1993) distinguishes between the approaches of Hobbes and Locke, the two leading philosophers of the seventeenth century, to the determination of the terms of a social contract. She (p. 380) states, "When the people agree to obey the ruler, do they surrender their own power to him, as the philosopher Thomas Hobbes ([1651] 1990) tried to argue? Or do they merely lend him that power, reserving the right to take it from him if and when they see fit, as John Locke ([1690] 1991) maintained?" In this debate, where does Kautilya's description of the terms of the social contract fall? It falls somewhere in between the Lockean "agency" contractarian theory and Hobbesian "alienation" contractarian theory[9]. Similarly, the State of Nature assumed was in between Hobbes' "war of all against all" and Locke's in which no one harmed others to their "life, health, liberty or possessions"[10].

Anyhow, all the commentators have confined their analysis to the exploration of the origin and nature of the institution of kingship only from the perspective of political

---

science. A few additional points are noteworthy. According to Kautilya, the origin of the institutions of property and kingship were utilitarian in nature. Both property and law were created together, thus anticipating Bentham[11]. However, unlike Bentham, Kautilya never separated law from ethics. For example, Basham (1959, p. 153) observes, “The humane regulations of the *Arthashastra*, probably unique in the records of any ancient civilization, are perhaps survivals of Mauryan laws, and it is therefore, not surprising that Megasthenes declared that there was no slavery in India”. The origin of these institutions was based on individuals’ explicit (not tacit) consent, that is, it was individualistic, human invention and not God’s creation although “endorsed by God”. Since Manu, the first (and the last) elected ruler was the son of Vivasvat, the Sun god implying divine endorsement. However, there was no mention that Manu had any supernatural powers. It is also obvious that everyone at that time was almost similarly situated and therefore, John Rawls’ “veil of ignorance” was not needed for any moral justification of the contract theory. Incidentally, Kautilya was also aware of the possibility of free riding. Once the law and order and protection of property rights were established, a non-payer of taxes also benefited.

### 3.2 Sanctity of the contracts

Since due to the increasing urbanization and commercialization, explicit contracts were becoming, perhaps necessary and more common[12]. Therefore, Kautilya emphasized the sanctity of contracts to promote commerce. He advised the king to fulfill his commitments since that was in his own self-interest. He (p. 133) stated that a decadent king “does not carry out his part of what had been agreed upon”; and “by his indolence and negligence destroys the welfare of his people” (7.5).

### 3.3 Requirements for a valid contract

According to Kautilya (p. 442), “Contracts entered into by dependants or unauthorized persons are invalid, unless the person was specifically authorized to do so. Contracts entered into when one of the parties was angry, intoxicated, mad or under duress shall be invalid (3.1)”.

### 3.4 General principles of contracts on loans and deposits

Kautilya provided an exhaustive list of rules relating to loans and similar transactions.

*3.4.1 Suing for recovery.* Kautilya specified as to who could be sued for breach of a contract. According to Kautilya, loans between son and father and between husband and wife were not recoverable in law. He (p. 423) suggested, “A wife shall not be sued for a debt incurred by her husband if she had not agreed to the borrowing, though this rule does not apply to herdsmen’s families or to farmers leasing land jointly. A husband shall be responsible for the debts incurred by his wife if he has gone away without providing for her. Farmers and servants of the Crown shall not be arrested for non-payment when they are at work (3.11)”.

A few important aspects of the above mentioned rules are obvious. According to Kautilya, law should be reasonable, manageable (there could be countless cases if couples are allowed to sue each other) and family friendly. The sentence “Farmers and servants of the Crown shall not be arrested for non-payment when they are at work” implies that law should be least disruptive to productive operations.

*3.4.2 Obligations of debtors and creditors.* Kautilya (p. 423) wrote, “The obligation of a debtor (e.g. interest on loan) shall not increase if he is: engaged in performing rites, which take a long time; ill, under tutelage in a teacher’s house; a minor; or insolvent

(3.11)". Kautilya believed that rules should be formulated in such a way that the weak in the society, such as the sick, a minor and an insolvent were protected (there was some bankruptcy protection even at that time).

*3.4.3 Sureties.* According to Kautilya, minors could not be sureties and also any surety was limited to the particular transaction.

*3.4.4 Limitation.* Kautilya suggested that a loan was not recoverable, if a creditor ignored it for ten years (did not apply to minors and those away on long journeys).

*3.4.5 Obligations of heirs and successors.* He recommended that those, who were to inherit property of the deceased, should be responsible of payment of the debt.

*3.4.6 Many creditors.* Kautilya suggested that "the debts owed to the King or Brahmins leaned in the Vedas shall have priority".

*3.4.7 Exemptions for unforeseen circumstances.* According to Kautilya, if a person was affected by calamities (such as plundering of village, caravan or herds, breakdown of law and order, destruction by fire or floods), he was not obliged to return the entrusted property to him.

*3.4.8 Use of deposits.* He (p. 425) suggested, "Anyone who uses a deposit for his own benefit shall pay compensation to the depositor. A person to whom a property is entrusted shall not misappropriate, substitute, sell, mortgage or lose it nor allow live property to escape".

### *3.5 Contracts on loans*

Pre-Kautilyan thinkers had already identified wages, interest, rent and profits as separate factor payments indicating the existence of urbanization. According to Kautilya, the first six rules noted above applied to loans also. He (p. 425) added, "No one shall recover interest without agreeing on the rate with the debtor at the time of making the loan. Once agreed upon an interest rate shall not be changed during the course of the loan (3.11)". Kautilya (p. 426) suggested, "The lawful rates of interest (on money lent) for different purposes shall be on: normal transactions 15 per cent per annum; commercial transactions: normal 60 per cent; risky travel: through forests 120 per cent; by sea 240 per cent. No one shall charge or cause to be charged a rate higher than the above, except in regions where the King is unable to guarantee security; in such a case, the judges shall take into account the customary practices among debtors and creditors (3.11)".

At that time, there were no Usury laws prohibiting the payment of interest on loans. Kautilya proposed appropriate, in fact quite liberal, risk premiums on risky loans. Sternbach (1965, Vol. I, p. 512) comments, "Therefore, in such enterprises where the capital appeared to be endangered it was not possible to advance loans with a fixed rate of interests which amounted to one and a quarter percent per month because the lender realized that in such a contract he was running too great a risk. Therefore, the law harmonized with the requirements of economic conditions permitted in such cases to receive or to agree to higher rates of interests"[13]. According to Sternbach, Kautilya created laws to promote commerce by accommodating lender's economic interests. Similarly, Kautilya was aware of market imperfections and therefore, suggested upper limits on the interest rates to be charged by lenders to protect the borrowers.

### *3.6 Salient features of labor contracts*

The very fact that Kautilya discussed explicit labor contracts is significant in itself. In fact, he devoted a whole chapter to labor laws. Kautilya (p. 450) recommended, "The agreement between a laborer and the one hiring him shall be made in public. Laborers

---

shall be paid wages as agreed upon. If there is no prior agreement, the laborer shall be paid in accordance with the nature of the work and the time spent on it at customary rates". He continued, "The customary rate can be modified by prior agreement (3.13)". He (p. 451) recommended, "An employee shall have the right, if he is ill, in distress, incapable of doing the work or if the work is vile: to have his contract annulled or to have it done by someone else. An employee shall not be obliged, against his will, to continue working for his previous employer if he had completed the task allotted to him and already accepted employment under another. An employee shall have the right to additional compensation if he does more work than agreed upon (3.14)".

### *3.7 Collective labor*

There was no restriction on forming labor groups. Kautilya (p. 452) explained, "The rules about rights and obligations of individual labor also apply to groups of workmen who contract collectively to do a specified task. Workmen belonging to collective groups shall divide the earnings among themselves either equally or according to shares agreed upon earlier (3.14)".

### *3.8 Marriage contracts*

Kautilya listed eight types of marriages and depending on parents' approval and performance of sacred duties four of them were considered both sacred and lawful and the other four only lawful. Divorce was permitted based on incompatibility and misconduct.

### *3.9 Maintenance of wife after separation*

Although Kautilya was not against divorces but did not recommend no-fault divorces. However, according to him, it was not only husband's moral duty to support his former wife but also his legal responsibility to do so. Kautilya suggested, "If the maintenance payments to a wife are to be made periodically, the husband shall calculate and pay the required amounts in [suitable] installments. If no regularity of payment has been decided upon, the husband shall provide the necessary food and clothing, or more than necessary, according to the income of the husband. Such maintenance shall also be paid in cases where the wife had not received the dowry, her property and her compensation for supersession. The husband shall not be sued for maintenance, if the wife is supported by the family of her father-in-law or if she is [financially] independent (3.3)".

## **4. Common property and protection of private property rights**

According to Kautilya, as noted above, institutions of property and kingship originated together, that is, there were no property rights until the king enforced them. According to Kautilya, there was no link between property rights and natural rights. The original assignment of property rights was based on social consent. The owners had the rights to use, exclude others and transfer their properties. Private property rights were almost unconditional on the existing settlements since according to the original contract, the king was not supposed to modify them. However, according to Kautilya, the property rights on the new settlements were to be made conditional on putting the properties to productive use. Remember the original contract involved only protection and not prosperity, provision of public infrastructure or other welfare benefits. Thus, the extension of king's responsibilities required some modifications to the original contract. The original contract and the modifications suggested by Kautilya to deal with the changed objectives and circumstances are presented in turn.

---

#### *4.1 King's contractual obligation to protect public*

According to Kautilya, the original contract stipulated that the king should protect an individual's private property (both movable and immovable) from other individuals. He (p. 437) suggested, "If a King is unable to apprehend a thief or recover stolen property, the victim of the theft shall be reimbursed from the Treasury (i.e. the king's own resources). Property [unjustly] appropriated shall be recovered and returned to the owner; otherwise, the victim shall be paid its value (3.16)".

#### *4.2 Abstaining from expropriating private property*

The king himself also should refrain from expropriating private property. Kautilya (p. 121) wrote, "The wealth of the state shall be one acquired lawfully either by inheritance or by the king's efforts (6.10)". He (p. 133) stated, "A decadent king, on the other hand, oppresses the people by demanding gifts, seizing what he wants and grabbing for himself and his favourites the produce of the country [i.e. the king and his coterie consume more than their due share thus considerably impoverishing the treasury and the people] (8.4)". He continued that such a king "fails to give what ought to be given and exacts what he cannot rightly take"; "indulges in wasteful expenditure and destroys profitable undertakings"; "fails to protect the people from thieves and robs them himself"; "does not recompense service done to him" (7.5). Kautilya did warn such kings that the public would remove them at the first opportunity to do so.

#### *4.3 Unconditional private property rights on the existing settlements*

The owners could use their properties in any way they saw fit, could rent, sell or transfer them. Kautilya (p. 231) suggested, "Water works such as reservoirs, embankments and tanks can be privately owned and the owner shall be free to sell or mortgage them (3.9)".

#### *4.4 Kautilya attached special importance to self-acquired property and skills*

According to Kautilya (p. 414), "Partition of inherited property shall be made in accordance with the customs prevalent in the region, caste, guild or village [of the family]. The laws of inheritance do not apply to self-acquired property (3.5)". He (p. 421) added, "The sons who are proficient in the craft shall inherit everything and maintain the others. If no son is a skilled craftsman, all sons shall share equally (3.6)". Kautilya suggested the waiving of customary inheritance rules related to bequeathing self-acquired property. He also made an exception in the case of a business requiring special skills such that economic efficiency and equity were preserved. This could be described an evolutionary stage between physical capital and intellectual property rights.

#### *4.5 Kautilya implicitly defined surplus created by transfer of property*

Kautilya suggested that an owner, who wanted to sell his house, should announce in the presence of his neighbors its price, which he was willing to accept. If due to bidding among buyers the price of the house turned out to be higher than the asking price (reserve price), the excess would go to the government. Kautilya (p. 434) wrote, "The owner shall name his price and ask three times: 'Who is willing to buy at this price?' If, during this time, no one has challenged [the owner's right to sell] prospective buyers may make their bids. Bids by proxy are not allowed. If there is a competition among buyers and a higher price is realized, the difference between the call price and the sale price along with any tax payable shall go to the Treasury. The tax [due on the transaction] shall be paid by the successful bidder (3.9)". Not only, all the necessary

---

steps, such as title verification, responsibility of payment of taxes were specified but also the concept of a surplus 'the difference between the call price and the sale price' is discernible. Cooter and Ulen (pp. 78-80) calls it the bargaining theory to understand the theory of property.

#### *4.6 Assignment of private property rights on new settlements*

Kautilya's three insights are highlighted here. These are related to

- the importance of clearly defined property rights;
- granting the village headman the right to levy a user fee to mitigate "the tragedy of commons" and avoid the "tragedy of anti-commons"; and
- Kautilya saw the need to modify property rights but without violating the original contract.

With that constraint in view, he suggested modification of the property rights only on the new settlements (and also with self-acquired property on the existing ones). He suggested rewarding hard work by granting ownership rights and thus proposed a pure labor theory of property, that is, without mixing it with the labor theory of value.

*4.6.1 Clearly defined property rights.* Kautilya understood the importance of good governance and good institutions: unambiguous private property rights, and maintenance of law and order[14]. He (p. 371) wrote, "The boundaries of every residential property shall be clearly demarcated by pillars at the corners with wires strung between them (3.8)". Similarly, he (p. 179) stated, "Each boundary of a village shall be one or two *krosas* and be [clearly identifiable using] a river, a mountain, a forest, a dry-bed, a cave, an embankment, or trees like the silk cotton, acacia and milktree (2.11)".

Kautilya considered three types of property rights: collective property, common property and private property.

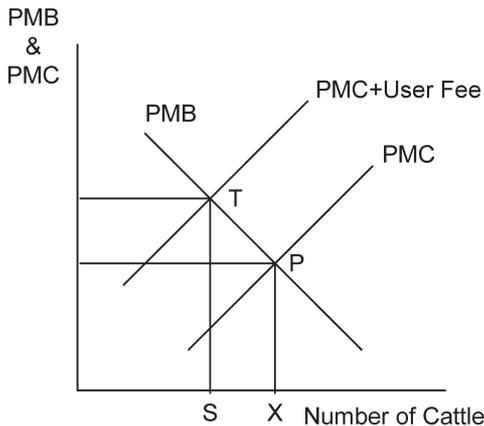
*Collective property.* Residents rather than local authorities were involved in deciding, building and maintaining some facilities. According to Kautilya (p. 370), "Every one shall contribute his share to the building of common facilities. No one shall obstruct or prevent the lawful use of such facilities by others in the neighborhood. Such facilities shall not be destroyed (3.8)". He (p. 371) added, "It is preferable that sheds, courtyards, latrines, fire places, places for pounding grain and all open spaces are used as common property (3.8)". Kautilya believed that sharing these facilities was likely to promote cooperation and harmony among people and therefore, it was undesirable to put any restriction on their use. For example, he (p. 365) wrote, "All the people in a village shall contribute their share of the [community] work and the costs of festivals and entertainments (3.10)". He (p. 366) added, "The people of a village shall obey the orders of anyone who proposes any activity beneficial to all. They shall not conspire against such a person to [attack or] harm him (3.10)".

*Common property.* Kautilya considered pasture as a common property but treated it differently than collective property. According to him, anyone could use the pasture subject to a user fee and the revenue collected from the user fee was designed to finance the local administration. Kautilya (p. 366) suggested grazing charges as follows: "Small animals 1/16 pana, cattle, horses and donkeys 1/8 pana and buffaloes and camels 1/4 pana (3.10)". There were additional charges for additional uses, such as resting or staying overnight. However, he added, "Bulls belonging to village temples, stud bulls and cows up to ten days after calving are exempt from payment of grazing charges".

In Figure 1, PMB is the private marginal benefit curve and PMC is the private marginal cost curve. In the absence of a user fee, a farmer would keep X number of cattle heads on the common grazing land and the number would be S if a user fee is imposed.

A few points are worth noting. First, it is not claimed that Kautilya was aware of the distinction between social marginal cost (SMC) and PMC or he could calculate the optimum level of user fee (i.e. user fee =  $SMC - PMC$ ). But, his suggestion to levy the user fee not only raised the needed revenue for the local administration but also reduced the overuse of the common grazing land. That is, Kautilya's suggestion avoided Aristotle's major concern that "common to the greatest number has the least care bestowed upon it". Similarly, a grazing field if divided among the residents would face "the tragedy of anti-commons". Since each piece of land would become too small to be useful for grazing and also would require expensive fencing. Second, it is significant to note that even though grazing field was a common property but the village headman had the clearly defined right to exclude non-payers and thus the Coasian insight is also discernible. Third, Kautilya's suggestion indicates that individual authority for management and not necessarily ownership is the necessary condition for economic efficiency. For example, Posner (2003, p. 33) remarks, "The creation of individual (as distinct from collective) ownership rights is a necessary rather than a sufficient condition for the efficient use of resources. The rights also must be transferable". Fourth, Kautilya advanced the benefit principle of taxation. Since the user fee was lower for smaller animals than that on larger ones presumably the smaller animals consumed less grass than the larger ones. Finally, his recommendation that "cows up to ten days after calving are exempt from payment of grazing charges" is a true case of law protecting both the ethical values and economic efficiency. According to Kautilya, cattle rearing was the second most important economic activity and allowing the cow and calf stay free of charge ensured their good health and consequently to a higher growth in their population.

Ownership of property on the new settlements was conditional on its being put to productive use. Vaughn (1978) remarks, "Grotius and Pufendorf had both argued that private property was established in the state of nature by the consent of all mankind who once shared in the original communistic ownership of these resources. Such a theory of property, implied, however, that since property only existed at the consent of



**Figure 1.**  
User fee to reduce the overuse of pasture

---

society, this consent could be withdrawn or modified by the society which sanctioned it originally, a conclusion which Locke sought to avoid. Instead, he argued that private property was established in the state of nature not by the consent of mankind, but by natural law". However, according to Kautilya, a king should be allowed to modify property laws (and other laws too) if that promoted public interest. In any case, Kautilya never advocated linking property rights to natural rights.

#### *4.7 Kautilya proposed new settlements on virgin land*

According to Spengler, Kautilya was aware of the law of diminishing returns. Spengler (1971, p. 71) observes, "He does not explicitly recognize the tendency to Ricardian diminishing returns implicit in his account of the quite unequally colonizable and unevenly cultivable character of India's lands". Kautilya did emphasize the building of irrigation facilities for increasing output and particularly reducing its variability (he displayed high-risk-averse behavior), but in the absence of modern inputs, bringing new land was the primary source of growth in agricultural output. Kautilya based the decisions regarding the selection of site for a new settlement, characteristics of its settlers and the type of property rights to be granted to them, on the cost-benefit analysis.

*4.7.1 Selection of a site for settlement.* Kautilya (p. 179) stated, "The king shall avoid [settling] any part of the country which is liable to attack by enemies or jungle tribes and which is likely to be afflicted by disease and famine. He shall avoid excessive expenditure (2.1)". Clearly, settlement of virgin land was treated like a business investment and the selection of its site was based on analyzing the risk-return tradeoff.

*4.7.2 Selection of the settlers.* According to Kautilya (Kangle, Part II, p. 55), "He should cause villages to be settled consisting of mostly of shudra agriculturists, with a minimum of one hundred families and a maximum of five hundred families, with boundaries extending over one krosa or two krosas, (and) affording mutual protection (2.1)". It is significant to note that Kautilya trusted the shudra agriculturists, who were the lowest in social status, but were known to be hard working and most experienced for achieving the stated objective of maximization of agricultural output. On the other hand, Aristotle justified private property that it promoted prudence and responsibility and only the aristocracy should own a larger share of the property. For Kautilya, "prudence and responsibility" were requirements to own private property on new settlements. Cooter and Ulen (2004, p. 116) remarks, "In Aristotle's conception, it is just that aristocrats receive an unequal share of wealth because they use it for more worthy ends than do others".

*4.7.3 Assignment of property rights.* Kautilya (p. 179) suggested to the king, "He shall grant land to Brahmins [of different categories]: teachers, purohitas, experts in the Vedas and those who officiate at ritual sacrifices. Such land shall be exempt from fines and taxes and be transferable to heirs. He shall [also] grant land [after the village is fully established] to heads of departments, accountants, record keepers (gopas), divisional officers (sthanikas), doctors, couriers and horse trainers. Such land shall not be sold or mortgaged by the possessor [being a perquisite associated with the job] (2.1)". Apparently, Kautilya's goal was to promote a well-balanced community consisting of intellectuals, the merchants, the moneylenders and the government officials. It is also obvious that Kautilya had a lot of respect for the intellectuals, who were "experts in Vedas".

---

#### 4.8 Kautilya implicitly proposed the labor theory of property

According to Kautilya (pp. 179-80), “Arable land shall be allocated to tax-payers for their lifetime [only]. Unarable land, prepared for cultivation by any one [by their own efforts] shall not be taken away from them. Land allotted to those who do not cultivate it shall be confiscated and given to others. Alternatively, employees of the village, whether salaried or not, or [village] merchants may cultivate them. The loss suffered by the state due to non-cultivation shall be made good by the offending holder. [On new settlements] the cultivators shall be granted grains, cattle and money which they can repay at their convenience. Favors and exemptions shall be granted either at the time a settlement is organized or as when people move in. Grants can also be made later [to people in existing settlements] provided that such grants result in increased revenue and/or avoid losses to the Treasury; for, a King with depleted Treasury eats into the very vitality of the country. He shall, however, treat leniently, like a father [treat his son], those whose exemptions have ceased to be effective (2.1)”.

A few points are noteworthy. Both the labor theory of property and the labor theory of value have received a sustained interest for more than two centuries. Ellerman (1992) provides a comprehensive intellectual history of these theories[15]. He believes that John Locke’s second treatise on government could be credited with the origination of these theories. However, Kautilya’s statement “unarable land, prepared for cultivation shall not be taken away” indicates that he not only anticipated Lockean justification for private property but also was more specific as to its requirements. For example, Locke did not make any distinction between arable land and unarable land. Additionally, as Ellerman (1992, Chapter 4) points out that Locke did not distinguish between labor performed and labor owned (wage labor). The following paragraph has drawn a lot of criticism from the leftists that Locke treats the horse and the worker alike.

“Thus the Grass my Horse has bit; the Turfs my Servant has cut; and the Ore I have digg’d in any place where I have a right to them in common with others, become my Property, without the assignation or consent of any body. The labour that was mine, removing them out of that common state they were in, hath fixed my Property in them. [Locke, Second Treatise, section 28]”.

This type of criticism has no merit and can easily be ignored. However, this paragraph shows logical inconsistency. First, existence of wage labor in the natural state of nature appears unnatural. Second, the existence of wage labor indicates the existence of markets. But that implies the existence of property rights because markets cannot exist in their absence. Thus, the existence of wage labor essentially invalidates Locke’s justification for the labor theory of property. Also the use of the phrase, “the loss suffered by the state due to non-cultivation shall be made good” by Kautilya indicates that he was aware of the concept of opportunity cost.

#### 4.9 Kautilya on the labor theory of value

Ellerman remarks, “The labor theory of property has throughout its history been entwined with and often totally confused with the labor theory of value. The admixture of the two labor theories was present even in Locke who had a somewhat rudimentary form of the labor theory of value”[16]. Waldauer *et al.* (1996) conclude, “Kautilya was far ahead of his time in developing a labor theory of value in trying to determine what was a “just” wage for workers”. According to Vaughn, labor theory of value has three possible meanings. However, none of these meanings of the labor theory of value can be attached to Kautilya’s ideas. First, Kautilya did stress the importance of labor. For example, he (p. 619) stated, “The value of land is what man makes of it (7.11)”. But he (p. 637) also

argued, “Man, without wealth, does not get it even after a hundred attempts. Just as elephants are needed to catch elephants, so does wealth capture more wealth. Wealth will slip away from that childish man who constantly consults the stars. The only [guiding] star of wealth is itself; what can the stars of the sky do? (9.4)”. He stressed the importance of both capital and labor as sources of value. In fact, Kautilya attributed only one-third of agricultural output to labor and the remaining two-thirds to land, seeds and other inputs. Second, as mentioned above, the price of a good depended on demand factors (competitive bidding) also and not just on cost. That is, labor content alone was not used to determine relative prices. Third, Kautilya on normative grounds also did not suggest that two goods with identical labor content should have identical prices. Therefore, it may appear at first glance that he was implicitly proposing a labor theory of value. But, Kautilya had a much broader perspective than considering labor as the only source of value or the only measure of value.

Most importantly, it may also be noted that Kautilya never separated economics from ethics as indicated by the phrase “treat leniently like a father”.

## 5. Conclusions

According to B.R. Ambedkar, “This country has seen the conflict between ecclesiastical law and secular law long before Europeans sought to challenge the authority of the Pope. Kautilya’s Arthashastra lays down the foundation of secular law in India unfortunately ecclesiastical law triumphed over secular law”. Kautilya understood the importance of ethical conduct and compliance with laws to economic prosperity. He proposed a true labor theory of property but social consent was needed to sustain it.

Finally, despite the fact that Kautilya advocated a contract theory between the ruler and the ruled, that a king was a salaried public employee and that it was utilitarian in nature, unlike Bentham, he still appealed to the moral motivation. For example, he (p. 377) Stated, “A king who observes his duty of protecting his people justly and according to law will go to heaven, whereas one who does not protect them or inflicts unjust punishment will not (3.1.42)”. He believed that a king should take care of his subjects like a father takes care of his children. He (p. 128) wrote, “Whenever danger threatens, the king shall protect all those afflicted like a father [protects his children] (4.3)”.

## Notes

1. Kangle (1965, Vol. III, pp. 10-1) presents the views of many historians on the origin of Arthashastra literature and concludes, “But there does not appear to be any valid reason why the beginnings of this science cannot be placed as early as 600 BC or even a little earlier”.
2. Sihag (2005a) presents Kautilya’s ideas on imperative of economic prosperity and national security.
3. *Law and ethics*: D’Amato (1981) lists the views of some well-known legal theorists, which vary from Bentham’s extreme positivism view that there is no necessary relationship between law and morality to Cicero’s extreme natural law view that there is a necessary relationship between law and morality. Kautilya may be placed somewhere in between these two extremes. However, there has been a lot of controversy regarding Kautilya’s ideas on the nature of the relationship between law and ethics. Chapter one of Book III of *The Arthashastra* deals with this relationship.
4. *Law and economics*: It is now almost universally accepted that the application of economic analysis to law originated much earlier than during the 1950. Mackaay (1999) provides a very detailed history of law and economics. His list includes Adam Smith, David Hume, Beccaria, Bellamy and Jerome Bentham. He (p. 68) also adds, “In this light

---

Machiavelli (1961; Pearson, 1997, p. 19) should count as an early precursor of law and economics, as should the Cameralists active in Germany from the fifteenth until the early nineteenth century”.

Medema *et al.* (1999) present the contributions of John R. Commons and many others on the application of economic analysis to law. Medema (2004) brings out Sidgwick’s contribution to law and economics. According to Sima (2004), “It is notable that Carl Menger, who memorably played a part in the emergence of the new science of marginalist economics, was a lawyer who contributed to the development of law”. Kautilya devoted almost one-third of his Arthashastra to issues related to the administration of justice. Dreikmeier (p. 254) believes that Kautilya understood that “justice is what transforms power into ‘authority’”. Sihag (2007c) presents Vishnugupta Chanakya Kautilya’s ideas on the application of economic analysis to law during the fourth century BCE.

5. *Economics and ethics*: Stigler (1980) believed that there was hardly any conflict between self-interest and ethics. He (p. 190) asserted, “I believe that it is feasible and even an orthodox scientific problem to ascertain a set of widely and anciently accepted precepts of ethical personal behavior, and to test their concordance with utility-maximizing behavior for the preponderance of individuals”. Sen (1987) deplores the absence of any bonhomie in modern economics. Hausman and McPherson (1996) emphasize the need to incorporate ethics into economic analysis. In recent years increasing amount of effort has been devoted to perform a civil union between economics and ethics.

However, many contributions in Groenewegen (1996) point out the difficulties of incorporating ethics into economic analysis. Sihag (2005b) presents Kautilya’s ideas on ethics and economics. Kautilya (p. 177) summarized his advice to a king as: “Ever victorious and never conquered shall be that Kshatriya, who is nurtured by Brahmins, made prosperous by the counsels of able ministers and has, as his weapons, the precepts of the shastras (1.9.11)”.

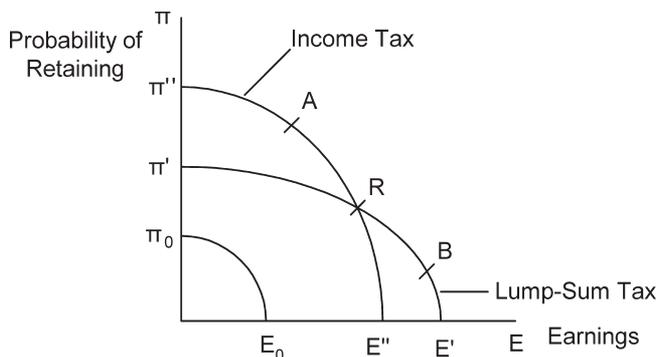
6. Sihag (2007a) presents Kautilya’s implicit analysis on institutions, governance, ethical conduct, knowledge and prosperity.
7. Zaratiegui (1999) does not take into consideration Kautilya’s contributions when he remarks, “The character and content of the old ethics has little to do these days with moral behavior. Furthermore, the roles have changed: Economics is now the social science with the greater academic and cultural prestige, while it was ethics that once had priority during the first stage of the process. Ethics exercised its control with a holistic view of society, whereas the focus has now changed to analyze why individuals from different cultural backgrounds adopt similar ethical and cultural norms with respect to moral behavior”.
8. Sihag (2007b) presents Kautilya’s ideas on moral and material incentives.
9. According to Kautilya, moral motivation and self-interest were powerful forces to control behavior. Sihag (2005b) presents Kautilya’s ideas on controlling the behavior of a king. He observes, “Kautilya reminded the king that his hold on power depended on public support, which had to be earned through good deeds and administration of justice. (i) public support to a King is tied to his being just: Kautilya (p. 573) observed, ‘When a strong but unjust king is attacked, his subjects will not come to his help but will either topple him or go over to the attacker. On the other hand, when a weak but just king is attacked, his subjects will not only come to his help but also follow him until death (7.5)’. (ii) public support to a king linked to economic development: Kautilya (p. 159) argued, ‘When a people are impoverished, they become greedy; when they are greedy, they become disaffected; when disaffected, they either go to the enemy or kill their ruler themselves (7.5)’. He suggested, ‘Therefore, the king shall not act in such a manner as would cause impoverishment, greed or disaffection among the people; if however, they do appear, he shall immediately take remedial measures (7.5)’. It may be

noted that a little vague but a definite distinction between positive and normative economic analysis is discernible in the above statements”.

10. Drekmeier (fn. b, p. 245), believes, “Kautilya, however, occupies a position intermediate between Greek and Hindu theories”.
11. Bell and Parchomovsky (2005) quote Jeremy Bentham, “[p]roperty and law are born together, and die together. Before laws were made there was no property; take away laws, and property ceases”.
12. According to Goetzmann (2006), “When people started living in large communities like Uruk, they began to live with strangers as well as friends. It may have been possible to know everyone in a large farming village, but not in a vast city such as Uruk. What were once implicit agreements among neighbors now became explicit, contractual agreements among strangers. When everyone had the same profession and skills, neighborly help could always be repaid in kind. But, when people developed different professions it must have been difficult to maintain neighborly reciprocity. Urban societies still needed co-operation, but limits to familiarity with fellow inhabitants, and difficulty with quantifying the units of such cooperation meant that people required more formal ways to insure a return on their helpful efforts. Cambridge University’s Paul Millett traced this developmental relationship between urbanization and interest loans in ancient Athens in the first century BC. In Greece, the pattern is clear – urbanism necessitated explicit contracts, and gave rise to interest charges. Interest is a ‘sweetener’ to induce someone to lend you what you need”.
13. Posner (2003, p. 25) states, “Many areas of law, especially the great common law fields of property, torts, crimes, and contracts, bear the stamp of economic reasoning. It is not a refutation that few judicial opinions contain explicit references to economic concepts. Often the true grounds of decision are concealed rather than illuminated by the characteristic rhetoric of judicial opinions. Indeed, legal education consists primarily of learning to dig beneath the rhetorical surface to find those grounds, many of which may turn out to have an economic character”.
14. Sihag (2005a) presents Kautilya’s ideas on the roles of institutions and establishment of law and order. Figure 2 is used to capture Kautilya’s ideas on the role of law and order.

Let  $\pi_0 E_0$  be the initial possibility frontier.  $E_0$  and  $\pi_0$  represent an individual’s earnings and the probability of retaining his earnings respectively. Establishment of law and order shifts the possibility frontier to  $\pi' E'$  under a lump-sum tax and to  $\pi'' E''$  under an income tax. That is, establishment of law and order and good governance increase both  $E$  and  $\pi$ .

Similarly, Bell and Parchomovsky (2005) conclude, “This Article has shown that property is best understood as a legal institution designed to create and protect the value inherent in stable ownership of assets”.



**Figure 2.** Possibility frontier (initially  $\pi_0 E_0$ ) as influenced by lump-sum tax ( $\pi' E'$ ) and as influenced by income tax ( $\pi'' E''$ ). The increase in  $\pi$  is smaller under a lump-sum tax than under an income tax. Income is higher under a lump-sum tax than under an income tax

15. John Locke (1689, II, Chapter V, Para. 27), "Though the Earth, and all inferior Creatures be common to all Men, yet every Man has a Property in his own Person. This no Body has any Right to but himself. The Labour of his Body, and the Work of his hands, we may say, are properly his. Whatsoever then he removes out of the State that Nature hath provided, and left it in, he hath mixed his Labour with, and joyned to it something that is his own, and thereby makes it his Property. It being by him removed from the common state Nature placed it in, hath by this labour something annexed to it, that excludes the common right of other Men. For this Labour being the unquestionable Property of the Labourer, no Man but he can have a right to what that is once joyned to, at least where there is enough, and as good left in common for others".

Ellerman comments, "This is Locke's classic statement of the labor theory of property, the theory that people have the right to the fruits of their labor. The argument is set in a hypothetical original state of society prior to the accumulation of capital when nature is a common resource to all. The 'right' Locke postulates is a natural right that is not dependent on the particular laws in a society. Indeed, the labor theory of property is sometimes referred to as the "natural rights theory of property" [e.g. in Schlatter, 1951]. The theory is intended as a normative or prescriptive theory, not a positive or descriptive theory. A given legal system might or might not in fact recognize this natural right, but the theory holds that society should recognize and codify the natural right to the fruits of one's labor in the system of positive laws".

16. John Locke (1689, II, Chapter V, Para. 40), "For 'tis Labour indeed that puts the difference of value on every thing; and let any one consider, what the difference is between an Acre of Land planted with Tobacco, or Sugar, sown with Wheat or Barley; and an Acre of the same Land lying in common, without any Husbandry upon it, and he will find, that the improvement of labour makes the far greater part of the value. I think it will be but a modest Computation to say, that of the Products of the Earth useful to the Life of Man 9/10 are the effects of labour: nay, if we will rightly estimate things as they come to our use, and cast up the several Expenses about them, what in them is purely owing to Nature, and what to labour, we shall find, that in most of them 99/100 are wholly to be put on the account of labour".

## References

- Basham, A.L. (1959), *The Wonder that was India*, Grove Press, New York, NY.
- Bell, A. and Parchomovsky, G. (2005), "A theory of property", *Cornell Law Review*, Vol. 90 No. 3, pp. 531-615.
- Chandler, T. (1987), *Four Thousand Years of Urban Growth: An Historical Census*, Edwin Mellon Press, Lewiston, NY.
- Cooter, R. and Ulen, T. (2004), *Law and Economics*, 4th ed., Pearson, Addison-Wesley, New York, NY.
- D'Amato, A. (1981), "Lon Fuller and substantive natural law", 26 *American Journal of Jurisprudence* 202, Code A81A.
- Drekmeier, C. (1962), *Kingship and Community in Early India*, Stanford University Press, Stanford, CA.
- Ellerman, D. (1992), *Property and Contract in Economics: The Case for Economic Democracy*, Basil Blackwell, Cambridge.
- Goetzmann, W.N. (2006), "Financing civilization", available at: [www.viking.som.yale.edu/will/finciv/chapter1.htm](http://www.viking.som.yale.edu/will/finciv/chapter1.htm)
- Groenewegen, P. (Ed.) (1996), *Economics and Ethics*, Routledge, New York, NY.
- Hampton, J. (1993), "Contract and consent", in Robert E. Goodin and Philip Pettit (Eds), *A Companion to Contemporary Political Philosophy*, Blackwell Publishing, Malden, MA, pp. 379-93.

- Hausman, D.M. and McPherson, M.S. (1996), *Economic Analysis and Moral Philosophy*, Cambridge University Press, Cambridge.
- Machiavelli, N. (1961), *The Prince*, (G Bull trans.), Penguin Books, Baltimore, MD.
- Mackaay, E. (1999), "History of law and economics", in online encyclopedia.
- Medema, S.G., Mercurio, N. and Samuels, W.J. (1999), "Institutional law and economics", in online encyclopedia.
- Medema, S. (2004), "Sidgwick's utilitarian analysis of law: a bridge from bentham to becker", available at: [www.utilitarian.net/sidgwick/about](http://www.utilitarian.net/sidgwick/about)
- Pearson, H. (1997), *Origins of Law and Economics – The Economists' New Science of Law, 1830-1930*, Cambridge University Press, Cambridge.
- Posner, R. (2003), *Economic Analysis of Law*, 6th ed., Aspen Publishers, New York, NY.
- Ray, B.N. (1999), *Tradition and Innovation in Indian Political Thought*, Ajanta Books International, Delhi.
- Schlatter, R. (1951), *Private Property: The History of an Idea*, Rutgers University Press, New Brunswick, NJ.
- Sen, A.K. (1987), *On Ethics and Economics*, Blackwell, Oxford.
- Sihag, B.S. (2005a), "Kautilya on public goods and taxation," *History of Political Economy*, Vol. 37 No. 4, pp. 723-51.
- Sihag, B.S. (2005b), "Kautilya on ethics and economics", *Humanomics*, Vol. 21 Nos. 3-4, pp. 1-28.
- Sihag, B.S. (2007a), "Kautilya on institutions, governance, knowledge, ethics and prosperity", *Humanomics*, Vol. 23 No. 1, pp. 5-28.
- Sihag, B.S. (2007b) "Kautilya on moral and material incentives, and effort", *History of Political Economy*, Vol. 39 No 2, pp. 263-92.
- Sihag, B.S. (2007c), "Kautilya on administration of justice during the fourth century BCE", *Journal of the History of Economic Thought*, Vol. 29 No. 3, pp. 359-77.
- Sima, J. (2004), "Praxeology as law and economics", *Journal of Libertarian Studies*, Vol. 18 No. 2, pp. 73-89.
- Spengler, J.J. (1971), *Indian Economic Thought*, Duke University Press, Durham, NC.
- Sternbach, L. (1965), *Juridical Studies in Ancient Law*, Motilal Banarsidass, Delhi.
- Stigler, G.J. (1980), *Economics or Ethics?*, *The Tanner Lectures on Human Values*, Harvard University, Cambridge.
- Vaughn, K.I. (1978), "John Locke and the labor theory of value", *Journal of Libertarian Studies*, Vol. 2 No. 4, pp. 311-26.
- Waldauer, C., Zahka, W.J. and Pal, S. (1996), "Kautilya's *Arthashastra*: a neglected precursor to classical economics", *Indian Economic Review*, Vol. XXXI No. 1, pp. 101-8.
- Zaratiegui, J.M. (1999), "The imperialism of economics over ethics", *Journal of Markets and Morality*, Vol. 2 No. 2, pp. 208-19.

### Further reading

- Ambedkar, B.R. (n.d.), "Thus spoke Ambedkar, quotations of Dr. B.R. Ambedkar", available at: [www.ambedkar.org/babasaheb/quotations.htm](http://www.ambedkar.org/babasaheb/quotations.htm)
- Beider, P. and Elliott, C. (2003), The economics of US Tort liability: a primer, congressional budget office", available at: [www.cbo.gov/showdoc.cfm](http://www.cbo.gov/showdoc.cfm)
- Coleman, J. (2003), "Theories of tort law", *Stanford Encyclopedia of Philosophy*, available at: <http://plato.stanford.edu/entries/tort-theories/>

- 
- Geistfeld, M. (2003), "The role(s) of economic analysis in tort law", *Law and Economics Workshop*, University of Berkeley, Berkeley, CA.
- Jamieson, D. (2003), "Method and moral theory", in Peter Singer (Ed.), *A Companion to Ethics*, Blackwell, Malden, MA, pp. 476-87.
- Kangle, R.P. ([1965] 2000), *The Kautilya Arthashastra*, part III, Motilal Banarsidass, Delhi.
- Kaplow, L. and Steven, S. (2001), "Any non-welfarist method of policy assessment violates the pareto principle", *Journal of Political Economy*, Vol. 109, pp. 281-6.
- Kautilya, V. (4th century BC), *The Kautilya Arthashastra*, part II, in Kangle R.P. (English trans.), Motilal Banarsidass, Delhi.
- Kautilya, V. (4th century BC), *The Arthashastra*, in Rangarajan, L.N. (Ed.), Penguin Books, New Delhi, New York, NY.
- Locke, J. (1988), *Two Treatises of Government [1689]*, in Peter, L. (Ed.), Cambridge University Press, Cambridge.
- McAdams, R.H. and Rasmusen, E. (2005), "Norms in law and economics", *American Law and Economics Association Annual Meetings*.
- Post, J.E., Lawrence, A.T. and Weber, J. (1999), *Business and Society*, 10th ed., McGraw-Hill, New York, NY.
- Rowe, C. (2003), "Ethics in ancient Greece", in Peter S. (Ed.), *A Companion to Ethics*, Blackwell, Malden, MA, pp. 121-32.
- Sihag, B.S. (2004), "Kautilya on the scope and methodology of accounting, organizational design and the role of ethics in ancient India", *Accounting Historians Journal*, Vol. 31 No. 2, pp. 125-48.

**Corresponding author**

Balbir S. Sihag can be contacted at: balbir\_sihag@uml.edu