PATRIZIA DE BERNARDO STEMPEL

The Accents of Celtic

New Light
on the Older
and Oldest
Stages

of Celtic

mobile pitch

antepenultimate
stress

Initial stress

penultimate
stress

new penultimate
stress
after apocope

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COVER ILLUSTRATION

Gaulish torque of Mailly-le-Camp, inscribed in Greek characters.
See items <IV/9.23> and <VI.T10>.
Musée des Antiquités nationales, Saint-Germain-en-Laye
Photograph: J.A. Arenas Esteban
Diagram: R. Stempel

Marito incomparabili

Preface

Accent is one of the most important language features. Consequently, I have become fascinated by it and spent part of the last thirty years collecting and evaluating the evidence for and the nature of word-accent in the Continental Celtic varieties, an accentuation system that has to be reconstructed as no accent marks were used in the written evidence we have. However, even if the primary purpose of this study was to inquire into the accent patterns of the old Celtic dialects on the Continent, the evidence I present here is also of major significance for the reconstruction of the accent patterns of the Celtic branch as a whole. In fact, the accentuation system I identify for the Continental varieties is crucial for understanding how and when the well-known synchronic accent-patterns of the Insular branches came into being.

Even if further investigation of the earliest Goidelic stage will be needed in the future, the accentuation system I am now able to reconstruct for the older and oldest Celtic has reached a degree of both internal and external coherence. I use the term 'external coherence', because the accentuation system I reconstruct here agrees with the comparative and typological data, in particular with the gradual replacement of the inherited movable pitch accent which took place in the other Indo-European subfamilies. By 'internal coherence' I mean that the accent patterns I identify for the Continental Celtic varieties fit in with the general diachronic development we see within the Celtic family of languages.

My views have not remained the same over the decades. People familiar with my work will appreciate that, apart from organizing in a more systematic way many of the examples discussed in my contributions on Old Celtic accentuation[*] together with those scattered in the rest of my publications, I have not only added as many instances as possible of Continental Celtic words containing relevant sound changes that might allow us to distinguish between stressed and unstressed syllables, but also, above all, made important adjustements to the views I expressed in earlier publications. It is my hope that this book will contribute to a better understanding of the oldest and often still obscure Celtic remains.

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[*] In particular: *Zum gallischen Akzent* (1994), *Gaulish accentuation* (1995), *Centro y áreas laterales* 2 (2002), *Varietäten des Keltischen* (2007), *La ricostruzione del celtico d'Italia* (2009), *Die Geminaten des Festlandkeltischen* (2010), *Accenti e strati linguistici* (2011), *The interface of word formation* (2013), *Livelli di celticità linguistica* (2014).

I am most grateful to Bill McCann, Jonathan West and Reinhard Stempel for their comments on various versions of this text as well as for having revised my English formulations and corrected many of my errors. Any remaining shortcomings are entirely my own responsibility. I am also indebted to Francesco Rubat Borel and Reinhold Wedenig for information about some of the onomastic items discussed. Last not least, heartfelt thanks are due to Dr. Andreas Barth, Ralph Stemper and all their colleagues at Carl Winter Verlag Heidelberg.

Víllodas, Valentine's Day 2023   *Patrizia de Bernardo Stempel*

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Symbols and Abbreviations

*	precedes a reconstructed form assumed to have existed
**	precede an unreal or improbable reconstruction
#	indicates the end of a word
'	precedes the accented syllable
>	points to a new stage of the same form
>>	points to a new stage of the same form due to a different accentual pattern
<	points to an older stage of the same form
<<	points to an older stage of the same form due to a different accentual pattern
⇨	points to a derivation of a given word
⇦	points to a derivation of a given word
▶	indicates that the phonetic representation that follows is possibly not the most archaic one for the word under discussion

á, é, í, ó, ú   indicate stressed vowels

a:, e:, i:, o:, u: indicate long vowels

a_1, e_1, i_1, o_1, u_1 indicate inherited vowels

a_2, e_2, i_2, o_2, u_2 indicate vowels resulting from assimilation

S   represents a stressed syllable

U   represents an unstressed syllable

X̆   represents a syllable of which nothing is said with regard to stress

A	Austria
abl.	ablative
acc.	accusative
AD	*anno Domini*
AngloN	Anglo-Norman
ApS	antepenultimate stress, i.e., stress on the 3rd last syllable
ArchCelt.	Archaic Celtic
Arm.	Armenian
B	Belgium
BC	before Christ
BG	Bulgary
Biblio.	bibliography
Bret.	Breton
Britt.	Brittonic
C	any consonant
Celt.	Celtic
cent.	century
cfr.	*confer*, compare
CH	Switzerland

CIb.	Celtiberian
Co.	Cornish
col., cols	column, columns
CommCelt.	Common Celtic
CZ	Czech Republic
dat.	dative
D	Germany
DN, DNN	divine name, divine names
E	Spain
ead.	*eadem*
EN, ENN	ethnic name, ethnic names
F	France
FL	Liechtenstein
FN, FNN	family name, family names
forthc.	forthcoming
Galat.	Galatian
Gallo-Lat.	Gallo-Latin
Gaul.	Gaulish
GB	Great Britain
gen.	genitive
GeInf.	Germania inferior
GeSup.	Germania superior
Gk	Greek
gl.	glossed
Gmc	Germanic
Goid.	Goidelic
H	Hungary
Hisp.	non-Celtiberian Hispanic
HR	Croatia
I	Italy
ibid.	*ibidem*
id.	*idem*
IE	Indo-European
i.e.	*id est*, that is
Ir.	Irish
L	Luxembourg
Lad.	Ladin
Lat.	Latin
Lep.	Lepontic
lit.	*litteraliter*
loc.	locative
loc.cit.	*loco citato*
LW	loanword

Maced.	Macedonian
MlBret.	Middle Brteon
MlHG.	Middle High German
MlIr.	Middle Irish
MlW.	Middle Welsh
ModBret.	Modern Breton
NHG.	New High German
NL	Netherlands
no., nos	number (sg. and pl.)
Nor.	Noricum
OBret.	Old Breton
OCo.	Old Cornish
OInd.	Old Indian
OIr.	Old Irish
OProv.	Old Provençal
OW.	Old Welsh
P	Portugal
p., pp.	page, pages
pers.	person
PeS	penultimate stress, i.e., stress on the 2nd last syllable
PGN	name of a population group
PL	Poland
pl.	plural
PlN, PlNN	place name
PN, PNN	personal name, personal names
Pol.	Polish
Proto-Celt.	Proto-Celtic
Prov.	Provençal
R	any sonorant
RN, RNN	river name, river names
RO	Romania
S	stressed syllable
ScGael.	Scottish Gaelic
scil.	*scilicet*, that is
sg.	singular
SLO	Slovenia
SN, SNN	settlement name, settlement names
SPI	stress position indicator(s)
SRB	Serbia
s.v., *s.vv.*	*sub voce*, *sub vocibu*
U	unstressed syllable
V	any vowel
VLat.	Vulgar Latin

voc.   vocative
vs.   *versus*, as opposed to
W.   Welsh

I Introduction

> '*The minor ones* [scil. *clues*] *are*
> *relatively weak – but only relatively.*
> *They gather strength from the major ones.*'
> Ellery Queen, *The Door Between*, p. 174

I.1   Accent and stress

In most languages, bi- and polysyllables 'contain one syllable that is more prominent than the rest, in terms of loudness, pitch or some other feature'.[1] The syllable thus highlighted is referred to as being accented.

As David Abercrombie explained, 'The various possible realisations of accent may have nothing phonetic in common. An accented syllable *may* be realised as stress, with various features of pitch, of syllable length, of loudness, and of articulatory characteristics in various combinations. But none of these is included in the definition of accent. In other words, accent is ineffable.'[2]

Accordingly, the term 'accent' is used here as an umbrella-definition for all types of suprasegmental features highlighting part or parts of a given word, particularly whenever there is no need to distinguish between the musical type of word accent, usually known as 'pitch' and the intensity word-accent known as 'stress'. It is, however, worth mentioning that some scholars just speak of 'syllabic accent' as opposed to 'mora accent', because the essential difference between the aforesaid types of accent is that in the stress-type the extent of the accent is equal to the duration of the whole syllabic phoneme, whereas in the pitch-type the accent affects only part of the syllable, namely the mora.[3]

I.2   The Old Celtic periods

The Celtic languages did not develop all at once from Common Indo-European, but formed gradually while their speakers progressively separated from what were to become speakers of the other Indo-European dialects while the bearers of the Indo-European culture moved westwards from their original settlement area.

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[1] HOCK & JOSEPH 2009, p. 28. On the question of whether there are any languages at all that do not highlight at least one syllable in a given word, see HYMAN 2014.

[2] ABERCROMBIE 1976 as quoted by VAN DER HULST 2014, p. 5.

[3] Cfr. SZEMERÉNYI 1999, pp. 73f. with further bibliography. For an in-depth discussion of several aspects of word stress see the contributions in VAN DER HULST 2014.

The process took place quite slowly as those linguistic innovations which we now regard as Celtic developed by degrees in the area in which the aforesaid people were settling before part of the speakers in question departed for new territories.

The relative chronology of several relevant innovations found in the older Celtic sources allowed me to recognize at least five successive linguistic phases, each one of them preceding a new population split. For obvious reasons, the whole discussion cannot be repeated here, but the relevant isoglosses for establishing the five Old-Celtic stages listed in the following have been detailed, and in some cases identified for the first time, in several of my contributions from 2006 on.[4] For the sake of clarity, a list of these relevant isoglosses is to be found in Section II, Chapter 2, Table 11 below, immediately followed by a visual representation of the various Celtic phases in Diagram 1.

It is during the first period, when all those speakers whose languages could later be characterized as Celtic were presumably living together in one speech community, that a bundle of features shared by all the Celtic languages developed. It was only after this phase that some of the speakers of this most archaic Celtic brought their language for the first time to the Iberian and Apennine peninsulas. There, as a consequence of the spatial separation from the core Celtic area, various Hispanic varieties emerged, as well as Ligurian Celtic. It is important to mention that the variety we call Celtiberian must be a later development as it shows several specific innovations with respect not only to the older Celtic of Stage One, but also to the other Celtic varieties found on the Iberian peninsula.[5]

The second Old-Celtic period may have been relatively short, as during its course only few linguistic changes were added to the bundle of features developed during Stage One. Afterwards, another batch of Celtic speakers brought their language to the North of Italy, where we later find the specific peri-Alpine variety traditionally known as 'Lepontic'.[6]

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[4]   The reader is referred to *Lenguas célt. en la investigación* and, for a more detailed account, to *Language and historiography* and *From IE to the Celtic languages*, while individual relevant isoglosses have been discussed in *Idg. und kelt. 'geben'*, *El genitivo-ablativo sing. del IE arcaico* and **sunus in Early Celtic*. A comprehensive reca-pitulation is now to be found in the appendices A und B to *CF* II/1, pp. 335-347. The descriptions of the remains of Old Celtic published in 2020 by STIFTER, (a) and (b), BELTRÁN LLORIS & JORDÁN CÓLERA and also MULLEN & RUIZ DARASSE do not take any notice of these new findings and also omit several bibliographical references.

[5]   See *Centro y áreas laterales* and *Varietäten des Keltischen*, together with ARENAS ESTEBAN & DE BERNARDO STEMPEL 2011.

[6]   Although a label such as 'Peri-Alpine Celtic' would be more appropriate for denominating pre-Gaulish Celtic as attested in Switzerland and Italy, I shall still, for

The third Old-Celtic phase may have been, by contrast, quite long, because those speakers whose languages would later arise as Goidelic, Gaulish and Brittonic introduced together many linguistic innovations into the Celtic variety of Stage Two they had shared until then. Only after this shared third period must some of the speakers of this new Old-Celtic koiné have reached Ireland, where Goidelic subsequently (and also gradually!) emerged and much later split into the modern varieties known as Irish, Scots-Gaelic and Manx.[7]

Meanwhile, during a fourth Old-Celtic phase, the remaining speakers of the still partly undifferentiated Celtic language of Stage Three introduced into their speech those innovations found both in the most simple form of Gaulish and in Common Brittonic.[8] This happened before several local varieties arose from Common Gaulish under the influence of the various regional sub- and adstrata.

Finally, the variety of Stage Four which was still shared started to diverge from Gaulish during the fifth Old-Celtic phase, both by generalizing some sound-changes which until then had only been sporadic and by introducing further new linguistic features. After these speakers of Celtic had reached Britain, their language eventually split, apart from other Brittonic dialects now extinct, into Welsh and Cornish, whereas Breton only developed when some of the Britons came back to the Continent.

I.3   The problem

In a chapter titled 'Accents without accent marks' of her monograph on Ancient Greek accentuation, Philomen Probert discusses the difficulties of identifying the accentuation of Ancient Greek words.[9] The situation is much more complicated with Continental Celtic dialects, given that (1) we have no evidence that accent marks were ever used in writing in Celtic sources and (2) all Continental varieties are now extinct, except for some borrowings into Latin and a few place names which survive in Belgian, Dutch, French, German, Italian, Portuguese and Spanish toponymy.

One may, however, infer the position of the accent from the effects of those sound-changes which are usually caused by the proximity of a strong expiratory

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pragmatic reasons, stick to the traditional name. For the various stages of the Italian Celticity see in particular *La ricostruzione del celtico d'Italia* and *Livelli di celticità linguistica*.

[7] See especially *Layers*.

[8] Interestingly, BLAŽEK 2010 comes to a similar conclusion simply by means of the lexicostatistic data available.

[9] PROBERT 2006, pp. 16-21.

word-stress. As we shall see, it is possible to distinguish between sound-changes affecting unstressed syllables (in which cases one speaks of pre-tonic or post-tonic 'weakening') and sound-changes affecting only stressed syllables (in which cases one speaks of 'strenghtening'). I call all of them 'stress position indicators' ('SPI' for short) and list them in Section III below.

I.4   The corpus

Given that the transmission of the Old-Celtic varieties is fragmentary and that their remains consist mainly of names,[10] often embedded in Roman inscriptions and in Greek texts, the quality of the evidence collected is far from being consistent.[11] Nevertheless, in order to draw some reliable conclusions, I looked for the greatest possible number of stress position indicators in the greatest possible number of lexical and onomastic items belonging to all known Continental Celtic varieties. *Hápax legómena* and rare variants were included whenever they seemed to be able to shed some light on the problem under discussion.

    An interesting exception to the general lack of accent marks in Old Celtic may be represented by *Nóreiae*, the genitive of the goddess called *NOREIA*, written with a stroke in line 10 of a Roman inscription from Noricum (*CF*-Nor 110).[12] Although this stroke, called *apex* in Latin epigraphy, usually marks vowel length in Roman inscriptions,[13] this is obviously not the case here, because an alleged Celt. **Nōreia would have regularly turned into **Nāreia. One might, therefore, suppose that the short *-*o*- of *NOREIA* was provided with an *apex* so as to call attention to the otherwise unexpected pronunciation ['noreya].[14]

    Other instances of Old-Celtic words, both proper nouns and lexical items, written with accent marks are not only extremely rare, but also provide unreliable evidence, given that they are always embedded in texts of a different language.

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[10] A name is to be classified as linguistically Celtic if it can be explained in a formally and semantically satisfying way by tracing it back to an Indo-European or at least Celtic lexical basis with the help of sound-changes documented in the Celtic languages.

[11] No problem was, however, caused by the variety of writing systems in which the items collected are attested, given that I only selected those items in which no writing peculiarities interfered with the SPI under discussion. It goes without saying, for example, that neither Celtiberian nor Lepontic forms can be adduced when discussing consonantal geminations and degeminations.

[12] *CF* I/2, p. 822-825; see also *CF* I/1, pp. 365-377.

[13] See, among others, MEYER 1983, p. 35, and LASSÈRE 2007, I, p. 55.

[14] Indeed, '[...] cet accent [*scil.*: the *apex*] se rencontre parfois sur des voyelles brèves [...]': CAGNAT 1914, p. 27. See also BODEL 2012, p. 87f.

Such is the case, among others, of Βρεταννία and of τριμαρκισία, a Galatian 'three-horse battle unit', for their accentuation was fitted into a well-known Greek pattern.[15]

I.5   The evidence

The data collected belong to one of the following three types.

Type (a): variants of the same onomastic type or lexical item one or more of which was/were affected by the relevant sound-change(s). For examples see the items (A), (D) and (F) in § I.9 below.

Type (b): a name or a lexical item the most plausible etymology of which implies that it was affected by the relevant sound-change(s). For examples see the items (B) and (C) in § I.9 below.

Type (c): a nominal or a lexical derivation whose unexpected suffix-selection[16] can be easily accounted for by the relevant sound-change(s). For an example see item (F) in § I.9 below.

The variants which showed the effects of relevant sound-change(s) were, at the beginning, very probably substandard. The sound-changes in question are to be understood as 'in progress', according to the age and geographical provenance of the item under discussion and also, presumably, to the nature of the source. Some of the sound-changes seem, however, to have acquired a certain regularity in the course of time, even if part of them did not become regular until well into the Old-Celtic Stage Five.

It is important to stress that it is the data as a whole, and not just the individual lexical and onomastic items, that enable us to deduce the accent position in the various phases of Old Celtic. Several items, in point of fact, do not indicate on which syllable the accent lay, but rather those syllables which were unaccented.

I.6   Chronology

One of the characteristics of the old and, in particular, Continental Celtic texts is that their absolute and relative chronology seldom coincide. As a consequence, it was, unfortunately, not possible here to draw any conclusions about ancient accentuation from the absolute chronology of the lexical and onomastic items that exemplify the processes under discussion. This is why matters of dating are

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[15] For the attestations see the inscription no. 1.14 from Aphrodisias in TOMLIN 2018, p. 18, and, respectively, FREEMAN 2001, p. 17f. For the pattern see DIEU 2016, p. 259.

[16] That is, whenever the pre-suffixal vowel of the derived formation does not tally with the stem class of its basis.

seldom addressed in this study. Information about the absolute chronology of the evidence collected will, however, be duly found in the bibliographical references added to each of the lexical and onomastic items analysed.

However, even if we are not yet in the position of identifying the chronological and also geographical limits of the individual dialectal areas,[17] the evidence provided by the whole of the Keltiké helps us to better understand 'The making of Celtic' across the centuries.

I.7   This book

The present monograph aims to fill a gap in Celtic Studies. To this effect, the materials discussed in my work from 1994 on are not only organized here in a more systematic way, but also with the addition of as many instances as possible of Old and mainly Continental Celtic words containing an even greater number of diagnostic sound-changes that indicate which syllables were highlighted by accent or rather, as in our case, by word stress.

Following this first introductory section, **Section II** sketches the history of word accentuation starting from Common Indo-European down to the individual Celtic languages. In particular, its first chapter discusses some Old-Celtic forms which indicate that Proto-Celtic, like Proto-Germanic and contrary to the general view, did not immediately modify all inherited Indo-European accentuation-patterns. Its second chapter introduces the different synchronic accentuation-patterns operating in the various Celtic dialects. It shows how the reconstruction of an initial stress for the whole Celtic subfamily of languages is unfounded, how each accent system naturally gave rise to the later ones and how the new, revised model of Celtic accentuation fits into the gradual 'glottogenetic'[18] model of Celtic outlined in § I.2 above. In recent years, this model has displaced the traditional genealogical trees for the Celtic subfamily.[19] Finally, the third chapter of this second section provides additional evidence by identifying, in other Indo-European subfamilies, a number of typological parallels for the set of Celtic accent-shifts described in this book.

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[17] This must be left as a possible goal for future investigations.

[18] I use this term so as to make it clear that I am concerned here with the development of the Celtic language and its varieties as such: I am certainly not saying or even implying that all Celtic speakers descended from the Indo-European speaking group.

[19] See, among others, BURILLO MOZOTA, pp. 136f. and 139 fig. 39, MEID 2007, p. 182, MOTTA & NUTI 2008, p. 106f., RIECKHOFF 2010, p. 23, FOMIN 2016, p. 365, and RODWAY 2016, p. 80. Even the trees in ESKA 2017, p. 1271, and in MULLEN & RUIZ DARASSE 2020, p. 775, are tacitly indebted to my *Etappenmodell*, unfortunately mis-represented by MATASOVIČ 2009, p. 13.

Section III illustrates which means are generally available for reconstructing the position of the accent in the absence of written accentuation marks and, in particular, which phonetic phenomena point to the strengthening or the weakening of a syllable as a result of the position of an intensity stress.

Subsequently, the stress position indicators identified in the Continental Celtic varieties are discussed in detail within the fourteen chapters of **Section IV**. Since not all phonetic indicators identified are equally relevant for establishing the place of the accent, they are arranged according to their decreasing significance and, when possible, in opposite pairs. Accordingly, monophthongizations are placed first, followed by diphthongizations, because they indicate which syllables were with certainty unstressed and stressed respectively. After them the cases of syncope, immediately followed by those of vocalic epenthesis are discussed, because they also indicate which syllables were unstressed and stressed respectively. Next to them are placed the chapters dealing with instances of vocalic assimilation, centralization, and narrowing, given that they all take place in unstressed syllables. The simplification of non-expressive geminate consonants and the gemination of simple consonants are discussed afterwards, for they have been shown to take place before and, respectively, after the stressed vowel.[20] The next four chapters deal with the loss of *w* in different contexts, the loss of *m* before a dental nasal, and the deletion of *n* before a stop, whereas the coda is reserved to the discussion of metathesis when a liquid consonant followed a stop. Each of these fourteen chapters is again divided in three subchapters:

- the first of them summarize previous research on the sound-change under discussion and illustrate how it works in the Celtic varieties;
- the second subchapters list the Continental lexical and onomastic items collected and examine them according to the position of the syllable in which the sound-change under discussion took place. The individual items are numbered throughout each subchapter and are provided with bibliographical references of the types (α) or (β) and (γ): those of type (α) cite publications already dealing with the specific lexical or onomastic item in connection with Old Celtic accentuation,[21] whereas those of type (β) just deal with its documentation and/or etymology, and those of type (γ) touch on other aspects that might be relevant for the understanding of the phonetic development outlined;

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[20] See *Die Geminaten des Festlandkeltischen*.
[21] It is important to stress that even some of my own contributions have by now become obsolete in this respect: the accentual interpretation offered in the present monograph is always the one to be preferred.

- finally, the third subchapter of each of the fourteen chapters in this fourth section discusses particularly interesting or problematic cases and draws those conclusions which can be reached simply on the basis of the evidence displayed in the specific chapter.

More evidence of the same types is offered in the book's fifth and sixth section, where one will also see how word stress adjusted to the stress-pattern which was operative at a particular time whenever one or more affixes were added to a given derivational base.

In particular, **Section V** is reserved for the analysis of those Continental Celtic words which show the effects of more than one diagnostic sound-change pointing to the same stress-pattern, that is, to cases of multiple stress-position indicators all pointing in one direction. This fifth section is divided into three subchapters in the same way as Section IV. The individual lexical and onomastic items collected are numbered and displayed in simple alphabetical order in the second subchapter, each of them provided with a summarized list of the relevant sound-changes and with bibliographical references of the aforesaid types (α), (β) and (γ).

Section VI, similarly divided into three subchapters, lists words or, most often, whole families of words which show a stress-shift between an earlier proparoxytone and a later paroxytone pattern, no matter which of the diagnostic sound-changes was/were involved. Since in this section, concerned with what may be called 'biphasic evidence', many lexical and onomastic items are discussed together, the relevant stress-position indicators are not recapitulated each time. Their approximate phonetic representations are, however, arranged in a roughly relative chronological order: in particular, the sequences referring to a pro-paroxytone stress-pattern are preceded by the indication (i.),[22] whereas those involving a paroxytone stress-pattern are preceded by the indication (ii.).[23] The word-families analysed are listed in alphabetical order and numbered. In this section, too, the bibliographical references provided are distinguished according to the types (α) or (β) and (γ) as specified above.

Section VII deals with a different kind of data, namely that of modern place-names. It discusses all sorts of toponyms, mostly surviving in Romance-speaking countries, which continue Continental Celtic forms. It is a material that, notwith-standing the particular problems it presents, points to the same underlying stress system as the Continental Celtic names and lexical items analysed in the sections IV to VI. Therefore, while the history of scholarship on the subject and some

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[22] Or, where necessary, (i.a), (i.b) etc.
[23] Or, where necessary, (ii.a), (ii.b) etc.

conclusions are to be found in their first and, respectively, third subchapter, the evidence collected has been arranged in the second subchapter according to the following four groups: the first, discussed in § VII.2.1, consists of pairs of modern place-names which imply one and the same Celtic protoform stressed in different ways; the second, in § VII.2.2, consists of modern place-names whose Celtic protoform must have undergone a stress-shift; the third, in § VII.2.3, is represented by modern place-names which, regardless of their accentuation history, imply an underlying proparoxytone Celtic protoform; the fourth group finally, in § VII.2.4, is represented by modern place-names going back to a paroxytone Celtic proto-form.

It is important to note that, at times, it seemed suitable to discuss, or at least mention, one and the same onomastic or lexical item in more than one section of the book.

The conclusions of the whole study are recapitulated in **Section VIII**.

I.8   On the accentual interpretations

To make a difficult topic easy to read, I have devised a special, user-friendly transcription style for the accentual interpretation of the lexical and onomastic items under discussion. It centres on those sound-changes which are stress-relevant.

This particular typographic style, which will be illustrated in the following paragraph, was chosen not only on account of its better readability, but also because our inadequate knowledge of ancient Celtic pronunciation makes it impossible to produce accurate, that is, proper phonetic transcriptions.

The accentual transcriptions offered in this book are, therefore, just approx-imate, that is, simplified phonetic representations of the underlying or, mostly, just of the immediately preceding accentuation of a given word.

In some cases, some of the specific sound-changes accounting for the develop-ment seen in a given item may have taken place in a slightly different order than that proposed in the various stages represented in this book; however, this is nothing that would affect the outcome of our discussion with respect to the accentuation of the individual item.

I.9   Typographic styles

The *lexical or onomastic items* under discussion are printed in italics, with the exception of OGAM FORMS and COIN LEGENDS in Latin characters, which are printed in small capitals.

NOMINATIVES OF DIVINE NAMES, which had often to be *RESTORED* on the basis of the cases epigraphically attested, are printed in italicized small capitals.

Bold characters in the item(s) under discussion highlight the **phoneme(s) affected** by the relevant sound-change(s).

Etymological reconstructions preceding a string of approximate phonetic representations are printed in italicized sans-serif characters and are preceded by an asterisk.

The approximate representations of the phonetic stages the word under discussion went through are also printed in a sans-serif typeface, but without italics and asterisks. Stress is then indicated simply by the stroke commonly used to denote an acute accent (e.g., á), and the representations of the actual attested forms disregarding their acquired Latinate features are underlined.

Please note that a distinction has been made between the approximate phonetic representations of a proparoxytone and those of a paroxytone stress-pattern:

- the voiceless velar stop is written <k> in proparoxytone words, but <c> in paroxytona;
- the semivowels *y* and *w* are written <y> and <w> in proparoxytone words, but <i> and <v> in paroxytona.

For a better understanding of the above explanations I give here some examples of the commentaries on the evidence collected in this book. The items (A), (B) and (C) are taken from the very first chapter of Section IV, item (D) from Section V, and the items (E) and (F) from Section VI.[24]

(A)   VIR**E**TIOS (coin legend: PN), possibly together with *Viredo* (PN)

as opposed to *Viriatus* (PN)

i.e., *Wiryā-to-s* 'Sporting A Celtiberian Armlet'[25]

Wíryātos > Wíretos, from which Wíret-*yo-s*

[Biblio β: *DLG*, p. 321; KAKOSCHKE 2012, p. 745; *NPC*, p. 201; *RIG*-M-307 and M-308]

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[24] The linguistic abbreviations and symbols employed are explained in the list at the beginning of this volume.

[25] Probably indicating a military grade, cfr. *Daily life in Celtiberian inscriptions*, p. 623.

(B)   δεκαντεμ beside δεκαντεν 'tithe'

   i.e., *dek'm-tyo-m* lit. 'one tenth'

   dékantyom > dékantem > dékanten

[Biblio α: *From Ligury to Spain*; *Reinterpreting some documents*, p. 52; *Sprache der keltischen Religion*, pp. 153-156]

(C)   *Totatigen*[*u*]*s* (PN) and *Tutate* (DN, voc.sg.)

   as opposed to *TOUTATIS* and *TEUTATES* (DN)

   i.e., *TEUTATI-genos* 'Born Of [The God] *TEUTATIS*'

   either as Teutatígenos > Toutatígenos >Totatígenos

   or as ▶ Toutatigénos > Totatigénos

   beside ▶ Toutáte > Tutáte

[Biblio α: *CF* I/1, p. 331f.; *Gaulish accentuation*, p. 19; *I nomi teoforici*, p. 83; *Zum gallischen Akzent*, p. 24;
Biblio β: *AcS* II, col. 1895; Dröge 1989, p. 211; *KGPN*, p. 279; *RIG*-*L-110]

(D)   *Adnamatus* (and *Adnamatius*) > *Adnametus* (PNN)

   as opposed to *Adnamantia* (SN)

   i.e., *Ad-namant-o-s* 'Turned Towards The Enemy'

   Adnámantos (from which Adnámant-yā) > Adnámatos > Adnámetos

[SPI: nasal effacement after unstressed vowel together with post-tonic vowel-narrowing; post-tonic nasal effacement]

[Biblio β: *AcS* I, cols 43 and 156; *AcS* III, col. 508f.; *CF* II/1, pp. 138 and 317; Meid 2002, p. 261; Meid 2005, p. 160; *NPC*, p. 12]

(E)   *ABIANOS* with *ABIANIOS* beside *Abienos*

   as opposed to *ABIONA*, *Abionnos*, and *OBIONA* (DNN; PNN)

i.a$_1$ *ÁBYON-o-s* > Ábyenos

i.a$_2$ *ÁBYON-o-s* > Ábyanos, from which Ábyan-*yo-s*

ii.a$_3$ *ÁBYON-o-s* >> Abiónos > Abiónnos

ii.b *ÁBYONA* >> Abióna > Obióna

[Biblio α: *CF* I/1, pp. 99f.]

(F)   *VLEDICOS*

   as opposed to *VLADOS* (DNN) and *Vlattius* together with *Vlaticus*, the

   labialized *Vlatucia*, and *Vlatcanus* (PNN)

   all derived from ContCelt. *vlato-* 'leader'

i.a Wlátos > Wláttos, from which <u>Wlátt-*yo-s*</u>

i.b$_1$ Wláto-*ko-s* > <u>Wlátikos</u> > Wládikos

i.b$_2$ Wlátokos > <u>Wlátukos</u>, from which <u>Wlátuk-*yā*</u>

i.c <u>Wlátikos</u> $\Rightarrow$ Wlatíko-no-s > Wlatíkanos

ii.b Wládikos >> Vladícos > <u>Vledícos</u>

ii.c Wlatíkanos >> Vlaticános > <u>Vlatcános</u>

[Biblio α: *I nomi teoforici*, p. 88; *Taboo-theonyms*, p. 111;

Biblio γ: *Labialisierung und Velarisierung*, p. 205f.]

I.10   An important *caveat*

Even in those cases in which the phonetic phenomena (i.e., stress position
indicators) identified in a given lexical or onomastic item allow us to know the
position of their stress in the preceding stage or stages of the Continental Celtic
variety involved, they do not necessarily tell us which was its position at the very
time of the written attestation under discussion.

   This is particularly true whenever the stress position indicators point to an
antepenultimate stress, that is, to expiratory accentuation of the third last syllable.
Given that such a proparoxytone pattern turns out to be the archaic one in
Continental Celtic, we cannot know, in fact, whether it was still retained at the
time of our written source or not. For example, although the two letters <a> of the
divine name *ARUBIANOS* for a 'God At The Summit' imply an antepenultimate
accentuation of its protoform **(P)er(i)-úb^hyo-no-s*, we cannot tell whether this
divine epithet of Jupiter was still pronounced Arúbyanos or already Arubiános at
the time it was written in some or even in all of the extant Norican inscriptions.[26]

   Therefore, the transcriptions given in this book are noncommittal and just
indicate which was/were the p r e v i o u s stress position(s) presupposed by the
lexical or onomastic item under discussion.

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[26] Namely *CF*-Nor 015, 053, 074, 075 and 078 in *CF* I/2. Cfr. also *CF* I/1, pp. 281-286.

II Patterns of Accentuation in Indo-European and Celtic

II.1 Accent in Indo-European

There is a measure of agreement regarding the reconstruction of the accent inherited by all Indo-European language groups '[a]t the time of the disruption of the Indo-European community'[1] as a mobile, musical pitch or 'mora accent':[2] it is believed that the accented syllable was higher in pitch than the others, that the accent could fall on any syllable of a given word, even the last one, and that its place varied according to the specific structure of each individual inflectional form of a word. Such a system appears, however, to be the result of an accent shift which took place in more ancient times.[3]

On the one hand, the accent systems of Baltic, Greek, Old Indian and Slavonic seem to continue an Indo-European pitch, but differ from each other. So much so, that scholars disagree about which of the four branches best preserves the original Indo-European features.[4]

On the other hand, the very existence of ablaut in Indo-European with full and zero grade points to an old expiratory stress. This probably belonged to the most ancient Indo-European period, that is, to Pre or Proto-Indo-European before ablaut acquired morphological status in several paradigms.[5]

Regarding the details of the inflectional paradigms showing ablaut in the Indo-European parent language, there has always been much disagreement.[6] Fort-

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[1] Here in the words of LEHMANN 2002, p. 202.

[2] LEHMANN 1993, pp. 58-61 and 113-115; BERNABÉ 1995, pp. 391-402; SZEMERÉNYI 1999, pp. 76-82; MEIER-BRÜGGER 2000, pp. 142-148. For the terminology see above in Section I § 1.

[3] Cfr., among others, LEHMANN 1993, p. 61: 'But the patterning of some derivatives from roots suggested that at an earlier stage the language had stress accent, not pitch. In this way [...] the loss of vowels, as in [Gmc] *nist- [i.e. 'nest', from Pre-Indo-European *ni-sed-ó-s], could be accounted for.'

[4] See, for example, KIPARSKI 1973; LEHMANN 1993, p. 113f.; POLJAKOV 2009; OLANDER 2013; PRONK 2013.

[5] 'Evidence for the assumption of a stress accent in early Indo-European has been presented by Brugmann, his predecessors and contemporaries', cfr. LEHMANN 2002, pp. 204-206 (here p. 205). Cfr. also KIM 2013, p. 65.

[6] As remarked by RASMUSSEN 2009, p. 407, 'Much of current scholarly effort goes into sorting out which word types go by which accent-and-ablaut patterns, in formal and functional terms'. For the various accentual approaches, both paradigmatic and compositional, see, among others, KIPARSKY 2010 together with KEYDANA 2013, KIM 2013 and TREMBLAY 2013.

unately, this is scarcely relevant for the reconstruction of Old Celtic accentuation. However, the proposal by Alwin Kloekhorst is of particular typological interest and plausibility. Taking into account the Anatolian evidence, he reconstructs only two types of paradigms for the Proto-Indo-European noun: a static and a mobile pattern.[7] The static pattern could be used both for inanimate and animate nouns, the only difference between them being the accusative ending *-m* of the animate nouns. By contrast, the mobile and probably younger declension pattern had a completely different inflection depending on the animacy of the noun in question: while inanimate nouns had a proterodynamic paradigm,[8] the accusative and genitive singular of animate nouns were particularly marked as they exhibited the hysterodynamic inflexional type.[9]

In the course of time, not only did this old stress-system give way to what seems to have been the Common Indo-European pitch, but also the pitch was adapted in some Indo-European subfamilies and replaced in others, as was the case with every other category inherited from the parent language. Even the substitutions, however, did not happen as directly as is often assumed.[10]

As to the topic of the present book, it is of particular interest to observe that Proto-Germanic preserved the Proto-Indo-European mobile accent for a period in its development, not unlike the probable situation in Proto-Celtic, discussed below in Chapter 2 of this section. Indeed, the addendum to Grimm's Law known as Verner's Law makes clear that the change by which the inherited mobile pitch was replaced by an intensity stress on the first syllable of a given word can only have taken place after the first or Common-Germanic consonant shift was completed.[11] It is also probable that most of the characteristic sound-changes of the Indo-European subfamilies, and thus also the Common-Germanic introduction of an

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[7]   According to KLOEKHORST 2013, p. 126, 'the difference between static vs. mobile inflection was probably dependent on the phonetic shape of the root'.

[8]   With full grade of the root in the nominative and accusative sg. as opposed to the root's zero grade in the genitive and locative sg., which had full grade in the declensional morpheme instead, together with zero grade in the ending of the genitive sg.

[9]   With the nominative sg. identical to that of both inanimate types, but the accusative differentiated by zero grade of the root and full grade of the declensional morpheme preceding the ending *-m*. The genitive sg. also showed zero grade of the root, but with zero grade of the declensional morpheme and full grade *-es* of the ending.

[10] See, for example, SNOJ 2005 on the partial retention of the Indo-European mobile accentuation in the Slavonic branch. Analogously, according to PROBERT 2006, p. 84, 'For many words the position of the Greek accent has remained the same from late Indo-European until the Hellenistic period.'

[11] Cfr. KIPARSKI 1973, p. 845f.; LEHMANN 1993, p. 58; MEIER-BRÜGGER 2000, p. 146; FORTSON 2007, p. 303f.; ADAMCZYK 2013.

initial stress, only took place after they had began differentiating from the parent language in lexicon, syntax and morphology.

A further coincidence, not with the quality, but with the quantity of accentual changes observed in the Celtic varieties, may be seen in the fact that not all Germanic daughter languages continue the new initial intensity stress: Norwegian and Swedish, among others, even developed contrasting tonal contours.[12]

The Italic language family, long supposed to have replaced common Indo-European pitch by a word stress on the first syllable at the very beginning of its development, now also appears to have changed more gradually and at a later stage.[13]

In short, the assumption that the same isogloss might account for the introduction of the initial stress in Germanic, Italic and Celtic[14] can be discarded as untenable. 'In a broader perspective, one may [...] conceive of Proto-Italic as a stage of Indo-European similar to Proto-Germanic, in terms of the behavior of inherited accent and of the development of accentual innovations: in both branches, the old mobile accent appears nowhere on the surface, having been replaced at a very early period by an initial stress accent; yet traces of its existence at an earlier stage are visible on the basis of segmental phonological alternations that are sensitive to accent'.[15] Examples of this kind can be found:

- in the apocope of final syllables which were unstressed in Indo-European (inter alia in Lat. *et* < IE *$éti$ as opposed to Lat. *pede* < IE *$ped-i$);
- in the fuller realization of the vocalic sonorants under the inherited stress (inter alia in Lat. *palma* < *$pálama$ < IE *plh_2-meh_2 as opposed to Lat. *plānus* < IE *$plh_2-nó-$);
- in Thurneysen & Havet's Law, which only affects originally unstressed syllables (cfr. Lat. *favēre* < IE *$g^{wh}ow-éye-$ versus *ovis* < IE *$h_2ów-i-s$);
- in the allomorph *$-iye/o-$, developed in originally unstressed position from IE *$-eye/o-$ (cfr. the $ō$-grade causative *$swó:p-eye/o-$ > *$swó:p-iye/o-$ continued by Lat. *sōpīre* as opposed to the type of Lat. *monēre*).

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[12] See in particular PERRIDON 2006 in *Germanic Tone Accents*, a volume reviewed by OLANDER 2009. FORTSON 2007, p. 331f.

[13] Cfr. the bibliography listed by BERNABÉ 1995, p. 393, SZEMERÉNYI 1999, p. 81, and, in particular, by VINE 2012, who notices (p. 547) 'a growing openness towards a conception of Italic as a branch of Proto-Indo-European that – like Germanic – may have had indirect traces of the old Proto-Indo-European mobile accent'.

[14] More on this in Chapter II. 2 § 1 below. In this context one ought to remember that, before the identification of the Celtiberian dialect, the linguistic reconstruction of Celtic used to centre on the Goidelic branch.

[15] So VINE 2012, p. 567f. Cfr. also WEISS 2020, p. 118 with note 17, p. 119 and p. 152.

II.2   Accent in Celtic

'Nothing definite is known about the Common Celtic accent.'[16]
'Since the nineteenth century, Proto-Celtic, Brittonic
and Gaulish accent have proven thorny problems.'[17]
'On n'a jamais réussi à reconstruire l'accentuation du proto-celtique.'[18]

II.2.1 The delusion of a Common-Celtic initial stress

It is well known that the modern representatives of the Indo-European subfamily of Celtic languages show an expiratory word-stress, albeit with different patterns as regards its position in the various languages and dialects. The patterning is, however, much less clear the more we approach the oldest and prehistoric stages of this subfamily.

The traditional view of the accentuation in the Celtic subfamily tends to assume that the Indo-European mobile pitch was replaced very early by a fixed initial stress like the one identifiable in the earliest Goidelic stages, and that this substitution was already Proto-Celtic.

Some scholars even consider the introduction of an expiratory word-stress on the initial syllable to be an isogloss characteristic of the western Indo-European languages, that is, an innovation shared by Germanic, Italic and Celtic.[19] They seem not to be aware of Heinrich Zimmer's warning, back in 1896, that 'Die Annahme einer übereinstimmenden "gemein-westeuropäischen Accentregelung" ist ein Phantom, das [...] nicht als wissenschaftliche Thatsache vorgeführt werden sollte.'[20] Indeed, the gradual substitution of the inherited mobile pitch in Germanic is necessarily later in terms of relative chronology, as we have seen in Chapter II.1 above. It is worth mentioning that this very same objection was already raised by Heinrich Zimmer more than a century ago: 'Es ist seit Verners Entdeckung eine festgelegte Thatsache der germ[anischen] Sprachgeschichte, dass das Germ[anische] noch n a c h dem Eintreten der germ[anischen] Lautverschiebung den beweglichen indogerm[anischen] Accent hatte'.[21]

Consequently, other scholars came to regard the initial stress as an innovation shared by Italic and Celtic.[22] Nevertheless, even in doing so they disregard Zimmer's conclusion, that the differences 'hinsichtlich der Betonung' were too

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[16]   *LHEB*, p. 265f.
[17]   SALMONS 1992, p. 153.
[18]   PILCH 1998, p. 103.
[19]   So, among others, SALMONS 1984 and 1992, critically reviewed by SCHMIDT 1994.
[20]   ZIMMER 1896, p. 83.
[21]   ZIMMER 1896, p. 81.
[22]   In still recent times, for example SCHRIJVER 2015, p. 196.

significant to speak 'von einer Übereinstimmung [...] für Urkeltisch und Urita-lisch'.[23] Moreover, as illustrated in Chapter II.1 above, the Italic family appears to have introduced the initial stress at a much later point as well.

There was never any real support even for the scholarly view that an initial expiratory stress developed independently in Proto-Celtic. The reasons for rejecting such a view are essentially three:

1) the replacement of the Indo-European mobile accent by a fixed stress appears to have been a gradual process in Celtic as well. Indeed, as I am going to show in some detail in Chapter 2 § 2 of this section, some of the Celtic forms attested can only be satisfactorily explained if one assumes that the inherited Indo-European accentuation was still preserved in the Proto-Celtic era.

2) The evidence allegedly supporting a word-initial stress in some Cisalpine inscriptions[24] consists at best of trisyllables with proparoxytone accentuation. In fact, the aforesaid evidence is based just on a metrical analysis of the Vergiate inscription and comprises solely the two verbal forms *KariTe* and *KaliTe* interpreted as 'Ká.ri.te' and 'Ká.li.te'.[25] Other similarly vague items of this kind might be *uvamoKozis* 'Highest Host' and the datives *<vu>lTiauioPos ariuonePos* 'to The Hairy Lords' at Prestino / I.[26] In fact, they were probably pronounced Uva(m)mógotsis, Vultyávyobos and ariwónebos on account of the weakenings seen in *Uvamo-* from **upero-mo-*,[27] *Vulti-* from **wolti-*, and *-ebos* from **-obʰos*, together with the strengthening of **aryon-* to *ariuon-*.[28]

3) Those scholars who subscribe to the widely held belief in an original Celtic initial stress[29] cannot offer a plausible explanation for the abrupt change from a supposedly original initial word-stress to the paroxytone pattern shared both by Common Brittonic and Gaulish.[30]

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[23]   Cfr. ZIMMER 1896, p. 83.

[24]   According to ESKA & MERCADO, pp. 171-176.

[25]   By ESKA and MERCADO 2005, p. 176, who regard their own analysis as 'very tentative'.

[26]   *CdI* II, pp. 638-640 (no. 180). See *Livelli di celticità linguistica*, p. 94f. with notes 54-58 (ad no. 4).

[27]   Via upermó- > upəmmó-.

[28]   The simplest explanation for the sequence *-iuo-* is, in fact, provided by the assumption of a diphthongization under the stress of the etymological **-yo-* like those discussed in chapter IV.2 below. Cfr. also the diphthongization seen in the Hispanic divine name *ARIOUNI* attested in the dat.pl. *Ariounis* `to The Lords' (*Divine names in NW Spain*, p. 197).

[29]   As, for example, KURYŁOWICZ 1968, p. 193f.

[30]   More on this topic in Chapter II.2 § 5 below.

II.2.2 Proto-Celtic remains of the Indo-European mobile accentuation

The old Celtic corpora still preserve a few reflexes of the Indo-European mobile accent. Its traces are, in the first place, to be observed in the different treatment of sequences of a vowel and a liquid before *s* plus consonant: as I was able to prove in previous publications, the Celtic sequences (C)V*rs*C and (C)V*ls*C were regularly metathesized into (C)*rV*sC and, respectively, (C)*lV*sC whenever they were pre-tonic. By contrast, no metathesis took place in tonic position.[31]

One of the Celtic lexical items clearly showing the complementary distribution of forms with and without the metathesis traceable to the inherited Indo-European mobile accent is the word for 'tree'. On the one hand, the Old Irish noun *crann* 'tree' continues a zero-grade protoform *k^wrs-no-m* which, according to the well-known Indo-European word-formation rules, was stressed on the suffix and thus points to at least four intermediate phonetic stages:

- IE k^wrsnóm > Celt. k^warsnóm, becoming Celt. k̲r̲a̲s̲n̲ó̲m̲ on account of the aforesaid metathesis in pre-tonic position;
- ArchCelt. krásnon > Goid. kránnən on account of the Archaic Celtic shift to a proparoxytone accentuation which was later regularized as initial accentuation in Goidelic;[32]
- Goid. kránnən > Ir. kránn on account of the Irish apocope.

On the other hand, Gaul. *prenne* 'tree' and its Brittonic cognates such as W. *pren(n)* 'id.' continue a protoform *k^wres-no-* which, for being rhizotonic on account of its full ablaut grade, shows the opposite treatment of the same phonetic sequence. In fact, it simply went through the phonetic stages IE k^wrésno- > Britt.+Gaul. prénnə > MlW. prénn > W. prén.[33]

In the same way, inherited *nomina actionis* with full and, therefore, stressed ablaut grade of the verbal root did not undergo metathesis. This is the case, for example, with OIr. *goirt* 'sharp; keen', which goes back to an inherited protoform *g^{wh}or-st-i-s*, that is, IE g^{wh}órstis, and hence became Ir. góirt with no metathesis.[34]

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[31] Cfr. *Sonanten*, pp. 24, 32 and *passim s.vv.*, together with *NWÄI*, pp. 256f., 271 and 550, where I linked the intervening metathesis to oxytonesis. Hence, MATASOVIĆ 2009, p. 10, is to be corrected regarding the authorship of this law; cfr. also DE BERNARDO STEMPEL 2012, p. 218.

[32] As described in §§ II.2.3 and II.2.4 below.

[33] Cfr. *Sonanten*, p. 100, together with *NWÄI*, p. 256f. with note 143.

[34] Cfr. *NWÄI*, p. 271 with note 95.

For the same reason, the Old Irish so-called *t*-preterite *bert* 'he/she/it bore' does not show metathesis. As this is actually an inherited sigmatic aorist, it goes back to a full-grade protoform IE **bʰer-s-t* with accent on the verbal root. Consequently, Celt. bérst just lost the intermediate sibilant and became bért in Irish.

By contrast, we do see the metathesis of vowel and liquids before *s* plus consonant in pre-tonic position in participial and other formations which, because they contain the zero grade of the root, continued to be accentuated on the suffix as in the Indo-European parent language. One such example is OIr. *mlas* 'taste, savour', which goes back to IE **mls-to-s* and presupposes mlstós > Celt. malstós > mals(s)ós > mlasós >> ArchCelt. and Goid. mlásos > mlásəs > Ir. mlás.[35]

Further examples of this type are:

- OIr. *bras* 'quick' from a protoform **bʰrs-to-* belonging to IE **bheres-* 'id.' which went through the phonetic stages brstó- > Celt. barstó- > brastó- >> ArchCelt. brásto- > Goid. brássə- > Ir. brás;[36]
- OIr. *flann* 'blood; blood-red', a cognate of Lat. *volnus* which goes back to IE **wls-no-* and implies a phonetic development wlsnó- > Celt. walsnó- > wlasnó- >> ArchCelt. wlásno- > Goid. flánnə- > Ir. flánn;[37]
- OIr. *fras* 'shower', which goes back to IE **wrs-tā* via wrstá: > Celt. warstá: > wrastá: >> ArchCelt. wrássa > Goid. frássə > Ir. frás.[38]

Another word whose Celtic development still reveals the original Indo-European accentuation is the Old Irish substantive *rann* 'part', which goes back to an Indo-European protoform **pr-snā*. One can therefore reconstruct IE prsná:, which became Celt. (p)arsná: and was afterwards metathesized to rasná: before the Archaic Celtic stress-shift transformed it to rásna, subsequently becoming Goidelic ránnə and then Irish ránn. Remarkably, the second stage in this development (that is, the one not yet showing metathesis) is still attested in the Celtiberian accusative plural **a.r.z.n.a.s** 'lots, parcels' instead of the expected ****r.a.z.n.a.s.** This indicates that the Celtiberian accentuation[39] was already established before the Celtic pre-tonic metathesis could have taken place.

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[35] Cfr. *Sonanten*, p. 130, together with *NWÄI*, p. 272 with note 96 and p. 441.
[36] See *Sonanten*, p. 86, and *NWÄI*, p. 271 note 93.
[37] *Sonanten*, p. 111, together with *NWÄI*, p. 268 with note 68.
[38] For this and OIr. ²*fras* 'abundant, copious' see *Sonanten*, p. 114, together with *NWÄI*, p. 270 with note 85 and p. 444.
[39] Which was normally on the antepenultimate syllable, as illustrated in the following § II.2.3.

A similar word-formation can be observed in OIr. *drenn* 'combat', which can be traced back to a **snā**-derivative of the Indo-European verbal root *_der-_ 'to tear up; break'[40] and, in particular, to a full-grade protoform *_der-snā_. This presupposes the following phonetic stages: Proto-Celt. dersná: > Celt. dresná: >> ArchCelt. drésna > Goid. drénnə > Ir. drénn.

The same kind of sound change also accounts for the origin of the Continental Celtic theonym *GRANNOS* from IE *_G^{wh}r-sno-s_ (that is, 'The Object Being Hot')[41] through the following phonetic stages: IE G^{wh}r-snó-s > Celt. Garsnós > Grasnós >> Grásnos > Gaul. Gránnos.

As to OIr. [1]*brat* 'act of plundering, robbery', it is probable that one has to trace it back to a set̥- and not to an anit̥-derivative of the IE verbal root *_b^herH-_ 'mit scharfem Werkzeug bearbeiten'.[42] In fact, the set̥-derivative proposed by Eric Hamp[43] would allow a desiderative-type segmentation *_b^hrH-s-d^hā_, but no metathesis, whereas only an anit̥-protoform *_b^hrs-d^hā_ would imply pre-tonic metathesis from brzdá: to brazdá: via Celt. barzdá:.[44]

In the case of Bret. *plac'h* 'girl, maid' it is also unclear whether one should trace it back to an anit̥-derivative *_k^wl-sko-_, as proposed by Goulven Pennaod,[45] or else to a set̥-derivative *_k^wlh_1_-sko-_. Both possible protoforms contain the zero grade of the Indo-European verbal root *_k^welh_1-_ 'eine Drehung machen, sich umdrehen, sich (um-, zu-) wenden',[46] also continued in the Old Irish masculine noun [1]*caile* 'maid, serving girl' < *_k^wl(h_1)-yo-s_ and the compound *buachail(l)* 'cowherd'.[47] In the first case, one would assume at least three intermediate phonetic stages, namely k^wlskó- > k^walskó- > k^wlaskó- >> plásko-, whereas the second reconstruct would directly lead to k^wlaskó-, that is, without metathesis.[48]

On account of the aforesaid pre-tonic metathesis, one might wonder whether the hitherto 'unclear' sound-change from IE *_morg'-i-_ to CommCelt. *_mrogi-_

[40]   See *LIV*, pp. 119-121, *LEIA-D*, p. 193f., and Niepokuj 1997, II, p. 103.
[41]   As translated by Zeidler 2003.
[42]   *LIV*, p. 80.
[43]   Hamp 1992, p. 219.
[44]   See in *NWÄI*, p. 558 with note 11, as opposed to *ibid.*, p. 273, and *Sonanten*, p. 87.
[45]   Pennaod 1982, p. 40f. No longer pertinent are the objections raised by Schmidt 1986, p. 384.
[46]   *LIV*, pp. 386-388.
[47]   See *Zum Genus femininum*, p. 432 with notes 40-42, and *NWÄI*, p. 208 with note 51.
[48]   See *Sonanten*, pp. 61, note 110a, and 42f.

'territory, region', as seen in OIr. *mruig*, Gaul. *brogi-* etc.,[49] might have been analogously caused by pre-tonic position in a pre-Celtic oxytone protoform morgí-.

A metathesized unstressed syllable would also account for the hitherto unexplained Celtic lexeme *cartu-/carti-*. In fact, the reconstruction of an inherited **kratú-s* 'strong' (cognate, among others, to Gk κρατύς 'id.')[50] metathesized to kartús and provided with a Celtic Caland-variant kartís[51] prior to the stress retraction operating in Common Celtic (which led to the afore-mentioned kártu- and kárti-) would provide very good semantics for several names attested in various Celtic-speaking areas. The names in question are, among others, idionyms such as *Cartus* and *Cartua*, *Cartilius* and *Cartilia*,[52] for all of which a meaning 'The Strong One' seems adequate; *Cartimandua*, equating the British queen to a 'Strong Mare'; CARTIVEL(LAVNOS) and *Ka.ŕ.ti.ŕ.i.ś* < **Karti-rīk-s* for a 'Strong Ruler' on a British coin and, respectively, a Celtic 'Strong King' on an Iberian vessel found in France; *anareKarTos* < **Andi-(p)ro-kart-o-s* 'Very Very Strong' on a Cisalpine drachma dated back to the 4th cent. BC[53] and the later 'Strong' *Cartorius*; the family name (gen.pl.) **Ka.r.Ti.n.o.Ku.m** 'of The Descendants of Kártinos, the Strong One' on a Celtiberian bronze; oiconyms like the ancient Καρτεία 'The Strong [Settlement]' and *Carta* 'id.' beside *Chartogne*/ F < **Cartónia* and *Chartreuve*/ F, the former *Cartobra* (9th cent. AD) < **Kartóbriga*, the 'Strong Hillfort'.[54]

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[49] MATASOVIĆ 2009, p. 280. Cfr. also *NWÄI*, p. 34f.

[50] See BEEKES 2010, I, p. 772f. The same kind of metathesis also accounts for the alternation between Gk θάρσος and θρασύς 'audacious, courageous, bold' (*ibid.*, p. 534f.).

[51] On such variants see, in particular, *Caland's law and Celtic onomastics*.

[52] Note that the word **Ka.r.Ti.l.i.Ke** on a Celtiberian hospitality tessera, considered problematic by JORDÁN CÓLERA 2019, p. 606f., can be easily traced back to a feminine adjective **Kartílik-yā* 'Belonging to the Kartílikōs, i.e., to the Descendants of Kártilos' with the same monophthongization in unstressed final syllable which is discussed in Chapter 1 of Section IV below.

[53] Its -*e*-points to a penultimate word-stress An(n)arekártos < Annarokártos. It is, however, impossible to say whether also the second *a*-vowel developed at this paroxytone stage or in a theoretically possible prior proparoxytone phase of the type Anderókartos > Andarókartos. Cfr. *Las leyendas monetales célticas*, pp. 187 and 189. For the dating see ARSLAN 2017, p. 439f.

[54] I can, therefore, no longer subscribe to my previous attempts to connect such forms with

A late retention of the inherited accentuation can also account for the development of the Old Irish adjective *olc* 'bad' from the inherited Indo-European noun *wlkʷó-s* 'wolf' via ulkʷós > ulkós[55] and then, with pre-tonic assimilatory vowel-lowering, olkós >> ólkəz > ólk.

The original nasal sonorants also seem to have been vocalized in Celtic at a time when the inherited accentuation was still preserved.[56] Cfr., for example, the inherited noun *ngʰ-w-īnā* 'nail', that is, IE ngʰwí:na:, which became əngwína: in Common Celtic. Later on, the Archaic Celtic shift to a proparoxytone accentuation 'əngwina, preserved as initial stress in Goidelic, produced Ir. íngen, written *ingen*. By contrast, the Brittonic stress-shift led to ənguína, and then from enguínə to the oxytone OW. eguín (written *eguin*), finally reshaped as éwin (written *ewin*) in Middle and Modern Welsh.[57]

Further instances of Proto Celtic preservation of the mobile inherited accent may be observed in the Old Irish feminine gender of the cardinal number 'three'. Cfr. the Old Irish nom.pl. *téoir* 'three' as opposed to its accusative *téora*. In particular, the nominative can be traced back to a Proto-Celtic protoform *tris-or-es*, and the accusative to a protoform *tris-or-ns*. The first protoform appears to have been simplified from Celt. trisóres to tisóres, which then became tesóres through the lowering of the pre-tonic vowel. The Archaic Celtic stress-shift transformed it into tésores > Goid. tésores > téhoirə and, finally, into Ir. té:oir. The second protoform, Proto-Celt. trisórns was also subject to simplification (tisóra:ss) and to pre-tonic vowel-lowering (tesóra:s), before the Archaic Celtic stress-shift transformed it into tésora:s > Goid. téhora > Ir. té:ora.

Inherited stress alternations might also account for a Celtic paradigm split like that observed in W. *blynedd* 'year' as opposed to OIr. *blíadain* 'id.'. The inherited declension pattern seems, in fact, to have opposed a full-grade nom.sg. *bʰleid-n-ih₂* to a zero-grade gen.sg. *bʰlid-n-yeh₂-s*. Thus, the rhizotonic nominative bʰléid-n-ih₂ would account for the epenthetic vowel *-a-* inserted before the nasal affix into the Celtic protoform bléiðani: > blé:ðani that preceded

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the participle stem *kar-ant-*. For the attestations of the names listed see ARENAS ESTEBAN & DE BERNARDO STEMPEL 2011, pp. 121-125; *DCCPlN*, p. 93; *Altbritannische Münzlegenden*, p. 45; *DLG*, p. 108; *DThNG* I, p. 193; JORDÁN CÓLERA 2019, pp. 683, 688f. and 693; *MLH* II, p. 107f. (no. B 1.28); *NPC*, p. 59.

[55] From which the Continental Celtic idionym *Ulcus* developed, i.e., Úlkus: see below in Chapter IV.4.

[56] More on this in DE BERNARDO STEMPEL, *Revisiting the nasal sonorants* (forthc.).

[57] This is a new interpretation of the data collected in *Sonanten*, p. 122.

Ir. blíaðain and, apparently, also the Welsh variant blúyðin, written *blwyddyn*.[58]
By contrast, the stem of the oxytone genitive bʰlidnyáːs would be responsible for
the Celtic protoform blidnyáː which yielded ArchCelt. blídnya and, with the later,
Brittonic and Gaulish penultimate stress-pattern, blidníya > Britt. blynéyə. The
latter form led first to OW. blynéð and later to Middle and Modern Welsh
blýneð.[59]

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[58] Probably, by way of *bléːðani >> Gaul.+Britt. *bleːðáni > Britt. *bleːðíni > OW.
      bluiðín >> MlW. and W. bluíðin.
[59] For a good Indo-European etymology from the verbal root *bʰleid- 'aufschwellen'
      (*LIV*, p. 88) cfr. RASMUSSEN 2009, p. 413. See also *LEIA*-D, p. 59, MATASOVIĆ 2009,
      p. 69, *Sonanten*, p. 49, and *NWÄI*, p. 79, with further bibliography.

II.2.3 An archaic antepenultimate stress

The existence of a proparoxytone stress-pattern in Continental Celtic was recognized very early on account of several originally Celtic place-names preserved in territories where now other, mostly Romance, languages are spoken. Toponyms like *Bourges* or *Rennes*, for example, could be traced back to the Celtic ethnonyms *Bituriges* and *Redones* only under the assumption of the antepenultimate accentuations Bitúri:ges and Rédones.[60]

Nevertheless, this word stress on the antepenultimate syllable was first regarded as the product of a comparatively recent and probably alloglott linguistic wave: François Falc'hun saw in the proparoxytone accentuation of place names with a long penult an 'imitation de la prononciation du gaulois par une élite hellénique ou hellénisée des villes', that is, an influence of the Greek language.[61] Other scholars followed Wilhelm Meyer-Lübke in attributing the proparoxytone accentuation of place names with a short penult to Latin influence.[62] In my very first studies, I even assumed an influence of the Germanic superstrate in order to explain at least part of the proparoxytone place-names with a long penult.[63]

In 2002, however, I realized that the proparoxytone stress-pattern still recognizable in some of the geographic names attested in Gaul could also explain the sound changes that took place in most of the lexical and onomastic items of the Hispanic Celticity: for example, in the idionym *Camalos*, that is, Kámalos from an older Celtic *kámu-lo-s also continued by Gaul. *Camulus*; or in the stem *Kalato-*, that is, kálato- from Celt. **kaleto-* 'hard, tough', as contained in the Celtiberian family name **Ka.l.a.To.Ku.m** (gen.pl.) and in the derived Celtiberian idionym **Ka.l.a.i.To.s** < **kálet(o)-yo-s*.[64]

In the same year, it also became evident that the same antepenultimate stress-pattern even accounted for several lexical and onomastic elements of the Cisalpine Celticity: among others, the acc.sg. *montem Berigiemam* of an ancient oronym *Bʰérgʷʰ-yo-mā for 'The Highest' mountain, and idionyms like *Upsedia* <

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[60] More details in Section VII below.
[61] FALC'HUN 1966, p. 140.
[62] Cfr. MEYER-LÜBKE 1901, p. 61; HABERL 1912, p. 96f.; DEROY 1986, p. 27.
[63] With regard to this assumption, *Zum gallischen Akzent*, p. 31f. is now obsolete, as well as *Gaulish accentuation*, p. 27f., and *Keltische Ortsnamen*, p. 409. The belief expressed in the aforesaid articles that the accentuation on the penultimate syllable was characteristic of the whole Hispanic Celticity is also obsolete.
[64] Cfr. *Centro y áreas laterales*, p. 118f., and see in Chapter 6 of Section IV below. More evidence of the same type was offered in *Varietäten des Keltischen*, pp. 156-159.

Upsidia, which precedes Gaul. *uxedia* 'summa' and presupposes a protoform *úpsi-dyā*.[65]

Given that traces of a proparoxytone stress are to be found most consistently in the Iberian and Appennine peninsulas, it was only logical to assume that the proparoxytone stress-pattern was characteristic of the most archaic Celtic layers: 'Dato il particolare arcaismo linguistico della celticità ispanica e di quella italiana occidentale, che corrispondono *grosso modo* alle fasi 1ª e 2ª del divenire delle lingue che chiamiamo celtiche, possiamo [...] facilmente dedurre che l'accento sull'antepenultima era una caratteristica del celtico più arcaico.'[66]

We shall indeed see that the younger toponyms were stressed on the penultimate syllable, whereas the older ones and also river names, which are always particularly archaic, often continue proparoxytone Celtic forms: cfr., among others, *Nîmes* from *Némos-o-s* 'The Woods' as opposed to *Nemours* which presupposes the paroxytone pronunciation Nemáusos in France, or the hydronyms *Bòrmida* > *Búrmia* and *Gandòvera* in Italy.[67]

As shown in the following **Table 1**, the average Indo-European bisyllabic rhizotonic word necessarily came to be stressed on the antepenultimate syllable whenever it added one more syllable corresponding to an inflexional or derivational affix:

average IE basis *'V__V-	plus	inflexional or derivational morpheme *-V-	results in 'V__V__V

Also, the new average word[68] could be either prefixed or compounded with an Indo-European basis acting as a determinans. As outlined here in **Table 2**, this resulted in proparoxytone tetra- and pentasyllables:

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[65] Cfr. *La ricostruzione del celtico d'Italia*, pp. 163, 174, 180, 185, and ARENAS ESTEBAN & DE BERNARDO STEMPEL 2011, pp. 125-127. For more examples of the same type see *Livelli di celticità linguistica*, p. 91 [where 'proparoxytone' has inadvertently lost its 'pro-'].

[66] See *Accenti e strati linguistici*, here p. 12.

[67] From Celt. *Bórwo-dā* 'The Bubbling [Water]' > Bórꞵiða and *Gandó-berā* 'The Mud-Carrying [Water]' > Gandóꞵera; more details below in Chapter 2 § 3 of Section VII.

[68] In this sense also JUNG 1992, p. 88.

a prefix ***V-**	plus	new average Celtic word	results in
an IE basis ***V__V-**		**'V__V__V**	**V__'V__V__V**
			V__V__'V__V__V

It is, therefore, evident that the antepenultimate or proparoxytone stress-pattern must have substituted the inherited pitch at some point of the first Celtic period.

The assumption of an archaic Celtic accentuation on the antepenult makes it much easier to explain:

- the diachronically complementary distribution of (older) proparoxytone and (younger) paroxytone place-names;
- the distribution of the (archaic) proparoxytone and (modernized) paroxytone lexical and onomastic items attested in the various Continental Celtic areas. Such an assumption is, furthermore, supported by the fact that in those Continental-Celtic words in which there are traces of both stress patterns, that is, in which one can still recognize the sound changes triggered by them, one consistently observes the passage from a proparoxytone to a paroxytone accentuation and not vice versa. This is the case of the river name *Sequana* (today *Seine*/ F) from *Sékʷ-o-nā 'The Talking [Water]', which later became Sekuána, continued in Italy by *Saquàna* and *Soàna*.[69] In the same country one also finds *Tékʷ-o-no-s 'The Running [River]' becoming first Tékinos and then Tecínos > *Ticínos* (today *Ticìno*/ I);[70]
- how on the one hand Goidelic initial stress arose and how, on the other, the penultimate stress of proper Gaulish and Common Brittonic developed, two fully indepedent stress-shifts for which there is ample typological support.[71]

Reckoning with a proparoxytone stress-pattern older than the Goidelic initial stress, we can even understand better the sound-changes that led to several Old Irish forms: how, for instance, the comparative **kino-tero-* became OIr. *cenntar*, later redetermined as *cenntarach* '*citer*' via kinótero- > kenótarə

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[69] More details in VII.2 § 1 below.
[70] More details in VII.2 § 2 below. See also the examples in Section VI of this book.
[71] See respectively below in §§ 4 and 5 of this chapter II.2.