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A Stone of Contention: Afterthoughts on the Rigvedic *vájra* – and Why a Mace is not an Option

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**A Stone of Contention.
Afterthoughts on the Rigvedic *vájra* –
and Why a Mace is not an Option.**

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[The present study deals with the widely held view that the *vájra* was conceived by the Rigvedic poets as a club or mace – the translation terminology of the target languages is not uniform. This is largely due to a change of mind on the part of Karl Friedrich Geldner, who revised his earlier view of the *vájra* as a wedge (“Keil”, 1907–1909) to the translation “club” (“Keule”, 1929) without giving any reasons. The great influence of his authoritative translation, only published in 1951, is demonstrated by the fact that, with very few exceptions, his later view of the *vájra* as a club was unquestioningly adopted by most later Rigvedic translators and interpreters, even though no dictionary gives such a meaning for *vájra*. This continuous practice has strengthened the unwavering belief in its correctness to the extent that it has spread as a firm conviction to all areas of research in Indology and related disciplines. In defence of my thesis that the criteria for a mace are not answered by what the Rigveda says about the *vájra*, and that a *vájra* should therefore have been some other kind of weapon, such as a biface-like sling projectile made of stone or lead, the history and rationale of the mace theory is examined and the plausibility of both assumptions (“stone” and “club”) discussed and compared.]

The removal of the sling as a weapon from the Rigvedic arsenal

The year 2014 marks a caesura in the universal history of military affairs and weapons technology that has apparently gone unnoticed: in that year, Rigvedic India has disappeared tacitly from the group of pre-modern cultures that had known the sling as a weapon and had used it intensively for both military and civilian purposes, from the Mediterranean region through the Middle East and Ancient Iran as far as Central and East Asia.¹ The process of a translational elimination of the sling from the armoury of the Rigveda, which had been dragging on over decades,² was completed in this year. It becomes visible in the latest, complete English translation of the Rigveda (JBTr), from which all references to the existence of a sling, or the concept thereof, as found in earlier translations, dictionaries and accounts of Vedic material culture,³ have been

¹ *Vájra*, pp. 27–38.

² *Vájra*, pp. 39–46.

³ So, in addition to the major Sanskrit dictionaries – in particular WRV under entries *ádri*, *ásan*, *ásáni*, \sqrt{k} *ṣip*, *gó*, \sqrt{n} *ah*, \sqrt{p} *at*, *barhánā*, \sqrt{m} *uc*, *mení*, *svaryā* –, also Hans Reichelt (1913, pp. 44f.), Walter Neißer (NRV, p. 133 s.v. *ásáni*; p. 134 s.v. *ásman*), Manfred Mayrhofer (EWA (1), p. 65 s.v. *ádri*; p. 137 s.v. *ásman*, p. 145 s.v. *ástar* ‘Schleuderer’) and Thomas Krisch (*Rivelex* (1), pp. 596f. s.v. *ásman*; p. 598 s.v. *ásmahanman*), cp. also *Vájra*, p. 23, note 24. See, moreover, “[d]e fait, le RV mentionne divers projectiles mortels, désignés par des noms qui signifient «pierre, roc» : *ádri*-, *ásáni*-, *ásman*-, et même *párvata*-. Indra est lui-même qualifié par l’épithète *ádri-vant*- [...] «armé de la pierre». Un tel projectile pouvait être lancé à mains nues, mais de façon plus efficace au moyen d’une fronde.” (Pinault 2022, p. 237). On *ádri-vant* cp. also Geldner (1907, p. 6): “den Schleuderstein, den Keil besitzend” (“possessing the sling stone, the wedge”), Witzel/Gotō (WGTr V.35.5): “du mit den Schleudersteinen” (“you with the sling stones”) and notes 46f. and 59 below.

[1]

consistently removed.⁴ No rationale or reference to recent research is offered to explain this move.⁵ Not only has the disappearance⁶ of the sling as a weapon not been explained anywhere, but it is also inexplicable as far as global military history is concerned. All the more so since the sling stone is definitely present in the Indus culture as well as in Avestan and post-Vedic sources in India. As a result, if the translation is to be used as a reference work for such matters, as is the case for researchers in the neighbouring disciplines of Asia and Africa, it would have us believe that the only place in universal history where the sling was absent was the Vedic civilisation on the Indian subcontinent. Another obvious consequence is that Indra's famous arm could not have been a sling stone if the Rigveda shows no trace of the sling as a weapon. It would be unthinkable to assume that it was, because it could hardly be something that did not exist. And so it must seem absurd to anyone who shares this view to pursue the question of whether it was *conceivable* that the word *vájra* in the Rigveda could have had anything to do with the sling as a weapon.

In my book on the *vájra*, henceforth *Vájra*, I had questioned the plausibility of the increasingly popularised mace and examined the characteristics of the largely forgotten sling stone to see which of the two types of weapon could claim a higher degree of consistency. In doing so, it was necessary to include what modern research generally tends to ignore as obsolete, namely historical approaches to Rigvedic notions by Vedicists even before Geldner's time. Their divergent views become visible only when earlier approaches are fully documented. Full documentation makes it possible to know where one stands. No one need believe that the apogee of Vedic scholarship was reached with Alfred Ludwig in the 19th century to evaluate afresh the pre-Geldnerian approaches to the *vájra*, for the enigma of its true nature remains. We must however be careful not to be deceived into believing that Geldner, who can undoubtedly be credited with the most authoritative translation of the Rigveda in the twentieth century, could not have made a mistake in changing his earlier conception of *vájra* as "Keil" ("wedge" or "bolt") to the translation "Keule" ("club" or "mace", etc.). We should rely not so much on the confidence that a scholar *inspires* in us, but on well-founded arguments and philological rigour. Such was the unquestioning faith in Geldner's later approach to the meaning of *vájra* that this was willingly sacrificed on the altar of trust. After all, *errare humanum est* – but *in errore perseverare diabolicum*. As

⁴ Where even Geldner (1951) gives the meaning "Schleuderstein" ("sling stone") for *ásman* and *asáni*, and "Schleuderwaffe" ("slingshot") for *tújya*, JBTr render these words as indeterminate "stones" (*ásman*), unspecified "missiles" (*asáni*), and as "(the weapons) to be brandished" (*tújya*) (cf. Geldner 1951 on RV II.30.4f.; ["sling stone" LTr]; IV.16.17; 22.1 ["Schleuderstein" LTr; "sling stone" LTr]; VI.6.5 ["Schleuderstein" LTr; "fronde" EVP XIII (1964), p. 41]; VII.104.4; 19; 25 ["scharfer Stein" LTr]; VIII.27.18; X.138.5).

⁵ The present assessment is based on JBTr (2014) and the JB(C) files (accessed in December 2023). See also the detailed analysis of Malzahn (2016, pp. 191ff.). More recently, however, Jamison (2023, p. 334) seems to have agreed that "the Indo-Iranian peoples" had used the sling as a weapon "in the shape of the "stone" (Vedic *asáni*-, some occurrences of *ásman*-)."

⁶ See above, notes 3ff. and cp. in addition Ludwig's translation, where the meaning of "sling(ing) stone(s)," (LTr I.121.9; 133.4; 172.2; II.30.5; VI.6.5; VII.104.19; X.89.12; LTr I.51.3; 121.9; 165.4; II.30.4; 38.11; IV.17.13) and "stone slinger/armed with a sling stone" (LTr I.133.2; IV.22.1; VI.46.2; VIII.46.2; 86.9 and LTr I.10.7; 11.5; 80.7; 14; 121.10; III.41.1; IV.6.2; 22.1; 32.5; 36.3; V.39.1; 3; 54.3) are given.

I have tried to show, and as we shall soon see, this time in greater detail, that is exactly what had happened, namely insisting on an opinion that has not been verified, even though it may turn out to be wrong. And while the mace has become untouchable in the sense of sacrosanct, those who deny its untouchability soon find themselves untouchable in a very different sense.

The study of weapon technology is part of the study of the material culture of the Rigveda. However, if some reject the *vájra* as a real weapon from the outset and interpret it as a miraculous arm, there is no longer any need to deal with its material aspect. If we assume, too, that this imaginary weapon had been designed as a mace, there is also no further need to address the question of the contradictory nature of its functions, as I had programmatically posed in my investigation:

“The premise of the present study is therefore that the idealisation of the *vájra* as an infallible weapon of the gods is *anchored in the real world of weaponry*. If this premise is untenable, the entire edifice built upon it will naturally fail.”⁷

Reviews that apply criteria other than those of material culture to such an investigation miss the point. If they were to do so nonetheless, they would first have to disprove the premise that the *vájra* could indeed have been a real weapon and demonstrate conclusively that it belongs solely to the world of myth and poetic fantasy. As far as I have been able to ascertain, this is not the case.

As a real weapon, however, the *vájra* was subject to the physical laws of the real world. Therefore, I had examined all text passages that contain statements on material, form, function and handling that were relevant to the identification of a *vájra*.⁸ From the perspective of weapons technology and military history a potential reinterpretation of the *vájra* as a sling weapon⁹ is more reasonable than the assumption of a fantasy mace with regard to discourse analysis, mythology, or etymology.¹⁰

⁷ “Die Prämisse für die vorliegende Untersuchung ist also die eines waffentechnologisch *in der realen Welt verankerten Ausgangspunkts* für die Idealisierung des *vájra* als einer unfehlbaren Götterwaffe. Trifft diese Prämisse nicht zu, scheitert mit ihr natürlich auch das gesamte darauf errichtete Gebäude.” Moreover: “Im ungünstigsten Fall wäre das hier erzielte Resultat bloß anders falsch als schon die vorangegangenen Deutungsversuche, im besten Fall aber träte eine weitere Deutungsalternative zu den bestehenden hinzu, der man nähertreten oder die man begründet wieder verwerfen kann.” (Vájra, pp. 18f.).

⁸ “Die relevantesten der von der Forschung dafür herangezogenen Zitate werden hier erneut aufgegriffen. Arbeitshypothetisch diesmal aber so, daß sie einer Interpretation zugunsten eines Schleudergeschosses standhalten müssen.” (Vájra, p. 18).

⁹ The Vedic scholars of the period after Geldner evidently had no desire to consider the obvious question of whether the *vájra* could hypothetically have been a sling weapon and to pursue this further, cp. Vájra, p. 86.

¹⁰ “[...] when discussing the etymology of *vájra* [...] it is impossible to establish an etymology of a word without an accurate analysis of its usage in the oldest texts available. It cannot be done by relying on the interpretations of sociologists, comparative mythologists, and historians of religion and taking its significance within the framework of their conjectures as a point of departure.” (Thieme 1958, p. 139 [= Kl. Schr. 765]). Rau (1976, p. 358 [= Kl. Schr. 860]) advised the etymologists to be even more cautious in their speculations (about the *vájra*) than they would have to be in any case (“Das sollte Etymologen noch vorsichtiger machen als ihnen bei ihren Spekulationen ohnehin ansteht”). Cp. note 197 below.

How the vājra became a club

Since Geldner's translation of the complete Rigveda into German, the *vājra* has been accepted as a club. However, there are weighty factual arguments against this, which were put forward as early as the 1970s. There has been a startling disregard for these arguments since then. On the other hand, the correctness of the mace thesis has never been proven, nor were the internal contradictions associated with it ever resolved convincingly. In the light of the cumulative evidence for all the characteristics and properties attributed to the *vājra* in the Rigveda, the idea of examining it from the point of view of a real weapon, specifically as a hurled projectile or as a term for a slinging weapon in its own right, appears as a plausible alternative to the popular, but never substantiated, theory of the (copper, stone or wooden) mace.¹¹ It is understandable that it is difficult to accept that fundamentals of one's work should be questioned or even reassessed when one has positioned oneself so firmly and even made the mace theory the premise of one's publications.¹² One should not underestimate such subliminal psychological factors in contentious issues. If critics find themselves in exactly this situation of having been committed to the position that the *vājra* was a mace, and only a mace, it does not make things any easier. Since the latter half of the 20th century, generations of Vedicists have grown up with the ubiquitous translation "mace" or equivalents such as club, bludgeon, or cudgel¹³ for *vājra*, have internalised it, and have passed it on. It is not easy to eradicate all this. Moreover, proponents of the mace theory seem to use the terms bludgeon, club, cudgel, and mace rather indiscriminately. At any rate, I do not recall having seen any definitional attempt at demarcating the terminology in question. Categorical differences are therefore apparently of little importance, and so I follow their practice of vagueness in this paper, since I am not a supporter of the mace theory anyway.

Counterarguments ignored

The cogent arguments against a mace, as put forward by Das Gupta and Wilhelm Rau in the first place, are, as said above, consistently ignored. Mention or discussion of their theses, however, is not tantamount to an endorsement of their idiosyncratic reinterpretations of the *vājra*. So why not consider their objections? Falk and Schlerath presented well-founded arguments against the models of the *vājra* as developed by Das Gupta and Rau, and Falk even succeeded in showing experimentally that Das Gupta's *vājra* did not exhibit the expected flight characteristics. However, refuting their harpoon models, on the one hand, and anthropomorphic figures from the Copper Hoards from the Gangetic basin, on the other, is not the same as conclusively proving the *vājra*'s character as a wooden or copper mace as advocated by Schlerath and taken for granted by subsequent scholarship. Neither opponent could be persuaded by the other. Rau stuck to his harpoon theory,¹⁴ Schlerath to his Hercules club,¹⁵ while

¹¹ Cp. Vājra, p. 85.

¹² See, e.g., 'I Boldly Took the Mace (*vājra*) for Might' (Whitaker 2015).

¹³ Thus Thieme 1958, p. 139 [= Kl. Schr. 765].

¹⁴ Rau 1983, pp. 41; 48 [Kl. Schr. 938; 945].

¹⁵ Schlerath 1997, p. 826.

Falk, after his refutation of Das Gupta's anthropomorphic figures, saw the so-called bar-celts as the only remaining possibility for regarding an object from the Copper Hoard implements as a "continuation of the tradition of the R̥gvedic *vájra*".¹⁶ There are, therefore, several concepts of the *vájra*, but the question of its true nature is clearly left open. And therefore, the substantiated arguments put forward by Das Gupta and Rau against a club cannot simply be passed over, as if their reasonable doubts had never been raised.

The sling stone as an alternative interpretation

In my opinion the sling stone deserves a prominent place alongside the existing models. It is an explanatory alternative which has been developed with due regard to the current state of research as outlined above and as detailed in my treatise.¹⁷ Scholars who *know* in advance that the *vájra* can only be a bludgeon, and who make this knowledge a presupposition like an article of faith, without any serious consideration of previous research, had not been taken into account. It would have been pointless to enumerate each and every of the innumerable instances in which *vájra* is rendered almost mechanically as club or mace.¹⁸

Whitaker's recommendation of his own studies is exemplary in this regard. The first (2011) has a motto which reads:

"It's not about whose facts are true. It's about whose fabrication of history and culture has the most consensus."¹⁹

What kind of expectations can one have for historically sound results when an investigation is carried out under such a motto? Moreover, by saying "has," Whitaker makes it clear that his is a perpetual present, for he fails to accept that the consensus regarding the *vájra* has varied throughout history. What consensus at what point in time might he have had in mind? The consensus was lightning, like that of Zeus, for a while (in the 19th century).²⁰ It combined for a while with the idea of a bolt or a wedge in the sense of a stone projectile (from the late 19th to the early 20th centuries), and thereupon it was transformed into a club (about the middle of the 20th century). Towards the end of the 20th century, the latter "consensus" began to be challenged. Since then, there have been contending views. Whitaker did not take any of them into account, as the bibliography in his book and his limited discussion of the true nature of the *vájra* amply demonstrate. For him, the *vájra* as "the mace of Indra" stands firm and undisputed. In the one and only case in which he acknowledges the existence of the sling as a weapon in the R̥gveda (2015), this does not go beyond a vague enumeration:

"in terms of Bronze Age weaponry, bows, spears, slings, clubs, sharpened maces, and knives are mentioned in the R̥gveda."²¹

¹⁶ Falk 1994, p. 205, no. 3; see also pp. 200–202 and Brockington's (1978) rejection of Das Gupta's anthropomorphic figures from the Gangetic basin as remains of actual *vájras*.

¹⁷ *Vájra* pp. 17–25.

¹⁸ Since no Sanskrit dictionary, not even Mayrhofer's EWA, gives a meaning such as "mace" for *vájra*, one would have expected a note to that effect, along with a rationale for any deviation.

¹⁹ Whitaker 2011, p. [V].

²⁰ On the Keraunos of Zeus and the related interpretatio graeca see *Vájra*, pp. 96f.

²¹ Whitaker 2015, p. 81, n. 8.

One would like to know what the Vedic term for ‘sling’ was that Whitaker had in mind here, for elsewhere he demands a detailed description of it to make it credible if the *vájra* were one,²² and also whether he had anything to say about the characteristics of Vedic sling stones, particularly in comparison with the characteristics of a *vájra*. Apparently he does not, for he seems firmly convinced from the outset that a *vájra* is a kind of bludgeon:

“[in the Rigveda], the *vájra* is a sharp, multipronged bludgeoning weapon; a mace, cudgel, or hammer of some kind, perhaps made of stone, copper, or bronze, which the warrior god Indra uses to club his enemies to death.”²³

Although Whitaker refers to “debates over the nature and identity of the *vájra*,”²⁴ he evidently had not really taken note of the content of all these earlier debates. Otherwise he and others, who hold the same view, would have been aware that “the nature and identity” of a *vájra* had never been finally resolved. The debate has simply fallen silent. The mere cessation of discussion, however, does not turn the *vájra* into a cudgel, so that one might be able to say with Whitaker’s apodictic certainty that the *vájra* “is a bludgeon.” Theoretically, it *could have been* one, but it also *could have been* a completely different weapon. Until the identity of the *vájra* is firmly established, the idea of a mace is at best one hypothesis among others. Whitaker’s studies are not an inquiry into the nature of the *vájra*, but the premise thereof. A *petitio principii* will not contribute much to the study of historical weaponry in ancient India. It is moreover doubtful whether a theoretical approach based primarily on discourse analysis, cognitive linguistics and ritual theory is the ideal choice for the study of material culture in history.²⁵ The answer to such questions can only be given in terms of quality and not in terms of quantity.²⁶ Whitaker would have been spared the trouble of counting:

“a limited number of cases in which the *vájra* is described as flying [...], hurled [...],²⁷ or compared with a missile [...]. [...] the total number of times the *vájra*

²² Whitaker 2015, pp. 962–964; see below, note 249.

²³ Whitaker 2015, p. 53.

²⁴ “For debates over the nature and identity of the *vájra*, see Apte (1956); Das Gupta (1975); Falk (1994); Rau (1974, 1976); and Schlerath (1975, 1977).” (Whitaker 2015, p. 81, n. 8).

²⁵ “I will approach the *Rgveda* in a theoretically hybrid manner, particularly in terms of discourse analysis, cognitive linguistics, and ritual theory.” (Whitaker 2015: 59).

²⁶ “[...] Slaje’s study [...] fails to explore the numerous appearances of the term *vájra* in any real critical depth. For example, no data is provided on the number of appearances of the term and its derivatives in the *Rgveda*. Without this information, the reader is led to believe that all cases have been examined systematically. I would have expected this information from the outset and a thorough investigation of most of these cases to support any reconsideration of the identity of such an important term in Indian history.” (Whitaker 2023, p. 963).

²⁷ The commentary on JBTr IV.22.2 surprisingly contradicts this view. With reference to the *vájra* as being hurled (*ásyan*) it states: “[...] the *vajra* is never thrown [...]” JB(C). In contrast, Rau (1976, p. 43 [Kl. Schr. 827]) states: “without any doubt a thrown weapon” (“[...] so haben wir es ohne jeden Zweifel mit einer Wurfwaffe zu tun”). Cp. also Hertel 1927, p. 216: “[...] Indra’s *vajra* is always hurled.” (“[...] Indras *vajra* wird immer geschleudert.”). In the Yajurveda, *prababhra* (“slinger”) is always used in combination with *vájra*: “[...] Kāṭh *prababhra*- = MS *pravabhra*- ‘Schleuderer’, immer mit *vájra*-” (EWA (2), p. 249 s.v. *bhar*). Pinault 2022, p. 236f.: “Il est indéniable que le *vájra*- n’était pas seulement asséné, et employé pour frapper l’adversaire dans le combat rapproché. C’était aussi (ou principalement) une arme de jet (*sāyaka*-) [...]. D’après le RV, les pierres destinées à frapper l’adversaire étaient lancées (*as*-, *kṣip*-) avec un mouvement tournant ou tournoyant (*vart*-/*vṛt*-, éventuellement avec préverbe).” Cp. also note 3 and [6]

is said to be missile-like is ten, which is less than four percent of the total appearances of the term in the *R̥gveda*. I would expect far more if the *vájra* was exclusively a missile.”²⁸

if he had been familiar with the state of research. Because, of course, his demands have all been met long ago as a first step in this matter.²⁹ Our predecessors have selected all the relevant passages from the mass of mere mentions of the word *vájra*, which are irrelevant for determining the type of weapon because they do not contain sufficient information about material, shape, handling, impact, etc. The discussion has since focused on the interpretation of those passages that were identified as significant and from which relevant information can be gleaned. And I can say with certainty that none of these passages, which have been the subject of so much controversy, have been ignored in my study.³⁰ The belief that the percentage of qualitatively informative passages is decisive in determining the *vájra* is a somewhat adventurous approach. If you are looking for the characteristics of an elephant in a text, and the text mentions elephants a hundred times, but only four per cent describe it as having a trunk, four legs and two tusks, does this lead to the conclusion that these characteristics do not apply with any certainty to 96 per cent of the remaining elephants because they were not explicitly specified? The answer is obvious. Especially when it comes to the history of technology, it is not the number of references to a technical detail that is important, but the fact that it is mentioned at all. And for this reason it is the qualitative data that are pivotal, rather than statistical quantities.

My introductory survey of the history of research explicitly pointed out that the “throwing or slinging of stones in the Rigveda had not escaped Vedic scholarship [...],”

although this had been forgotten since Geldner’s pioneering translation, when he chose the translation “club” (“Keule”) for *vájra*.³¹ The sling has been ignored ever since, giving the wrong impression that the weapon did not even exist in the Rigveda:

“[...] the first thing we notice is that one of the oldest long-range weapons, ubiquitous throughout the ancient world, is absent or at best marginal in Vedic culture, *at least according to the state of Vedic scholarship*. This *apparently missing* precision weapon in the Veda was the slingshot.”³²

The present state of Vedic scholarship was presented as follows:

“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

VIII.100.7d: *vájram índro apīpatat* (WRV: “Aor *apīpatat*: (1) fliegen machen, zum Fluge erregen [A.]; (2) schleudern [A.]” = “to let fly, to hurl, throw”).

²⁸ Whitaker 2023, p. 964.

²⁹ For earlier recordings see WRV p. 1197 s.v. *vájra*; Nobel 1957, p. 60; VWC pp. 2726–2729; Rau 1973, p. 37 [Kl. Schr. 821], note 37; Rau 1976, p. 357 [Kl. Schr. 869]; Schlerath 1975a, p. 539 [Kl. Schr.]; Das Gupta 1975, pp. 109f.; Pinault 2022, p. 235; Lubotsky 2023, s.v. *vájra*.

³⁰ *Vájra*, p. 18.

³¹ *Vájra*, pp. 23f. See also below, p. 11.

³² “[...] fällt zunächst ins Auge, daß eine der ältesten, in der gesamten Alten Welt omnipräsenten Fernwaffen in der vedischen Kultur demgegenüber gar nicht oder allenfalls nur peripher vorzukommen scheint, zumindest wenn man den realienkundlichen Forschungsstand der Vedistik zum Maßstab nimmt. Diese ausgerechnet im Veda scheinbar fehlende Präzisionswaffe war die Handschleuder” (*Vájra*, p. 24).

Middle East and the ancient world, [...]. In such a case, a *vájra* would not have been the unique Vedic weapon it is generally taken to be, [...], but rather the well-trying 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.”³³

Therefore, the argument that

“[f]rom the outset, Slaje recognizes that there is no direct evidence archeologically or textually for slings in the Vedic period, yet he argues that this weapon is the real contender for the *vájra* due to the overwhelming use of slings in other ancient cultures outside of South Asia,”³⁴

misses the point.³⁵ For what is said there on this subject is the following:

“The [...] thesis put forward here of the nature of the *vájra* as a sling projectile is based on the established, millennia-old omnipresence of the sling weapon in the ancient Near East and throughout the ancient world, as well as on the *demonstrable presence of slung stones in the Rigveda*.”³⁶

Methodically, I had approached the issue in four steps: state of research – working hypothesis – philological and empirical evidence – degree of plausibility.

Based on the state of research, which at least agrees on this, my point of departure was the acceptance of the *vájra* as a real weapon, not as a multifunctional mythical wonder weapon. A clear distinction between these two categories is of fundamental importance. Since none of the previous assumptions had led to a lasting consensus, the attempt at a new interpretation had to begin with a ranged weapon that was known and used in the cultural-geographical environment of the Rigveda at the time. From a historical and technical point of view, apart from spear and arrow the sling is the only ranged weapon known to have been universally used in warfare in the pre-firearms era. Therefore, the evidence for the use of the slingshot in the Rigveda was first examined. The philological evidence for sling stones was, as expected, positive and is consistent with our dictionaries, empirical findings from classical and oriental archaeology, and previous studies on the use of the sling as a powerful weapon in invariably all cultures of the ancient world.³⁷ On the basis of these facts, a working hypothesis

³³ *Vájra*, p. 103.

³⁴ Whitaker 2023, p. 962.

³⁵ The argument misses the point to such an extent that whoever makes it must have either completely misunderstood the German wording of my introduction or, if not, distorted its meaning. For further instances where this presumption is also likely to apply, see below p. 10, note 45; pp. 36ff.

³⁶ “Die [...] hier vertretene These von der Natur des *vájra* als eines Schleudergeschosses gründet sich auf die gesicherte, jahrtausendealte Omnipräsenz der Schleuderwaffe im Alten Orient und in der gesamten Alten Welt sowie auf die demonstrierbare Gegenwart geschleuderter Steine auch im Rigveda” (*Vájra*, p. 18).

³⁷ “It was national special forces such as Cretan archers, Balearic slingers, etc. that far surpassed and eventually replaced the inferior Italic light infantry and cavalry in terms of quality” (“Es waren nationale Spezialwaffengattungen wie kretensische Bogenschützen, balearische Schleuderer etc., die die minderwertige leichte, italische Infanterie und Kavallerie an Qualität weit übertrafen und schließlich ersetzten.” DKP, s.v. Auxilia).

was formed that the *vájra* could have been a sling projectile that was specially crafted for this purpose. As a working hypothesis, it had to be tested and proven from various angles. Firstly, we have reliable historical expertise on the massive use of slingshots in military formations and individual combat in the past. Experimental archaeology has confirmed the enormous impact force, comparable to that of firearms, and the long range, greater even than that of the bow, documented in ancient and oriental sources. Last but not least, the sling, used by military units and snipers, was also widely employed as a siege weapon, a fact that places it in the same category as Indra, who “breaks down fortresses” (*pūrbhíd*). One need not take this literally to mean that ordinary sling bullets would breach the walls of a castle, any more than an ordinary club would breach such a wall. It may well be that fortifications have been captured with the help of sling attacks – with Indra imagined to be at the head of the charge. The efficiency of these projectiles was so great that it even led to adaptations in the architecture of fortifications.³⁸ We can of course postulate that Indra demolished castles with an enormously oversized club. The same fantastic supposition could however also be applied to stones as huge as catapult projectiles. These were indeed used to demolish castle walls, but hardly as early as the time of the Rigveda.

Let it be noted, since few scholars seem to be aware of it, that projectiles were normally not thrown with the arm, but were slung with a sling. The first is a throw, the second a shot. In terms of speed and impact, this is roughly the same difference as throwing an arrow by hand or shooting one with a bow, although a fist-sized stone, whether thrown at close range or struck, can have a devastating effect. Sling projectiles were made of stone, fired clay or lead of different sizes, characteristics and shapes to meet the needs of the specific mission. Depending on the purpose for which they were used, they could be as large as a fist, with sharpened edges, etc.³⁹ With this in mind, the *vájra* in the Rigveda was put to the test by assuming the hypothesis of a specially crafted heavy projectile,⁴⁰ which was launched by slinging. The sling assumption was then tested against the key passages in the Rigveda to see if it contradicted physical laws less than the assumption of a club. No new semantic approaches were needed for the terminology in the Rigveda used to describe, craft and handle a sling stone, as the meanings that are lexicalised in the dictionaries are semantically broad enough to yield contextually meaningful results. These results were then contrasted with the “mace” hypothesis as attributed to *vájra* by a majority of translators, a meaning which, we must repeat, is not known to any dictionary. Anyone using the concept of the mace as a real weapon is invited to substantiate their choice in a like manner. In doing so they should bear in mind that physical laws govern the world of things, perhaps less so the world of words. The plausibility criteria applied in my *Vájra* treatise were on the one hand the absence of internal contradictions. On the other hand, if our modern translations are to be believed, the *vájra* as a bludgeon was used at the same time for striking, for being hurled over long distances and for digging. A blunt weapon for close combat, it could also be sharpened like a knife and would have moved through

³⁸ See below, note 75.

³⁹ See *Vájra*, pp. 28–33. It is not, however, a case of arbitrarily compiling attributes that fit “almost any weapon” (Jamison 2023, p. 334), but rather one of comparing these very attributes with the handling and characteristics of a *vájra* as they are characteristic of sling stones (*Vájra*, pp. 36f.).

⁴⁰ On the size, weight and nature of sling projectiles, see *Vájra*, pp. 28–36.

the air. It had a line, could bellow and multiply – to name but a few such implausibilities.

As summarised by Das Gupta:

“The translation of *vájra* as “club” [...] in the more recent Vedological literature cannot be sustained either. The *vájra* obviously has [...] a thick/broad metal thrusting side [...], is hurled like a throwing weapon and occasionally also used as a “striking weapon” [...], but a “jagged” weapon [...], which is sharpened [...] and used for cutting and chopping among other things [...], can hardly be described as a “club”. After a critical examination of the material, W. Rau also comes to the conclusion that this approach to the meaning is not tenable [...].”⁴¹

So also Wilhelm Rau:

“In any case, a throwing club is not sharpened, bears no resemblance to an arrow, has no string and can hardly be thrown with two hands.”⁴²

However, assuming a long-range weapon, its suitability for accurate and lethal use must be the central criterion for identifying a *vájra*. Among other factors, gravity, weight, mass, ballistics, aerodynamics, etc., affect its handling and performance. These criteria cannot be ignored. For, the *vájra* is

“[...] without any doubt a thrown weapon: explicitly described as such, the *vajra* is hurled, remarkably with the help of both hands: [...] The *vajra* is held with the left hand and hurled with the right. [...] It is hurled with both hands from the level of the shoulders.”⁴³

Rau’s analysis corresponds remarkably to the technique of slinging stones, where the projectile is held in the horizontally raised sling with one hand, and the sling is then made to rotate with the other.⁴⁴

In addition, there are still unanswered metallurgical questions about the nature of the *vájra*’s ore. Considering these purely factual aspects, my comparison of the two weapons seemed to favour a powerful projectile over a club. A large number of apparent contradictions can be resolved by considering a sling projectile: the sling is held above the head with both hands; when one end is released after it has been swung to launch the projectile, it cracks loudly like the snap of a whip; the stone makes howling and whistling noises as it flies, striking its target unexpectedly from above with great force; if it is made of lead, it flashes in the air in the sunlight. But nowhere in my treatise was it claimed that the *vájra had to be* a sling stone. The explicit and sole aim of this

⁴¹ “Die Übersetzung von *vájra* in der neueren vedologischen Literatur als “Keule” [...] läßt sich ebenfalls nicht aufrecht erhalten. Der *vájra* hat zwar einen offenbar aus Holz hergestellten Griff [...], eine dicke/breite metallene Stoßseite [...], wird wie eine Wurfwaffe geschleudert und gelegentlich auch als “Schlagwaffe” benutzt [...], aber eine “zackige” Waffe [...], die geschärft [...], und u.a. zum Schneiden und Zerhacken verwendet wird [...], kann kaum als “Keule” bezeichnet werden. Auch W. Rau kommt nach einer kritischen Überprüfung des Materials zu dem Ergebnis, daß dieser Bedeutungsansatz nicht haltbar ist [...]” (Das Gupta 1975, p. 67). Cp. also *Vájra*, p. 20.

⁴² “Eine Wurfkeule wird jedenfalls nicht gewetzt, hat keine Ähnlichkeit mit einem Pfeile, besitzt keine Leine, und kann kaum mit zwei Händen geschleudert werden.” (Rau 1973, p. 44 [Kl. Schr. 828]).

⁴³ “[...] so haben wir es ohne jeden Zweifel mit einer Wurfwaffe zu tun: ausdrücklich als solche bezeichnet, wird der *vajra* geschleudert, und zwar bemerkenswerterweise mit Hilfe beider Hände: [...] Der *vajra* wird mit der Linken festgehalten, mit der Rechten geschleudert. [...] Geschleudert [...] mit beiden Händen aus Schulterhöhe.” (Rau 1973, pp. 43f. [Kl. Schr. 827f.]). In addition, cp. also Rau (1976, p. 358 [Kl. Schr. 860]).

⁴⁴ See *Vájra*, pp. 36–38 (with images).

comparative study was to determine the greater plausibility of one of the two types of weapons by technological criteria, but not to conclusively establish the *vájra* unfailingly as a lethal slug.⁴⁵

One does not have to share the view of a sling stone. It is of course possible to come to a different conclusion. However, a decision must be taken whether to use the criteria of real or miraculous weapons. As stated above, a real weapon cannot be refuted by the criteria of a mythical weapon, and a review misses the point if it confuses the two. In the case of a real weapon, it would have to be shown that the characteristics of a heavy club, which is a close-combat weapon, are more in accordance with natural laws and show fewer inconsistencies than those of a heavy sling projectile, which is a ranged weapon. But if the sling stone is indeed more plausible than a club in terms of the characteristics associated with a *vájra*, what follows from an objection that it could not be a sling stone? It follows that it could be a mace even less.

Fervent advocates of the club can best test their hypothesis by reconstructing one with all the properties attributed to the *vájra* in the Rigveda. The destructive function, roaring sound and distance precision of such a knife-sharp bludgeon – a contradiction in terms – and its simultaneous suitability as a digging tool – another such contradiction – should be tested in nature by experimental archaeologists. To begin with, a modest sketch would suffice to give an idea of what it might look like. This might also help to locate a similar weapon in any other culture of about the same era. Should drawing and testing fail, resorting to a fantasy weapon would be the obvious choice. In this case, the *vájra* could no longer be a bludgeon, and the debate about a real weapon would be over.

From bolt/wedge to club: Ludwig's "Keil" and Geldner's "Keule"

Let us now turn to the alleged proof for a mace attributed to Schlerath. Where did he get his idea of a mace from in the first place?

It was Geldner who was the first to translate *vájra* consistently as “club” (“Keule”) in his translation of 1929 (which was not published until 1951). The interesting point is, his predecessors had not done so. Nor any of the manuals. And before 1929, he had not done so either. In his Rigveda glossary of 1907 and in his commentary of 1909, Geldner had *consistently* translated *vájra* as “bolt/wedge” (“Keil”), in accordance with Ludwig⁴⁶: “bolt/wedge, the weapon of Indra” (“Keil, Indras Waffe), *vájrabāhu* as “in whose arm the bolt/wedge is” (“in dessen Arm der Keil ist”), *vajrabhṛt* as “carrying the bolt/wedge, bolt/wedge carrier” (“den Keil tragend, Keilträger”), *vájrahasta* as “in

⁴⁵ This was essentially misunderstood by Whitaker, who thought the book “argues provocatively that it is unmistakably a “sling” (die Schleuder)”, “that the *vájra* is unequivocally a sling weapon” (Whitaker 2023, p. 962).

⁴⁶ *Vájra*, pp. 23 and 90; see also below p. 13; pp. 31f. For example, Ludwig identified Indra’s stone as an iron missile hurled by a sling, and Indra as a slinger (*Vájra*, p. 23, n. 25; p. 90, n. 244 and above, note 6). Likewise (“Keil”) also Weber 1858, p. 45 and Delbrück 1888, pp. 26 passim. Similarly Witzel/Gotō at least for the vocative *adriivas* in RV V.35.5: “du mit den Schleudersteinen” (WGTr V.35.5). On *adriivas* as “carrier of the bolt/wedge” (“Keilträger”) cf. Delbrück 1888, pp. 271 passim. It should however be noted that Malzahn rejects the meaning of “throwing stone” for *ádri* (Malzahn 2016, pp. 196f.), cp. also above, note 3 and below, notes 47 and 59.

whose hand the bolt/wedge is” (“in dessen Hand der Keil ist”), and *vajrín* as “owner of the bolt/wedge, Indra” (“Besitzer des Keils, Indra”).⁴⁷

There are different ways of conceptualising possession or carrying:



Fig. 1: Hittite slinger carrying a loaded sling, c. 1000 BC.



Fig. 2a–b: David by Michelangelo, with sling over left shoulder and stone in right hand.

However, it is likely that Ludwig and Geldner deliberately took a conceptual middle course here by rendering the synchronic meanings of “thunderbolt, understood as a sling stone” – as already documented by Graßmann⁴⁸ – with a German term that also

⁴⁷ Geldner 1907, p. 152; Geldner 1909, pp. 128; 134; 164. Jamison (2023, p. 335) emphasises “the strong association of the *vájra*- with Indra’s arm or hand [...] having the *vájra*- in his right [arm/hand]”, referring to compounds such as *vájra-bāhu*, *vájra-hasta*, *vájra-dakṣiṇa*- and *vájra-bhīṭ*-. This is undisputed. However, it is also true that Indra is by no means the only god to have such attributes (*Vájra*, p. 49). Moreover, would it not be in contradiction with Schlerath’s assertion that “a Hercules club cannot be swung with one hand” (below, p. 24, n. 132)? In addition to *vajrín* (“owner of the” *vájra*”), another epithet worthy of consideration is *ádri-vant*. It is hard to deny that *ádri* means “stone,” whatever its nature (cp. above, notes 3 and 46).

⁴⁸ Cp. Malzahn 2016, p. 191 with reference to WRV (s.v. *asáni*): “Grassmann sets up ‘stone’ as the original meaning, which results in the synchronic senses “Donnerkeil, als Schleuderstein aufgefasst”.” Cp. [12]

encompasses precisely these two meanings. Until the beginning of the 20th century, the German word “Keil” was used in both meanings and was generally familiar. In the sense of a “splitting wedge” (“Keil zum Spalten”), or “a household tool”, especially a “wedge of oak or iron,” on the one hand, and on the other hand also in the sense of a “lightning bolt.”⁴⁹

In the 20 years between 1909 and 1929, Geldner changed his mind and switched from his earlier translation “wedge” to a new one, “club”. During this period, no studies on the identity of the *vájra* had appeared to suggest such a move. Geldner’s decision was his personal opinion, which had no proven basis in fact and no evidence whatsoever in support. Here, an observation by Johannes Nobel, who worked closely with Geldner on the indexes until his death, is worth noting:

“Geldner repeatedly made changes to the translation. He would explore the possibilities of a different interpretation, frequently abandoning his original point of view and replacing it with a different, putatively better one.”⁵⁰

Only later were attempts made to find a reason for assuming a mace.⁵¹ It is a testimony to the lasting influence Geldner’s translation has had on future generations of Vedic scholars and Rigveda translators that they have gullibly taken his revised choice as a matter settled once and forever. Despite the serious doubts raised by Das Gupta and Rau, the constant repetition of Geldner’s “club” seems to have had an autosuggestive effect on scholars, leading to a collective conviction of its unshakable correctness. A correctness, it should be noted, that had not been proven by anyone.

As with the earlier interpretation of the *vájra* as a lightning bolt, so with the mace:

“With regard to the interpretation of the Vedic *vájra*, the older Indologists [...] were of the opinion that it was a mythical weapon, that is, a mythical representation of a certain natural phenomenon. The fact that scholars were familiar with a similar idea from Greek and Germanic mythology and legends, namely that of a “thunderbolt” or “thunderstone”, the “thunderbolt” of Zeus, and that they saw Indra as a “god of thunder”, certainly contributed to developing this view. As a result, *vájra* was usually rendered as “thunderbolt” or “lightning”.⁵²

also “Quand il s’agit des agents divins, cette arme est envoyée depuis les cieux, mais cela n’en fait pas l’équivalent pur et simple de la foudre.” (Pinault 2022, p. 237).

⁴⁹ Cp. Grimm, s.v. “Keil,” nos. 1) (“als werkzeug”) and 4a) (“donnerkeil”): “nach dem alten glauben warf Donar im zündenden blitz und donner einen steinernen keil (hammer). die mhd. zeit hielt wenigstens an dem geschleuderten stein fest [...] und noch der heutige volksglaube lässt mit dem einschlagenden blitze einen schwarzen keil niederfahren in den boden”; 4b): “auch die nhd. dichter brauchen diesen keil noch als willkommenes bild für blitz und donner [...] sogar vom blitz und geschosz der kanonen.”

⁵⁰ “An der Übersetzung hat Geldner immer wieder geändert. Er hat die Möglichkeiten einer anderen Interpretation geprüft, seine ursprüngliche Auffassung vielfach verworfen und durch eine andere, vermeintlich bessere, ersetzt.” (Nobel 1957, p. V).

⁵¹ “In Übereinstimmung mit Apte [1956] und Lommel [1939] übersetzen die Vedisten dieses Jahrhunderts [= des 20. Jahrhunderts, WS] *vájra* üblicherweise als “Keule” [...]” (Das Gupta 1975, p. 6).

⁵² “Was die Deutung des vedischen *vájra* angeht, so glaubten die älteren Indologen [...], daß es sich um eine mythische Waffe handelt, d.h. um die mythische Verbildlichung einer bestimmten Naturerscheinung. Zur Entstehung dieser Auffassung hat gewiß die Tatsache beigetragen, daß den Forschern aus der griechischen und germanischen Mythologie und Sagenwelt eine ähnliche Vorstellung vertraut war, nämlich die eines “Donnerkeils” bzw. “Donnersteines,” des “Blitzes” des Zeus, und daß sie in Indra einen “Gewittergott” sahen. So wurde *vájra* gewöhnlich mit “Donnerkeil” oder “Blitz” wiedergegeben.” (Das Gupta 1975, p. 3); cp. also *Vájra*, p. 19. Recently, Toshifumi Gotō translated *aśáni* in RV VII.104.25 [13]

As we have seen, between the “lightning bolt” and the “club” lay the phase of a remarkably different, realistic approach to meaning in the form of a potential double meaning, to wit, “lightning bolt” and “bolt/wedge”.

It was not until recently that Melanie Malzahn convincingly demonstrated that the original meaning of *ásman* and *ásáni*, two terms that are also central to the question of hurling or slinging stones, was that of a weapon, to which the meaning of thunderbolt was only subsequently attributed. Summarised, it reads like this:

“[...] the case of *ásman*- shows that a term denoting ‘stone’ could come to refer to lightning and thunder. However, *ásman*- did not denote ‘lightning’ or ‘thunderbolt’ from the start. This is thus a “special development” of Indic [...]. This view is supported by the fact that in Avestan *asman*-/*asan*-, when used in the sense of a weapon, always refers to a ‘sling stone’ or ‘stone missile’ and never ‘lightning’ [...] Indra evidently did not start out as a thundergod/stormgod either, but rather as a heroic warrior figure of the Heracles kind, whose famous weapons only later became gradually associated with lightning and thunder, i.e., were reinterpreted as thunderbolts, *ásáni*- probably being the first of them to do so. [...]. It was only in post-Vedic times that Indra finally became completely associated with rain, thunderstorms, and fertility. [...] as the case of *ásman*- shows, in the language of the Veda a word for ‘stone’ could indeed assume the meaning of ‘lightning’ or ‘thunderbolt’; however, this does not require us to posit such a semantic shift in the case of *ásáni*-. As was pointed out before, in India ‘(tip of a) missile’ could have turned into ‘thunderbolt’ too.”⁵³

However,

“*ásáni*- started out as an abstract ‘sharpness’ based on a possessive adjective **ásana*- ‘provided with sharpness > sharp’, which was later concretized and denoted ‘sharp thing’. It is possible that ‘sharp thing’ was then further narrowed to ‘stone’.”⁵⁴

The connection of *ásman* and *ásáni* to the *vájra* is established in this way:

“Assuming that *ásáni*- here [= RV I.80.13ab , W.S.] refers to a weapon of Indra and not of Vṛtra seems indeed to make more sense; if this is correct, *ásáni*- seems to refer either to the Vajra as a whole, or to the foremost part of it.”⁵⁵

“As for Indra’s *ásman*-, it is well known that Indra’s weapon par excellence was rather the *vájra*-, [...]”⁵⁶

as “Donnerkeil” and suggested the same translation as a possibility for 104.4; 5; 19 and 20 as well (WGTr, pp. 296; 640).

⁵³ Malzahn 2016, p. 199.

⁵⁴ Malzahn 2016, p. 201.

⁵⁵ Malzahn 2016, p. 192. For a different construction of this sentence (I.80.13a–c), which results in “als Du den Vṛtra und Deinen Schleuderstein in einen Kampf miteinander verwickeltest, danach trachtend, die Haubenschlange mit dem *vájra* zu töten,” cp. *Vájra*, p. 47. On the understanding that *vájra* means “slingshot” here, Jens Thomas (Leipzig) suggests an alternate translation: “Daß Du den Vṛtra und Deinen Stein *mittels der Schleuder (vájra)* hast kämpfen lassen.” Mention should also be made of Renou’s translation: “Quand tu eus fait combattre ensemble Vṛtra et ta fronde (à forme) de foudre” (EVP XVII (1969), p. 29).

⁵⁶ Malzahn 2016, p. 197.

At this point the question inevitably arises as to the role of wedges as weapons in a prehistoric context, if ‘stone’ or ‘wedge’ were indeed to refer to the original meaning of *ásman*, *ásáni*, and *vájra*. Well-known examples of this type of stone tool are the prehistoric hand axes. They were made by chipping stone to form a two-sided edge. In prehistoric research, the thesis that hand axes were also used as hurled projectiles with a high lethality rate, is not only considered plausible,⁵⁷ but has been experimentally proven as well.⁵⁸ When Ludwig and Geldner (1907–1909) translated *vájra* as bolt/wedge (“Keil”), they might have had such hand axes (“Faustkeile”) in mind too. This is indicated by the fact that Reichelt also spoke of a “stone wedge” (“Steinkeil”) and that Geldner, when rendering *adrivat* by “possessing the sling stone, the wedge” (“den Schleuderstein, den Keil besitzend”), equated “sling stone” with “wedge”.⁵⁹ Regardless of this, the shapes of the jagged and sharp-edged wedges depicted in relevant studies are strikingly similar to those of the projectiles known to have been hurled with slings:



Fig. 3: Acheulean handaxes from the site of Boxgrove, England, which date to about 500.000 years.

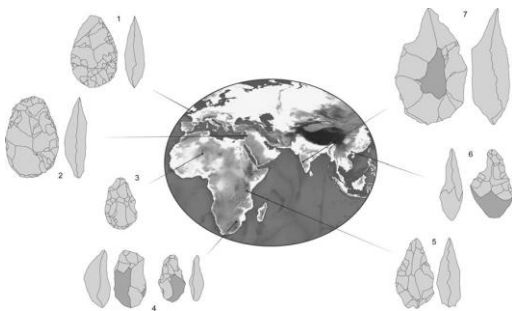


Fig. 4: Acheulean handaxes from various regions (to scale).

⁵⁷ Corbey et al. 2016, p. 7.

⁵⁸ Cp. Samson 2006, especially pp. 129f.

⁵⁹ Reichelt 1913, p. 44; Geldner 1907, p. 6, s. v. *adrivat*; “*vajraṃ bhrātṛvyāya pra harati* er schleudert den Keil gegen den Feind” (Delbrück 1888, p. 127). Cp. *Vájra*, p. 90 and note 46 above (also on Malzahn’s rejection of the meaning “throwing stone”). Cp. also Schlerath (1975a, p. 543): “A more primitive form of the club is the hand axe made of stone, which can also be fitted with a handle. It may not always be easy to draw the line between this and a club” (“Eine urtümlichere Form der Keule ist der steinerne Faustkeil, der auch mit einem Stiel versehen sein kann. Die Grenze zur Keule dürfte nicht immer leicht zu ziehen sein”).

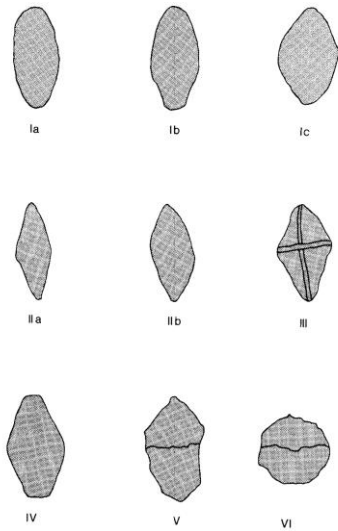


Fig. 5: Types of Roman lead projectiles for slingshots.

The similarity in shape between the hand axes used as ranged weapons in prehistoric times and the sling projectiles of historical times is too striking to be ignored simply because Geldner, for some unknown reason, all of a sudden changed his mind in favour of the idea of a club. Typologically speaking, sling projectiles are divided into round, ovoid, biconoid, edged-biconoid, double pyramidal, polygonal, acorn-shaped and other forms with flattened, pointed or angular outlines. There are also finds of sharp-edged pointed oval forms,⁶⁰ not to mention the triangular *tribuli* with 4 spikes. These were used in the ancient art of warfare by Roman and Byzantine slingers.⁶¹ Battle-ready sling stones are not pebbles, as should be obvious. There is Neolithic evidence for the use of the sling dating back to the 7th millennium BC. The transition from the prehistoric hand axe thrown with the arm to a Neolithic projectile hurled with a sling required only a minor technological innovation, namely harnessing kinetic energy by rotating a sling. Georges-Jean Pinault has made an interesting remark in this regard, more specifically with reference to a sharp sling stone and its developmental step towards the *vájra*:

“il resterait à voir si la coexistence de la pierre aiguë et du *vájra* comme arme létale reflète une évolution technique du projectile, alors que le procédé du lancer, au moyen de la fronde, serait le même.”⁶²

Studies conducted with advanced measurement techniques have shown that the impact force of such a stone is comparable to that of a handgun.⁶³ Not only is the hand sling considerably older than the bow, but its heyday was in the Early Bronze Age. In later periods, however, it surpassed even the use of the bow.⁶⁴ From a historical point of view, therefore, a biface-shaped missile hurled by a sling fits perfectly into the Rigvedic period.

Indeed, when launched indirectly, the projectile soars into the air and then hits the target from above with a force amplified by gravity, like a bolt of lightning literally

⁶⁰ *Vájra*, pp. 28–32; 51; 96.

⁶¹ DKP, s.v. *Tribuli*.

⁶² Pinault 2022, p. 237.

⁶³ *Vájra*, p. 29, n. 35; pp. 34f.

⁶⁴ *Vájra*, pp. 27f.

out of the blue. This explains why the slingers of antiquity also used projectiles that were marked with a bolt of lightning.⁶⁵ In this way, the original perspective of a real mundane projectile, the hurled wedge, could later have become merged with that of a celestial projectile, i.e. lightning or hail, conceived as hurled, but not as mythical symbolisation of an otherwise inexplicable meteorological phenomenon. Their conceptual convergence could have been put to poetic use in a way similar to that documented for the “Keil” (“bolt”).⁶⁶

Schlerath's Herculean club

This brings us directly to Schlerath, who believed that the *vájra* was a club because, inter alia, “the club, as a primitive weapon, must be the primordial”.⁶⁷ Schlerath lost himself completely in the myths of classical antiquity,⁶⁸ as we shall see presently. Schlerath's argument in this context approaches the realm of the comical:

“But Indra's throw with the stone weapon from heavenly heights does not belong to mythical primeval times like his heroic deeds with the *vájra*, but can be experienced in any lightning storm. [...] Everyone knows what it is like when Indra is throwing stones.”⁶⁹

He clearly believes that the more “primitive” a weapon is, the more it suits the Rigvedic god Indra. In short, the older, the more Indra. He might have come to the same conclusion in the case of the “primitive” weapon of the sling stone, had he been aware of it. Returning with Schlerath to the club as the third alternative in the historical research sequence of lightning bolt, hand axe and bludgeon, it is evident that Western prejudices were unconsciously at work not only in the earlier idea of a thunderbolt, but also in that of a club. This is particularly evident in Schlerath's fixation on the image of Hercules' club, which characterises his imagination throughout and models his idea of the Rigvedic *vájra*.⁷⁰ Not that such a hypothesis was impossible in itself. But the question is whether Hercules and his club could also have been the model for the *vájra* conceived by the Vedic Ṛṣis or known to them from their own experience. The assumption of an Indo-European past, from which the image of a primitive club had been handed down as a common heritage and of which the *vájra* is a remaining Rigvedic specimen, is somewhat odd. After all, even Hercules, who is sometimes depicted also with a bow, fought with a sling as well:

⁶⁵ *Vájra*, p. 34; on the lightning or hail character of sling projectiles see also the references in *Vájra*, p. 39, n. 62; p. 66, n. 160; p. 83, n. 226. See also the images of Greek lead bullets with thunderbolts below on p. 43.

⁶⁶ Cp. above, note 49.

⁶⁷ “Die Keule als Primitivwaffe muß das Ursprüngliche sein” (Schlerath 1975a, p. 554).

⁶⁸ Always thinking of Hercules, he compares the *vájra* with “the heavy primeval club [...] of Heracles” (“die schwere urtümliche Keule [...] des Herakles,” Schlerath 1975a, p. 548).

⁶⁹ “Indras Wurf mit der Steinwaffe aus himmlischer Höhe gehört jedoch nicht wie seine mit dem *Vajra* vollzogenen Heldentaten der mythischen Urzeit an, sondern kann bei jedem Gewitter erlebt werden. [...] Jeder weiß, wie es ist, wenn Indra mit Steinen wirft“ (Schlerath 1975a, p. 543).

⁷⁰ Schlerath 1975a, pp. 531f.; 538; 548f.

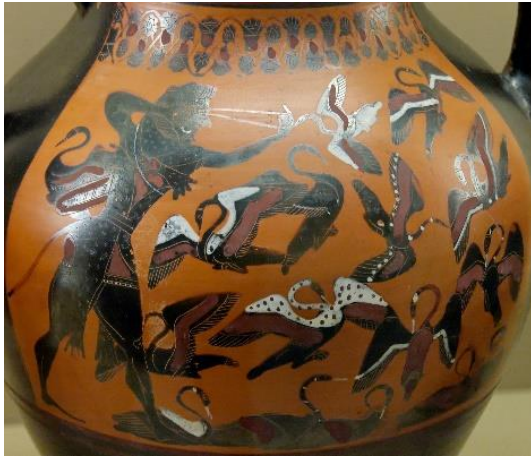


Fig. 6a-b: Heracles killing the Stymphalian birds with sling (ca. 540 BC) and bow (c. 250 AD).

In Davary's analysis of a newly discovered coin of the Kušan king Huviška (151 – c. 190 AD), Hercules holds a sling in his left hand. The sling would have been made of woven fibres with a heavy stone tied to it, and Hercules would have held the sling like a melee weapon. In contrast, Gardner's analysis of a similar coin in the British Museum results in a lion's skin and an apple⁷¹ (probably from the Hesperides):



Fig. 7: Hercules on Huviška coin.



Fig. 8: Hercules on Huviška coin.

But the sling was not the weapon that was the hallmark of the heroic character of Hercules in the myth. So Schlerath's inspiration was the myths of antiquity about Greek heroes with clubs and other legends⁷² that he had internalised. Fuelled by this imagination – but not by that of Greek and Roman warriors hurling sling stones –, he went on to impose the notion of the mace on the *vájra* of the Rigveda in the course of his refutation of Rau's harpoon hypothesis: "There is nothing, absolutely nothing, to support *vájra* = "harpoon".⁷³ I concur with his assessment. But like many of his fellow experts, Schlerath considers a mace to be an instrument for "breaking down castles,"

⁷¹ Davary 2022, pp. 1; 4. Description of the coin in the British Museum, plate XXVII, 15: "Bearded Hercules [...] holds in r. hand, club; over l. arm, lion's skin; in l. hand, apple" (Gardner 1886, p. 138, no. 22).

⁷² "Der Odyssee sind die Gigantes ein Märchenvolk wie Kyklopen und Phaiaken, [...]. Sie schleudern Felsen und brennende Baumstämme zum Himmel." (DKP, s.v. Gigantes).

⁷³ "[Es] spricht nichts, aber auch gar nichts für Vajra = "Harpune"." (Schlerath 1975a, p. 542).

something that has never been heard of anywhere else, and which he thought was used for this very purpose by the heroic Indra. He overlooks the fact that in historic battles it was the sling which was one of the most powerful siege weapons of the ancient world.⁷⁴ So efficient indeed that it influenced the development of fortifications.⁷⁵ This creates a tension between myth and reality: Schlerath tries to refute Rau's harpoon with realistic arguments, assuming that the *vájra* was a real weapon. However, he can only think of clubs of all kinds, as well as of bifaces, hammers and axes.⁷⁶ So he has to resort to myth in order to explain his mace hypothesis and, in contradiction to his initial assumption of a real weapon, comes to the conclusion that the *vájra* was not a mundane weapon after all.⁷⁷ The pattern of contradiction persists: on the one hand, Schlerath has to admit that the *vájra* can shatter. And he even says that Indra *hurls* it.⁷⁸ But when it comes to the probably most absurd assertion, namely that the "Indra mace" ("Indrakeule") could even 'multiply', Schlerath's initial realism again no longer works: "The multiplication of the Indra mace is only possible because in this hymn the functions of Indra are transferred to the Maruts in a multiplied form. In reality there are not many clubs – the poet cannot go that far – but the Maruts carry golden axes, which are called "Indra maces" only because of their invincibility."⁷⁹

So myth and unbridled fantasy are the means of escape from the dilemma, to which Whitaker's "dispersal of Indra's pluralized weapon" is also no exception. For the only really obvious assumption, that the plural could denote the multitude of stone projectiles used by a slinger, seems inconceivable to someone whose theorising obscures a sober view of the real world.⁸⁰ A good number of stones carried by Indra can also be concealed in other words the poet uses. For example, like this:

⁷⁴ *Vájra*, p. 27 with note 32.

⁷⁵ "Greater distances were covered using long-range weapons such as slings (projectiles mostly of clay), lances or bow and arrow, the efficiency of which stimulated the development of fortifications." (DNP, s.v. 'Waffen').

⁷⁶ "Es ist zu erwarten, daß diejenigen irdischen Waffen, mit denen die Wirkungsweise des Vajra erläutert wird, eine technologische Ähnlichkeit mit diesem aufweisen. Verwandte Waffen [...] sind: Holzkeule, leichterer Knotenstock, mit Nägeln oder Messerschneiden versehene Holzkeule, Holzkeule mit Metallkopf, Metallkeule (evt. mit Buckel- oder Stachelkopf), steinerner Faustkeil (zum Schlagen oder Werfen), Hammer (aus Stein oder Metall), Axt. Waffen dieser Art (soweit sie zu identifizieren sind) werden im Veda mit dem Vajra in Beziehung gesetzt." (Schlerath 1975a, p. 541).

⁷⁷ "Im Rigveda ist der Vajra keine irdische Waffe, sondern er befindet sich nur in den Händen Indras" (Schlerath 1975a, p. 552).

⁷⁸ "[...] daß die Keule nach dem Wurf zerspringt (9 nachrigvedische Belege) [...]. [...] daß Indra zunächst flieht, nachdem er den Vajra geschleudert hat (12 nachrigvedische Belege)." (Schlerath 1975a, p. 540). Additional instances are recorded in Rau (1976, p. 357 [Kl. Schr. 859]).

⁷⁹ "Die Multiplizierung der Indrakeule ist nur möglich, weil in diesem Hymnus Funktionen des Indra in vervielfachter Form den Marut übertragen sind. Es sind aber in Wirklichkeit gar keine vielen Keulen vorhanden – so weit kann der Dichter nicht gehen –, sondern die Marut tragen goldene Äxte, die nur auf Grund ihrer Unbesiegbarkeit "Indrakeulen" genannt werden." (Schlerath 1975a, p. 541).

⁸⁰ "Perhaps the dispersal of Indra's pluralized weapon over "ninety navigable (rivers)" reflects the manifold blows he delivers to the serpent and the violent memory that the rivers retain of their liberation" (Whitaker 2023, p. 963). "Perhaps the point is that, once the rivers were released to flow in all directions, Indra's power, embodied in the mace, was subdivided and spread across the whole fertile, water-fed landscape." (JBTr, p. 206, Introduction to RV I.80). In fact, with some stretching of the interpretation, [19]

In I.32.5 Indra kills Vṛtra, conceived as an angry cobra, with the *vájra* (*vájreṇa mahatā vadhéna*):

“With a *vájra*, a very powerful *vadhá*, Indra killed Vṛtra.”

So the *vájra* is a *vadhá*. The immediately following stanza I.32.6 explains why:

“Vṛtra did not survive the impact of his *vadhá-s*” (plural).

In the given micro-context, to interpret the *vadhá-s* in I.32.6 differently from the *vadhá* mentioned in I.32.5, and therefore *not* as *vájra*, is philologically more than questionable. But if we do what is philologically required, we get *vájra-s* in the plural. However, if one attributes several weapons to Indra, all of which he would have used in the fight against Vṛtra, one must be able to explain what they are. If, on the other hand, the *vadhá-s* were projectiles, then Indra would have had a number of projectiles in his arsenal. As explicitly stated in I.32.6, the fatal throw was made with a *mahán vadhá*, his *vájra*. And this could refer to a specially crafted lethal stone as the heavy calibre slug that finally overthrew Vṛtra.⁸¹ An edged stone the size of a hand axe driven with a sling into the swollen hood (*vyāṃṣa*) of a cobra will tear it apart, leaving a bloody pulp, as would a lead bullet fired from a shotgun.

Moreover, we should ask whether Schlerath’s fancied “Indra mace” (“Indrakeule”) is documented anywhere in the Rigveda? Of course not. There, only the word *vájra* is used, which in Schlerath’s imagination becomes the “Indra mace”. But not even constant repetition can make it one.⁸² Given that sling projectiles are hurled, that they are numerous, and that they can shatter on impact and can smash their target, should this realistic type of weapon not be taken into consideration?

Inconsistencies of this kind are characteristic of Schlerath’s method, which oscillates between reality (in rejecting Rau’s harpoon) and myth (in embracing a Herculean club): there can only ever be one hero with one weapon that characterises him. So, too, with Indra and his *vájra*, which must be a cudgel according to the image of Hercules. The analogy does not, however, work to Schlerath’s full satisfaction, since the *vájra* is also wielded by others in the Rigveda – by gods and humans.⁸³ Therefore, he has to reinterpret any bearer of a *vájra* mentioned in the Rigveda as *essentially being* Indra. He does this in the following way:

To say that Indra alone possesses the *vájra* was justified. Wherever the literal wording of the text contradicts this view, the poet must have been *alluding* to Indra. This is because he introduces an essential identity with Indra. Such a procedure was an

any kind of weapon could be argued for, even the sling. On the plural of Indra’s “weapons,” i.e., projectiles, see Vájra, pp. 67f. with note 166.

⁸¹ For further evidence pointing to an arsenal of sling stones with which Indra circles the enemy (I.121.9ab, Vájra, pp. 43f. with note 84) and hurls them at him, see also p. 58, note 133 and p. 68; moreover RV I.52.8 (Vájra, p. 58); I.80.8 (pp. 40f.); X.23.1d and X.138.5a–c (Vájra, p. 67 with note 166). On *sānu* as the upper part of an animal, in the case of a snake the head (with its hood inflated) cp. Vájra, p. 72. For the meaning “projectile” cp. PW (s.v. *vadhá*): “tödliche Waffe, namentlich Indras Geschoss” (with reference to I.32.5).

⁸² See Schlerath 1975a, pp. 540–547.

⁸³ Cf. Rau’s extensive list of *vájra*-bearers other than Indra (even Asuras use it) in the Vedic Saṃhitās including the Rigveda, which clearly refutes Schlerath’s misrepresentation (Rau 1976, p. 357 [Kl. Schr. 859]).

important feature of Rigvedic spirituality. From the outset, Indra alone has always been the one and only mace-bearer.⁸⁴

If, as is the case here, there is a total disregard for the direct meaning⁸⁵ of the text, then anything can be read into it at will, with the most daring theses based on unrestricted chains of association. It is fair to say that such methods are not philological. It seems downright grotesque when Schlerath, guided by classical models at every turn, referring constantly to them and unable to detach himself from them, accuses Rau of not taking into account “the limitations of his own position” and of not “attempting to engage with the way of thinking of a foreign world.” What is – in Schlerath’s words – “particularly embarrassing” here is not the “application of modern standards of judgement to old texts,” but Schlerath’s own inability to see that he himself is doing exactly what he wants to blame Rau for: namely, not being able to detach himself from his point of view and allowing his thoughts to revolve exclusively around myths that are familiar to him. To approach the truly foreign with an open mind, using philological and artefactual research, remained methodically speaking alien to him.⁸⁶

Moreover, precisely because the club of Hercules is so heavy and not a throwing weapon, Hercules is usually seen shouldering or leaning on it in ancient artistic depictions:

⁸⁴ “[...] die Aussage, Indra allein ist im Besitz des Vajra, [ist] gerechtfertigt [...]. In jedem Fall, in dem das nach dem unmittelbaren Wortlaut nicht so zu sein scheint, hat der Dichter auf Indra angespielt, eine Wesensidentität mit Indra ins Spiel gebracht. Ein solches Verfahren ist ein wichtiger Zug der rigvedischen Geistigkeit [...]. [...] daß ursprünglich nur Indra der Keulenträger ist” (Schlerath 1975a, p. 539). Cp. also: “Die zugrundeliegende Erkenntnis des Dichters, daß Agni seinem geheimen Wesenskern nach mit Indra identisch ist und daß durch Indras Erscheinungsform als Agni seine Kraft bestätigt und verstärkt wird, kann nur so ausgedrückt werden, daß dem Agni die Taten des Indra mit zugeschrieben werden. Diese Aussagen können jedoch nur dualisch von Indra und Agni zusammen gemacht werden. Dem Agni allein einen Vajra zuzuschreiben, wäre unerhört.” (Schlerath 1975a, p. 540). JB(C) on II.33.3 take a different stand: “This is the only occurrence of sg. *vájra-bāhu-* that doesn’t qualify Indra. (The only non-sg. form is dual *vajra-bāhū* addressed to Indra and Agni in I.109.7.) I do not know why Rudra is thus identified here.”

⁸⁵ Schlerath’s weighting of the text’s statements depends on his interpretative needs. Elsewhere it is the literal meaning alone that matters: “When the poet assures us that Indra has a golden vajra, it tells us [...] a lot: namely, what is explicitly stated.” (“Wenn der Dichter uns versichert, daß Indra einen goldenen Vajra hat, so besagt das [...] sehr viel: nämlich das, was dasteht.” (Schlerath 1975a, p. 531)).

⁸⁶ Even if one does not agree with the results of Rau’s research, his impartial subject-related method is clearly preferable to that of Schlerath.



Fig. 9a–b: Hercules shouldering his club and resting on it.

We never read in the Rigveda that the *vájra* is carried on the shoulder, that Indra leans on it, or that it touches the ground when he lowers his hand. To my knowledge, there are also no depictions of Hercules throwing his club. A club this size is simply not carried “handheld” (*vájrahasta*). But a large-calibre stone would be, as can be seen in figures 1, 2 and 10. However, those who agree with Schlerath’s Herculean fantasies will also have no problem with his prejudiced interpretation of the Avestan *vazra* as a mace and its identification with the Rigvedic *vájra* as a mace of exactly the same kind:

“In the Avesta, *vazra*-, as has never been doubted and cannot be doubted, means “club” (as does the Persian continuator *gurz*).”⁸⁷

Is this so? Has it really never been, and may not be, doubted?

The Avestan vazra

The Avestan specifications of the *vazra* are too sparse to determine the character of the weapon. The majority of textual evidence is contained in the Avestan hymn to Mithra (*Mihr Yašt*), the language of which is dated approximately in the early first millennium BC and thus overlaps roughly with the time of the Yajurveda, the Brāhmaṇas and the older Vedic Upanishads.⁸⁸ Compared to the *vájra* of the Rigveda, the Young Avestan *vazra* is therefore a comparatively late witness. For the approximately simultaneous texts of the Brāhmaṇa period Falk states that “it cannot be overstated that [...] the term *vajra* is used in the Middle Vedic texts as an appellation of any object or weapon with imperatively fatal effects.”⁸⁹ In addition, the *vájra* and the *vazra* are also very far apart in terms of region⁹⁰ and religion. Thus in the Avesta Indra is an insignificant *daēva*, i.e.

⁸⁷ “Im Avesta heißt *vazra*-, wie niemals bezweifelt wurde, und auch nicht zu bezweifeln ist, (genau wie der np. Fortsetzer *gurz*) “Keule”.” (Schlerath 1975a, p. 536; cp. also p. 554).

⁸⁸ According to a personal communication by Almut Hintze (London, 6 April 2024), who kindly drew my attention also to Skjærvø 2005–2006. Taking into account their long preceding oral tradition, Skjærvø summarises the dating of Young Avestan texts as follows: “1000–500 BCE” for the “Young Avestan oral traditions” and “± 500 BCE” for the “crystalization of Young Avestan texts” (p. 29, Table 1). Earlier, Gershevitch had assigned the second half of the fifth century BCE to the *Yašt* (1959, pp. 3; 25), a date that was adopted by the *Encyclopædia Iranica*: “[...] the Zoroastrianized verses of the *Yašts* were composed in decent Avestan approximately in the 5th century B.C.E.” (EncIr s.v. *Vendīdād I*).

⁸⁹ Falk 1994, p. 201.

⁹⁰ “the geographical horizon of the *Mihr Yašt* is located in Central Asia” (Hintze 2014).

a demon, but not the most prominent of the gods, as in the Rigveda.⁹¹ And does Indra wield a *vazra* in the Avesta? No. For the interpretation of the Rigvedic *vájra*, therefore, the descriptions of the Avestan *vazra* are certainly not without, nonetheless of only a limited value, similar to the Vedic texts of a later period. It is precisely for this reason that I had excluded all post-Rigvedic texts from my study to avoid Rau’s methodological fallacy of using Vedic texts from all strata indiscriminately to explain the *vájra*. However, since the testimony of the *vazra* is a weighty argument put forward by the proponents of the mace theory, it will be considered here briefly.

As stated above, almost all references to the *vazra* are in the hymn to Mithra (*Yašt* 10), who appears in the Avesta as the bearer of this weapon, albeit not the sole one. As regards the existing translations, since “each previous translator had offered only his own opinion, without reference to differing views” and since they “differ in the rendering of a number of crucial passages,” we will use Gershevitch’s edition and translation, as he quotes and discusses all available interpretations “provided they do not rest on wild emendations or on disregard of Avestan grammar”⁹²

There are differing views about the *vazra* and whether it could be identical to the *gaḍā*, another weapon that Mithra uses in the immediate textual environment of wielding his *vazra*. The *vazra* – which like the “pluralized” *vájra*⁹³ appears in the plural in the Avesta, too, as one of the weapons of Mithra’s adversaries, the ‘treaty-breaking men’ (*Yašt* 10.40) – is rendered variously in translations and dictionaries as “Keule(n),”⁹⁴ “Keil,”⁹⁵ “club(s),”⁹⁶ “massue(s),”⁹⁷ “Keule, insbes. Haukeule,”⁹⁸ “nur Haukeil oder Haukeule,”⁹⁹ “Blitz,”¹⁰⁰ and “mace(s),”¹⁰¹ or is left untranslated as “*vazra*”.¹⁰² The *gaḍā*, on the other hand, which occurs in the singular and plural, is rendered as “Keule,”¹⁰³

⁹¹ “Indra is mentioned only twice in the Avesta. At Vd. 10.9, [...] one should say “I hostilely engage Indra (... Saurwa, ... Nāṅhaiθya).” At Vd. 19.43 Indra stands second in a list of demons after Anra Mainyu [...]” (*Enclr* s.v. Indra).

⁹² Gershevitch 1959, p. VIII. For a detailed analysis of the content of the *Mithr Yašt*, see Hintze 2014.

⁹³ See above, notes 79–81.

⁹⁴ Windischmann 1857 (10.40; 96); Spiegel 1863 (10.40; 96; 132); Geldner 1881 (10.40; 96; 132); Wolff 1910 (10.40; 96; 132); Lommel 1927 (10.40; 96; 132).

⁹⁵ Windischmann 1857 (10.132). On Keil = Faustkeil („hand axe“), see above pp. 11ff.

⁹⁶ Darmesteter 1883 (10.40; 96; 132).

⁹⁷ Darmesteter 1892 (10.40; 96; 132).

⁹⁸ AirWB (Bartholomae 1904), s.v., with a telling reference to the Rigvedic *vájra*: “ai. *vájra*- m.; np. *gurz*; ist Mithras Hauptwaffe wie der *vájraḥi* die des Indra”.

⁹⁹ Reichelt 1913, pp. 44f.

¹⁰⁰ Hertel 1927 (10.96) and p. 214.

¹⁰¹ Herzfeld 1947 (10.40, p. 785; 10.96, p. 435); Gershevitch 1959 (10.40; 96; 132).

¹⁰² Hertel 1927 (10.40; 132); Herzfeld 1947 (10.39, p. 439).

¹⁰³ Windischmann 1857 (10.101; 131); Spiegel 1863 (10.101; 131); Geldner 1881 (10.101); Wolff 1910 (10.101; 131); Hertel 1927 (10.101; 131); Lommel 1927 (10.101).

“Streitkolben,”¹⁰⁴ “club,”¹⁰⁵ “mace,”¹⁰⁶ “mace-heads,”¹⁰⁷ “massue(s),”¹⁰⁸ “masse”¹⁰⁹ and “Wurfkeule”¹¹⁰

For Schlerath, who ignores the question whether *gaḍā* or *vazra* was Mithra’s weapon and how they are related to each other, as well as other critical points raised by previous research, *vazra* undoubtedly means ‘club’, just as it undoubtedly meant ‘lightning’ for Hertel. For Herzfeld, on the other hand, *gaḍā* and *vazra* were absolutely identical:

“The *gaḍā* (fem.) is Mithra’s *vazra*; the two are not distinguished (*Wb.* [= *AirWB*, *W.S.*] as club for throwing and for striking.¹¹¹ [...] the *vazra* was not a piece of the arsenal on the chariot: when angry, Mithra carries it in his hand [...] and the club does not lie ready to hand that he might disappoint his worshippers at any moment”¹¹²

In doing so, he disregards Bartholomae’s distinction, quoted above (*AirWB*), between a club for throwing (*gaḍā*) and for striking (*vazra*). But Bartholomae, for his part, had spoken out against Geiger, who had taken the opposite view.¹¹³ Hertel, too, criticises Bartholomae’s entry in the *AirWB*, with reference to Geiger and the latter’s arguments concerning the verbs and adjectives that accompany the *vazra*. According to Hertel and Geiger, they cannot refer to a striking weapon, but must refer to a throwing one (“Wurfgeschoss,” “Wurfwaffe,” “Wurfkeule”).¹¹⁴ One does not have to agree with Hertel’s view that the *vazra* is not the representation of a human weapon,¹¹⁵ to see that the issues raised with reference to the verbs denoting the handling of the two weapons are on the mark:

“The verb denoting the handling of *vazra*- is – I add: exclusively – *nivig*-, which Bartholomae himself translates *Sp.* 1313 as “to hurl down”, adding, however, quite unjustifiably for the sake of his false explanation of *vazra*-, “to swing down”. Similarly, he gives the simplex *vig*- the meaning “to swing, to hurl” and translates the reference, *Yt.* 19.92 [...] as “swinging (so wrong instead of “hurling”) the victorious projectile (so right!) which he carried”. This is despite the fact that he correctly interprets the meaning of *vaēda*- as “projectile”.”¹¹⁶

¹⁰⁴ Geldner 1881 (10.131).

¹⁰⁵ Darmesteter 1883 (10.101); Herzfeld 1947 (10.101, p. 435); Gershevitch 1959 (10.101; 131).

¹⁰⁶ Darmesteter 1883 (10.131).

¹⁰⁷ “mace-heads” and “maces of *ayah*, ore” (Herzfeld 1947: 10.131, pp. 435; 783).

¹⁰⁸ Darmesteter 1892 (10. 101).

¹⁰⁹ Darmesteter 1892 (10. 131).

¹¹⁰ *AirWB* s.v. *gaḍā*: “Im Gegens. zu *vazra*-, womit gehauen wurde.” “nur Wurfkeule” (Reichelt 1913, p. 45); Lommel 1927 (10.131).

¹¹¹ “*gaḍā* in 131, everywhere else *vazra*, are synonyms; a distinction of throw and blow is not probable.” (Herzfeld 1947, p. 787).

¹¹² Herzfeld 1947, p. 438. Herzfeld was so convinced by his interpretation that he suggested changing the order of the relevant passages to adapt the text to his theory (pp. 458f.).

¹¹³ Geiger 1882, p. 445.

¹¹⁴ Hertel 1927, pp. 215f.

¹¹⁵ In the sense that only the name had been transferred from a heavenly, as the most effective, weapon to a human weapon (p. 219), so that the *vazra* could be a human weapon just because it bears the respective name (Hertel 1927, pp. 215; 218f.).

¹¹⁶ “Das Verbum, welche die Handhabung des *vazra*- bezeichnet, [ist] — ich füge hinzu: ausschließlich — *nivig*- [...], was Bartholomae selbst *Sp.* 1313 mit „herabschleudern“ übersetzt, freilich, indem er seiner falschen Erklärung des *vazra*- zuliebe ganz unberechtigter Weise „herabschwingen“ hinzufügt. Ebenso setzt er für das Simplex *vig*- die Bedeutung „schwingen, schleudern“ an und übersetzt die Belegstelle, [24]

A comparison of the major translations of the participle *hunivixta*, which is supposed to inform us about the handling of the *vazra*, is as follows: “gut herabgeschwungen / herabgeschleudert,”¹¹⁷ “swung down,”¹¹⁸ but also “well-tossed,”¹¹⁹ “kräftig geschwungen”¹²⁰ and at the same time “leicht zu schwingend,”¹²¹ “well-falling,”¹²² “gut geschleudert,”¹²³ “gutgeschwungen,”¹²⁴ “gut niedergeschmettert,”¹²⁵ “well brandished,”¹²⁶ but also “easily brandished.”¹²⁷ It would be hard to argue that the meanings given here for *hunivixta* as the characteristic attribute of *vazra* are free from any contradictions. In some cases, the translators even contradict themselves. In contrast, the verbal action for *gaḍā* is *nijainti*¹²⁸ (“to smash the *gaḍā* at”). It is also difficult to understand how Schlerath’s conception of a “heavy primeval club [...] of Heracles,”¹²⁹ could “easily be brandished”¹³⁰ or even “fastened to the girdle”.¹³¹ On the authority of Geiger and the *Encyclopædia Iranica* just quoted, the *vazra* was therefore attached to the belt and was also used as a throwing device. It is amazing what Schlerath, who argued that “a heavy hammer can only be swung with both hands, a Hercules club cannot be swung with one hand”,¹³² comes up with, and presents as, a statement of fact:

“The Iranian clubs were miniaturised and used with *one* hand due to fighting on horseback”.¹³³

Moreover,

“smaller *gurz* can be carried on the girdle.”¹³⁴

Yt. 19,92 [...] mit „das sieghafte Geschoß (so richtig!) schwingend (so falsch statt „schleudern“), das er führte“. Und das, obwohl er die Bedeutung von *vaēda-* ganz richtig als „Wurfgeschöß“ ansetzt” (Hertel 1927, p. 215f.).

¹¹⁷ AirWB s.v. *vaēg* [ai. *vejate*].

¹¹⁸ Herzfeld 1947, pp. 435; 785.

¹¹⁹ Herzfeld 1947, p. 439.

¹²⁰ Geldner 1881, p. 493.

¹²¹ Geldner 1881, p. 510.

¹²² Darmesteter 1883, pp. 129; 154.

¹²³ Wolff 1910, p. 205; Lommel 1927, p. 71.

¹²⁴ Wolff 1910, p. 219; Hertel 1927, p. 144; Schlerath 1975a, p. 537.

¹²⁵ Hertel 1927, p. 168; Lommel 1927, p. 83 (“gut niedergeschleudert”).

¹²⁶ Gershevitch 1959, pp. 93.

¹²⁷ Gershevitch 1959, pp. 139. [Cp. also “In Middle Persian club/mace is described as a weapon easy to wield”. (*Enclr* s.v. *gorz*).

¹²⁸ AirWB s.v. ¹*gan + nī* (“(eine Waffe) niederschlagen, -schmettern auf”).

¹²⁹ See above, notes 67f. and “a club that is used for fighting has to be heavy” (“eine zum Kämpfen benutzte Keule muß schwer sein,” Schlerath 1975a, p. 550).

¹³⁰ Geldner and Gershevitch above.

¹³¹ *Enclr* (s.v. Army, I. Pre-Islamic Iran, 1. The Avestan Period); cp. also Geiger 1882, pp. 438–450 on “the martial equipments of the Avestan people”.

¹³² “einen schweren Hammer schwingt man nur mit beiden Händen, eine Herkuleskeule kann man nicht mit einer Hand schwingen” (Schlerath 1975a, p. 538). Malandra (1973, p. 283) was looking for a way out of the dilemma along the same lines: “[...] the *vazra/vajra* [...] was a heavy weapon that could only be wielded (Av. *nī-* or *fra-vaēg-*) easily with both hands.” But wielding is never easy when you need both hands to do it.

¹³³ “In Iran wurde der *vazra-* schon früh eine verhältnismäßig einheitliche Metallwaffe. Die Kampfesweise zu Pferd führte zu einer Verkleinerung der iranischen Keulen und zur Handhabung mit einer Hand.” (Schlerath 1975a, p. 552).

¹³⁴ “Kleinere *gurz* können am Gürtel getragen werden.” (Schlerath 1975a, p. 551). According to Malandra “[d]etails as to its precise form or use are not given in the only occurrence of *kamarā-* in the weapons- [25]

However, although Schlerath presents himself as surprisingly well informed on the size and method of carrying the Persian *gorz* without citing any evidence, we are talking here about the Avestan *vazra* of Mithra.

Thus, the use of the Avestan *vazra* for the purpose of comparison with the Vedic *vájra* clearly has its limits here, too. The equation does not work, in spite of certain similarities. Besides, with reference to Whitaker’s imagination of Indra’s *vájra* as “the image of manly strong Indra cradling his bold *vájra*, like a father [bears] his beloved son”,¹³⁵ it should be noted that a father does not carry his son on his belt, but, perhaps, as a warrior, he might weigh his fist-sized sling projectile carefully, as if he were cradling his child in his arms.

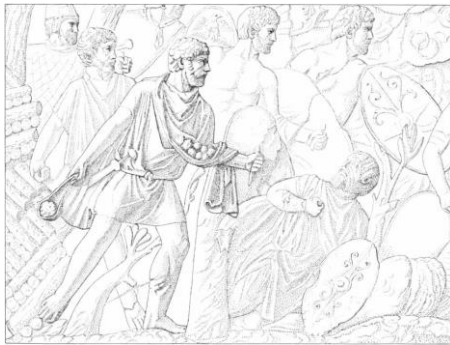


Fig. 10a–b: Roman Auxiliary in the Dacian wars, his sling at the ready, carries extra missiles in the fold of cloak flung over his shield arm. – Flint slingstones from Lachish (Iron Age).

There is more to it. Schlerath had shown little hesitation in juxtaposing textual layers of different ages and origins in order to prove that the Avestan *vazra* corresponded to the Rigvedic *vájra*. While the comparatively younger *Yašt* was the proof par excellence in his opinion, he had no reservations about using the much younger *Vendīdād*¹³⁶ with the same evidential value. For Schlerath it is “already clear from the list of the soldier’s equipment” that *vazra* in the Avesta means “Keule”. For which he refers to “*Vidēvdāt* 14.9”.¹³⁷ But what do we find there? The simple mention of the word *vazra* as one of a number of weapons in a warrior’s arsenal.¹³⁸ This may or may not have been understood as a club in the *Vendīdād*. The same uncertainty applies to the shorter list in *Yašt* 13.72. Nothing specific about the type of weapon is implied by the mere mention of the word. However, as the sling and sling stones (*fradaxšanya*) are also enumerated there in *Vidēvdāt* 14.9,¹³⁹ it could be argued that this rules out the possibility that the

list *Vend.* 14.9. Presumably, such weapons as the *karata* or ‘dagger’ would have been suspended from it.” (1973, p. 271).

¹³⁵ Whitaker 2023, p. 964.

¹³⁶ “There is general agreement among scholars that the Avestan of the *Vendīdād* bears witness to a late and degenerate state of the language. [...] the *Vendīdād* will have been composed in the Arsacid period [i.e., 247 BC to 224 AD., W.S.], if not even under the early (?) Sasanians [i.e., the 7th–8th centuries AD, W.S.].” (EncIr s.v. *Vendīdād* I.)

¹³⁷ Schlerath 1975a, p. 536. So also Jamison 2023, p. 336, who does not even mention the *Yašt*.

¹³⁸ Cp. Darmesteter 1892, p. 215; Wolff 1910, p. 406.

¹³⁹ “une fronde avec lacet à main” (Darmesteter 1892, p. 215, note). The *fradaxšanyas* of the treaty-infringing men in *Yašt* 10.39 are rendered as “Schleudergeschosse” (*zarštva* = “made of stone or perhaps made [26]

vazra was a projectile specifically designed for slings. But then one must explain why the *vazra* should be a club, when the club already appears as *gaḍā* in the arsenal of Mithra's chariot.¹⁴⁰ The only way out of this dilemma is to assume that there were two different clubs, as some have indeed tried to do.¹⁴¹ But where the sling is mentioned alongside the *vazra*,¹⁴² one could just as easily distinguish two different categories of sling projectiles, an ordinary one, and one specifically crafted for special use.¹⁴³ Obviously, Schlerath's certainty about the character of the *vazra* as "Keule" is becoming increasingly difficult to share.

More Avestan weapons

If the Rigvedic *vájra* was the mythic wonder weapon of Indra, and thus identical with the Avestan *vazra*, why should the other weapons of the Avesta, like those of Mithra and the soldiers, not also be considered wonder weapons? Is it plausible that of all the weapons listed, only the *vazra* was such a one? There is a great deal of ambiguity regarding the weapons of the Avesta, whose reality, to my knowledge, has never been denied, as evidenced by the fact that there are sometimes extremely divergent interpretations, which will not be discussed in detail here. Take, for example, the throwing weapons in Mithra's chariot (Yt. 10.128–131). In addition to the *vazra*, *čakuš* is also mentioned (10.130). This weapon does not seem to have caused any major headaches for the translators either, although their opinions on it vary greatly: "stählerne Wurfäxte,"¹⁴⁴ "Wurfscheiben,"¹⁴⁵ "[...] zweischneidige Hämmer,"¹⁴⁶ "zweischneidige kupferne Hämmer,"¹⁴⁷ "steel-hammers,"¹⁴⁸ "disques d'acier,"¹⁴⁹ "double-headed axes,"¹⁵⁰ "two-wedged hatchets of steel,"¹⁵¹ "battle ax, hatchet."¹⁵² Apart from the various definitions of the metal as copper, steel, or even "Spanish steel,"¹⁵³ there are also

of metal", cp. Windischmann 1857, p. 35), "Schleuderkugeln" (Geldner 1881, p. 493), "pierres de fronde" (Darmesteter 1892, p. 454), "Schleudersteine" (Wolff 1910, p. 204; Hertel 1927, p. 144; Lommel 1927, p. 71) and "sling-stones" (Herzfeld 1947, p. 785; Gershevitch 1959, p. 93; Malandra 1973, p. 287). On the sling as a weapon in the Avesta cp. Geiger 1882, p. 446; Malandra 1973, p. 270 (*asan-*, *asman-* for "sling-stone, stone missile"), p. 275 (*fradaxšanā-* for "sling"), pp. 276; 287 (*fradaxšanya-* and *zarštva-* for "sling-stone"; cp. also Jamison 2023, p. 336). It should be food for thought when the Avestan *vazra* is used for the interpretation of the *vájra*, but the sling and its projectiles are excluded for the interpretation of the Rigveda, despite being mentioned explicitly (*asan-*, *asman-*) in the Avesta.

¹⁴⁰ *Yašt* 10.128–132.

¹⁴¹ See the translations above, pp. 22f.

¹⁴² *Yašt* 10.39–40.

¹⁴³ Cp. pp. 29; 35; *Vájra*, pp. 55f.

¹⁴⁴ So Wolff 1910, p. 219.

¹⁴⁵ Spiegel 1863, p. 100.

¹⁴⁶ Hertel 1927, p. 168, note: "Bezeichnung eines Metalls".

¹⁴⁷ Geldner 1881, p. 510.

¹⁴⁸ Darmesteter 1883, p. 154; Lommel 1927, p. 83 ("stählerne Hämmer, beiderseits spitze").

¹⁴⁹ Darmesteter 1892, p. 476, note: "*cakusha* traduit *cakrā*".

¹⁵⁰ Herzfeld 1947, p. 435.

¹⁵¹ Gershevitch 1959, p. 139.

¹⁵² Malandra 1973, p. 273, "double-bitted [...] and made of steel [...] As in the case of *gaḍā*, Bartholomae assumed that the *čakuš* was thrown".

¹⁵³ So Herzfeld 1947, p. 791, on *čakuš* "of Yt. 10.128" [recte: 10.130] based on the reading *hōspinēnānām* (crit. ed.: *haosafnaēnam* [Gershevitch 1959, p. 138]), which he understands as "*huspīn*" = "Spanish (steel)" [27]

translations of “double-edged hammers”. The latter reminds one of the idea of “sharpened clubs” of the Herculean type. Indeed, it is no mistake to see rather a sword in a “club” when it has a double edge that is sharply ground. In any case, it cannot be a club, bludgeon, or mace.¹⁵⁴

It can generally be said that there is a great deal of confusion regarding Avestan weaponry. This can also be seen in *karata* (Yt. 10.40; 131), which is variously translated as “Messer,”¹⁵⁵ “Messer, Dolchmesser, Dolch,”¹⁵⁶ “Dolch,”¹⁵⁷ “dagger,”¹⁵⁸ “knife,”¹⁵⁹ “Schwert, kurze messerartige Waffe,”¹⁶⁰ and, in the majority of cases, also as “Schwert / sword / épée”.¹⁶¹

The metals

The interesting thing about swords is that the Indo-Iranians do not really seem to have had a word for sword. They did not use swords – the reason given is lack of metallurgical knowledge¹⁶² – and they certainly did not have brass ones as the *Encyclopædia Iranica* claims.¹⁶³ Apart from the questionable determination as sword, the description there of its metal as brass is entirely inexplicable. There is no historical record of sword blades made of brass for use in actual combat.¹⁶⁴ And the equation of the Avestan *vazra* with the Rigvedic *vájra* is also limited by metallurgical issues. We are talking about completely different timelines in the texts under consideration. On the one hand, the Rigveda predates the Iron Age. On the other, the Younger Avesta not only knows of

[= Toledo steel, W.S.] and concludes that “the appearance of the word in the sixth century in the Avesta is the effect of Phoenician trade”.

¹⁵⁴ Whitaker dismisses a sharpened sling stone as inconceivable – although we know these projectiles were also crafted in that particular form (*Vájra*, pp. 53f.) –, but finds nothing wrong with the idea of a sharpened club: “Firmly holding the mace [*vájra*] in his hands, Indra honed it sharp like a carving knife [...]” (Whitaker 2023, p. 964).

¹⁵⁵ Spiegel 1863 [10.131]; Lommel 1927 [10.131].

¹⁵⁶ AirWB s.v. *karata*.

¹⁵⁷ Wolff 1910; Geldner 1881 [10.131]; Lommel 1927 [10.40].

¹⁵⁸ Herzfeld 1947; Malandra 1973, p. 266.

¹⁵⁹ Gershevitch 1959.

¹⁶⁰ Geiger 1882, p. 449.

¹⁶¹ Windischmann 1857; Spiegel 1863 [10.40]; Geldner 1881 [10.40]; Hertel 1927; Darmesteter 1883; 1892.

¹⁶² Cp. Malandra 1974, pp. 266f. On the absence of swords in Vedic texts until c. 500 BCE and the meaning of *asi* as “butcher’s knife” cp. Schlerath 1997, pp. 823–826.

¹⁶³ “a short double-edged sword, made of brass [...] also fastened to the girdle” *Enclr* (s.v. Army, I. Pre-Islamic Iran, 1. The Avestan Period). In contrast, Geiger (1882, pp. 390; 449) defines these weapons as made from ore or bronze.

¹⁶⁴ “The early cultures of the Near East, the ancient Egyptians, the Etruscans, and the Bronze Age cultures in other parts of Europe did not purposely produce brass. [...] The earliest brass objects intentionally alloyed are Hellenistic coins from Bithynia (1st cent. AD), which contained approximately 20% zinc. From the time of the Principate, brass was a widespread metallic material; it was referred to as *aurichalcum* because it looked like gold (Plin. HN 34,2; 34,4, or rather *orichalcum* corresponding to the Greek word *oreíchalkos*; cf. Plat. Kritias 114e) and was highly valued. Fibula, coins and individual types of vessels were produced from pure brass of prescribed composition. Brass consisting of tin and lead was used to produce decorative objects such as handles, ornamental fittings for furniture, vessel handles and smaller devices. [...] Since Augustus, the copper-zinc alloy was to a large extent used for minting; [...]” (Riederer 2006). Even Elgood (2004) cannot provide a single example of swords and daggers with brass blades, but knows only of brass hilts, which have a decorative character.

iron, it even knows steel, if we are to believe our experts. Thus, the *gaḍā* (“club” or “mace”) is said to be *ayanḥaēna-* (“of iron”).¹⁶⁵ By contrast, the *vazra* (allegedly also “club” or “mace”) is *zaranyehe/zaranya-* (*zaranaēna*, etc.) “gold; made of gold”.¹⁶⁶ It is controversial whether these weapons are items for striking or for throwing.¹⁶⁷ The material determination as gold, as maintained also by Schlerath, was criticised by Gershevitch:

“If the word has anything to do with ‘gold’ it can only mean ‘gilded’, since a mace ‘cast in yellow iron’ is evidently not made of gold.”¹⁶⁸

Gershevitch, on his part, was criticised by Malandra:

“The word *ayah-* can only mean here ‘bronze’, for what other metal used in the manufacture of weapons would be designated as ‘yellow’? Gershevitch’s “[...] gilded iron” is difficult to accept, especially when the Avestan passage is compared with Ṛgvedic descriptions of Indra’s *vajra*.”¹⁶⁹

And not only that. A club made of gold or with a gold coating is not suitable for use in battle. It would deform or lose its coating on the first impact. A more convincing result can be achieved with a hypothetical approach to a lead bullet,¹⁷⁰ which we know to have been a widespread weapon of war. Both the raw material and the finished product can satisfactorily explain the colouring of the Rigvedic *vájra*, which oscillates between silvery-bright and golden and flashes in the air.¹⁷¹

The flying vazra and Schlerath’s freedom from doubt

Thus, the confusion over Avestan weaponry continues. In view of the problematic state of the evidence, this uncertainty is entirely understandable. What is less understandable is how Schlerath’s apodictic assertion, which he maintained unswervingly even 22 years later, that *vazra* – “undoubtedly”¹⁷² – means “club”,¹⁷³ could have been

¹⁶⁵ *Yašt* 10.131 (Gershevitch 1959, p. 139). More cautious is AirWB s.v.: “metallen (eisern)”; Lommel 1927, p. 83: “ehern”. Malandra (1973, p. 273) however points out that it might be regarded as synonymous with *dāru-/dru-*, which would result in a wooden club. On the problem of determining the *ayas* in the Rigveda, which is linguistically cognate, cp. *Vájra*, pp. 74–84.

¹⁶⁶ *Yašt* 10.96; 132. “aus gelbem Metall, aus festem Gold” (Lommel 1927, pp. 78; 83); “golden” with reference to *híranya-* (Schlerath 1975a, p. 536); “Gold” (Schlerath 1975a, p. 553). Schlerath avoids mentioning Gershevitch’s objections.

¹⁶⁷ Cp. above pp. 22f.

¹⁶⁸ Gershevitch 1959, p. 245 *ad* Yt. 10.96, n. 3.

¹⁶⁹ Malandra 1973, p. 281.

¹⁷⁰ In the cultural areas considered for Aryan immigration, the occurrence and use of lead has been documented since the 3rd millennium BC. Galena was one of the most important ore minerals in the history of civilization. It was used for the production of lead as early as the 6th millennium BC. Lead was therefore well known in the Ancient Near East and Antiquity, where it was mainly mined as a by-product of silver production. Cp. *Vájra*, pp. 74–84.

¹⁷¹ Cp. *Vájra*, pp. 79–83.

¹⁷² Schlerath’s freedom from doubt is given a particularly piquant note by the motto under which the editors have placed the festschrift to which he contributed with the essay quoted in the footnote below: “A European is never satisfied, he always doubts” (“Ein Europäer ist nie zufrieden, er zweifelt stets.” – “Vorwort der Herausgeber,” p. 5).

¹⁷³ “Der Vajra, die Waffe Indras und anderer Götter, ist eine hochpoetische und aus indo-iranischer Zeit ererbte Vorstellung. Das wird deutlich durch die elf parallelen Fügungen, die aw. *vazra-*, unbezweifelt [29]

made against such a background, where even the types of weapons that appear to be well-known are uncertain. And there is still more:

Yašt 10.128–132 lists a variety of weapons in great numbers in Mithra’s chariot that are said – in an identically phrased concluding sentence – to fly through the air, literally that they “ride” (*vaz*)¹⁷⁴ through the air¹⁷⁵ and that they “fly, fall; pounce [on someone] in flight” (*pat*)¹⁷⁶. So these should be throwing weapons, clubs of the *gaḍā* type included.¹⁷⁷ Last in the series is the *vazra* (10.132). And it is precisely the last lines of the *vazra* passage (“they fly (*vazanti*), [...] they fall (*patanti*)”) that Schlerath has deliberately left out, even though he has quoted the paragraph in excerpts.¹⁷⁸ Admittedly there are philological and text-critical problems. One is that, unlike the weapons mentioned before, the *vazra* is used in the accusative singular. The two verbs are consistently used in the plural. From a text-critical point of view, this could be the result of mechanical repetition by a scribe.¹⁷⁹ Here is the editor’s reasoning for his decision to edit the text as printed:

“[...] in st. 132, where one may feel tempted to suppress the identical formula, I have chosen to retain it, on the assumption that the original **vazaiti* and **pataiti* were changed to plurals under the influence of the stereotyped wording of the preceding stanzas.”¹⁸⁰

As a result, Gershevitch accepted the *vazra* to “fly and fall on to” [the evil head(s) of evil gods].¹⁸¹ When we consider that the sling was one of the most accurate and most lethal long-range weapons in history, is it not fitting that the *vazra* is described as the “strongest of weapons, most valiant of weapons”,¹⁸² specifically of the throwing weapons (*zaēna*)¹⁸³ mentioned in this set of five stanzas?

“Keule,” wie der np. Fortsetzer *gurz* bis zum heutigen Tag beweist, und ai. *vajra*- enthalten (vgl. die Aufstellung bei Schlerath 1975, 500 ff.)” (Schlerath 1997, p. 821).

¹⁷⁴ “Any kind of gliding movement like ‘hovering, flying (etc.)’ e.g. like an arrow or spear: “which travels as fast [...] as the arrow”, etc.,” cp. AirWB s.v. *vaz*.

¹⁷⁵ AirWB s.v. *mainiv-asah-*, *mainyav-* “moving through the air, floating, flying” (“sich durch die Luft bewegend, schwebend, fliegend”), said of projectiles (with reference to Yt. 10.129ff.). Correspondingly also Wolff 1910: “Moving through the air ...” (“Durch die Luft sich bewegend ...”).

¹⁷⁶ Cp. AirWB s.v. *pat*.

¹⁷⁷ “[...] contrary to what happens with his clubs (st. 131), he never lets go the mace [...]. It is arms that are *thrown* (emphasis Gershevitch’s), and thereby lost, which he needs in large numbers: arrows, spears, knives, etc.” (Gershevitch 1959, p. 280).

¹⁷⁸ Schlerath 1975a, p. 537. Das Gupta (1975, pp. 1f.), on the other hand, has explicitly pointed out that Avestan *vazras* fly.

¹⁷⁹ “The last three lines are thought to have been added by an undiscerning scribe who wanted the stanza to end like sts. 129–131” (Gershevitch 1959, p. 280).

¹⁸⁰ Gershevitch 1959, p. 280.

¹⁸¹ Cp. Gershevitch 1959, p. 141. Thus already anticipated by Lommel (1927, p. 83) with: “gedankenschnell *fliegt sie* [scil. die “Keule,” WS], [...] *fällt sie* auf die Schädel der Teufel”. Note that Gershevitch, in rendering the *vazra* as mace, adapts *mainyavasā* accordingly and translates it not as “moving through the air”, but as “hailing from supernature”. On *mainyav-* see above, note 175.

¹⁸² Gershevitch 1959, pp. 121; 139.

¹⁸³ *zaēna* (10.96; 132; cp. 141) = “Waffe,” etymologisch verwandt (AirWB s.v. *zaēna*; EWA (2) s.v. *hay*) mit ai. *hetī* “Schuß, Geschoß, Waffe, Wurfwaffe” (cp. WRV, PW, pw). Cp. also Geiger 1882, p. 445, n. 1. Differently assessed by Malandra (1973, p. 286): “simply a general term for ‘weapon’” and “probably not connected with OInd. *hetī-* ‘missile’”.

Even descriptions that ascribe to the *vazra* an indeterminate number of bulges¹⁸⁴ and cutting edges¹⁸⁵ like the *vájra* do not make the weapon a mace in the style of Hercules.¹⁸⁶ There is a more plausible explanatory model. It is based on specially crafted historical sling stones with edged and serrated shapes.¹⁸⁷ The Avestan statement that the *vazra* was cast¹⁸⁸ would apply to lead bullets, too. It is certainly a reasonable assumption to make. The Rigvedic evidence for the casting of sling bullets is not yet conclusive, but it is already present in the Atharvaveda.¹⁸⁹ However, Schlerath does not seem to see any contradiction between “carpentry” (wood)¹⁹⁰ and “casting” (metal) when he cites both activities in the given meanings for the production of the *vazra*.¹⁹¹ In doing so, he moreover sets aside the fact that the word *vazra* does not appear at all in his Avestan evidence for alleged carpentry (10.141), but only *zaēna*, a word for weapon or throwing weapon, although it might refer to *vazra*.¹⁹²

As further “indisputable” evidence for *vazra* in the sense of “club” Schlerath repeatedly cites the Persian word *gorz* as an etymological continuation.¹⁹³ However,

“the name *gorz* and its descriptions can be found in most texts dealing with mythical, religious, and epic topics. *Gorz*, besides its function as an instrument of war, is referred to in ancient Iranian literature as an implement used by both divine entities and terrestrial figures as a symbol of the victory of justice over oppression and order over chaos; [...] the majority of references to the use of mace and its descriptions in New Persian texts, are found in the *Šāh-nāma*, [...] as a symbol of chivalry, heroism, and dispensing justice [it] is the heritage of great heroes in the Iranian national epic [...].”¹⁹⁴

The *Šāhnāma* was written between the end of the tenth century and the beginning of the eleventh century. This puts it at a distance of certainly more than 1,500 years from the Young Avestan texts and perhaps just short of 3,000 years from the Rigveda. A broad spectrum of meanings can be attributed indirectly to *vájra*, if one takes the methodically reverse direction from classical modern Persian *gorz*¹⁹⁵ to Indo-Iranian and

¹⁸⁴ Cp. AirWB s.v. *sata-ḥstāna*- “mit hundert Buckeln besetzt”. On *sata*, skt. *śata*, as an expression of an indeterminate quantity cp, pw s.v. *śata*.

¹⁸⁵ Cp. AirWB s.v. *sato.dārā*-: “mit hundert Schneiden, schneidigen Kanten”. “blades” (Gershevitch 1959, p. 121; 139).

¹⁸⁶ Cp. Schlerath 1975a, p. 541, cited above note 76. See also above, pp. 16ff. and Schlerath 1997, p. 821: “[...] it follows [...] that the club was already cast in copper in this period, long before the appearance of written sources, but that there was still the idea of the wooden Hercules club, made from a young tree whose roots had been cut, resulting in a heavy end piece with “a hundred” knots” (“[...] ergibt sich [...], daß schon in dieser weit vor dem Einsetzen der Quellen liegenden Zeit die Keule aus Kupfer gegossen wurde, daß es aber auch noch die Vorstellung von der hölzernen Herkuleskeule gab, die aus einem jungen Baum zurechtgemacht wurde, dessen Wurzeln abgeschlagen wurden, wodurch sich ein schweres Endteil mit “hundert” Knollen ergab”).

¹⁸⁷ Cp. Vájra, pp. 55f.

¹⁸⁸ *frāhixta* (Yt. 10.96), cp. AirWB s.v. ¹*haēk* (with *frā*-).

¹⁸⁹ AV 11.10.13b: *vájraṃ yám ásincata*. Cp. Vájra, p. 52, note 120.

¹⁹⁰ *hutašta* (Yt. 10.141), cp. AirWB s.v. *taš*.

¹⁹¹ Schlerath 1975a, p. 536.

¹⁹² See above note 183.

¹⁹³ Schlerath 1975a, pp. 536; 551; 554; 1997, p. 821.

¹⁹⁴ *EncIr* s.v. *gorz*. Cp. also Harper 1985, pp. 248; 257ff.

¹⁹⁵ “A mace of gold, silver, or iron; a club, battle-axe; a pestle; penis (Steingass p. 1082); “Keule, Stab (der Edelknaben), Streitkolben” (*Farhangvevis*, p. 2044, s.v. *gorz*).

Young Avestan *vazra* in order to determine the meaning of Old Indian *vájra* on merely etymological grounds, even without taking into consideration the *possibility* of semantic change between the two linguistically cognate words, which are separated by about 2000 to 3000 years. The instances cited by Mayrhofer under the entry *vájra-* are sufficient to illustrate how meanings connected to *vazra* can become differentiated. He points to New Persian *gurz* with the meaning “club,” to the Iranian loanword *varz*, meaning “stick” in Armenian, and to the Finno-Ugric loanword *vasar* with the meaning “axe”. However, just as all the Sanskrit dictionaries before him, he refrained from assigning the meaning “club” to *vájra* and beyond that also to *vazra*. He leaves both their meanings open.¹⁹⁶ What are the chances, then, from a purely linguistic point of view, that Young Avestan *vazra* meant a club and nothing else but a club, and that the Rigvedic *vájra* could only have had exactly the same meaning? It is well known that later meanings can be radically different from the original usage, narrowing the original meaning to a subordinate level or expanding it, being based on the similarity of a thing, etc.¹⁹⁷ In addition, archaeological finds of heads of clubs are sometimes invoked as evidence.¹⁹⁸ If anything, however, these prove that clubs existed in ancient Iran, which is not disputed. Art historical and archaeological expertise, however, consider it more likely that these “clubs” were sceptres used for ceremonial purposes.¹⁹⁹ That would be a different story. Moreover, even in the unlikely event that they were indeed used as weapons, there is no evidence that it was these clubs that were known as *vazra*. The name is not inscribed there. After all, there were other words for “club”, of which we know *gadā* (skt. *gadā*), *dārav* (skt. *dāraṇa*, “wooden club”) or *vaēda*. In the same way, there were also Iranian words for sling stones and for the sling weapon.²⁰⁰ In the

¹⁹⁶ EWA (2) p. 492 s.v. *vájra*. I am indebted to Almut Hintze for drawing my attention to the wide variety of meanings (club, stick, axe) of the *vazra* loanwords listed by Mayrhofer. This diversity in the development of meaning is also reflected in the way Parpola presents it: “Another loanword for a metal object is Proto-West-Uralic **vašara*, “hammer, ax,” from Proto-Indo-Aryan **vaj’ra*, “weapon of the war-god”; it probably denoted the ax or mace of the Sejma-Turbino warriors, but later acquired the meaning “hammer” from the Nordic war-god Thor.” (Parpola 2015a, p. 63).

¹⁹⁷ On the current state of the etymological issue cf. Pinault 2022, pp. 238f.: “La comparaison avec l’indo-iranien autorise même à restituer un mot indo-européen **uāg-ro-*, qui serait la substantivation d’un adjectif **uāg-ro-* «brisant, coupant», dérivé d’une racine **uāg-* «briser, fendre» [...]. Telle est la *doxa* actuelle pour les indo-européanistes, et dans les dictionnaires étymologiques les plus récents. Il ne s’agit pas de restituer le nom d’une arme indo-européenne. Il est possible que ce terme désignait une partie seulement de l’arme indo-iranienne, la partie importante qui brise et qui tue, étendue par métonymie à la totalité de l’objet. Cette partie aurait pu être en pierre aussi bien qu’en métal.” (Pinault 2022, p. 239). Cp. also Kümmel (2023, p. 85, s.v. **ueg-*, note 1): “[...] ap. *vazarka-* = np. *buzurg* ‘groß’ (unsicher Anschluss von ved. *vájra* = av. *vazra-* m. ‘eine Waffe, Donnerkeil’) [...]”

¹⁹⁸ Malandra 1973, p. 283; Schlerath 1975a, pp. 547f. “There is a number of bull-headed maces/clubs among the extant ancient weapons. Careful examination of these ancient war relics easily reveals why Iranians considered the mace the most decisive instrument of war. Included among them are two bronze maces kept at The Metropolitan Museum of Art in New York, which are dated to the first millennium B.C.E., and another one, made of iron and bronze, kept in the Los Angeles Sub-province Museum of Art. Pictures of bull-headed clubs are also found on ancient bas-reliefs and coins.” (*Enclr* s.v. *gorz*).

¹⁹⁹ In her detailed study on these and typologically related maces from different collections, however, the Metropolitan Museum’s then curator, Prudence O. Harper, not only says that “the evidence for the existence of this symbolic weapon in Iran, itself, is slight,” but also that she assumes that all these ox-headed maces were ceremonial objects, suggesting sceptres (Harper 1985, p. 248 with note 9).

²⁰⁰ See above note 139.

Avestan language, *vazra* may or may not have referred to a club, a special sling stone, or a completely different type of weapon. The same is true of the *vájra* in the Veda. The word may or may not have been used to denote a club. It may or may not have referred to a sling stone. Cognate words do not necessarily designate the same objects at all times and in all places where they are found. The likelihood of a change in meaning, a new allocation of functions, a change in the symbolic character, etc. must therefore be included in our consideration. Rau and Schlerath have acknowledged this in principle.²⁰¹ Even though they have not adhered to it. Therefore, the handling, nature and function of the *vájra* as described in the Rigveda at the given time is the decisive key to its determination.

Mutual Dependency of Rigvedic and Avestan scholarship

It is worth recalling a remark on method made by Friedrich Spiegel in 1868, which has apparently fallen into oblivion, which may still have some relevance in the present context of the tracing of the introduction of the concept of the *vájra* as a club in the Rigveda:

“In the way of the Veda interpreters, the method is simply to determine what the phrase means or ought to mean in the Vedas, and then to transfer the result to the Avesta. For us, the matter is not quite so simple. We also recognise that in such cases there is a connection going back to the Aryan period. But the time before the separation of the Indians and the Erânians is much older than the Vedas, and so several cases are possible. It is possible that both the Indians and the Erânians retained the original meaning; but it is also possible that only one of the two peoples retained it, and it is even possible that neither of them retained it”.²⁰²

The same principle, but in reverse, can also be observed with the club. As late as 1909, Geldner adhered consistently to the translation of *vájra* as “Keil” (“wedge”).²⁰³ He never uses the word “Keule” (“club, mace”).²⁰⁴ There must have been a reason for his consequent change to “Keule” in his pioneering 1929 translation.²⁰⁵ It is probably to be found in his own excerpt translation of the Avesta (1881), in Bartholomae’s dictionary (AirWB, 1904) and Wolff’s translation (1910), where “Keule” was the translational choice for *vazra*. So for a while, the two translations “Keil” for *vájra* and “Keule” for *vazra* coexisted. In 1913 Reichelt was still of the opinion that

²⁰¹ Rau 1973, p. 45 [Kl. Schr. 829]; Schlerath 1975a, p. 537.

²⁰² “Nach der Art der Vedaerklärer ist einfach die Methode die, dass man festsetzt, was die Phrase in den Vedas heisst oder heissen soll und dann das Resultat auf das Avesta überträgt. So einfach steht für uns die Sache nicht. Auch wir erkennen an, dass in solchen Fällen ein Zusammenhang vorliegt, der in die arische Periode zurückgeht, aber die Zeit vor der Trennung der Inder und Erânier ist eben weit älter als die Vedas, und darum sind mehrere Fälle möglich. Es ist möglich, dass sowohl Inder wie Erânier die ursprüngliche Bedeutung festgehalten haben; es ist aber auch möglich, dass nur eines von beiden Völkern sie festhielt, es ist sogar möglich, dass sie beide nicht festgehalten haben.” (Spiegel 1868, p. XXVII).

²⁰³ See above, pp. 11f.

²⁰⁴ See also above note 47.

²⁰⁵ = Geldner 1951. On the publication history cp. Nobel 1957, p. V.

“[i]t was only after Indra had become the god of thunder and lightning that his wedge [= *vájra*, WS] took on the meaning of a lightning bolt or sling stone.”²⁰⁶

It is evident that the idea of a wedge or a sling stone as the true nature of the *vájra* was there. It lasted until Geldner decided to accept the dubious notion of “Keule” for the Avestan *vazra* for his translation of *vájra* in the Rigveda, too. As shown above, there is and has been even less solid evidence for such a meaning, due to the scarcity of informative statements in the Avesta. Again, it was the etymological relationship between *vazra* and *vájra* that led to the equation of the object, i.e. the Rigvedic *vájra*, with an Avestan *vazra* predetermined as a club, exactly in the manner outlined by Spiegel. On the basis of Geldner’s novel choice of “club”, which was adopted by Vedic scholars, the Iranists invoked the Vedicists for the meaning they assigned to *vazra*, who in turn invoked the knowledge of the Iranists, which was considered no less certain.²⁰⁷

What Schlerath had done was basically nothing but an attempt to justify Geldner’s unexplained translation “club” in hindsight. As he himself admits, “since the thirties the word *vajra*- [...] has almost always been translated by the Vedicists as ‘club’”.²⁰⁸ Thus, Geldner’s sudden change of mind is the true source of the *communis opinio*. Although I would not go as far as Rau in saying that Schlerath “at no point promotes the understanding of the texts,” there is a lot of truth in his statement that by examining the specimina of Schlerath’s interpretations, “the reader can judge how well-founded Mr. Schlerath’s apologia for the *communis opinio* is”.²⁰⁹ Schlerath managed to refute Rau’s harpoon hypothesis. But he failed to provide any convincing evidence in favour of the mace theory, apart from apodictic assertions based on presupposed equations with the Hercules club as a kind of a bludgeon.

The sling of David

Obviously, other Rigveda interpreters were influenced by the same legacy of ideas about club-wielding heroes of classical antiquity. Whitaker for instance is reflexively guided by Old Testament stories in the first place when it comes to slingers, but not by weaponry-related objective criteria. His approach is determined to a decisive extent by his cultural lore. However, the question must on the contrary be approached neutrally, without allowing ourselves to be unconsciously guided by classical or biblical images. Against the thesis of the *vájra* as a sling projectile, he presents the following argument at one point:

“Since one of the benefits of a sling is that it requires little strength to be deadly—the whole point of David’s miraculous defeat of Goliath—then the

²⁰⁶ “Erst als Indra zum Blitz- und Donnergott geworden war, bekam sein Keil die Bedeutung Blitz- oder Schleuderstein.” (Reichelt 1913, p. 45). Cp. also Malzahn 2016, pp. 199ff. (above, p. 14, notes 53f.).

²⁰⁷ Cp. *Vájra*, pp. 87f.

²⁰⁸ “Das Wort *vajra*- wurde [...] seit den dreißiger Jahren von den Vedisten fast immer mit “Keule” übersetzt.” (Schlerath 1997, p. 821).

²⁰⁹ “Nach diesen Proben mag der Leser abschätzen, wie fundiert Herrn Schleraths Apologie der *communis opinio* ist. Da er das Verständnis der Texte an keiner Stelle fördert, habe ich leider nichts von ihm lernen können und halte daher mit besonderem Hinweis auf S. 45 sqq. meiner Abhandlung deren Inhalt in vollem Umfang aufrecht.” (Rau 1976, p. 358 [Kl. Schr.] 860).

extensive emphasis on Indra’s physical power in the *R̥gveda* seriously undercuts Slaje’s thesis.”²¹⁰

And elsewhere he holds that

“Slaje even goes so far as to compare the deadly nature of the sling with modern firearms, and consequently gives Goliath as much a chance against David as any sword-wielding warrior would have against a teenager with a .45 caliber pistol.”²¹¹

This second point, with which Whitaker honoured me undeservedly as its author, is actually a statement I had quoted from the results of empirical research into the power of the sling as a weapon, where the velocity and impact energy of sling bullets were measured experimentally.²¹² It is the first sentence, however, that is telling. Whitaker’s comparison with the Old Testament account is problematic. There, it is God who helps the physically weaker David, a shepherd boy, to an unexpected victory over a towering enemy. But how? By making him fight with a much more powerful arm than the giant’s melee weapons. Whitaker’s argument is practically self-refuting. Actually, the penetrating power of a forcefully slung sling, which can even bring down a giant, is indeed reinforced by the biblical legend of David, but in no way refuted. The passage reads:

“And David put his hand in his bag, and took thence a stone, and slang it, and smote the Philistine in his forehead, that the stone sunk into his forehead; and he fell upon his face to the earth. So David prevailed over the Philistine with a sling and with a stone, and smote the Philistine, and slew him; [...].”²¹³

Korfmann warns against trivialising the sling as a weapon by interpreting David’s victory as a mere miracle of God. The archaeological and historical evidence would contribute to the demythologization of the event.²¹⁴ If Indra had been fighting with a heavy close-combat weapon of limited range such as the mace, he would have been as defenceless against any ranged slinger as Goliath was against David. Heroes and villains alike, the gunslingers of the Old West earned their fame and spread their terror not through their “incredible raw physical strength”, but through their superior mastery of a deadly long-range weapon. After all, it was the gun that “won the West”, not the bludgeon. At the risk of repeating myself, it’s just that the sling is the kinetic ancestor of firearms, and the sling stone is that of bullets.

And although it was a long-range weapon, we know that it could also be used at close range, as shown below with a slinger in the midst of the turmoil of battle in the second millennium BC:

²¹⁰ Whitaker 2023, p. 964.

²¹¹ Whitaker 2023, p. 962.

²¹² Dohrenwend 2002, pp. 30; 38f. (with tables and charts). See Vájra, p. 34.

²¹³ 1 Samuel 17:49f. (King James Version). For the Hebrew verb *ṭābaʿ* (root *TBʿ*) and its meaning of sinking into something cp. Gesenius 2013, pp. 415f., on Hebrew “sling” (*qālaʿ*, root *QLʿ*) and associated terms as well as for “slinger” (*qall[ī]āʿā*) – all with references – cp. Gesenius 2013, pp. 1171f. (I am indebted to Peter Stein (Jena) for his help with this). On the interpretation of this passage cp. also Korfmann 1986, pp. 129f. and see also figures 2a–b. Korfmann points out that David is not the only slinger in the Bible and refers to the slingers of the tribe of Benjamin, who inflicted heavy casualties on the Israelites, and to the fact that slingers were part of David’s elite corps (p. 131).

²¹⁴ Korfmann 1986, p. 130.

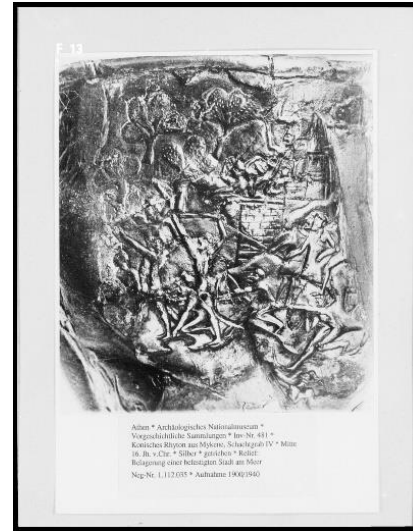


Fig. 11a–b: Silver rhyton from Mycenae, 1600 BC: in the centre a slinger with a sling stretched horizontally over his head.

Not to mention that the sling was also used by individual snipers outside of military units.²¹⁵

Some even doubt the penetrating power of a sling projectile. The Old Testament story under consideration confirms what is well-known from historical accounts elsewhere, namely that a slingshot projectile, depending on its size and type, will either shatter or penetrate the object it hits.²¹⁶

Against this background, the attribution of a “superior penetrating power” to the *vájra* is hardly an “over-translation”, as Whitaker would have it. For here we have a coincidence of two attributes that qualify the *vájra*, *abhibhūtyójas* and *pārya*:

“Such *vájras* were made of metal, could make a whistling sound (*svaryā*) and were also characterised by a superior penetrating power (*abhibhūtyójas*, *pārya*).”²¹⁷

Of these two attributes, Whitaker omits the second (*pārya*) from his quotation, leaving only *abhibhūtyójas*.²¹⁸ When one looks up Graßmann (WRV), the meaning under the entry of *pārya* as directly related to *vájra* is however “to penetrate” (“hindurchdringend”).²¹⁹ So this is not a meaning that I have made up on my own, and it is consistent

²¹⁵ Slaje 2019, p. 116, note 17 [= KSKKG, p. 822].

²¹⁶ Korfmann 1986, pp. 136f.; *Vájra*, pp. 34ff., notes 55f. Persian slingers used fist-sized stone projectiles with a shorter range, while the Greeks used smaller lead bullets to keep the Persians at a distance (Korfmann 1986, pp. 132f.); *Vájra* pp. 32f. Cp. also Rau (1976, pp. 826f., notes 65f.), who stated that in the Rigveda the *vájra* was used to split the opponent or his head, at times also an item, sometimes into pieces, sometimes to penetrate it.

²¹⁷ “Solche *vájras* waren aus Metall, konnten ein sirrendes Geräusch (*svaryā*) von sich geben und zeichneten sich darüberhinaus durch eine überlegene Durchschlagskraft (*abhibhūtyójas*, *pārya*) aus” (*Vájra*, p. 51): *tváštāsmāi vājraṃ svaryāṃ tatakṣa* (I.32.2b); *tváštā [...] tatákṣa vājraṃ abhibhūtyojasam* (I.52.7cd; cp. IV.41.4d); [...] *pāryaṃ tatakṣa vājraṃ* (I.121.12d). (*Vájra*, p. 51, note 114).

²¹⁸ “[...] *abhibhūtyójaḥ* is translated as ‘superior penetrating power’ (überlegene Durchschlagskraft). In overtranslating the noun by assigning to it penetrating qualities [...]” (Whitaker 2023, p. 963).

²¹⁹ WRV, p. 808, no. 1). JBTr chose “decisive” for *pārya* and translates “decisive Vṛtra-smiting mace” (I.121.12, p. 283), which is explained in the commentary as the “decisive help” given to Indra (JB(C) IV). [36]

with what we know about David’s sling stone penetrating Goliath’s forehead. Nor is it expedient to absolutise Western notions of a brave, battle-ready hero and adopt his attributes uncritically as a standard for characterising a Vedic heroic figure. The “image of manly strong Indra” with “incredible raw physical strength” seems to be inspired by this, especially when one depicts a slingshot in Indra’s hands as unmanly and downright ridiculous.²²⁰ The standards of appreciation in the field of arms may be different from those which modern scholars have inherited from their own culture, views which are unconsciously carried into an alien culture in the hope of explaining it. An overemphasis on theory runs the risk of underestimating not only the immense power and far-reaching effect of a sling stone, especially when it is a weapon mastered with virtuosity, but also the degrees of size and weight of the projectiles that could be hurled.²²¹ Studies of the skeletons of the ancient Balearic people show clear deformities, especially in the right arm, which is evidence of their specialisation.²²²

Culture-dependent reputation of ranged weapons

While it may be true that in Europe the slingshot tended to be linked with the image of the unheroic, this says little about its reputation in non-European cultures. In the High Middle Ages, ranged combat with bows and crossbows was also seen as unchivalrous, treacherous, inferior and cowardly:²²³

“The German mercenary of the late Middle Ages and early modern period could use a bow and arrow for hunting at best, but not in war, whereas an Ottoman or a warrior of the steppes could. [...] As is well known, the Greeks and Romans left the bow and arrow to the barbarians, the auxiliaries. The word “archer” often had a contemptuous connotation, because it was a foreign weapon that was also considered effeminate.”²²⁴

Contrast this with India, where Rāma, Arjuna and other heroes were revered archers. There is no ‘effeminate’ connotation discernable. So why should the Rigvedic appreciation of the weapon of a heroic figure like Indra be subordinated to a prejudice that only a “manly” club would befit Indra, but not a sling, which is “laughable” because it “requires little strength to be deadly”? Have we not seen that the *vazra*, too, which

It is the meaning given as no. 4) in WRV: “decisive, of the battle and the day of decision” (“entscheidend, vom Kampfe und dem Tage der Entscheidung”), which Graßmann however allocates to other passages. He explicitly assigns the meaning “penetrating” to *pārya* in the passage (I.121.12) criticized by Whitaker as “overtranslated”, see previous note 218.

²²⁰ “[...] the image of manly strong Indra cradling his “bold *vājra*, like a father [bears] his beloved son” at 10.22.3 seems somewhat laughable if the weapon were a sling” (Whitaker 2023, p. 964). On this statement, cp. also above, p. 25.

²²¹ See above note 40.

²²² Korfmann 1986, p. 134.

²²³ Bumke 1999, pp. 233ff.

²²⁴ “Der deutsche Söldner des ausgehenden Mittelalters und der Frühen Neuzeit konnte mit Pfeil und Bogen bestenfalls bei der Jagd etwas anfangen, nicht jedoch im Krieg, wohl aber ein Osmane oder ein Krieger der Steppenvölker. [...] Griechen und Römer überließen bekanntlich Pfeil und Bogen den Barbaren, den Auxiliartruppen. Das Wort „Bogenschütze“ hatte oft einen verächtlichen Beigeschmack, da es sich um eine fremde Waffe handelte, die auch als weibisch eingestuft wurde” (Korfmann 1986, pp. 144–147).

is claimed to be “undoubtedly” a club, was equally said to be “easy to wield”?²²⁵ A massive sling stone, properly crafted, can be at least as frightening as a club when wielded threateningly or symbolically. It is probably even more fearsome than a club, because it can bring death over long distances, where one feels out of reach, whereas a club is only suitable for close combat. There is nothing threatening about a bullet or a gun on the exterior. It is only when the lethal effects of a loaded firearm are known that it becomes a threat. It is easy to understand that it is not possible to simply transfer standards specific to one’s own culture to other cultures without appropriate differentiation. In terms of warrior ethics, India is not known to have scorned ranged weapons such as the sling and the bow. Nor is there any negative connotation attached to the club as a primitive striking weapon in India, contrary to what seems to have been the case in ancient Greece.²²⁶ This is interesting. After all, according to Schlerath, this weapon “of lower rank” was the Greek hero’s weapon par excellence – and therefore not also Indra’s, but indeed his alone.²²⁷

Digging and drilling with a mace?

As regards the material aspects of the *vájra*, an inclination towards the primeval club of Indra as one made of wood or stone prevails.²²⁸ And is it not testimony to the acceptance of a realistic weapon that a lathe is being sought for its manufacture? There is no other way to understand the comment on RV VI.17.10 (JBTr):

“As for what the clause expresses, I assume that Tvaṣṭar is manufacturing the *vájra*- by turning it on a lathe or lathe-like device.”²²⁹

The turning lathe, which was used in stone- and woodworking, was developed after the 4th millennium BC.²³⁰ But since the lathe was used for objects made of wood or stone, would it not be a fair conclusion that “spikes and edges to glint in the light” would have been made of these materials? Can this be realistically assumed?

Speaking of realistic assumptions, there is also criticism of the “questionable idea that a slingstone can break open the mountain cave or bore holes in it for water to flow out.”²³¹ In order to find the idea “questionable”, one must first have thoroughly misunderstood it. The point is this: none of the Vedic scholars, including Whitaker, ever thought it “questionable” that you could dig or drill channels with a mace, or a *vájra* for that matter.²³² If that were the case, the *vájra* would not be a mace, but a spade, a

²²⁵ See above p. 25 and note 127.

²²⁶ “In historical times, the Greeks seem to have considered a wooden club to be a weapon of lower rank [...]” (“In historischer Zeit begegnet eine Holzkeule bei Griechen offensichtlich als eine Bewaffnung niederen Ranges [...]”, Schlerath 1975a, p. 549).

²²⁷ See above note 84.

²²⁸ Cp. above note 186.

²²⁹ “Alternatively, but less likely in my view, Tvaṣṭar is displaying it to Indra by turning it here and there to allow its spikes and edges to glint in the light.” JB(C) on VI.17.10. The author reaffirms her commitment to a “realia-based interpretational strategy” elsewhere as well (Jamison 2023, p. 334).

²³⁰ DNP, s.v. ‘Werkzeuge’.

²³¹ Whitaker 2023, p. 963.

²³² To cite only one example: “by his mace, he drilled out channels for the rivers” (II.15.3b, JBTr). Stuhmann is more cautious in this regard, refraining from the translation of *vájra* here (RVSt p. 271). It is incomprehensible to me how such characteristics of digging and drilling as are ascribed to the *vájra* by modern Vedistics, including its alleged bellowing (*Vájra*, pp. 23f. with note 26), can be judged to be [38]

shovel or a drill. The contradictory nature of such a notion is obvious. Even if we accept that *khá* can mean “channel” in some places, which is the meaning Stuhmann attaches to it in his interpretation of references to irrigation systems or water regulation in the Rigveda,²³³ we must face the problem that wherever the *vájra* appears in contexts of alleged “digging” or “drilling,” assumed to refer to the “opening of channels,” it certainly could not be a “mace”. For in this case, the *vájra* would have been thought of as a digging or drilling tool by the Vedic poets, which I consider an unrealistic assumption. However, the primary meaning of *khá* is “opening,” which refers to an opening from which water can flow,²³⁴ as from a spring in a rock.

Did Indra smash the mountain like a jar, leaving only a heap of rubble, or did he split it open, i.e. make holes in it so that the confined waters could escape?

[...] *áradan ná síndhūn, bibhēda girīṃ návam ín ná kumbhám* (X.89.7cd)

“He cleared the way for the waters,²³⁵ as it were, by perforating²³⁶ the mountain as easily as a new pot.”

Śabaravāmin testifies to the existence of ritual vessels with multiple perforations for pouring. About *sáta* he has the following to say:

*sata iti dārumayaṃ pātram parimaṇḍalaṃ śatachidram.*²³⁷

“By [...] *sata* is meant a wooden cup, globular, with a hundred holes.”

Obviously there was the idea of perforated vessels with liquids flowing out of their holes. In short, bullet holes made by Indra’s gigantic sling stone, or even holes punched by his bolt of lightning, is more in keeping with the Vedic seers’ way of thinking than the assumption that a mace could have drilled an opening like a rock spring. For this and further reasons,²³⁸ I had commented on this passage as follows:

“The question of why water flows from mountain springs is answered with the rationalism of mythical times: someone must have made openings in the

“compatible with the older interpretation of the *vájra*.” “Older” here (Jamison 2023, pp. 335 and 336) apparently refers to viewing the *vájra* as a club. In fact, the club is Geldner’s modified and therefore “younger” interpretation, as shown above.

²³³ RVSt pp. 270f.

²³⁴ “*Oeffnung*, welche gemacht wird, um das Wasser aus einem Behälter abzulassen” (WRV, p. 371); “Höhle, Öffnung” (PW); “Öffnung, Loch, Ausgang” (pw); “Oeffnung, Quelle, Schleuse” with reference to RV II.15.3 (Geldner 1907: 51). In my opinion, this meaning applies also to RV V.32.1a, where *ásrjo ví khāni* should mean “You let the orifices flow” in the sense that Indra made the water flow from the springs. Cp. EVP (V (1959), p. 99) on VII.82.3 (“Vous avez percé les orifices des eaux”) and EVP (IX (1961), p. 74) on IV.28.1 “il a ouvert les orifices, (qui étaient) comme obstrués.” Cp. also RVBh on II.15.3b and V.32.1a (*khāni = nirgamanadvārāni*); *Vájra*, p. 70 with note 176, and Reichelt 1913, p. 37 (on RV I.51.4): “Du eröfnetest die Verschlüsse der Wasser”. In this context, Reichelt cites Oldenberg “daß aus der Tiefe der Felsen der mächtige Gott die verschlossenen Quellen hat *hervorbrechen* lassen”. Cp. below, note 235.

²³⁵ I would also interpret *√rad* in the sense of the primal opening of springs in order to release the waters that are confined in the rocks, namely with WRV in the construction “die Ströme [A.] durch Bahnbrechen frei machen / Ströme [A.] eröffnen, ihnen freie Bahn machen.” I think the same also holds good for *prá vartanīr arado* [...] (IV.19.2), *ābhyo arado gātúm* (VI.30.3), *yābhya* [...] *áradad gātúm* (VII.47.4), *yā* [...] *rarāda* (VII.49.1). I do not think Geldner’s “digging” and “furrowing” of river beds by using a *vájra* makes acceptable sense here.

²³⁶ “to break through defences; [...] to make a hole in something”. Cp. WRV s.v. *√bhid*: „Wehren [A.] durchbrechen“ (Gr.); PW s.v. *√bhid*: “[...] ein Loch in Etwas schlagen, [...] aufreißen, schlitzten.”

²³⁷ ŚBh ad *Mīmāṃsāsūtra* 1.3.10, vol. 2, p. 154. On *sáta* cp. “Gefäß aus *palāśa*-Holz (*Butea frondosa*) zum Ausgießen der gereinigten *surā* in der *sautrāmaṇī*-Zeremonie. KathSaṃ XXXVIII, 3.” (WdAR p. 129).

²³⁸ Cp. *Vájra*, pp. 69–71.

mountains for the first time – in illo tempore – from which the water enclosed within, guarded by a legendary serpent, has been able to flow freely ever since. The shape of the spring openings would also fit the *vájra* as a round projectile with which the Vedic hero could shoot such holes in the rock after killing the serpent in front of him”.²³⁹



Fig. 12: Karst spring.

I had pointed out that the verbs used to describe the impact of a *vájra* are also close to the semantics of ancient Near Eastern expressions for describing shots and hits with a sling as crushing, smashing, shattering, battering, breaking and dashing to pieces. In the context of the violent use of the *vájra*, these verbal roots, such as $\sqrt{kr̥t}$, $\sqrt{tr̥d}$, \sqrt{pis} , \sqrt{bhid} , $\sqrt{mr̥}$, \sqrt{rad} , $\sqrt{oraśc}$, \sqrt{snath} , $n̥t̥$ -, $áva$ - \sqrt{han} , etc., do not necessarily refer only to the effect of club blows, although they are usually translated in this way. They can also paint a graphic picture of the injuries and devastating effects caused by the power of a sling stone.²⁴⁰

²³⁹ “[...] weshalb Wasser aus Bergquellen rinnt, wird mit dem Rationalismus mythischer Zeitalter beantwortet: Jemand muß zum ersten Mal – *in illo tempore* – Öffnungen in die Berge gemacht haben, aus denen das darin eingeschlossene, von einer sagenhaften Schlange bewachte Wasser seither frei herausströmen kann. Auch die Form von Quellöffnungen würde zum *vájra* als einem rundlichen Geschoß passen, mit dem der vedische Heros derartige Löcher in den Fels schießen konnte, nachdem er die davor positionierte Haubenschlange erlegt hatte” (Vájra, p. 70). Cp. Pinault 2022, p. 237: “On comprend parfaitement qu’un projectile, bien ajusté, peut percer une paroi rocheuse [...], produisant une fente dont l’eau peut jaillir.” Cp. above, note 234.

²⁴⁰ Vájra, pp. 69–73. I doubt that nonspecific verbal actions, which can be applied to any arbitrary and potentially lethal weapon such as \sqrt{han} , can help to clarify the thorny question of the nature of the *vájra* (Jamison 2024, pp. 335f.). In contrast, the potential for clarification lies in the more specific verbs, which necessarily include the root \sqrt{vrt} , since the latter can express the rotational movement of the sling and its projectile (Vájra, pp. 62f.).

The vājra in the dual number?

It has also been suggested that the word *vājra* should occur in the dual number if *vājra* meant both the sling and the sling stone.²⁴¹ Firstly, *vājra* as a single word in the dual number would have denoted at best two *vājras*, not two different components. Of course, one could ask for a coordinative compound consisting of two members (*dvandva*), the second of which is in the dual number, but this is not exactly how these compounds are formed and used in the Rigveda.²⁴² Moreover, in the case of a two-component weapon, it is sufficient to name just one of the two components in order to have an understanding of the whole. The second component is immediately also understood. Although both are always required for shooting, only one is specified. I had demonstrated this by citing several Rigvedic examples of how the use of bow and arrow is expressed.²⁴³ The poet says “he hits with the bow” or “he kills with the arrow”. But he nowhere says: “He hits/kills with bow *and* arrow”. Comparable to modern usage: “he shot him with a pistol / he put a bullet in his body,” but not: “he shot him with a pistol *and* a bullet”. Even when there is mention of both components, and even in classical Sanskrit, an *itaretara-dvandva* in the dual number, as would be the case with our “bow and arrow,” seems to have been extremely rare.²⁴⁴ The Rigvedic usage has simply to be transferred in a congruent way from the bow and arrow to the sling and its projectile. Since both components are always needed to wield the weapon, the immediate cause of a hit would be the sling stone, but the indirect cause would be the sling strap. The assumption that the term *vājra* occasionally included the strap and thus expressed the combined sling weapon in an admittedly vague but not technically precise expression, is therefore hardly unjustified.²⁴⁵ And this fact has been tacitly accepted by all Vedists who acknowledge the existence of the sling in the Rigveda. For it was never demanded that the sling stone should appear in the dual in order that the accompanying second component, i.e. the strap, might also be expressed. As I see it, however, in the true and narrower sense, “*vājra*” would probably have referred to the projectile as such.

²⁴¹ “[...] Slaje [...] argues [...] that the term [*vājra*] can signify at once the sling strap and projectile, though it never appears in the dual number” (Whitaker 2023, p. 962); “I also find it grammatically questionable that the term never appears in the dual, yet is supposed to signify a weapon comprised of two parts” (Whitaker 2023, pp. 963–964).

²⁴² See Macdonell 1916, § 186 A1; 3 (pp. 269f.) and Delbrück 1888, § 31 (pp. 49–52); § 58 (pp. 86f.) for the Vedic formation and use of the dual number.

²⁴³ *Vājra*, p. 48.

²⁴⁴ An example of such an extremely rare case is *kārmuka-śarau* (PRV 9.22), which Jonarāja explains with *dhanuś-śarau*. A *samāhāra-dvandva* in the neuter singular is recorded in the dictionaries as *dhanuṣ-kāṇḍa*. However, this only shows that the two components of a bow were regarded as a single unit. The dual ending is typically used when two different categories are enumerated in the compound, as in *cakra-dhanuṣoḥ* (discus and bow, MBh 1.2.93c). On the “few singular Dvandvas which express a collective sense and are always neuter” in the Rigveda cp. Macdonell 1916, § 186 A3 (p. 270).

²⁴⁵ *Vājra*, p. 49.

The sling strap

This suggests we should take a quick look at the sling strap. The sling usually consists of two strings with a pouch between them, or one strap with a bulge in the middle to hold the stone. This sling – in the Rigveda in all likelihood a leather strap made of cowhide (*gô*) – is, in contrast to the stone, completely unspectacular. This is probably why it is so rarely mentioned.²⁴⁶

Now, one could argue against my interpretation that in the following passage *gô* refers to a sling:

tvám āyasám prāti vartayo gôr divó ásmānam [...] (I.121.9ab)

“Down from the sky you hurl the metallic stone out of the leather strap at [...].”²⁴⁷

Those opposed to the method of Ockham’s razor and the related Mīmāṃsā principle of avoiding undue interpretive effort (*yatnagaurava*) are invited to present convincingly complicated interpretations. Yet there is additional evidence for the use of a strap expressed by *úd-√yam* and its nominal derivatives. While *úd-√yam* in the Rigveda can denote the (threatening) raising of a string with both hands above one’s head to signify the imminent launching of a bullet,²⁴⁸ the noun *udyāma*, which only occurs in later Vedic texts and was for this very reason omitted from my study, denotes a strap. It may be worthwhile, though, to refer to some such later references, since there has been criticism that the Rigveda has no detailed description of – among other things – the strap.²⁴⁹ Such criticism cuts both ways, however, when someone asserts the existence of the sling in the Rigveda, but fails to cite the passages in which “the hypothetical parts of the sling” such as “strap, finger loop, pocket, stone” are documented. The same would be true for any Vedicist who accepts the sling as a weapon (“fronde,” “Schleuder,” “sling”) and takes the sling strap as a matter of course. The question, then, is why the explicit mention of the strap is made a condition only when the *vájra* is made the subject of the issue of the sling, but never in cases where the strap is taken for granted regarding ordinary sling stones (e.g. as *ásman* or *ásáni*)?

To return to *udyāma*, its meaning was of course another subject of the dispute between Rau and Schlerath. Rau stated that the *vájra* had “a line on the right side”, referring to *Śatapathabrāhmaṇa* 8, 5, 1, 13.²⁵⁰ He later explained in more detail, based on numerous references, that *udyāma* is used in Vedic texts to denote a skein (“Strähne”) or strand (“Strang”).²⁵¹ Because he thought of *vájra* as a harpoon, Rau thought of *udyāma* as a kind of “return line” (“Rückholleine”). As expected, Rau’s interpretation of *udyāma* in

²⁴⁶ Vájra, p. 43, n. 80 on I.121.9. Pinault cautions that “objectivement, pour les pierres comme pour le *vájra*-, on manque de mentions indubitables des lanières de cuir de la fronde, [...]. Il est avéré que *gô*-«bovin» peut désigner par métonymie le cuir, mais le seul passage, RV I.121.9ab, où ce nom est présent [...] me semble constituer une base trop étroite [...]” (Pinault 2022, p. 237). See, on the other hand, EVP XVII (1969), p. 41 on I.121.9: “fronde du ciel (à courroie de cuir) de vache” and cp. also above, note 3 for respective entries in WRV.

²⁴⁷ For a full discussion of this passage cp. Vájra, p. 23 (with note 25) and pp. 43f. (with notes 80–84).

²⁴⁸ Vájra, pp. 58–61.

²⁴⁹ “The fact that poets do not dwell literally or metaphorically on the hypothetical parts of the sling, strap, finger loop, pocket, stone, etc., is telling” (Whitaker 2023, p. 964). Cp. above, notes 21f.

²⁵⁰ “Der *vájra* hat an der rechten Seite eine Leine” (Rau 1973, p. 42 and note 64 [Kl. Schr. p. 826]).

²⁵¹ Rau 1976, p. 358 [Kl. Schr. 860].

the context of harpooning displeased Schlerath. So he asked: “is there a single passage in which the retrieval of the object or person struck by the *vajra* by means of the line is mentioned?”.²⁵² Of course there is not, and in this respect Schlerath was right. But what solution did he offer? Schlerath, for his part, saw in *udyāma*- a designation of braided strings as well as – in the context of *vájra*- – “the raising of this weapon”.²⁵³ But if *udyāma* in the Rigveda can mean “upstretched thread” even in Schlerath’s opinion,²⁵⁴ we are not so far from the possibility that the word, or the verbal root from which it is formed, could also be applied to the taut strap of a sling. It is interesting to note that Schlerath narrows down the meaning of *udyāma* even further:

“*udyāma*- is not string in general, but “stretched string” or “means for lifting”.²⁵⁵ It would be hard to find a more apt description of a sling strap. Rau and Schlerath, on the other hand, stuck to the harpoon and the club and became entangled in these preconceived ideas with their cords and strings. It takes a great deal of opinionated stubbornness to prefer a flirt with Teutonic throwing clubs, which could allegedly be retrieved with the help of lines after being thrown, a belief ascribed by Vergil to “some”, rather than allowing even the slightest doubt to arise about one’s own club theory:

“These are not “harpoons”, of course. You just retrieve the throwing clubs so you can throw them again.”²⁵⁶

The proponents of the mace theory are invited to think about this and explain how they actually want to deal with ‘lines’, which according to Vedic texts belong to a *vajra* – except for the lack of evidence for the noun in the Rigveda. There, however, the verbal use with *úd-√yam* is well documented:

“This holding up of the weapon is expressed in the Rigveda by the root *√yam*, sometimes prefixed with *úd*. Graßmann comments on this root: “The sensual concept [...] is that of the connection of two objects, for example by a rope or the like. For our root, the basic sensory concept [...] seems generally to be “to hold something in one’s grasp by means of an outstretched object (such as a rope or an outstretched arm).” [...]” – “If the sling is held horizontally above the head with the arms stretched upwards, as is depicted in Mycenaean, Hittite and Roman art, this is a sign of an inserted projectile and thus of the readiness of the sling to be launched on the basis of an imminent rotational movement. This is also clearly expressed elsewhere by the use of *úd-√yam* (‘to raise [threateningly]’).”²⁵⁷

²⁵² “Gibt es eine einzige Stelle, an der vom Zurückholen des vom Vajra getroffenen Gegenstandes oder der getroffenen Person vermittle der Leine die Rede ist?” (Schlerath 1975a, pp. 532f.).

²⁵³ Schlerath 1975a, pp. 532; 547. Cp. also RVBh on V.32.6f.: *uccaír apagúryā = úrdhvam vajram udyamyā; úd vādhar yāmiṣṭa = vajram udayacchat*; on VI.71.1ab: *savitā [...] bāhū ayamsta = bāhū [...] udyacchati*. This meaning of *ud-√yam* is consistent with the dictionaries: “Arme, Waffen usw. (Akk) in die Höhe strecken” (WRV, PW, pw).

²⁵⁴ Schlerath 1977, p. 559.

²⁵⁵ Schlerath 1977, p. 561.

²⁵⁶ “Natürlich handelt es sich nicht um “Harpunen”. Man holt die Wurfkeulen nur zurück, um sie ein weiteres Mal werfen zu können.” (Schlerath 1975a, p. 550).

²⁵⁷ “Dieses Hochhalten der Waffe wird im Rigveda durch die manchmal auch mit *úd* präfigierte Wurzel *√yam* ausgedrückt. Zu dieser Wurzel bemerkt nun Graßmann: “Der sinnliche Begriff [...] ist der der Verbindung zweier Gegenstände, etwa durch ein Seil oder ähnliches. Für unsere Wurzel erscheint als der sinnliche Grundbegriff [...] allgemeiner “durch irgend einen ausgestreckten Gegenstand (wie ein Seil, oder auch den ausgestreckten Arm) etwas in seiner Gewalt halten. [...]” – “Wird also der [43]



Fig. 13: Hittite slinger with sling stretched horizontally over his head, c. 1000 BC.
 Fig. 14: Etruscan slinger, wall painting, around 510 BC.

Schlerath, however, invokes a “lightning stone” as Indra’s “stone weapon” rather than abandoning his fixation with a club in “mythical primeval times”²⁵⁸:

“But Indra also uses the stone, the stone weapon: *aśáni*.”²⁵⁹ This stone is the lightning stone. But Indra’s throw with the stone weapon from heavenly heights does not belong to mythical primeval times like his heroic deeds with the *vajra*, but can be experienced in any lightning storm.”²⁶⁰

He argues in this way even though Rau, in the context of *aśáni* and other related words for “stone,” had explicitly emphasised a “sharp, red-hot sling stone,” which would have been thought to be the lightning.²⁶¹

The vajra as a stone in the R̥gvedabhāṣya and as the king of stones in Tibetan

The Tibetans, on the other hand, translated *vajra* as stone, specifically as “the king”, i.e. the hardest “of stones”. This is most likely due to the fact that this meaning of the Sanskrit term had been passed on to them and because, unlike European scholars, they

Schleuderriemen mit nach oben ausgestreckten Armen waagrecht über dem Kopf gehalten, wovon es Bildzeugnisse aus mykenischer, hethitischer und römischer Zeit gibt, ist das das Zeichen für ein eingelegtes Geschoß und somit für die Einsatzbereitschaft der Schleuder zur Schußabgabe anhand einer unmittelbar bevorstehenden Rotationsbewegung. Dies kommt durch eine entsprechend konnotierte Verwendung von *úd-√yam* (‘[drohend] emporheben’) auch anderswo unmißverständlich zum Ausdruck.” (Vájra, p. 58f.). On *úd-√yam* as the threatening lifting of the wedge (*vájra*) before the “throw,” cf. Delbrück 1888, pp. 252ff.

²⁵⁸ Cp. above note 67.

²⁵⁹ On *aśáni* cp. above note 4.

²⁶⁰ Schlerath 1975a, p. 543.

²⁶¹ “[...] dachte man sich diesen [Blitz] als scharfen, glühenden Schleuderstein [...]” (Rau 1973, p. 829). On the possibility that heated projectiles were mentioned in the Rigveda, as they were used in other premodern cultures as baked clay bullets and as (previously heated) cast lead balls, see Vájra, pp. 45f. On “lead liquefied by heating” (*liquefacto plumbo*) in the meaning of “cast lead projectiles” in the Aeneis cp. Vájra, p. 74 with note 191.

had not been culturally influenced by the archetypes of classical antiquity.²⁶² So, “stone” (*rdo*), “sling stone” (*'ur-rdo*) and “*vajra*” (*rdo-rje*) can hardly be a semantic accident and could also help to explain how the Sanskrit word *vajra* came to mean “diamond,” the hardest and therefore, among other things, the most valuable stone. Based on an original meaning such as “bludgeon,” the semantic transition to “diamond” would be quite difficult to understand. It is not in the least unreasonable to assume that the meaning of “hard stone” for *vajra* was derived from an Indian tradition, although in the classical period the conceptual convergence may rather be seen in the meaning of “diamond,” which Sanskrit *vajra* had by then assumed, and *rdo-rje* became the standard translation also for other terms which meant “diamond”.



Fig. 15: Tibetan *rdo-rje*.



Fig. 16a: Greek Sling Bullet. Circa 4th-1st century BC.



Fig. 16b: Greek Sling Bullet. Circa 4th-1st century BC.

²⁶² Cp. Vájra, pp. 27; 66; 95f.
[45]

Indeed, Mādhava (a.k.a. ‘Sāyaṇa’)²⁶³ glossed words, the meaning of which was “sling stone” according to Ludwig and Geldner,²⁶⁴ with “*vajra*”: thus *ásman* in II.30.4 (*tápuṣáśneva = dīptena vajreṇa, ásneva = aśanyeva*)²⁶⁵ and IV.22.1 (*ásmānam = vajram*). This Veda exegete thus explained a hurled (sling) stone as a *vajra*,²⁶⁶ but not conversely in any explicit manner, as far as I am aware, the *vajra* as a stone. It is worth noting that Mādhava dealt with stones used as projectiles elsewhere, too (randomly collected for exemplary quote):

I.51.3 *ádrim = vajram*; I.121.9ab *āyasám [...] ásmānam = ayomayaṇi vajram [...] śīghraṇi śator vyāpakam*; I.172.2 *ásmā = vyāpaka āyudhaviśeṣaḥ*; II.30.5ab *ásmānam = kaṭhinaṇi vajram*; IV.22.1 *ásmānam = vajram*; VI.6.5 *aśánir = vajraḥ*; X.102.3 *dāsasya vā [...] áryasya vā [...] vadhám = śator vadham = vajranāmatat = hananasādhanaṇi vajram*.

Mādhava not only says that the *vajra* was a special weapon with pervading qualities (*vyāpaka āyudhaviśeṣaḥ*),²⁶⁷ that it quickly penetrated the enemy (*śator vyāpakam*), that it was a hard stone (*kaṭhina, ásman*) and that it was a weapon used by enemies (*śatru*) as well with deadly effect (*hananasādhana*), but also that it was suitable for hurling (or suited for a sling [*kṣepaṇa*]): I.130.7ab *vājreṇa = kṣepaṇasamarthenāyudhena*.

In our context, however, it is particularly significant that while the identification of the *vajra* with a stone is undeniably there in both the Indian and Tibetan traditions, the connotation of a club, which is characteristic of Western interpreters and translators who are influenced by classical mythology, is conspicuously absent. Everyone may draw their own conclusions from this.

²⁶³ Cp. Slaje 2010.

²⁶⁴ See above note 4.

²⁶⁵ On heated projectiles see Vájra, pp. 45f.

²⁶⁶ “*ásman* [=] “pierre” en général, “fronde” ou “vajra”” (EVP IV (1958), p. 75 on V.47.3; cp. also EVP XIII (1964), p. 101 on II.30.5: *ásman* = “une fronde – laquelle n’est autre que l’éclair”). One might also refer to VIII.93.9a (*girā vājro ná sám bhṛtaḥ*). Depending on the interpretation, it could be evidence of the stony nature of a *vājra*. If we accept *girā* as the locative singular of *giri* (‘mountain’), we get a perfectly coherent meaning: “as the *vājra* [‘stone’] is contained / concentrated in the rock”. ‘Contained’ is to be understood in terms of its potential presence, insofar as the *vājra* – seen as a stone – is obtained from the rocks of a mountain (for an analogous usage of *sám bhṛta* with locative cp. II.16.2b; III.30.14c; 39.6a as well as “*rasaḥ sám bhṛta oṣādhīṣu* (VS 19, 33)” [PW s.v. *bhar*]). This is how Ludwig comments on this passage: “[...] der ausdruck *girā – vājro na sám bhṛtaḥ* ist ungewönlich, ob man nun den blitz oder Indra (mit dem blitz verglichen) meint, wofern *girā* von *gīḥ* abgeleitet wird. Denn die schilderung soll doch die gewaltigkeit Indra’s (oder des donnerkeiles) hervorheben, was durch *girā* von *gir-* nicht erreicht wird. Es kann daher kaum zweifelhaft sein, dasz das wort *gīḥ* ‘der berg’ ist ; man kann nun übersetzen ‘wie in einem berge geborgen ist der keil [in seiner hand] mit gewalt, der nicht abkömt [vom zile], | strebend der gewaltige [selber, Indra], nicht nider zu strecken’ || oder ‘wie ausz einem berge zusammengebracht (geformt) ist der keil’ (vgl. VIII. 87, [98,] 4.) u.s.w. denn Indra mit dessen eigenem keile zu vergleichen ist unpassend” (LÜC (2), pp. 184f.). However, by accepting *girā* as an instrumental singular of *gír* (‘hymn of praise’), we get a different, perhaps less convincing meaning, namely “like a mace equipped with a hymn” (JBTr).

²⁶⁷ Could this be related to the idea of the *vājra* as *pārya* (“penetrating”)? Cp. above p. 36f., notes 217f.



Fig. 17: Use of a sling stone to keep a group of assailants at bay.

At the end of these reflections, if there is one thing we can be sure of, it is that the last word on the identity of the *vájra* has not yet been spoken. If the mace was indeed ever a likely candidate, then a lethal stone would definitely be a likelier one. On the methodological premise that the *vájra* cannot be the same as what it or its use is merely compared to, perhaps a more convincing solution will one day emerge.²⁶⁸

²⁶⁸ Mention should be made of Parpola (2015b), who was able to link a terracotta funerary statuette from the Bactria and Margiana Archaeological Complex (BMAC), which shows an axe adze hanging from a man's belt, to a weapon of the Maruts, the Rigvedic *vāśī*. In northern Iran and Afghanistan, miniature metal axe adzes have been unearthed in the BMAC graves of men, to which the find of a single shaft-holed axe adze from the upper strata (c. 2000–1900 BC) at Mohenjo-daro can be definitely related. According to Parpola, it „signals the beginning of Aryan immigration into South Asia around 2000–1900 BC“.

Corrigenda and addenda to Vájra:

p. 15

Thoshifumi → Toshifumi

p. 47

See above, note 55.

p. 49

Add the following as an alternate translation of RV I.8.3:

“wollen wir die Schleuder (*vájra*) *in todbringender Weise* (*ghanā́*) ergreifen” (suggestion by Jens Thomas, Leipzig).

p. 63

Add to note 148:

“Vgl. auch RV VIII.96.9, wo *cakréṇa* (d) den rotierenden *vájra* (b) aufgreifen könnte.”

p. 70

ille → illo

p. 71

Shift the first 3 lines to after figure no. 17.

p. 79

ille → illo

p. 97

āśman → *áśman*

aśāni → *aśáni*

Credits

Fig. 1: Hittite slinger carrying a loaded sling, c. 1000 BC, Tell Halaf. Chr. Max Freiherr von Oppenheim Stiftung (Slg. Oppenheim 29/19, p. 4): Oppenheim_98117,77.jpg (<https://arachne.dainst.org/entity/6565485/image/6565485>) [= Vájra fig. 15a].

Fig. 2a–b: David by Michelangelo, with sling over left shoulder and stone in right hand. Galleria dell'Accademia, Florence. By Jörg Bittner Unna – Own work, CC BY 4.0, <httpscommons.wikimedia.orgwindex.phpcurid=109721361>.

Fig. 3: “Acheulean handaxes from the site of Boxgrove, England, which dates to about 500 Ka. The handaxes are made of flint and are between 12 and 14.5 cm in length” (Corbey et al. 2016, p. 7, fig. 1).

Fig. 4: “Acheulean handaxes from various regions (to scale)” (Corbey et al. 2016, p. 7, fig. 2).

Fig. 5: Types of Roman lead projectiles for slingshots [= Vájra fig. 3].

6a–b: Heracles killing the Stymphalian birds with sling (ca. 540 BC, British Museum, GR 1843.11-3.40 (Cat. Vases B 163), from Wikimedia Commons) and bow (between 201 and 250 AD. Roman mosaic from Llíria. National Archaeological Museum Madrid, 38315 BIS, from Wikimedia Commons).

Fig. 7: Hercules on Huviška coin. *Triton X*, 488, 12.2006 (Davary 2022).

Fig. 8: Hercules on Huviška coin. British Museum (Gardner 1886). Foto: Harry Falk.

Fig. 9a–b: Hercules shouldering his club (Lansdowne Herakles Getty Museum, about A.D. 125. Findspot: Villa Hadriana, Tivoli. Original: 4th century BC) and resting on it. Roman copy (216 AD) of the Imperial era after a Greek original of the Early Hellenistic era c. 4th century BC) from Wikimedia commons.

Fig. 10a–b: Roman Auxiliary in the Dacian wars, his sling at the ready, carries extra missiles in the fold of cloak flung over his shield arm. Trajan's Column (redrawing) [= Vájra fig. 5]. – Flint sling stones from Lachish. Iron age. Height: 6.40 centimetres, weight: 387.50 grammes, width: 6.20 centimetres. © The Trustees of the British Museum, Asset number 432202001.

Fig. 11a–b: Silver rhyton from Mycenae, 1600 BC. In the centre a slinger with a sling stretched horizontally over his head [= Vájra fig. 14].

Fig. 12: Karst spring [= Vájra fig. 17].

Fig. 13: Hittite slinger with sling stretched horizontally over his head, c. 1000 BC, Tell Halaf. (The Trustees of the British Museum. Museum number 117103. https://www.britishmuseum.org/collection/object/W_1920-1211-343) [= Vájra fig. 15b].

Fig. 14: Etruscan slinger, wall painting, around 510 BC, Tarquinia, Tomba della Caccia e Pesca [= Vájra fig. 16].

Fig. 15: Tibetan *rdo·rje*, [= Vájra fig. 25].

Fig. 16a–b: Greek Sling Bullets. Circa 4th–1st century BC. Winged thunderbolt. 25.76g, 29mm x 11mm (a); 59.08g, 49mm x 16mm (b). Online Auction Catalogue of *Roma Numismatics Limited*, E-Sale 93, Thursday 6th January 2022.

Fig. 17: Use of a sling stone to keep a group of assailants at bay. Śrīnagar, 26 February 2016. Yawar Nazir (Getty Images) [= Vájra fig. 26].

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