

XVI The king's givings and takings

As is clear from chapter V, the king is involved in several kinds of giving and taking. Here, I would like to add a few etic viewpoints.

A Presumptive taxation⁷⁰⁰

Remember the contract theory of state and citation <57>, according to which the king can collect as *bhāga* “one-sixth of the grain and one-tenth of the merchandise, as also money”. This rule also holds for goods stolen from abroad (see subsection VII.B(5)). According to Trautmann (2012, pp. 142–143), the term *bhāga* implies that “the king is a co-sharer with the people of the kingdom in various wealth-making enterprises [...] The focus is not on ownership of a resource but of a share of what is produced.” An example of such a tax is the market tax described by Kautilya (subsection XIII.B(2)).

However, co-sharing surely knows exceptions. In particular, presumptive taxes were also encountered in premodern India. Presumptive taxes are not based on actual income, but rather on the potential to create income.⁷⁰¹ In particular, most taxes mentioned in the charter of Viṣṇuṣeṇa are “presumptive”. This clearly holds for VCh 48–51, where fees were to be paid for fields and workshops, but not for sales or profits generated from these production facilities. The outgoing duties (subsection V.H(7)) may also be considered presumptive. The outgoing merchants may have hoped to obtain good prices abroad, but the actual revenue was not relevant to the duty to be paid.

B The king's compensation for theft

According to subsection V.F(3), the king or his officials had to compensate victims of theft. In contrast, compensation for stolen items is not widespread in modern legal

700 This section borrows freely from Wiese & Das (2019, p. 149).

701 Thuronyi (2004) discusses the administrative and other merits of presumptive (or potential-income) taxation.

systems. The Old Indian rules remind us of the central obligations of governments to ensure inner and outer security. This is surely in line with the contract theory of state. From an efficiency perspective, it is unclear whether such compensation rules should be in effect. On the one hand, potential victims may take insufficient precautions if they know that the costs of theft are borne by the government (or king). After all, the compensation acts as an insurance against theft. In economic theory, these reductions in precautionary measures come under the heading of moral hazard.⁷⁰² On the other hand, (modern) governments may also need (monetary and political) incentives to prevent theft (e.g., by stricter laws against theft, by increasing the police force, by controlling borders, etc.).

C Import and export duties⁷⁰³

Subsection V.H(7) is about the preferential treatment of incoming goods over outgoing goods. Some economic remarks on these rules are in order. Note that border-crossing transport of goods in premodern times is not to be confused with modern-day imports or exports. An exporter (in the modern sense) is institutionally located in a home country and obtains gold, foreign currency, or claims (receivables) in exchange for the goods he exports. A country may benefit from exports if it values gold, foreign currency or claims higher than the exported goods. In Old and Medieval India, the goods taken out of the country by merchants were lost until (and if) the merchants returned. It is therefore understandable that Kauṭilya and Viṣṇuṣeṇa were concerned about goods flowing out of the country.

In Europe, similar policies were pursued in order to safeguard and increase the supply of goods in city or state. This approach is called “policy of provision” and is discussed in detail by Heckscher (1994). For example, “[i]n 1234 imports into Ravenna were free of duty, while tolls were imposed on exports.”⁷⁰⁴ In Europe, the policy of provision gave way to the mercantilist “protection” policy that favoured exports over imports.⁷⁰⁵

D *Bali* as a balancing mechanism in the contest between the vital functions⁷⁰⁶

The *bali* given to the king is a reflection of the king’s potential to do harm to his subjects, in particular by not protecting them, i.e., by leaving them alone. Reconsider

⁷⁰² See, for example, Salanié (2005).

⁷⁰³ This section borrows freely from Wiese & Das (2019, pp. 149–150).

⁷⁰⁴ Heckscher (1994, p. 87)

⁷⁰⁵ Heckscher (1994, pp. 112–172)

⁷⁰⁶ This section borrows freely from Wiese (2022b).

section V.G. In some accounts of the contest between the vital functions for superiority, breath's threat of withdrawal carries more weight than the threat of withdrawal by the other vital functions. Consequently, these other vital functions offer *bali* to "king *prāṇa*".⁷⁰⁷ This tribute can be seen as serving a specific purpose, in line with the withdrawal symmetry obeyed by the Shapley value.

Apparently, the tribute is a positive entity. After the other vital forces provide *bali* to breath, the latter's Shapley value includes the *bali*. Now, after having turned over the tribute to breath within the body, i.e., in the grand coalition, speech (as one vital function) does not suffer more from breath's leaving the body than breath would suffer from speech's exit. That is, withdrawal symmetry is restored.⁷⁰⁸

E The king's fear of disloyal subjects or officials

While the subjects may fear the king's wrath and therefore pay the taxes that he demands, a reduction in the king's demands may stem from the king being afraid of disloyal subjects. In fact, whenever specific taxes or tax rates are reported, they will in general stem from some generalised bargaining procedure, sometimes presumably explicit, as in the charter of Viṣṇuṣeṇa, which is called an *anugrahashtitipātra* ("charter of statutes for showing favours")⁷⁰⁹. Implicit bargaining can be deduced from passages such as <55> and the loyalty theory of state.

As has been observed by Vanberg (1982, p. 59, fn. 48), both sides in any relationship do things that they would not have done without the influence (or existence) of the other party. Thus, the Old Indian king would

- provide security to his subjects against violence, from within the monarchy and from without (see section V.A),
- collect one-sixth of the grain and one-tenth of the merchandise from his subjects (<57>),
- have reason to fear his subjects' disloyalty (<55>).

The amount of taxes to be paid by the subjects can be calculated with the help of the Shapley value. The Shapley value presupposes cooperation, where the king (K) provides security in exchange for taxes and where the subjects (S) remain loyal. This mutual dependence has to be balanced.

Let us discuss the coalition function for the king-subject game. If the king and the subject cooperate, their worth is arguably given by $v(K, S) = b - d$. The subjects enjoy the benefit b of protection against internal and external enemies. Remember that the Sanskrit word *daṇḍa* stands for both sorts of activities. Therefore, we abbreviate the cost of providing inner and outer security by d . Since the taxes t are collected by the

707 I refer to the title of a paper by Bodewitz (1992).

708 Wiese (2022b) shows that Śaṅkara considers the threat of withdrawal to be a generalisable procedure. In particular, Śaṅkara talks about a test (*parikṣaṇa*) and a method that is teachable (*prakāropadeśa*).

709 Wiese & Das (2019, p. 44)

king and paid by the subject, they do not show up in $v(K, S)$. Furthermore, one may defend the king's one-man worth of $v(K) = -f$. If the subjects do not cooperate (i.e., are disloyal), the ruler faces a revolt, and the fear of that revolt is indicated by f , which would be positive. Finally, one might assume $v(S) = 0$. The subjects neither enjoy the benefit of protection nor have to pay taxes. This zero worth implies that a revolt comes without cost to the revolting subjects (which is surely unrealistic).

The Shapley value has to obey the equal-threat property $Sh_K - (-f) = Sh_S - 0$ and Pareto efficiency $Sh_K + Sh_S = b - d$. These two equations yield the Shapley values

$$[11] \quad Sh_K = \frac{b - d - f}{2} \text{ and } Sh_S = \frac{b - d + f}{2}$$

Apparently, the fear of revolt reduces the king's payoff and increases the subject's payoff. The taxes t to be paid can be calculated from $Sh_K = t - d$ or from $Sh_S = b - t$. From both equations, one obtains

$$[12] \quad t^{Sh} = \frac{b + d - f}{2}$$

That is, the taxes that the king can demand depend positively on the benefit of protection b and the cost d of providing this benefit. The king's fear of revolt f diminishes his ability to collect taxes. All of these results make perfect sense.

The king is also concerned about the loyalty of his officials. As seen from (134), officials were often remunerated quite generously. It seems that the fear of revolt or dishonest behaviour by officials gives the king sufficient reason to remunerate them generously. Economists are reminded of the efficiency-wage hypothesis put forward by Shapiro & Stiglitz (1984). These authors argue that paying workers above the market rate has the advantage of disciplining them according to the following mechanism: If a very well-paid worker is caught shirking, he will be fired and not find an equally well-paid job elsewhere. Similarly, Kauṭilya's officiating priests, etc. will be loyal to the king because they cannot hope to get a higher remuneration in the same kingdom (after a revolt) or in another (after being fired).

F Juridical aside: Varuṇa rule⁷¹⁰

(1) Two-level punishments

One of the king's duties in the classical period was just punishment. One may worry about the king's incentives to do so. As the famous Latin saying goes: "quis custodiet custodes ipsos", i.e., who supervises the supervisors? One answer given by Manu points to Varuṇa as chastiser of kings for a good reason:

⁷¹⁰ This section borrows freely from Wiese (2016b).

⟨221⟩ *rājñāṃ daṇḍadharo hi saḥ*⁷¹¹

for he holds the rod of punishment over kings⁷¹²

As shown in section IV.E, Varuṇa has Vedic credentials as chastiser of kings. Late-Vedic Brāhmaṇas would also address Varuṇa as *dharmapati*. We thus have a two-level structure, where Varuṇa can punish the king who in turn can punish his subjects. At this juncture, one might worry about Varuṇa's incentives to chastise the king appropriately. Presumably, a regressus ad infinitum would not occur, as the god Varuṇa does not himself encounter any incentive problems.

In this setting, the role of Varuṇa consists in fining the misbehaving king. One might argue (alongside Manu) that the king will fulfil his *rājadharmā* if he is afraid of the chastiser Varuṇa. However, for the "Varuṇa the chastiser" argument to convince his subjects, it is not the king's belief that is relevant. Rather, the subjects need to believe that the king is a believer. We thus require second-order beliefs⁷¹³, which are more difficult to uphold than first-order ones.

If the belief argument is too facile, we can supply additional arguments for how Varuṇa's punishment might work. Does it imply that the king, the most powerful agent himself, would somehow need to punish himself? Against this idea, Kane⁷¹⁴ has already opined that "these prescriptions [...] were counsels of perfection and must have been futile. No king would ordinarily fine himself". He then refers to medieval texts where the king is understood as a "subordinate chief". It is thus the overlord who does the punishing, rather than Varuṇa himself. This is a good explanation, as far as it goes. However, it just pushes the problem up another level. After all, how would an unjust overlord be brought to justice?

(2) Casting property fines into the water

Remember subsection V.F(2), where Manu strongly advises the king to throw confiscated property into the water or to give it to Brahmins. Why should Manu demand that the king not keep the confiscated property taken from offenders? Is it not pure waste to throw the property into the water? Of course, one might point to the alternative of giving the property to Brahmins. After all, Brahmins do often benefit from unclaimed property. The case of treasure troves is analysed in the conclusion (subsection XX.A(1)). While the Varuṇa clause may be yet another clever device by Brahmins

711 MDh 9.245b. The same idea is expressed in KAŚ 4.13.43cd: *śāstā hi varuṇo rājñāṃ mithyā vyācaratāṃ nṛṣu* (translated as "for Varuṇa is the one who disciplines kings when they act wrongly with respect to men" by Olivelle (2013))

712 Olivelle (2005)

713 See Geanakoplos (1994).

714 Kane (1973, pp. 176–177)

to gain influence and wealth, there is, I suggest, much more behind it. My argument builds on the assumption that the king likes to be reckoned a just king and to enjoy the loyalty of his ministers and subjects. The king's fear of disloyal subjects is covered in section XVI.E.

Now, in his position vis-a-vis his subjects, the king knows best whether he acts justly. How can he, even if well-intended, convince his subjects? Simply saying: "I am a just king" will generally not suffice. In game-theory parlance, this would just be "cheap talk" and hence not credible. The Varuṇa clause may thus help the king to "prove" that he is a good king, a king who would not take property as a fine in order to enrich himself or to fill his depleted treasury. The best way to do this would be a ritual, with Brahmins performing the rites in front of many onlookers. Then, in line with Chwe (2001), common knowledge (section XVIII.C) of the king's righteousness might be produced.

It seems unlikely that Old Indian thinkers would explain the Varuṇa clause in a similar fashion as one might do nowadays. In any case, a society need not always understand a problem in an explicit manner. The Nobel-prize winner (in Economic Sciences, 1974) Friedrich August von Hayek⁷¹⁵ has stressed that useful institutions (such as markets or specific judicial rules) are often neither invented nor even fully understood by us humans. Instead, they spontaneously develop and are kept if they prove useful. In this sense, institutions may embody "intelligent" solutions. I think that the "Varuṇa rule" specified in the Mānava Dharmasāstra is a suitable illustration of such implicit understanding.

G Juridical aside: judicial wagers⁷¹⁶

(1) Two puzzles

As a second judicial aside, I would like to deal with the so-called "judicial wager". It appears in the framework of a judicial proceeding. When objective evidence of satisfactory quality was not available, a premodern Indian judge could then turn to ordeals or judicial wagers (*paṇa*). Basically, a judicial wager amounts to proclaiming: "I am speaking the truth; if found otherwise by the king, I will pay the appropriate fine and, on top of that, make a payment of size w ."

Lariviere (1981) presents the scarce textual evidence. For our present purposes, let this verse from the Yājñavalkya Smṛti suffice:

⁷¹⁵ Hayek (1973, pp. 8–34)

⁷¹⁶ This section borrows freely from Wiese (2023b).

⟨222⟩ *sapaṇās ced vivādaḥ syāt tatra hīnaṃ tu dāpayet |
daṇḍaṃ ca svapaṇaṃ caiva dhanine dhanam eva ca* ||⁷¹⁷

If the dispute should be with a wager, then he should make the defeated party pay the fine and his own wager as well, but only the contested amount to its owner.⁷¹⁸

There is no need to repeat Lariviere's inconclusive findings in detail. I will assume that the wager amount was determined by the king, but that the two parties to the legal conflict could decide between this amount or the amount zero. The king is assumed to be the recipient of a party's wager, but only if he has decided against that party. To summarise, one or both parties might risk a wager. The wager of that party is lost against whom the king pronounces his verdict.

While one might be tempted to think that the king has an incentive to rule against a party with a positive wager, Lariviere (1981, p. 143) does not entertain this possibility (nor the opposite one!) when he writes: "The *paṇa* seems [...] not to be a factor at all in deciding the case [...]" Let us assume such a Lariviere king for a moment. This king would simply ignore the wagers placed by the parties and decide on the evidence available to him. In that case, the parties do not have any incentive to offer a non-zero wager. If the ruling goes in their favour, they do not have to pay the wager. If the ruling goes against them, they lose the case and have to pay the wager as an additional fine. Wagers seem to become a puzzle from the perspective of a Lariviere king. Furthermore, if the king is tempted to rule against a party that has placed a wager, this party doubly loses. First, it increases the possibility of a negative ruling. Second, it might cost one his wager. I call this the incentive puzzle: Why might a party to a judicial conflict ever offer a positive wager?

A second puzzle becomes apparent from Lariviere's article. The verse cited above, as well as two verses cited from the Nārada Smṛti (Lariviere (1981, p. 135)), "point out what should be an important point in the general description of legal procedure since it divides all legal procedure into two categories. This is just the sort of thing which one would expect to find often repeated (or at least alluded to) in other basic *smṛtis*, but these three verses are the only ones that we find in the whole corpus of *dharma-śāstra*. This is unusual. It might not be so unusual if the verses gave a thorough and complete description of the *paṇa*, but that is hardly the case, and the context in which they occur does not shed any further light on the procedure. In both texts, the verses occur early in the discussion of legal procedure and are found with a hodge-podge of more or less unconnected and general statements about legal procedure."⁷¹⁹ I propose to call this the scarce-evidence puzzle.

717 YSm 2.18

718 Lariviere (1981, p. 135)

719 Lariviere (1981, pp. 135–136)

(2) A game-theoretic solution to the incentive puzzle

One can analyse judicial wagers in game-theoretic terms. The king is assumed to act on two motivations. While he enjoys receiving the wager, he is also interested in passing just judgements. After all, if he is not considered a just king, he might risk losing his people's support. This is the subject-matter of the loyalty theory of state.

Now, while the king has some evidence for deciding a case, this evidence will often be far from conclusive. Then, so I like to argue, the wagers may help the king to arrive at a just verdict. Such a verdict might come about if the wager risked by a party indicates that party's confidence in winning the case. This confidence may in turn be based on that party's knowledge of her innocence and of the other party's dishonest dealings. Thus, the king might think that a justified accuser or an innocent defendant will tend to risk a positive wager, while dishonest accusers or defendants might not.

Of course, these speculations need to be borne out by a more rigorous analysis. The methods of doing so are provided by game theory (see subsection XI.D(1)). For the problem at hand, we need to turn to so-called signalling games, where we distinguish between pooling equilibria and separating equilibria.⁷²⁰ In our context, a pooling equilibrium is characterised by both parties either risking or not risking a wager. In contrast, in a separating equilibrium, the two parties behave differently, allowing the king—if so inclined—to infer the truthfulness of the agents from that difference in behaviour. However, given that the parties know the king's incentives, would they be willing to give these differing signals? Why should we not expect an outcome where either no party or both parties risk a wager?

In the model employed by the current author, it turns out that one needs to distinguish between a “just” king and an “unjust” king. For an unjust king, the importance of passing a correct judgement is smaller than the payoff he obtains from a positive wager. Such a king cannot use wagers as signals in a separating equilibrium. The parties will foresee that an unjust king prefers to cash in on the wager rather than deliver a correct verdict. In contrast, the just king's payoff and beliefs are such that at least one party will choose a positive wager.

(3) The scarce-evidence puzzle

If “objective” evidence is not available to a judge, ordeals or wagers may have been used in premodern India. Related to both ordeals and wagers is the nearly 1000-year-old English institution of “trial by battle”, used to settle land disputes. Here, representatives of the opponents fought against each other with clubs, with the winning party obtaining (or keeping) the contested land. An economic analysis is provided by Leeson (2011). The opponents hire champions to fight for them, the outcome mainly depend-

⁷²⁰ A suitable textbook for our purposes is Rasmusen (2009), in particular the signalling chapter.

ing on the money spent to hire a champion (or even several, in order to dry out the champion-market for the opponent). The important similarity between a trial by battle and a trial with a wager lies in the fact that the opponents are obliged to risk money. In the Indian case, the *paṇa* is wagered, and only has to be paid if the king's ruling is adverse. In the English trials by battle, the money spent for champions is lost, regardless of the outcome. Significantly, this English institution did not survive for long.

Judicial wagers have serious drawbacks. Firstly, a cash-strapped party may just not be able to place the wager amount required by the king. Then, separation is not driven by the honesty of the parties, but rather by the depth of their pockets. This fact will surely make a king's subjects suspicious of that institution. Additionally, the subjects will sometimes observe that the king obtains the wager amount. That, also, will not contribute to the king's reputation. The parties may suspect that the king has financial reasons in mind when using the wagers as a basis for his judgement. Doing so—even the suspicion that he might do so—will certainly undermine any confidence in the justice system. Consequently, the king will then be torn between two motives. On the one hand, he takes the positive wager as an indication of truthful behaviour and tends to rule in favour of the only party risking the wager. On the other hand, ruling against the party with the positive wager is financially profitable for the king. For these mixed motives, one may conjecture that a third party, like the Brahmins, rather than the king himself, was the recipient. However, the *nibandha* evidence collected by Lariviere (1981) does not provide any support in this direction.

From the point of view of the current section, the problematic nature of judicial wagers may underlie their actual failure, somewhat similar to the failure of trial by battle. Of course, *dharmaśāstra* authors may not have found good reason to write extensively about an institution long gone extinct. This is probably the solution to the scarce-evidence puzzle.