

AL-BIRUNĪ'S NOTES ON INDIAN FOUR-HANDED CHESS – SOME REMARKS

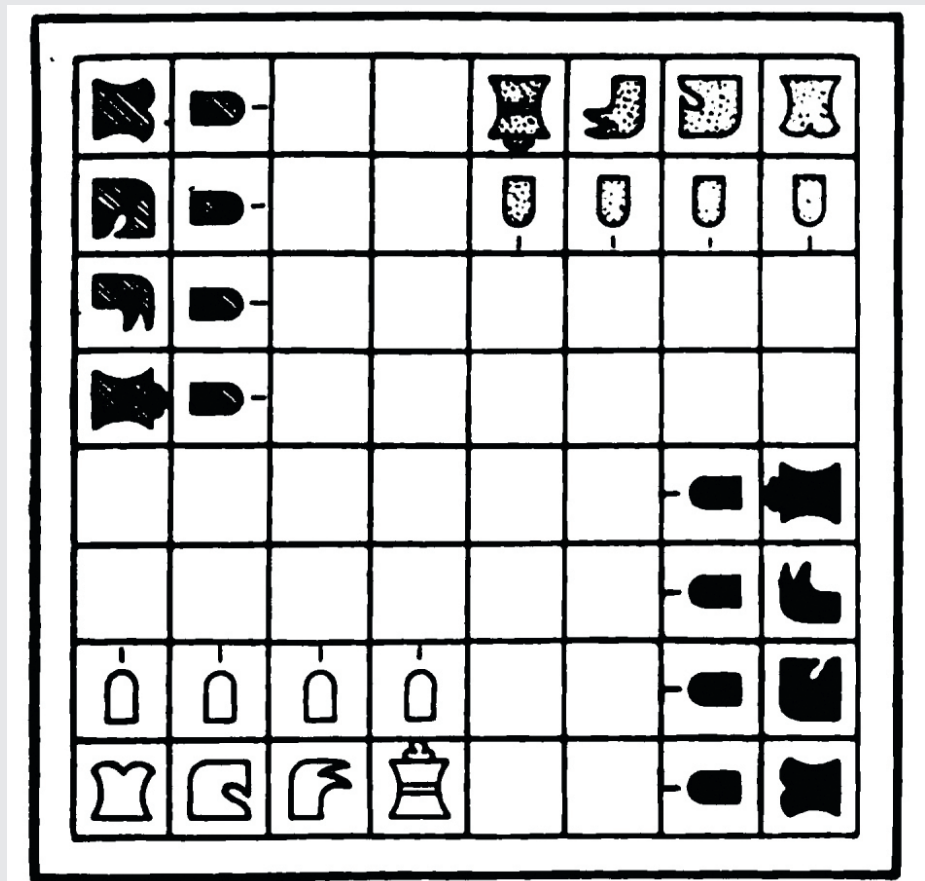
BY MARIA SCHELICH

■ Since Hiram Cox and Duncan Forbes put forth the theory that *catūrāji*, the Indian four-handed dice-chess, should be regarded as “the seed from which our chess was to spring”¹ that game has not ceased to be a kind of bone of contention with chess historians. This is mainly due to the fact that some of its features did not fit in with the almost generally accepted classification of chess as a war game. Unfortunately, when the traditional Indian four-handed dice chess was discovered for Europe by William Jones in 1790, it had already been on the verge of becoming obsolete. Written sources, allowing to reconstruct it are few, and eye-witnesses are already almost completely absent.² When Harold Murray wrote his *History of Chess* in 1913, it was no longer played in the way described by Al Birunī, Śūlapāni, Raghunandana or by the Caturaṅgatarāṅginī. Instead a simpler variant without dice became current.

The main points that prevented chess historians from accepting the older *catūrāji* as a possible ancestor of modern two-handed chess were two: the way a player was allowed to treat his partner (Sanskrit: *mitra*, friend, *ally*) because it seemed to go against the logic and moral of (the European notion of) warfare,³ the most rigid verdict on this point coming from Paul Thieme in 2001,⁴ and secondly, the use of dice.

Al Birunī (ca. 1030 A.D.) wrote:

“They play chess, four persons at a time, with a pair of dice. Their arrangement of the figures on the chess-board is the following:
As this kind of chess is not known to us, I shall explain what I know of it. The four persons playing together sit so as to form a square round the chessboard, and throw the dice in rotation.
.... The name of King applies here to the Firzan (minister).



Four handed chess after Al Birunī

.... The pieces have certain values, according to which the player gets his share of the stakes; for the pieces are taken and pass into the hands of the player. The value of the King is 5, that of the Elephant 4, of the Horse 3, of the Rook 2 and of the Pawn 1. He who takes a king gets 5, for two Kings he gets 10, for three Kings 15, if the winner is no longer in possession of his own king. But if he has still his own King, and takes all three kings, he gets 54 – a number which represents a progression based on general consent and not on the algebraic principle “.

Four handed chess after Al Birunī
Murray also mentions a third point of criticism: the number of the highest stake for the winner:

“Al Beruni was unable to explain the reason for this number and regarded it as a mere convention of the game. But it is the exact value of the other three armies when calculated in accordance with his figures, and this represents the highest score possible, and it may have been retained in that way.”

Although it does not seem so at first sight, all three points mentioned above are not contradictory or illogical at all. It only needs a change of perspective on the game in several points, namely:

1. four-handed dice chess should not be regarded as a simpler (or, worse, “crippled”) form of two-handed chess, but as a variant of the game in its own right,
2. it should be kept in mind that the terminology of the rules for both two- and four-handed chess is that of classical Indian political science (Arthaśāstra, Rājanītiśāstra),
3. the notion of war should not be restricted to fighting on the battleground, i.e. to the military aspect, but should also include contest for supremacy by employing strategies of direct and indirect confrontation.

Thus, to understand the true nature of Indian four-handed chess, it might be helpful to take a closer look on the teachings of classical Indian political science. From the very beginning, this science made it a matter of principle that diplomatic action and weakening an enemy by indirect action as well as by economic and political pressure from inside and outside should always be preferred to open armed conflicts. The dominant strategies in *catūrāji* - namely obstructing the pieces of the rival king instead of capturing them at any cost and the obligation to regain one's ally-king if he was captured by one of the rival-kings - perfectly matches this tendency. Moreover, the peculiar treatment of the ally in the course of playing exactly reflects the political moral taught in the manuals for the guidance of kings and is particularly close to the teachings of Kauṭilya (ca. 3rd-1st cent. B.C., see below), who with his Arthaśāstra laid the foundation to Indian political theory and political science.⁵ In fact, the setup of four-handed dice chess repeats a basic political concept that was first developed in the Arthaśāstra and stayed in continuous use up to modern times. Albrecht Weber, on whom Murray and

van der Linde largely relied for their knowledge of the Indian chess variants, could not yet have known the Arthaśāstra because the text was lost for centuries and rediscovered only in 1906, five years after Weber died. But he could nevertheless have already seen the close connection between four-handed chess and Indian political theory because the Nīṭisāra of Kamaṇḍaka - the most authoritative Sanskrit text on politics from about the 6th cent. onwards - was well known to him, and Kamandaka took all his basic concepts from the Arthaśāstra. It was Heinrich Lüders who first suggested that there might be a link between the four-handed *catūrāji* game and the concepts of Indian political theory. He was followed in 1936 by Manmohan Ghosh, the editor of Śūlapaṇi's Caturangadīpikā⁶ and later by Helmut Rosenfeld, G. Wichmann and Joachim Petzold. Ghosh was perfectly right in calling the arrangement of the four parties on the board “a sort of very primitive type of maṇḍala (sphere of diplomacy)”, symbolizing “a war carried on between two kings (*vijigīṣu* and his *ari*) with their two allies (*mitra* and *ari-mitra*).”⁷ A closer look into the political morals of the old Indian texts on policy and diplomacy clearly suggests that the four-handed chess *catūrāji* exactly mirrors their teachings. Thus, Murray's critical remarks regarding the peculiar nature of the *mitra*, the dice and the number 54, mentioned by Al-Birunī, can be explained best by consulting the oldest text of this genre, the Arthaśāstra of Kauṭilya, on his design of “non-violent” political trade in times of peace and war, elaborately dealt with in Book 6-13.

The *mitra*

From its very beginning in the late 4th century B.C., classical Indian political science has cultivated a rather peculiar notion of war, of political behaviour and of the ideal king. Like in early medieval Europe and due to similar politico-geographical conditions, the ideology of kingship was focussed

on rule (lat. *regnum*, Sanskrit *rājya*) and not on state and its administration (lat. *imperium*, Sanskrit *rāṣṭra*), and quite naturally so, because in ancient and medieval times, the kings in India (as well as those in Europe) had to cope with a vast and relatively sparsely populated territory and a growing number of petty monarchies, oligarchies and chiefdoms eager for expansion and more or less constantly contesting each other's aspiration to sovereignty.⁸ It is well known from inscriptions that, apart from periods of centralization in times of empires (and even then), the territories of Indian kingdoms were oscillating continuously. That is why attaining (*lābha*), preserving (*pālana*) and extending (*vardhana*) his own political power were of prior concern to every king and determined his political activities.

This was the general situation to which Indian political science in its initial phase had to respond. It might not be by chance that tradition ascribes the first theoretical treatise on politics, the *Arthaśāstra* (further: KA), to Kauṭilya. Although it cannot be proved that Kauṭilya was a real historical person, tradition has it that he was the counsellor (*mantrin*) of king Candragupta Maurya. He is said to have been the *spiritus rector* behind the activities of this king to gradually subdue all political powers in Northern India in the aftermath of the unlucky “Indian adventure” of Alexander the Great and to found the first empire on Indian soil around 320 B.C.

The Arthaśāstra is highly interesting not only because of the vast scope of subjects it deals with in a systematic way, but also from the methodological point of view. Kauṭilya combines empirical knowledge with rational analysis and reasoning and shows the preference for classifying things and the obsession with numbers that was so typical for Indian scientific thinking from its very inception.⁹

Kauṭilya develops a theory of kingship and governance which, due to its analytical potential, its radical pragmatism and the nature of its political strategies has often been called Macchiavellian. He creates structural models and topologies with the help of which strategies of political action can be worked out and put into practice.¹⁰ In India, the KA has recently been “re-discovered” for management training and has come to be regarded as a kind of bible for good governance and modern business strategies.

Successful rule, according to Kauṭilya, depends on an economically prospering core-territory (*mūla*, lit. root) and on military power, but first and foremost on the personality of the king, his energy, his intellect and his diplomatic skill to form alliances in order to economically and politically destabilize the kingdoms of potential enemies by direct and indirect action. The theoretical concepts developed for this purpose are three, the first being the concept of *saptāṅgarājya* or seven constituent elements of rule (KA 6.1.1). Of these, six elements are factors which normally define a state:

1. king (*svāmi*, lit. lord),
2. minister (*amātya*),
3. fortified city (*durga*)¹¹
4. land and people (*janapada*),
5. treasure (*kośa*) and
6. army (*daṇḍa*).

Element number seven, the ally (*mitra*), at first sight does not seem to fit in with the other constituents, because it is an external factor, for it denotes the ruler of a similarly organized political organism. This ruler, according to the Arthaśāstra, equally possesses the elements minister, fortified city, land and people, treasure, army and an ally of his own. Yet he is indispensable as a constituent of the *saptāṅgarājya* because, due to the Indian notion of kingship, it is the highest duty of a king to establish order and to protect his subjects by procuring *abhaya* (security, i.e. freedom from fear from within and outside), i.e. by saving them from calamities

caused by nature and men, by thieves, robbers, corruption, raids, attacks, invasions by enemies etc. Permanence of welfare and security is, of course, achieved best by controlling everything and everybody. Kauṭilya therefore not only advises a ruler to instal a net of secret agents throughout his own country and those of his neighbours (or his potential rivals), but to attain overlordship over as many neighbouring kings as possible. The ideal king, according to him, is a world-emperor, an idea which is known from the oldest ritual manual for the consecration of a king, the *Aitareya Brāhmaṇa* (ca. 800 B.C.). Kauṭilya gives it a special political connotation, his ideal king is called *cāturanta*, Lord over the four ends of the world, and, consequently, each king has to be a would-be-conqueror (*vijigīṣu*) striving to attain overlordship among neighbouring kings.

Instrumental to attaining the status of an overlord or “world-emperor” are the second and the third concept mentioned above, the “Circle of Kings” (*rājamaṇḍala*) and the “Wheel of Neighbours” (*sāmantacakra*). The Circle of Kings forms the sphere of political agency of a king outside of his own country and is conceived as a topological model instrumental to calculating the strategic value and the advantages and disadvantages of all kinds of economic, political and military measures and activities. These measures and activities can be implemented by setting the “Wheel of Neighbours” into motion, the king functioning as leader (*netṛ*) or operator of the wheel, its hub.¹² The constituent elements of the *rājamaṇḍala* model are the neighbouring kings together with their six elements of rule, all of them potential rivals in the constant struggle for sovereignty. They have to be evaluated according to their economic and political strength and then classified as potential allies (*mitra*) or potential enemies (*ari*), the criteria being whether the natural interests, the position of a kingdom and the resp. king’s actual strength would make cooperation (*sandhi*) or confrontation (*vigraha*) desirable, possible, necessary or inevitable.¹³

It has to be stressed here that the terms *sandhi* and *vigraha*, although very often translated by “peace” and “war”, are not real equivalents of these European terms. Their slightly different Indian connotation is illustrated best by citing Caraka, the author of the earliest treatise on medicine (1st-2nd cent. A.D) who shares the terminology for logical reasoning with Kauṭilya (with Caraka most probably borrowing from Kauṭilya). Both are generally held to be the earliest logicians in Indian philosophy. Caraka uses the terms *sandhi* and *vigraha* to characterize two kinds of debates (*sambhāṣāvidhi*).¹⁴ The „friendly debate“ (*samdhāyasambhāṣā*) is in fact a discussion where both participants put forth their arguments on a subject, i.e. they cooperate in order to find the proper solution. In an „inimical debate“ (*vigrhasambhāṣā*) the participants are rather rivals, each of them fighting his opponent, trying to disarm him by arguments and thus defeating him. Here each one of the debating persons is primarily concerned with winning the debate, i.e. with his personal success. The elucidation of the subject is of secondary importance. The relation of a king to his *mitra* in the KA resembles the relation of the participants in a “friendly” debate. They are rather partners in a joint enterprise, yet by no means real friends. By cooperating with the king, the ally contributes to solve a problem common to both. The difference between the connotation of “friend” and “enemy” in Caraka and Kauṭilya lies in the objective of their respective undertaking. In case of Kauṭilya it is political, not merely epistemological - diagnostic: it serves to attain overlordship at the cost of every member of the Circle of Kings, be it an enemy or an ally. The ally in this special kind of “friendship” is degraded to a mere instrument of the leader-king. His profit from the joint undertaking (if there is any profit for him at all) will always be a mere temporary one. In the long run, the friendship *per definitionem* has to be sacrificed by the leader king on the altar of leadership in his own “Circle of Kings”.