

Summary in English

The present study deals with the sling as a weapon in the Rigveda and with the *vájra* as a special further development in terms of material and form. It is an attempt to find out about the original nature of this weapon by following a realistic path. The premise is thus anchored in the real world in terms of weapon technology, with a *vájra* idealized by the Vedic poets as an infallible weapon of the gods, in particular of Indra. The thesis advanced here of the nature of the *vájra* as an innovative sling bullet is based on the established, millennia-old omnipresence of the slingshot as an important military weapon in the entire Old World from the Mediterranean and Middle Eastern civilizations to the Indus culture, as well as on evidence in the Rigveda for stones thrown by means of a sling. In contrast, a (copper) mace has firmly established itself as the equivalent of a *vájra* in recent scholarship without a sound basis. The pragmatic question of the actual suitability of a mace with primitive clubbing qualities and with only a few metres of staggering flight as an accurate long-range weapon has not been raised, or if it has, then only in an inapt manner in terms of weapon technology. Under the premise of a long-range military weapon, the suitability for precise and lethal use is the central criterion for identifying a *vájra*. Superior weapon technologies generally gain acceptance everywhere and are quickly adopted by the defeated. One would thus have expected that the peoples of the regions through which the Indo-Aryans wandered and through which they had to fight their way would have appropriated the highly effective *vájra* of these Vedic tribes themselves if possible. Such an assumption, however, is not supported by the evidence from outside India. The question therefore suggests itself whether a *vájra* might not have been a type of weapon that was already in widespread use in the cultural areas of the Middle East and the ancient world, as abundantly testified to by written and archaeological evidence. In such a case, a *vájra* would not have been the unique Vedic weapon it is generally taken to be, known only to Vedic tribes and reserved for them alone, but rather the well-tried and established long-distance weapon of war as was the hand sling. Precisely this one, omnipresent throughout antiquity, seems conspicuously absent from Vedic culture. So one is led to believe that the real reason for this seeming absence is not absence in terms of non-existence, but absence in terms of absence of recognition.

Chapter II summarises the philological and archaeological findings for the existence of the slingshot in cultural areas outside India, especially in classical antiquity,

the Middle Eastern world, in Iran, Tibet and the Indus civilization, and presents in detail the characteristics of this weapon, the bullets, their manufacture and use.

Chapter III examines the use of the slingshot with stone bullets in the Rigveda and compares their characteristics with those of the neighbouring cultures.

Chapter IV deals with the attributes of *vájras* in the Rigveda, especially with regard to handling, sound, impact and the metal of which they could be made. As a result of the comparison with the hand slings of the Old World and sling stones mentioned in the Rigveda, it becomes clear that these features also apply to *vájras*. In the case of a *vájra* made of metal, *áyas* points to lead ore, and *āyasá vájra* correspondingly to cast lead projectiles, as everywhere else in use, in particular in the ancient Greek and Roman realms.

Maintaining a material view of Rigvedic culture in the context of weaponry, the word *vájra* as a real weapon appears to have been used for extremely effective sling projectiles specially crafted from lead. The apparently innovative character so admired by the Rigvedic poets may have lain precisely in this. Occasionally, *vájra* seems to refer more generally to the hand sling as a whole, encompassing the sling and the projectile as its two components. A *vájra* shares the following characteristics with Rigvedic sling bullets made of stone known as *ádri*, *aśáni*, *ásman* and *vadhá*. These bullets are or can be: used for slinging (*sāyaka*), optionally made of metal (*āyasá*), specially manufactured ($\sqrt{takṣ}$), sharp-edged (*tigma*) and jagged (*sahásrabhṛṣṭi*) by whetting ($\sqrt{sā}$), carried along ($\sqrt{bhṛ}$), raised (in the sling pouch) threateningly with both arms (*úd-√yam*) before the sling is whirled ($\sqrt{vṛt}$). When thrown they fly (\sqrt{as} , \sqrt{pat}) with a buzzing sound (*svaryā*) and descend in a ballistically high curve from above down to earth.