ON THE PREHISTORY OF ASPECT AND TENSE IN OLD IRISH

This article deals with the prehistory and development of the Old Irish (OIr.) tense system, which is characterized by the following features: 1. syncretism of the Indo-European verbal categories aorist and perfect, which merge into a preterite as a narrative tense; 2. development and transformation of the inherited thematic imperfect; 3. production of a new perfect based on a syntagmatic aspect formation; 4. development and transformation of a future tense consisting of different allomorphic subclasses: (a) the late $f$-formation, whose historical background is unclear; (b) subjunctives in prospective function; (c) Indo-European desiderative formations.

The paper is arranged as follows: 1. Aspect flexionnel; 2. Syncretism of aorist and perfect; 3. Aspect syntagmatique; 4. Aspect syntagmatique > perfect/Mood. The subsequent development which took place in the course of the ninth century, when 'ro-forms come to be used in narrative also', is outside the scope of my article.

1. ASPECT FLEXIONNEL

The term aspect flexionnel, introduced by J. Holt, described a type of aspect whose components are formally characterized by the differentiation of stem formation. In Indo-European, aspect flexionnel is based on the opposition of perfective aorist and imperfective/imperfect/present, while the perfect going back to an old diathesis is outside

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1. I would like to thank Karin Hlaváček and Micháel Ó Flaithearta for correcting my English.
4. The archaisms of the Gaulish (Gaul.) inscription of Chamalières include three verbal forms of a Gaulish future in sje-/sjo-: *bissét he will split' *theidó, *hidi; pissi mi 'I shall see' OIr. ađéi 'he sees' < *Ađeu-eti; foncemam foncionioi 'who will swear the oath' (K. H. Schmidt, 'On the reconstruction of Proto-Celtic', in Proceedings of the First North American Congress of Celtic Studies [ed. G. W. MacLennan, Ottawa 1988] 231–48, p. 241; idem, Zur Rekonstruktion des Keltschen, Festlandkeltisches und inselkeltisches Verbum, Zeitschrift für celtische Philologie 41 (1988) 159–79, pp. 174–5. The Gaul sje-/sjo-future has been identified as an equivalent of the Sanskrit [Ski] (and Old Iranian) future with possible reflexes in Baltic, Slavic and Greek (Gk). The evidence of this originally Proto-Celtic formation must be seen in the light of another archaic Celtic future formation, i.e. the reduplicated future of OIr., which has its exact equivalent in the Sanskrit desiderative (cf. Thurneysen, Grammar, 414–15 § 669).
5. Thurneysen, Grammar, 341 § 530.
7. It must be added, however, that Holt’s model for Greek, consisting of an aorist distinct from the opposition between a marked perfect and an unmarked present (Etudes, 32), must be rejected.
the opposition. In contrast to the imperfective imperfect/present stem, the aorist occupies the unmarked position of the binary aspect system, so that Meillet's definition of aspect in Classical Greek may also be applied to Indo-European:

Le thème de présent indique un procès considéré dans son développement, dans sa durée; le thème d’aoriste, le procès pur et simple: l’un peut être symbolisé par une ligne, l’autre par un point.

In Indo-European, aspect is the nucleus of the later formed tense-system, as is proved by the so-called injunctive, a verbal category which is characterized by the lack of primary endings and augment; the use of the augment as a marker for the past tenses of the indicative is one of the most important isoglosses among the Eastern Indo-European languages Sanskrit (Skt), Iranian (Iran.), Greek (Gk), Armenian (Arm.) and Phrygian: present *bher-e-t-i, imperfect *e-bher-e-t (Gk ἔγεψε, Skt abhasā, Arm. ēber) vs injunctive *bher-e-t. As far as its function is concerned, Thurneysen defined the injunctive as follows: 'Es waren dies zwar schon reine verbalformen; aber sie bezeichneten nur die verbindung einer thätigkeit mit einer person, ohne rücksicht auf tempus und modus'. This definition was later confirmed by K. Hoffmann in his synchronic investigation of the Vedic injunctive: 'Zeitstufenlosigkeit und Nicht-Bericht ("Erwähnung") sind demnach der Funktion des Injunktivs eigentümlich'. The archaic injunctive category has been particularly well preserved in the context of the Indo-European prohibitive negation *mē, Vedic mā, where it occurs either as a derivation of the aorist stem (the so-called prēventive) or as a derivation of the present stem (the so-called nēhibitīte).

10 The term injunctivus was coined by K. Brugmann, Morphologische Untersuchungen auf dem Gebiet der indogermanischen Sprachen III (Leipzig 1880), as a substitute for B. Delbrück’s unechter conjunctiv; it originally served to designate 'arische indicative mit conjunctivischer bedeutung' (Brugmann, Morphologische Untersuchungen III, 1) in the sense of 'iniunger alicui o/cium u./dgl./, franz. enjoindre' (ibid., 2).
12 Der Injunktiv im Veda (Heidelberg 1967) 226. From a typological point of view, this 'Zeitstufenlosigkeit' may be compared with the gnomic function of the archaic permanisit in Old Georgian; cf. G. Deesters, Das kharthwelische Verbum (Leipzig 1930) 111–12; K. H. Schmidt, 'On aspect and tense in Old Georgian', Folia Slavica 7 (1964) 290–302, pp. 292–3.
E. Schwyzer used the term 'tempus' primitivum as a substitute for
injunctive: 'Im ältesten Indogermanischen mag es an "Tempora" nur das
"Primitiv" . . . und das Perfekt gegeben haben. Mit Augment wurde
das Primitiv zum "Präteritum" .\textsuperscript{14} The 'tempus' primitivum split into
imperfect/present and aorist, the semantics of the verbal stem deter-
mining its use as an imperfect/present or as an aorist: e.g. imperfective
aspect > imperfect/present (Gk ἔστιν/ἔστιν) vs perfective aspect > aorist
(Gk ἔσται, present ἔσται).\textsuperscript{15} In general, the aspectual semantics of an
Indo-European verb is confirmed by several languages: e.g. perfective
aspect > aorist: (a) Gk ἔσται, Skt asthāti; (b) Gk (middle) ἔθετο, Skt ādāti, Arm. ἔθεσθαι, Old Church Slavonic ē; (c) Gk (middle) ὑπάρχει, Skt ādāt, Arm. eti, etc. Besides this, there is also some evidence for paradigmatic shift: e.g. imperfective aspect > imperfect/present: (a) *bhēreti /
*bhēreti (Gk, Skt), *bhēretelo (imperfect in OIr. berēd) > aorist (Arm.),
(b) *ējēmeleto (Skt jānajīta > aorist (Gk ἔρευετο) etc. Consequently,
the development of Schwyzer's 'tempus' primitivum implies three dif-
dent stages of the Indo-European tense system: (1) perfect vs 'tempus'
primitivum, (2) 'tempus' primitivum > perfective aspect vs imperfective
aspect, (3) perfective aspect vs imperfective aspect > aorist vs im-
perfect/present. As a matter of fact, the transition from stage 1 to stage 2
had already taken place in Indo-European time; if not, we would ha-
ve no explanation for the stem formations of present/imperfect.\textsuperscript{16}
On the arrangement of the stem formations of present/imperfect and to a lesser
extent of aorist, Cowgill points out that imperfectives to telic roots were
created by using various affixes that formed verbs proper of imperfective
aspect and emptying them . . . of their semantic content other than that
of imperfective aspect. This is the frequent Indo-European pattern of
root aorist and derived present, of the type Sanskrit aorist ādāti: present
ādātī, or Homeric aorist βλέπο: (nasal) present βλέπω. At the same
time, perfectives to atelic roots were – perhaps only very sparingly at
first – created by using a suffix *-e. . . .\textsuperscript{17}

Celtic remnants of the injunctive are preserved in the paradigms of
(a) imperfect and (b) imperative: (a) OIr. 3rd singular (sg.) berēd < *bhereto (middle), 3rd plural (pl.) berēitis (modelled on the 1st pl.
...heirmis) < *-berat < *bheronlos; furthermore 2nd sg. in -tha; in Brit-
ton the Middle Welsh ending -ad (preserved e.g. in gwydat, 3rd sg. imperfect of gwybol ‘to know’) can be traced back to *-a-lo in Gaul. we have logito ‘he has laid’/located’ < *logh-ej-e-lo with paradigmatic shift from imperfect to aorist/preterite, although the reading is not quite sure. Furthermore, in the Lepontic (Lep.) and Gaulish evidence, there are hybrids consisting of root plus perfect ending: Lep. karite = gar-i-le ‘he has enclosed’, kalite = kal-i-le ‘he has erected’; Gaul. karn-i-l-u ‘locavit et statuit’, pl. karn-i-l-u-s; lub-i-l-i-s beside imperative lub-i: Skt lubhāyati, Latin (Lat.) lubet, libet etc. In OIr., the 2nd sg. beir < *bher-e-, an extragrammatical, extrasyn tactic form, is the nucleus of a paradigm which was later completed by the injunctive: 2nd pl. berid < *bher-e-le, 3rd sg. bered < *there-lo, 3rd pl. berat < *bher-o-nlo.

In spite of the recent criticism, the principle of suppletion cannot be completely separated from the aspect flexionel of the archaic injunctive period. Among the evidence provided by Thurneysen, we observe the preterite stem berid:- present berid ‘bears’; together with do-u(i)c ‘has brought’ and do-ma ‘has given’, birt, berit, perfect ru-bart, constitute a suppletive paradigm. This is in agreement with Pokorny’s statement that the Indo-European root *bher is durative and cannot be the basis of an aorist or a perfect (cf. Gk ἐμείκων, κοιμώκος; Lat. tetel etc.).

22On the use of the injunctive in the imperative paradigm cf. R. Thurneysen, KZ 27 (1888) 172-82; K. H. Schmidt, Probleme des Prohibitivsatzes, Studia classica et orientalia Antonino Pagiario oblata III (Roma 1969) 223-32; idem, Studia Celtica 3 (1968) 22; Szemerényi, Einführung, 263.
23C. Watkins, ‘Preliminaries to a historical and comparative analysis of the syntax of the Old Irish verb’, Celtica 6 (1963) 1-49, p. 44.
26Grammar, 458-74 §§ 70-73.
27bid., 422 § 682.
28J. Pokorny, Indogermanisches etymologisches Wörterbuch (Bern 1919-69) 128.
For this reason the s-aorist formation *bert<sup>23</sup> must be rather late. On the other hand, the Indo-European root */dheh<sub>1</sub>/* </*to-pro-
dad-dhh<sub>1</sub>-i is confirmed by Continental Celtic verbal formations of the 3rd person: Gaul. *edē < /*dhe-dhh<sub>1</sub>-ē-i, Lep. tetu, i.e. dedu < /*dhe-dhh<sub>1</sub>-u, Celtiberian tatus, i.e. datu < /*dhh<sub>1</sub>-ū-s.<sup>30</sup>

Finally, the theory concerning the identification of the conjunct endings in Insular Celtic with the injunctive<sup>31</sup> must be rejected. The two main arguments against it are the following: (1) the resulting equiva-
lation of conjunct flexion and Indo-European injunctive is not in keeping
with the late date of Irish evidence, (2) it is not clear why Old Irish
or Insular Celtic should have undertaken a distribution of primary and
secondary endings different from all other Indo-European languages and
why the primary endings should have been restricted to simple verbs.<sup>32</sup>

2. SYNCRETISM OF AORIST AND PERFECT

The syncretism or merger of aorist and perfect into a preterite is a feature of later linguistic development in Indo-European. H. Zimmer had already noticed this transformation in Old Irish and Latin:

Das altir. präteritum ist wie das sogenannte lateinische perfekt
vom standpunkt der form ein synkretisches tempus: beim abgeleit-
eten verb fungiert eine neubildung wie im Latein, wenn auch ganz
anderen ursprungs (s-präteritum); beim starken verb ist ganz wie
im Latein bald die fortsetzung des alten s-aorists, bald die des alten
reduplierten präteritums (perfekts) in gebrauch. Vom standpunkt
der bedeutung sind alle diese bildungen verschieden ursprungs
ebenso einheitlich wie ein lat. expugn/avi, legi/, dixi. Es müss-
en also bei erhaltung aller formen ziemlich starke verschiebungen der
bedeutung vor sich gegangen sein.<sup>33</sup>

This fusion may be observed in individual Indo-European languages
in three particularly clear variations:<sup>34</sup>

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<sup>23</sup>Cf. H. Zimmer, 'Keltische studien', KZ 30 (1888) 1-292, pp. 198–217; C. Watkins,
'The origin of the t-preterite', Éra 19 (1962) 28–40; idem, Indo-European origins of
the Celtic verb (Dublin 1962) 115–74, for the explanation of the OIr. t-preterite with
the relevant bibliography.

<sup>30</sup>Cf. K. H. Schmidt, 'Grundlagen einer festlandkeltischen Grammatik', Le lingue
indo europee di frammentaria attestazione (ed. E. Vincen, Pisa 1983) 65–90, p. 73;
Idem, ZCP 41 (1986) 175. There is an alternative explanation of these verbal forms
on the basis of the root *dēh₂ (dēh₂ 'to give' (cf. Eska, Botorritsa, 104, with
the relevant bibliography).

<sup>31</sup>Cf. Meid, Grundlagen; Watkins, Celtica 6 (1963) 1-49; and recently Szemerényi,
Einführung, 249–52 with further references.

<sup>32</sup>Schmidt, KZ 94 (1980) 191.

<sup>33</sup>Keltische Studien 18', KZ 36 (1900) 451–586, p. 464.

<sup>34</sup>Cf. K. H. Schmidt, 'Das Perfektum in indogermanischen Sprachen. Wandel einer
1. The new preterite consists of allomorphs which can be traced back either to an aorist or to a perfect. This type corresponds to Old Irish and Latin.\(^{35}\) It is also attested in Tocharian\(^{36}\) and Albanian.\(^{37}\) In Celtic, the allomorphic fusion probably antedates the Continental Celtic inscriptions, because (a) perfect formations and (b) aorists occur in contexts which are obviously identical from a structural point of view: (a) *bebe, letu, karile, kalile, karmitu* (see above); Gaul. *ieuuv* etc.\(^{38}\) (b) *s-aorists sesit* (Chamalières) ‘he has sown’ < *seh₁-s₁-t₁-e₁, legasit* (Seraucourt à Bourges) ‘he has laid’ < *legh₁-₁-s₁-t₁, prinas* (La Graufesenque) ‘he has bought’ < *ki₄²-s₁-t₁ or *ki₃₄-s₁-t₁.\(^{39}\)

2. In Germanic,\(^{40}\) the strong preterite is basically confined to the paradigm of the old perfect.

3. In Slavic and Modern Greek, the preterite is basically confined to the paradigm of the *s*-aorist.

The transformation of the old perfect of state into a resultative perfect is a prerequisite for the merger of aorist and perfect into a preterite with the function of a narrative tense (*temps de récit*).\(^{41}\) Originally, the Indo-European perfect referred to the state of the subject resulting from a preceding action or process. This type is attested in Greek, Sanskrit and Iranian because of their early tradition;\(^{42}\) e.g. *τομής μεξ θώμος, ἑπικα γαλα τωλά πένουθα* (p 284); Vedic *bibháya* ‘he is afraid’. The later Indo-European evidence is characterized by a function shift by which ‘das Perfekt von einer vergangenen Handlung gebraucht wird, deren Wirkung im oder am Objekt noch in der Gegenwart fortdauert’.\(^{43}\) The formal features of the Indo-European perfect – special personal

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\(^{35}\) See Zimmer, *KZ* 36 (1900).


\(^{39}\) Ibid., 167–8.


\(^{43}\) Wackernagel, *Kleine Schriften*, 1001.
endings, reduplication and/or ablaut — are all preserved in Celtic. Moreover, the above-mentioned hybrid formations in Continental Celtic (karite, kalite, karnitus) may possibly belong to the great number of innovations (‘große Anzahl von Neuerungen’) in the perfect formation referred to by Szemerényi.

Finally, the uncompounded *praetertum narrativum* discovered by Zimmer must be regarded as an archaism.

### 3. Aspect syntagmatique

In contrast to the early aspect *flexionnel* of Greek, Sanskrit and Iranian (see above), the later aspect systems correspond to an aspect *syntagmatique* type, the perfective aspect being the marked member of the aspectual opposition. The perfective aspect is generally formed by verbal composition, while the imperfective aspect is not compounded. The change from aspect *flexionnel* to aspect *syntagmatique* implies a functional shift of the aspect system; the opposition of *point* vs *ligne* (aspect *flexionnel*) is replaced by accomplished/telic vs non-accomplished/atelic action (aspect *syntagmatique*): ‘Perfektiv heißt eine Handlung im Hinblick auf ihre Vollendung, d. h. eine solche, bei der dem Redenden ein Abschluß vorschwebt, ohne Rücksicht auf die etwaige Dauer der Handlung oder des Vorganges bis zu dem Abschluß.’

The most significant example of aspect *syntagmatique* (based on verbal composition) is attested in Slavic, whose aspect system has been
compared with Germanic, Baltic, East Iranian and the non-Indo-European Kartvelian (South Caucasian) languages.

The functional verbal composition of Insular Celtic must be taken as another example of aspect syntagmatique, which, however, has been transformed 'from a perfective past into a perfect, which is the stage we have reached by the time of our earliest sources in Irish'. On the other hand, the stage of an aspect syntagmatique must be taken as the basis for the non-past contexts of functional verbal composition. These 'meanings' had already been investigated around the turn of the century and have recently been discussed e.g. by Wagner, West, and McCone, who points out 'that the Old Irish system of resultative/potential augmentation has its origins in the telic effects of certain preverbs upon a wide range of mostly atelic roots'.

The functional split in Insular Celtic (perfect vs aspect syntagmatique) requires a thorough systematic investigation which can be supported by typological comparison. To give just a few examples: (a) West, tries to illustrate the potential and optative function of by Gothic parallels; (b) the gnomic present, which served to designate 'general clauses of universal time', can be compared typologically with tenseless categories such as the injunctive (see above), the gnomic permissive of Old Georgian or the gnomic aorist of Greek, whose 'Ausgangsverwendung beruht auf einem uralten zeitlosen Gebrauch des Aorista'; e.g. ὁ κε θείας ἐπιπείθησαι, μάλα τ' ἐκλήνων (aorist) αὐτοῦ

59 ibid., 342 § 530.
60 Cf. e.g. notes 75 and 88.
61 See note 76.
63 Early Irish verb, 125.
64 Studia Celtica 16–17 (1981–2) 353.
65 Thurneysen, Grammar, 343 §§ 531.
66 ibid., 342 § 530.
68 E. Schwyzer, Griechische Grammatik II (München 1950) 285.
(A 218). In other cases the original aspect syntagmatique is confirmed by the semantics of the verbal compound; compounds such as *ibid* 'he drinks' + *eo*-s, *ithid* 'he eats' + *de-fo* express the telic action very clearly.  

4. ASPECT SYNTAGMATIQUE > perfect/mood  

The functional shift from aspect syntagmatique to perfect is restricted to verbal composition in the context of 'preterite indicative and past subjunctive'. In other contexts – as e.g. the gnomic function in connection with the present or the potential and hortative functions – the compound verb has basically preserved the stage of the aspect syntagmatique. The different processes entail a functional split which must be taken into consideration in reconstructing the history of the compound verb. Furthermore, as has already been stated, the functional split took place both in Goidelic and in Brittonic.


Cf. the numerous parallels from other languages: German *aus trinken, aufessen*, Lat. *decomere* etc. (McCone, *Early Irish verb*, 120–28), and see the deictic differentiations between OIr. *tét* 'he goes', *de-tét* 'he comes' etc. (K. H. Schmidt, *Zum Suppletivismus der Verba für "gehen" und "kommen" im Altirischen*, *Münchener Studien zur Sprachwissenschaft* 19 (1966) 117–28). In other languages, as for instance in non-Indo-European Svan, a Kartvelian language, the imperfective present and the perfective aspect exhibit suppletive verb inflection which is based on the aspect fleissonel: *i-zi* 'he eats': *ais* la-la-em, *i-fr* 'he drinks': *ais* la-i, *la-la*; cf. also *an-rít* 'he comes': *ais* an-qad etc. (Schmidt, *Rota Slovenica* 7 (1984) 298); cf. also Thurneysen, *KZ* 37 (1904) 60; idem, *Grammar*, 538 § 952 referring to OIr. *ro-sag*, *roig*, *roich* 'reaches': *saig* 'seeks, makes for', which he compares semantically with Lat. *assequii, consequii: sequi.*

Thurneysen, *Grammar*, 341 § 530. The functional change from perfectivity to anteriority results in a perfect/pluperfect; therefore Thurneysen's definition of the function of *m* yields perfective force to the preterite indicative and past subjunctive, ibid.) must be rejected. On the other hand, Zimmer's explanation (*KZ* 36 (1900) 495–6) puts too much emphasis on its function as a pluperfect.

McCone uses the term augment for the functional preverb 'insofar as an extra element is added to the simple or compound verb for purely grammatical reasons . . . while bearing in mind that structural and syntactic similarities between these Old Irish augments and their Greek counterpart do not extend beyond the vague definition just given' (*Early Irish verb*, 96). In looking for an alternative term, one might think of marked (e.g. marked preterite; marked present subjunctive etc.).

Cf. e.g. J. Strachan, 'Welsh *ry* = Irish ro- of possibility', *Ériu* 2 (1908) 60–61; idem, 'Further remarks on Welsh *ry* ', *Ériu* 2 (1908) 213–20; J. Loth, 'Questions de grammaire et de Linguistique brittonique', *Revue Celtique* 29 (1908) 1–67, p. 56: 'ry- se trouve avec le présent, indiquant qu'une chose se fait habituellement'; idem, 'Questions de grammaire et de Linguistique: la particule verbale ro-(ry-) en gallois, corso et breton', *Revue Celtique* 30 (1909) 1–36; Loth distinguishes five different uses of *ro- in Brittonic: 1. constatation de l'antériorité d'une action au fait par rapport au présent ou au passé; 2. l'achevement d'une action passe, dans le présent, ou la continuation d'une action passe dans le présent; 3. le souhait; 4. la possibilite au present; 5. l'habitual au present', ibid., 23; cf. also J. Loth, 'Questions de grammaire et de}
Because of the fragmentary evidence of Continental Celtic, it is difficult to determine the beginnings of the two processes (i.e. (a) the development of an aspect syntagmatique, (b) the functional split). But the functional similarities between Celtic and Germanic with regard to the aspect syntagmatique might suggest a common tendency towards the establishment of this type of aspect. In any case, however, the similarities with regard to aspect between different Indo-European languages as well as between Goidelic and Brittonic must be the result of a later convergence.

As the necessary re-examination of the Insular Celtic evidence, including the historiography of the problem, cannot be undertaken in this article, I will conclude with some remarks on the earliest investigations, beginning with J. K. Zeitib: 'Sunt RU (ro) et NU (no) notae usitatae illa actionis perfectae, haec infectae'. Zimmer stressed the prepositional character of ro and pointed to the Slavic parallel. Thurneysen observed Old Irish calques on Latin compound verbs, but did not yet realize the function of the uncompounded präteritum narrativum (see above). While he offered a considerable collection of data, Strachan did not recognize the function of OIr. ro, as becomes apparent from the following: 'The particle ro served to form a perfective form to such verbs as had no perfective (aorist) stem'. Zimmer was
the first to solve this problem (see above).\textsuperscript{87} Moreover, he discovered the narrative character of the uncompounded preterite.\textsuperscript{88} On the basis of Zimmer's most important findings the question was discussed anew by Thurneysen, who included the different grammatical contexts.\textsuperscript{89}

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\textsuperscript{87} \textit{KZ} 36 (1900) 463–586.
\textsuperscript{88} ibid., 484.
\textsuperscript{89} \textit{KZ} 37 (1904) 52–120. Early contributions were also made by J. Strachan, 'Action and time in the Irish verb', Transactions of the Philological Society 1899–1902, 408–438; Chr. Sarauw, \textit{Irske Studier} (Kopenhagen 1900) 61 ('Præsens indikativ med ro'); idem, 'Syntaxisches', \textit{KZ} 38 (1905) 145–62; H. Pedersen, 'Zur Lehre von den aktionsarten', \textit{KZ} 37 (1904) 513–50; idem, 'Erklärung', \textit{KZ} 38 (1905) 421–6, etc.