# 'Sacrifice' in Proto-Indo-European<sup>1</sup>

Stefan Zimmer Rheinische Friedrich-Wilhelms-Universität, Bonn

Some basic notions about sacrifice in Proto-Indo-European culture can be gained from the reconstructed lexicon and the formulas of inherited poetical diction. They show that the difference between gods and humans is clear, and that both groups are supposed to share common values. The human-divine relationship is understood as an alliance. Sacrifice is a solemn dinner given to the gods, accompanied by gifts and counter-gifts. In ritual, fire and water play important roles. Cattle and other animals are slaughtered and eaten, rather 'nine' than 'one hundred' at a time.

T

Religious terms which have been reconstructed with undisputed certainty are rather rare in the Proto-Indo-European lexicon. Best known are two deities, viz. 'Father Sky' and his daughter 'Dawn'. In most cases, terms we would classify today as belonging to the realm of religion vary considerably in various branches of Indo-European. Nevertheless, attempts to reconstruct, at least partially, the religious terminology of Proto-Indo-European are legitimate, as long as hypotheses are necessary caveats. proffered with the Here, considerations around the notion of 'sacrifice' are presented to the readers.<sup>2</sup> They are based on the following assumptions:

<sup>1</sup>Extended and revised version of a paper delivered to the International Symposium on "Opfer. Praktiken und Vorstellungen in Nord-, West-und Mitteleuropa bis zum Mittelalter" , held in the University of Bonn, 23rd-24th May, 2008. I am grateful to two anonymous readers for their careful readings and comments. Their criticism contributed to improve my text.

<sup>2</sup>I apologize for not indicating all possible references. This would amount to giving a rather comprehensive bibliography of Proto-Indo-European Cultural Studies which, of course, would be quite unreasonable here. Numerous (most, I hope, of the most important) titles are listed in my recent two-part Forschungsbericht (Zimmer 2002-03). The interested reader is kindly asked to consult it should more information be desired.

- 1. Comparative Grammar is a powerful tool for reconstructing not only the form of words but also, although with less persuasiveness, their basic meaning.
- 2. 'Proto-Indo-European' is, first of all, a purely linguistic term. But it is not at all unreasonable to call those who spoke that language, for brevity, 'Proto-Indo-Europeans', and, analogically, their culture, 'Proto-Indo-European culture'.
- 3. Language is without any doubt the most important expression of the human mind. Both its elements and structures (as described by grammar and lexicon) and its realizations (speech acts) pertain to the intellectual and emotional sphere (G 'geistige Kultur'), not to the material world ('materielle Kultur').
- 4. To look for archeological remains which might be attributed to the Proto-Indo-Europeans is perfectly natural. But it cannot be stressed enough that elements of Proto-Indo-European culture can only be found in those products of the human mind that are expressed in language (and hence recoverable by the methods of historical linguistics).<sup>3</sup>
- 5. We have two kinds of first-class sources in Indo-European Cultural Studies: the reconstructed lexicon, and the 'formulas' of inherited Indo-European poetic diction, found in nearly all Indo-European literary traditions.<sup>4</sup>
- 6. Among the older languages and their literatures, Vedic deserves the first place as most valuable for the reconstruction of Proto-Indo-European culture. Old Avestan, though linguistically more archaic, is attested only in the small corpus of Zara $\theta$ uštra's Gā $\theta$ ās (and the slightly younger so-called Yasna Haptaŋhāiti). Anatolian, of greater absolute age than Aryan (i.e. Indo-Iranian), has quite obviously been transformed dramatically (in a way which may be compared with creolization) by the impact of non-Indo-European sub- and adstrate languages, literatures and cultures (the latter most

<sup>&</sup>lt;sup>3</sup>All hypotheses must, of course, fit into the general frame of cultural history. Cultural items and their names can be borrowed much easier than all (other) items of languages, such as the core vocabulary, and especially, grammatical structures

<sup>&</sup>lt;sup>4</sup>See the classic collection by Schmitt (1967), and the volume ed. by Pinault and Petit (2006) which includes references to recent literature and numerous valuable new contributions to the field. The often stupendous parallels found in various literatures have been interpreted by various authors as going back to PIE 'proto-narrations' (e.g. Allen 2003). This is impressing indeed but hardly comparable to 'formulas' based on linguistic evidence.

clearly in religious matters). Greek is quite an archaic language, but we have no literary documents from its early (i.e. the Mycenean) period, and the epics, though deeply rooted in the Indo-European poetical tradition, show massive influences from other, presumably non-Indo-European oriental neighboring cultures (Hesiod more so than Homer). In India alone, the incoming Aryans, as they called themselves, seem not to have met a culturally superior civilization. The Indus (or Harappa) Civilization was already dead or at least dwindling away rapidly.

7. It would be absurd to assume that the Aryans arriving in Iran and India in the 2nd millennium BC were still the unaltered Proto-Indo-Europeans of a millennium or more earlier. It is their relative closeness to the common origins which gives them and their literature undisputable prominence (even pre-eminence) in Proto-Indo-European Cultural Studies.

H

'Sacrifice' is generally defined by Religious Scholarship as an act of painfully giving up something valuable to superhuman powers, vel sim. Today, most authors are rather reluctant to give an all-encompassing definition because of the wide variety found in human religious rites and ideas. Thus. J. Henninger (1987: 544-557) doubts the possibility of finding such a general definition (1987: 553-554); he speaks of 'sacrifice' as an "act of sanctifying or consecrating an object"; this object acquires the nature of a gift, and "the recipient of the gift (is) a supernatural being... with whom the giver seeks to enter into or remain in communion" (ibid. 544-545). Included in the act is the "idea of renunciation"; the accompanying ritual distinguishes it from simple offering (ibid. 556). The intentions of the giver may be praise (homage), thanksgiving, supplication, or expiation (ibid. 549). Often, the

<sup>&</sup>lt;sup>5</sup>The classical text of former religious scholarship is the 'Essai sur la nature et la fonction du sacrifice' by Henri Hubert and Marcel Mauss, Année sociologique II, 1899, 29-138. The first chapter contains the famous definition "Le sacrifice est un acte religieux qui, par la consécration d'une victime, modifie l'état de la personne morale qui l'accomplit ou de certains objets auxquels elle s'intéresse." (cited here from the web: <a href="http://classiques.uqac.ca/classiques/mauss\_marcel/melanges\_hist\_religions/t2\_sacrifice/Melanges\_2\_sacrifice.pdf">http://classiques.uqac.ca/classiques/mauss\_marcel/melanges\_hist\_religions/t2\_sacrifice/Melanges\_2\_sacrifice.pdf</a>>.

sacrifice has been regarded<sup>6</sup> as a (sometimes totemic) communal meal; this meal is a link between the profane and the sacred world. It may be performed as a reenactment of primordial events, or it may fulfill the function of a mechanism for diverting violence (cf. scapegoat rituals) (ibid. 550-554, with references).

Even without claiming competence in Comparative Religion, or in the theology of any religion, one might say that beyond any doubt, all specific religions practice some form of sacrifice.<sup>7</sup> Their respective specific definitions are of no great concern here. All might be derived, I trust, from the general one just given.

What can be said about the notion and expression of 'sacrifice' in Indo-European? Even if it is impossible to reconstruct Proto-Indo-European religion in detail, some elements might be recovered. Proto-Indo-European Culture can only be understood in the framework of Proto-Indo-European society, whose main values are glory, freedom, truth, and hospitality (no ranking intended), which had relatively flat hierarchies, no professional priests or full-time 'cult specialists', no permanent kingship, no temples, no other intellectuals than poets, lit. 'word smiths'.

First of all, the difference between gods and humans was well understood, as shown by two widely attested, clearly inherited pairs of antonyms:

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*dei u\acute{o}- 'celestial' vs. *d^h \mathring{g}^h m\acute{o} n\acute{o}- 'terrestrial'
*\acute{n}-mrto 'not affected by death' vs. *mrt\acute{o} 'affected by death'.
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Apart from these qualities, both groups were, in principle,

 $<sup>^6\</sup>mathrm{E.g.}$  by W. Robertson Smith (1846-1894); modern scholarship is rather critical of his theories.

<sup>&</sup>lt;sup>7</sup>Discordant voices, such as Testart (1993:29) who states that "tant en Océanie qu'en Amerique, de larges regions n'ont jamais pratiqué le sacrifice" obviously work with different definitions of 'sacrifice'.

<sup>&</sup>lt;sup>8</sup>A number of essentials may be found in Benveniste (1969: II 223-231); as always, his sometimes quite structuralistic interpretations should be checked with the sources. The wide-ranging theories of the great G. Dumézil about Proto-Indo-European religion and society, more famous outside Indo-European Studies than inside, have turned out, after long discussions, to lack sufficient textual and linguistic evidence (cf. Schlerath 1995-96, with ample references). Therefore, his works are not cited here.

<sup>&</sup>lt;sup>9</sup>This sentence should not be misunderstood as an underestimation of the factual esteem for wealth or intelligence.

on an equal footing, the gods being, in all other aspects, rather similar to humans. 10 They have different tastes and customs, and are, of course, much more powerful than humans, but they are neither omnipotent nor omniscient, neither completely good nor completely bad. Gods and humans communicate according to the traditional rules of proper behavior, valid in the patriarchal, semi-nomadic and relatively free Proto-Indo-European society. It is not surprising then to find that the central term describing human demeanor towards the gods is the root \*Hiag-which expresses activities comprising both 'veneration' and 'sacrifice'. (One should try to realize that this distinction exists only for us moderns, and would have been unintelligible for Proto-Indo-Europeans.) This is abundantly illustrated by the root's reflexes, including derivatives and compounds, in the various Indo-European languages. Here is a small sample of relevant items:<sup>11</sup>

Avestan  $yazait\bar{e}$  = Vedic yajate 'offers' and 'venerates' (said by the yajamana- who has a ritual performed by brahmins for his own sake) = Greek  $a\zeta\epsilon\tau ai$  'venerates'; Vedic active yajati is said by the acting brahmin (cf. Gotō 1996: 27 and 254); Vedic yajna- = Av yazna- 'sacrifice' = Greek  $a\gamma vos$  'holy, pure'; Ved yajata- = Av yazata-, MPers yazdan 'god' (< 'the venerable ones', plural); Gr  $a\gamma vos$  'sacred'; perhaps also Lat vos 'with an empty stomach' (Forssman 1993: 100).

A root \*sak-, widely attested in Italic, seems to express the awe felt towards the deity/deities: Latin sacer, OLat also sācris 'dedicated (to the gods)' > holy' and 'cursed, damned', with numerous close relatives in Sabellian, and a counterpart in Anatolian: Hitt. šaklai- 'custom, rite, law' < \*sāk-li- (Tischler 2004: 725-6; Kloekhorst 2008: 700-1); L sanctus, Oscan saahtúm 'holy' is formally equivalent to ONorse sáttr 'reconciled' < \*sanh-ta-z, possibly < 'sanctioned'. Welsh hagr, Cornish hager, and Breton hagr 'ugly' reflect the earlier negative meaning 'damned', whereas Tokharian A sākär B sākre 'happy, prosperous' continue the positive shade 'blessed'. 12

<sup>&</sup>lt;sup>10</sup>Cf. Émile Durkheim's famous dictum that the sacred world is a projection of human society.

<sup>&</sup>lt;sup>11</sup>For much more, see the standard etymological dictionaries.

<sup>&</sup>lt;sup>12</sup>Unfortunately, PIE \*sakro- is unattested in Aryan. For some authors the existence of the phoneme [a] in PIE is problematic; they tend to regard the root as a loan from an unknown source. Other lexemes from the field of the

A remarkable case of PIE sacrifical language is the verb  $*ad-b^her$ -, a fully transparent compound meaning literally 'to bring to, to carry (along)'. Already in common PIE usage, it has taken the special meaning 'to sacrifice' (from 'to contribute victuals / victims to the sacifical meal'?), as shown by numerous attestations (some are nomina agentis from the verbal compound) in Indo-Iranian, Italic, Celtic, Germanic, and Phrygian (cf. Untermann 2000: 49, with ref.).

#### Ш

The most prominent form of \*deiuo-Hiaĝ-nó- in Proto-Indo-European society was a solemn dinner given to the gods. They were politely invited ('called down', cf. Toch A ñkät B ñakte 'god'< \*ní-ghuH-to-, Normier 1980), seated in places of honor near the fire on bundels of soft grass or reeds (barhiṣ-, barəsman-), served the best parts, cooked or roasted, of a fat animal slaughtered for the occasion, served the best possible drinks (water, milk; \*sauma- in Aryan times; wine later in Greece, etc.), and – most important – entertained with praise-poems. Unfortunately, although we hear nothing about the musical part of those early events, it can hardly have been absent.

Thus lavishly honored, the gods – being 'gentlemen' like their hosts (cf. L hospes < \*hosti-potis 'lord of the guest' ≈ Ved áthiti-pati-, according to the traditional majority view, defended recently by Forssman 1998;<sup>15</sup> or else <\*hosti-pets 'approaching the guest' in traditional minority view, e.g. Ernoult-Meillet 1932: 441) – could not but return the favors by granting to their human friends ('allies') valuable gifts in their turn: glory,

<sup>&#</sup>x27;sacred' may be found (again) in Mallory-Adams (2006: 412-4). The list should be used with caution (e.g. L *flamen*, Skt *brahmán*- is fallacious, as has long been known).

<sup>&</sup>lt;sup>13</sup>Neither Benveniste's proposal to see traces of potlatch in Proto-Indo-European sacrifice, based on his interpretation of L *daps*, etc. (Benveniste 1969: II 223-231) nor Lincoln's (1986) reconstructed 'cosmogonical myth', involving a first human sacrifice, are convincing. Both lack philologically sound comparanda in Indo-Iranian and Greek traditions. For the intimate connection of sacrifice and hospitality in Vedic India, see Jamison (1996).

<sup>&</sup>lt;sup>14</sup>This confirms the traditional etymology for the Germanic terms (retained by Watkins 1985: 23 and Mallory-Adams 2006: 408-411; but differently Watkins 2000:31).

<sup>&</sup>lt;sup>15</sup>For the basic meaning of *áthiti*-, guest', see Pinault (1998): '(who is) standing at the side (of the pater familias)'.

victory, booty, rain and wide pastures, sons, cattle, riches, in one word: prosperity. 16

Some remarkable details have been preserved in the formulas of Proto-Indo-European poetical diction: The gods are addressed by man 'standing upright', with 'extended hands' – they are not feared as willful tyrants who demand that people throw themselves down on their faces before them. The gods are addressed "with their proper names", politely and respectfully, of course, but without so much awe that even their names cannot be pronounced and must be substituted by epithets, cover names, or the like.

The gods are treated as most noble guests, and the human-divine relationship is understood as an alliance. This is not an alliance ('covenant') in the religious Biblical sense (Hebrew *bərīt*), put upon the people by (a) god,<sup>17</sup> but rather in the sense of a political alliance, concluded with a mighty neighbor. Such treaties are periodically renewed or prolonged, always with adjusted rituals. The common feast provides ample opportunity not only to exchange mutual vows of allegiance, but also to exchange gifts: praise and veneration by human lords for their divine partners, material and immaterial wealth from the superhuman powers for their mortal followers.

#### IV

If the sacrifice is, first of all, a festive dinner given for the gods, fire and water, basic elements in every kitchen, deserve high attention. They must have acquired rapidly symbolic functions and connotations, perhaps very early in history, and probably long before Proto-Indo-European could have come into existence. Proto-Indo-European typically distinguishes between two words for each of the elements. Fire and water do exist in two, obviously quite unrelated, forms: one neuter, thus inanimated, but the other with gender, i.e. animated:

<sup>&</sup>lt;sup>16</sup>This is why some scholars speak of the sacrificial gift as a bribe, which is hardly an appropriate term. To speak of potlatch in this context, as other scholars proposed, seems rather exaggerated. The classical study of gift and countergift is Mauss (1923-24).

<sup>&</sup>lt;sup>17</sup>It should be noted, however, that political treaties, mentioned in the Bible as well, are also called *bərīt* in Hebrew. The conclusion of alliances seems to have been connected with an animal sacrifice, cf. the remarkable parallel Hebr. *qrt brjt* = Greek ὅρκια τέμνειν 'to cut an alliance' (which B. Maier, Tübingen, kindly pointed out to me).

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*ngni- (m) (Skt agni-, Lat. ignis, Litt. ugnis, Slav. ognb, etc.)<sup>18</sup> vs. *puH\underline{\mu}er-/n- (n) (Gr \pi\hat{\nu}\rho, Umbr pir, Hitt pah\underline{h}ur Gen. pah\underline{h}\underline{\mu}enas, etc.); *h_2ep- and/or *h_2ek^u-eh_2 (f) (Skt ap-, Lat. aqua, etc.) vs. *\underline{\mu}od-r/\underline{\mu}ed-res or *\underline{u}d-\overline{o}r/\underline{u}d-res (n) (Hitt. watar, Gen. wetenas, Skt \underline{u}dan-, Gr \underline{\nu}\delta\omega\rho, Gen. \underline{\nu}\delta\alpha\tauos < *-ntos, E LG water, HG wasser, Skand vatn, etc.).
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As the guests from heaven remain invisible during the dinner=sacrifice, their food is laid on (=put into) the hearth-fire, their drink is poured out ('libated') before their seats (or also into the fire?). Quite naturally, Fire becomes a messenger, carrying the gods' share up to heaven, as the rising smoke indicates.

Fire and water are not only indispensable elements of a dinner; they also symbolize purity and truth. This is the reason behind the veneration of Fire as the symbol of Ahuramazda in Zoroastrian cult, and of the ritual washings ('ablutions') met nearly everywhere. In ordeals, Fire and Water act as judges, revealing the hidden truth: fire does no harm to the truthful, water cannot but despise the liar.

In everyday life, the family's own hearth with its ever burning fire, is the place for sacrifice; for public ritual, special fire places or altars are built, and the fire is kindled by rubbing special pieces of wood (G Feuerhölzer) against each other, in order to provoke sparks igniting the tinder. The archaic nature of the procedure is indicative of the ritual's venerable old age; similar hints are given by other ancient implements, such as stone knives and wooden tools. Compared to Bronze Age, and partly even to Neolithic technical standards, some of these customs must be very old indeed.

It is remarkable that in the process (assumed, hardly documented) of gradual elaboration of cultic ritual which leads to the distinction of sacrifice from purely societal dinner (which, of course, gets its own ritual), the victims, the animals slaughtered, remain the same, viz. those usually eaten at both occasions: pigs, sheep and goats for smaller events, cattle for bigger festivities (cf. Lat *su-ove-taurilia*). Later, we find a broad variety according to deities with obviously varying tastes, and according to occasions (e.g. dogs are sacrified mostly to

<sup>&</sup>lt;sup>18</sup>According to Thieme (1980: 493 = 1995: 1020; cf. further Thieme 1965: 69 = 1984: 513) the 'nude', i.e. without skin, naked flame. This implies, not unrealistically, 'tabuistic deformations'. For details, see the etymological dictionaries.

infernal powers, or for magical purposes). <sup>19</sup> A bullock seems to have been the standard for public sacrifices, and perhaps even one hundred at once.

But the famous Greek 'hekatomb' merits its own paragraph. Greek  $\dot{\epsilon}\kappa\alpha\tau\dot{\rho}\mu\beta\eta$ , clearly an exocentric compound (a Bahuvrīhi) whose literal meaning is 'characterized by 100 cows', may (and sometimes probably should deliberately) be understood in two ways: it is either a 'sacrifice of one hundred heads of kine', or it is a 'sacrifice offered in order to receive a reward of one hundred cattle' or of comparable worth (because cattle served as units of value). Vedic śatagvín-, an epithet of ray- 'riches' (for the etymology, see Thieme 1964: 596 = 1995: 991) is an adjectival derivative of śata-gu- 'possessed of a hundred cows' (attested only later, in the 'Laws of Manu' and the Gautama-Dharmaśāstra). 20 In Old Persian, a proper name \* $\theta$  atagu- 'id.' must have existed; it is attested in the Elamitic parallel tradition, and in a derivative represented by the Graecizised province name Sattagydia; both forms go back to Proto-Iranian \*sata-gu-. The Indo-European age of the idea may further be supported by the presumably Celtic proper name Conto-bovio-vindillus found in an inscription at Pompeii (CIL IV 1838). Delamarre (2003:79) proposes to understand it as 'Vindillus qui a obtenu cent bœufs.'2

A corresponding 'reversed Bahuvrīhi' is found in the OIr Irish proper name  $Buchet < CC *bu-kanto-,^{22}$  in the Greek month's name  $Bov-\kappa\acute{a}\tau\iota os$ , and in Skt.  $go-\acute{s}ata-$  'a present of a hundred cows sent to a Brāhman', the base for  $go-\acute{s}atin-$  'possessing a hundred cows' (Mahābhārata).

More common may have been smaller sacrifices, such as the 'nine cattle/bulls' mentioned in Homer (II 6, 174; Od. 3,9).<sup>23</sup> Oettinger (2008) is a fine study of the role of the numbers 'nine' and 'ten' in sacrificial context, and the

<sup>&</sup>lt;sup>19</sup> In Greece, rituals directed towards the celestial gods ( $\iota$ ερ $\iota$ α,  $\theta v \sigma \iota$ α $\iota$ ι) culminated in sacrificial meals for which ,edible' animals were slaughtered, whereas in rituals for chthonic deities ( $\sigma \phi a \gamma \iota a$ ) 'inedible' (= usually not eaten by men) animals were sacrificed: horses, donkeys, dogs.

<sup>&</sup>lt;sup>20</sup>Such a simple, transparent compound may have been formed at any time by speakers of Sanskrit.

<sup>&</sup>lt;sup>2Î</sup> Conto-, however, cannot be a genuine Celtic numeral, as 'hundred' is CC \*canto- or \*cænto- < PIE \*kmtóm (cf. Gaul canto-, Oir cét, W cant).

<sup>&</sup>lt;sup>22</sup> Following Kim McCone *Ériu* 42, 1991, 37-42.

<sup>&</sup>lt;sup>23</sup>Note that Il. 6, 236 is no such attestation, as only values (in the sense of monetary units) are compared.

symbolism of '100'. The material adduced there could easily be expanded, e.g., by references to Celtic usage.

Much has been written about an alleged Proto-Indo-European horse sacrifice. Followers of F. R. Schröder and G. Dumézil think of the Vedic aśvamedha- as continuing an inherited ritual. This is hardly convincing, as critics have said many times. The defenders' main comparandum, Gerald of Wales' unique story of an 'Irish' royal consecration rite, allegedly still practiced in the Middle Ages, is but an absurd concoction: half a millennium after the Christianisation of Ireland, such a blatant paganism is unthinkable.<sup>24</sup> Furthermore, the institution of 'king' cannot be secured for Proto-Indo-European culture; the PIE root noun \* $h_2$ re $\hat{g}$ -s is only reconstructible as second member of compounds. And the domesticated horse was, most probably, still unknown to Proto-Indo-Europeans. So, horse sacrifices, well known from a number of ancient Indo-European societies, are a post-Proto-Indo-European development.

One might be more confident for other types of sacrifice, even if pertinent specific vocabulary cannot be reconstructed. According to Indian and Greek convictions, it was necessary to offer periodically certain gifts to the dead in order to secure their continuing existence in the other world (called 'world of the fathers' in Vedic): meat balls, cakes, milk or wine. Custom requires a son to do so – this is the reason for many details of Proto-Indo-European law,<sup>25</sup> and still practiced in India today. Calendar dates and special sidereal events (new year, solstices, equinoxes, new moon, full moon; eclipses, oppositions, comets, etc.) and seasonal dates (beginning of spring, harvest feasts, etc.) provide ample opportunities for rituals, possibly

<sup>&</sup>lt;sup>24</sup>The anecdote has never been taken serious by historians. The alleged custom is unknown to the otherwise quite detailed Irish law books; it is – conspicuously – not even mentioned in the rather comprehensive *New History of Ireland*, cf. Cosgrove (1987) and Ó Cróinín (2005). The real problem, still unsolved as yet, is: Did Gerald invent the story himself, or what could have been his source(s)? His anti-Irish ,racism' (F. J. Byrne) seems to follow Bernhard of Clairvaux's invectives (cf. the latter's Life of St Malachy). To assume that Gerald may have had access to oral sources, potentially old, and even mythical, would go beyond all we know about Ireland's vigorous (pseudo-)historical tradition. After all, Gerald was a stranger, unable to speak Irish, a member of the occupant's (spiritual and military) forces. I'd guess he was made a fool by some clever *scéalaí*.

<sup>&</sup>lt;sup>25</sup> Cf. Paul Thieme's study of the term *kumārapati-*, 'Jungfrauengatte' (Thieme 1963: 161-248 = 1984: 426-513).

including sacrifices. In family and society, numerous 'rites de passage' may have been marked by small or big sacrifices: 26 birth, coming of age, marriage, death. Similarly, political events such as the conclusion of alliances, starting of war, victories and defeats, departure and return of hosts, called for proper ritual, including sacrifice. Unfortunately, Indo-European Studies cannot be more precise on all these matters. The technical vocabulary obviously underwent constant modernization in all branches of Indo-European, so that we have to rely on the few bits and pieces (some words and formulas) referred to above. We are, of course, entitled to build hypotheses on, for example, Vedic-Homeric parallels; all this must be controlled by general historical considerations, and strictly checked by Comparative Grammar.

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<sup>26</sup>Cf. the classical study by van Gennep (1909).

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