

The rise and fall of a person-case constraint in Breton *

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Abstract: This work explores the coupling of person-split nominative objects with anomalous subjects (Jahnsson’s Rule JR, Person-Case Constraint PCC). In Breton, split-nominative objects spread from an Icelandic-like combination with oblique subjects of unaccusatives, to Finnish-like combinations with subjects of transitives in constructions like the imperative, and then retreated piecemeal. These changes admit of externalist sources, such as frequency entrenchment and analogy over clitic forms, but are bounded by persistent coupling of with anomalous subjects, and disfavour external sources for it like ambiguity avoidance. An approach is set out through constraints on ϕ -dependencies, their relationship to case and licensing, and their interaction with grammaticalisable partial ϕ -specification, building on other work on JR/PCC. The anomalies of the restricting subject are analysed as person-only specification, and extended from quirky obliques to pronouns minimal in absence of number + n/N: imperative *pro* and human impersonals. The ineffability or accusative of the restricted persons is analysed through the integration of dependent case into Φ /Case theory but apparent syntactic variation is modelled through externalisation.

Keywords: Person-Case Constraint, Jahnsson’s Rule, person restrictions, agreement, case, licensing, parameters, externalisation, diachronic syntax, Breton, Finnish, Icelandic

1 Introduction

This work studies a common coupling of ϕ -restricted or ϕ -split nominative objects with anomalous subjects through its development in Breton. The split-nominative object is limited to plain 3rd person (henceforth 3), and it is ineffable or appears as accusative in 1st and 2nd person (1, 2, grouped as $\frac{1}{2}$), as well as in human-logophoric 3rd person if the system has one (grouped with $\frac{1}{2}$ as $\frac{1}{2}+$). The anomalous subject includes ordinary (pro)nominals that are oblique rather than nominative in case, but also certain special pronouns, such as the subjects of arbitrary human impersonal and imperative constructions. The coupling will be called Jahnsson’s Rule JR, adapting the term a similarly ϕ -restricted distribution of case in work on Finnish (Jahnsson 1871: §11, Kiparsky 2001), and belongs to ϕ -case-licensing interactions that have been grouped in work on Person-Case Constraint(s) PCC (Anagnostopoulou 2003, Rezac 2011, Coon and Keine 2021, Deal 2022).

Tables 1 introduces JR/PCC in Breton and its chief comparanda here of Icelandic and Finnish. The systems are accusative: S/A group as nominative against O as accusative in coding and structure. One or more constructions deviate: oblique-subject unaccusatives and passives, active transitives in the imperative, the perfect, or with arbitrary human impersonal subjects.¹

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¹ Glossing follows Leipzig, plus ! imperative-jussive, *ADS* adessive, *PRT* participle, *PT* past, *R* particle, no gloss for 3SG/default - \emptyset , *NOM*, *ACC*, *GEN* reduced to *N*, *A*, *G* when needed, \approx for boundary unclear as = or -. In sources, verse is marked †; \cdot stands for source -; the - boundary breaks up source words, =, \approx do not unless accompanied by \cdot . Citations and constructed examples use the orthography of Modern Breton. The conventions of Table 2 go by default for others. 1, 2, 3 abbreviate 1st, 2nd, 3rd, $\frac{1}{2}$ 1st and 2nd, $\frac{1}{2}+$ 1st, 2nd and any grammaticalised human-logophoric 3rd. A, S, O, R coopt grammatical role terminology: A, external argument of active transitives; O, their internal argument; S, of unaccusatives; O→S of passives; R, added argument; O, (O→)S also used for like-coded arguments in exceptional case-marking.

Table 1: Split-nominative S/O in Breton, Finnish and Icelandic (constructed)

Obj.	Icelandic A split-nom. : ineff. O	Finnish split-nom. : acc. O	Middle Breton split-enclitic : ineff./acc. O
R>S			
3	Henni leiðast þeir 3SGF.DAT bore.3P 3PL.N	Hänella on ne 3SG.ADS be.3SG 3PL.N	He≈d≈eus=y 3SGF.A/G≈DAT≈be=3PL.N
½+	*	Hänella on meidät 3SG.ADS be.3SG 1PL.A	*
	She is bored with them/*us.	She has them/us.	She has them/*us.
V! O			
3	Taktu þá take!2SG 3PLM.A	Vie ne take!2SG 3PL.N	Kemer=y take!2S=3PL.N
½+	Taktu okkur take!2SG 1P.A	Vie meidät take!2SG 1P.A	Hon=kemer 1PL.A=take!2S
	Take them/us!	Take them/us!	Take them/us!

The φ -restricted case-effability alternations of JR/PCC have motivated primitives and principles *internal* to the narrow human language faculty like syntactic dependencies for person and number, but also been attributed to factors *external* to it, such as communicative avoidance of ambiguity and frequency-sensitive preference for brevity in conventionalisation. These sources of φ -restrictions can coexist and even synchronically overlap and diachronically interact within one and the same system and within one and the same framework of analysis, and then be difficult to disentangle to better understand the scope of each mechanism (sec. 2 and lit. there).

Two aspects of the φ -restriction in Breton are of interest in this respect. One is the relatively recent and largely historical development of the φ -restrictions, sketched in Table 2. It permits tracing the restriction of nominatives to 3rd person as its spreads from its origin in oblique-subject intransitives, encompasses a range of transitives closely comparable to that of JR across in Finnic despite a very different origin and trajectory, and appears in both of the two forms that split-nominativity takes in the otherwise similar JR/PCC of Finnish and Icelandic, namely ineffable and accusative ½. The other aspect of interest is the form that the φ -restriction takes. The original target of the φ -restriction can be recovered as nominatives in object position, and can be so analysed at subsequent stages. However, their form had early come to differ from that of nominative subjects through changes like encliticisation. This will limit the applicability of the clearest candidates for factors elsewhere like ambiguity avoidance in enforcing the coupling of φ -restricted nominative objects with anomalous subjects in JR/PCC. Yet that that coupling kept on constraining the development of Breton as the φ -restricted enclitics spread from intransitives to certain but not other transitive constructions through mechanisms like analogy over clitic syncretisms. This leads here to an internalist mechanism for the φ -restriction, though one that can stand beside and interact with externalist sources of φ -restrictions like entrenchment of infrequent host-clitic combinations in arbitrary gaps (sec. 3).

Table 2: Breton weak-pronoun finite-clauses object coding

	Breton *12C	16C	17C	20/1C SE	C	NW	Finnish 20C
Synthetic general							
V _{tr}	A=	A=	A=	A=	A	A	A
HAVE	=3N~1/2+*	=3N~1/2+*	=3N~1/2+*	=3N~1/2+*	A	A	3N~1/2+A
AUX + PRT _{tr} perfect periphrasis							
	–	A=	A=	A=	A	A	A
BE/∅ _{AUX}							
	–	=3N~1/2+*	=3N~1/2+A=	=3N~1/2+A=	A	A	[3N~1/2+A]
HAVE _{AUX}							
Imperative-Jussive							
V!3	A=, =A	A=, =A?	A=?, =A?	–	–	–	A
V!2	A=, =A	=3N~1/2+A=	=3N~1/2+A=	=A	=3N~1/2+A	A	3N~1/2+A
Human impersonals							
generic	–	–	–	–	–	–	A
arbitrary	A=	A=	A=	A=	A	A	3N~1/2+A

Conventions: x= pro/mesoclitic, =x enclitic; N nom., A acc; SE southeast, C central, NW north-and-west, *12C reconstructed; * ineffable, – unavailable, [...] indirect comparison (4.3)

The mechanism proposed is motivated by split-nominative/absolute objects of JR/PCC in Breton, Finnish, Icelandic, and Basque, extended by split-nominatives elsewhere such as those of *se*-constructions in Romance, and by split-accusatives of the classical transitive PCC (sec. 4-5). The φ -restrictions are attributed to the interaction of syntactic φ -dependencies with interveners of different φ -content, building on Anagnostopoulou 2003, and the form of the restrictions to relationships between φ -dependencies, case and licensing, Rezac 2011:

Partial φ -intervention and φ -bearers. The distribution of nominative on subjects and objects reflects the same φ -dependencies, constrained by intervention relativised to person π and number # φ -features, (1) (Anagnostopoulou 2003). The group of “quirky” π -only bearers is extended from certain obliques to pronominals special in absence of n/N, including imperative and arbitrary human impersonal pronouns (cf. Malamud 2012; Zanuttini et al. 2013).

(1) T-nominative dependencies (π person, # number)

- a. No intervener: $\sqrt{\text{NOM}}$: $[T_{\pi, \# = \text{NOM}} \dots \text{G.NOM}_{\sqrt{\pi, \#}} \dots]$
- b. Complete intervener: *NOM: $[T_{\pi = X, \# = X} \dots [X_{\pi, \#} [\dots \text{G.NOM}_{* \pi, \#} \dots]]]$
- c. Person intervener: $\sqrt{3 \sim 1/2 +} \cdot * \text{NOM} (\rightarrow \text{ACC})$: $[T_{\pi = X / \emptyset, \# = \text{NOM} / \emptyset} \dots [X_{\pi} [\dots \text{G.NOM}_{* \pi, \#} \dots]]]$

Case and licensing: Person-restricted nominatives objects can be ineffable or “repaired” by accusatives, and analogously for related restrictions. The profile of repairs relates them to dependent case if integrated with φ -dependencies (Rezac 2011, Kalin 2018) and adapted to the challenges for such φ /case linking (Preminger 2014, 2019). Variation between ineffability and repairs can be derived from grammaticalisation of clitic hosts in Breton, and suggests more general reduction of this variation to the externalisability of case, in line with work on person restrictions (Coon and Keine 2021) and other variation (Berwick and Chomsky 2015; Eguren, Fernández-Soriano and Mendikoetxea 2016).

The theoretical background is frameworks that countenance the possibility of different sources of φ -restrictions: one or more internalist mechanisms, for instance Agree for φ -case-licensing dependencies over conventionalised φ -specifications of targets and controllers, feeding conventionalised manipulations of φ -features in the mapping of syntax to realisation, and consequences of other mechanisms like parsing garden paths. The motivations underlying these mechanisms frame the study and are introduced next.

2 Comparative and theoretical setting

Accounts of nominative objects in Finnish and Icelandic have correlated them with nonnominative subjects in different ways (Timberlake 1974; Yip, Maling and Jackendoff 1987, Maling 1993; Marantz 1991, McFadden 2004; Schütze 1993; Nelson 1998; Kiparsky 2001; Vainikka and Brattico 2014), and differ likewise for their split-nominative restriction to 3rd person (so even within similar frameworks: Anagnostopoulou 2003, Rezac 2011; Schütze 1993, Sigurðsson and Holmberg 2008, Coon and Keine 2021; Nelson 1998). This analytic heterogeneity partly reflects differences between the two languages and across their varieties, and is complemented by direct arguments from ϕ -restrictions elsewhere that these can derive from different mechanisms yet largely converge in form. A striking case study is Rhodes 1993, 1994 for person-hierarchic prefix agreement in Ojibwa. The prefix oscillates between O and A according to the person hierarchy $2 > 1 > 3$, but Rhodes argues that at least the $\frac{1}{2} > 3$ part of the oscillation has syntactic correlates for some speakers, on the order of active vs. passive, while for others it is syntactically inert, on the order of allomorphy (cf. Rezac 2011: ch. 3).

Rhodes's findings are articulated within what will here be called internalist approaches to ϕ -restrictions, including all those cited above for Finnish and Icelandic. Internalist approaches posit circumscribed mechanisms that can yield only some ϕ -restrictions and with certain correlated properties: for instance, syntactic Agree \pm Merge, with its phrase-structural unboundedness and potential for feeding binding or scope, but circumscribed by innate features like [participant] for $\frac{1}{2}$, lending itself to modelling active/passive-like alternations governed by $\frac{1}{2} > 3$ (Bruening 2001 on Ojibwa-type systems, but cf. Oxford 2022). Internalist approaches also typically allow for mechanisms that can yield other or any ϕ -restrictions but with different correlated properties, for instance postsyntactic deletion of terminals in arbitrary featural contexts like 3SG $>$ 1SG, $2 > 1$ in one mood and $1 > 2$, $\frac{1}{2} > 3$, 3SG $>$ 3 in another, confined roughly to extended words and without effect on binding or scope (Bobaljik and Branigan 2006 on the spurious antipassive in Chukchi, Nevins 2012 on *amn't*, henceforth for brevity *amn't*-type gaps). These two examples suggest fair separability of mechanisms by correlates (Rezac 2011: ch. 2-3). Yet work on arbitrary conventionalisation itself suggests it might subvert such expectations and raises the possibility of idioms like nominative case and high-scoping O just in 1PL/2 A $>$ 3SG O (cf. Bárány and Sheehan 2022 with lit. on Wampis, fortified here with SG and scope; on idiomaticisability of unbounded syntactic dependencies, see Jackendoff 2006: ch. 6, Bruening 2020; on idiomatic case, cf. Harris 1985: 5.3, Marlett 1986: sec. 4). That would reduce one sort of evidence for constrained internalist mechanisms of ϕ -restrictions (see thus Miller and Sag 1997: 1, 3.2 for all of *me lui*, *me te*, *l'en* clitic gaps discussed below, and *amn't*-type *sors-je*, in French). It would not thereby follow that arbitrary ϕ -restrictions should lack asymmetries in preferred specifications or correlates, if these can be derived from externalist factors: form-frequency correspondence (Haspelmath 2004, 2020 on the PCC, here 3.4.2; Gildea and Zuñiga 2016: 2.3 on person hierarchies), ambiguity avoidance (Hakulinen and Karlson 1975, Baramidze 1964), politeness (Heath 1991, 1998), iconicity (García 2009).²

The challenges facing both internalist and externalist accounts may be illustrated by the particularly well-studied set of ϕ -restrictions grouped in Bonet's 1991 PCC, here focusing on Romance. The basic version bars or transforms dative + $\frac{1}{2}$ accusative clitics like *me lui* in French, and it has a syntactic profile comparable to active-passive (Postal 1990, Rezac 2011: ch. 4). Weaker versions improve some $\frac{1}{2}$ dative + 2/1 accusative clusters like *me te* in some contexts for some speakers, but their properties have suggested grammatical illusion or idioms (Ormazabal and Romero 2007, Kempson and Chatzikyriakidis 2011), and perhaps show syntactic inertness (lit. in Rezac 2011: 4.6.8). Yet they too are widespread in the way arbitrary *amn't*-type gaps are not and are usually attributed to the same mechanism as *me lui* (Walko

² The internalist - externalist terminology (Collins 2021) is adapted as vague prototypes for referring to mechanisms as externalist in the measure that they are clearly external to theories of narrow human language faculty (so Zipf's Law of Abbreviation: Clink, Ahmad and Klink 2020, Kanwal et al. 2017, Horn 2004; less so ambiguity avoidance with sui-generis details in its application: Walter 2007: 5.1, Harris 2017: 4.4: still less actual details of say iconicity as applied to *me lui*), and as internalist to the rest relative to theories of " ϕ " (of which would usually be independent for instance any internal constraints on syllable structure or on feature complexity for *amn't*, Broadbent 1999, Nevins 2012).

2013, Coon and Keine 2021, Deal 2022). Stronger versions might bring in other gaps or opacities in clitic combinations like 3 + 3 *le(s) lui/leur*, all the while drawing limits, say at 3SG.ACC + locative **l'y* (cf. Walkow 2013; on the phenomena, Pescarini 2021: ch. 11 with lit.). Here the emerging evidence is mixed, with variation in which gaps and opacities have which correlates in which systems (Rezac 2011: 2.3-4, 4.6.4, Walkow 2013: 250, Pescarini 2014: 6.2, Alcaraz 2018). Independent external factors like Zipf's Law of Abbreviation have been proposed as source of some of these restrictions (Haspelmath 2004, 2020, 2021), but at present observed relationships of clitic gap, structure, and correlates are not derived by them or contrary to expectation (see *in fine* the conditions in Postal 1990 on *me lui*, further here 3.4.2, 3.8).

The background framework assumed here allows φ-restrictions to reflect sharply restricted internalist mechanisms like Agree; unclearly delimited conventionalisation mechanisms encoding various sources of φ-restrictions external to this; and other sources like garden paths. To isolate elements of φ-restrictions to account for by an internalist mechanism (sec. 4-6), the development of JR/PCC is traced through split-enclitic object coding in Breton (sec. 3). The diachronic and dialectal evidence of Breton allows a fair picture of key changes and their sequencing, with their potential externalist factors, and suggests a persistent role for the coupling of split-nominative objects with anomalous objects, while the enclitic form taken by the objects resists externalist accounts of the coupling itself (cf. Gildea and Zuñiga 2016 for the strategy).

3 Development of split-nominative objects in Breton

3.1 Breton in context and the plan

Breton, Cornish and Welsh are Brythonic languages of the Insular Celtic group of Indo-European. Within this group, Brythonic and Goidelic stand in an uncertain relationship adequately approximated here by sisterhood prior to 1C. Goidelic is attested in 7C– Old Irish and offers the oldest evidence of relevant morphosyntax. Brythonic gives rise to a dialect continuum where Old Welsh and Old Breton-Cornish become differentiable in 8C, and to Middle Welsh, Cornish and Breton in 11-12C. Evidence about their relevant morphosyntax starts to appear at the old stage, but much of it must await the first extensive texts, by manuscript dates 13–15C for Welsh (prose and verse), 14–17C for Cornish (verse), 15/16–17C Breton (prose and verse) (see introductions in Ternes 2011 and lit. there).

Within Breton, dialectal differences are obscured by the *koine* of Middle Breton, but emerge sharply with the transition to Early Modern Breton from later 17C. At that point also the first grammars appear, while nonnormative descriptions, studies and corpora do so during 19C and continue to 21C. Relevant here is chiefly the split between the southeast SE and north-and-west NW, as well as an innovative central zone at their interface C (see Schrijver 2011, DME.I: 3.1 and Appendix for introduction and description of sources).

All the early Brythonic languages code O by accusative pro/mesoclitics to the finite verb in most constructions, italicised in (2)a-(2)b and subsequently. Enclitics are largely reserved to doubling these and other bound pronouns, (2)c. There are no restrictions of person.

(2) Finite-clause bound-pronoun objects in Middle Breton (T. Gueguen: Bel, Cnf; early 17C)

General

- | | | |
|----|------------------------------|-----------------------|
| a. | <i>n'a=esse-n</i> | paour |
| | NEG=2SG.ACC/GEN=left-1SG.NOM | poor |
| | that I not leave you poor | |
| b. | <i>ma=en=pedé</i> | <i>è=bugalé</i> |
| | as=3SGM.ACC=asked | 3SGM.GEN=children |
| | that his children asked him | |
| c. | Milliguet | <i>r'a=vezy-Ø=tè</i> |
| | cursed | R=will.be-2SG.NOM=2SG |
| | may you be accursed | |

Prior to 14C Breton-Cornish had innovated enclitic coding of 3rd person object S of BE when coupled with oblique subject R, set in bold here and below. This occurred in the *mihi est* ‘to X is Y’ construction used as ‘have’, (2)d. Objecthood and person restriction of this S go back to an unknown time depth. ½ counterparts were and long remained ineffable.

Mihi est

- d. ...en≈de≈uo≈e=**auff** /ã(ṽ)/ yuez en≈é≈guenou
 3SGM.ACC≈DAT≈was=3SGM also in=3SGM.GEN≈mouth
 [for as St. Paul had Jesus-Christ in his heart,] he had him also in his mouth [cf. Isaiah 29:13]

By the first extensive texts of early 16C Breton, these 3-only enclitics had spread to coding O in two other constructions. One is the *have*-perfect, (2)e, innovated within Breton by recruiting *mihi est* as auxiliary. The other is the imperative, (2)g, through restriction of earlier any-person enclitics. ½ counterparts were at first ineffable in the *have*-perfect, but accusative proclitics to the participle were innovated to express them in later 16C, (2)f. In the imperative, the same proclitics specialised to do from earlier any-person proclitics before 16C, (2)h.

Have-perfect

- e. rac ma=en≈de≈ues=**off** /ã(ṽ)/ deliueret
 for as=3SGM.ACC≈DAT≈is=3SGM delivered
 for he has delivered him
- f. té a=z≈heus ma=disquet
 2SG R=2SG.ACC/GEN≈is 1SG.ACC/GEN≈taught
 you have taught me

Imperative

- g. hoguen rent-omp=y da nep ...
 but rend-!1PL.NOM≈3PL to whoever
 but let us retribute them to whoever ...
- h. hon=diliur-et
 1PL.ACC/GEN≈deliver-!2PL.NOM
 deliver us!

The remainder of this section follows the developments of this person-split object coding by enclitics. First are set out relevant aspects of the pronominal system and its development in imperatives (3.2) and unaccusatives (3.3). Then the history of the person restrictions is traced as they spread across anomalous-subject constructions from unaccusatives (3.4) to the perfect (3.5) and the imperative (3.6), but not to subjectless or canonical-subject constructions (3.7). Their analysis as split-nominatives restricted by person intervention in \varnothing -dependencies is introduced, along with potential externalist factors in each development.

The two chief comparanda for Breton here are Icelandic and Finnish. Icelandic is a north Germanic language, and its context needs no discussion (see Leonard and Árnason 2011), apart from note of ongoing variation in JR/PCC (Árnadóttir and Sigurðsson 2013). Finnish is a north Finnic language, and its context does need comment (Häkkinen 1994, Lehtikoinen 1995). The argument coding relevant to JR presents a diachronic discontinuity in importing the coding of eastern varieties into a chiefly western basis, yet it is now part of native competence and studied as such in the literature. Finnish represents an apogee of constructions with split-nominative objects in Finnic, and their development is drawn on here, also only attested from 16C, but across a range of systems on the order of Celtic rather than Breton (3.8).

3.2 Pronominal objects and the imperative

3.2.1 *Brythonic pronominal system*

The puzzles of anomalous object coding in Breton may be introduced through the history of its imperative. It reveals the source of enclitic for coding O, the system of accusative pro-/meso-

and enclitics that should have emerged and is found in Cornish, and the mysteries of person restrictions in Breton that will be derived from the nominative S of *mih est* under JR/PCC.

Insular Celtic inherited nominative-accusative alignment in case and finite verb agreement. In Brythonic, case distinctions had been lost on free (pro)nominals, but S/A still grouped as nominative in finite verb agreement, against accusative mesoclitics coding bound-pronoun O. There were no infinitives, only nominalisations. The inherited bound-pronoun forms were joined by suffixes to prepositions in Insular Celtic. All and only bound pronouns could be doubled by an invariant set of enclitics that arose from late attachment of free pronouns.³

Table 3: Bound pronouns in Brythonic

Term	Form	Host	Codes	Bound-free relation
nominative	suffix	V _{FIN}	A, S	Bound doubles free
accusative	acc. mesoclitic	V _{FIN}	O, relic R	Bound-free complementary
genitive	gen. pro/mesoclitic	N	O, S of V→N, possessor of N	Bound-free complementary
oblique	suffix	P	argument of P	Bound-free complementary
doubling	enclitic	V _{FIN} ,N,P	–	Doubles bound

To go by all later systems, bound pronouns had blocked free ones when available. They were not available in certain syntactically characterisable environments like coordination or fronting (Fleuriot 1964: §138, Hemon 1975: §51, Willis 2008). This sort of clitic-free alternation is familiar from Romance systems like French, and has been argued to reflect different syntactic structures, weak and strong (Cardinaletti and Starke 1999). Within weak-pronoun environments, bound pronouns could run into morphophonological difficulties like syllabification. Here too free pronouns appear to have been available (DME.II: 2.2), unlike in French (Rezac 2010b), but as in Irish (McCloskey 1986, Andrews 1990, Legate 1999). In the latter sort of systems then, free *forms* can grammaticalise for weak-pronoun *structures*, perhaps specific structures like accusatives, but bound forms are still preferred (for analyses, see op.cit.).⁴

3.2.2 Origin of enclitics in Breton-Cornish

Accusative clitics came in second position of the clause in Proto-Indo-European (Wackernagel's Law, Walkden 2020: 1.2). In Insular Celtic, this placement had become relativised to the morphological complex of the finite verb (Vendryes's Restriction, Eska 1994). The clitics attached leftward to the first conjunction or particle of the complex if there was one, and the whole amalgamated with the finite verb, giving accusative mesoclitics. Let us model this as their attachment to a left-peripheral C position from some nearby derived position at or above the VP (cf. Goidelic: Adger 2006, Newton 2006; parallels: Hrafnbjargarsson 2004: 5.4.5, and further 3.3.3). When the verb itself was the initial element of the verbal complex, henceforth V1, accusative clitics attached to it in C as pure enclitics, but these were lost early, and unblocked free pronouns were used in Brythonic (Goidelic recruited a dummy host). Early Welsh partly keeps this system of free pronoun O in V1, witnessed with imperatives-jussives, mesoclitic O to hosts like negation *na=* in nonV1, including imperatives-jussives (DME.II: 2.1-3 with lit.).⁵

By Middle Cornish of 14C-, two further developments had taken place. One is enclisis of free pronouns, in (3) =*ve*, =*vy* vs. free *my*. The new forms are identical to the preexisting doubling enclitics, and perhaps attached as part of the same tendency. The other development is generalisation of enclisis from V1 to nonV1 with imperatives-jussives, as with negation *na=* in

³ Exposition simplifies as relevant, a.o. coding of residual R like O (3.3.1), mesoclitics to separable preverbs and tmesis (both lost by Breton-Cornish, DME.II: 2.3), or nuances of enclisis timing (DME.II: 2.4).

⁴ The difference between French and Irish will come up at several points. It may be illustrated by French *nous=ri/*frions* '1PL.NOM=laugh/*fry-1PL' or *bois-tu/*je* 'drink=2SG/*1SG', with the gaps ineffable, but Ulster Irish conditional *chuirfi-mis* 'choose-1PL', **chuirfeadh muid* 'choose 1PL' vs. gapped **chuirfi-dis* → *chuirfeadh siad* for 3PL (for the diachronic pathway, see Roma 2000). Celtic systems also show the preference for bound forms when these realise strong structures (in Breton only with prepositional inflection, Jouitteau and Rezac 2006).

⁵ In Brythonic, the imperative has 2SG, 2PL, 1PL forms and no subject distinct from inflections, the jussive 3SG, 3PL and overt subject that include those ranging over speaker-addressee like *each of you* (DME.II 5.2, and 4.5 below).

(3), as alternative to mesoclis; other moods kept on requiring mesoclis with *na=* and in other nonV1, to which they had become increasingly confined (parallels in Romance including colloquial French: Mavrogiorgos 2010, Rowlett 2014). Both developments are found in Breton, and the 14C- Middle Cornish system seems a good proxy for Breton-Cornish of say *12C. Unlike in later Breton, there is no person restriction of the enclitics (DME.II: 2.3-4).

(3) Imperative O in Middle Cornish (PA[†], early 15C)

- | | |
|--|---|
| a. holy-ough= ve
follow-!2PL=1SG
follow me! | b. na=vlamy-ough= vy
NEG=blame-!2PL=1SG
do not blame me! |
|--|---|

The new enclitics are no longer reducible to free pronouns in form, nor can they be analysed through unblocking, or related to V1. Their distribution will shift again before it becomes of interest here, and its mechanism can be left open until then (3.4). The new system then codes O as mesoclitics outside imperative-jussive, as enclitics in V1 imperative jussive, and as either in nonV1 imperative-jussive. It is the starting point for the next step in Breton (3.3).

3.2.3 Proclisis in Breton and person restrictions

Early 16C Breton elaborates on the developments seen in 14C- Cornish in two ways. One is a shift from mesoclis to proclisis (DME.II: 2.2; Lewis and Pedersen 1961: 354, Hemon 1975: §53). In Brythonic and in Cornish, accusative clitics were only mesoclitic, but genitive clitics were mesoclitic after certain prepositions and proclitic otherwise. In Breton, accusative and genitive clitic had become syncretic save for 3SGM; the syncretism made available proclitic forms of accusatives where these had earlier had no leftward host (dark-shaded in Table 4); and mesoclitic forms were lost save 1SG/2SG and marginally 3 (light-shaded in Table 4).⁶

Table 4: Breton old mesoclitic =x= (1SG/2SG) and new proclitic x= (all) (2 not shown)

	Initial		Middle Breton		Middle Cornish		Middle Breton	
	Middle Cornish		Middle Breton		Middle Cornish		Middle Breton	
	ACC	GEN	ACC	GEN	ACC	GEN	ACC	GEN
1SG	–	ow=	ma=		a/na=m=		a/na=m=	
1PL	–	agan=	(h)on=		a/na=(ga)n=	a=gan=	∅/n=on=	
3SGM	–	y=	en=	e=	a/na=n=	a=y=	∅/n=en=	∅=e=

The mechanics of the new system are taken up later (3.3.3), but the shift should have added pro/mesoclis to enclisis with imperatives-jussives, both V1 and nonV1, and partly did with jussives (DME II: 2.3). With the imperative, however, the clises had become restricted by the second innovation of Breton, person restrictions, also in both non/V1. In 3rd person, only the case-syncretic enclitics from unblocked free pronouns are found. In ½, only the accusative proclitics and remaining 1SG/2SG mesoclitics appear. The system is shown in (4).

(4) Middle Breton imperative and jussive (J[†], Pm[†], early 16C)

- | | |
|--|--|
| <i>½ pro/mesoclitic imperative</i> | |
| a. ma=conferm
1SG.ACC/GEN=confirm!2SG
3 enclitic imperative | b. na=m=ancoufha
NEG=1SG.ACC=forget!2SG |
| c. les= ef
leave!2SG=3SGM
3 proclitic or enclitic jussive | d. na=blasfem= ef
NEG=blaspheme!2SG=3SGM |

⁶ The surviving mesoclitics may be those with that had nonsyllabic forms later than others, and included 3rd *=s=, lost earlier than 1SG/2SG, perhaps because mostly collapsing with object drop or proclitics (DMB.III with lit.).

e. *en=miret*
3SGM.ACC=keep!3SG

f. *roent=ef*
give!3PL=3SGM

These person restrictions are mysterious at this point. There are none in Cornish or Welsh. They did not arise from issues with proclitic-host combinations in the development of Breton. The missing 3 proclitics are found outside the imperative-jussive (historically nonV1), and in the jussive (V1 in (4)). The missing ½ enclitics are regular in imperatives of Cornish, and in Breton were used in doubling, e.g. *ma=cred-et=me* ‘1SG=believe-!2PL=1SG’ (J[†]), as well as for coding arguments of certain items like *gwa=me* ‘woe=1SG’ (3.7), just like 3 enclitics. Externalist accounts of such person splits look to form-frequency correspondences, but on these, the more recent and formally more marked enclitics should have specialised for the less frequent human objects (3.7). Internalist approaches look to host position or mood (Mavrogiorgos 2010, Pescarini 2021 with lit.), or higher clausal positions of ½ than 3 (Wiltschko 2006), and these too lead to the wrong expectations about the imperative alone and in comparison with the *have*-perfect (3.6). However, in the perfect, the restriction can be traced directly to *mihi est* ‘have’, and it offers a source for the imperative as well. Its history is taken up next.

3.3 *BE, Mihi est, and the perfect*

3.3.1 *The Insular Celtic Background*

Insular Celtic originally had indirective alignment in morphology: dative case marked R, a.o. goals, experiencers, and possessors, accusative marked O, nominative S. The closest cognate systems of Italic Latin and Germanic Gothic additionally have indirective alignment in syntax: passives promote accusative O to nominative S without affecting dative R (Napoli 2018; Miller 2019; this cannot be examined in remnants of the promoting passive in Brythonic, q.v. 3.8, 4.4.3, but might be in Old Irish, cf. Thurneysen 1946: §409).

By the time Insular Celtic is attested, R has mostly been recoded as prepositional, but there remained uses of pronominal clitics that continued the uses of the earlier inflectional dative R. In form, these clitics had collapsed with accusative clitics coding O, making for secundative alignment in morphology. However, indirective alignment remained in syntax: accusative clitics coding R but not O alternated with prepositional phrases, and did not corresponded to genitive clitics in nominalisations. In Brythonic, early Welsh has about the same range of recessive uses of this clitic R as Old Irish (Lloyd-Jones 1928). In Breton and Cornish, mostly only traces remain (comparable to English *woe is us* ~ *woe are we*, Abbot 1870: §230), but it has become regular with two intransitives: *deur* ‘bother’ > ‘wish’, chiefly with abstract S, and by 17C recoded with A/S for R; and BE used as *have*, available with animate and pronominal S through all the stages relevant here and our focus (DME.I: sec. 4-5, DME.III; cf. for such restricted coding distributions a.o. oblique-subject intransitives in Icelandic, Thráinsson 2007: 4.2, Basque, Fernández and Ortiz de Urbina 2009: 3.3, or *strike* in English, Marantz 1983: 4.1).

In all early Insular Celtic systems, *have* is expressed in two different ways with BE. One construction, *apud me est*, always codes the possessum with the morphology and syntax of the nominative S of plain BE, and the possessor through prepositions, ‘to’, ‘on’, ‘with’. The other, *mihi est*, in its earliest form also codes the possessum like nominative S at least in morphology, and the possessor as the dative-accusative clitic R. This situation is continued in early Welsh, where *mihi est* is rare and recessive and *apud me est* productive; neither ϕ -restriction nor subjecthood can be examined (DME.I: sec. 4-5). Both *apud me est* and *mihi est* are found in the cognate systems of Latin and Gothic (Baldi and Nutti 2001; Miller 2009; Bauer 2002). The rich corpus of early Latin reveals that S of *mihi est* had no ϕ -restrictions, (5)a, and could be the structural subject, (5)b, like S of *apud me est* (cf. DME.I: sec. 2).⁷

⁷ The present terminology of *have*-constructions is grounded in Latin (Baldi and Nutti 2001), following work on possession (Heine 1997): transitive *habeo* ‘have.1SG’; *be* in *mihi est* ‘!1SG.DAT be.3SG’; *be* in *apud me est* ‘at 1SG.ACC be.3SG’; *have* for the group; BE is used for the suppletting stems corresponding to *be* of each system. Each *have*-construction’s range of uses varies across systems and their stages (Baldi and Nutti 2001 on Latin, Stolz et al. 2008 on Celtic, and elsewhere useful for Breton, Brugman 1988, Myler 2016 and Heine 1997, Stassen 2010); in Middle Breton *mihi est* and *apud me* overlap with different frequencies for almost all uses of *have/avoir* (DME.III). Obliques

(5) S in *mihi est* of Latin (Plautus: *Casina*[†], *Rudens*[†]; Old Latin, -3C)

Agreeing 2nd person S in mihi est

- a. ut tu mihi es
 as 2SG.NOM 1SG.DAT be.2SG
 as thou art mine

Agreeing 2nd person S under passive ECM in mihi est

- b. qui [[__ Herculei socius esse] diceris]
 who Hercules.DAT companion.NOM be.INF say.PASS.2SG
 who art said be companion to Hercules

3.3.2 Dative subject in Breton-Cornish

In Breton and Cornish, *apud me est* remains unmodified in coding and structure, but *mihi est* undergoes several developments, traced here with focus on Breton, first for R and then for S.

In Breton, BE and accusative-syncretic proclitic R remain in *mihi est* to early 18C and then in the southeast to 21C. Morphophonological developments at the clitic + BE boundary repeatedly induced opacity, but the R.ACC=BE structure was evidently continuously reacquired, because the clitic kept on taking up new forms and allomorphies of accusative clitics as they developed for O, and the stem new forms and form-usage couplings of BE like the infinitive when it appears in 17C (DME.I: 4.1-3 building on Ernault 1888, Le Goff 1927).

In the shared history of Breton and Cornish < 14C, there had also taken place two innovations that reified the earlier indirective syntax of R. One can be interpreted as the introduction of dative morphology: reanalysis of the prefix **di-* > *de-*. It may originally have been a directional preverb, used with BE outside *mihi est*, and in *mihi est* with any-person R-clitics, but specialised to after all and only 3 R-clitics in *mihi est*, (6)b (DME.I: 2.4, following Fleuriot 1964, 2002). The new distribution hints at reanalysis to dative marking of the left-adjacent accusative-syncretic R clitic, because dative tends towards syncretism with accusative higher in the person hierarchy, e.g. ½ but not 3 in French (Adger and Harbour 2007; Næss 2008; Starke 2017; Bárány 2018). The accusative + *de* = dative clitic is underlined from (6) onward.

(6) Development of dative *de* and clitic-doubling in *mihi est* (constructed)

Apud me est (at all stages)

- a. pa=vezo galloud {dezo, da tud, *dezo tud}
 when=will.be power to.3PL to people to.3PL people

Mihi est (reconstructed → 16C)

- b. pa=z(de-)vezo (*tud) galloud → p=ōde≈vezo (tud) galloud
 when=3PL.A=to-will.be people power when=3PL.A/G-DAT=will.be
 When they/people will have power.

The other development is extension of indirective morphosyntax from clitic to free (pro)nominals, also seen in (6)b. The residue of dative R in Brythonic was limited to clitics. All clitics could double clause-peripheral preverbal nominals in constructions like clefts. Sometime before 15C, these constructions had given rise to a new clause-internal preverbal A-position (Meelen 2019). With all arguments other than R, (pro)nominals in the new preverbal A-position and the old postverbal A-position(s) were not doubled by bound pronouns; A/S/O could not be in either position ($O_{*i} \alpha_i = V \sim \alpha_i = V O_{*i}$), others could not be when postverbal ($X_i V P-\alpha_i \sim V P-\alpha_i$

could be subjects of infinitives in Latin (Barðdal et al. 2020); I do not know whether dative R of *mihi est* is so attested, nor how early its S is attested as PRO (late in *Institutiones*, Gaius 1, §60, Justinian 1, x, §2). In Middle Welsh S of *mihi est* is 3, which is unrevealing under its usual uses there, save in the nonce *us=be.2SG kind* ‘that thou beest kind to us’, also unrevealing, since in systems where high obliques restrict S, low obliques like the dative of *kind* do not (Sigurðsson 1996: sec. 2; Rezac 2016: sec. 4; cf. Postal 1984: 153-8, 1990: 177, Rezac 2011: 162-3).

X_{*i} , including *apud me est* with *dezo* in (6)a). With R, i.e. with *deur* and *mihi est* BE alone, (pro)nominals in the new preverbal position required doubling, and still more strikingly, the R clitic had come to double a (pro)nominal in a postverbal A-position, which had not existed earlier since nonclitic R had been recoded as PP ($R_i \alpha_i/*_k = V \sim \alpha_i/*_k = V R_i$, (6)b) (DME.I: 5.1-2, cf. Mac Cana 1973). This limitation of clitic doubling to R is not inherent in the analogies that gave rise to the doubling (op.cit.). Rather, it matches asymmetries in other systems where doubling is limited to or only obligatory with so-called quirky oblique case, i.e. case that like typical inherent case reflects c/s-selection, but like typical structural case participates in ϕ /A dependencies (Anagnostopoulou 1999, 2003, Michelioudakis 2015, DME.I: 5.3).⁸

Systems where intransitives have quirky obliques vary in the degree of their subjecthood (see 4.2). Breton and Cornish both hint early on in word order that R but not S is the subject of *mihi est* (DME.II: 5.2). Breton then reveals R to be as subject-like as in Icelandic: R and not S appears in a new subject-only position when the perfect periphrasis arises by 16C, and as specified subject and PRO when infinitives develop from nominalisations in 17C, as in (7)c (DME.II: 5.4). All other obliques are prepositional phrases inert to ϕ -dependencies and subjecthood diagnostics, (7)b, including in *apud me est*, (7)a.

(7) OC PRO in Breton (J. Marion: EOv, MG; late 18C - early 19C SE)

Apud me est: S is PRO

- a. eit PRO bout d'oh hou=ç'hunan
for be.INF to.2PL 2PL.ACC/GEN=self
[you should withdraw yourself ... from the world] in order for you to be your own

Passive of ditransitive: O→S is PRO

- b. eit PRO bout presentét de=Zoué
for be.INF presented to=God
[desires of the Faithful] to be presented to God

Mihi est: R is PRO

- c. eit PRO hou=poud=**ean**.
for 2PL.ACC/GEN=be.INF=3SGM
[except if you had deceived] in order to have it.

(8) sets out basic assumptions about these constructions. T is the locus of nominative ϕ -dependencies and of subjecthood in infinitives. Intransitives can add a PP argument to S, but the PP does not participate in ϕ /case/A-dependencies with T, perhaps because it is below S, and the structural subject of T is S, (8)a. A couple of intransitives including BE can add a quirky-case R that does interact with T to become the subject, perhaps because it is above S, which is then in object position, in the manner of asymmetric quirky-subject unaccusatives in Icelandic (4.2).⁹

- (8) a. *Apud me* [_{NOM} T ... [_α S [... R_{PP} ...]]] or [_{NOM} T ... [_α R_{PP} [... S ...]]]
b. *Mihi est* [_{DAT} T ... [_α R [... S ...]]]

3.3.3 Nominative object in Breton-Cornish

Brythonic inherited ϕ -agreement of nominatives with the finite verb by suffixes. It remained after the loss of case inflections, with preverbal or postverbal S/A, including S of *mihi est*. This is the situation in earlier Welsh (Schumacher 2011 and further lit. in DME.II: 3.1). If there had been split-nominative objects at this point, they would have had O/S that agreed in 3rd person

⁸ Early, clitic doubling matches ϕ -features; in later southeastern varieties, it does so when doubling personal pronouns including (N)OC PRO, and otherwise neutralises to 3SGM, also used for doubling arbitrary PRO.

⁹ T and v are conventions, and may reflect complex systems such as v for the semantic introducer of A and accusative ϕ /case locus but Voice for the c-selector of A, Alexiadou et al. 2015, and T for the nominative ϕ /case locus but Fin for the highest A-position, cf. Holmberg 2017, Cardinaletti 2004, Rizzi and Shlonsky 2006. For structures for *have*, see Myler 2016, for coding alternations like those quirky nominal ~ PP here, see Wood and Marantz 2017.

and was ineffable or accusative in ½. This may be witnessed in innovative mediopassives in Old Welsh and Breton-Cornish (4.4.3). For *mihi est* there is no evidence from this stage about agreement and subjecthood (3.3.1 above and note 7 there).

By 14C Breton and Cornish, free (pro)nominal S/A combine with the 3SG/default form, and the old agreement suffixes remain only to code otherwise silent bound-pronoun S/A. S of *apud me est* participates in this development, (9).

(9) (Non)agreement with S of *apud me est* in Breton (J. Pourchasse: CGS[†]; 18C SE)

pro + agreeing verb

- a. Deoh hemp quin vei-n perpet
to.2PL without more will.be-1SG.N always
I will always be yours.

Overt S + 3SG verb

- b. Mé vou deoh hemb partage
1SG will.be to.2PL without sharing
I will be yours alone.

Analyses differ, but concur that there was change from a system where ϕ -suffixes were agreement with nominatives to one where the controller had to be a bound or weak pronoun in a local configuration (see a.o. for Breton, Anderson 1982, Stump 1984, Jouitteau and Rezac 2006; Irish, McCloskey and Hale 1984, Legate 1999, Ackema and Neeleman 2003; Welsh, Willis 1998). Here it is supposed that both earlier and later systems have a ϕ -dependency of T with nominatives. In both, silent nominative pronouns are of the Italian *pro* type, rather than weak *egli* or strong *lui* type, and as *pro*, they are licensed in a local configuration with the target of agreement, say Spec,T (Cardinaletti 2004, Cardinaletti and Starke 1999, Dobrovie-Sorin 1998, Rizzi 1986; Holmberg and Roberts 2010). In the later system, agreement only surfaces in this configuration, for reasons left open here (e.g. realisation of ϕ -values on T in the local context of *pro*, Jouitteau and Rezac 2006, cf. 5.3, or extra structure of free (pro)nominals, cf. note 37).

With the agreement change, object-position S lost bound-pronoun forms licensed by agreement in Spec,T. This affected *mihi est* at some point before 14C when its S had come to be in object position and R in subject position (3.3.2, cf. ex. (8)). Free pronouns should then have become available to realise even weak-pronoun S, as with V1, and encliticised, as in the imperative (3.2). That is the coding of S of *mihi est* found as soon as there is evidence, 14C in Cornish, 16C in Breton (DME.II: 3.1):¹⁰

(10) 3rd person objects of *mihi est* in early Brythonic (verbs are 3SG/DFLT)

	Welsh (BT [†] , 14C)	Cornish (CE [†] , late 14C)	Breton (N [†] , 16C)
a.	ny=th=vi __ NEG=2SG.A/G=be you will not have it	b. ha ty a=vy3=hy and 2SG R.2SG.A/G=be=3SGF and you will have her	c. n=oz=boe=y 2PL.A/G=be.PT=3PL you did not have them

As in the imperative, once free pronouns encliticised, their availability no longer followed from the unavailability of bound pronouns, and reanalysis of their licensing must have taken

¹⁰ Beside this pathway of agreement change, there is an earlier, compatible one where agreement was initially lost with nominative objects in oblique-subject constructions (DME.II: 3.1, as in Icelandic, 5.4); differences between the two pathways might appear in contingent and hard to test predictions about agreement in early Welsh and in Middle Breton jussives (DME.II: 5.2). After loss of agreement with nominative objects (pro)nominals, it would in principle have been possible at any point for speakers to reanalyse the first free and later enclitic pronouns coding earlier nominative S as coding accusative O of an expletive-subject transitive (cf. Rigau 2005 on Catalan *calere*, similarly earlier French *falloir*) realised as free/enclitic due to clitic cluster conflict with proclitic R (3.5.4, see for a later stage of Breton Lambert 1999: 823) yet restricted in combination with it to 3rd person by a unique instance of *me lui* in the language (cf. Postal 1990, Rezac 2011: 4.5.5 on French *falloir*). This seems compatible with what follows with technical changes, but makes incorrect predictions at stage after stage of development (e.g. DME.II: 352 on a later doubling diagnostic of accusatives, 357 on a change to what such a system would be expected to look like, and below 3.5.4).

place, further developing the system reached in 3.2. That original system in Figure 1 (left) had accusative mesoclitics like 1PL =n= from enclisis to a conjunction or particle C from some derived supra-VP position, and the whole amalgamated in some way with the finite verb (3.2). By 14C, meso- to proclisis shift in Breton, e.g. 1PL =n= → (h)on=, had emancipated accusative clitics from leftward dependence on C (3.2). The new proclitics were dependent on a rightward host only, at first the finite verb, but when the perfect periphrasis was innovated in 16C, it allowed their attachment to participle rather than auxiliary (3.5, show in (15)), and infinitives too came to host them when innovated in 17C (DME.II: 4.5). This evidence indicates that these proclitics unlike the earlier mesoclitics attached from a fairly low position to fairly low verbal elements. Their clisis is modelled here as optional A-movement of objects of any case to Spec,v (as for all objects in Icelandic, Thráinsson 2007: 7.2.4), and licensing of only weak pronouns in this derived position through their proclisis from Spec,v rightward to certain hosts, say those containing v (Rezac 2005: sec. 4 on 20C Breton, 3.5 below for grammaticalisation of hosts; see Kramer 2014: esp. 4.5 with lit. for theory and parallels, including the restriction of the general object shift in Icelandic to weak pronouns in Mainland Scandinavian). This gives the endpoint in Figure 1 (left). The residual 1SG/2SG(/3) mesoclitics are now simply proclitics that additionally need a leftward host for syllabification (cf. DME.II: 330 note 6; earlier mesoclitics were not all nonsyllabic, nor are in Middle Cornish).

Figure 1: Object clitic development prior to person restrictions (with 15/16C Breton forms)

	ACC object 'sees us'	ACC object 'see us!'	NOM object 'hast them'
origin	C=n _{1PL.ACC} =gwel _{see+v+T}	gwel _{see+...+C} ni _{1PL}	=z _{2SG.ACC} =bez _{be} i _{3PL}
enclisis	<i>same</i>	gwel _{see+v+T} =ni	=z _{2SG.ACC} =bez _{be} =i
proclisis	hon _{1PL.ACC} =gwel	gwel=ni + hon=gwel	<i>same</i>
cf. pf.	=z=bez hon=gwelet _{seen}	=z=bezet hon=gwelet	=z=bez=i gwelet

In the imperative-jussive, Figure 1 (centre), there was an alternative coding of accusative object O by enclitics, going back to free pronouns unblocked in V1 and their encliticisation to these verb forms regardless of V1 in pre-14C Breton and Cornish (3.2). The same enclitics, going back to free pronouns unblocked by restrictions on agreement above, coded nominative object S of *mihi est* in pre-14C Breton and Cornish, Figure 1 (right). For these enclitics of *mihi est*, the target of enclisis is identifiable as T against v or C: when the perfect periphrasis grammaticalises in 16C, the enclitics *mihi est* are available immediately and attach to the auxiliary rather than the participle (3.5, shown in (15); DME.II: 3.3); when infinitives grammaticalise in 17C, they too host the enclitics but lack the elaborate C-system of finite clauses (DME.I: 5.4). The origin site for all object encliticisation to T may be taken to be the same Spec,v as for procliticisation to v, since object shift to Spec,v should be available to all structural objects independently of case (parallels: Icelandic object shift, Thráinsson 2007: 7.2.4; Irish enclisis of nominatives from Spec,T to T, Bennet et al. 2019: sec. 3, cf. Icelandic in Sigurðsson and Wood 2019). From Spec,v, only accusative objects could procliticise, since proclitics were morphologically accusative, but the diachronic pathways to enclitics meant that they were case-syncretic like their free-pronoun antecedents, and yet they were available only for imperatives-jussives + accusative O through reanalysis of V1 (Figure 1 (centre)) and BE + nominative S through loss of agreement (Figure 1 (right)). It thus remains to understand how enclisis was constrained, since it no longer correlated with its historical causes like V1.

One way to fix enclitic distribution is through arbitrary restriction of enclitic hosts to imperative-jussive and BE verb forms. That seems suitable to the *12C Breton-Cornish ≈ 14C Cornish system (arbitrarily grammaticalised hosthood of enclitics was an independent point of variation in the system, see 3.7 here and DME.II: 2.4). Another is by restricting enclisis of arguments to underlyingly nominative case. That will be suitable at the next stage in 15/16C Breton, where nominative case will be presently proposed to have transferred from objects S of *mihi est* to O of imperatives. The two mechanisms are characteristic of different views of grammaticalisation, yet also compatible at the same or at different stages (cf. Hopper and Traugott 2003, Roberts 2007). The mechanisms must not restrict the doubling use of enclitics

from strong free pronouns (3.1). That follows for the case-based mechanism if doubling enclitics lack case, and may need some abstraction for the hosthood mechanism so long as object and doubling enclitics were syncretic (17/18C, 3.7, but earlier cf. perhaps DME.II 2.4).¹¹

3.4 Person restrictions: *mihi est*

3.4.1 *The restrictions*

At this point, we can return to the puzzle of person restrictions (3.2). In the imperative, instead of the expected all-enclitic, all-proclitic, or free system, there appear ½ accusative proclitics and 3 enclitics (3.2). The same will be true of *mihi est* and there the cause(s) can be identified.

The restrictions are described in some of the earliest grammars in 19C (e.g. Le Bayon 1878), linguistic studies of 20-21C (e.g. Ternes 1970, Cheveau 2007, Crahé 2014), and are borne out by corpora (Hemon 1975: §11, DME.II). They affect imperatives, lexical *mihi est*, and the *have*-perfect built on it, grouped here with *mihi est* as *have*-construction. Each restricted construction stands beside unrestricted ones with similar use – future, present and infinitive for commands, sometimes in suppletion with the imperative (3.7); *apud me est* and transitive *kavout* ‘find, get’ for possession, the latter also suppletive with *mihi est* (DME.I: 5.4); past gradually replaced by perfect (Hemon 1975: §130 note 1). The restrictions limit enclitics to 3, while the missing ½ may be ineffable or accusative pro/mesoclitics, and the latter cannot code 3 in these constructions. The same clitics have no restrictions in other uses: pro/mesoclitics O outside the imperative, enclitics doubling bound pronouns, and coding arguments of items like *gwa* ‘woe’ (q.v. 3.2, 3.7). Free pronouns in strong pronoun environments like focus fronting, everywhere rare, are also unrestricted even in the restricted constructions, as in (11). On the other hand, free pronouns will largely turn out to be unusable for weak pronouns barred by person restrictions.

(11) Free strong pronoun object of *have* constructions in Breton

Lexical mihi est (S. Guillome: ALLS; early 20C SE)

- a. Mi hou=pou doh en=nouz
1SG 2PL.ACC/GEN=will.be from the=night
You will have me by night [or by day].

Have-perfect (E. Gueguen: Cnf; early 17C)

- b. huy a=m=eus galuet an=sarmant me eo an=guiznyen
2PL R=1SG=be called the=shoot 1SG be the=vine
[You in sacred place who serve me:] you I have called the branch, I am the vine.

In this section the φ -restrictions are studied for *mihi est* itself, from which they spread to the *have*-perfect (3.5) and arguably imperative (3.6). The earliest evidence of the limited corpora through mid-17C is hamstrung by the baseline rarity of definite human “possessa”. These texts therefore only show that such human enclitics were available as human 3, Cornish 14C as in (10)b, Breton 17C as in (2)d, not that ½ were ungrammatical, though they are absent. That ungrammaticality is revealed slightly later by the way translators faced the challenge of clitic + *avoir* in French and Italian. *Mihi est* and enclitics are the rule for 3, even human, but for ½, other codings are used. Southeastern varieties turn to *apud me est* or transitive *kavout* ‘find, get’, which have no restrictions, as in (12)a (DME.II: 3.2).

(12) Lexical *mihi est* + ½ *possessa* in Matthew 26:11 in Breton

Southeast apud me est (J. Guequellou: HJC; early 18C SE)

- a. ne=me=havehet quet berpet
NEG=1SG.ACC/GEN=will.find.2PL.NOM not always

¹¹ There may be no way to see if enclisis could operate on low-position S of BE or other intransitives when there is no R in subject position, due to constraints on existential-presentational constructions like focus, 4.3, but cf. presentatives, 3.7.

Northwest *a*-form (J.-F. Le Gonidec: TJK; early 19C NW)

- b. n'=hó=pezô két bépréd ac'hanoun
NEG=2PL.ACC/GEN=will.be not always of.1SG
you will not always have me (source *vous ne m'aurez pas toujours*, DME.III)

Other varieties use so-called *a*-forms, free pronouns originating as inflections of *a* 'of', (12)b. These gradually replaced all accusative proclitics from 18C. Yet even before they did so, they were occasionally resorted to in 17C when neither clitics nor free pronouns were a good choice for object coding, and that included objects of *mihi est*, (13) (DME.II: 4.2).¹²

(13) Lexical *mihi est* in Breton (C. ar Bris: IN, RP; early 18C NW)

√3 enclitic, tr. of *F. de Sales* Introduction à la vie dévote

- a. hó=pezo=ii evit compagnuzet
2PL.ACC/GEN=will.be=3PL for companions
[that] you have them as companions (source: *que vous les eussiez ... pour compagnes*)

*I→*a*-form, tr. of *P. de Barry* Réflexions sur les quatre fins derniers

- b. hó=pezo ac'hanon [...] evit ho=Parner
2PL.ACC/GEN=will.be of.1SG for 2PL.ACC/GEN=judge
you will have me [at least] as your judge (source: *vous m'avez du moins pour votre juge*)

These strategies confirm 19C– descriptions of the restrictions of enclitics to 3. They also suggest that free pronouns were unavailable in weak-pronoun environments to take over from the barred ½ enclitics. That too seems inferable from descriptions, though it rests on their limited recognition of the differences between enclitic and free pronouns (Le Bayon 1878, Guillevic and Le Goff 1902).

3.4.2 External source: Entrenchment

The φ -restrictions in *mihi est* lend themselves to both externalist and internalist accounts. On externalist approaches, this is reification of frequencies as conventionalised gaps arbitrary with respect to constrained internalist mechanisms of φ -dependencies (Haspelmath 2004 for *me lui* and analogues, cf. 2020, 2021; Yang 2016: 5.1.3, 2017). The proposal lends itself to *mihi est* because human personal pronouns had likely been rare as its S on at least some uses (to go by corpora of Brythonic, and the proxies of *have*, *avoir* on Google n-gram). Grammaticalisation of enclitics from free pronouns could entrench their low frequency as ineffabilities, and so perhaps could have subsequent conventionalisation (see note 19).

Conventionalisation seems to have a rather broad scope (sec. 2), and entrenchment should be able to gap free as well as bound forms in function of various aspects of their and their context's form and usage (Haspelmath 2004: 6.1, Yang 2016: ch. 5-6; for candidates from *me lui*, see Postal 1990 a.o. p. 176-7, 173, Sheehan 2018; Charnavel and Mateu 2015, García 2009: 127 note 32). The outcome of entrenchment can be modified by analogy, and this can reverse expectations from earlier frequencies (Haspelmath 2004: 6.1 for *me lui* from 'give' to 'introduce'). Neither entrenchment nor analogy is deterministic, so there are no predictions relative to a given pair of diachronically adjacent states (in Haspelmath 2004; contrast Yang 2016). Hence is no expectation that *mihi est* should have differentially lost enclitics in 'I have you/him' but not 'I have you/him on my right', though these are differentiated by frequencies; or that *apud me est* should have had the gap *BE.1/2 to-PP* despite being dedicated to possession, or (*daz*)*pren* 'buy (back)' *1/2=V*, and these were unproblematic when need arose to translate *have me* (9) and 'bought, redeemed us'.

¹² *A*-forms likely originate from use of 'of' to code partitive O/S (Stark and Widmer 2020) and are sporadically used to code pronominal O in negative clauses in all 16-17C varieties (DME.II: 4.2) before use as stopgaps in 17C and generalised in early 18C. Intriguingly, in none of these uses-stages, or later, are they restricted to pronouns with human or inanimate referents, and so not animacy-related differential object marking (ibid).

There can be conditional expectations about tendencies across diachronic transitions. Given the observed form-frequency correspondence in Zipf’s Law of Abbreviation, whereby more frequent items prefer shorter encodings; and given the observed correlation of the degree of shortness and conventionalisation, inferred from the greater tendency of shorter than longer forms to become bound, and so conventional selective about local contexts; then bound forms should be gapped more than free forms, modulo other factors like analogy (Haspelmath op.cit.). For JR/PCC φ -restrictions here, it remains to be worked out how to get to their observed distribution, for instance the greater deviance of the common dative + accusative than the rare dative + dative *me lui* (see, with lit., Postal 1990 on *me lui* in French, e.g. p. 176-7, though see García 2009: ch. 5 for less externally grounded “iconicity”; parallels: Rezac 2008b on Basque; Sigurðsson 1996 on Icelandic).

3.4.3 Internalist: φ -intervention

The internalist approach to person restrictions here is partial intervention in syntactic φ -dependencies coupled with last-resort dependent case, sketched in (14) and developed in sec. 4-5. The syntactic dependency is Agree. It relates each of person π and number $\#$ φ -features as probes on a target like T with matching features on the closest goal by c-command. Match unifies the features, though other factors can affect whether and how the unification surfaces.

(14) T-nominative dependencies

a. Complete intervener: *NOM:	[T $_{\pi,\#}=X$	...	[X $_{\pi,\\#}$	...	*NOM $_{\pi,\#}$]]
including <i>kavout</i> ‘get’	[T $_{\pi,\#}=NOM$	...	[A.NOM $_{\pi,\#}$ v [...	→ACC $_{\pi,\#}$]]]]
b. No intervener: \surd NOM:	[T $_{\pi,\#}=NOM$	...		NOM $_{\pi,\#}$]]]]
including <i>apud me est</i>	[T $_{\pi,\#}=NOM$	...	[(KP)	v [BE S.NOM $_{\pi,\#}$ (KP)]]]]
c. Person intervener: \surd 3~* \surd 2+.NOM:	[T $_{\pi=X/\emptyset,\#}=NOM$	...	X $_{\pi}$	...	NOM $_{\pi,\#}$]]
including <i>mihi est</i>	[T $_{\pi=X,\#}=NOM$	...	[R.DAT $_{\pi}$	v [BE S.NOM $_{\#}$,→ACC $_{\pi,\#}$]]]]]]

In (14)a, T cannot match O past A for any φ -feature; in (14)b, the match is complete even with object-position S; in c it is split, π with R and $\#$ with S. A fully matched goal is attributed a property that can surface in case morphology, nominative for T. In c that is so for $\#$ -only S but not the incompletely-matched $\pi,\#$ -bearing S. In Breton nominative objects are realised as enclitics, and so π -less, 3-only enclitics for S in *mihi est* c. The nominative φ /case locus T is “independent”, but accusative v “dependent”, in the sense that its φ probes only as needed for licensing: always in (14)a, never in (14)b, and if there is a π -bearing S in (14)c. That would allow accusative proclitics in for $\frac{1}{2}$ S in c, but these will turn out to be ineffable here for morphological reasons, and free pronouns will be unavailable because they have not grammaticalised to realise weak-pronoun accusatives (3.5.4).

The person φ -feature π is taken to be absent on 3rd person on O/S, though this will not be so for A/R. The number φ -feature correlates closely with the presence of n/N. These φ -features may be invisible to clausal φ /case loci when embedded within larger structures that license them. One is *inherent case*, understood as c/s-selected KP like the *to*-PPs of English experiencers and their dative counterparts in German. Inherent-case KPs can also be transparent to the φ -features within, as in innovative varieties of Icelandic. Finally, they may behave as π -only bearers, or quirkily, as in typical varieties of Icelandic, and the clitic-doubling R of *mihi est* in Breton. Among ways to approach quirky obliques, it may be useful to have one to hand that is externalist: π grammaticalises uses of obliques like experiencers and so perspective-holders.

Internal and external mechanisms can give rise to different expectations about φ -restrictions (see lit. above on French, Basque, Icelandic). These can be difficult to disentangle, since with the framework of a typical internalist approach, there can also be arbitrary gaps of different external origins (sec. 2), and they can overlap with φ -restrictions from internalist mechanisms like (14) synchronically (Rezac 2011: 4.6.4 for *se lui* in French, 5.6.2 for JR/PCC in Basque). Indeed, one of the cues for the acquisition of a structure constrained by an internalist φ -restriction is arbitrary gaps due to an externalist factor: low frequencies of $\frac{1}{2}$ S in R=BE=S might have cued reanalysis from subject S, Latin (5)b, to object S, (14)c, though the inverse is

also possible. Below the argument for an other internal mechanism like (14) in Breton is based on limits on the subsequent spread of the ϕ -restrictions of *mih est*.

3.5 Person restrictions: Have-perfect

3.5.1 *The perfect*

Breton and Cornish innovated periphrasis of BE + resultative participle for the passive of transitives and perfect of intransitives, and Breton extended it to the perfect of transitives before 16C (Le Roux 1957: 120ff., 389ff., Hemon 1975: §154). The extension takes two forms, (15). One is the *be*-perfect, reserved to transitives reflexivised by the inherited prefix *em-* ‘self’. It may be represented as *They are (them=)self-seen*, cf. the synthetic preterite *They them=self-saw*: BE is recruited as the auxiliary, A is coded like S of BE, O is coded as *em-* attached to the participle alone and later augmented by accusative proclitics. The other is the *have*-perfect, used with other transitives, and variously extended to intransitives. Its form is *Them=is=they seen*, cf. the synthetic preterite *They them=saw*: A(S) is coded like R of *mih est* and is the structural subject, and O like S of *mih est* and is the object (see 3.3 and lit. there).

(15) Breton periphrastic perfect in later 16C (a-c Cath, d Gk)

Be-perfect of reflexivised transitives

- | | |
|--|---|
| a. me so <i>ma=em-roet</i>
1SG be 1SG.A/G=REFL-given
I have given myself | b. <i>ma=z=eo bezet e n=em-offret</i>
as=R=be been 3SGM.A=REFL-offered
as he had offered himself [for me] |
|--|---|

Have-perfect of transitives

- | | |
|---|--|
| c. oll <i>e=m=eux=y</i> dispriset
all R=1SG.A/G=be=3PL despised
I have despised them all. | d. <i>euel ma=m=eux ho=advertisset</i>
like as=1SG.A/G=be 2PL.A/G=warned
as I have warned you. |
|---|--|

The coding identities between lexical and perfect-auxiliary BE remain over the history of Breton: as forms, syntax and usage of BE and its R and S-coding clitics and suffixes change, so do those of the perfect auxiliaries, under the correspondence A = R and O = S. The stability is not reducible to a resultative analysis of the perfect as lexical plain and *mih est* BE + participial secondary predicate, since that is attested alongside the perfect and contrasts with it as in English *She/They had born a child yesterday* (including with *mih est* at least from 16C, DME.III; cf. with lit. Salzmann and Schaden 2019, Day and Zahler 2014).¹³

Here the perfect is viewed as innovation of new argument codings for (in)transitives modelled on those of BE, as part of the grammaticalisation of BE as perfect auxiliary, whether by calque on Romance or reanalysis of BE + participle resultative. It may be analysed as follows in a framework that can incorporate the ϕ -locality approach to JR/PCC in (14). In Breton, *v* of transitives selects for bare (pro)nominals as A, and in virtue of this, it is the ϕ /case locus of accusative as dependent case, (14)a. Upon grammaticalisation of BE as the perfect auxiliary, a new *v* appeared that selects A in the way *v*/Appl of *mih est* selected R, with dative quirky case, and in consequence, is not necessarily a ϕ /case locus and allows nominative on O from T, (14)c. The new *v* is selectionally correlated with perfect auxiliary BE in T and participial *v*P. Reflexivised transitives have a special *v* that ensures A=O, and its selection for caseless A and so dependent case on O were not affected, arguably under influence of the distribution of *be* and *have* in the perfect of French. There was no independent change to the selection of O and S.¹⁴

¹³ The Breton coding of A(S)-O like R-S in *be/have*-perfects has been widely observed where *have* is based on *be* (*mih est*: circum-Baltic, Seržant 2012; Latin, Heine 1997: 4.3; Georgian, Hewitt 1995: 501-2, Harris 1985: 13.2, cf. Hewitt 2016 relating Breton; *apud me est*: Irish, Wigger 2020), but some of these may be resultatives (Georgian, Boeder 1999).

¹⁴ Various alternatives are compatible with what follows, for instance without light verbs, but others are excluded; notably, reflexivised transitives were not simply intransitives in 16C (as seen in (15)), and A, S do not seem to have assumed aspects of the interpretation of R, S in *mih est* even to the extent resultatives have them (cf. on animacy, DME.III). The analysis here restricts quirky case to A of transitives (as similarly e.g. Skopeteas et al. 2012 on Georgian),

3.5.2 Gaps, stopgaps, and repairs

When A and O of the *have*-perfect adopted the coding of R and S of *mihi est*, enclitics for O came with the 3 restriction of enclitic S, $A=BE=3.O \dots PRT$. At this point there likely appeared functional pressure to express weak-pronoun $\frac{1}{2}$ O, since from the earliest texts on, transitives found in the perfect are common with human O: so *karet* ‘love’, *keleñn* ‘instruct’, *pediñ* ‘ask’.

Over 16-17C, accusative proclitics appear on the participle for $\frac{1}{2}$ but not 3 O, complementing enclitics for 3 O to the auxiliary, and this is the usual system thereafter in varieties that keep enclitics to 21C (see lit. in DME.II: 3.3). This accusative coding will be called the *repair* use of the accusative proclitics, *her=be us=seen*, because the accusative proclitic is available only when an enclitic is not, *her=be=they seen*. It is illustrated in (11) and in the context of the fuller system in (2). In its restriction of accusative proclitics to $\frac{1}{2}$, the repair contrasts with no restriction on them in the older synthetic tenses attested at all periods from 9/10C, *them/us=saw.she*, also shown in (2), and their infinitives when these developed in 17C, *them/us=see*. It also contrasts with no restrictions on accusative proclitics on the participle of the *be*-perfect of reflexivised transitives when these were added to the reflexiviser *em-* in later 16C, *her be them/us=self-seen*, shown in (15) (further 3.7). Finally, it contrasts with unrestricted accusative proclitics on bare participles in reduced clauses, *them=seen*, clear in 18C but perhaps from late 16C (DME.II: 3.3, DME.III). Table 5 resumes this system and further changes.¹⁵

Table 5: Accusative (A) pro/mesoclitic in varieties with 3 enclitics for O/S to $BE_{V/AUX}$

			Late 16C	Conservative	Innovative	<i>a</i> -forms
Synthetic	tr.		A=V	A=V	A=V	V <i>a</i> -form
	tr. refl.		A= <i>em</i> -V	–	–	–
	<i>mihi est</i>		*	*	*	R=BE <i>a</i> -form
Perfect	tr.:	DAT=BE +	$\frac{1}{2}$ A=PRT	$\frac{1}{2}$ A=PRT	A=PRT	PRT <i>a</i> -form
	tr. refl:	BE(-NOM) +	A= <i>em</i> -PRT	–	–	–
	<i>mihi est</i> :	DAT=BE +	*	*	(A=PRT)	?
Participle (bare)	tr.		(A=PRT)	A=PRT	?	PRT <i>a</i> -form
	tr.refl		?	–	–	–
	<i>mihi est</i>		?	?	?	?

Note: (...) marginal attestation; conservative 17C– southeast, 17C rest; Innovative: part of 18-19C southeast and rare, 18C rest; *a*-forms: 18C rest.

The appearance of $\frac{1}{2}$ accusative proclitics on the participle in the repair is delayed relative to 3 enclitics on the auxiliary. In the first extensive texts of earlier 16C, the perfect already uses enclitics for 3 O, but not proclitics for $\frac{1}{2}$ O, and frequencies suggest that $\frac{1}{2}$ O is being is avoided (DME.III). This is supported by recourse to otherwise unavailable codings with writers that lack the repair: an early 16C writer’s one *be-* for *have*-perfect in earlier 16C so that BE can host the $\frac{1}{2}$ O proclitic, and an early 17C writer’s systematic recourse to haphazard choice among $\frac{1}{2}$ enclitics, object drop, and the *a*-forms already noted on such last-resort use with lexical *mihi est*

and thus sweeps under the rug the varying coding of S of unaccusatives and even passives as R of *mihi est* or S of plain BE in Breton (DME.II: 3.3). A more adequate alternative and closer to a resultative origin is to introduce the dative subject of the perfect by a functional head H related to the perfect, and either have the highest argument of the vP raise to this dative in Spec,H (Bjorkman 2018, cf. 4.3), or have the dative in Spec,H interpret the highest argument of the vP left open if external or passed up through function composition if internal (Wood 2015). However, other solutions have been also advanced for similar variation in coding the S of unaccusatives (Postal 1989: 96-101; Schäfer 2008: 6.6; Berro 2019: sec. 4).

¹⁵ In Middle Breton, accusative proclitics are syncretic with genitive ones outside 3SGM and residual 3 mesoclitic, and these suggests that proclitics were accusative as early as late 16C when introduced on participles (DME.II: 3.3, 4.1, cf. (15)b). The accusative is revealed clearly in southeastern varieties of 18C– by genitive-accusative differentiation in 1SG, 2SG, 1PL in form, and for all proclitics in the syntax of doubling for all proclitics (DME.II: 3.3), but obscured by allomorphy in north-and-west in early 18C (DME.II: 4.3-4). However, the matter is not central to what follows, and a putative genitive of $\frac{1}{2}$ proclitics to the participle would fit in as differential object marking (see 5.2).

in (13) (DME.II: 3.4). Similar strategies have parallels elsewhere and judgments reveal them to come with various degrees of deviance; they will be called *stopgaps* here (for φ -restrictions, see Sigurðsson 1996 on Icelandic, Ormazabal and Romero 2007, Kempson and Chatzikyriakidis 2011 on Spanish and Greek; cf. for intrusive resumption, Heestand et al. 2011; for local overlapping reference, Rezac 2016). In Breton, nonce or haphazard use of these stopgaps anticorrelates with systematic use of the repair in a given variety. Free pronouns in weak pronoun environments seem absent as both stopgaps and repair (cf. ineffability of *me lui* and other gaps in French, Rezac 2011: 4.3, 4.6 with lit.).

3.5.3 *Internalist and externalist sources*

The transfer of the person restriction on enclitics from *mihi est* to the *have*-perfect is a natural sequel to the transfer of R, S coding to A, O. In the internalist account (14), the transfer involves transfer of split-nominative from object S of *mihi est* to object O of the *have*-perfect, and that is the automatic consequence of the overtly cued transfer of quirky dative coding through clitic doubling from subject R to subject A. There could be no such transfer to enclitics coupled with no subjects or φ -complete nominative subjects, for instance in the *be*-perfect of reflexivised transitives (further 3.7). Upon this transfer of quirky dative case to A, accusative might have become available for $\frac{1}{2}$ O, and did, but at first was ineffable because weak pronoun $\frac{1}{2}$ could only be expressed by proclitics and these had no host, as set out presently (3.5.4).

Typically, gaps derivable from internalist mechanisms can be surface-identical to arbitrary gaps encodeable in the same framework (3.4.3). The Breton alternation $A=BE=3.O \dots PRT \sim A=BE \dots \frac{1}{2}.O=PRT$ is less susceptible to this analytical duality than typical arbitrary gaps like **amn't*, **sors-je*, **stridden*. The $A=BE=3.O$ group can be indefinitely separated by A-positions and adverbs from the $\frac{1}{2}.O=PRT$ group, yet ineffability of the $3.O=PRT$ depended on availability of $A=BE=3.O$, because $3.O=PRT$ was available in the *be*-perfect of reflexivised transitives and perhaps in participial relatives (DME.II: 3.3). The needed dependency is not in the typical domain of morphological approaches to arbitrary gaps (Rezac 2011: 3.4, Embick and Marantz 2008), and might go beyond other limits proposed on arbitrary conventionalisation (e.g. Bruening 2020 on **NEG V! the golden goose*; see DME.III on ECM).

If there is no issue with conventionalising an arbitrary $3.O=PRT$ gap in virtue of the complementary availability $A=BE=3.O$, a potential externalist source of the complementarity is available in “antisynonymy”, that is, preference for unique form-function couplings (Hawkins 2004: 3.2, Traugott 2004; but for actual complexity see a.o. Wolk et al. 2013). By antisynonymy, the preexisting enclitic coding of 3 O can have gapped its new proclitic coding while not interfering with proclitics for $\frac{1}{2}$ O. In the same way other circumlocutions might have been recruited to repair the enclitic gap, including any of the stopgaps above, and others like passives. In contrast, the particular internalist mechanics of φ -intervention and dependent case in (14) is severely circumscribed in what complementary φ -restrictions it can yield, and does not include any of these possibilities (see 5.1).

3.5.4 *Grammaticalisation of the accusative repair*

When accusative clitics appear in the *have/be*-perfects of Breton, it is on the participle, not the auxiliary, in contrast to ad/superstrate French (cf. Le Roux 1957: 120ff., Hemon 1975: §154). There may be a straightforward explanation. Breton-Cornish had no clusters of accusative pro/mesoclitics, and no diachronic source for them, since its R-coding accusative + dative clitics had become limited to unaccusatives, and indeed were rare enough earlier that they do not cluster with O-coding clitics even in Welsh ditransitives (DME.II: 3.3). By the time the perfect was innovated in Breton and created pressure to code O by accusative proclitics in a structure where these also coded A, there was no evidence to guide the ordering and allomorphy of the two accusative clitics and the dative marker. Such partly haplological feature combinations seems to favour grammaticalised idiosyncracies elsewhere (see e.g. on Romance with lit, opacities Pescarini 2021; gaps Miller and Monachesi 2003, Rezac 2010b; cf. a.o. Basque, Arregi and Nevins 2012; Nunggubuyu, Noyer 2001). The issue reappeared later in Breton when varieties outside the southeast shifted dative-nominative to dative-accusative *have*-constructions

in 18C. They used new accusative *a*-forms for S of *mihi est* and O of the *have*-perfect (cf. 3.4, 3.7.2), but still did not cluster accusative-clitic R/O and S/A here (DME.II: 3.2, 4.2-4 with lit.).

The participle appears not to have yet grammaticalised as proclitic host in the earliest extensive texts of 16C. In them perfects only have 3 O through enclitics, apart from one early stopgap that codes a 1st person O by proclitic to BE, suppressing the A proclitic (3.5.1). At this point different innovations could have made available accusative proclitics for ½ O, as in similar developments in Romance (for auxiliary vs. participial attachments in varieties of French, nuanced by different uses of the participle, see Benucci 1993, Vinet 2003, Miller and Monachesi 2003, diachrony, Jensen 1990: §341, more broadly Pescarini 2021: 3.8, 4.4, ch. 10, role of morphophonology Morin 1979: 304 note 5). To grammaticalise the participle as proclitic host, two elements were needed. One was the right syntactic configuration to allow clisis. Here, clisis takes place from Spec,v, so this element is grammaticalisation of the participle as realising v or some other verbal content adjacent to v (see 3.3). The other element is effability of the *O=PRT* combination given the surface-opaque allomorphies of the onset of pro/mesoclitic hosts known as mutations in Breton (Iosad 2021). Mutations have arbitrary irregularities and gaps (Hemon 1975: §1-17), their acquisition suggests limited generalisability (Stephens 1996, Kennard and Lahiri 2015), and they prove aberrant or ineffable on other novel proclitic hosts (infinitives of *mihi est*, Rezac 2021, transitive ‘own’ reanalysed from ‘whom/whose is’, Chatelier 2016: 180ff., Guillevic and Le Goff 1902: 54). These elements were in place and *O=PRT* appeared in later 16C and early 17C depending on variety, not only for the ½ accusative clitics of the repair in the *have*-perfect, but for any-person ones in the *be*-perfect of reflexivised transitives shown in (15), and perhaps also in bare participles in reduced clauses (DHM.II: 3.4, DME.III; see 3.7).¹⁶

Only once the participle grammaticalised as proclitic host could *A=BE ½.O=PRT* appear to complement *A=BE=3.O PRT* in the perfect. In the externalist approach, ½.O=PRT was innovated at this point, while on the internalist approach, only the externalisation of the accusative weak pronoun was, and case-syncretic strong free pronouns could have been undetectably accusative as ½ O of the perfect as soon as A had become quirky dative.

3.6 Person restrictions: Imperative

The imperative of active transitives has the same split-enclitic coding as the perfect, but from the first texts to document it in early 16C it has both not only 3 enclitics like the perfect, but also ½ proclitic that the perfect acquired from later 16C. This seems as expected. The perfect had to grammaticalise the participle as proclitic host to allow the proclitics, but with imperatives-jussives, enclitics go back to < 12C Breton-Cornish, and proclitics go back to Brythonic mesoclitics modified by the general meso- to proclisis shift in 12-14C Breton (3.2). It remained to add person restrictions. These transfer readily from *have*-constructions on any approach.

Figure 2 sets out the proposed history of the imperative including its person restrictions, fully documented from 16C on, but choosing among several possible reconstructions in the poorly documented 12-16C. At each step, a possible external factor is suggested. Entrenchment of frequencies with *mihi est* left arbitrary gaps for ½ in the enclitics coding its S. The imperative historically had unrestricted pro/mesoclitic and enclitic coding for its O, and over the enclitic coding, the person restriction could spread from S to O directly, or via the *have*-perfect. Thanks to the availability of pro/mesoclitics, there was no functional loss, and antisynonymy could restrict these as in the *have*-perfect. This is the system of 16C Middle Breton, earliest southeastern varieties, and others later. The southeast unrestricts enclitics in imperative but not *have*-constructions in early 18C, giving the former a uniformly enclitic paradigm and returning to part of Breton-Cornish attested in 14C Cornish.

Figure 2: Externalist rise of person restrictions in imperative

*12C≈Middle Cornish 14C

¹⁶ There often remained a gap for the participle of *be* itself, giving *They have=them had* ~ **They have you=had*; this is not unexpected, for with *be* unlike with transitives, synthetic finite forms did not offer guidance about mutations induced on the stem by plain accusative clitics (Le Goff 1927, but there may be variation, DME.II: 355 note 36, Rezac 2021, and perhaps also variation on free weak pronouns instead, *ibid.*, Cheveau 2007: 5.4.2).

Enclitics for O and 3.S	V!=O ~ =V!=O ~ =O=V! vs. general =O=V _{FIN} R=BE=3.S vs. general =V _{FIN} =S [low frequency of ½ possessa]
<i>Before 16C</i>	
Meso→proclisis	V!=O joined by O=V!
<i>Have</i> -perfect innovated	R=BE=3.S → A=BE=3.O PRT
V!=O restricted to 3 rd	V!=O ~ O=V! → V!=3.O ~ O=V! [from <i>have</i> -constructions]
O=V! restricted to ½	V!=3.O ~ O=V! → V!=3.O ~ ½.O=V! [antisynonymy]
<i>16C/17C</i>	
Participle→host to ½=	A=BE=3.O PRT → ... ~ ½=PRT [antisynonymy or from ipv.]
<i>18C north-and-west</i>	
<i>Have</i> → accusative S/O	A=BE=3.O PRT → ... ½/3=PRT + <i>a</i> -forms alongside ½/3=
<i>18C southeast</i>	
Ipv., pos. → all-enclitic	V!=3.O ~ ½.O=V! → V!=O
Ipv., neg. → surrogate pres.	NEG=V!

On the φ -intervention approach to 3 enclitic ~ ½ accusative proclitic person restrictions in (14), the outward changes and even their ultimate causes can be the same, but there are now commitments to an internal mechanism that surfaces in the coupling of split-nominative objects with anomalous subjects in JR/PCC. Analogy over enclitic forms would still cue the transfer of person restrictions from S of *mihi est* to O of the imperative. That cue however would lead to change in A from φ -complete to φ -partial intervener, which entails the 3 nominative ~ ½ accusative coding of O, realised as 3 enclitic ~ ½ accusative proclitic. The mechanism cannot restrict enclitic arguments when there is no intervener, or to the extent that evidence guides the learner to φ -complete or φ -inert interveners.

That fits the stages of Breton in Table 6. Most categories of the synthetic finite verb share the coding of subject A/S and of object O. These have been taken here to reflect φ -complete nominative and accusative respectively. Imperatives are almost alone in having an anomalous subject A/S, being restricted to 1PL/2 bound pronouns indicated by partly unique inflections. They are thus a point of lability in the system for the inference of the φ /case properties of this argument. That matches the observed unique diachronic lability of their O coding, shifting from the same accusative meso→pro- and enclitics as other categories (c. *12C, perhaps 18C-southeast in Table 6, see 3.2), to split-pro/enclisis shared with *have*-constructions and analysed here as split-nominative (16-18C, 19C- central), to unique unrestricted enclisis that allows various analyses like unrestricted nominative (18C- southeast, further 4.4). There is one other category with anomalous A/S in the earliest documented stages of 16/17C, the jussive, but here the anomaly is richer agreement, and it is then as expected not coupled with split-enclitic O, but retention of the older system of unrestricted proclitic and enclitic O in V1 (3.2), insofar as the limited evidence goes (DME.II: 2.3, 5.2, Rezac 2021). This coupling of split-enclitic qua split-nominative object with anomalous subject is expected by JR/PCC.

Table 6: A-O coding for weak-pronoun arguments (N nominative, A accusative)

	Breton *12C	16-17C	18-20C C	18-21C SE	Finnish
Present, future, past indicative, conditional of plain (in)transitives					
S/A	-N N [?]	-N	-N	-N	-N N
O	A=, =A	A=	A	A=	A
Jussive of plain (in)transitives					
S/A	-N N [?]	-N α → -N	? → -	-N	-N (α)
O	A=, =A	A=, =A [?]		=A [?] , =N [?]	A
Imperative of plain (in)transitives					
S/A	-½	-½	-½	-½	-½ (α)
O	A=, =A	=3N~½A=	=3N~½A	=A [?] , =N [?]	3N~½A
Oblique-subject unaccusatives; transitives in perfect [restructuring-raising]					
R/A	DAT=	DAT=	DAT=?	DAT=	[DAT-GEN, ADS]
S/O	=3N	=3N~½A=	A	=3N~½A=	[3N~½A]

Note: -½ only bound-pronoun coding exists, α nonbound coding has special restrictions

To what extent the subject-object coupling of JR itself is derivable from externalist factors can be approached through externalist analyses of JR in Finnish. Finnish is like Breton in the coupling, as indicated in Table 6, and so indeed is Finnic, down to lability of O coding in the imperative-jussive according (non)agreement with A/S (see 4.5). For Finnish, there is a seminal externalist account of the coupling of nominative objects with anomalous subjects through dispreference for ambiguity. The marked accusative of Finnish reflects innovation in a reconstructed system with unmarked nominative-accusative, and preference to disambiguate A and O would have favoured spread of an innovated marked accusative, with the imperative the least ambiguous in virtue of typical use of silent 1PL/2 subjects (Hakulinen and Karlsson 1975, Comrie 1975, Dixon 1994; cf. Hawkins 2004: ch. 3-4, 2014: ch. 7-8).

The history of the split-enclitic coding in Breton seems to leave no role for ambiguity avoidance at any stage. We cannot leverage it to explain why *mihi est* with its unambiguously clitic-doubled R had at any point restricted its unambiguous free > enclitic S to 3; why the unambiguous 2SG-2PL-1PL A/S imperative of c. *12C with its any-person proclitic and enclitic O later restricted the proclitics to ½ and enclitics to 3 (3.2); why the innovated coding of O in the *be*-perfect of reflexivised transitives was any-person proclitics from the synthetic tenses rather than split-enclisis from the *have*-perfect (further 3.7); why items like *chetu* ‘lo’ discussed below which coded their unique argument by enclitics did not adopt the person restrictions on enclitics from *mihi est* as did the imperative (see 3.7).

In Finnish JR, ambiguity avoidance has been seen as the source of the couple of nominative objects with anomalous subjects, not of their split-nominative restriction to 3. This has been attributed to differential object marking, since nominative 3 alternates with accusative ½ in Finnish, not with ineffable ½ as in Icelandic or Basque or in *mihi est* of Breton (on Finnish, Kiparsky 2001, Vihman and Nelson 2019; see here sec. 5). Differential object marking has one candidate externalist source in form-frequency correspondence whereby shorter form is favoured in encoded expression in proportion to frequency of use (cf. 3.4.2; see with lit. Newmeyer 2005: 4.9, Hawkins 2014: ch. 8, Haspelmath 2020 but also Tal et al. 2022). For a typical transitive like *bring* as well as for *mihi est* BE, that would favour shorter inanimate O/S and marked animate O/S. In Finnish that seems to fit JR in *mihi est* and imperatives of transitives, since its ½+accusative has an extra morpheme relative to its 3 nominative.

Again, Breton does not directly fit this explanation. In Breton JR, ½ are ineffable or recruit the older accusative meso→proclitics, rather than the enclitics more recently grammaticalised from weak pronouns for 3. These enclitics started out and remained less phonologically reduced than the proclitics, e.g. 1SG unaccentable =*m=*, *mə=* vs. accentable =*me*, 3P unaccentable (*h*)*o=* vs. accentable =*i*, later =*int* (DME.II: 2.4, 3.2). If the form-frequency correspondence were reformulated to fit Breton, for instance with markedness for length as diagnosed by degree of combinatory constraints, it runs the risk of no longer suiting uses to which it has been put in

argument coding (Haspelmath 2004, 2021 on free pronouns for clitics in PCC contexts in Greek) and losing its externalist grounding in Zipf’s Law of Abbreviation (sec. 2).¹⁷

3.7 The split-nominative object group

The development of person-governed enclitic restrictions or enclitic-proclitic alternations has been traced from its origin in *mihi es*, to the *have*-perfect and the imperative. It is compatible with externalist and internalist accounts alone or together: so for instance from *mihi est* to the imperative, by analogy over the enclitics that coded both their objects, with or without modeling the spread as transfer of split-nominative object coupled with partial ϕ -intervener subject. These latter extra commitments of the internalist account are there to account for the constraints on subject-object coupling in JR/PCC. They limit what other constructions can have person-split enclisis qua split-nominative by this mechanism. Three lines of evidence about this are available in Breton: constructions whose sole argument is coded by enclitics, constructions with ordinary subjects, and changes to enclitics.

First then let us take a look at constructions with but one argument and it enclitic. In Brythonic and later, several items selecting one argument only had no bound coding for it, and so used unblocked free pronouns even in weak-pronoun contexts, Table 7 (3.2):

Table 7: Elements with unblocked free pronouns

Defective element	Origin	Cf.	Nondefective alternative
<i>hag</i> ‘as’ of comparison (origin: Lambert 1975)	‘and’	<i>que</i>	<i>euel</i> ‘like’
<i>gwa</i> (BE) ‘woe (is)’ (origin: Barðdal et al. 2013; cf. English: Abbott 1870: §230)	‘woe’ + BE + dative	<i>woe (is) me</i>	<i>goa</i> + ‘to’ PP
<i>chetu</i> &c presentational ‘lo’ (cf. origin of <i>voilà</i> : Morin 1985, Grevisse and Goose 2008: §1100)	fossil <i>look!</i>	<i>lo!</i> , <i>voi(s)-là</i>	–
<i>eme(z)</i> ‘quoth’	defective verb	<i>quoth</i>	<i>lavarout</i> ‘say’ (origin: Lewis and Pedersen 1961: §590.6 note, Hemon 1975: §152)

Table 8 sketches the complex developments that are recoverable at this point (DME.II, Rezac 2021). The free pronouns sometimes encliticised in Breton-Cornish, and through their syncretism with verbal or prepositional inflections in 3rd person, could lead to adoption of the latter in 3rd or beyond, with or without arbitrary gaps (at first absences, later described, e.g. Ternes 1970: 16.2.2). The enclitic coding often long coexists with split-enclisis in the *have*-imperative group, but never seems to adopt its person restriction on enclitics. Generally, the fulcrum for transfer of the person restriction would be merely the enclitic coding of arguments, as from *mihi est* to imperative, e.g. 15C- *gwa=i/ni* ‘woe=3PL/1PL’ “woe them/us” ~ *gwa deze/dimp* ‘woe to.3PL/1PL’ “woe to them/us” but not *gwa=i* ~ *gwa-dimp*. With presentationals like *chetu* ‘lo’, the fulcrum of transfer would have been a closer parallel. The presentationals are thought to derive from imperatives of ‘look’ fossilised before the first attestations in later 15C, **sell-it=hu=i/ny* ‘look!2PL=2PL=3PL/1PL’ “behold ye them/us” and the usages of the presentationals remains close to this imperative (Hemon 1975: §51.8; cf. Morin 1985: sec. 8 on French, or English *lo!*). Yet throughout the 15-18C varieties that have split-enclitic coding in the imperative *sellit=i* ‘look!2PL=3PL’ ~ *hon=sellit* ‘1PL=look!2PL’, it is not transferred to the presentational, *chetu(=)i/ni* ‘lo(=)3PL/1PL’. Internalist accounts that couple split-nominative objects with anomalous subjects expect that their mechanism will not extend to constructions with one argument only like *gwa* ‘woe’ or *chetu* presentationals.

¹⁷ The internalist mechanism here will incorporate differential object marking a.o. as variety of accusative, though there is no reason to think that any clitic in Breton is DOM, and it is not clear that it is in Finnish (4.4 and note 35).

Table 8: Special pronoun codings in Breton-Cornish

Host	Cornish 14-16C	Breton 16-17C	18C NW	19-21C SE	20C C
V-objects					
R=BE	=3	=3	▶ [°]	▶ [°]	<i>a-form</i>
A=BE + PRT	–	=3 → =3~½=	▶ [°]	▶ [°]	<i>a-form</i>
V!	=α	=3, ½=	▶ [°]	=α [!]	=α [?]
Other unblocked					
<i>hag</i> ‘as’	–	#α	▶	▶ | –	–
<i>gwa</i> ‘woe’	=α | ‘to’-α	=α | #α	▶ | ‘to’-α	<i>N/A</i>	?
<i>che-</i> ‘voilà’	[=α]	≈α | (-3=3)	≈α	≈α | -α | -1, =3	?
<i>eme</i> ‘quoth’	-α≈α	-α=α | -3	-α | ≈α | (≈½) | (=½) | eme+BE	-3=3 | ≈α | –	-3(~½)
Other					
<i>ema</i> ‘be at’	-3, BE-½	-3=3, BE-½	-α	▶	▶

Legend: # free, =enclitic, ≈ free or enclitic?, - V-suffix, ~ P-suffix, ° sui-generis bound, + compound, ° new forms of 3-enclitics exist, ! new forms specific to imperative exist, ▶ same as Middle Breton, (...) poorly attested, [...] noncognate analogue, | subvariety separator

The second line of evidence about JR is verbal constructions with both subject and object arguments where models arose for transfer of the split-enclitic coding of objects if it could be emancipated of anomalous subjects. Here may belong the recruitment in some varieties of the present with its own pro/mesoclitic O for negative commands to supplete with imperatives with their split-enclitic O that became restricted to positive commands (DME.II: 5.7). More clearly in this group of phenomena are constructions that did actually innovate or change the clitic coding of their O as they arose, such as *have*-perfects, inventoried for reference in Table 9.

Table 9: Spread of clitics across verbal constructions (deep/light shade = new/lost restrictions)

Source	Target	Innovation	Variety	Sec.
<i>3-restriction on enclitics</i>				
R _{DAT} =BE=___3S	V!=___3O	Restr. of ipv.	12-15C	3.5
<i>3-restricted enclitics</i>				
R _{DAT} =BE=___3S	A _{DAT} =BE=___3O	<i>have</i> -pf.	12-15C	3.5
finite	A _{DAT} =BE _{INF} =___3O/S (PRT)	<i>have</i> -inf.	17C se	3.5
finite/preceding	BE=___3O/S (PRT)	<i>have</i> -inf.	20C se	3.5
<i>Unrestricted enclitics</i>				
V!=___3O	V!=___O	Unrest. of ipv.	early 18C se	3.6
<i>½-restricted accusative pro/mesoclitics</i>				
___O=V _{FIN}	___½O=V _{FIN}	Repair	12-15C	3.2
___O=V _{FIN}	A _{DAT} =BE _{FIN/INF} ___½O=PRT	Repair	late 16C	3.5
<i>Accusative pro/mesoclitics</i>				
___O=V _{FIN} , ___GEN=V _{NMLZ}	___O=V _{INF}	Infinitives	16-17C	3.3
___O=V _{FIN}	BE _{FIN/INF} ___O=PRT	Pf. refl. tr.	late 16C	3.5
___O=V _{FIN}	___O=PRT	Reduced tr.	late 16C	3.5
___O=V _{FIN} , ___½O=PRT	A _{DAT} =BE _{FIN/INF} ___O=PRT	Rgl'n. of <i>have</i>	18C nw, %se	below
___O=V _{FIN} , ___½O=V!	___O=V!	Rgl'n. of ipv.	19C %nw	below
<i>Accusative + dative de pro/mesoclitics</i>				
___R/A=BE _{FIN} (PRT)	___R/A=BE _{INF} (PRT)	New <i>have</i> -inf.	17C se	3.3

There are several points where analogy might have spread 3-restricted enclitics alone or in alternation with ½-restricted proclitics, but did or did not in accordance with their dependence on anomalous subjects. The simplest is the perfect of transitives. When it appeared by 15/16C, it was as the *have*-perfect focused on so far (type *them=is=they/*us seen*). If the transitive is

reflexivised, the *be*-perfect was used, with A coded like S of BE, the invariant reflexived prefix *em-* on the participle, and no distinctive coding for O (type *they/we are self-seen*) (see 3.5). Later in 16C the participle grammaticalised as host for accusative proclitics of the *have*-perfect, restricted to ½. At this point the *be*-perfect also added O-codings clitics to the participle (ex. (15) in 3.5). However, it did so on the model of the synthetic finite tenses like the past, any-person person proclitic, rather than the *have*-perfect, ½ proclitic to the participle and 3 enclitic to BE. Externally, the choice seems opaque: neither model offered a straightforward extension, since there had before existed neither *BE=x* without *A/R=* proclitics (only later, see next), nor *x=(em-)PRT* where varieties will vacillate for some time in fixating allomorphs of proclitics (DME.II 3.4, 4.1, 4.3). The choice is expected if split-enclisis is split-nominative constrained by JR/PCC, since the *have*-perfect has an anomalous subject, coding A like the clitic-doubled R of *mihi est*, but the *be*-perfect does not, coding A like regular A/S.

The untaken path of generalising split-enclisis beyond anomalous subjects seems to surface in the development of infinitives and yet fits the expectations of internalist approaches (DME.II: 5.4). In the southeast, infinitives are innovated from nominalisations by 17C. At first, the infinitives of *have*-constructions used not just the infinitive of BE, but also the dative pro/mesoclitic doubling of A as PRO, and correspondingly split-enclitic coding of O, (16)a. Later the A proclitic disappeared but the split-enclitic O remained, and there arises a unique ambiguity of strings like *bout=ean* in (16)b between unrestricted clitic doubling of PRO S in the infinitive of the *be*-perfect of a passive transitive, ‘despite PRO being himself mocked’, and 3-only enclitic coding O in the *have*-perfect of the corresponding active, ‘despite PRO having mocked him’. These varieties invariably kept doubling of A in finite clauses with its evidence for quirky dative, and also in infinitives with specified subjects, and other systems indicate that the case would transfer to silent PRO (see with lit. Thráinsson 2007: 8.2.2 on Icelandic).¹⁸

(16) Infinitives of *have* [cf. Luke 23:11]

Old (J. Gequellou: HJC; early 18C SE)

- a. goudé PRO en≈d≈out=hon reçetiet guet disprisance
 after 3SGM.ACC≈DAT≈be.INF=3SGM received with disdain
 [Herod ...] after having received him with disdain

New (J. Oliero: AVIE; early 20C SE)

- b. goudé PRO bout=ean goapeit ha gusket dehou ur=sé huen
 after be.INF=3SGM mocked and clothed to.3SGM a=robe white
 [Herod ...] after having mocked him and put on him a white robe

The developments in Table 9 let us also look at subject-object coupling in the loss of split-enclitic coding for O. In 18C, some southeastern varieties optionally, and other varieties generally, lost the split-enclitic coding in *have*-constructions. They aligned their objects with accusative objects of other constructions by using unrestricted accusative proclitics, and outside the southeast, also their new *a*-form alternatives. Under the analysis here, this is a shift from dative-subject - nominative-object to dative-subject - accusative-object constructions. The shift has been well studied as the intermediate stage in the shift to nominative-subject - accusative-object in Germanic. There the intermediate stage is accompanied by addition of nominative agreement and/or case to the dative-coded subject. The same is true in Breton. Absent from Germanic and Breton seems a stage where the object is still split-nominative and the subject already is too (Germanic: Jónsson 2009, Árnadóttir and Sigurðson 2013, 4.2, cf. Allen 1995, 2006, Hrafnbjargarsson 2004, Fischer et al. 2004: 3.2.2; Breton: DME.II: 5.1; cf. 4.2, 5.2).

The final line of evidence bearing on the nature of the split-enclitic coding is an innovation in the form of enclitics. Over the history of Breton, enclitic forms usually changed uniformly across all their uses, namely the *have*-imperative group, the *woe*/presentational group, and doubling. In 18C however, the 3-only enclitics of the *have*-imperative group became differentiated from doubling enclitics, illustrated for 3P *y*, *int* → (*h*)*e* in (18) (DME.II: 2.5):

¹⁸ A caveat is warranted here that better descriptions of the facts resumed here for these varieties is needed.

(17) Differentiation of enclitics in Breton (COL; early 19C NW)

- | | | | |
|----|---|----|---|
| | <i>Imperative object: 3PL / (h)e/</i> | | <i>HAVE object: 3PL / (h)e/</i> |
| a. | grit= he e=r=c'his
make!2PL=3PL in=the=manner
Make them in current fashion. | b. | bezâ <u>ho</u> =pezo= he
be.INF 2PL.A/G=will.be=3PL
You will have them. |
| | <i>Other coding free/enclitic/suffix: 3PL /int/</i> | | <i>Doubling: 3PL /i/</i> |
| c. | chetu= [?] / _? / [?] / _? ·int amâ
lo= [?] / _? / [?] / _? 3PL here
Here they are. | d. | ur=C'harros caër <u>o</u> ≈d≈eus=y
a=carriage fair 3PL.A/G≈DAT≈be=3PL
They have a beautiful carriage. |

On the ϕ -intervention analysis of JR/PCC, the innovation can be seen a new realisation of the nominative objects it posits as underlying these enclitics. It would then be expected that the forms can only spread to coding objects coupled with anomalous subjects, and they do spread to enclitics coding objects of *have*+imperative constructions and not to doubling enclitics, though it is not possible to examine enclitics coding the sole argument of items like *gwa* ‘woe’ (by dint of loss, shift to inflections or free pronouns, and incomplete documentation).

3.8 Overview and limitations

Figure 3 gathers the steps in the evolution of the split-enclitic object coding in Breton. Each step is attributed potential externalist causes, codable as arbitrary conventionalisations, and internalist mechanisms, largely compatible with and cuable by the former.

Figure 3: Development of split-enclitic objects in Breton

	Pseudogloss	Construction, Development	External source	Internal change	Analog
	< 9C				
M	keep. <i>arb</i> -they, us=keep- <i>arb</i>	M mediopassive			Fin
H	you=be-they, you-be-we [?]	H <i>mihi est</i> have			%Fin
!	keep!= [?] them/us	! imperative			
other	woe is them/us	other nonhosts			
	< 12C				
M	them/us=keep- <i>arb</i>	<i>arb</i> - ϕ , * $\frac{1}{2}$ =	\mathcal{F} uniformity	<i>arb</i> $_{\pi \rightarrow \phi}$	%Fin
H	you=is they/ ^{!/*?} we	agr restriction		(open)	[%Ic]
!	keep! them/us	enclisis V \downarrow		Π	
H	you=is=THEY/*WE	ease, enclisis, = $\frac{1}{2}$	fq. entrench.	DAT $_{\emptyset \rightarrow \pi}$	Fin, Ic
!	keep!=THEM/US	ease, enclisis	fq. brevity	Π	
other	woe=THEM/US	ease, enclisis	fq. brevity	Π	
	< 16C				
!	them/us=keep!	meso>proclisis	\mathcal{F} uniformity	Π	
!	keep!=THEY ~ US=keep!	= $\frac{1}{2}$, 3=	\mathcal{F} H, \mathcal{E}	<i>pro!</i> $_{\pi \rightarrow \phi}$	Fin
Pf.	you=is=THEY/*US seen	new pf.	\mathcal{F} H	new v $_{Ag}$	
Pf.	16-17C Middle Breton				
Pf.	you=is us=seen	$\frac{1}{2}$ =	\mathcal{F} non-Pf., \mathcal{E}	Π	[Fin]
	18C SE				
H,!,Pf	(new forms of enclitics)			Π	
!	keep!=THEM/US [?] ,=THEY/WE [?]	proclisis in-!, = $\frac{1}{2}$	\mathcal{F} uniformity	<i>pro!</i> $_{\pi \rightarrow \phi/\emptyset}$	%Fin
Pf.	%you=is/are them=seen	3=	\mathcal{F} uniformity	DAT $_{\pi \rightarrow \phi}$	%Fin
	18C NW, C				
H,Pf	(realignment to accusative)	enclisis H,Pf, 3=, a	\mathcal{F} uniformity	DAT $_{\pi \rightarrow \phi}$	%Fin, %Ic
	19C NW				
!	(realignment to accusative)	enclisis!, 3=, a	\mathcal{F} uniformity	<i>pro!</i> $_{\pi \rightarrow \phi}$	%Fin

other > 18C all
 wœe, %lo-they/we/*you, ... various \mathcal{F} various Π

Legend: CASE-SYNCRETISM; *a*(-forms); \mathcal{F} analogy over forms, \mathcal{E} antisynonymy, fq. frequency; *arb* arb. hum. impers.; *pro!* ipv. subj. pron., Π externalisation; Fin(nish), Ic(elandic), % dial.

The attested and absent diachronic transitions of Breton have suggested that there is a factor checking the spread of split-enclitic objects to constructions that have distinct but anomalous subjects, here JR/PCC. The evidence lines up with what is currently known of subject-object couplings in the history of Finnic and Germanic. JR in Finnic has different origins, a far greater time-depth relative to documentation, and corresponding diversity. Its known developments bear out the coupling of split-nominative objects with anomalous subjects, and less clearly the specific anomaly of no : full : partial \varnothing -intervention that leads to unrestricted nominative : split-nominative : accusative objects (sec. 4 and Suppl. A; diachrony: Laanest 1982, Janhunen 2002, Lehtinen 2007, Havas 2008, Smit 2020). Germanic offers as it were the complementary situation. JR/PCC in Germanic is limited to oblique subject constructions, but studies of documented and on-going changes have identified the nuanced way in which shift from split-nominative to accusative objects entails specifically greater agreement of the more slowly evolving dative to nominative subject (Jónsson 2009, Árnadóttir and Sigurðsson 2013). T

The history of JR/PCC in Breton limits the applicability of externalist sources for it, at least ambiguity avoidance and form-frequency correspondence. An internalist analysis has been sketched. It is developed next, focusing on the unification of anomalous subjects as partial \varnothing -interveners (sec. 4), and the relationship of agreement, case and licensing (sec. 5).

It is well also to be clear about the limitations of the evidence in this section: it is exploratory rather than validable, in part because the number diachronic transitions is small and their analysis has not been separated from the study of the role of ex/internalist factors, in part due to the analytical degrees of freedom inherent in the proposals involved. If in the development of Breton, split-enclisis had spread to nominative-subject perfects, against the expectations of a surfacy form of JR, nothing said so far would bar an internalist analysis conformant with the present theory, for instance BE + controlled participial clauses with quirky dative PRO (for analogues, see Coon 2013 on control underlying unexpected case-alignment, Landau 2008 on dative PRO; more transparently for JR in Finnic, Suppl. A: 4.2). Constraints would be needed the supplementary linking theories of acquisition from data to grammar state (Yang 2016), and/or of internal change from state to state (Walkden 2017). The same mutatis mutandis for a change that would seem to go against form-frequency correspondence + conventionalisability, say from effable : ineffable to less : more bound forms (3.6 on *mihi est*), or to ineffable/free : bound (3.4.3 on *me lui*), insofar as such changes can be attributed to other externalist factors like analogy or candidates for them (for analogues, see García García 2018 for paths and principles that subvert with particular verb classes the expectation that differential object marking inversely correlates with expectedness-frequency, and Itxaso-Rodriguez 2020: 5.2 for transfer of one outcome; cf. Walkden 2017 discussing Hawkins 2004).¹⁹

4 Quirky intervention

¹⁹ Analytical freedom may seem more obvious of the structure and content typically posited in internalist approaches, but at present I do not see how to avoid it even for proposals that hew close to frequency and length. Cf. Haspelmath 2004: 3.4 for entrenchment above in 3.4.2: “If a language were found in which all bound-pronoun combinations were possible at an earlier stage and certain combinations became impossible at a later stage (without attendant further grammaticalization), this would constitute counterevidence to my theory.” If the claim is relative to R + O, then counterexamples are documented stages of some varieties of Basque (lit. in Rezac 2016: 155); if it also of R + S, then ongoing changes in varieties Basque (lit. op.cit.: 156-7); if all pronoun combinations, then the many arbitrary gaps varieties in Basque (op.cit. sec. 7-9) and likely French (Morin 1979, Miller and Monachesi 2003, Rezac 2010b) – modulo leeway in what counts as grammaticalisation. Yet the deduction of entrenchment in the work seems to me unaffected by there being other roads than it to gaps, like infrequency due to ambiguity, politeness, phonological markedness, featural complexity, preference for other constructions, though the categorial expectation is lost (see cited lit.). Similarly for the related consequence of form-frequency in Haspelmath 2020’s Universal 1, counterexample to which seems a.o. *me lui* in French varieties with *le leur* : *m’y* (Postal 1990: 3.2 and lit. or Lambrecht 1985: 35).

4.1 Quirkiness: Introduction

The φ -intervention approach to person restrictions takes its cue from complete φ -intervention. It is introduced here through Basque, under the hypothesis that its richer agreement morphology tracks key aspects of the proposal with transparency (Rezac 2011: 5.2 with lit., and for discussion and alternatives, Albizu 1997, Arregi and Nevins 2012):

(18) Basque datives (illustrative, standard morphology)

- a. guri gustatzen/etortzen zai-zki-gu [a' **ga-it**-u-zki]
 1PL.DAT liking/coming ...-PL-1PL.DAT 1PL-PL-...-PL
 We like/approach them (pseudogloss: Us like/approach they)
- b. guri *gustatzen/[%]etortzen **za**-t^{zai}-zki-gu [b' [%]di-gu-zu (*with* gustatzen)]
 1PL.DAT liking/coming 2PL-...-PL-1PL.DAT ...-1PL.DAT-2PL.ERG
 We like/approach you (pseudogloss: Us liked/approached you)

The verbal complex includes a $\frac{1}{2}$ prefix (*za-*, *ga-*, bold) and a PL infix (*-zki-*, *-it-*, underlined). Both are typically controlled by absolutive S/O, but the prefix by ergative A when the absolutive is 3. R is dative and controls distinct morphology (*-gu*). Some dative Rs block the absolutive's control of the person prefix. These are φ -quirky, in the sense that they restrict morphology that they seem not to control. That quirkiness is absent in some varieties for some datives that do control the prefix and so are φ -complete for this dependency, (18)a'. The restriction involves structural intervention: with unaccusatives in (18), dative R bars prefix control when it is high experiencer but not low goal of motion; with transitives, prefix control is barred for absolutive O/S but not ergative A. The nonagreeing $\frac{1}{2}$ absolutive O/S is can be ineffable, or have alternatives, and some *repair* the restriction, being illegitimate otherwise. Such as the shift in (18)b from absolutive to ergative coding of $\frac{1}{2}$.S for unaccusatives with high but not low R, recently innovated in some varieties that permit $\frac{1}{2}$.S with low R, and in some that have arbitrary gaps in the ABS+DAT paradigm like present $\sqrt{1SG/*2PL.S+R}$. The shorthand PCC* will be used for the restriction under the φ -intervention analysis, as one of the φ -restrictions that have been discussed in the literature as the PCC (sec. 2).

In Icelandic, Finnish, or Breton, morphology is less obvious about person-number splits, but otherwise their split-nominative (O→)S shows similar interaction with dative R. High but not low dative R restricts split-nominative (O→)S to 3, but not if (O→)S raises past R (Icelandic: Sigurðsson 1996: 2.5, Eythórsson and Barðdal 2005: 9.2, cf. Wood and Sigurðsson 2014; Sigurðsson and Holmberg 2008: 267). The restricting dative is usually φ -quirky, but can be overtly φ -complete in controlling verb agreement like the nominative (Icelandic: Arnadóttir and Sigurðsson 2013), and cognate systems have instead a φ -inert dative and no restriction on (O→)S (German). Icelandic especially adds some useful boundary conditions on analyses of PCC* (cf. Thráinsson 2007: 8.2.6-7, 4.2.5). One is evidence that structurally low nominatives can control full agreement when φ -quirky datives are absent, (19)a. Another is that φ -quirky datives need not control agreement or clitics, (19)b. Third, licensing need not improve if agreement is suspended or in contexts that do not have any like infinitives, (19)c.²⁰

(19) Split-nominative in Icelandic “A” agreeing and nonagreeing clauses

- a. Það hafið/?hafa/*hefur líklega verið þið.
 it have.2PL/3PL/3SG likely been 2PL.NOM
 It has probably been you. (Thráinsson 2007: 4.2.5.2)
- b. Henni hafa leiðst þeir/*þið

²⁰ In Icelandic PCC* in infinitives holds across a variety of structures (Nomura 2005: 79-80, Bobaljik 2008: 10.6, Boeckx 2008: 51, Pesetsky 2021: 2.6.2, “A”) but for some is weaker than in finite clauses or absent (Sigurðsson 2004: 155 note 14, “C”, Sigurðsson and Holmberg 2008: 271; cf. note 37 on “C+”). Distinct is licensing of specified subjects in opaque infinitives (with Preminger 2011: 932-4 cf. esp. Bobaljik 2008: 10.6, Schütze 2003: 297 note 2, 1997: 4.1.1.5).

- 3SGF.DAT have.3PL bored 3PL/*2PL.NOM
 She is bored with them/*you. (pseudgloss: Her bore they/*you)
 (Thráinsson 2007: 4.2.5.2; *þeir* needs 3PL, 3SG or 2PL do not rescues *þið*)
- c. Við vonumst til [að _____ leiðast hún/*þið ekki]
 1PL.NOM hope for to PRO.DAT bore.INF 3SGF/*2SG.NOM not
 We hope not to be bored with her/*you.
 (Bobaljik 2008 : 319 note 27 citing H. Thráinsson p.c.)

The analysis of JR/PCC as PCC* here starts with the ϕ -intervention of ϕ -quirky obliques on split-nominative objects, and adds human impersonal and imperative subject pronouns as potential person-only bearers, while excluding most other (pro)nominals.

4.2 Quirky obliques: Theory

4.2.1 Varieties of inherent case

The best-studied type of obliques has coding fixed by local *c/s*-selection, or *inherent case*, and is ϕ -inert even if structurally on the path of ϕ /case and “A” dependencies like raising to subject. Examples are the *to*-experiencer of English *seem* and its dative counterpart in German. The same obliques are ϕ -quirky in Icelandic, limiting nominatives to 3rd person and usurping their A-dependencies. These can further develop ϕ -completeness, usurp nominative-linked ϕ -agreement despite oblique case, and the nominative then switch to accusative (see lit. in 4.1).²¹

In PCC* these inherent case types should interact with structural nominative as in (20). (Pro)nominals without inherent case control ϕ -dependencies according to locality. Those with inherent case do so if ϕ -complete and are invisible if ϕ -inert. If they are ϕ -quirky they block dependencies for $\frac{1}{2}+$ yet result in 3SG/default agreement morphology. When a ϕ -dependency is blocked for a nominative, it is usually either not licensed or appears as accusative.

(20) T-nominative dependencies (π person, # number)

- a. No intervener: $\sqrt{\text{NOM}}$: [T $_{\pi, \# = \text{NOM}}$... G.NOM $_{\sqrt{\pi, \#}}$...]
 b. Complete intervener: *NOM: [T $_{\pi = X, \# = X}$... [X $_{\pi, \#}$ H [... G.NOM $_{* \pi, * \#}$...]]]
 c. Person intervener: $\sqrt{3 \sim \frac{1}{2}+}$.NOM: [T $_{\pi = 3/\emptyset, \# = \text{NOM}}$... [X $_3$ H [... G.NOM $_{* \pi, \sqrt{\#}}$...]]]

Inherent case is here taken to involve adposition-like content K structurally between the target and the goal of a ϕ -dependency (a.o. Andrews 1982; Belletti 2017: 4.2; Rezac 2008a; Sag et al. 1992). The oblique is ϕ -inert when K makes the ϕ -features of the K-bearing nominal inaccessible to clausal ϕ -dependencies, ϕ -complete when not, leaving open the mechanisms (K phasehood, Gallego 2010; K-N Agree, Rezac 2008a; concord, q.v. Norris 2020).²²

²¹ Interaction of ϕ /A-dependencies with obliqueness can be nuanced within and across systems (for lit. from different perspectives, see Barðdal and Eythórsson 2018, Citko et al. 2018, Metslang 2013). Of A-dependencies, PRO is the most restrictive (against “EPP”, Holmberg 2017, Cardinaletti 2004; local anaphora, Metslang 2013, Barðdal and Eythórsson 2018; WCO, Postal 1993, Bruening 2022, Paparounas and Salzmann 2022). With PRO go specified subjects when diagnosable (Icelandic, Holmberg 2017, and so Breton, 3.3, contrast Italian with richer left periphery, Cardinaletti 2004). However, PRO and specified subjects are often incompatible with what are otherwise oblique subjects (e.g. Anagnostopoulou 2003; Rezac 2008b, Sigurðsson 2003), for what may be trivial morphological reasons such as absence of oblique PRO and oblique + genitive stacking (cf. Jung 2008: 3.4.1, 6.3.3.2 for Russian). If the nominative or absolutive object then cannot independently also be subject, entire constructions can be ineffable (a.o. in Finnish *mihi est*, Koskinen 1998, Seržant 2015, cf. Kiparsky 2001: 2.4, Vilkuna 1996: 4.4.2; *mihi est* in Russian, McAnallen 2011).

²² The mechanics allows extension of inherent case from *c/s*-selection at generation to e.g. raising to Voice (cf. Dotlačil and Šimík 2013, Anagnostopoulou and Sevdali 2015, Sigurðsson 2017: ch. 2, but idiosyncratic in e.g. Postal 1986: 2.3.2, Grevisse and Goose 2008: §279), or prepositional/oblique complementisers (McCloskey 1983, Postal 2003, Jung 2008, cf. Sigurðsson 2003). Such derived obliques always seem local to the assigner, shared with structural ergative case but not agreement in Basque (Rezac et al. 2014, cf. Deal 2019), consistent with distinction between nonlocal featural dependencies through Agree realised in classical structural case (Chomsky 2000), and Merge that yields KP shells upon generation or displacement (Pesetsky 2013: 4.2, 2021: 5.1.2; contrast Sigurðsson 2017: ch. 2). ϕ -inert, transparent and quirky inherent case all seem available with inflectional obliques (for revealing variation within/across Icelandic and German, Barðdal and Eythórsson 2006, Wood and Sigurðsson 2014; Greek, Michelioudakis 2015; Basque, Fernández and Ortiz de Urbina 2009: 3.3), and quirky vs. transparent seems independent of exponence (e.g. with case-number

Φ -quirky inherent case behaves as a (pro)nominal with no number and a person that interferes as $\frac{1}{2}$ but controls as 3, or as human-logophoric 3 in systems that make this distinction among 3s. This φ -quirkiness can be reified as φ -specification corresponding to such marked 3 (Anagnostopoulou 2003, Taraldsen 1995; Richards 2008). Let us then suppose that quirky K is inert K plus [3rd], roughly ‘human’, say because it has grammaticalised on a K from usages like dative experiencers. This analysis is closely similar to that of imposter (pro)nominals with opaque or complex φ -dependencies (synchrony: Danon 2013; Landau 2016; Höhn 2015; diachrony: Corbett 2015, 2021, Rappaport 2009). With quirky K and imposters alike, grammaticalised φ -features can mismatch interpretation, but otherwise can be interpreted similarly, say [3rd] on dative experiencer K as a restriction to ‘human’ (person as operator on predicate meanings: Harbour 2016; N and P as predicates: Heim and Kratzer 1998).²³

4.2.2 Φ -dependencies and φ -features

Syntactic dependencies are modelled as the relation Agree between features of atoms (Chomsky 2001: 10, Collins and Stabler 2016: 44). In Agree, the occurrence of a feature F with no value, the *probe*, can match with that of the occurrence of F, the *goal*, in its domain, roughly c-command, which is closest to it, also roughly measured by c-command (Chomsky 2000, Pesetsky and Torrego 2007). Match results in feature unification, but externalisation of the feature can depend in various ways on the context (further 5.4).²⁴

Φ -features in the systems here are “number” # and “person” π . # is perhaps number-gender-class, and characteristic of (pro)nominals built of (n+)N, including typical personal pronouns. There will be #-less impersonal and imperative pronouns below, built on no or exceptional n/N. Interpretation offers limited guidance about values of #, even when not idiomatic, since absence of # can be close to availability of homophonous SG and PL, or to specifications that may be called *minimal*: no value, default value, SG or PL if the other is not available as alternative.

Person π has values that distinguish 1st, 2nd, and when present also a marked 3rd that groups with 1st and 2nd for person restrictions, such as human-logophoric *hän*-series in Finnish (Kaiser 2018). These values are written [1st], [2nd], [3rd], and jointly $\frac{1}{2}+$, leaving open their theory (Heim 2008, Kratzer 2009, Harbour 2016, Ackema and Neeleman 2018). It is convenient to assume that all are distinct from minimal π analogous to minimal #, and that general 3rd person on A is minimal π , but can be absence of π on O/S. There is support for such a difference between A and O/S (Adger and Harbour 2007: 4.3.1). The use made here of this minimal- π A : no- π O/S split is to halt T’s π -probe at A, and it would instead be possible to treat general 3rd uniformly as minimal or π and get the contrast otherwise.²⁵

Quirky obliques are attributed the human-logophoric [3rd], though minimal π would do (cf. Béjar and Rezac 2009: 47). This follows work on the role of dative Rs in person restrictions or their typical interpretation (Burston 1983, Boeckx 2000, Anagnostopoulou 2003: 5.4.2, Adger and Harbour 2007, Rezac 2008a, Harbour 2016: 5.4.2, Coon and Keine 2021: 3.4.1; parallel in different terms Medová 2008: ch. 9-10). It is supported by greater formal markedness of 3rd person agreement with quirky dative case against ergative, absolutive, nominative A and O/S (not always reanalysable as dative exponence: so secundative-aligned, person-only indexing in

fusion, Atlamaz and Baker 2018, without, Rezac 2008a, Árnadóttir and Sigurðsson 2013); adpositions need better study (for reanalyses of quirky-like paradigms, see on intervention Bruening 2014, subjecthood Cardinaletti 2004; for pertinent unclarity, Miller and Sag 1997: 589 note 21, Landau 2008: 893-4, 905 note 25; Gallego 2019: 3.3).

²³ Other ways of getting quirky inherent case to interact only with person dependencies could be adopted here: quiriness as φ -completeness interacting person and number probe position or ordering (Sigurðsson and Holmberg 2008; Béjar and Rezac 2003, Preminger 2014, Coon and Keine 2021), but cf. number agreement across undisplaced quirky obliques (Anagnostopoulou 2018, Kučerová 2016: 50 note 4); quiriness by filtering probes on K (Rezac 2008a), with richer assumptions than used here about match-valuation (q.v. Deal 2015, 2022).

²⁴ These assumptions are picked among adoptable alternatives (no atom-feature distinction: Sag 2012: 1.2; copy not unification: Haug and Nikitina 2016; syntactic match vs. value and their interactions: Deal 2015, 2022).

²⁵ Concretely: only nonminimal π -bearers need π -match for case/licensing (5.4); A-introducing *v* is a barrier to φ /case (but see Keine 2017 on agreement, Vainikka and Brattico 2014 on case); #-match bars π -match (lit. on quiriness above; cf. e.g. Coon and Preminger 2014). A vs. O/S is an approximation: object A under oblique-subject raising verbs in Icelandic is licensed and so π -less as 3 even if agreeing for number while $\frac{1}{2}$ are only licensed if in an opaque infinitive that provides its own licensing to Spec,T (4.1); object-position S that is also subject in Finnish raising-restructuring leads to accusative rather than split-nominative on embedded O and so has π (cf. Kiparsky 2001: 2.2.3, Rezac 2019).

Georgian, Anagnostopoulou op.cit.), though that is obviously relatable to human-logophoric morphology (diachronically maybe Basque, Ariztimuño 2013: 9.3.1, Breton, 3.3.2, not e.g. Georgian, Harris 1985: 12.1.1, Romance, Alkire and Rosen 2011: 8.8). These usually human Rs give rise to person restrictions even if inanimates, much like imposter pronouns (Ormazabal and Romero 2007: 3.1.2 on *me lui* in Spanish but cf. D’Alessandro and Pescarini 2016; Rezac 2011: 4.2, 2022 *me lui* in French; DME.III for Breton and Finnish; cf. Manzini 2012: 11; further 4.6).

4.2.3 Case and licensing

Φ -dependencies have some relationship with case and licensing. As an initial useful strategy, Φ /Case theory is adopted here: (pro)nominals need licensing which includes case assigned under ϕ -Agree as well as inherent case (see further 5.2). This is adapted to person restrictions by requiring any and all of π , # of a (pro)nominal to match in ϕ -Agree in order to get case (Anagnostopoulou 2003). It is augmented with a theory of dependent case formulated so that loci of dependent ϕ /case, like accusative v, are available only to (pro)nominals not licensed by loci of independent ϕ /case, like nominative T. This fits PCC*: the ϕ -restriction disappears when the restricted argument is recoded as inherent (e.g. ‘with’-coding for S in Icelandic, Maling and Jónsson 1995, Basque, Fernández and Ortiz de Urbina 2009: 3.3); it can be repaired by switching to dependent case (Rezac 2011: ch. 5); and when there are divorces between ϕ and case, ϕ is affected primarily (which also challenges Φ /Case, 5.2-3).²⁶

For oblique + S unaccusatives like BE in *míhi est*, this modified Φ /Case designs the space of variation illustrated for Germanic in (21) (see lit in 4.1).

(21) Psych-unaccusatives and transitives in Germanic (PCC* in bold)

a.	$T_{\pi, \# = \text{NOM}}$	$\text{DAT}_{\text{inert-R}}$	$> \text{NOM.S}$	German <i>gefallen</i> ‘like’
b.	$T_{\pi = 3, \# = \text{NOM/DFLT}}$	$\text{DAT}_{\text{quirky-R}}$	$> \mathbf{3.NOM.S}$	Icelandic <i>leiðast</i> ‘bore’, <i>falla í geð</i> ‘like’
c.	$T_{\pi, \# = \text{DAT}}$	$\text{DAT}_{\text{complete-R}}$	$> \text{ACC.S}$	Icelandic <i>líka</i> ‘like’
d.	$T_{\pi, \# = \text{NOM}}$	NOM.S	$> \text{DAT.R}$	Icelandic <i>falla í geð</i> ‘like’
e.	$T_{\pi, \# = \text{DFLT}}$	DAT.R	$> \text{PP}$	Icelandic <i>líka</i> ‘like’
f.	$T_{\pi, \# = \text{NOM}}$	NOM	$> \text{ACC}$	English subject-exp <i>like</i> , object-exp <i>bore</i> (structural subject underlined, $>$ c-command of highest A-positions in TP)

The three initial combinations are the chief focus. If the oblique R subject is ϕ -inert (21)a, it does not interfere in the ϕ /case dependency of T and S. If it is ϕ -complete (21)b, it blocks the dependency like an argument without inherent case would, say A for O with transitive *like*. ϕ -complete R should and does license accusative on S, like A does on O with *like* (Jónsson 1996, Árnadóttir and Sigurðsson 2013). If the oblique is ϕ -quirky (21)c, it blocks only the π -dependency of S with T, and allows nominative #-only S. There is no issue if S can be higher than R within the TP, (21)d. In Icelandic this can be so for “alternating” unaccusatives and even for asymmetric ones in exceptional derivations where A’-displacement of R feeds A-raising of S (see lit. in 4.1). There is also no issue if instead of S there is an inherent-case argument with similar interpretation (21)e. If both arguments had structural case, (21)c would come out like *like* and (21)d like *bore* in (22) (but that is not their analysis in English, Baker 1996, Pesetsky 1995).

4.3 Quirky obliques: Configurations

The foregoing mechanics for quirky obliques have been sketched for *have*-constructions in Breton in sec. 3 and is now completed by comparing the more transparent Finnish and Icelandic.

²⁶ Licensing of quirky obliques is left open. French contrasts $\text{DAT} > \frac{1}{2} * \text{ACC} / \text{DAT}$ clitic clusters, and comparison of dative clitics with the locative one in the system suggest the former are quirky and the latter inert; but analyses have treated the lower dative as locative-like (Postal 1990, Rezac 2011: ch. 4 Appendix). Slovenian has $\text{DAT} > 3/*1/*2.\text{ACC}$, $\text{ACC} > 3/*1/*2.\text{DAT}$ clitics with ditransitives with order argued to reflect c-command (Stegovec 2018); but the *’s would also follow if $\frac{1}{2}$ were limited to the high dative construction (q.v. Haspelmath 2005). Revealing here would be Icelandic dative-extraction + nominative-fronting with $\frac{1}{2}.\text{DAT}$ (cf. Sigurðsson and Holmberg 2008: 167).

In Finnish, the finite verb agrees for person and number with nominative S/A in high and most low structural subject positions, (22)a. It is taken to realise $\pi, \#$ -Agree of T. In an analogue of existential-presentational constructions of English, (22)c, S is indefinite in object position, and uniquely, a nominative that tends not to agree. These are the patterns of most S's, including that of BE + adessive R in *apud me est* 'be with, at ... 's'. The same case combination in *mihi est* has the usage of *have* (22)b-(22)c and behaves quite differently. The adessive or dative-genitive R is subject, S is in object position, can be definite, and has nominative when 3, accusative when $\frac{1}{2}+$. This is here analysed as PCC* and the adessive or dative-genitive as φ -quirky inherent case (Finnish: Kiparsky 2001, complemented esp. for low subject positions Holmberg 2005, agreement in the existential-presentational construction a.o. Hakulinen et al. 2004, nonfinite clauses Koskinen 1998, Vainikka 2003, Hakulinen and Karlsson 1979).²⁷

(22) Person restrictions in Finnish unaccusatives, agreeing clause

BE in apud me est, neutral word order

- a. {Se on, ne ovat, sina olet} heillä
 3SG.NOM be.3S, 3PL.NOM be.3PL, 2SG.NOM be.2SG} 3PL.HUM.ADS
 {It is, they are, thou art} with them.

BE in mihi est, neutral word order

- b. Heillä on {se, ne, *sinä, sinut}
 3HUM.PL.ADS be.3SG {3SG.NOM, 3PL.NOM/ACC, 2SG.NOM, 2SG.ACC}
 They have {it, them, thee}.

BE in apud me est, mihi est existential-presentational

- c. Heillä on kaupungin parhaat voileivät
 3HUM.PL.ADS be.3SG town.GEN best.PL.NOM sandwich.PL.NOM
 {At their place are, They have} the best sandwiches in town.

Nonfinite clauses work the same way, (23), to the extent confounds can be set aside, such as optional availability of matrix accusative under ECM.

(23) *Mihi est* in Finnish infinitive under active ECM

...tietää [minulla olevan {se/sen, sinut/*sinä}]
 ...know.3SG 1SG.ADESS be.INF {3SG.NOM/ACC 2SG.ACC/*NOM
 ...she knows that I have you.

The φ -restricted case-agreement patterns of quirky-oblique subjects of unaccusatives in Finnish are nearly the same as in Icelandic "A" in (19) (4.1), and granting coding of nominative objects by enclitics, in Breton (sec. 3). One difference and challenge is ineffability rather than accusativity of the restricted $\frac{1}{2}+$ in Icelandic and Breton. Another is variation in agreement for object-position nominatives across and within Finnish and Icelandic, while overt agreement has been lost in Breton. Finally, it must be addressed why there is no effect of dative R on accusative O in active transitives of Finnish and Icelandic (vs. passives in Icelandic, Sigurðsson 1996: sec. 2; Anagnostopoulou 2003: 5.2; in Breton R here is always inherent PP, 3.3) and on repair-accusative S (in *mihi est* of Finnish; in Breton there are independent clitic cluster restrictions, 3.6). Each of these quandries is addressed in sec. 5 (5.2, 5.4, 5.2 resp.).

The present analysis of PCC* has no direct role in them for thematic interpretation. All the systems here meet this expectation, but most so Finnish through its richness of infinitives transparent for φ /case (Vainikka and Brattico 2014). When the silent subject S/A of the infinitive is linked to matrix nominative S, (24)a-b, O of the infinitive is accusative. When it is linked to matrix dative-genitive R, it is split-nominative, (24)c. This is expected if the matrix nominative

²⁷ Finnish is illustrated from studies and corpora, adapted to minimal pairs, and key data checked with two speakers.

is structural, the dative-genitive quirky, and the latter links to the silent subject by raising, raising to oblique, restructuring, or ϕ -inert/quirky PRO (Koskinen 1998; Nelson 1998).²⁸

(24) Clausal domains in Finnish

Transparent clause, control

- a. He tulevat [] ottamaan sen / minut mukaan].
 3PL.N come.3PL to.take 3SG/1SG.ACC along
 They will come to take it/me along.

Transparent clause, raising to nominative

- b. He osavat [] ottaa sen / minut mukaan].
 3PL.N hit.3PL to.take 3SG/1SG.ACC along
 They know how to take it/me along.

Transparent clause, raising to oblique or restructuring

- c. Heidän tulee [] ottaa se / minut mukaan].
 3PL.GEN come.3SG to.take 3SG/1SG.ACC along
 It becomes them to take me along

Icelandic offers similar patterns as Finnish in different multipredicate structures, with matrix quirky dative experiencer R and embedded split-nominative A/(O→)S (see lit in 4.1). Breton lacks transparent multipredicate constructions with lexical predicates. The periphrastic perfect is their counterpart, with perfect-selected v introducing the quirky oblique S/A (3.3.4). There are synthetic perfect counterparts with oblique-A + nominative-absolutive O (e.g. Georgian, for compatible analyses see Skopeteas al. 2012, Béjar 2003), and nonperfect counterparts including by extension of coding originating in perfects (cf. Harris 1985, Haig 2006, Coghill 2016). Thus the analysis expects synthetic and periphrastic nonperfects and perfects with restricting ϕ -quirky oblique As and 3-only split-nominative or -absolutive O (e.g. Rezac 2008a, cf. Bhatt 2008; Doron and Khan 2012, Kalin and van Urk 2015), beside ϕ -inert oblique A and unrestricted O (e.g. Anand and Nevins 2006, Shklovsky 2012).

In Finnic, Icelandic, and Breton, split-nominative (O→)S is restricted to case-agreement domains that include a distinct subject. It is difficult to examine person restrictions for low, object-like (O→)S alone in such constructions like the existential-presentational one, since all three systems impose independent antipronominal restrictions. One line of evidence available is escapes from these restrictions in English and French, *There were only we three in all that vast country* (English, Chomsky 2000: 149 note 90, Schütze 1997: 4.1.6, Kay and Michaelis 2017: 0.11-12; French, Grevisse-Goose 2008: §660-1, Postal 1986: 114). This has been studied in Finnish. One line of evidence is contrast between split-nominative object S + oblique subject of *mihi est* (22)b and unrestricted nominative S + fronted but nonsubject oblique as in *apud me est* (25)a (Hakulinen and Karlsson 1975: 4.2; Kiparsky 2001: 2.2.3), but the latter S may be in the subject position (by obligatory narrow focus, Holmberg and Nikanne 2002). Another line of evidence is nominal predications with unrestricted agreeing nominatives that are not in subject positions, (25)b (Hakulinen and Karlsson 1975; for analyses, Hartman and Heycock 2018).²⁹

²⁸ Matrix nominative S here can be nonagreeing in the existential-presentational construction (Kiparsky 2001: 2.2.3), while the embedded S is usually silent under linking to matrix dative-genitive (but for nonstandard types, Laitinen and Vilkuina 1993, Suppl. A: 4.1). In standard varieties the matrix dative-genitive (q.v. Huomo 1995, Inaba 2007) has invited analysis as raised genitive subject of infinitives (Laitinen and Vilkuina 1993, Koskinen 1998), and that would here be analysable as ϕ -quirky, but nonstandard adessive favours matrix origin (e.g. Ahtia 2014: §20; Suppl. A: 4.1), and restructuring (Nelson 1998: II.C.3) or raising to oblique (adapting Koskinen 1998: ch. 4, cf. note 22), and so does even standard absence of possessive suffixes in matrix infinitives corresponding to this dative-genitive (Suppl. A: 4.1). Other subjects of nonfinite clauses do not link to obliques; for transparent infinitives, their subject can be only genitive, only possessive-suffix, or OC PRO, of which the only analysis excluded here is as ϕ -complete, while the nominal-like genitive+possessive-suffix and NOC PRO of opaque infinitives could be ϕ -complete (see Vainikka and Brattico 2014, Koskinen 1998 with lit., and analysis along the lines here in Rezac 2019).

²⁹ There is a 3-only nonagreeing nominative S in a dialectal raising construction, but again strikingly unavailable as accusative (Laitinen and Vilkuina 1993, Kiparsky 2001; Suppl. A: 4.1).

(25) Candidates for nominatives in object position

<i>BE in apud me est vs. mihi est</i>			<i>Binominal copula</i>		
a.	Heillä	olet SINÄ.	b.	Se=han	olet sinä.
	3HUM.PL-ADS	be.2SG 2SG.NOM		3SG=EMPH	be.2SG you.
	YOU are with them, *They have you.			It is you.	

Icelandic goes with Finnish on these constructions, to a first approximation, and its clause-structure improves evidence that binominal copula constructions do have their unrestricted nominatives in object-like positions (Sigurðsson and Holmberg 2008: sec. 4, Coon and Keine 2021: sec. 4). Breton also goes with Finnish; in particular, its 3-only enclitics do not code S in these constructions, apart perhaps from presentatives and then they are unrestricted (3.7).

The restriction of split-nominative (O→)S to constructions with subjects is of particular interest for Finnish and Breton, because their ½+ is not ineffable but accusative, and one might suppose that ½+ is accusative not in virtue of φ-quirky subject, but of being in a low, object-like position. This would be a differential object marking relative to objecthood defined by structural position alone rather than copresent subject. In point of fact, differential object marking is empirically and theoretical codistributed with typical dependent accusative, so that it is available to O but not (O→)S: for instance dative ½+ ~ accusative 3 in Spanish impersonals but not ~ 3 nominative in passives (4.4). That is so also for the accusative repair of the split-nominative coding in Finnish and Breton. In both systems, it contrasts strikingly with coding that is sensitive to position, and shared by existential-presentational (O→)S with O: partitive of negation, available for personal pronouns and so directly comparable with split-nominative (Finnish, Kiparsky 2001: 2.2.2, Vilkuna 1996: 3.5.1; Breton, Schapansky 1996, Stark and Widmer 2019, DME.II: 358 note 39).³⁰

4.4 Quirkiness in impersonals

4.4.1 *Arb* features and consequences

The attribution of bare [3rd] to φ-quirky obliques has limited support outside PCC* (4.2). It is strengthened by the coupling of split-nominative objects of PCC* with arbitrary human impersonal and imperative subjects in JR of Finnic and its counterpart in Breton. These are not oblique, yet have properties suggesting π-only bearers, and suggest substantive constraints on this φ-specification, and so on possible subjects coupled with split-nominative objects in JR.

The section introduces this class of pronouns with human impersonals, which include arbitrary *arb* in French *on*, German *man*, Irish autonomous inflection, and Spanish *se*, all confined to nominatives; and generic *gen*, including English *one*, Spanish *uno*, without case restriction (a.o Egerland 2003, Moltman 2005, McCloskey 2007, Malamud 2012, Ackema and Neeleman 2018, Fenger 2018). All are restricted roughly to humans, but in a way that differs from nouns like *person*, *people*, with various consequences such as unparaphraseability of *I wonder what it feels like if one is a horse* (cf. Moltman 2006 on *one*, Rezac and Joutiteau 2016: ch. 3 on *on*; *ibid.* on logophoricity, as well as Malamud 2012 on *man*). The restriction is here

³⁰ The antipronominal restrictions of existential-presentational and other inversion constructions are complex when studied in depth (English, Kay and Michaelis 2017, Deal 2009: sec. 8, Birner and Ward 2003, Kayne 1979), and those of the systems here seem similar (Icelandic, Thráinsson 2007: ch. 6; Finnish, Hakulinen et al. 2004 and further A*; Breton, DME.III). It would be intriguing to reduce antipronominal restrictions on low-S generally to π-intervention (as in Richards 2008 with lit. for expletive constructions in English). However, their patterns do not seem to easily lend themselves to this, nor to the reverse enterprise of reducing person restrictions on S of oblique-subject constructions to other restrictions (cf. Sigurðsson 2012: sec. 3). Thus the definiteness effect in Icelandic does not constrain S or a given clausal or A-position whether or not there is a higher one available, but rather whatever argument would raise to the canonical subject position if it does not raise there (Sigurðsson 1989: 6.3, 2011). Even more unrelated seem whatever limitations *have*-constructions have on definites (Myler 2016: 6.3). Certain binominal copula constructions have restrictions analysed as φ-intervention, but their absence in the systems here needs understanding (Coon and Keine 2021, Béjar and Kahnemouyypour 2017, Bhatia 2019, Vigo 2016).

construed as $\pi=[3^{\text{rd}}]$, like human-logophoric 3rd person pronouns of Finnish (following esp. Malamud 2012; differently Ackema and Neeleman 2018, Fenger 2018).

For #, the generic impersonals like *one* are singular for # on interpretive and formal grounds, so # is [SG], and as then expected, they are φ -complete nominatives combining with accusative O. The arbitrary impersonals have more leeway. They are consistent with freely-valued or minimal #, which should go with accusative O, but also with no #, and so split-nominative O. Both options are well attested for the *arb se* of Romance (cf. Pescarini 2017): accusative and 3-only nominative in Italian (D'Alessandro 2007), 3 nominative coupled with ineffable $\frac{1}{2}$ in Piedmontese (Parry 1998) and Portuguese, (Narò 1976), but with repair accusative $\frac{1}{2}+$ in Genovese (Parry 1998, Mendikoetxea and Battye 1992), DOM accusative qua dative in Spanish (Mendikoetxea 1999, Fernández-Ordóñez 1999; see Suppl. B: sec. 2). This split-nominative O has been analysed as PCC* analogous to PCC* with quirky oblique subjects (D'Alessandro, 2007: ch. 4, Pescarini 2017 on Italian, Rezac 2011: 6.4, Dobrovie-Sorin 2017 on French, Mendikoetxea 2008, MacDonald 2017 on Spanish, Giurgea 2019 on Romanian; Suppl. B: sec. 4). Romance systems also show a promising candidate for *arb se* minus the remaining π -specification in anticausative *se*, expletive-like and coupled with unrestricted nominative O→S (Schäfer 2008, Alexiadou et al. 2015). Table 10 gives the expected correlations of subject S/A φ -specification and object O coding in these and functionally related constructions.

Table 10: Varieties of noncanonical A

A	Form	Syntax	O	See
<i>arb</i>	<i>above</i>	π -only Spec,v	split-nom.	<i>above</i>
	<i>above</i>	π ,# Spec,v	acc.	<i>above</i> , Legate 2014
anticaus.	expletive	φ -less	nom.	Alexiadou et al. 2015
can. passive	oblique	inert inh., adjunct?	nom.	Alexiadou et al. 2015
	implicit	v-adj. and v projects	nom.	Legate 2014
noncan. pass.	implicit	default π ,# Spec,v	acc.	Legate 2014
quasiarg./fate	pro	default π ,# Spec,v	acc.	Schäfer 2008, Wood 2016

4.4.2 Finnish *arb*, split-nominative, and double nominative

Romance systems have split-nominative objects with *arb* subject alone, because their quirky obliques are not subjects (Béjar and Rezac 2003). Finnish has them both with *arb* and quirky oblique subjects (Rezac 2011: 5.6). To introduce Finnish *arb*, it is useful to first look at its *gen*. Finnish *gen* is 3SG *pro* close to *one*, and like *one*, close to *ihminen* 'a/the person': 3SG for agreement, 3SG for anaphora, SG for secondary predicates, not restricted to a particular case or role. Thus when it corresponds to nominative S/A, it comes out as 3SG *pro*, and O is accusative, (29)a; when it corresponds to quirky oblique subject A/R, it is silent, and O/S is split-nominative (see a.o. Kaiser and Vihman 2006, Holmberg 2018, Kaiser 2019).

(26) Human impersonals in Finnish

<i>Generic impersonal</i>	<i>Arbitrary impersonal</i>
a. jos tuo {sen, minut}.	b. jos tuodaan {se, minut/*minä}.
if bring.3SG 3SG.ACC 1SG.ACC	if bring.ARB 3SG.NOM 1SG.ACC/*NOM
if one brings it/me	if one brings it/me

The Finnish *arb* is expressed by a distinctive inflection of the finite verb. It is close to *man-on-se arb*'s, substituting only for nominative S/A, and with full (pro)nominalhood on diagnostics from control to anaphora to secondary predicates (cf. Landau 2010, Legate 2014). Unlike with *gen*, primary and secondary predicates and local anaphora are found as both SG and PL, consistently with absence of # on *arb* and semantic # on dependents (Kaiser and Vihman

2006: sec. 3, 6.1, complemented by Vilkuna 1996: 4.1.4, Hakulinen et al. 2004: §1324; Suppl. A: 3.2). As then expected of a π -only *arb* as A, it combines with split-nominative O, (26)b.³¹

The Finnish system thus has both φ -complete nominative S/A, in regular (pro)nominals and *gen*, with accusative O; and π -only S/A, in quirky obliques and *arb*, with split-nominative O/S. This strengthens the correlation of split-nominative objects with π -only subjects under φ -intervention. Icelandic has *gen maður* but not *arb* (Sigurðsson and Egerland 2009). Breton has both *gen den* and inflectional *arb* but both are φ -complete, with accusative O (Rezac and Jouitteau 2015). At a point before the period studied here for Breton, the inflectional *arb* combined with split-nominative O, that is 3 nominative \sim 1/2 accusative O (Table 9), itself perhaps merging an earlier passive with nominative O and *arb* with accusative O (Cowgill 1983, on Breton §45, cf. Graver 2009; later in the period here, Lambert 2010).

4.4.3 Variation and personification

The origin and extensions of the Finnish *arb* are revealing about the details of partial φ -intervention and its limits. The likely source of *arb* is the reflexive of an implicit-causee or indirect causative in Proto-Finnic, *They made ARB help themselves* \rightarrow *Helped.ARB them* (Lehtinen 2007; cf. Bellec 2014 on French *Ils se sont fait aider*). The construction retained nominative of the reflexivised A=O, and reanalysed its causative + reflexivised A=O agreement in 3rd person as new “4th person” inflection, which extended to S. Implicit causees have proven invisible to PCC-type φ -restrictions (Albizu 2000). The invisibility can be readily incorporated here on various analyses of them, such as φ -sets adjoined to v and invisible due to the adjunction structure (cf. Wood and Sigurðsson 2021 with lit.). On this view, the original *arb* construction had no person restrictions. Reanalysis of the inflected causative morphology could have kept inflectional implicit S/A with unrestricted nominative O and further innovated agreement to track nominative O; or shifted to φ -complete *arb* S/A with accusative O; or to π -only *arb* S/A and split-nominative O. All of these O codings are attested in Finnish varieties (Jahnsson 1871: §11, Lehtinen 1984, Smit 2016; Suppl. A: 3.1). The associated *arb*’s might be diagnosable, for instance by local anaphora, though complexities of these diagnostics elsewhere have resisted consensus (Legate 2014: ch 4; Alexiadou et al. 2015; Collins 2023).

More recently, *arb* has “personalised” in Finnish by coming to partly or wholly express 1PL, displacing their older person-number agreement inflection, and in closely related varieties ditto for 3PL (Kaiser and Vihman 2006; Suppl. A: 3.1). The morphosyntax of these new formations is shown in (27). Split-nominative O is kept, and as is then expected here, so are characteristics of *arb*: its old inflection, its *pro*-drop even when *pro* is unavailable to personal pronouns in a given register, and its antecedence of 3/default anaphora. However, there also appears novel doubling by this inflection of 1PL nominative pronouns, and with or without them, antecedence of 1PL as well as 3/default anaphora.

(27) *Arb* and its personification in Finnish

Classical and continuing arb

- a. Minusta *pro* ollaan yhä enemmän huolissa -an.
 1SG.ELAT BE.ARB still more worry.PL.INESS -3/DFLT
 People worry more and more about me.

New 1PL

- b. Nyt (me) ollaan yhä enemmän huollissa {-an, -mme}.
 now 1PL.NOM BE.ARB still more worry.PL.INESS 3/DFLT 1PL
 (...) we worry more and more.

³¹ The description of the morphology of *arb* is limited here to finite synthetic verbs, but *arb* behaves the same with finite periphrastic formations (Suppl. A: 3.3). Nonfinite “passive” clauses share part of the morphology of *arb* in finite clauses, but some have no relationship to *arb* (Vainikka 1989: 5.3.1.1), others are difficult to probe (Vainikka 1989: 5.3.1.3, 5.3.2.3). In “active” nonfinite clauses, NOC PRO combines with split-nominative O (Taraldsen 1986, Hakulinen et al. 2004: §939), and is analysable with the same φ -content as *arb*, though the origin is different (Havas 2008 with lit.; Suppl. A: 4.1). PRO in Icelandic and Breton is φ -complete (3SGM for φ -dependencies).

Unchanged 2PL for plurality or for the addressee in V-use

- c. Nyt te ole-tte yhä enemmän huollissa -nne
 now 2PL.NOM be-2PL still more worry.PL.INESS 2PL
 You worry more and more.

This *arb* + nominative 1PL A has been challenging for approaches to JR that relate split-nominative O to the absence of nominative A (discussed in Timberlake 1975, Maling 1993, Nelson 1998, Kiparsky 2001). Here, since evidence reveals clearly the presence of *arb*, *arb* can be taken to be the goal of the ϕ /case dependency with nominative-assigning T. 1PL can then be associated with *arb* in a complex or extended nominal (so for Romance 1PL personifications of *arb* with similar dual properties, Taylor 2009, Costa and Pereira 2013, Rezac and Jouitteau 2016: ch. 6; cf. Höhn 2015, Cardinaletti 2019). The ϕ -dependency of nominative T sees only the π -only *arb* at the top of the doubling structure, matches it for π and skips it for # match with O. Each ϕ -match is complete relative to the ϕ -features of the goal, and so satisfies the conditions on case-assignment. Nominative thus appears not only on the #-matched O, but also π -matched *arb*, visible on its 1PL doublee, and detectable elsewhere by the nominative *pro*/clitic-like distribution of *arb* (Dobrovie-Sorin 1998, 2017; Kayne 2000; Fenger 2018). The 1PL is not expected to need case for its own licensing, since doublees often have their own mechanisms in the big DP (op.cit.; on contribution of the doublee to ϕ -dependencies with anaphora, cf. 4.5).

The ϕ -intervention analysis of JR/PCC then allows double-nominative constructions dependent on a single nominative locus, but under heavily circumscribed conditions, already inherent to Anagnostopoulou (2003): π -only subject and #-only object. The analysis does not allow the next conceivable step in the personification of *arb*, correctly it seems: reanalysis of *arb* with 1PL, detectable in regularisation of agreement and limitation to 1PL anaphora, without concomitant replacement of split-nominative by accusative O (see Taylor 2009, Costa and Pereira 2013 for just this step with accusative O).

4.5 Quirkiness in imperatives

4.5.1 Imperative pronouns and person

The subject of imperatives (28)b, addressee-inclusive 2SG, 2PL, 1PL, is the last subject S/A combining split-nominative O in JR: in Finnish, varieties of Breton, but not Icelandic. Even the jussive (28)a, used to issue commands targeting non-addressee inclusive subjects, takes accusative O in Finnish, and such traces as there are of it in Breton (3.6). Like *arb*, the imperative has challenged to analyses of JR, because it can code subject S/A in ways similar to other moods, including nominative in (28)b (see lit. in 4.4.3).

(28) Imperative vs. jussive in Finnish

Jussive A.NOM + O.ACC

- a. (He) tuo-koo-t (he) {sen, minut}
 3PL.NOM bring-!3-PL 3SG.ACC 1SG.ACC
 Let them bring {it, me}.

Imperative A.NOM + O.3.NOM~1/2.ACC

- b. (*Te) tuo-kaa (te) {se, minut/*minä}.
 2PL.NOM bring-!2PL 3SG.NOM 1SG.ACC/*NOM
 (You) bring {it, me}.

On the approach here, imperative subjects lend themselves to a π -only analysis that groups them with *arb* but does not generalise to other agreeing nominatives. The analysis mostly adopts directly independent theories (Zanuttini et al. 2013, Isac 2015). Imperatives allow and require pronouns with special properties as subjects, like infinitives do (N)OC PRO (Potsdam 1998). The content of these imperative pronouns is ϕ -features and these perhaps come from outside

them as with PRO (op.cit.; Landau 2015 with lit.): the left periphery of imperative clauses constrains their subjects addressee-inclusion and gives them [2nd] and optionally [1st] (Zanuttini 2008: 216, Zanuttini, Pak and Portner 2012: sec. 3, Isac 2015: 8.2.1.1). Like PRO the pronouns can have distinctive morphosyntax: they can be *pro* in systems that lack general *pro* (English, French; Finnish with greater range of *pro*, Vainikka and Levy 2000), and they can be restricted by doublees that add 3rd person, *No one raise your/their hand!* (so Zanuttini 2008 for English, similarly Finnish, no doublees in Breton or French, DME.II: 5.2).

4.5.2 Imperative number and associatives

These elements of the analysis of imperative pronouns do not so far provide anything to distinguish 2SG and 2PL imperative inflections. One candidate is valued # born and borne on the imperative pronoun itself (Zanuttini et al. 2013). The expected result here is ϕ -complete imperative subject S/A and accusative O, as in English or French. For Finnish and Breton with their split-nominative O, another way is needed of distinguish 2SG : 2PL inflections of A/S. It should exempt imperative pronouns from presence of #, in a system where pronouns do generally have #, and it should let “1PL/2PL” imperative pronouns behave like pluralities. Candidates are comitatives, inclusives, and associatives, the last explored here (Corbett 2004).

Associatives be examined independently of # in systems like Cantonese, where bare nominals are ordinarily used neutrally for number and lack numerosity-related morphology. An associative morpheme combines with personal pronouns and to some extent referential nouns, and picks out the contextually salient group containing their referent (Cheng and Sybesma 1999; Cysouw 2009: 4.3.5). That group is semantically a plurality (Vassilieva 2005: 2.1.2, Ackema and Neelman 2018: 292 note 23). Associatives have been proposed as universal part of the content of plural $\frac{1}{2}$ personal pronouns (cf. Corbett 2004: 4.3), but combine with # in systems like English, perhaps as consequence on the presence of n/N (Kratzer 2009: sec. 5; Elbourne 2009). Associatives should then build semantically plural pronouns without # to the extent #-n/N can be absent, including imperative pronouns. This use of associatives may be compared to analyses of partial control that rely on singular PRO and comitative content, with somewhat different properties (Boeckx, Hornstein, and Nuñez 2007: 5.6.1, Sheehan 2014).

It is not straightforward to test for associatives, and expectations are nuanced by allomorphy, conventionalisable variation in number dependencies (Corbett 2004: 6.4), and covert counterparts of overt doublees of imperative pronouns (e.g. *no person:-s*). Associates create semantic pluralities, and that suffices to bar [SG] on local anaphora and concurring nonfinite predicates under interpretative analyses of their number (Pollard and Sag 1994, Sauerland 2004, Sudo and Spathas 2020, which work well for singular and plural with *arb* in Finnish in 4.4.2). Morphology only leads to the expectation that exponence of associative and [PL] content can differ. That fits tendencies in varieties close to standard Finnish to eliminate regular plural inflections from the imperative and inversely for the jussive (cf. Sebeok 1944; Suppl. A: sec. 2; see below on the jussive), but these are not evident in Breton (cf. Rezac 2021).

4.5.3 Variation and its limits

The 2SG-2PL-1PL distinctions of imperative morphology are not deterministic about the analyses of the underlying content. Here, $\pi, \#$ gives accusative O; π with associativity gives split-nominative O; and unrestricted nominative O in varieties of Finnish and perhaps Breton is expected if π is not transmitted to the imperative pronoun but still constrains its interpretation (close to Zanuttini et al. 2013; parallel to semantic control for OC PRO, Chierchia 1984, Pearson 2016; configurationally cf. putting the imperative subject outside the domain of ϕ /case, Nelson 1998: IV.C.6). An unrestricted nominative O should also arise in other ways, for instance if the imperative subject A are a v-adjoined ϕ -set like the implicit A of passives, but unlike in typical passives, still indicated on the finite verb (so Legate 2014 on Acehnese, cf. Table 10). These differences of content and structure might or might not be independently diagnosable for imperative pronouns in a given system, though they are elsewhere (op.cit.).

The core content of imperatives may be compatible with their not selecting an imperative pronoun, and thereby lends itself to the analysis of jussives, along the lines of *See to it that they*

eat (Zanuttini et al. 2013: 3.2.2, 4.2). In Finnish and Breton, the jussive takes 3SG/PL nominative subjects, in regular positions, and tracks their number by the same agreement morphology as other moods. It is then expected to take accusative O. The systems can lose number agreement, but also innovate or regularise it (on Finnic, e.g. Lönnbohm 1879, Timonen 2008, Zaikov 2000: ch. 3, see Suppl. A: 2.2; on Breton, DME.II: 5.2). Its loss allows reanalysis, for instance with imperative subject *arb* doubled by nominative for S/A, and so split-nominative O (on Finnic, Timberlake 1974: 245 note 66, cf. 1975: sec. 7).

4.6 Parameters and expectations

ϕ -intervention unites person restrictions due to obliques with those due to nonoblique special pronouns as π -only X in $H_{\phi/(case)} > X > \alpha$. When H is the nominative ϕ /case locus T , π -only X defines the set of constructions of JR in Finnish, while H as v gives the ditransitive core of the classical PCC. T allows examination of a greater of elements, because some can only be subjects: imperative pronouns, arbitrary human impersonals, PRO. Other factors should determine the distribution of arguments that can lack $\#$, π and $\#$, or neither. These factors leave considerable leeway for the potential π -only bearers. The acquisition of their ϕ -specification might not always be cued by their own form and interpretation, but it can still be cued through ϕ -restrictions, that is PCC*, for instance by split-nominative O/S.

Constraints on the distribution of $\#$ would offer substantive constraints on PCC*. The boundaries of the JR set of constructions in the history of Breton and Finnic suggest that $\#$ is entailed by lexical N or its associated n . If so, there are two ways to build π -only bearers. One is complex structure hiding the $\#$ contributed by n/N , as in obliques. The other is through absence of n/N , defining a class special pronouns, comparable by their limited content to those discussed in the literature as minimal pronouns (Kratzer 2009) and posited as analyses of arbitrary human impersonals, imperative subjects, and PRO (Malamud 2012; Zanuttini et al. 2013; Landau 2015 with lit.). By the time a noun like *human* has become a π -only bearer with split-nominative O, it should have lost its lexical n/N and so grammaticalised as a human impersonal with human-logophoric π [3^{rd}]. This seems to fit known diachronies (q.v. Giacalone Ramat and Sansò 2007; Muller 2007, Giacalone Ramat and Sansò 2011, Narò 1976; Meyer 2010; Taylor 2009, Costa and Pereira 2013). It is not clear where run-of-the-mill personal pronouns fall relative to the $\#$ - n/N correlation, but the systems here are consistent not only available but also obligatory n/N (cf. Elbourne 2009, Kratzer 2009). This n/N - $\#$ correlation could be weakened and then predict systems where JR extends to subjects like personal pronouns, kinship nouns, animate nouns, or masculine animate nouns (see discussion and lit. on 3^{rd} person in $1/2+$ below).

Insofar as $\#$ correlates with n/N and n/N is present on personal pronouns, there should be no straightforward extension of (split-)nominative object O from the imperative to other moods, to couple it in them with nominative subject S/A – say to the present, through and on its surrogate-imperative use, or future, on and through its use for injunctions. These extensions can occur through complex structures, such as nominative S/A that are really *arb* doubled by the apparent nominative, and so with consequences detectable in ϕ -features of various dependencies (4.4.3, 4.5.3, cf. Zanuttini et al. 2013: 1252 note 30), covert obliques (cf. Árnadóttir and Sigurðsson 2013: 4.2-3), or biclausal analyses (3.8). Expectations then depend on the interactions of potential structures and their externalisations with overt cues available to the learner (Walkden 2017, cf. here 3.8).

Among elements that can lack $\#$ like *arb* and imperative pronouns, no correlations are predicted. That seems right. In Breton, imperative and *have*-constructions had both gained split-nominative objects in 16C, but by 19C only the latter kept them in the southeast, and only the former elsewhere. Finnic shows the same independence, and *arb* can differ from either (e.g. Jansson 1871; Oranen 1984; Canneli 1889: §55; Suppl. A). In Romance *arb* alone can be quirky (4.4). In Breton, split-nominative objects spread from obliques-subject constructions by periphrases built on them, and through case-syncretisms to imperatives. In Finnic, as far as can be told, nominative objects might have arisen piecemeal, as in reanalysis of indirect causatives to passives (4.4) or of modifying as governing infinitives (see lit. in Havas 2008; Suppl. A). In Tangkic and Ngayarda languages, the nominative object of imperatives has been seen as the old absolutive left behind by general shift to accusative because it was unambiguous as object, in

some systems split by person through differential argument marking (Dixon 1994: 6.3, Evans 1995: 10.4, Klokoid 1979: 388).

Finally, expectations are always modulated by the ϕ -probes of a system. Systems without $\#$ -probes cannot be sensitive to presence vs. absence of $\#$, and ditto for subsystems like T vs. v (further 5.2). Conversely, a system with extra π -probes can be immune to person restrictions and can reveal that it is so through them (Béjar and Rezac 2023 on Georgian).

As in sec. 3, it is in place here to highlight limitations of evidence for the proposal, even relative to given mechanisms of ϕ -intervention and its interaction with case and licensing. The grouping of anomalous subjects in JR as π -only interveners takes its cue from those like *arb* where there is evidence for a $\frac{1}{2}$ -like interpretation and for freedom about numerosity (4.4). Only in a limited fashion for π and mostly not for $\#$ is there such evidence for quirky obliques (4.2). Likewise the grouping of split-nominative/absolute $\frac{1}{2}$ -objects in JR/PCC as π -bearers is based on systematic inclusion of $\frac{1}{2}$ pronouns, but even then can sometimes be subverted interpretively (Postal 1989, Rezac 2011: 6.5), and excursions to 3rd more systematically involve unclear variability in π -bearer behavior according to interpretation (Charnavel and Mateu 2015), grammaticalisations like 3SGM (Silverstein 1977, Ormazabal and Romero 2007, Foley and Toosarvandani 2022, Coon and Keine 2021: 3.4.3), and mismatches like 3rd person imposters for the addressee (García 2009: ch. 5, Rezac 2011: 6.4-5). Such variation is unsurprising given independent evidence that ϕ -features can grammaticalise on (pro)nominals and specific dependencies with considerable opacity relative to form and usage (e.g. Taylor 2009, Corbett 2004, Wechsler and Zlatić 2003).

5 Agreement, case and licensing in and beyond repairs

5.1 Repairs

In JR, 3-only nominative alternates with ineffable or accusative $\frac{1}{2}+$ with small set of atypical subjects and is unrestricted with typical nominative, oblique, and no subjects. This distribution has been called a repair, because the more syntagmatically and paradigmatically restricted accusative alternates with ineffability. Other repairs of JR/PCC are illustrated in Table 11.

Table 11: $\frac{1}{2}+$ repairs of 3 PCC* (underlined recoded in repair)

Construction	Repair	System
A subject + O object		
A.ARB + <u>O.NOM</u>	–	(Piedmontese)
A.ARB + <u>O.NOM</u>	O.ACC	Finnish; Spanish
A.DAT + <u>O.NOM</u>	O.ACC	Finnish, Breton
A.IPV + <u>O.NOM</u>	O.ACC	Finnish, Breton, (Lardil)
R subject + (O→)S object		
R.DAT + (O→)S.NOM/ABS	–	Icelandic, Breton, Basque
R.DAT/ADS + <u>S.NOM</u>	S.ACC	Finnish
R.DAT + <u>S.ABS</u>	S.ERG	Basque [%] , (Choctaw)
<u>R.ABS</u> + S.ABS	R.ERG	(Chinook)
A + high R + O object		
A.NOM + <u>R.DAT</u> _{clitic} + O.ACC	R.DAT _{low}	French, Spanish
A.ERG + <u>R.DAT</u> _{agr} + O.ACC/ABS	R.DAT _{low}	Basque
A.NOM/ERG + <u>R.DAT</u> _{agr} + O.ACC/ABS	R.DAT _{low}	Georgian [%]
A.NOM + <u>R.DAT</u> _{clitic} + O.ACC	R.LOC _{low}	French [%] (Catalan)
A.NOM + R.DAT _{agr} + <u>O.ACC/ABS</u>	O's self.ACC/ABS	Georgian [%]

Symbols: [%] variation; (...) not all repairs in system included; Romance, Basque: nonleista

Sources: see Bonet 1991, 2008, Rezac 2011: ch. 4-5, Tyler 2018.

For split-nominative objects and their absolute counterparts, the repairs look like augmentation in ϕ -case-licensing potential, recoding the barred $\frac{1}{2}+$ through the same

“dependent” accusative or ergative that is used independently of ϕ -restrictions in transitives or applicative intransitives. The idea can be generalised to other repairs in Table 11 by treating alternations like high dative ~ low PP as ϕ -case-licensing augmentation of oblique K (Rezac 2011: ch. 4-5; cf. for more complex syntax with finer ϕ -distinctions or different configuration of targets and goals, a.o. Béjar and Rezac 2009, Keine 2010: ch. 6, Rezac 2011: 4.3, 5.9, Walkow 2013, Georgi 2012, Driemel et al. 2020, Bárány and Sheehan 2022).

The theoretical interest of such a generalisation is brought out by expectations about repairs without it. ϕ - and other restrictions of all origins can be sidestepped by circumlocutions: free form for bound, prepositional for double object, passive for active (de Rostrenen 1738: 177 for Breton). Circumlocutions have their own conditions independent of the gap they avoid (see Embick and Marantz 2008 for this point about *amn't ~ aren't*). To take an example with ϕ -restrictions, speakers of French can lack forms for 1PL, 2PL pres.ind. of *frire* ‘fry’ and *moudre* ‘grind’ (note 4), and then can use the direct causative *we are making fish fry* instead of *we are frying* fish, but not so *we are making coffee grind* because of its independent deviance as causative (a ϕ -independent analogue is English *give/*bet'm to me* for **give/*bet me'm*). In principle, such circumlocutions could themselves be conventionalised so as to happen to be complementary with gaps, but the restriction requires evidence (Yang 2016).

A distinct internalist pathway to complementary circumlocutions or repairs is then indicated if there are systematically available some but not other circumlocutions under complementarity with gaps, provided that the complementarity does follow independently, as it would tend not to if it differentiated among syncretic gaps across rare structures. The repairs in Table 11 do show sensitivity to such subtle and rare differences (for instance the restrictions on free for clitic pronouns in French *me lui*, Postal 1990, parallels in Basque or Chinook, Rezac 2011: ch. 4-5). They can though need not be analysed as augmentations of ϕ -case-licensing (op.cit.). They might or might not be restricted to such augmentation. For now it seems only possible to point to repairs that are unexpected as augmentation, and note their apparent absence as repairs, though not as circumlocutions: say rephrasing a benefactive dative by an expression with nondefault lexical content like *on behalf of*.

Here the hypothesis of last-resort augmentation of ϕ -case-licensing capacity is taken as the background at least for repairs of split-nominative/absolutive by accusative/ergative in alternation with ineffability, notably the JR group of Icelandic-Finnish-Breton. A puzzle for augmentation has been variation between ineffability and dependent accusative/ergative in alternation with split-nominative/absolutive, across adjacent stages and dialects, within systems that do have dependent accusative/ergative in transitives. Breton reveals that one cause is externalisability, since its $\frac{1}{2}$ accusative clitics could not appear to fix the ineffability left by 3-only nominative in perfects before grammaticalisation of the participle as proclitic host (3.5.4). That leads to the general account of variation through externalisability of multiple case next.

5.2 Dependent Φ /Case and externalisability

The Φ /Case recasting of Case Theory attributes some case morphology and some (pro)nominal licensing to ϕ -Agree dependencies (Chomsky 2000). Here ϕ -dependencies are split into π and $\#$, and a (pro)nominal π , $\#$ is taken to be case-license only if for any and all of its π , $\#$ there is some matching ϕ /Case locus (adapting Anagnostopoulou 2003, Rezac 2003, in line with evidence from Finnish, 4.4.2). Φ /Case with dependent case incorporates the proposal of dependence theories of case that the nominative-absolutive are independent and go on the highest argument in their domain that does not have *c*/selected case (see esp. Maling 1993 for JR; on the *C/T* domain of nominative vs. *v/V* domain of absolutive cf. Yuan 2021).³²

³² Maling 1993 is the seminal dependent case analysis of 3 nominative objects in Finnish, the link of their distribution though not yet person Icelandic, and recognition of accusative on $\frac{1}{2}$, alluding to differential marking; much of this remains elsewhere (Nelson 1998: IV-V, Kiparsky 2001: 2.1.3, 3.1-2, Rezac 2011: 5.2, Vainikka and Brattico 2014: sec. 5). Dependence theories of case are internalist, and in frameworks where their core implication independent \rightarrow dependent ϕ /case is not violable, it lead to the expectation that the outcome of diachronic pathways to superficial counterexamples will be acquired either as idioms under evidence of exceptionality or as structures that satisfy dependence theories through covert elements with independent ϕ /case. For this content there is good evidence in covert but diagnosable full, quasi, or implicit arguments (Szucsich 2007, Schäfer 2008: 6.6, 7.4, Legate 2014: ch. 4, Wood 2016; cf. Bittner and Hale 1996), agreement of overt obliques (Jónsson 1996, Árnadóttir and Sigurðsson 2013; Rezac

The various implementations of dependent case make similar predictions on configurations with ϕ -complete A, O, (O \rightarrow)S and these + R (see with lit. Baker 2015, Baker and Bobaljik 2017). Here the mechanism of dependent ϕ /case here is syntactic (Bobaljik 1993, Laka 1993, Bittner and Hale 1996), and reflects the same Agree mechanics as independent case with the same consequences for licensing (Laka 2000), with the difference that the locus of independent ϕ /case is lexically fixed with a ϕ -probe and loci of dependent case receive one as needed for convergence (Béjar and Rezac 2009, Rezac 2011, Kalin 201; local alternative: 5.3). Some differential argument marking can be as dependent case: here, the unique form of the accusative on $\frac{1}{2}$ in Finnish (as DOM, Nelson 1998: V, Kiparsky 2001: 3.1, cf. Maling 1993: 52 note 5; the origin is a pluraliser, see lit. in Suppl. A: 6.1), and perhaps the dative-syncretic form of free and variably clitic accusatives in Spanish and Basque (see note 35 and alternatives and lit. there; the ultimately origin seems to be R/O lability, see lit. in Suppl. B: sec. 2).³³

The distinctiveness of these choices in the landscape of dependence theories of case lies in the person-sensitive distribution of dependent case and its alternation with ineffability in JR/PCC. Given a π -only intervener between the independent nominative ϕ /case locus T and O/S, $\#$ -only O/S is licensed as nominative, but π -bearing O/S needs dependent accusative, or else is ineffable (4). The present challenge is an explanatory account of variation between ineffability and dependent accusative-ergative specific to this configuration of PCC*, sometimes across fairly different systems like Icelandic and Finnish, sometimes across otherwise essentially identical systems like stages of 16/17C Breton (3.5), or microvarieties of 20/21C Basque (Rezac 2008b, Arregi and Nevins 2012). Breton suggests externalisability can lie behind this variation, and the mechanics of ϕ /case here does isolate a property unique to the repair use of dependent ϕ /case in partial ϕ -intervention multiple case (see Coon and Keine 2021 for a conceptually similar reduction of variation in intervention-based ϕ -restrictions to externalisability).

In canonical active transitives (29)a, A is ϕ -complete, while in canonical unaccusatives (29)b, A is absent. O \rightarrow S is like S, ϕ -complete oblique A is like nonoblique, ϕ -inert oblique A and implicit A are like absent A.

(29) Derivations

Canonical active transitive and passive transitive or unaccusative, accusative system

- | | | | | |
|----|-----------------------------|---------------------------|-----------------------------|-----------------------------|
| a. | $T_{\pi=A, \#=A}$ | $A_{\pi, \#; \text{NOM}}$ | $V_{\pi=O/\emptyset, \#=O}$ | $O_{(\pi), \#; \text{ACC}}$ |
| b. | $T_{\pi=S/\emptyset, \#=S}$ | | v | $S_{(\pi), \#; \text{NOM}}$ |

In structures with π -only A and $\#$ -only O, T matches multiple goals, boxed in (29)c-d. If O has π , it fails ϕ -relativised case licensing unless the dependent locus has a ϕ -probe, indicated by \rightarrow , and then receives multiple case, also boxed. This gives dependent case repair in a system with agreeing or clitic accusatives (Breton dative-subject perfects). Both goals of a split-valued locus like T here get case from it, such as nominative π -only *arb* and $\#$ -only O (overtly in 4.4, elsewhere filtered by resolution of oblique-nominative case stacking, Yoon 2004).³⁴

Quirky-A active transitive, accusative system

- | | | | | |
|----|------------------------|-----------------------|------------------------------------|-------------------------------|
| c. | $T_{\pi=A, \#=O}$ | $A_{\pi; \text{NOM}}$ | v | $O_{\#; \text{NOM}}$ |
| d. | $T_{\pi=A, \# \neq O}$ | $A_{\pi; \text{NOM}}$ | $V_{\rightarrow \pi=O, \# \neq O}$ | $O_{\pi, \#; \text{ACC+NOM}}$ |

2008a), and overt expletives (cf. Schäfer 2012: sec. 6). Dependence theories imply less strongly and uniformly when dependent ϕ /case is available (Kalin 2018: sec. 5; for a case-study of double object unaccusatives in English, see Baker 1996, vs. passives, Pesetsky 1995, Haddican and Holmberg 2019, contrast Amharic and Maricopa in Baker 2015).

³³ Varieties of Finnic present an intriguing DOM: they recruit the normally partial or negated object partitive as human-pronoun differential object marking (Ojajärvi 1950), and while they do so typically both in ordinary transitives and in repairs of split-nominative (Larjavaara 1990 on a system close to Finnish), sometimes this seems confined to the repairs, and that needs more work (Miljam 2008 on Estonian; but perhaps due to independent reasons, Suppl. A: 4.2).

³⁴ It is assumed that loci are ϕ -complete even when π alone would do, with otiose $\#$ dashed-underlined (Rezac 2008b); and that nothing bars multiple goal (to probe) to probe matches indicated by ! (Keine and Bhatt 2017). Typical outcome follows from externalisation of multiple unified probes with one value (see below here in 5.2) and of split-matching probes as default (see 5.3): thus *arb se* + nominative $\#$ -only O valuing T for number, $\pi+\#$ accusative O with T default.

In ergative systems, v-absolutive is independent and T-ergative dependent, so ϕ -quirkiness of A does not affect v-O dependencies.³⁵

Canonical active transitive and passive transitive or unaccusative, ergative system

- e. $T_{\rightarrow\pi=A,(\#)=A}$ $A_{\pi,(\#);ERG}$ $V_{\pi=O/\emptyset,\#}=O$ $O_{(\pi),\#;ABS}$
 f. T $V_{\pi=S/\emptyset,\#}=S$ $S_{(\pi),\#;ABS}$

R is below v and intervenes for both accusative and absolutive O (French, Béjar and Rezac 2003; Basque, Rezac 2008b, unless O shifts past R, Slovenian, Stegovec 2018). Repairs here need other dependent loci (K/P, D, Appl: see sources to Table 11, Kalin 2018: sec. 5).³⁶

Canonical ditransitive in accusative/ergative system, without and with O-raising

- g. $T_{\pi=A,\#}=A$ $A_{\pi,\#;NOM/ERG}$ $\boxed{V_{\rightarrow\pi=R,\#}=O}$ $R_{\pi;ACC/ABS}$ $O_{(*\pi),\#;ACC/ABS}$
 h. $T_{\pi=A,\#}=A$ $A_{\pi,\#;NOM/ERG}$ $\boxed{V_{\rightarrow\pi=O,\#}=O}$ $O_{\pi,\#;ACC/ABS}$ $R_{\pi?;ACC/ABS}$

R + S will differ according to system. In accusative systems, S often raises past R generally (French or German, but R is arguably ϕ -inert) or conditionally (Icelandic if quirky R displaces, see lit. in 4.1). R between T and S should give rise to split-valued T and #-only S, and does, apart from variation in whether split-valued T realises number from S or shifts to default (5.3).

Quirky-R unaccusative or passive, accusative system, without and with S-raising

- i. $\boxed{T_{\pi=R,\#}=S}$ v $R_{\pi;NOM}$ $S_{(*\pi),\#;NOM}$
 j. $\boxed{T_{\pi=R,\#}=S}$ v $R_{\pi;NOM}$ $S_{(*\pi),\#;NOM}$
 k. $T_{\pi=S/\emptyset,\#}=S$ $S_{(\pi),\#;NOM}$ v $R_{\pi?}$ t_S

In absolutive systems, R should similarly restrict S relative to absolutive v, but not affect S's relationship to ergative T if S raises past R (a.o. Basque, where S not R is PRO, Rezac 2008b). The result is repair by ergative (Table 11 with lit.). The expected π ,#-valuation of the dependent locus T is found, and independent mechanisms reduce # on v at externalisation (see a.o. Rezac 2008b: 4.3 with lit., and on the nature of T-agreement, Rezac et al. 2014: 4.4).

Quirky-R unaccusative or passive, absolutive system, without and with S-raising

- l. T $\boxed{V_{\pi=R,\#}=S}$ $R_{\pi;ABS}$ $S_{(*\pi),\#;ABS}$
 m. $T_{\rightarrow\pi=S/\emptyset,\#(l)=S}$ $\boxed{S_{(\pi),\#;ABS+ERG}}$ $\boxed{V_{\pi=R,\#}=S}$ $R_{\pi;ABS}$ t_S

Across the systems here, PCC* constrains arguments in a case and a clause type where they would either control agreement or be clitic, but not necessarily otherwise: nominative or absolutive in finite agreeing clauses of Icelandic or Basque, but nonfinite nonagreeing clauses vary in Icelandic, and are not constrained in Basque; accusative clitics in active ditransitives French or Spanish, but not nonclitic counterparts in Finnish and Icelandic (Finnish like Breton might lack quirky R above O, but Icelandic active-passive contrasts show $R > O \sim R > O \rightarrow S$, see 4.3). These observations are well approximated by the hypothesis that π only needs licensing if there is a π -probe in its ϕ /case domain and π -probes tend to be cued by agreement and clitics (Preminger 2019), though also by other evidence (ϕ on infinitival T in Finnish strictly cued by

³⁵ More complex scenarios may be illustrated with Basque. In the present, v has a ϕ -probe satisfied by any O/S, but in the past v it has a π -probe satisfiable only by $\frac{1}{2}$, so 3 O lets it Agree with $\frac{1}{2}$ A, while SG/PL on any A still needs Agree with # on T and so A is ergative (Béjar and Rezac 2009), save for π -only *arb* A which is then correctly licensed by v alone and there is no ergative (Albizu 2000). Suppose further that for a underived reasons *arb*, can only be π -licensed by v. It follows that *arb* A does not allow v's π -probe to license absolutive $\frac{1}{2}$ O, correctly. This O uniquely here appear as dative, as also in even nonleista Spanish in contrast to Italian (diachrony: Suppl. B: sec. 2). Here it can be viewed as added π -probe on Appl because v already has the π -probe that licenses *arb* (thus with a slightly different set-up Berro and Fernández 2022, cf. Kalin 2018 on DOM), or not as a repair but a conventionalisation whereby *arb*-selecting v uses R when vaninally v uses O (q.v. Pineda 2020; cf. possible failure of complementarity in these Basque and Spanish systems where even human 3 to be dative as O with *arb* but not barred in as O in A+R+O or as S in R+S PCC).

³⁶ If π of quirky obliques needs licensing, $\frac{1}{2}$ +R should be barred on shift of O past R, indicated by ? (Slovenian: Stegovec 2018, but see note 26); similarly with shift of S (cf. Icelandic next: unknown).

split-nominative ~ accusative alternation of S, see 4.3 ex. (23), infinitival T in Icelandic variably cued according to robustness of agreement in finite clauses, more in “A” than “C”, note 20).

The hypothesis can be integrated here by extending ϕ -relativisation of case licensing: case is available under match if the match is complete with respect to the intersection of the ϕ -features of the goal and the locus. This requirement is met for accusatives in Icelandic or Finnish if they have on v some non- π probe that matches any O but no R, like # (corresponding closely to categorial features, Chomsky 1995). These system then have no PCC* for quirky R + accusative O in active ditransitives (the commonest scenario); for transparent R + accusative (O→)S in their passives and in unaccusatives (varieties of Icelandic, Árnadóttir and Sigurðsson 2012: 130 note 30); or for repairs of PCC* with quirky oblique R + accusative (O→)S (Finnish; its split-valued T marked here ! surfaces as default, see note 36).

Quirky-R transitive and unaccusative or passive if accusative not agreeing/clitic

n.	$T_{\pi=A, \#A}$	$A_{\pi, \#; \text{NOM}}$	$V_{\#!=O}$	$R_{\pi; \text{ACC}}$	$O_{(\pi), \#; \text{ACC}}$
o.	$T_{\pi=R, \#!=S}$	$V_{\rightarrow \#!=S}$	$R_{\pi; \text{NOM}; \text{ACC}}$	$S_{(\pi), \#; \text{ACC} + \text{NOM}}$	

The non- π probe can be extended to the independent locus of infinitives when they lack PCC* – Icelandic “C”, not “A”, nor Finnish (but cf. Pesetsky 2021 and here note 37).³⁷

All and only derivations with π -only higher arguments have T-probes split-valued from different goals, boxed, π from R/A and # from O/S. There is no variation on effability of these structures unless O/S also has π . These are also the only derivations where O/S gets multiple case, from T and v in repairs. Multiple case is an independent point of variation in effability (Young 1988, Béjar and Massam 2000, Yoon 2004). It is thus possible to attribute variation in repairs to the externalisability of the multiple case structures like [[[...] ACC] NOM] or {< π , ACC>, <#, NOM>}. Silence is only expected to resolve the issue if it avoids realisation, in the way posited for ellipsis, not if it is realisation by PF \emptyset (cf. the fine-grained variation in Rezac 2008b: 86 for Basque). Syncretism too should only resolve multiple case if its exponent externalises the syncretised features, and there is evidence of variability in its rescue of multiple case (Young 1988: 2.2.4; cf. Arregi and Nevins 2012: 2.3.2 for Basque).

The externalisability of multiple case could be pressed further to eliminate the distinction between independent-dependent loci and recourse to global computation in activating dependent loci. Suppose all ϕ /case loci always active. O/S would then fully matching both T and v , usually with resolution to absolutive or nominative (cf. Richards 2017), but more variously in active systems (Dixon 1994). Variation in repair would reflect extension of this resolution when a goal split-matches T and v . Such full recasting of PCC* through problems of externalisation eliminates ϕ /case licensing conditions in syntax along with globality, and in this joins other work (see esp. Coon and Keine 2021).

Two boundary conditions on repairs need addressing on this alternative. One is the nature of the externalisation problems that license repairs. There are systems where PCC* and ϕ -arbitrariness *amn't* type gaps can be syncretic, but only PCC* allows repairs by dependent ϕ /case (see on Basque, Chinook, French in Rezac 2011: ch. 5 with lit., and cf. Coon and Keine 2021: 3.5). The

³⁷ Differences from Preminger 2019 mostly do not seem pertinent here, apart from tentative attribution of # to v not cued by clitics, and indeterminacy for arguments not agreeing or clitic (Icelandic, Finnish), and even these (given microvariations on *me lui* in Romance clitics, Pescarini 2021: 4.5.4, García 2009: ch. 3, 5, Nicol 2005, cf. Basque, Rezac 2016: sec. 5 – leaving uncertainty when accusative clitics that cannot interact with dative ones, as in Breton, 3.3.2, 3.5.3). Under Preminger’s proposal, systems with PCC* for accusative clitics but not free strong pronouns like Greek or Italian treat the latter like 3rd person nominals of the system. That works readily for Breton, where free pronouns do not control overt agreement, but must be specific to accusatives in Greek and Italian, where they do as nominatives. Suppose then that nominatives (and perhaps accusatives) can externalise case-marked (pro)nominals, but only accusative strong pronouns (also) larger structures invisibilising ϕ in a shell (like inert oblique K, 4.3-4; comparably Béjar and Rezac 2003: 54, Preminger 2019: note 7, Coon and Keine 2021: 3.5, cf. Caha 2009, Starke 2018 with lit.). The same analysis would also account for insensitivity of accusative strong pronouns to PCC* in the non-agreement/clitic systems of Icelandic and Finnish, and can be extended to nominatives in Icelandic varieties where they do not agree when not raised to subject and are then immune to PCC*, if at least one raising step still needs the shell-less structure because driven by ϕ -Agree (“C+”, q.v. Árnadóttir and Sigurðsson 2008, Wood and Sigurðsson 2019, vs. contextual nonagreement and some PCC* in “C”, agreement and PCC* in “A” Sigurðsson 1996, Sigurðsson and Holmberg 2008; cf. differences in varieties of Basque, Rezac 2008b - Arregi and Nevins 2012: 2.3.4). There is then less need of ϕ -relativisation of case: incomplete improvement in infinitives of Icelandic “C”, see lit. in 4.1, and complete in Basque, less clearly Georgian.

other boundary condition is the nature of syntactic conditions on repairs. It is clearest in systems that fix PCC* of accusative-absolutive in ditransitives by recoding quirky datives as locative-like obliques (like French or Basque, see Table 11 with lit.). Here π -bearing O is barred by φ -quirky dative R bar *above it*, but the repair yields φ -inert dative R *below it*, otherwise unavailable for a given R like that of ‘give’, but similar to locative obliques like goals of motion of the same system. On the global approach, the repair can be incorporated with K as dependent locus. On the local approach, the structure of the repair seems to be the same as that of a regular transitive with a low oblique like goal of motion, and so should always be available to say goals of transfer – yet it only is when repairing PCC* (Rezac 2011: ch. 4).

5.3 The nature of case and licensing

Case Theory takes its cue from systems where (pro)nominals seem to lack caseless forms: Latin ‘friend’ appears with nominative *-s* in *amīcus*, ‘he’ *is*, accusative *-m* in *amīcum*, *eum* but caseless **amīco*, **e* are “morphologically ill-formed” (Rouveret and Vergnaud 1980: 190). Classical Case Theory abstracts over this observation to a licensing condition on (pro)nominals. φ -Agree extends the two steps to agreement (Chomsky 2000). Φ /Case unifies the two (ibid.).

JR/PCC of Finnish and Icelandic, Basque, Breton fit the expected interactions of φ , case and licensing well: φ -content is linked with ineffability and dependent case because these only affect $\frac{1}{2}(+)$; the conditions are syntactic because effability-case depends on a structurally higher but indefinitely distant argument. At the same time, as far as PCC* goes, the links made by Φ /Case could be considerably narrowed, for instance so that only marker person or π needs licensing (see a.o. Béjar and Rezac 2003, Preminger 2014; Kalin 2018; Baker 2008; Sigurðsson and Holmberg 2008, Zubizarreta and Pancheva 2018; Stegovec 2018; Bianchi 2006).

The linking of φ , case and licensing in syntax in Φ /Case has been challenged on different grounds (for discussion from different perspectives, see McFadden 2004, Preminger 2014, Baker 2015, Pesetsky 2021, Bány and Sheehan 2022). Of these the one particularly relevant here is nonagreement specific to the characteristic configurations of PCC* (cf. Preminger 2014 on the centrality of this argument). This is distinct from general absence of agreement with low or object-position nominatives, found in Icelandic “C+” (analysable through conditions on externalisation, D’Alessandro and Roberts 2008, Schütze 2020: sec. 6, Bhatt and Walkow 2013, Marušič and Nevins 2018; and through φ -content of expletives that “transmit” case in independent ways, cf. Chomsky 1995: 361 note 119, Frampton et al. 2000, Oxford 2019: 4.3 ex. (28)). In Icelandic “C”, these must agree, save when there is a quirky oblique subject that restricts them to 3, i.e. in the configuration of PCC* (Sigurðsson and Holmberg 2008 with lit.; cf. Basque, Etxepare 2006; Spanish, Mendikoetxea 1999). This restriction has an intriguing analysis here because it is the only context where the φ -probes of T have split match in the π -only intervener and #-only object. So long as externalisation has access to this split, as it does if Agree unifies rather than values features, it can realise split-matching loci with default values, Icelandic “C”, rather than the unified values, “A”.³⁸

Depending on the mechanics of the φ -case relationship, an analogue is expected of special split-valued agreement in special case: namely, if case reflects enough properties of the φ /case locus, for instance as its copy (see Pesetsky and Torrego 2007, Pesetsky 2013: 3.2, 9.1, Rezac 2003). The coherent vs. split match could then influence the realisation of case, and make the nominative of PCC* configurations distinct from nominative elsewhere. The last step in evolution of Breton here has been the rise of what can be analysed as such a distinctive nominative restricted to PCC* configurations (3.7), though it can also be analysed otherwise because in that system it cannot be contrasted with a fully matching unrestricted nominative (cf. Chomsky 2000: 149 note 90, given the analysis of the construction in Richards 2008).

6 Conclusion

³⁸ Even in “C”, O→S controls number agreement in passives rather than unaccusatives (Sigurðsson 1996: 2.3), arguably under influence of the separate number agreement of the participle between R and (O→)S, and there is other evidence for this agreement influence (Sigurðsson and Holmberg 2008: 266, cf. perhaps Schütze 1997: 109 note 17).

This study has traced the rise, spread, and retreat of ϕ -restricted object coding in Breton as a manifestation split-nominative objects coupled with anomalous subjects (sec. 3). The developments suggest principles linking split-nominative objects with anomalous subjects and place boundary conditions on the subject anomaly. These principles have been explored in as partial, person-only intervention in ϕ -dependencies (sec. 4; Anagnostopoulou 2003) and recruitment of dependent ϕ /case for licensing (sec. 5; Rezac 2011, Kalin 2018). The spread of split-nominative objects has been analysed as variation in π -only bearers (sec. 4), adding to quirky obliques (Anagnostopoulou 2003) special pronouns where absence of # may be contingent on absence of n/N: imperative subjects and human impersonals (Zanuttini et al. 2012; Malamud 2012, Landau 2015). Variation in ineffability and dependent case alternants to split-nominative has been localised in externalisability of ϕ /case-dependencies in (sec. 5; Coon and Keine 2021). Different sorts of limitations of the evidence have been noted (sec. 3.8, 4.6, 5.3). By way of ending, the potential may be highlighted of exploring the issues further through other development of JR/PCC, some on-going and allowing fine-grained resolution and generation-to-generation tracking (Basque, Arregi and Nevins 2012: 2.3, Berro and Fernández 2022, Rezac 2008b, 2016; Mainland Scandinavian, Árnadóttir and Sigurðson 2013, Jónsson 2009), some more sparsely documented but leading through divergence and interaction to varied end-points over fairly understood long-term histories of large linguistic areas (Finnic, Timberlake 1974 and further lit. in Suppl. A; adjacent Slavic, Timberlake 1974, Jung 2008, Yashinova 2018).

7 References

Breton texts

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