The Old Irish Article[1]

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Although the Old Irish article *in* is standardly described as a marker of definiteness, it also co-occurs with indefinite nouns. This phenomenon has long been known in the literature, but thus far even an adequate descriptive account of it has proven elusive. This article advances two claims about the distribution of *in*. First, indefinite referents introduced by *in* become the focal centre of the discourse. Second, *in* co-occurs with both definite and indefinite noun phrases because it is a signal to the addressee to retrieve or establish a mental representation of the referent. Although the distribution of *in* is unusual within Indo-European, it is actually predicted by the reference hierarchy of Dryer (2014). The Old Irish article is thus of particular importance for our understanding of the typology of article systems and referential marking.

1. Introduction

Old Irish is standardly described as having a definite article, but not an indefinite one (e.g., Borsley and Roberts 1996: 46, Ronan 2004: 133, Stifter 2009: 70), which is supported by examples such as the following:

(1)   *Old Irish* in
        boí **cú** occo. im·dīched **in cú** Laigniu huili.
        'He [= Mac Da Thó] had **a dog**. **The dog** protected all
        the Leinstermen.'   *SMMD* 1.1–2

Indefinite *cú* 'a dog' in the first sentence lacks a determiner, but definite *cú* in the second is preceded by the article *in*. The article is not limited to definite noun phrases, however:

(2)   *Indefinite* in
        ba dorcha ind adaig. fóbair a n-armach. co n-acca ara chind **in fer** 7
        leth a chind fair 7 leth fir aile for a muin.
        'Dark was the night. They made for their arms. He saw before him
        a man, and half his head on him and the half of another man on his
        back.'   *LU* 4933 (tr. Ronan 2004: 134)

The referent of *in fer* is new to the discourse and indefinite (*GOI*: §470),
which is why it is rendered 'a man'. The appearance of *in* here with an
indefinite referent is surprising, since no article precedes indefinite *cú* 'a dog'
in example (1). Indeed, from a typological perspective, the co-occurrence
of *in* with both definite and indefinite referents is unexpected, since such
domain-crossing articles are uncommon among the world's languages (Becker
2018: 137).

     The distribution of *in* prompts the following two questions, which are
the focus of this study:

(3)   *Questions*
        a. What exactly is the distribution of *in*?

        b. How do we motivate the ability of *in* to co-occur with both
            definite and indefinite referents?

A number of scholars have attempted to answer the first question, most notably
Thurneysen (*GOI*: §470) and Ronan (2004). The former maintains that *in*
co-occurs with indefinite specific referents, that is, indefinite expressions that
refer to a specific individual of the type denoted by the head noun. This is an
important insight, since to the best of my knowledge all indefinite referents
marked with *in* are in fact specific.[2] However, Thurneysen's analysis stands in
need of refinement since *in* does not co-occur with all indefinite specific noun
phrases. Ronan (2004) emphasises the pragmatic characteristics of referents
preceded by *in* and notes that they are often supernatural entities. Ronan is
right that pragmatic factors play a critical role in the use of indefinite *in*, but
her account suffers from both empirical and theoretical weaknesses.

     My own analysis takes Thurneysen's observation as its point of departure
– indefinite *in* is restricted to indefinite specific referents. I refine his analysis

by identifying the discourse factors that constrain the use of indefinite *in*. The central claim of this paper is that indefinite *in* signals the discourse prominence or 'noteworthiness' (a term borrowed from Ionin 2006) of the referent that it precedes. This discourse prominence manifests itself in two ways. First, the indefinite referent introduced by *in* becomes the focal centre of the discourse. Second, it continues to be referred to in subsequent utterances. I use Centring Theory to provide an explicit account of how indefinite referents introduced with *in* function within discourse. Under my analysis, such referents are similar to the pragmatically specific indefinite referents of Dryer (2014).

Turning to the second question, I argue that *in* is a signal either to retrieve a mental representation of a referent or to establish one (cf. von Heusinger 2019: 165). The former is characteristic of definite referents marked with *in*, the latter of indefinite referents. Crucially, indefinite referents introduced with *in* are described in more detail after their introduction. On the basis of this information the addressee builds a mental representation of the referent. The use of *in* as a signal to establish a mental representation is not limited to indefinite referents, but is also found with definite referents (in particular, the establishing type, which is introduced in example 5 below).

On my analysis, the distribution of Old Irish *in* is predicted by the reference hierarchy of Dryer (2014: e235):[3]

(4)   *Reference Hierarchy*
      Anaphoric Definites > Non-Anaphoric Definites > Pragmatically Specific Indefinites > Pragmatically Non-Specific (but Semantically Specific) Definites > Semantically Non-Specific Indefinites

The reference hierarchy ranks referents according to prominence (cf. Givón 1978, Greenberg 1978). Dryer (2014: e235) contends that if a language uses an article for more than one referent type on the hierarchy, the referent types must be contiguous. So if an article is used with anaphoric definites and pragmatically specific indefinites, it is predicted to be used with non-anaphoric definites as well. Old Irish *in* bears out this prediction. As laid out in detail in sections 2 and 4 below, *in* systematically occurs with anaphoric definites, non-anaphoric definites, and pragmatically specific indefinites. Pragmatically non-specific definites and semantically non-specific indefinites lack determiners in Old Irish.

The data for this study have been culled from *Scéla Mucce Meic Dathó* (*SMMD*; Thurneysen 1935), *Togail Bruidne Da Derga* (*TBDD*; Knott 1936), and *Táin Bó Froích* (*TBF*; Meid 2015). In addition, examples from previous studies (e.g., *GOI*, Ronan 2004) have been used.[4] The focus is thus on prose data. As a reviewer rightly points out, the distribution of *in* in poetic texts differs. I leave it for future research to establish how much of the analysis presented here can be extended to the poetic data.

The remainder of this paper is structured as follows. Section 2 presents an overview of *in* as a definite article. Section 3 critically reviews previous literature on indefinite *in* and highlights a number of shortcomings. In section 4, I introduce Centring Theory, which is a framework for analysing referential marking and local coherence in discourse. Section 5 uses Centring Theory to substantiate the claim that indefinite *in* is a marker of discourse prominence. Section 6 then motivates the semantic and pragmatic range of *in*. Section 7 brings the paper to a close.

2. Old Irish *in* as a definite article

An adequate analysis of *in* requires a dossier of the referential types with which the determiner can be used. This section provides an updated description of the definite contexts in which *in* is found, since treatments such as *GOI* are now long out of date.

2.1. Pragmatically definite referents

A distinction between pragmatically and semantically definite referents, which was originally proposed by Löbner (1985: 298–9), has proven invaluable for both synchronic and diachronic analysis (e.g., Himmelmann 1997: 38, Napoli 2009: 581, Müth 2011: 13–15, Wendtland 2011: 19–24). The two types differ according to the role that contextual information plays in the identification of the referent of the noun phrase.[5]

A pragmatically definite referent can only be identified on the basis of contextual information:

(5)   *Pragmatic definites*
       a. *Deictic*
           Close **the window**.

b. *Anaphoric*
John bought a book and a magazine. **The book** was expensive.
(Schwarz 2013: 535)

c. *Recognitional*
Did you end up going to **the party** [that you were telling me about]?

d. *Establishing*
Did you hear **the news** that they are going to shut down the department?

Deictic referents are identifiable based on shared physical context (Becker 2018: 57–8, Flick 2020: 73–4). So in example (5a) there needs to be a window in the immediate environment for the definite expression to be felicitous. Anaphoric referents are identified on the basis of identity with a previously mentioned referent (Becker 2018: 60, Flick 2020:74–5). In example (5b), *the book* refers to the book introduced in the previous sentence. Recognitional referents are identifiable on the basis of experience shared between speaker and addressee or common knowledge (Himmelmann 1997: 61–82, Becker 2018: 59, Flick 2020: 77–8). In example (5c), a previous conversation between speaker and addressee allows the latter to identify the specific party that the former is referring to. Establishing referents are identifiable on the basis of the information supplied in an adjunct (Hawkins 1978: 130–49, Becker 2018: 64–6), such as the clause *that they are going to shut down the department*. In example (5d), *the news* is both discourse- and hearer-new. It is the information in the adjunct that licenses the use of the definite article in such examples.

The article *in* is used systematically with all of the pragmatically definite referent types above:

(6) *Deictic*
'is maith **in mucc**,' ar Conchobar.
'"The pig is good," said Conchobar.'   *SMMD* 6

(7) *Anaphoric* (Ronan 2004: 134)
a. Buí **rí** amra airegda for Érinn, Eochaid Feidleach a ainm.
'There was **a** famous noble **king** of Ériu, Echu Feidlech
his name.'   *TBDD* 1.1–1.2

b. gabais saint **in rí** n-impe fo cétóir.
    'A desire seized **the king** at once.'   *TBDD* 1.1–1.2

(8) *Recognitional*
     tre thindnacul **inna n-dánæ** in spirito do chách[6]
     'through the bestowal of **the gifts** of the spirit upon everyone'
                                                                    Wb. 21c2

(9) *Establishing* (*GOI*: §471)
     'na tair!' ol Ailill, 'co·tucae croíb dam di**n chaírthenn** tall fil i
     mbruuch na habann.'
     '"Do not come back!," said Ailill, "until you bring me a branch
     of **the rowan**-tree which is over there on the bank of the river."'
                                              TBF 17.178–9 (tr. Meid 2015: 69)

Example (6) is uttered by Conchobar just after the pig has been brought into the physical context. Example (7a) is the opening sentence of the *Togail Bruidne Da Derga*, which introduces the king Echu Feidlech, to whom reference is again made in example (7b), where the definite article is used. In example (8), *dánae* 'gifts' is definite because the gifts of the spirit are familiar from cultural knowledge (*GOI*: §472). In example (9), *caírthenn* 'rowan tree' is new to the discourse and is preceded by a definite article because of the accompanying relative clause *tall fil i mbruuch na habann* 'which is over there on the bank of the river', which provides information to make the referent identifiable. In section 6 below I claim that this use of *in* has an affinity with indefinite *in*.

2.2. Semantically definite referents
In contrast to pragmatically definite referents, a semantically definite referent can be identified without information from the immediate situation or context of utterance, as illustrated by the following examples:

(10) *Semantic definites*
      a. *Contextually unique*
          What's the best way to **the centre**?

      b. *Absolutely unique*
          It takes **the earth** 365.3 days to orbit **the sun**.

    c. *Bridging*
       Eva bought a book. **The author** is French. (Becker 2018: 24)

A contextually unique referent is identifiable on account of its being the only salient referent of its kind in the discourse (Becker 2018: 63–4). In example (10a), the use of the definite article in *the centre* presumes that there is a unique centre in that context. An absolutely unique referent is unambiguously identifiable independent of the discourse situation or broader context (Becker 2018: 58–9), as is the case with *the sun* and *the earth* in example (10b). I include in this category the use of a definite article with superlatives and ordinals, e.g., *the hardest problem* or *the second stop* (Müth 2011: 14). A bridging referent is identifiable on the basis of a link with a previously identified referent (Becker 2018: 60–3). So in example (10c) it is the relationship between book and author that allows for the felicitous use of the definite article.

    Old Irish *in* is found consistently with the following semantically definite referents:

(11) *Contextually unique*
      atát gillai dún is'taig im·rul<l>atar **in cocrích**.
      'We have men in the house who have raided **the borderland**.'
      SMMD 6.11–2

(12) *Bridging*
    a. to·théit Ingcél do thoiscélad for**sin mBruidin**…
      'Ingcél went to reconnoitre **the hostel**…'   *TBDD* 71.640

    b. cindus sin, a Iṅgcél? for Fer Rogain.
      'How was it there, Ingcél? said Fer Rogain.'
      Cip indus, for Iṅgcél, is ríghda **in costud**, i[s] slúagda **a seiseilbe**, is flaitheamda **a fúaim**.
      'However it was, said Iṅgcél, **the feasting** is royal, **the clamor** like that of a host, **the noise** princely.'   *TBDD* 73.654–6

In example (11), *cocrích* refers to a unique borderland in the context, although there are many possible borderlands in general. In example (12a), Ingcél is

sent to canvass the hostel. In the portion of his report in example (12b), he uses the definite article with three nouns, whose referents are new to the discourse: *costud* 'celebration', *seiseilbe* 'clamor', and *fúaim* 'noise'. The definite article is felicitous here since the existence of these referents can be assumed in a hostel.

Absolutely unique referents generally do not require an article:[7]

(13) *Absolutely unique* (*GOI*: §470.a)
    a. ésc(a)e 'the moon'
    b. grían 'the sun'
    c. ecl(a)is 'the church'
    d. domun 'the world'
    e. geinti 'the Gentiles'
    f. fáithi 'the Prophets'
    g. apstil 'the Apostles'

It is important to recognise that absolutely unique referents can co-occur with *in*—for instance, when they are anaphoric referents (as noted in *GOI*: §472). What the data above are intended to show is that absolutely unique referents do not *require* the article.

It is not the case that a determiner must occur systematically in all of the contexts in examples (5) and (10) to qualify as a definite article. Becker (2018: 78), for instance, considers an article definite if it occurs systematically with anaphoric, contextually unique, bridging, and establishing referents. Old Irish *in* is used systematically in all of these contexts.

3. Previous analyses of indefinite *in*

3.1. Thurneysen 1946

The starting point for my analysis of indefinite *in* is Thurneysen (*GOI*: §470), who writes that 'the article is often used to indicate an individual person or thing that is determinate for the speaker (or author) but hitherto unknown to the characters of the narrative and to the hearer (or reader).' Two types of indefinite referents are standardly recognised in the literature, specific and non-specific (Hawkins 1978: 203–4, Lyons 1999: 57–60, Becker 2018: 66–7). Traditionally, specific referents are characterised as identifiable by the speaker

but not the hearer.[8] By contrast, non-specific referents cannot be identified by either the speaker or the hearer (Becker 2018: 66). This leads to the breakdown in Table 1.

Table 1. Definite, indefinite specific, and indefinite non-specific referents

	Definite	Indefinite Specific	Indefinite Non-Specific
Identifiable by Speaker	✓	✓	✗
Identifiable by Hearer	✓	✗	✗

The English indefinite article *a(n)* can mark both specific and non-specific referents:

(15) *Indefinites*
    a. *Specific*
        I started reading **an amazing book** yesterday.

    b. *Non-specific*
        Do you have **a pen**? Any pen will do. (Becker 2018: 77)

In example (15a), the phrase *an amazing book* denotes a specific book, but *a pen* in (15b) does not correspond to any particular pen (Becker 2018: 66–8).

Coming back to Old Irish, Thurneysen is arguing *avant la lettre* that *in* marks indefinite specific referents. According to his analysis, *in* would be an example of an inclusive-specific article:

(16) *Inclusive-specific article* (Becker 2018: 72)
    An inclusive-specific article is an article that systematically occurs with anaphoric, contextually unique, and specific referents. It may also occur with other types of definite referents. It does not occur with nonspecific referents.

As demonstrated above in sections 2.1 and 2.2 above, *in* occurs systematically with anaphoric and contextually unique referents. Thurneysen's analysis thus amounts to adding specific referents to its range of use. His account makes two predictions:

(17) *Predictions of Thurneysen's account*
 a. Indefinite non-specific referents are never preceded by *in*.
 b. Indefinite specific referents are systematically marked with *in*.

The first prediction is borne out, the second one is not. Indefinite non-specific referents in my corpus never co-occur with *in*:

(18) *Non-specific indefinite referents*
 a. *Indefinite non-count*
 ro·lá di*diu* i **socht** innī Mac Dathó co·rrabe tri thráth cen **dig** cen **biad**, acht 'co immorchor ón taíb co araile.
 'Then the aforementioned Mac Da Thó fell into **silence** with the result that he was two days without **drink** (and) without **food**, but tossing from one (lit. the) side to another.'   *SMMD* 3.1–2

 b. *Indefinite count singular*
 ocus do·bértar tri fichit cét lilgach hi cétóir ocus **carpat** ocus da ech bas dech la Connachta.
 'And three score hundred dairy cows will be given at once and **a chariot** and two horses, the best in Connaught.'   *SMMD* 2.4–6

 c. *Indefinite count plural*
 'segait for cach leth do thabairt **bó** ocus **ban** ocus **brat**,' olsi.
 '"They roam each part to carry off **cows** and **women** and **booty**," she said.'   *TBF* 27.321–2

These examples illustrate bare indefinite mass nouns (18a), bare indefinite singular count nouns (18b), and bare indefinite plurals (18c). Outside of my corpus, I am not aware of any examples in which *in* co-occurs with an indefinite non-specific referent.

   The second prediction of Thurneysen's analysis (example 17b), that indefinite specifics are systematically marked by *in*, is not borne out by the data:

(19) *Bare indefinite specific*
 at·chonnarc and **imdae** 7 triar indi.
 'I then saw **an apartment** with three men in it.'   *TBDD* 82.745

Since it is a specific *imdae* 'apartment' that the speaker saw, Thurneysen's analysis predicts that it be preceded by the article. There is no shortage of examples that upset this prediction. Thurneysen's analysis thus predicts that *in* should co-occur with indefinite referents far more often than it actually does.

3.2. Ronan 2004

Ronan (2004: 133) argues that pragmatic factors constrain the use of indefinite *in*. Her ultimate claim is that *in* is a cataphoric deictic element that serves as an 'attention marker' (p. 133) or 'topicality marker' (p. 145). Foundational to her analysis are the following observations about the use of indefinite *in* in *An Teanga Bithnua* and *Táin Bó Cúailgne* (Ronan 2004: 136–8):

(20) *Indefinite* in
    a. The referent is a supernatural event.

    b. The referent is a character with supernatural characteristics (e.g., from the *síd*).

    c. The referent is a strange natural phenomenon.

These properties are illustrated by the following examples:

(21) a. *Supernatural event*
      talmaidiu iarsein, intan ba deadh n-aidche inna casc, co clos ni, **a n-deilm** isnaib neluib amal fhogur torann.
      'Suddenly then, when it was the end of the night of Easter, something was heard, **a rumbling** in the clouds like a crash of thunder.' *TBn* 6

    b. *Supernatural being*
      co n·acca ara chind **in fer** 7 leth a chind fair 7 leth fir aile for a muin.
      'He saw in front of him **a man** with half his head on himself and half of another man on his back.' *LU* 4932–3

    c. *Strange natural phenomenon*
      fecht n-aill forréccaig Mac Roth in mag. Co-n'facca ní, **in glascheó mór** ra ercc in comas eter nem 7 talmain.

> 'Mac Roth scanned the plain a second time. He saw **a great grey mist** that filled the space between heaven and earth.'
>
> <div align="right">TBC-LL 4183</div>

The *deilm* 'rumbling' in example (21a) is the product of a supernatural event. In example (21b), *fer* 'man' denotes a monstrous creature. Ronan (2004: 138) describes the grey mist in example (21c) as a strange natural phenomenon, although she does not explain what makes it so strange.

On the basis of these observations, Ronan (2004: 142) argues that the pragmatic importance of the referent plays a role in the use of indefinite specific *in*. She identifies two types of new characters in her corpus, which differ primarily in their referential persistence, that is, how long they remain the focus of the narrative after being introduced. The first type is introduced at 'semantic high points' in the narrative but exhibits limited referential persistence. The mysterious beings that Cú Chulainn encounters in the *Táin* exemplify this type. In the second type, major characters are introduced that shift the direction of the narrative. Such characters are accordingly characterised by extended referential persistence. Ronan (2004: 142) illustrates this second type with the following example from the *Echtra Condlai*, which introduces one of the central characters in the narrative:

(22) lá ro boí Condla Rúad mac Cuind Chetchathaig for lám a athar
      i n-uachtor Usnig. Co n-acca **in mnaí** i n-étuch anetargnaid na
      dochum.
      'One day Condla the Red, son of Conn of the Hundred Battles was
      next to his father on the Hill of Uisneach. He saw **a woman** in
      strange clothing coming towards him.'   *LU* 9994

She goes on explain that the use of *in* reflects the importance of the character for the subsequent discourse (Ronan 2004: 143).[9]

Ronan compares this use of *in* with the English indefinite specific *this*, which is illustrated by the following example (from Wright and Givón 1987: 16):

(23) Dear Abby:
      There's **this guy** I've been going with for near three years.

This is the beginning of the letter so *this guy* is new to the discourse and unidentifiable. Ronan (2004: 144) goes so far as to assert that *co n-acca in fer* is equivalent to English 'He saw this man'. While I disagree with this specific claim, Ronan's comparison of indefinite *in* and indefinite *this* is nevertheless an important one, which I will return to below.

Ronan's account suffers from a number of problems. To start with empirical issues, the supernatural aspect of the indefinite referents introduced with *in* is overstated. It is clear from her own data that indefinite specific referents introduced by *in* need not have anything to do with the supernatural. To the extent that there is an association between *in* and the supernatural, it is an epiphenomenon of text type, not a linguistically significant generalisation. Second, the predictions that the account makes are unclear. I agree with Ronan that the indefinite specific referents introduced by *in* are pragmatically important, but how is pragmatic importance to be defined? Without a clear answer to this question, Ronan's analysis is unable to predict when an indefinite specific referent should be preceded by *in*. Finally, Ronan is unable to reconcile the use of *in* as a definite article with the *in* that she identifies as an attention marker. Why is *in* used in these distinct ways? Despite these problems, Ronan is correct that pragmatics plays a critical role in the distribution of indefinite specific *in*. Her attention to the referential persistence of referents in particular is a crucial insight. In the next two sections, I present a new account of indefinite *in* that builds on some of Ronan's insights while avoiding the empirical and theoretical shortcomings of her account.

4. A new approach

As noted above in section 3.1, the essential challenge of indefinite *in* is to identify the types of indefinite specific referents with which it co-occurs, since it does not occur with all indefinite specific noun phrases. To do this, a framework is needed that allows one to define notions such as 'pragmatic importance' or 'discourse prominence' precisely. In this section, I introduce Centring Theory, which provides precisely that.

4.1. Centring Theory

Centring Theory is a framework for analysing local coherence and salience in discourse, where *local* refers to relations among discourse segments (Grosz et al. 1995, Walker et al. 1998b). Every utterance U_i in a discourse segment introduces a set of discourse entities (i.e., referents). Centres are entities that link one utterance to another in a discourse segment. There are two types of centres, forward-looking centres and backward-looking centres. The set of entities evoked in an utterance U_i forms the set of forward-looking centres, which is abbreviated $C_f(U_i)$. The $C_f(U_i)$ is ranked according to discourse salience (Walker et al. 1998a: 3, Strube and Hahn 1999: 310) and is discussed further below. The highest ranked entity of the $C_f(U_i)$ is known as the *preferred centre* and is predicted to be the backward-looking centre of the next utterance $C_f(U_{i+1})$ (Walker et al. 1998b: 4). The backward-looking centre C_b is the entity that the current utterance is focused on and also links the current utterance to the previous one (Poesio et al. 2004: 311).[10]

The relationships between utterances (known as transition types) are categorised according to the properties of the discourse centres in each utterance. More specifically, transitions between utterances are classified according to two factors. The first is whether or not the C_b remains the same from (U_{i-1}) to (U_i). The second is whether the $C_b(U_i)$ and $C_p(U_i)$ are the same discourse entity. The four possible combinations of values for these two factors yield four transition types, which are presented in Table 2.

Table 2. Typology of transitions

	$C_b(U_i) = C_b(U_{i-1})$ or $C_b(U_{i-1}) = \{\}$	$C_b(U_i) \neq C_b(U_{i-1})$
$C_b(U_i) = C_p(U_i)$	Continue	Smooth Shift
$C_b(U_i) \neq C_p(U_i)$	Retain	Rough Shift

The following sets of constraints and rules are commonly assumed in Centring Theory:

(24) *Constraints*
    a. *Constraint 1*
       There is precisely one backward-looking centre per utterance (Walker et al. 1998b: 4).

b. *Constraint 2* (Poesio et al. 2004: 313)
Every entity in the set of forward-looking centres in $C_f(U_i)$ must be realised in U_i.

c. *Constraint 3* (Poesio et al. 2004: 313)
The backward-looking centre C_b of an utterance U_i is the highest ranked C_f of U_{i-1} that is realised in U_i (Walker et al. 1994: 6, Hedberg 2010: 1831).

Constraint one limits the number of backward-looking centres in each utterance to one. Constraint two requires that every entity in the set of forward-looking centres be lexically or morphologically realised. Constraint three demands that the backward-looking centre of an utterance be the highest ranked forward-looking centre of the previous utterance that is realised in the utterance. This constraint will be particularly important for the analysis of *in* in section 4 below.

The following are the two rules of Centring Theory:

(25) *Pronoun rule* (cf. Walker et al. 1998a: 4)
If some element of the previous utterance U_{i-1} is realised as an overt or null pronoun in the current utterance U_i, then so is the C_b of the current utterance U_i.

(26) *Ordering rule* (Walker et al. 1998a: 4)
Transition states are ordered. The continue transition is preferred to the retain transition, which is preferred to the smooth-shift transition, which is preferred to the rough-shift transition.

The intuition behind the pronoun rule is that only the most salient entities of an utterance are pronominalised. If the C_b of an utterance is not pronominalised, then no other entity should be. (For discussion of the pronoun rule, see Poesio et al. 2004: 314–15.) The ordering rule reflects discourse coherence and inference load. According to this rule, some transitions between utterances are more coherent than others. A discourse segment centred on the same entity is considered more coherent than one whose centre repeatedly shifts (Chafe 1976, Walker et al. 1998a: 5).

4.2. Ranking

One of the most important aspects of Centring Theory is the ranking of the forward-looking centres (Cote 1998: 55). There are a number of proposals for ranking criteria in the literature, which are based on, for instance, grammatical function (e.g., Brennan et al. 1987, Fisher and McCreary 2007: 13), givenness (e.g., Ballantyne 2004), and information structure (e.g., Strube and Hahn 1999), or some combination thereof. Here I adopt a ranking according to grammatical function:

(27)　*Ranking* (Brennan et al. 1987: 156, Poesio et al. 2004: 319)
　　　SUBJ > OBJ > OBJ2 > OTHERS

According to this hierarchy, subjects (SUBJ) outrank direct objects (OBJ), which in turn outrank indirect objects (OBJ2), which themselves outrank other grammatical roles. I further assume that a possessor outranks a possessum if the latter is inanimate. If it is animate, then the possessum outranks the possessor (Di Eugenio 1998: 125, Hedberg 2010: 1831).

4.3. An illustrative example

The following examples from *Scéla Mucce Meic Dathó* illustrate the basic mechanics of Centring Theory. The narrative begins as follows:

(28)　boí rí amrae for Laignib.
　　　'There was a famous king of Lagin.'　　　　　　　*SMMD* 1.1

> C_f : {KING: *rí*, Lagin: *Laignib*}
> C_b : ∅
> C_t : —

The king is introduced with an existential clause, which lacks a backward-looking centre, since it occurs at the beginning of the discourse. The subject *rí* 'king' outranks *Laignib* 'Lagin' as a forward-looking centre. Since *rí* is the highest ranked forward-looking centre, it is the preferred centre and accordingly is predicted to be the backward-looking centre of the next utterance. This prediction is borne out:

(29) Mac Dathō a ainm.
      'Mac Da Thó his name.'   *SMMD* 1.1

> C_f: {KING: *a*, NAME: *ainm*, MAC DA THÓ: *Mac Dathō*}
> C_b: KING: *a*
> C_t: CONTINUE

This utterance provides more information about the king, who is again the highest ranked forward-looking centre. In the next utterance, a new discourse entity is introduced:

(30) boí cú occo.
      'He had a dog.'   *SMMD* 1.1–2

> C_f: {DOG: *cú*, KING: *occo*}
> C_b: KING: *occo*
> C_t: CONTINUE

Since the dog is an animate possessum, it outranks the king and is the highest ranked forward-looking centre. Note that the king is realised as a pronoun in *occo* 'at him'; in a sentence with only one pronoun, the referent of the pronoun must be the backward-looking centre, as is the case here. Since the dog is the highest ranked forward-looking centre, it is predicted to be the backward-looking centre of the next utterance. This prediction is borne out:

(31) im·dīched in cú Laigniu huili.
      'The dog used to protect all the Leinster people.'   *SMMD* 1.2

> C_f: {DOG: *in cú*, LAGIN: *Laigniu*}
> C_b: DOG: *in cú*
> C_t: SMOOTH SHIFT

The transition from example (30) to (31) is a smooth shift, because the dog is now both the backward-looking centre and the preferred centre of the discourse.

5. Indefinite *in* as a marker of discourse prominence

Against this background, it is now possible to offer a precise characterisation of indefinite *in* as a marker of discourse prominence. Referents marked with indefinite *in* are never the preferred centre of the utterance in which they occur, but become the backward-looking centre of the immediately following utterance. In other words, indefinite *in* introduces a referent that reorients the focal centre of the discourse. It is thus in subsequent utterances that we see the effect of *in*. In this respect, it is similar to indefinite *this* in English (Prince 1981: 235, Wright and Givón 1987, Gernsbacher and Shroyer 1989, Gundel et al. 1993: 277, n. 3, Ionin 2006).

The opening utterances of the *Togail Bruidne Dá Derga* illustrate the behaviour of indefinite *in*:

(32) buí rí amra airegda for Érinn.
      'There was a famed noble king of Ireland.'   *TBDD* 1

C_f: {KING: *rí*, IRELAND: *Érinn*}
C_b : ∅
C_t : —

(33) Eochaid Feidleach a ainm.
      'Eochaid Feidlech his name.'   *TBDD* 1

C_f: {KING: *a*, EOCHAID FEIDLECH: *Eochaid Feidleach*,
      NAME: *ainm*}
C_b : KING: *rí*
C_t : CONTINUE

(34) do·luid feachtus n-ann dar aenach mBreg Léith.
      'Once he went across the plain of Brí Léith.'   *TBDD* 1

C_f: {KING: ∅, BRÍ LÉITH: *mBreg Léith*}
C_b : KING: ∅
C_t : CONTINUE

(35) con·accai **in mnai** for ur in tobair.
       'He saw **a woman** at the side of the well.'   *TBDD* 1

> C_f: {KING: ∅, WOMAN: *mnai*, SIDE: *ur*, WELL: *tobair*}
> C_b : KING: ∅
> C_t : CONTINUE

The narrative begins by introducing a king (Eochaid Feidlech) with an existential clause, as in example (28) above. The king becomes the backward-looking centre of the discourse, a status that he maintains through example (35), in which a woman is introduced with indefinite *in*. Since the king is the preferred centre, he is predicted to be the backward-looking centre of the next utterance. This prediction is upset, however:

(36) 7 cír chuirrél argit co n-ecor de ór acthe.
       'And she had on a bright silver comb with an inlay of gold.'

> C_f: {WOMAN: *acthe*, COMB: *cír*, GOLD: *ór*}
> C_b : WOMAN: *acthe*
> C_t : SMOOTH SHIFT

The woman (Étaín) is now the backward-looking centre, as reflected by the fact that she is the only discourse entity realised with a pronoun. She becomes the backward-looking centre because the preferred centre of the previous utterance (the king) is not realised in this utterance. This is in fact characteristic of indefinite *in*: the indefinite referent introduced with *in* is canonically not the preferred centre of its utterance. It becomes the backward-looking centre of the next utterance because higher-ranked entities are not mentioned. The expected structure of the discourse is thus upset since the preferred centre does not become the backward-looking centre. Once introduced, Étaín remains the focus of the discourse for about forty-six sentences (the precise number will depend on how exactly one counts), which illustrates the referential persistence of indefinite referents introduced with *in*.

The following examples further illustrate the behaviour of indefinite *in*:

(37) a. is and sin [techis] **inn íall én** ’sin mag. luid Cú Chulainn ’n**a**
         diaid…
         ‘Then **a flock of birds** flew out of the plain. Cu Chulainn pursued
         them…’   *TBC-LL* 1706 (tr. Ronan 2004: 133)

      b. in tan didiu buí ann dadaig con·acca **inn-én** forsin forléss a
         ddocum 7 fácaib a énchendaich for lár in tigi.
         ‘When it was night, she saw **a bird** coming to her through the
         roof-window and it left **its** feather hood in the middle of the
         house.’   *TBDD* 7

The crucial property is that after the indefinite referent is introduced with
in it is subsequently realised as a pronoun, which reflects its status as the
backward-looking centre.

   Although the use of indefinite *in* is most common with indefinite objects,
it can also be used with indefinite subjects:

(38) is ed ro gob Conaire cona ṡlúagaib da Áth Clíath.
      ‘Conare set out for Áth Clíath with his troops.’   *TBDD* 38.344–5

C_f: {CONARE: *Conaire*, TROOPS: *ṡlúagaib*,
    ÁTH CLÍATH: *Áth Clíath*}
C_b : ∅
C_t : —

(39) is and do·sn-árraid **in fear** maeldub co n-oenṡúil 7 oenláim 7
      oenchois.
      ‘Then **a man** with black cropped hair with one-eye and one hand and
      one foot overtook them.’   *TBDD* 38.345–6

C_f: {{CONARE, TROOPS}: -*s*-, MAN: *fear*, EYE: *oenṡúil*,
    HAND: *oenláim*, FOOT: *oenchois*}
C_b : {CONARE, TROOPS}: -*s*-
C_t : CONTINUE

(40)   mael garb for suidiu.
       'He has roughly cropped hair.'   *TBDD* 38.346

> C_f: {MAN: *suidiu*, HAIR: *mael*}
> C_b: MAN: *suidiu*
> C_t: SMOOTH SHIFT

The use of Conare's name (as opposed to a pronominal form) in example (38) announces a new discourse segment. There is thus no backward-looking centre or transition type for this utterance. Since Conare and his troops are the highest ranked entities in (38), they become the backward-looking centre of the next utterance in example (39), where they are realised pronominally. A new entity is also introduced in this utterance with indefinite *in*, *in fear maeldub* 'a man with black-cropped hair', who will later be identified as Fer Calliu. In the next utterance (example 40), he becomes the backward-looking centre of the discourse. As the most salient entity in the utterance, he is realised with the anaphoric pronoun *suidiu* (on the distribution of which, see Griffith 2013). The introduction of Fer Calliu with *in* thus induces a smooth shift and he remains the backward-looking centre of the discourse for seven utterances.

Although the indefinite referents above that are introduced by *in* are 'noteworthy' in the sense that they become the focus of the discourse, they are crucially not supernatural referents (*pace* Ronan 2004: 137). It is not the nature of the referent that matters (e.g., whether it is supernatural), but rather the role that it plays within the discourse. The proposed analysis thus improves on previous scholarship in that it offers a more adequate characterisation of the distribution of *in*.

Previous research has not been attuned to the distinction between necessary and sufficient conditions on the use of *in*, but this is in fact crucial. The objective of this study has been to elucidate the necessary conditions on the use of indefinite *in*. According to my account, discourse prominence is a necessary but not a sufficient condition for the use of *in* with indefinite specific referents. In other words, indefinite referents can satisfy the conditions proposed above and still not be marked with *in*. Consider again example (19), which is repeated here for convenience:

(41)　*Bare indefinite specific*
　　　at·chonnarc and **imdae** 7 triar indi.
　　　'I then saw **an apartment** with three men in it.'　　　*TBDD* 82.745

The indefinite specific noun *imdae* 'apartment' is realised with the pronominal form *indi* 'in it' in the conjoined clause. It has thus become the backward-looking centre. The discourse profile of *imdae* is thus similar to that of the indefinite referents in examples (35) and (39) above, but the noun is not introduced with *in*. The crucial difference may be referential persistence. After example (41) the narrative moves on from the apartment, whereas indefinite referents introduced by *in* continue to be the centre of the discourse. Further investigation is required to determine if there is a minimum threshold of referential persistence that indefinite referents have to meet to be introduced by *in*.

5.1. Indefinite *in* with cataphoric *ní* 'something'

Ronan (2004: 135–6) groups together examples of the type presented in the previous section with those in which an indefinite referent introduced with *in* stands in apposition to the indefinite pronoun *ní* 'something'. Although such examples are similar to the data in the previous section, they exhibit an important difference, which is that they do not necessarily become the backward-looking centre of the immediately following utterance. Consider the following examples from *An Teanga Bithnua*:

(42)　a.　imshoi for tuaithbiul ar belaib an tsluaigh inna cete fadhes i
　　　　　ndeisciurt Slébi Sion.
　　　　　'He turned withershins before the host of the assembly,
　　　　　southwards in the southern part of Mount Zion.'　　　*TBn* 60

　　　b.　conacai **ni** fochétoir, **in nel tendtighi**.
　　　　　'Forthwith he saw **something**, **a fiery cloud**.'　　　*TBn* 60

$$C_f: \{\text{WARRIOR: } \emptyset, \text{ CLOUD: } nel\}$$
$$C_b: \text{WARRIOR: } \emptyset$$
$$C_t: \text{---}$$

c. do scai[l] **in nel sin** ara suilib.
   '**That cloud** dissolved? before his eyes.' *TBn* 60

C_f: {CLOUD: *nel*, WARRIOR: *a*, EYES: *suilib*}
C_b : WARRIOR: *a*
C_t : CONTINUE

The subject of example (42a) is a warrior who has been the focal centre of the text and whose only realisation is in the inflectional morphology of the verb *conacai* 'he saw'. He is the backward-looking centre of example (42b), in which a fiery cloud is introduced with *in*. In example (42c), the cloud is referred to with the expression *in nel sin* 'that cloud'. Recall from the rule in (25) above that if any element in an utterance is pronominalised, the backward-looking centre must be. In example (42c), the possessive pronoun suffixed to *ara* 'before his' refers to the warrior, which indicates that he – and not the fiery cloud – is the backward-looking centre. Although *nel tendtighi* 'a fiery cloud' is introduced with *in*, the role that this referent plays within the discourse differs from that of the examples in section 5. It appears that this difference is due to the presence of the appositive *ni* in example (42b).

The following example further illustrates how indefinite referents introduced with *in* differ when they are preceded by appositive *n*:

(43) a. fecht n-aill forréccaig Mac Roth in mag.
         'Mac Roth scanned the plain a second time.' *TBC-LL* 4183

      b. Con'facca **ní**, **in nglascheó mór** ra ercc in comas eter nem 7 talmain.
         'He saw **something**, **a great grey mist** that filled the emptiness between heaven and earth.' *TBC-LL* 4183

In example (43b), *ní* 'something' stands in apposition to *in nglascheó mór* 'a great grey mist', which does not become the backward-looking centre of the next utterance:

(44) andar leiss batar indsi ás lochaib atchondaic ás fánglentaib **na cíach**.
      'It seemed to him that he saw islands in lakes above the slopes
      of **the mist**.'   *TBC-LL* 4185

The suffixed pronoun in the preposition *leiss* 'to him' refers to Mac Roth, who is the backward-looking centre of the utterance. The mist is referred to only with the nominal form *cíach*. Referents introduced with indefinite *in* and cataphoric *ni* thus appear to exhibit referential persistence, but they do not shift the centre of the discourse. Examples with cataphoric *ní* also differ in their textual distribution. Ronan (2004: 135) notes, for instance, that such examples are not found in the *Táin* from the *Lebor na hUidre*, but they are attested in the Book of Leinster. Further investigation is required to establish precisely how the examples with cataphoric *ni* differ from those without it. For the moment, the point is simply that these two classes of examples, while similar, do differ.

5.2. Comparison with existential constructions

Since indefinite *in* and existential constructions are both used to introduce new referents, it is worth highlighting the differences between the two. Consider again example (28) from above, in which the king Mac Da Thó is introduced:

(45) boí rí amrae for Laignib.
      'There was **a** famous **king** of Lagin.'   *SMMD* 1.1

> C_f: {KING: *rí*, LAGIN: *Laignib*}
> C_b: ∅
> C_t: —

The subject *rí* 'king' exhibits two properties that set it apart from indefinite referents introduced with *in*. First, the clause asserts the existence of the king. Second, the king is the preferred centre of the discourse. The transition type of the next utterance (example 29 above) is continue, since the king is both the preferred centre and the backward-looking centre. By contrast, the existence of indefinite referents introduced with *in* is not asserted, but

presupposed. Furthermore, indefinite entities introduced with *in* are not the preferred centres of the utterances in which they are introduced. The transition type of the utterance following their introduction (in which they become the backward-looking centre) is a smooth shift.

6. Motivating the distribution of *in*

Definiteness and indefiniteness are standardly presented as distinct categories that do not allow overlap. One common approach to definite referents maintains that they are mutually identifiable by both speaker and addressee (e.g., Christophersen 1939, Heim 1991, Heim 2011). Indefinite referents, by contrast, are not mutually identifiable. Such a view reflects the cross-linguistic typology of articles in as much as distinct determiners are often used to signal definite and indefinite referents. As noted above in section 1, determiners that cross the definite-indefinite divide are typologically uncommon. For as well motivated as the divide between definite and indefinite referents may be, it does pose a problem for phenomena such as indefinite *in*. How is it that a determiner that predominantly signals definiteness can co-occur with indefinite referents?

If we consider determiners from another perspective, however, the divide between definiteness and indefiniteness turns out to be not so impermeable. Gundel et al. (1993: 276), for instance, argue that referring expressions are in essence processing signals. With a definite article, for instance, a speaker signals that the addressee can identify the intended referent. Identifiability is often based on a pre-existing representation of a referent in the addressee's memory, as would be the case with examples (10a), (10b), (11), and (13) above. If, however, enough descriptive content is included in the noun phrase, the use of the definite article does not require a pre-existing representation (e.g., Hawkins 1978: 140). Gundel et al. (1993: 277) offer the following example in support of this claim:

(46)   I couldn't sleep last night. The dog next door kept me awake.

The use of *the* in *the dog next door* is felicitous even when the addressee has no previous mental representation of the dog next door. Gundel et al. (1993: 277) go on to explain: 'For expressions which are both referential and

uniquely identifiable […] the addressee is expected to construct or retrieve a representation on the basis of the referring expression alone.' The definite article in English is thus a signal to the addressee either to construct or retrieve a representation of a discourse entity.

The importance of this insight cannot be overstated, since it explains how the same article can co-occur with both definite and indefinite referents. Indefinite *in* patterns with some uses of definite *in* in that it signals to an addressee that a new mental representation should be constructed on the basis of the description of the referent. In the establishing use of the definite article in example (5d) above, for instance, *in* signals that a new representation of the referent should be constructed on the basis of the description in the relative clause. The same is true of indefinite *in*. In examples (35) and (39), for instance, a discourse-new referent is introduced with *in* and then information about the referent is provided in the immediately following discourse.[11] From this perspective, the difference between the use of definite and indefinite *in* is thus not as sharp as it prima facie appears.

6.1. The number 'one' in Old Irish

In many languages of the world indefinite specific referents are marked with an indefinite article, which predominantly develops from the numeral 'one' (see, e.g., Heine 1997: 71–6, Weiss 2004, Schaden 2009, Kuteva 2019: 299–301 on the diachronic trajectory of indefinite articles). Consider, for instance, the marker *-ē* in the Iranian language Balochi, which descends from cardinal 'one':

(47)   *Indefinite specific article*
       kitāb-**ē**
       book-INDEF.SPEC
       '**A** (**certain**) book' (Jahani and Korn 2009: 667, Korn 2017: 84–5)

Jahani and Korn (2009: 667) report that nouns marked with *-ē* in Balochi cannot have an indefinite non-specific reading (cf. Korn 2017: 82, 84–5 for a similar situation in Bashkardi). The development of an article from 'one' is by no means restricted to Indo-European. Givón (1981: 36) observes a similar use of the numeral 'one' in what he refers to as 'Street Hebrew':

(48) ba   hine ish **xad** etmol   ve hitxil ledaber   ve-hu
 came here man one yesterday and began speak.INF and-he
 '**A man** came in yesterday and started talking and he…'

The subject *ish xad* 'man one' introduces a new referential argument that
remains salient, that is, it continues to be referred to (Givón 1981: 36). As
such, this use of Hebrew *exad* 'one' (or more specifically, its reduced form *xad*)
is remarkably similar to the use of Old Irish *in* discussed in section 5 above.

 Given this robust tendency to use 'one' to mark indefinite specific
referents in other languages, one wonders why Old Irish speakers did not
recruit 'one' for this function. The reason may be the morphosyntax of *óen*
'one' in Old Irish, which differs markedly from what we find elsewhere in
Indo-European. When *óen* means 'one' and modifies a noun, it predominantly
occurs as a bound form (*GOI*: §385):

(49) a. **oen**fir
     'of a **single** man'   *Ériu* i 114 §1
  b. **hoin**lebor
     '**one** book'   *Hib. Min.* 2.56

In these forms, *óen-* is an uninflectable first member of a compound. There are
contexts in which *óen* is independent and inflectable, such as when it means
'the same' (*GOI*: §362):

(50) inna **oena** méite
  'of **the same** size'   *Sg.* 203a26

The form *oena* agrees in gender, number, and case with *méite* 'size'. As a
pronoun, it is also independent and inflectable:

(51) a. inna oína **oina**-sa
     'these same **ones**'   *Ml.* 70a4

  b. iṅ-**óen** na lith-sa
     'on **one** of these festivals'   *Fél. Ep.* 20

What is not found is the use of *óen* as an independent, inflectable determiner with the meaning 'one'. It seems that Old Irish speakers did not recruit *óen* to mark indefinite specific referents because it simply did not have the same distribution as words for cardinal 'one' in other Indo-European languages where such a development did occur. It remains to be investigated what precisely facilitated this change elsewhere in Indo-European.

7. Conclusion

Old Irish *in* co-occurs with a contiguous series of referents on the reference hierarchy of Dryer (2014), namely anaphoric definites (or more broadly pragmatic definites), non-anaphoric definites (or more broadly semantic definites), and pragmatically specific indefinites. Although the distribution of *in* differs from that of articles elsewhere in Indo-European, it is nevertheless consistent with broader cross-linguistic patterns. One of the challenges that has bedevilled previous investigations of indefinite *in* is an adequate characterisation of the conditions on its use. I have demonstrated that *in* is used to introduce indefinite specific referents that become the focal centre (i.e., the backward-looking centre) of the discourse in the next utterance. This analysis thus improves empirically and theoretically on previous studies. It also raises the question of why referential marking developed the way it did in Old Irish. Since the definite article in Welsh can also introduce indefinite referents (see Ronan 2004: 143–4 with earlier literature), the answer to this question appears to lie in the earlier formation of (Insular) Celtic.

Notes

[1]   I would like to thank Joe Eska for fruitful discussion of some of the issues in this paper and two anonymous reviewers for their comments. I am also grateful to Angelo Mercado for his technical assistance with the manuscript. Fault for all remaining errors lies solely with me.

[2]   The notion of specificity is of course defined in various ways in the literature (see, e.g., von Heusinger 2019 for an overview). Here I rely on the familiar if flawed view that with indefinite specific referents a speaker intends to refer to a particular referent, which the speaker 'has in mind.'

3   According to Dryer 2014: e238, the Austronesian language Kokota appears to have an article whose distribution resembles that of Old Irish *in* (see Palmer 2009: 80).

4   The following abbreviations are also used: *TBC-LL*: *Táin Bó Cúailgne from the Book of Leinster* (O'Rahilly 1967); *LU*: *Lebor na hUidre* (Best and Bergin 1929); *TBn*: *An Teanga Bithnua* (Stokes 1905); *Wb*: *Glosses on the Pauline epistles* (Stokes and Stachan 1901–3: I, 99–712). Additional abbreviations follow *eDIL*.

5   My classification of referential types into pragmatic and semantic definites is based on Löbner 1985 and Szczepaniak 2011: 73.

6   The use of two articles in the same noun phrase is rare in Old Irish. On this phenomenon, see further Roma 2009 and 2014.

7   The same holds true for proper nouns, such as personal names and toponyms (e.g., Meyer 1906: 2–3).

8   Von Heusinger (2002) identifies problems with this view of indefinite specific referents. Building on his insights, Becker (2018: 66–7) defines a specific referent as a single referent of the kind set represented by a noun. A specific referent need not be identifiable by either the speaker or the hearer. The crucial requirement is that a specific noun phrase denote a single particular member of the kind set denoted by the noun. By contrast, non-specific referents do not correspond to any particular referent from the kind set denoted by the noun (Becker 2018: 68).

9   According to Ronan 2004: 143, this narrative importance of the character 'clearly overrides the fact that the participant is new.' It is not entirely clear what to make of this statement. It seems to assume that discourse-new participants could not co-occur with *in*, but as laid out in section 2.2 above, the article in Old Irish could in fact be used with discourse-new non-anaphoric referents (see in particular example 9).

10 Some equate the backward-looking centre with the notion of topic (e.g., Walker et al. 1998a: 3, Beaver et al. 2004: 14), but Roberts (2011: 1911) questions this equation. Indeed, given the variety of senses in which the term *topic* is used in the literature, it is hard to know what this equation amounts to.

11 One might even speculate that indefinite *in* emerged diachronically from the establishing use of *in*.

Abbreviations

GOI	Thurneysen, R. (1946). *A Grammar of Old Irish*. Trans. by D. A. Binchy and O. Bergin. Dublin: Dublin Institute for Advanced Studies.
LU	Best, R. I. and O. Bergin (eds) (1929). *Lebor na Huidre. Book of the Dun Cow*. Dublin: Hodges, Figgis, & Co.
SMMD	Thurneysen, R. (ed.) (1935). *Scéla Mucce Meic Dathó*. Dublin: Dublin Institute for Advanced Studies.
TBC-LL	O'Rahilly, C. (ed.) (1967). *Táin Bó Cúalnge from the Book of Leinster*. Dublin: Dublin Institute for Advanced Studies.
TBDD	Knott, E. (ed.) (1936). *Togail Bruidne Da Derga*. Dublin: Dublin Institute for Advanced Studies.
TBF	Meid, W. (ed.) (2015). *The Romance of Froech and Findabair or the Driving of Froech's Cattle. Táin Bó Froích. Old Irish Text, with Introduction, Translation, Commentary and Glossary Critically Edited by Wolfgang Meid*. Trans. by A. Bock, B. Bruch, and A. Griffith. Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck.
TBn	Stokes, Wh. (1905). *An Teanga Bithnua*. The Evernew Tongue. *Ériu* **2**, 96–162.
Wb.	Stokes, Wh. and J. Stachan (1901–3). *Thesaurus Palaeohibernicus. A Collection of Old-Irish Glosses, Scholia, Prose and Verse*. Cambridge: Cambridge University Press, vol. I, 499–712.

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