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A Study of Grammatical Gradience in Relation to the Distributional Properties of Verbal Nouns in Scottish Gaelic

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Abstract

Verbal nouns in Insular Celtic languages have long been a subject of interest because they are capable of exhibiting both nominal and verbal properties, posing a persistent challenge when it comes to determining their precise categorization. This study therefore seeks to examine the intersective gradience of verbal nouns in Scottish Gaelic from a functional-typological and multidimensional perspective, providing an insight into the interaction between their morphosyntactic, semantic, and pragmatic properties and their lexical categorization, and, consequently, encouraging a broader discussion on linguistic gradience. This hybrid category plays a central role in the clause structure of Scottish Gaelic, as it appears in a wide range of distinct grammatical constructions. Drawing on a range of diagnostic tests revealing the morphosyntactic and semantic properties of verbal nouns across various contexts (e.g., etymology, morphological structure, inflection, case marking, TAM features, syntactic function, types of modification, form and position of objects, distributional patterns, cleft constructions, argument structure, subcategorization, etc.), this line of research identifies two key environments, depending on whether the construction features a verbal noun functioning either as a verb or a noun. This distinction aims to illustrate the way in which these contexts condition the gradience of verbal nouns. By doing so, it provides strong evidence for their function along a continuum ranging from fully verbal to fully nominal depending on their syntactic context and semantic and pragmatic interpretation. In conclusion, the findings of this study suggest that the use of verbal nouns blurs the line between two lexical categories, often displaying mixed properties that challenge a rigid categorization.

Keywords: gradience; categories; verbal noun; Scottish Gaelic

1. Introduction: Categories

At least until the 19th century, linguists showed little interest in or—perhaps more accurately—lacked the opportunity to become thoroughly acquainted with the structural differences of languages. As a result, the prevailing approach among grammarians has been to assume that notions such as 'word' as well as grammatical categories like 'noun', 'verb', 'adjective', 'adverb', and 'preposition'—whose study goes back to antiquity—were cognitively grounded and thus universally applicable (Haspelmath, 2014). However, with the increasing availability of data from non-Indo-European (IE) languages beginning in the 19th century, linguists began to observe that these languages often display markedly different organizational patterns and properties, including significant variation in the number and type of categories, word classes, or parts of speech. This led to growing scepticism about the classical teaching of nine parts of speech (pronoun, noun, verb,

participle, adverb, article, preposition, conjunction, and interjection) and even raised doubts about the universality of the notion of 'word' itself, particularly with the rise of the concept of the 'morpheme'. According to Haspelmath (2014), it, then, became increasingly common to argue that the analysis of non-IE languages should not be forced into the categories developed for IE languages, since descriptive categories "depend entirely on the inner form of each language" and, accordingly, each language should be described "in its own terms" (Boas, 1911).

While early comparative linguists were primarily concerned with uncovering historical and genetic relationships among languages, structuralist linguistics—which emphasized the synchronic study of individual languages—gained prominence from the mid-20th century onwards. This approach led to the proposal of new language-specific categories and the recognition that certain categories may be unique to particular languages (Sapir, 1921; Bloomfield, 1933). However, this perspective clashed head-on with the new rising Chomskyan paradigm, which posited that grammatical categories—or at least their constituent features—are universal (Chomsky, 1970; Baker, 2003). As a result, linguists largely abandoned the earlier practice of identifying and justifying the most appropriate categories for describing individual languages. Instead, the focus shifted to revealing the fundamental principles governing language across all humanity, and lexical categories such as noun, verb, adjective, and preposition came to be assumed as universal. In the following decades, alternative classificatory frameworks received limited attention and, particularly with regard to categories, it was common to essentially reaffirm Chomsky's position.

From the late 20th century on, however, a number of scholars (e.g., Croft, 1991, 2000, 2023; Hengeveld, 1998; Van Valin & LaPolla, 1997; Dik, 1997; Evans, 2000; Baker, 2003; Dixon, 2010; Chung, 2012; among others) began to question the universality of these four major lexical categories, but a lack of consensus regarding the number of cross-linguistic categories became evident and proved difficult to resolve. This may, to some extent, be related to the difficulty in finding the right set of criteria to distinguish between word classes (Crystal, 1967) or, more importantly, in establishing a definition enabling the universal identification of distinct word classes.

In an effort to address the limitations of strictly morphosyntactic criteria for defining lexical categories, various scholars have proposed semantically grounded characterizations of major word classes. Givón (1984) offers a semantic perspective, for example, by characterizing nouns and verbs in terms of time-stability. Nouns are thus said to represent experiences that remain stable over time, whereas verbs refer to rapidly changing states of affairs. He also acknowledges the prototypical nature of some members of a category, which are considered to be more central than others. Similarly, Langacker's Cognitive Grammar (Langacker, 1987a, 1987b, 2002, 2008, 2009) concurs that prototypical nouns and verbs denote physical objects and overt physical actions, respectively, but introduces the idea of higher-level schemas, which represent universal, schematic realizations that underlie all category members and are grounded in basic cognitive processes. Word classes are thus defined on two levels: a more general level showing universal semantic schemas where nouns and verbs are defined as linguistic expressions that designate a thing and a process, respectively, and a more specific level offering local instantiations that range from prototypical to non-prototypical members. For his part, Croft (1990, 2001, 2007) synthesizes semantic and pragmatic perspectives by proposing three semantic classes—objects, actions, and properties, which correspond to three pragmatic functions—reference, predication, and modification. These classes and functions are in turn aligned with the traditional categories of nouns, verbs, and adjectives, respectively, which serve as typological prototypes rather than fixed grammatical classes. Importantly, these prototypes describe only the core of each category, while their boundaries are defined by the grammar of individual

languages. Finally, Haspelmath (2010) suggests that grammatical comparison must not begin with language-specific categories but rather with comparative concepts that are clearly distinct from descriptive categories. More specifically, an accurate analysis of word classes must take into account the semantic properties associated with the comparative concepts considered fundamental to communication, namely the capacity to refer and to predicate, and even to describe properties of entities. These functions appear to correspond to the traditionally used categories of noun, verb, and adjective, which, as Haspelmath (2012) argues, can be readily identified across languages and, as Croft (2000) points out, can be considered typological prototypes. In sum, these semantically oriented models offer a more flexible and cognitively grounded understanding of lexical categories, while acknowledging cross-linguistic variation in their grammatical instantiation.

In an attempt to sum up the situation, the evidence provided by the analysis of a wide range of languages from very diverse families reveals that there are hardly any languages that lack a definitive distinction between nouns and verbs (e.g., Schachter, 1985; Sasse, 1993; Davis et al., 2014; Vogel & Comrie, 2000; Haspelmath, 2001[1], 2023), although this distinction is not always as clear-cut as it is in IE languages[2]. Adjectives also appear to be widely attested cross-linguistically, although they are less universally represented than verbs and nouns. Finally, as far as the other categories are concerned, for example prepositions, adverbs, pronouns, determiners, quantifiers, numerals, coordinators and subordinators, and particles, these tend to vary much more significantly from one language to another.

One of the language families in which the distinction between the categories of verb and noun is not as well-defined as might be expected is the Celtic family. In these languages, a hybrid category exists that is commonly referred to as the verbal noun, which, from the earliest attested stages of its historical development, appears to demonstrate that the boundary between verbal and nominal categories is far from clear-cut, despite the bias suggested by the name generally attributed to this category. As a result, the study and analysis of verbal nouns have consistently attracted considerable scholarly interest, so that now this work will focus on an investigation of this category in Scottish Gaelic from the perspective of intersective gradience.

The organization of this paper is as follows: after a brief account of the most relevant typological properties in Scottish Gaelic in Section 2, Section 3 introduces the notion of the verbal noun in Celtic linguistics and provides a summary of the way in which this category has traditionally been analysed with respect to its origin and nature as either a nominal or a verbal element. Section 4 explains the concept of gradience in relation to word classes, parts of speech, or categories, and more specifically of intersective gradience, where an item exhibits characteristics of multiple word classes, thereby illustrating the intersection between categories. Section 5 offers a comprehensive investigation of the distribution and functions of the verbal noun in Scottish Gaelic by examining a range of morphosyntactic and semantic properties across various contexts with the aim of determining whether the category of verbal nouns in Scottish Gaelic has more verbal or more nominal properties. A detailed discussion of the results derived from this analysis is provided in Section 6, and, finally, a summary of the most relevant findings obtained in this research concludes this paper.

2. Typological Description of Scottish Gaelic

Scottish Gaelic is a language belonging to the Goidelic branch of Insular Celtic languages[3] and is mostly spoken in Scotland by about 69,000 speakers (NRS, 2022), who exhibit a considerable degree of diatopical variation in their speech. In order to clarify the discussion concerning verbal nouns in this language, an introductory typological overview of some of its most relevant phonological and morphosyntactic features is included here.

The most distinctive phonological feature of Celtic languages may be the existence of an elaborate system of initial mutations, which entail the alteration of the initial phoneme of words. More specifically for Scottish Gaelic, the most common type of mutation is lenition, which involves the softening of the initial consonant of a word—often marked orthographically by the insertion of an "h" in spelling (e.g., *bòrd* 'table' → *bhòrd*)—in a variety of morphosyntactic contexts, such as after the vocative particle, the article in some cases, certain possessive pronouns, and specific prepositions, particles, adverbs, numerals, and adjectives, among others.

According to conventional morphological typology, Scottish Gaelic is considered a mildly synthetic, largely fusional, language, since, while it now has a relatively low morpheme-to-word ratio and a fairly regular morphology, in the past its verb forms have included a number of inflectional affixes expressing different grammatical meanings. Also, there are now instances of inflected, fused, or conjugated prepositions, which have historically developed from the contraction of a preposition with a personal pronoun (i.e., prepositional pronoun) or with a possessive (i.e., prepositional possessive):

(1) Cha   chaidilinn   gu   math-san   taigh-tughaidh
     NEG   sleep.COND.DEP.1SG[4]   ADV   good in.the.DAT   house-thatched.DAT
     aca   rè   mo   shaor-làithean   samhraidh.[5]
     at.3PL   during   1SG.POSS   free-day.GEN.PL   summer.GEN
     'I would not sleep well in their thatched house during my summer holidays.'[6]

Some of the words contained in this sentence reflect the previously synthetic nature of Scottish Gaelic. One example is the verbal dependent form *chaidilinn*, which is composed of the verbal root *caidil*[7]—this verb appeared in Old Irish[8] as *co-tlud*, which is formed by a prepositional preverb meaning 'with' and a verbal root meaning 'sleep' (Calder, 1923, p. 197)—and the suffix-*inn*, which expresses the first person singular in conditional. The formation of verbal forms by adding pronominal suffixes to a verbal stem was common in Old Irish (Thurneysen, 1946/1980, pp. 455–460), but this method gradually gave way to a more analytical procedure. Consequently, in Modern Scottish Gaelic, personal pronouns are expressed as independent forms, rather than by means of verbal endings.[9] Other morphological properties of Scottish Gaelic are: the distinction made between the masculine and feminine genders—a neuter gender once existed but has now disappeared, the existence of a four-way case distinction (nominative-accusative, dative, genitive, and vocative)[10], the presence of inflected, fused, or conjugated prepositions, the distinction between independent and dependent verb forms, the existence of an impersonal verb form, and the use of ablaut as a morphological device to mark grammatical distinctions in terms of number in nouns, tense in verbs, and degree in adjectives.

With respect to word order, Scottish Gaelic tends to have the tensed verb in clause-initial position—after preverbal particles indicating subordination, illocutionary force, and negation in dependent, interrogative, and negative sentences[11], although it is also possible to arrange a non-verbal constituent in a preverbal position for pragmatic purposes, as an epiphenomenon of information structure. As regards the parameter referred to as argument-type, Scottish Gaelic may be considered a lexical-argument language now, as the overt lexical nominal phrases are the true arguments of the predicate. It is, likewise, a dependent-marking language because all grammatical relations are coded in nominal phrases—which can be morphologically unmarked and which occur in the common case, or marked as dative or genitive, rather than within the verb. Scottish Gaelic is an instance of a right-branching language owing to the fact that it tends to place dependents after heads (i.e., it has prepositions, and the nouns are commonly followed by adjectives, although nominal objects may precede or follow their verbs depending on the type of construction). In terms of alignment, this language can be said to exhibit a nominative-accusative alignment, as,

in the early stages of the language, the subjects of intransitive verbs were treated like the subjects of transitive verbs and were therefore distinguished from the objects of transitive verbs in basic clause constructions.[12] Finally, like the other Celtic languages, Scottish Gaelic makes use of two non-finite verbal forms, namely the verbal adjective and the verbal noun (or verb-noun). Regarding the first non-finite form, the verbal adjective, it suffices to note that it descends from the old past participle found in Old Irish. It was declined as an adjective and had verbal features, such as voice and, to a certain extent, tense (Thurneysen, 1946/1980, pp. 441–443; Russell, 1995, pp. 258–259), and is used today to express a passive meaning and perfect aspect in a specific passive-like construction:

(2) Tha   an   leabhar   sgrìobhte   mu thràth.
     be.PRES   the   book   write.VA   already
     'The book is already written.'

The second form, the verbal noun, will be discussed in more detail in the following sections, as it constitutes the main focus of this study due to its ambiguous nature.

3. The Verbal Noun

Verbal nouns in Insular Celtic languages have long been a subject of scholarly interest due to fact that they demonstrate both nominal and verbal properties. Consequently, numerous studies have been devoted to their investigation, both from a comparative perspective encompassing all Celtic languages (Wagner, 1959; Gagnepain, 1963; Russell, 1995, 2015) as well as through focused analyses of individual Celtic languages (Jeffers, 1978; Disterheft, 1980; for Old Irish; McCloskey, 1983; Guilfoyle, 1997; for Irish; Sproat, 1985; Willis, 1988; Fowkes, 1991; Borsley, 1993, 1997; Asmus, 2025; for Welsh; S. R. Anderson, 1981; Stephens, 1990; Timm, 1990; for Breton; Cram, 1984; Ramchand, 1993; Adger, 2010; for Scottish Gaelic; Lewin, 2016; for Manx; among others) in order to ascertain whether they should be considered either as verbs or nouns.

Despite extensive research, the synchronic status of verbal nouns in Celtic languages remains a subject of scholarly debate. Moreover, the limited historical evidence from stages prior to Old Irish precludes a definitive conclusion as to whether their origin was fundamentally nominal or verbal. Consequently, given the scarcity of early textual documentation prior to Old Irish, and although any claims regarding their diachronic development should be considered tentative, various scholars have nevertheless ventured to take a position on the issue by examining the origin of verbal nouns in other languages, tracing them back to Proto-Indo-European (PIE).

Although any hypothesis about their precise origin is speculative—especially considering that the earliest evidence available stems from a protolanguage, this line of inquiry led early scholars to argue for the nominal origin of verbal nouns based on their presumed historical derivation from abstract action nouns (Zeuss, 1871; Brugmann, 1886–1900/1897–1916).[13] For instance, Thurneysen (1946/1980) and Gagnepain (1963) classified the verbal noun unequivocally as a substantive. Similarly, Jeffers (1978) asserted that it was clearly nominal in nature, a characteristic that he associated with the change to a VSO structure, as Lehmann and Lehmann (1975) suggests. Disterheft (1980) also noted that its nominal function was recognized very early, but began to acknowledge that some of its uses would indicate properties more typically associated with verbs. Subsequently, in a similar vein, in their examination of Modern Irish, Breton, and Welsh, McCloskey (1980, 1983), S. R. Anderson (1981), Willis (1988), Timm (1990) and Fife (1990) also treated the verbal noun as a nominal element, but one that also showed verbal properties in some contexts, a position later echoed by Cram (1981), Ramchand (1993), and Adger (1996, 2010) in their analyses of Scottish Gaelic.[14]

However, this dual interpretation has been increasingly refined by scholars who tend to attribute the mixed categorial properties of verbal nouns to their complex diachronic development. Russell (1995, 2015) supports this view, arguing that verbal nouns in Celtic started out as nouns and have gradually become verbs across their documented history. This process of reanalysis is also emphasized by Ronan (2006), who states that during earlier stages of the Celtic languages, the verbal noun was unambiguously nominal in inflection and usage, whereas the incorporation of verbal features over time reflects an increasing tendency toward verbalization[15]. Lewin (2016) likewise points out that, while the verbal noun in Manx was originally a noun, it has been gradually reanalysed as a non-finite verb, though it continues to exhibit formal traces of its erstwhile nominal character.

Finally, as an illustration of an alternative, yet not necessarily exclusive perspective, Borsley (1993) states that, in Welsh, verbal nouns are basically verbs, although they can sometimes appear as nouns. Rouveret (1994) goes even further by arguing that, in Welsh, verbal nouns should be analysed as verbs embedded within a Determiner Phrase (DP). Similarly, Adger (2022a, 2022b) describes the verbal noun in Scottish Gaelic as a nominalization of the verb that operates across contexts typically occupied by infinitives or participles in other IE languages.

In conclusion, although the evidence provided by PIE appears to support a nominal origin of the verbal noun, and subsequent research on Celtic languages has increasingly highlighted both its diachronic dynamism and its current categorial ambiguity, which may lead us to recognize the verbal noun synchronically as a mixed or transitional category, there appears to be no scholarly consensus as to whether the verbal noun is more nominal or verbal in nature.

4. Gradience

For centuries, the dominant framework for understanding categorization was grounded in the rigid classical or Platonic-Aristotelian model. Under this model, category membership was determined by a set of necessary and sufficient conditions with rigid boundaries that allowed no room for variation, so an entity either fully belonged to a category or it did not; there was no in-between. However, despite its longevity and influence, this classical view began to be seriously questioned in the 20th century, as a growing body of empirical evidence highlighted its limitations. Studies from multiple fields began to challenge the rigidity of the classical model. For instance, key research in colour terminology (Berlin & Kay, 1969), speech variation (Labov, 1973), and psychological categorization (Rosch, 1978) illustrated the fact that natural categories often do not conform to strict binary divisions. Instead, these findings pointed to the idea that some members of a category are perceived as more central or typical than others, leading to the understanding that categories are structured around prototypes—ideal or the most representative examples—rather than through a fixed checklist of defining features. Over the following decades, semantically oriented scholars such as Jackendoff (1983, 1990), Langacker (1987a, 1990, 2002), and Lakoff (1987) were especially instrumental in articulating and refining this new view of categorization, which viewed category membership as graded rather than absolute, allowing for degrees of membership and recognizing the notion of gradience (Bolinger, 1961), which posits that linguistic categories and grammatical constructions often demonstrate internal variation and overlap with other categories. This conception of gradience has been fundamental to cognitive and functional approaches to language, and grammatical phenomena that previously appeared anomalous or irregular under the classical model have been reinterpreted as natural variations within a graded structure, illustrating the fact that categories are better understood as continua rather than discrete units.

In relation to word classes, parts of speech, or categories, the distinction between subsective gradience and intersective gradience pertains to two different types of categorical overlap or boundary blurring. Thus, on the one hand, subsective gradience refers to a type of gradience within a single category, whereby certain members of that category are more prototypical than others. In this case, all items are still classified under the same grammatical category but tend to vary in the degree to which they exemplify the core features of that category. On the other hand, intersective gradience involves an overlap between two distinct grammatical categories, since it refers to those linguistic elements with properties of two (or more) categories simultaneously, thereby occupying an intermediate position between them. Intersective gradience, therefore, highlights the permeability and continuity between categories, challenging the notion of strictly discrete grammatical boundaries. An example of intersective gradience can be seen in the category of verbal nouns in Celtic languages, as they are words that blur the boundaries between verbs and nouns.

5. Analysis of the Verbal and Nominal Characteristics of Verbal Nouns

Despite the theoretical challenges involved in defining word classes more generally, in practice it is often not difficult to reach an agreement regarding the identification and use of verbs and nouns in a given language. This is largely due to the fact that these categories tend to exhibit significant cross-linguistic similarities in their behaviour. Since the aim of the present study is not to contribute to the ongoing debate concerning the number of universal categories or to define the criteria that should be applied to distinguishing between them cross-linguistically, but rather to determine whether the category known as the verbal noun displays more verbal or nominal properties in Scottish Gaelic, my analysis will focus on examining its behaviour in a number of grammatical contexts with features traditionally employed to define verbs and nouns, which are the two categories between which verbal nouns exhibit intersective gradience[16]; hence the topic of this paper is to investigate the properties of this mixed or hybrid category, which is at times considered as nominal, and at other times regarded as an uninflected, verbal form, in Scottish Gaelic. To this end, the grammatical contexts are classified in two distinct subsections, depending on whether the features of the category under examination are more nominal (Section 5.1) or verbal (Section 5.2) in nature. While the evidence for the existence of gradience in verbal nouns in Scottish Gaelic is purely synchronic, as the examples are instances of Modern Scottish Gaelic, references to diachronic developments in specific constructions involving this syntactic category are provided whenever they are available.

5.1. Nominal Contexts

Verbal nouns act as nouns in sentences in several ways, as they serve as arguments of predicates, can show case, gender, and number distinctions, appear with determiners and numerals, and may accept adjectival, rather than adverbial, modification. Furthermore, their complement may take a genitive case and they themselves have genitive case marking both when they complement other nouns and when they appear in compounds. Additionally, they may have possessives instead of personal pronouns to realize their objects, may be modified by a relative clause, do not appear to show verbal morphology, are negated differently from finite verbs, can occur after prepositions, do not show a difference between independent and dependent forms, and lack voice distinctions. Finally, besides these properties, which are widely regarded as hallmarks of nominal elements, verbal nouns also display other features that could further underscore their nominal nature (e.g., the ambiguous role and the position of the possessive, the NP and PP objects, and the reflexive pronoun, the formation of compounds and of periphrases with the light verb

dèan 'do', and the presence of lenition effects in aspectual constructions). The following grammatical contexts serve to identify the verbal noun as a category of a nominal nature in Scottish Gaelic.[17]

One of the most distinctive features of nominals is that they can act as the subject[18] or object of an inflected verb and as the object of a preposition. Like nominals, verbal nouns can behave as subjects (3) and objects (4) of verbs as well as objects of prepositions (5):

(3)   Tha   cuideachadh   dhaoine   eile   gam   fhàgail   toilichte.
    be.PRES   help.VN   person.PL   other   at.1SG   leave.VN   happy
    'Other people's help makes me happy.'

(4)   Chunnaic   iad   mo   bhualadh.
    see.PAST   3PL   1SG.POSS   beat.VN
    'They saw my beating.'

(5)   Tha   mi   ann   an   Gaol   le   còcaireachd.
    be.PRES   1SG   in.3SG.M   in   love.DAT   with   cook.VN.DAT
    'I am in love with cooking.'

The nominal status of verbal nouns seems undeniable when we observe that they decline like nouns. Although nominal inflection has been retained in Modern Scottish Gaelic only in a gradually reduced form, morphologically, a verbal noun can be inflected for the common case (6)—which is unmarked, the dative case (7), and the genitive case (8), just like a noun, such as in the examples given below:

(6)   Tha   seinn   furasta   do   Phòl.
    be.PRES   sing.VN   easy   for   Paul.DAT
    'Singing is easy for Paul.'

(7)   Cha   tuirt   i   dad   mun   t-seinn.
    NEG   say.PAST.DEP   3SG   anything   about.the.DAT   sing.VN.DAT
    'She did not say anything about the singing.'

(8)   Cha   do   bhruidhinn   duine   rè   na   seinn(e).
    NEG   PFV   talk.PAST.DEP   nobody   during   the.GEN   singing.GEN
    'Nobody talked during the singing.'

Additionally, when used as a noun, the verbal noun is normally masculine (MacLaren, 1923, p. 144; MacFarlane, 1912/1948, p. 165)—like *leughadh* 'reading' in (9), but there are also feminine verbal nouns—like *togail* 'building' in (11). In both genders, the verbal noun may also appear in the plural (10 & 12):

(9)   Chòrd   an   leughadh   aice   rium.
    agree.PAST   the   read.VN   at.3SG.F   to.1SG
    'I liked her reading.'

(10)   Bidh   mòran   leughaidhean   anns   an   tachartas   sin.
     be.FUT   many   read.VN.PL   in   the.DAT   event.DAT   DEM.DIST
     'There will be many readings at that event.'

(11)   Bha   a   theagasg   Gearmailtis   airidh   air   moladh.
     be.PAST   3SG.M.POSS   teach.VN   German.GEN   merit   on   praise
     'His teaching of German was praiseworthy.'

(12) Bha   teagasgan   Ìosa   glè   fheumail   dha
be.PAST   teach.VN.PL   Jesus.GEN   very   useful   to
Na   deisciobail   aige.
the.PL.DAT   disciple.PL.DAT   at.3SG.M
'Jesus' teachings were very useful to their disciples.'

Verbal nouns also behave like nouns because they appear with determiners and numerals. Both articles (13), which are almost always definite, and numerals (14) precede the verbal noun:

(13) Bha   an   tadhal   aca   glè   thaitneach
be.PAST   the   visit.VN   at.3PL   very   pleasant
'Their visit was very pleasant.'

(14) Cha   do   rinn   mi   ach   aon   tadhal   air   bràthair
NEG   PFV   do.PAST.DEP1SG   but   one   visit.VN   on   brother.DAT
mo   mhàthar.
1SG.POSS   mother.GEN
'I made only one visit to my uncle.'

Another nominal feature of verbal nouns is that they can also be modified by adjectives:

(15) Ceart-sgrìobhadh[19]
correct-write.VN
'Orthography' (lit. 'Correct writing')

(16) Bha   coiseachd   bhrèagha   ann   an-dè.
be.PAST   walk.VN   beautiful   in.3SG.M   yesterday
'There was a beautiful hiking yesterday.'

The fact that the phrase containing the verbal noun is essentially nominal in character can be observed in that, unlike the direct object of a finite verb (17) and like the object of a noun (18), the direct object of a verbal noun may appear in the genitive case (18), although in contemporary usage it most commonly does so if the object is definite. This situation, which can be observed in constructions expressing the progressive (19) and purposive (20) aspect[20], means that what is assumed to be the direct object of an untensed verb—marked with the genitive—is in fact the possessive complement of a noun.

(17) Dh'ionnsaich   mo   bhràthair   na   cànanan   sin.
learn.PAST   1SG.POSS   brother   the   language.PL   DEIC.DIST
'My brother learnt those languages.'

(18) Ionnsachadh   nan   cànanan   sin.
learn.VN   the.PL.GEN   language.PL.GEN   DEIC.DIST
'The learning of those languages'

(19) Tha   mo   bhràthair   ag   ionnsachadh nan
be.PRES   1SG.POSS   brother   PROG   learn.VN   the.PL.GEN
cànanan   sin.
language.PL.GEN   DEIC.DIST
'My brother is learning those languages.'

(20) Tha   mo   bhràthair   a'   dol   a[21]   dh'ionnsachadh
be.PRES   1SG.POSS   brother   PROG   go.VN   PURP   learn.VN
nan   cànanan   sin.
the.PL.GEN   language.PL.GEN   DEIC.DIST
'My brother is going to learn those languages.'

Verbal nouns can be modifiers of other nouns—so the verbal noun may be said to perform an adjectival function in this context—and, as Scottish Gaelic still retains nominal distinctions like case, the verbal noun is in the genitive case in this situation almost categorically:

(21) Cunnart   dràibhidh
      danger   drive.VN.GEN
      'The danger of driving'

(22) Ealain   Sgrìobhaidh
      art   write.VN.GEN
      'The art of writing'

Another use of the verbal noun that could be considered nominal—or even adjectival, as it expresses a property of another noun, which serves as the head of the noun phrase—is observed in compounds, where verbal nouns can bear the genitive case. While this does not normally occur in Scottish Gaelic, some examples may be found:

(23) draibheadh-cadail
      drive.VN-sleep.VN.GEN
      'Sleepdriving' (lit. 'Driving of sleep')

(24) Teisteanas-breithe
      certificate-bear.VN.GEN
      'Birth certificate' (lit. 'Certificate of birth')

A clearer nominal property exhibited by verbal nouns is that, unlike finite verbs, they have possessives[22] or prepositional objects, rather than object personal pronouns. Thus, the fact that, unlike a finite verb (25), a verbal noun cannot be followed by a direct object pronoun, and that the so-called direct object of this untensed verb is in fact a prepositional possessive (26) or (a preposition plus) a possessive (27), which generally accompanies nouns, seems to suggest that as *gam chuideachadh* (26) or (*air*) *mo chuideachadh* (27) could be rendered in English as 'at my helping' or '(on) my helping', respectively.[23]

(25) Chuidich   e   mi.
      help.PAST   3SG.M   1SG
      'He helped me.'

(26) Tha   e   gam   chuideachadh.
      be.PRES   3SG.M   at.1SG   help.VN
      'He is helping me.'

(27) Tha   e   air   mo   chuideachadh.
      be.PRES   3SG.M   PERF   1SG   help.VN
      'He has helped me.'

It is also commonly said that, although arguments are obligatory, they can sometimes be ambiguous, especially in nominal contexts. This happens, for instance, in the two following examples where the argument cross-referenced by the prepositional possessive *gam* 'at my' is ambiguous, as it can be understood as coreferential with either an agent subject (28) or a theme subject (29):

(28) Tha   an   saighdear   sin   ga   leigheas.
      be.PRES   the   soldier   DEM.DIST   at.3SG.M   cure.VN
      'That soldier is curing him.'

(29) Tha   an   saighdear   sin   ga   leigheas.
     be.PRES   the soldier   DEM.DIST   at.3SG.M   cure.VN
     'That soldier is being cured.'

Additionally, like a regular noun, a verbal noun may also serve as the head of a relative clause, although this use appears to be rather unusual:

(30) Cha   robh   an   t-ionnsachadh   a   rinn   iad   math.
     NEG   be.PAST.DEP   the learn.VN   REL   do.PAST   3PL   good
     'The learning that they did was not good.'

Also, it is widely acknowledged (Pedersen, 1909–1913; Baudiš, 1913; Thurneysen, 1946/1980; Gagnepain, 1963; Disterheft, 1980; among others) that verbal nouns in Celtic languages display nominal characteristics as a result of their nominal functional morphology[24]. While they are typically derived morphologically from the same root as the base verb, in Scottish Gaelic, like other Celtic languages, there is no single dedicated verbal noun marker; instead, verbal nouns are typically, though not exclusively, formed by suffixation to the root.[25] The most common—and the most productive suffixes today—are: *(e)adh* (e.g., *pòs* 'marry'—*pòsadh* (vn)), *-inn* (e.g., *faic* 'see'—*faicinn* (vn)), *-sinn* (e.g., *ruig* 'arrive'—*ruigsinn* (vn)), *-tinn* (e.g., *cluinn* 'hear'—*cluinntinn* (vn)), *-tainn* (e.g., *can* 'say'—*cantainn* (vn)), *-(e)amh* (e.g., *feith* 'wait'—*feitheamh* (vn)), *-ad* (e.g., *greas* 'hurry'—*greasad* (vn)), *-ail* (e.g., *gabh* 'take'—*gabhail* (vn)), *-eil* (e.g., *tilg* 'throw'—*tilgeil* (vn)), *-e* (e.g., *ith* 'eat'—*ithe* (vn)), *-(e)achadh* (e.g., *èist* 'listen'—*èisteachadh* (vn)), *-aidh* (e.g., *iarr* 'want'—*iarraidh* (vn)), *-(a)ich* (e.g., *ràn* 'roar'—*rànaich* (vn)), *-t* (e.g., *freagair* 'answer'—*freagairt* (vn)), and *-eam* (e.g., *tuit* 'fall'—*tuiteam* (vn)).

Most verbal nouns have the same stem as the corresponding finite verb forms (e.g., *òl* 'drink'—*òl* (vn), *falbh* 'leave'—*falbh* (vn), *ruigh* 'run'—*ruigh* (vn), *reic* 'sell'—*reic* (vn), *snàmh* 'swim'—*snàmh* (vn), *cluich* 'play'—*cluich* (vn), *coimhead* 'watch'—*coimhead* (vn), *seinn* 'sing'—*seinn* (vn), etc.).

Some verbal nouns are slightly different from the corresponding verb stem (e.g., *beir* 'catch'—*breith* (vn), *thoir* 'give'—*toirt* (vn), *teagaisg* 'teach'—*teagasg* (vn), *cuir* 'put, send'—*cur* (vn), *ceannaich* 'buy'—*ceannach* (vn), *caidil* 'sleep'—*cadal* (vn), etc.).

Others change the final syllable of the root and add a suffix like *-eachd*, *-adh*, *-eachadh*, or *–eadh* (e.g., *coisich* 'walk'—*coiseachd* (vn), *faighnich* 'ask'—*faighneachd* (vn), *fuirich* 'stay, wait'—*fuireach* (vn), *ionnsaich* 'learn'—*ionnsachadh* (vn), *cuidich* 'help'—*cuideachadh* (vn), *dannsa* 'dance'—*dannsadh* (vn), *peant* 'paint'—*peantadh* (vn), *cuimhnich* 'remember'—*cuimhneachadh* (vn), *dràibhig* 'drive'—*dràibheadh* (vn), etc.).

Finally, there are verbal nouns that are not actually morphologically related to their corresponding verb, so they use suppletive verbal noun forms (e.g., *abair* 'say'—*ràdh* (vn), *rach* 'go'—*dol* (vn), etc.).

While this context is not so clearly nominal, the verbal noun cannot be negated like the finite verb. Conversely, the verbal noun is regularly negated by the negative preposition *gun* 'without', rather than by the negative particle *cha* 'not':

(31) Is   ann   ainneamh   a   dhèanadh   iad   e
     be.PRES   FOC   seldom   REL   do.COND   3PL   3SG.M
     gun   innse.
     without   tell.VN
     'Seldom would they do it without mentioning (it).'

(32) Thuirt   mi   ris   gun   a   dhol   a-mach.
     say.PAST   1SG   to.3SG.M   without   INV   go.VN   out
     'I told him not to go out.'

Another context that appears to reflect nominal properties—although it may be influenced by the distinction between finite and non-finite verb forms—is related to the contrast between independent and dependent verbal forms. Unlike the finite verb (33 & 34), the verbal noun does not show the independent/dependent distinction (35 & 36):

(33) Chunnaic   mi   Màiri.
      see.PAST   1SG   Mary
      'I saw Mary.'

(34) Chan   fhaca   mi   Màiri.
      NEG   see.PAST.DEP   1SG   Mary
      'I didn't see Mary.'

(35) Cho-dhùin   mi   Màiri   fhaicinn.
      decide.PAST 1SG   Mary   see.VN
      'I decided to see Mary.'

(36) Cho-dhùin   mi   gun   Màiri   fhaicinn.
      decide.PAST 1SG   without   Mary   see.VN
      'I decided not to see Mary.'

Also, in addition to lacking tense distinctions, the verbal noun also does not inherently express voice, as can be seen in the following example where the form of the verbal noun is neutral to the active/passive distinction, although contextual factors typically determine whether an active or passive interpretation is intended:

(37) Bha   mi   gan   teagasg.
      be.PAST   1SG   at.3PL   teach.VN
      'I was teaching them.'

(38) Bha   iad   gan   teagasg   agam.
      be.PAST   3PL   at.3PL   teach.VN   at.1SG
      'They were being taught by me.' (lit. 'They were at their teaching at me.')

Another piece of evidence for the nominal status of the verbal noun could be that the reflexive particle *fèin* 'self' may be added to the verbal noun (41) to derive reflexive pronouns, which means that the verbal noun shows the same property as the pronoun and noun in examples (39 & 40):[26]

(39) mi-fhìn, thu fhèin, e fhèin, i fhèin, sinn fhìn, thu fhèin, iad fhèin.
      1SG-self, 2SG self, 3SG.M self, 3SG.F self, 1PL self, 2PL self, 3PL self

(40) Mo   theaghlach   fhìn
      1SG.POSS   family   REFL
      'My own family'

(41) Tha   iad   air   an   cuideachadh   fhèin.
      be.PRES   3PL   PERF   3PL.POSS   help.VN   REFL
      'They have helped themselves.'

The widespread use of verbal nouns in prepositional phrases is commonly considered to be another important example of nominal syntax. As we can see in the following examples, the verbal noun can function as the object of a preposition, which is very common in Scottish Gaelic:

(42) Tha   seo   co-cheangailte   ri   co-obrachadh.
      be.PRES   DEM.PROX   related   to   collaborate.VN
      'This has to do with collaborating.'

(43) Tha   seo   math   airson   an   sgrùdaidh.
      be.PRES   DEIC.PROX   good   for   the.GEN   study.vn.GEN
      'This is good for my study.'

(44) Tha   brosnachadh   cudromach ann   an   ionnsachadh.
      be.PRES   motivation   important in.3SG.M in   learn.VN.DAT
      'Motivation is important in learning.'

Another context that highlights a similarity between nouns and verbal nouns is the position of the pronominal objects. Unlike finite verbs, which generally precede their personal pronouns, an object of a verbal noun must appear preverbally as a possessive (46)[27], with the resulting structure being similar to the ordinary nominal structures of the language, where a possessive adjective or determiner precedes a noun (45):

(45) Do   theaghlach.
      2SG.POSS   family
      'Your family.'

(46) Tha   iad   air   do   chuideachadh.
      be.PRES   3PL   PERF   2SG.POSS help.VN
      'They have helped you.' (lit. 'They are on your helping.')

Also, unlike nominal and pronominal complements, prepositional complements generally follow the verbal noun in constructions involving modal verbs—such as *feum* 'must' and *faod* 'can, may', adjectival or nominal predicates, and the expression of a perfect aspect (48), mirroring its behaviour when functioning as a noun (47).

(47) Ar   sabaid   an   aghaidh   eucoir.
      1PL.POSS   fight.VN   in   face   crime.GEN
      'Our fighting against crime.'

(48) Tha   sinn   air   sabaid   an   aghaidh   eucoir.
      be.PRES   1PL   PERF   fight.VN in   face   crime.GEN
      'We have fought against crime.'

Additionally, the appearance of the verbal noun in a periphrastic construction involving the verb *dèan* 'do' appears to suggest that, in these instances, the verbal noun is serving as a noun, and specifically as the direct object of the verb *dèan* 'do', as is the case with expressions in which this verb is combined with a noun to denote an event, such as *dèan sgeig* 'mock', *dèan casad* 'cough', *dèan ùrnaigh* 'pray', *dèan prothaid* 'make a profit', or *dèan iomrall* 'make a mistake', for instance.

(49) Dèan   cadal   a-nis!
      do.IMP   sleep.VN   now
      'Go to sleep right now!'

(50) Chan   eil   e   math   sodal   a   dhèanamh
      NEG   be.PRES.DEP   3SG.M   good   flatter.VN INV   do.VN
      ris.
      to.3SG.M
      'It is not good to flatter him.'

Finally, another argument for considering verbal nouns as nouns is that the typical Celtic phenomenon of lenition affects verbal nouns in the same way as regular nouns, as is illustrated by the initial mutation effected by first, second, and third person masculine singular possessives in verbal nouns in aspectual constructions[28]:

(51)   Tha   a   thidsear   air   a   mholadh.
     be.PRES   3SG.M.POSS   teacher   PERF   3SG.M   praise.VN
     'His teacher has praised him.'

(52)   Tha   a   tidsear   air   a   moladh.
     be.PRES   3SG.F.POSS   teacher   PERF   3SG.F   praise.VN
     'Her teacher has praised her.'

While this body of data might lead us to the conclusion that verbal nouns are simply nominals, several other contexts challenge such an interpretation and instead appear to support their analysis as verbal forms.

5.2. Verbal Contexts

Verbal nouns may also be considered verbal in nature, insofar as they typically denote events—such as actions, processes, or states, and most of them do not share the same form as deverbal nouns[29]. Furthermore, like tensed verbs, verbal nouns take arguments that are both unambiguous and obligatory, may assign a structural case to their complements, which may often be realized before the lexical verb, and can be modified by adverbials. They also function as non-finite complements to modals and nominal and adjectival predicates, and function as the only predicate in periphrastic aspectual and passive constructions. Additionally, verbal nouns occur in raising and control predicates, exceptional case marking (ECM) constructions, and causative constructions. Their behaviour in cleft constructions further aligns them more closely with verbs than with nouns, and the clauses in which they appear can often be substituted by finite clauses, which is a feature traditionally associated with the verbal category. Beyond these, verbal nouns have other properties (e.g., the distinction between aspectual particles and prepositions, the presence of verbal nouns as the only predicate in non-finite clauses as well as their occurrence as complements of interrogative phrases) that, while not uniquely verbal, further support their verbal status. The following grammatical contexts are proposed as a diagnostic of the verbal nature of verbal nouns in Scottish Gaelic.[30]

Apart from the fact that the verbal noun is primarily derived from the same root as the verb itself, traditionally lexical categories have been distinguished based on the type of meaning they denote. Seen from this perspective, verbal nouns appear to resemble verbs more, as they express states, actions, or processes, rather than to nouns, which typically denote people, objects, places, animals, abstract concepts, ideas, and similar entities. This is illustrated by the contrast between the meaning conveyed by a noun (53) and that conveyed by a verbal noun (54), as well as by the fact that a verbal noun can independently express an action in response to a question (55):

(53)   Bha   an   t-òran   aige   glè   bhòidheach.
     be.PAST   the   song   3SG.M.POSS   very   beautiful
     'His song was very beautiful.'

(54)   Bha   an   t-seinn   aige   glè   bhòidheach.
     be.PAST   the   sing.VN   3SG.M.POSS   very   beautiful
     'His singing was very beautiful.'

(55) A. Tha   Pàdruig   a'   cluich   a'   ghiotàir.
          be.PRES   Peter   PROG   play.VN   the.GEN guitar.GEN
          'Peter is playing the guitar.'
      B. Dè   tha   e   a'   dèanamh?
          what   be.PRES   3SG.M   PROG   do.VN
          'What is he doing?'
      A. A'   cluich   a'   ghiotàir.
          PROG   play.VN   the.GEN guitar.GEN
          'Playing the guitar.'

Another feature that appears to show the verbal nature of verbal nouns is that, although they may be etymologically related, most verbal nouns differ from deverbal nouns in form[31], such as *dannsadh* (vn) vs. *dannsa* (n) (<*danns* (v) 'dance'), *marcachadh* (vn) vs. *marcach* (n) (<*marcaich* (v) 'ride'), *foilleachadh* (vn) vs. *foill* (n) (<*foillich* 'cheat'), *gàireachdainn* (vn) vs. *gàire* (n) (<*gàir* (v) 'laugh'), *feadaireach* (vn) vs. *fead* (n) (<*feadairich* (v) 'whistle'), *osnachadh* (vn) vs. *osann* (n) (<*osnaich* (vn) 'sigh'), *faireadh* (vn) vs. *faire* (n) (<*fair* (v) 'watch'), or *rèiteach* (vn) vs. *rèite* (n) (<*rèitich* (v) 'reconcile'), among others. This means that in cases where distinct verbal and nominal forms have developed the characterization of verbal nouns as verbal and deverbal nouns as nominal would seem logical, in a fashion parallel to the distinction made between examples like 'reconciling' and 'reconciliation' in English[32].

An important verbal feature of verbal nouns is that they display an equivalent argument structure to that of finite verbs, such that finite verbs like *tuit* 'fall', *ionnsaich* 'learn', and *ceannaich* 'buy' require one, two, and three arguments, respectively, just like their corresponding verbal noun forms *tuiteam*, *ionnsachadh*, and *ceannach*. As with finite verbs and unlike nouns and adjectives, the arguments of verbal nouns are generally obligatory although they may be omitted when they can be easily retrieved from the context, and there is no ambiguity as to the role of these arguments relative to the verbal noun. Unquestionably, *e* 'he' is the agent and *Gàidhlig* 'Gaelic' is the theme in (56 & 57):

(56) Dh'ionnsaich   e   Gàidhlig.
      learn.PAST   3SG.M   Gaelic
      'He learnt Gaelic.'

(57) Tha   e   ag   ionnsachadh   Gàidhlig.
      be.PRES 3SG.M   PROG   learn.VN   Gaelic
      'He is learning Gaelic.'

The verbal noun should also be treated as a verb because it has selectional restrictions and strict subcategorization features (58), like inflected verbs (59):

(58) Bha   mi   ag   ithe   feòil   is   glasraich   /!bòrd   /*de
      be.PST   1SG   PROG   eat.VN   meat   and   vegetables   /!a table /*of
      chaise.
      cheese
      'I was eating meat and vegetables/!a table/*of cheese.'

(59) Dh'ith   mi   feòil   is   glasraich   /   !bòrd   /* de   chàise.
      eat.PST   1SG   meat   and   vegetables   /   table   /   of   cheese.GEN
          'I ate meat and vegetables/!a table/*of cheese.'

In these two examples, regardless of whether the verb *ith* 'eat' appears in the past tense or as a verbal noun *ithe*, it requires an NP expressing an inanimate, edible object.

Another verbal characteristic of verbal nouns is reflected in the case assigned to their direct object in certain constructions, particularly those expressing a perfect aspect, involving a modal verb, or containing a non-verbal predicate (61). In such contexts, the

nominal object of the verbal noun appears in the common case—paralleling the syntactic behaviour of the direct object of a finite verb (60), rather than in the genitive case, which would typically mark the complement of a noun[33]:

(60) Cheannaich   an   duine   sin   càr   ùr.
      buy.PAST   the   man   DEM.DIST   car   new
      'That man bought a new car.'

(61) Bu   chòir   don   duine   sin   càr   ùr   a
      be.PAST   obligation to+the.DAT   man.DAT   DEM.DIST   car   new INV
      cheannach.
      buy.VN
      'That man should buy a new car.'

Verbal nouns may also appear in structures where the object precedes the verbal noun (63)[34], which seems to have no counterpart in nominal structures, as it is impossible for a complement of a noun to assume a prenominal position (62):

(62) Dealbh   an   eich.
      painting   the.GEN   horse.GEN
      'The painting of the horse.'

(63) Tha   mi   air   an   t-each   a   pheantadh.
      be.PRES   1SG   PERF   the   horse   INV   paint.VN
      'I have painted the horse.'

Another typically verbal feature shown by verbal nouns appears in some constructions where adverbial, rather than adjectival, modification is available. In this context, the verbal noun is modified by an adverb[35], instead of an adjective, as would be expected if it had a nominal status, and the adverb tends to appear rightmost in the clause:

(64) Tha   i   a'   dràibheadh   gu   faiceallach.
      be.PRES   3SG.F   PROG   drive.VN   ADV   careful
      'She is driving carefully.'

(65) Tha   an   dotair   a'   ciùradh   a'   bhalaich   gu
      be.PRES   the   doctor   PROG   cure.VN   the.GEN boy.GEN   ADV
      ceart.
      correct
      'The doctor is curing the boy properly.'

Another feature that renders verbal nouns more similar to verbs than to nouns is their occurrence in constructions including modal verbs (66) or non-verbal predicates (67 & 68)[36], where many languages employ a non-finite form, which is comparable in function to the infinitive in other European languages:

(66) Feumaidh   clann   gèilleadh   do   am   pàrantan.
      must.FUT   children obey.VN   to   3PL.POSS   parent.PL.DAT
      'Children must obey their parents.'

(67) Tha   mi   toilichte   sin   a   dhèanamh.
      be.PRES   1SG   happy   DEM.DIST   INV   do.VN
      'I am happy to do that.'

(68) Bha   dùil   aca   a   dhol   a   Lunnainn
      be.PAST   expectation   at.3PL   INV   go.VN   to   London.DAT
      as   t-samhradh.
      in   summer.DAT
      'They expected to go to London in summer.'

Celtic languages are rich in periphrastic verbal constructions, most of which involve the use of verbal nouns. They are conventionally regarded as taking a form consisting of the auxiliary verb *bi* 'be', which is marked for person, number, and tense, an aspect marker or a preposition[37], and a verbal noun. Assuming that aspect is a verbal rather than a nominal property, the appearance of the verbal noun in a number of aspectual constructions containing the substantive verb *bi* 'be'—progressive (69), perfect (70), predictive (71), prospective (72), and stative (73)—lends further support to its categorial status as a verb.

(69) Tha   iad   a'   cluich   ball-coise.
      be.PRES   3PL   PROG   play.VN   football
      'They are playing football.'

(70) Tha   iad   air   ball-coise   a   chluich.
      be.PRES   3PL   PERF   football   INV   play.VN
      'They have played football.'

(71) Tha   iad   a'   dol   a   chluich   ball-coise.
      be.PRES   3PL   PROG   go.VN   PURP   play.VN   football
      'They are going to play football.'

(72) Tha   iad   gu   bhith   a'   cluich   ball-coise.
      be.PRES   3PL   to   be.VN   PROG   play.VN   football
      'They are about to play football.'

(73) Tha   sinn   nar   suidhe.
      be.PRES   1PL   in.1PL.POSS   sit.VN
      'We are sitting.'

Another characteristic of verbal nouns suggestive of a verbal more than a nominal nature is their frequent occurrence in constructions involving an auxiliary verb. Thus, in addition to the aspectual constructions illustrated above, a verbal noun may also occur in certain passive-like constructions, where it is preceded by the auxiliary verbs *rach* 'go' (75) or *bi* 'be' (76). The active counterpart is provided in (74) for purposes of comparison:

(74) Thug   sinn   tòrr   shiùcairean   dhan   a   chloinn.
      give.PAST   1PL   a.lot.of   sweet.PL.GEN   to.3SG.F   the.DAT   children.DAT
      'We gave a lot of sweets to the children.'

(75) Chaidh   tòrr   siùcairean   a   thoirt   dha   na
      go.PAST   a.lot.of   sweet.PL   INV   give.VN   to.3SG.F   the.DAT
      cloinn.
      children.DAT
      'A lot of sweets were given to the children.'

(76) a. Bha   tòrr   shiùcairean   air   an   toirt   dhan
          be.PAST   a.lot.of   sweet.PL.GEN   PERF   3PL   give.VN   to.3SG.F
          a   chloinn.
          the.DAT   children.DAT
          'A lot of sweets were given to the children.'

(77) b.

Bha	tòrr	shiùcairean	gan	toirt	dhan
be.PAST	a.lot.of	sweet.PL.GEN	at.3PL	give.VN	to.3SG.F
a	chloinn.				
the.DAT	children.DAT				

'A lot of sweets were given to the children.'

There is further evidence of the verbal status of verbal nouns in raising and control constructions, as we must assume that an understood argument of the predicate represented by the verbal noun in the subordinate clause either appears in the main clause in the case of raising or is determined by an argument of the predicate of the main clause in the case of control. Thus, on the one hand, *an co-dhùnadh seo* 'this decision' is an argument of the predicate *dùisg* 'arouse' but appears in the main clause in (77) and, on the other hand, a first person singular argument is shared by both predicates *iarr* 'want' and *dùin* 'close' but it is explicitly realized only in the main clause in (78). In view of this, the complex of which the verbal noun forms part in these constructions must be considered clearly verbal:

(77)

Tha	an	co-dhùnadh	seo	buailteach	air	fearg
be.PRES	the	decision	DEM.PROX	likely	on	anger
a	dhùsgadh.					
INV	arouse.VN					

'This decision is likely to arouse anger.'

(78)

Dh'iarr	e	orm	an	uinneag	a	dhùnadh.
ask.PAST	3SG.M.s	on.1SG	the	window	INV	close.VN

'He asked me to close the window.'

Although it is not so clearly verbal, further evidence of the verbal nature of the verbal noun can be found in grammatical contexts similar to exceptional case marking (ECM) constructions, where it appears to function in the same way as the present participle in other languages, such as English:[38]

(79)

Chan	fhaca	mi	thu	a'	coiseachd.
NEG	see.PAST.DEP	1SG.s	2SG	PROG	walk.VN

'I didn't see you hiking.'

Something similar occurs in causative constructions, where the verbal noun resembles the English bare infinitive:

(80)

Thug	mi	air	ruith	gu	luath.
give.PAST	1SG	on.3SG.M	run.VN	ADV	fast

'I made him run fast.'

Further differences between the behaviour of nouns and verbal nouns can be observed in cleft constructions. Firstly, unlike a finite verb, the verbal noun can only be regularly fronted in emphatic sentences because Scottish Gaelic follows the Insular Celtic VSO word order, which is characterized by commencing an unmarked simple sentence (basic word order) with a finite verb. Besides this, the genitive object of a non-finite verb may be fronted in a cleft construction (81), a possibility that is not available to genitive complements within complex noun phrases (82). Finally, it is noteworthy that, of the two strategies employed by Scottish Gaelic to form cleft constructions, the emphasis of nominal phrases, as well as of nominal clauses, is realized through the first strategy, which uses a postcopular clefted pronoun *e* 'it' (83), whereas verbal nouns make use of the second strategy, which requires the presence of the non-inflecting preposition *ann* 'in', a pattern also observed when adjectival, adverbial, and prepositional phrases are clefted (84):

(81) Is   e   an   taighe   sin   a   tha   i
be.PRES   3SG.M   the.GEN   house.GEN   DEM.DIST   REL   be.PRES   3SG.F
a'   ceannach.
PROG   buy.VN
'It is that house that she is buying.'

(82) * Is   e   an   taighe   sin   a   tha   ùidh
be.PRES   3SG.M   the.GEN   house.GEN   DEIC.DIST   REL   be.PRES   interest
agam   ann   an   ceannachd.
at.1SG   in.3SG.M   in   buy.DAT
'It is of that house that she is thinking about the purchase.'[39]

(83) Is   e   cèic   a   rinn   mo   mhàthair.
be.PRES   3SG.M   cake   REL   do.PAST   1SG.POSS   mother
'My mother made a cake.' (lit. 'It is a cake that my mother made.')

(84) 'S   ann   a'   dèanamh   cèic   a   rinn   mo   mhàthair.
be.PRES   FOC   PROG   do.VN   cake   REL   do.PAST   1SG.POSS   mother
'My mother made a cake.' (lit. 'It is making a cake that my mother did.')

Further evidence supporting the assumption that verbal nouns are verbs rather than nouns is provided by the fact that non-finite clauses in which verbal nouns occur (85) can be transformed into finite clauses (86 & 87) without altering the meaning of the construction:

(85) Bu   mhath   leam   Mìcheal   a   bhuannachadh.
be.PAST   good   with.1SG   Michael   INV   win.VN
'I would like Michael to win.'[40]

(86) Bhiodh   e   math   nam   biodh   Mìcheal   a'
be.COND   3SG.M   good   if   be.COND.DEP   Michael   PROG
buannachadh.
win.VN
'It would be good that Michael wins.'

(87) Bhiodh   e   math   nam   b'   urrainn   do   Mhìcheal
be.COND   3SG.M   good   if   be.PAST   ability   to   Michael.DAT
buannachadh.
win.VN
'It would be good if Michael could win.'

While this evidence is not so clearly verbal, it is of note that verbal nouns can also occur as the only verb in constructions not involving strictly aspectual uses of prepositions before verbal nouns. A verbal noun may also be the only verb in a tenseless clause, typically introduced by a conjunction like *gus* 'in order to' or *gun* 'without':[41]

(88) Gus   a   pàrantana   cuideachadh,   chuir
in.order.to   3SG.F.POSS   parent.PL.PURP   help.VN   put.PAST
i   romhpe   (a)   stad   a   bhith   ag   obair.
3SG.F   before.3SG.F   INV   stop.VN   PURP   be.VN   PROG   work.VN
'In order to help her parents, she decided to stop working.'

(89) Chaidh   e   tarsainn   air   an   t-sràid   gun
go.PAST   3SG.M   across   on   the.DAT   street.DAT   without
choimhead.
look.VN
'He crossed the street without looking.'

As shown in the previous section, the verbal noun usually appears in aspectual constructions after an element resembling a preposition at least formally. The putative preposition is generally formally identical to a particular locative preposition, which would probably indicate that the verbal noun is nominal in character[42]. However, it would seem more appropriate to analyse these aspectual markers as aspectual particles rather than prepositions for several reasons, proving that the original locative preposition has now grammaticalized as an aspect marker.

One of the reasons for this is their pronunciation, as the aspectual particle and the preposition may not share the same phonological form (90). This is the case with the particle used to express the progressive aspect, namely *ag*, which has two allomorphs (*ag* preceding verbal nouns beginning with a vowel (and sometimes *ràdh* 'say') and *a'* preceding verbal nouns beginning with a consonant) and is weakened in pronunciation, being consistently realized as /əg/ or simply /ə/, respectively, in contrast to the preposition from which it is diachronically derived, *aig* 'at', which only has one allomorph and is pronounced /ɛgj/ (92). A second distinction between aspectual particles and prepositions lies in their interaction with possessives: while the former allow contraction with possessives (*gam* 'at my' in (91)), the latter must always appear separately from them (*aig mo* 'at my' in (90)[43]). Finally, whereas the aspectual particle must be repeated before each verbal noun in coordinated constructions (92), the preposition may, in contrast, be omitted in the same context (93):

(90) Tha   mi   ag/əg/   ionnsachadh   seo   aig/ɛgj/   mo
      be.PRES   1SG   PROG   learn.PAST   DEM.PROX   at   1SG.POSS
      sheanmhair.
      mother.DAT
      'I am learning this from my grandmother.'

(91) Chan   eil   thu   gam   chuideachadh.
      NEG   be.PRES.DEP   2SG   at.1SG   help.VN
      'You are not helping me.'

(92) Tha   mi   a'   leughadh   agus   a'   sgrìobhadh   litrichean.
      be.PRES   1SG   PROG   read.VN   and   PROG   write.VN   letter.PL
      'I am reading and writing letters.'

(93) Chunnaic   mi   i   aig   a'   bhùth   agus   (aig)   an
      see.PAST   1SG   3SG.F   at   the.DAT   shop.DAT   and   at   the.DAT
      taigh-dhealbh.
      cinema.DAT
      'I saw her at the shop and the cinema.'

Further support for a verbal analysis of verbal nouns is provided by the observation that, when the emphasis on the pronominal object is required, it may be expressed either through a discontinuous emphatic possessive (e.g., *mo*ᴸ (+consonant)/*m'*ᴸ (+vowel)...*sa*, *do*ᴸ/*d'*ᴸ...*sa*, *a*ᴸ/Ø...*san*, *a/a h*-...*se*, *ar/ar n*-/...*ne*, *ur/ur n*-...*se*, *an/am*...*san*) (94) or through an emphatic personal pronoun (e.g., *mise, thusa, esan, ise, sinne, sibhse, iadsan*) (95) '1SG-EMPH, 2SG-EMPH, 3SG.M-EMPH, 3SG.F-EMPH, 1PL-EMPH, 2PL-EMPH, 3PL-EMPH':

(94) Theab[44]   e   mo   mharbhadh   sa   cuideachd.
      DEF   3SG.M   1SG.POSS   kill.VN   EMPH   too
      'He almost killed ME too.'

(95) Theab   e   mise   mharbhadh   cuideachd.
      DEF   3SG.M   1SG.POSS.EMPH   kill.VN   too
      'He almost killed ME too.'

Finally, it is also possible to find a verbal noun—*càradh* 'repair'—functioning as the sole predicate in a non-finite subordinate clause—*a' càradh an lanntair* 'repairing the lantern', which is a context where the non-finite verb form is typically interpreted as a converb modifying the main clause verb and acquiring clausal status. That is, the verbal noun performs an adverbial role by expressing relations of time, cause, or manner:

(96) Bha   am   bodach   na   shuidhe air   being   a'   càradh
      be.PAST the   old.man   in.3SG.M   sit.VN on   bench   PROG   repair.VN
      an   lanntair.
      the.GEN   lantern.GEN
      'The old man was sitting on a bench repairing the lantern.'

6. Discussion

An analysis of grammatical contexts involving verbal nouns in Scottish Gaelic shows a complex interplay of nominal and verbal characteristics, thereby justifying the continued debate surrounding their categorical classification. Further evidence would indicate that, while, in certain contexts, the verbal noun is either nominal or verbal, in other contexts this is less clear-cut, owing either to exceptions or because the context reflects properties of both categories. This therefore highlights the absence of a definitive boundary between them.

Thus, certain contexts allow for a straightforward identification of verbal nouns as either nominal or verbal. The clearest nominal contexts are those in which verbal nouns function as arguments of predicates (3–5), show distinctions in case (6–8), gender, and number (9–12), appear with determiners and numerals (13 & 14), require possessive pronouns instead of personal pronouns to express their arguments (26 & 27), and bear the genitive case when functioning as the complements of other nouns (21 & 22). Additional features reinforcing their nominal profile include the position of possessives (46) and PP complements (48), the formation of compound nouns (23 & 24), and their co-occurrence with the light verb *dèan* 'do' in periphrastic constructions (49 & 50).

Similarly, a number of contexts show the verbal nature of verbal nouns. These include their prototypical association with eventive semantics—such as actions, processes, and states (54 & 55), their morphological divergence from deverbal nouns, and their use as the non-finite complements of modal verbs and in impersonal constructions involving nominal or adjectival predicates (66 & 68). Other clear verbal properties are illustrated by the fact that verbal nouns also serve as the sole predicate in periphrastic aspectual constructions (69–73)—despite the lenition effects that possessives have on the verbal noun in this context—and passive constructions (75 & 76), and occur in control, raising, exceptional case marking (ECM), and causative constructions (77–80). Finally, other clearly verbal contexts include their behaviour in cleft constructions (81–84), the substitutability of verbal noun clauses with finite clauses (85–87), and their presence as a converb (96) in adverbial subordinate clauses.

On the other hand, a substantial number of contexts resist such a straightforward classification. For instance, regarding the morphology of the verbal noun, although it is evident that its root is clearly verbal, its inflection is unquestionably nominal. Verbal nouns may allow both adjectival and adverbial modification, which adds ambiguity (15 & 16 vs. 64 & 65). It is also unclear whether the positioning of the complements of verbal nouns can help determine whether these elements are more nominal or verbal in character, considering that their complements may either precede or follow the verbal noun in different constructions (63 vs. 18–20). Additionally, the case assigned to NP complements varies: while the genitive case is still often used in the expression of the progressive, prospective, and purposive aspect (18 & 20)—and this occurs usually when the object is definite, many constructions today favour the use of the basic or common case (63). Also,

the co-occurrence of verbal nouns with relative clauses (30) is not frequently attested in contemporary usage. Moreover, the fact that verbal nouns are negated differently from finite verbs (31 & 32) does not necessarily indicate a nominal nature, as similar phenomena are observed cross-linguistically in non-finite clauses; hence, this does not appear to be sufficient grounds for precluding the interpretation of the verbal noun as retaining verbal properties in this context. Likewise, although prepositions typically select for nominal complements (42–44), it is plausible that in these cases the complement is the entire clause containing the verbal noun, rather than the verbal noun itself, which retains a predicative function. Furthermore, the lack of dependent/independent formal distinctions (36), a hallmark of finite verbs in Scottish Gaelic, should not automatically be taken as evidence of nominal status, as such distinctions could well be tied to tense (the imperative form does not show this distinction either). The absence of voice alternations (38) also need not imply nominal status; rather, it may reflect one particular language-specific strategy for expressing the passive voice in Scottish Gaelic, one that diverges significantly from the garden-variety passive construction observed, for example, in English. Additional areas of ambiguity include the use of reflexive pronouns with verbal nouns (41)—a phenomenon also attested with adverbs and adjectives—and the presence of obligatory and unambiguous arguments (28 & 29), a property not exclusive to verbs, as many nouns also generally have arguments with an unambiguous syntactic and semantic function. Finally, the distinction between prepositions and aspectual particles (90–93)—apart from a few well-established cases such as *aig* vs. *ag/a', ann,* and even *air* in progressive, stative, and perfect constructions, respectively—is not always a reliable way of determining diagnostic purpose.

In summary, it seems clear that the behaviour of verbal nouns in Scottish Gaelic straddles the traditional divide between noun and verb and, rather than slipping neatly into a single category, verbal nouns have a dual nature that depends heavily on the grammatical contexts in which they appear.

While it is true that this type of confusion may be more prevalent in Celtic languages than in other branches of the IE family, due to the fact that Celtic languages possess only a single non-finite form—the verbal noun, leaving the verbal adjective aside, the difficulty in distinguishing between nominal and verbal properties in non-finite forms also occurs across other language families, as with the gerund in English (Quirk et al., 1985, p. 1291; Huddleston, 2002, pp. 1220–1222; Aarts, 2007, pp. 142–144; Malchukov, 2019; Keizer, 2023, pp. 186–187). Indeed, in many languages, the same non-finite form may appear in different syntactic constructions, reflecting a distinctly lexical nature. This is the case with the Italian infinitive, which can function either as a subject or an object (e.g., *Fumare fa male* 'Smoking is bad') and can also serve as the sole lexical predicate in constructions involving modal verbs (e.g., *Lui deve studiare oggi* 'He must study today'). It is also possible for two distinct non-finite forms to appear within the same syntactic context, such as the infinitive and the gerund in English when functioning as the subject or object of a sentence (e.g., *I started to do/doing*).

The root of this problem could be that, at least now, the distinction among non-finite forms is primarily based on their morphological characteristics (e.g., *-ar/-er/-ir* for infinitives, *-ando/-endo* for gerunds, *-nte* for present participles, and *-ado/-ido* for past participles in Spanish), rather than on the verbal, nominal, adjectival, or adverbial function they currently perform or may have performed in the past. Although it is not possible to trace the original morphology of verbal nouns further back than Proto-Indo-European, the solution to this categorial problem may be found through an analysis of the historical development of non-finite forms and the diachronic developments they have undergone up to the present day, not only within the Celtic languages but also across other languages, and more specifically, within those branches of the IE family most closely related to Celtic.

As has been widely acknowledged (Shields, 1992; Beekes, 1995; Szemerényi, 1996; Clackson, 2007), the reconstruction of the verbal system constitutes the most intricate aspect of PIE linguistics, owing both to its internal complexity and the considerable dialectal variation that distinguishes verbal morphology from other major categories. Notwithstanding this difficulty, there is a degree of scholarly consensus that the infinitives in PIE were formerly verbal nouns or action nominals. Nevertheless, it remains difficult to determine with certainty whether they were originally either nouns incorporated into the verbal system or were formed by attaching nominal morphology to a verbal root (Zeuss, 1871; Windisch, 1878; Delbrück, 1893–1900; Brugmann, 1886–1900/1897–1916; Pedersen, 1909–1913; Vendryes, 1910; Lewis & Pedersen, 1931; Disterheft, 1980, 1981). In addition, this protolanguage also made use of various participles—which may also have originated from a verbal root—that appear to have been adjectives assimilated into the verbal system, such as the present participle, the verbal adjective, which was semantically similar to a past participle, the gerundive, which was used to indicate need, obligation or possibility, and the absolute (also referred to as a gerund but in a different sense), which had an adverbial function.

New forms gradually emerged from the ancient categories, acquiring non-personal verbal functions. Thus, subsequently, the infinitive constructions found in the classical IE languages appear to descend from fixed case forms of PIE verbal nouns (Buck, 1933; Hahn, 1966; Rosén, 1981; Beekes, 1995; Sihler, 1995). For example, the Classical Latin and Ancient Greek infinitives are believed to have developed from PIE *s*-stem verbal nouns marked for the locative or dative case. Similarly, the Latin gerund (as well as the supine, which was employed to express purpose or to complement adjectives) is thought to have originated from the same element, although it was used in all nominal cases, excluding the nominative, which remained the domain of the infinitive. Verbal adjectives such as the gerundive, which expressed necessity, obligation, or propriety regarding the execution of an action, and participles, which occurred in the active, middle, and passive voice, are also frequently used. However, unlike the infinitive and the gerund, these forms adopted an adjectival morphology (Whitney, 1924; Sihler, 1995).[45]

Over time, the extensive inventory of non-finite forms of Latin was reduced to three primary types in the subsequent Romance languages: two hybrid categories, namely the infinitive and the gerund, which combine nominal and verbal features, and one mainly adjectival (although also adverbial and verbal) form, namely the participle, which appears in two different forms: the present and past participle. In most Romance languages, the functions of the gerund and the present participle eventually merged, with one of the forms emerging as the prominent variant—it is mainly used to express the progressive aspect and adverbial subordination—and the other being relegated to highly sporadic uses—as is the case with the evolution of the old present participle in *-ns/-nt* (in the genitive)—as an adjective in many of these languages.

The Germanic languages developed the same three principal non-finite forms, also fusing the original gerund and present participle forms, thus introducing significant ambiguity in determining the syntactic and semantic function of each (Ringe, 2006). For instance, although the infinitive commonly serves as the subject or object of a verb and as the complement of a preposition or noun, it is also widely used to express various aspectual distinctions, such as the prospective or predictive, and to function as the sole predicate in constructions involving modal verbs and impersonal clauses with adjectival or nominal predicates. A comparable ambiguity arises from the coalescence of the gerund and the present participle, now a single category that may serve a verbal role (as in the progressive aspect), an adjectival role (as a noun modifier), or an adverbial role (functioning as a converb in adverbial subordinate clauses) in many modern Germanic languages. The

past participle presents a similar challenge, as it may act as a verb (in the perfect aspect or in passive constructions) or as an adjective (when modifying nouns).

Finally, the Celtic languages appear to have undergone fewer changes than other IE branches with regard to the evolution of non-finite verb forms, as they have retained the categories of the verbal noun and the verbal adjective[46].

In light of this diachronic explanation, it is reasonable to assume that the reduction and convergence of non-finite forms appears to be one reason to explain the confusion surrounding the identification of their lexical category. This issue is, of course, even more pronounced in the Celtic languages, where a single non-finite form like the verbal noun can serve a nominal, verbal, and even adjectival or adverbial function.

Another reason, which may account for the hybrid character of certain non-finite forms, is the presumed fuzzy nature of categories. If more information were available regarding the origin of verbal nouns prior to PIE, two different hypotheses could be reasonably proposed. Firstly, if verbal nouns derived from verbs, they might still be reinterpreted and reanalysed as nouns when their function is more closely aligned with a reference to actions or states, rather than with predication, that is the description of the event in which the participants are involved. Secondly, by contrast, if verbal nouns were originally nominal in nature, they could also be reinterpreted as verbs when their function is more closely associated with the depiction of specific events rather than with an explicit reference to the participants engaged in those events. In either case, this issue appears to invite a broader reflection on whether it is the verbal noun itself that should be regarded as a mixed or hybrid category, or whether such hybridity is more appropriately attributed to the fuzziness displayed by the categories of verb and noun when considered from a more diachronic perspective and even from a more conceptual standpoint.

With this in mind, the issue of categorization may not be fully resolved, but it can at least be simplified if, like Croft (1990, 2001, 2007), we consider that the two core pragmatic functions, reference and predication, are only prototypically aligned with the two major semantic classes, object and action—or, more accurately entity and event, and, consequently, with the two primary lexical categories, the noun and the verb[47]. Thus, while the relationship between entity and reference, on the one hand, and between event and predication, on the other, seems to be grounded in basic cognitive processes, as objects typically serve as referents and actions or states are primarily conveyed through predicates in such a way that both reference and predication underpin propositional content, allowing utterances to express states, actions, or processes as well as the participants involved in them, it is entirely possible for an entity like 'beer' not to be referential (e.g., 'He drinks beer') and for an event like 'smoke' to be non-predicating (e.g., 'To smoke is bad'). Even more commonly, each of the two lexical categories, noun and verb, may be capable of fulfilling either of the two pragmatic functions. For instance, a noun such as 'dog' can function referentially (e.g., 'My dog is good') or predicatively (e.g., 'It is a dog'), and a verb such as 'read' can serve a predicative function (e.g., I read a book) or a referential function (e.g., 'Reading is funny').

This perspective may suggest that, at an early stage of language development[48], words emerged, independently of any fixed lexical category[49], as symbols—their sounds or letters signify only by cultural convention since the link between the sign and the signified could have been arbitrary—standing for both the entities and the events in which they are involved. Their subsequent classification into specific lexical categories would thus depend on the specific pragmatic function being expressed, which in turn necessitated a corresponding syntactic construction. In accordance with Haspelmath (2007)'s scepticism about the existence of pre-established grammatical categories and their purported semantic basis (Haspelmath, 2023, p. 35), these source categories may then have originated not as fixed lexical classes, but rather as conceptual categories and, while in contemporary

grammar each of these lexical categories tends to be associated with particular semantic properties and core pragmatic functions—namely noun with entity and reference and verb with event and predication, these correlations remain clearly distinct only in the most prototypical cases, which obviously do not include non-finite forms. This situation therefore appears to suggest that, in practice, the boundary between the categories of noun and verb is often blurred in non-finite forms, suggesting that the most defining feature of their interrelationship is their gradient nature and that the distinction is even less evident in languages with a more limited number of non-finite forms, as is the case with the Celtic languages. Thus, the gradience observed in Celtic verbal nouns may in fact be an epiphenomenon, reflecting a blurred boundary between two lexical categories, noun and verb, due to the difficulty in distinguishing between the functions of reference and predication in certain syntactic contexts. This gradience has been inherited, in a particularly salient way, by the hybrid category known as the verbal noun, and the fact that it typically appears in a single, morphologically undifferentiated form in Celtic languages further complicates the identification of its lexical status.

In light of the lack of early historical evidence, the only viable approach to understanding its lexical status and functional behaviour lies in examining and analysing it synchronically within the specific grammatical contexts in which it occurs. Regardless of whether their origin was verbal or nominal, it is evident that verbal nouns in the Celtic languages are employed across a significantly broader range of syntactic contexts than might be expected for either prototypical nouns or verbs, as they occur in environments where PIE and late IE would have used a genuine verbal noun, various types of participles, the absolutive or gerund, and the gerundive, each of which has different properties. Accordingly, the position of the verbal noun within the nominal-verbal continuum in the Celtic languages can be understood to vary across time and constructions[50]. This assumption that this category may be construction-specific and even language-specific is therefore consistent with Cristofaro's (2009) hypothesis that accounts for the cross-constructional and cross-linguistic diversity of individual categories and relations and is also aligned with a constructional view of categorization (Croft (2001); Goldberg (2006); among others). Accordingly, categories may be epiphenomenal, insofar as they depend on constructions, which are considered to be primitives, and word classes are defined by their distributional properties in different constructions.

On the one hand, it is important to bear in mind that that the properties of many contexts are currently in a state of flux, for example the grammaticalization of some prepositions as particles, the shift from possessives to personal pronouns, the case assigned to some NP objects, and the positioning of other NP objects, etc. This would suggest that the position occupied by these contexts within the continuum between clearly nominal and clearly verbal domains may not be fixed. Consequently, this could entail a reanalysis of the properties of the verbal noun in the future. In this light, the analysis of contexts involving verbal nouns in Scottish Gaelic may be better understood as part of an ongoing process of reanalysis, rather than as evidence of a completed categorial classification. Hence, the evolution of these constructions and the future categorization of verbal nouns remain subject to diachronic empirical investigation.

On the other hand, in the case of Modern Scottish Gaelic particularly, if these contexts were to be arranged along a continuum, contexts would be clearly nominal at one extreme and clearly verbal at the other. The former would include those contexts when the verbal noun functions as a subject or object, when it exhibits gender, number, and case distinctions, when it is modified by determiners and numerals, when it requires possessive pronouns instead of personal pronouns to express the arguments, and when it bears the genitive case as a complement to another noun. The latter would encompass contexts when the verbal

noun unquestionably expresses an event, when it is different from a deverbal noun, and when it occurs in aspectual constructions or as a complement of modal verbs and adjectival or nominal predicates, etc. Accordingly, a differentiation between verbal nouns in their nominal and verbal uses in these contexts would seem logical.

However, it is arguably within the intermediate zone that the intersective gradience of the verbal noun becomes most evident. It is precisely in this middle ground that the analytical challenges are most pronounced, as this area involves hybrid contexts that oscillate between nominal and verbal syntactic behaviour. As a result, the verbal noun emerges as a flexible part of speech in such liminal cases and resists a clear-cut classification, as neither its morphological features nor its syntactic distribution provide definitive clues to its function or categorial status. Thus, this case of the convergence of nominal and verbal properties in these instances renders the verbal noun a genuinely hybrid category, as it includes contexts in which it is not possible to ascertain whether it functions as a noun or a verb. In summary, the current difficulty in determining whether the category traditionally referred to as the verbal noun in Celtic languages and predominantly exhibiting nominal or verbal properties may be attributed to the primordial categorial indeterminacy of words and, subsequently, to the inherent gradience of the categories from which it historically derives, primarily the noun and the verb, as well as the convergence of a wide range of both nominal and verbal functions into a single non-finite form. This illustrates the fact that verbal nouns are a graded, rather than a discrete, category whose categorical identification can only be achieved through the analysis of each specific grammatical context in which they appear, taking into account the fact that the properties of the construction may vary diachronically and across languages.

7. Conclusions

Non-finite constructions in Scottish Gaelic are intriguing because they use a specific non-finite verbal form traditionally referred to in Celtic linguistics as the verbal noun, which, as the term implies, has both verbal and nominal properties. Accordingly, the categorial status of verbal nouns in the Celtic languages—specifically, whether they are fundamentally nominal or verbal—has long been the subject of extensive debate within the field of Celtic linguistics.

The present study has sought to provide an analysis of the properties of the verbal noun in Modern Scottish Gaelic, adopting a functional-typological and multidimensional perspective. This approach emphasizes a holistic examination of this distinctive feature of Celtic languages, addressing the syntactic, semantic, and pragmatic dimensions of the constructions in which this hybrid category appears. It cannot be denied that the analysis of the contexts in which the verbal noun currently appears in Scottish Gaelic offered in this study reveals a rather ambiguous situation, insofar as it does not allow us to identify the lexical nature of this category in the language clearly, except in a few cases. This implies that, as with verbal nouns in other Celtic languages, it remains impossible to determine whether the verbal noun is nominal or verbal in nature. However, this should not be seen as a disappointment, nor should it be regarded as an impediment to gaining a deeper understanding of the language. Rather, it may be interpreted as a confirmation of an evident reality. Thus, it makes little sense to attempt to assign exclusively nominal or verbal properties to this category, as it has inherited its versatile character from the categorial indeterminacy of word classes and, subsequently, from the fuzzy nature of verbs and nouns, so its categorial properties depend on the specific grammatical context in which it occurs. Additionally, these properties may also be subject to diachronic variation and may differ across languages.

With the historical information on the Celtic languages available to us, and even their most distant ancestor, PIE, we can only hypothesize as to whether the verbal noun originally belonged to the nominal or the verbal system. Subsequently, and as with other non-finite verb forms across languages, it gradually came to be used in a wide range of constructions in which it could acquire properties typically associated with verbs, nouns, and even adjectives and adverbs. The issue, however, is that, while it is generally straightforward to correlate many types of non-finite forms with specific lexical categories, the participle is often equated with a verbal adjective and the converb with a verb of adverbial nature, for example, forms such as the infinitive and the gerund resist such correlation, as they frequently have both nominal and verbal uses. This is especially controversial in the Celtic languages, where a single non-finite form, namely the verbal noun, is used to cover a range of functions typically expressed through the infinitive and gerund, and even the present participle—as in the case of the progressive aspect or when it is used as a modifier of another noun or a main verb, and the past participle—as in the passive construction and perfect aspect—in other languages.

This complex behaviour shows that identifying the verbal or nominal character of this category is essentially unnecessary, as its status appears to depend on the construction in which it occurs. Rather, this study highlights the need for a nuanced, construction-based approach when examining the use of verbal nouns in Scottish Gaelic. Consequently, an analysis of their syntactic distribution might be more reasonable, since what may constitute nominal or verbal is usage rather than the verbal noun itself. An explicit and systematic distinction between the constructions in which the verbal noun participates and a description of its function in each of them are therefore necessary.

As a result of the analysis of the distribution of verbal nouns in Modern Scottish Gaelic offered in this study, it is evident that the verbal noun has gradually and unquestionably become a highly versatile syntactic constituent since it can now behave either like a noun or a verb in different grammatical environments. However, it has also become evident that a distinction between verbal nouns used either nominally or verbally can be drawn only in a limited number of contexts. The main challenge therefore lies in the fact that not all of the contexts in which the verbal noun appears allow for a clear identification of whether the verbal noun functions as a noun or as a verb. It is precisely in these contexts that the intersective gradience between these two categories—that is, the intersectionality between the properties of the nominal and verbal categories—becomes most apparent. The two categories of noun and verb have traditionally served to represent syntactically the correlation between the semantic classes of entity and event, and the pragmatic functions of reference and predication. However, due to the evident intersectionality between reference and predication in some grammatical contexts and to the convergence of non-finite forms into a single form in Scottish Gaelic, it is only possible to ascertain whether a verbal noun functions as a noun (converging on the class of nouns) or as a verb (converging on the class of verbs) in contexts where the categories of noun and verb clearly correlate with their corresponding semantic class and pragmatic function, but, apart from these prototypical instances, the inherent hybridity of the verbal noun becomes apparent in the other syntactic environments. This provides compelling evidence that, given that a clear-cut distinction between nominal and verbal characteristics is problematical, we should analyse constructions including verbal nouns as a continuum from clearly nominal contexts to clearly verbal contexts with intermediate contexts where the twofold character of the verbal noun is evident and, consequently reflects an instance of intersective gradience. In summary, it is in these intermediate contexts that this hybrid non-finite form reflects the intersection between the two word classes of noun and verb, making it possible to confirm that categories are inherently gradient in nature and that gradience is a pervasive phenomenon.

Notes

1. Haspelmath (2001, p. 16543) mentions the Wakashan, Salishan, and Iroquoian families of Native American languages as well as a number of Polynesian languages, such as Samoan, as examples.

2. For a bibliography on word classes in typology, see Plank (1997).

3. Insular Celtic languages are divided into two primary branches: Goidelic (or Gaelic) and Brythonic (or Brittonic). Goidelic includes Irish, Scottish Gaelic, and Manx (and probably Pictish), while Brythonic comprises Welsh, Cornish, and Breton (and possibly Cumbric). This classification reflects historical linguistic divergence within the British Isles, distinguishing these Celtic languages from their Continental counterparts, which are now extinct.

4. Abbreviations used in the glosses of the Scottish Gaelic examples and discussion: ADV—adverbializing particle; CLM—clause linkage marker; COND—conditional tense; DAT—dative case; DEF—defective aspect; DEP—dependent form; FOC—focus; FUT—future tense; GEN—genitive case; IMP—imperative illocutionary force; INT—interrogative illocutionary force; INV—inverse particle; NEG—negation; O—object; PAST—past tense; PERF—perfective aspect; PFV—perfective aspect; PL—plural; POSS—possessive; PRES—present tense; PROG—progressive aspect; PROSP—prospective aspect; PURP—purposive aspect; REL—relative pronoun; S—subject; SG—singular; VA—verbal adjective; VN—verbal noun.

5. Regarding orthography, all the Scottish Gaelic words and examples in this article are written using the Scottish Qualifications Authority's spelling system (SQA, 2009).

6. The constructed examples drawn on for this study are provided by ten native speakers of Scottish Gaelic ranging in age from 40 to 80 years and coming from various areas of the Outer Hebrides or Western Isles, namely Harris, Lewis, North Uist, South Uist, Barra, and Benbecula. These speakers, interviewed between July 2024 and May 2025, responded to a series of questions regarding the specific grammatical constructions examined in this study, in the light of the considerable variation currently observed in this language, and only those examples that are unanimously considered grammatically correct by all speakers have been included. I wish to express my gratitude to these native speakers of Scottish Gaelic for their help and attention. Needless to say, any mistakes are my own.

7. The verbal root *caidil* is taken from the second person form of the imperative and is lenited here by the negative proclitic *cha*.

8. Old Irish (7th–9th centuries) is generally called Old Gaelic, as it is the oldest form from among the Goidelic languages.

9. Person is now only expressed synthetically in the first person singular and plural of the conditional tense (e.g., *bhithinn* 'I would be' and *bhitheamaid* 'we would be') and in the first persons and the second person plural of the imperative (e.g., *faiceam* 'let me see', *faiceamaid* 'let us see', and *faicibh* 'see (pl)), although they may be replaced by a more analytical expression consisting of an invariable verbal form ending in -*(e)adh* (e.g., *bhitheadh*) plus the independent personal pronoun *mi* 'I' and, most commonly, *sinn* 'we', for the conditional tense. As for the imperative, first- and third-person forms are infrequent in spoken discourse, despite being still sufficiently common in written language.

10. Since Scottish Gaelic no longer distinguishes between the nominative and accusative cases in both speech and writing as a result of phonetic change, and this case—traditionally referred to as the direct, common, basic, or nominative-accusative case—does not exhibit any additional morphology, it will not be marked in the examples, and only the dative and genitive cases will be explicitly indicated.

11. It is difficult to identify the canonical word order pattern in Celtic languages. As regards Scottish Gaelic, it is generally considered to be typologically a VSO language (MacAuley, 1992; W. Gillies, 1993), as it shows some trademark features of verb-initial languages, such as the use of prepositions, the common placement of adjectives in postnominal position, the presence of clause-initial interrogative particles, or the assignment of genitive case to a direct object (Dryer, 1992).

12. Nowadays there is no distinction between the nominative and accusative case of personal pronouns in Modern Scottish, so it uses the same personal pronouns to represent the syntactic functions of subject and object: *mi* 'I/me', *thu* 'you/you (sg)', *e* 'he/him', *i* 'she/her', *sinn* 'we/us', *sibh* 'you/you (pl)', and *iad* 'they/them'. This common, direct, basic or nominative-accusative case is opposed to an oblique case, which is marked through a preposition.

13. A few scholars (Windisch (1878); Fraser (1912); Pedersen (Pedersen, 1909–1913 among others), however, analysed the verbal noun as, in many respects, equivalent to the infinitive in other IE languages.

14   Cram (1981, pp. 8–9) mentions other scholars who analysed the verbal noun in Scottish Gaelic either as a noun—such as Stewart (1801/1812), Munro (1835/1843), Forbes (1843/1848), H. C. Gillies (1896), and MacLaren (1923), or as a verb, including Shaw (1778), Currie (1828), and Nicolson (1936).

15   Malchukov (2019) proposes a similar evolutionary path for the English gerund and appears to generalize that cross-linguistically non-finite forms may exhibit both verbal and nominal properties as a result of processes of nominalization and verbalization that occur within a language due to analogies established between specific constructions.

16   See Letuchiy (2023) and Rijkhoff (2023) for an account of the characteristics that verbs and nouns, respectively, most commonly exhibit cross-linguistically.

17   Other Celtic languages have distinctive syntactic contexts, distinct from those discussed in this section for Scottish Gaelic, in which the nominal nature of the verbal noun is likewise manifested. Among these are, for instance: (1) the parallelism found in constructions involving regular nouns and verbal nouns with respect to mutational phenomena in Welsh (Willis, 1988, p. 209); (2), the periphrastic construction consisting of a sentence-initial verbal noun plus a preverbal particle and an inflected form of a verb meaning 'do' in Breton (Timm, 1990, pp. 191–92); and (3), and the requirement for relative clause complementation when the verbal noun appears in sentence-initial position and the formation of genitive attributes to express modality in Welsh (Asmus, 2025, pp. 3, 4).

18   Although it was common in Old Irish (Disterheft, 1980, pp. 137, 148), verbal nouns do not appear to function frequently as subjects of passive sentences in Modern Scottish Gaelic:

E.g., a. active:

Chuala	mi	an	seinn.
hear.PAST	1SG	3PL.POSS	sing.VN

'I heard their singing.'

b. passive:

! Chaidh	an	seinn	a	chluintinn	(leam).
go.PAST	3PL.POSS	sing.VN	INV	hear.VN	with.1SG

'Their singing was heard (by me).'

19   In compounds like this the adjective precedes the nominal element.

20   In the early stages of all Celtic languages, the complement of a verbal noun consistently exhibited genitive case (Russell, 2015, p. 1237). However, it is now being gradually common to replace the genitive with the common case after verbal nouns, levelling the distinction between verbal nouns and true finite verbs. This test is not as reliable as the previous ones since these environments of genitive case are the minority. As can be seen in Section 5.2, in most circumstances the objects of verbal nouns appear in the common case: after modals (66), in many aspectual constructions (63), in complement subordinate clauses (35), and in constructions involving non-verbal predicates (61).

21   The purposive particle *a* is a reduced form of *do*, which was historically a preposition.

22   As this study examines whether verbal nouns should be analysed as nominal or verbal elements, I will, for the time being, employ the term 'possessives', instead of the more commonly used labels such as 'possessive adjectives' or 'pronominal pronouns', to refer to *mo*^{L} 'me', *do*^{L} 'you', *a*^{L} 'him', *a* 'her', *ar* 'us', *(bh)ur* 'you', *an/am* 'them'., in order to avoid taking a stance prior to reaching any conclusions, as, depending on whether verbal nouns are considered to be nouns or verbs, the possessive element should be analysed as a determiner or a pronoun, respectively.

23   Nowadays there appears to be a growing tendency to replace the prepositional possessive objects (a) with object personal pronouns (b) after the verbal noun in the progressive and purposive constructions, although this may not be accepted amongst most fluent heritage speakers:

E.g., a.

Tha	iad	gam	faicinn.
be.PRES	3PL	at.1SG	see.VN

'They are seeing them.'

b.

Tha	iad	a´	faicinn	iad.
be.PRES	3PL	PROG	see.VN	3PL

'They are seeing them.'

The same trend appears to be observable in Modern Irish as well (Ó Siadhail, 1989, p. 277).

24   See Thurneysen (Thurneysen, 1946/1980, pp. 447–455) for evidence of the nominal character of verbal nouns in Old Irish in terms of declension and derivation. According to Russell (1995, pp. 260–261), these suffixes, which are indistinguishable from general derivational noun suffixes, probably evolved through the historical specialization of general action noun markers, often being aligned with weak verbal forms, most of which originated from denominal or deadjectival sources. Likewise, Disterheft (1980, p. 16), following Thurneysen (Thurneysen, 1946/1980, pp. 445–455), enumerates twelve suffixes employed in the formation of

verbal nouns in Old Irish, showing that six of these suffixes are not attested as markers of verbal nouns or infinitives in other IE languages.

25 In addition to the existence of multiple verbal noun suffixes, Lamb (2024, p. 198) also notes that there is considerable diatopic variation in the use of these suffixes with certain verbal nouns.

26 A more common option for this sentence could be as follows:

E.g., | Tha | iad | air | iad | fhèin | a | chuideachadh. |
|---|---|---|---|---|---|---|
| be.PRES | 3PL | PERF | 3PL | REFL | INV | help.VN |

'They have helped themselves.'

On the other hand, it is important to note, however, that the reflexive *fhèin* may also accompany adverbs and adjectives, functioning as an intensifier:

E.g., | Bha | i | cianail | fhèin | brèagha. |
|---|---|---|---|---|
| be.PAST | 3SG.F | terribly | REFL | pretty |

'She was really very pretty.'

27 In certain constructions (37 & 51), the pronominal object appears in the form of a prepositional possessive rather than a possessive, as illustrated in this example.

28 Furthermore, the reduced form of the preposition *do* 'to', namely *a*, in the expression of the prospective aspect would also trigger lenition of the initial sound of the verbal noun, which further supports its analysis as a preposition rather than as a particle:

E.g., | Tha | an | tidsear | a´ | dol | a | chuideachadh | an | oileanaich. |
|---|---|---|---|---|---|---|---|---|
| be.PRES | the | teacher | PROG | go.VN | PURP | help.VN | the.GEN | student.GEN |

'The teacher is going to help the student.'

29 Like verbal nouns, deverbal nouns are also derived from verbs; however, unlike the former, the latter function grammatically as nouns, as they do not retain verbal properties.

30 Contexts in other Celtic languages are distinct from those examined in this section for Scottish Gaelic, in which the verbal nature of the verbal noun is also demonstrated. These contexts include: (1) the possibility of the verbal noun following an independent subject to indicate past action in narrative; (2) the use of the verbal noun as an imperative in Breton (Timm, 1990, pp. 195–196); and (3), and the replacement of a finite verb with a verbal noun in coordination if the subject remains the same, in Welsh (Lewis & Pedersen, 1931, p. 316; Asmus, 2025, p. 8).

31 There are also instances, however, in which the verbal noun and the deverbal noun share the same morphological form, as in *cadal* (vn/n) (<*cadail* (v) 'sleep'), *sodal* (vn/n) (<*sodail* (v) 'flatter'), or *gearan* (vn/n) (<*gearain* (v) 'complain').

32 Moreover, as Russell (2015, p. 1231) points out, new denominal verbs have emerged from verbal nouns to replace older, more irregular verbs in Irish.

33 As discussed in Section 5.1, there are other contexts, such as the expression of the progressive (19) and purposive (20) aspect, in which the object of a verbal noun takes the genitive case, which might lead us to suppose that it behaves like the complement of a noun. However, the fact that, aside from these few contexts, the common case is the norm with verbal nouns in Scottish Gaelic suggests that verbal nouns may be verbal in nature.

34 As previously discussed, in certain constructions such as those expressing the progressive, stative, and predictive aspects, the verbal noun precedes its complement.

35 One difficulty in applying this test is that, in Scottish Gaelic, adverbs can be marked formally to distinguish them from adjectives, or not at all. Adverbs are usually adjectives preceded by the adverbializing particle *gu* but sometimes there is no formal marking so it is not always clear whether we are dealing with an adverb or an adjective.

36 In such constructions, the nominal direct object precedes the verbal noun, with a leniting particle *a* intervening. This particle is commonly referred to as the inverting particle, and the construction in which it appears is frequently described as a small clause.

37 Like many other languages, including English, the purposive aspect construction requires the combination of *dol*, the verbal noun of *rach* 'go', and the verbal noun of a lexical verb.

38 Since the subordinate clause contains the progressive particle, it could be interpreted as a reduced relative clause, so the function of the verbal noun in this construction may be considered adjectival.

39 The non-clefted version of this construction would be as follows:

E.g., | Tha | ùidh | agam | ann | an | ceannachd | an | taighe | sin. |
|---|---|---|---|---|---|---|---|---|
| be.PRES | interest | at.1SG | in.3G.M | the.DAT | buy.VN.DAT | the.GEN | house.GEN | DEM.DIST |

'I am thinking about the purchase of the house.'

However, a more natural way to convey the same meaning would be through the following construction:

E.g.,
Tha	ùidh	agam	a	bhith	a'	ceannachan	taighe	sin.
be.PRES	interest	at.1SG	part	be.INF	PROG	buy.VN	the.GEN house.GEN	DEM.DIST

'I am thinking about the purchase of the house.'

[40] Many contemporary speakers generally do not accept small clauses of this type when the subject of the embedded clause is not coreferential with that of the matrix clause. As a result, they are likely to interpret the sentence as 'I would like to win Michael', rather than as intended. To convey the intended meaning unambiguously, speakers would instead prefer the construction *Bu mhath leam Mìcheal buannachadh.*

[41] Another context, which seems to reveal clear verbal properties of the verbal noun, can be observed when this category occurs in adverbial subordinate clauses expressing purpose, if it were not for the fact that it requires an object in the genitive case if it is definite:

E.g.,
Thàinig	mi	a	chàradh	a'	mhullaich.
come.PAST	1SG.s	PURP	repair.VN	the.GEN	roof.GEN

'I came to repair the roof.'

[42] One possible exception is *air*, which, as noted by Lamb (2024, p. 247), appears to result from the merger of three early Gaelic prepositions: *air* meaning 'before', *for* meaning 'on', and *iar n-* meaning 'after'.

[43] These two distinctions between particles and prepositions do not seem to appear consistently in other cases, however. Thus, for example, unlike the particles *ag/a* 'at' and *an(n)* 'in', which may convey the progressive and stative aspects, neither the particle *air* 'on', which is used to express the perfect aspect, nor the particle *gu(s)* 'to', which occurs in the expression of prospective aspect, can be contracted with the possessive, as is shown in (a) and (b). Likewise, the particle *a*, which is employed in the construction of the predictive aspect, shares the same pronunciation as the homonymous preposition, which is the reduced form of the preposition *do* 'to', as illustrated in (c). Finally, the particle *air* 'on' is generally omitted in coordination, as can be seen in (d):

e.g., a.
Tha	iad	air	mo	chuideachadh.
be.PRES	3PL	PERF	1SG	help.VN

'They have helped me.'

b.
Tha	mi	gu(s)	an	leughadh.
be.PRES	1SG	to	3PL	read.VN

'I am about to read them.'

c.
Tha	sinn	a'	dol	a^L /ə/	dhol	a /ə/	Ghlaschu	a-màireach.
be.PRES	1PL	PROG	go.VN	PURP	go.VN	to	Glasgow	tomorrow

'We are going to go to Glasgow tomorrow.'

d.
Tha	i	air	an	rùm	a	ghlanadh	agus (air)	an	càr	a
be.PRES	3SG	PERF	the	room	INV	clean.VN	and	PERF	the	car	INV

nighe.
wash.VN

'She has cleaned and washed her car.'

[44] The verb *theab* is commonly regarded as a defective verb giving rise to impersonal constructions that seem to be semantically equivalent to sentences containing the adverb 'almost' or 'nearly' in English (Lamb, 2024, p. 348).

[45] According to Haspelmath (1995, p. 17), converbs, which are non-finite forms used primarily to serve an adverbial function, probably originated as either adpositional forms of verbal nouns that became independent of their original paradigm or as (co-predicative) participles that lost their agreement properties.

[46] Some authors (Thurneysen, 1946/1980; Watkins, 1969; Jeffers, 1978; Russell, 1995, 2015) argue that the gerundive of necessity persisted up to the Old Irish period. Likewise, Thurneysen (Thurneysen, 1946/1980, p. 372) and Russell (1995, p. 276) present two examples from Old Irish that might represent reflexes of earlier present participles.

[47] Although several authors—Croft (1990, 2001, 2007), among them—identify three functions (reference, predication, and modification) as candidates for the building blocks of human language, I prefer to set aside the reference to the word class adjective in this discussion, along with its prototypical semantic class of propriety and function of modification, as I hold the view that language is fundamentally used to refer and to predicate (Van Valin, 2005, p. 1).

[48] It seems reasonable to assume that in prehistoric times, and like language acquisition in newborns, the earliest forms of language—prior to the development of a linguistic system—were probably composed of sequences of sounds intended to convey basic concepts, such natural sounds, warning calls, kinship relations and fundamental emotions and actions. These early and simple utterances may not have belonged to distinct grammatical categories and their speakers only became aware of the existence of categories when they gradually integrated words into syntactic structures.

49   Similarly, Heine and Kuteva (2007) put forward the idea that language was originally very simple, probably comprising only a single category, possibly the noun.

50   And even individual Celtic languages since, as observed in the analysis of specific contexts, the use of verbal nouns and the constructions in which they appear are not entirely uniform across all Celtic languages.

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