

On the implicit argument of Icelandic indirect causatives

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Abstract: The goal of this paper is to understand the syntax of Icelandic indirect causatives (ICs), especially with respect to the implicit causee. We show that the complement of the causative verb must be at least as large as a VoiceP, and that it shares some properties with active VoicePs, and others with passive VoicePs. We make sense of this state of affairs by proposing that the causee, while phonetically silent, has an explicit syntactic representation, but as a ϕ P rather than a DP. We further propose that ICs are built by stacking a second VoiceP on top of the lexical verb's first VoiceP, and that this configuration, along with the underspecified interpretation of ϕ P, leads to a special thematic interpretation of both the causer and the implicit causee. Our analysis suggests that there are certain core ingredients involved in building ICs—such as stacked VoicePs and an underspecified causee—but that the source of these ingredients can vary across languages and constructions, depending on the formal primitives that grammars make available to the language more generally.

Keywords: causatives, indirect causatives, implicit arguments, by-phrases, passives, middles, voice, quasi-active

1 Introduction

Going back to Kayne (1975), causative constructions have played an important role in our understanding of a wide variety of issues, including cyclic domains, case marking, and voice alternations. Indirect causatives (ICs), where the causee is left implicit, have presented challenges connected to our understanding of verb phrase cartography (Ramchand 2008, Harley 2013b, 2017), voice and passives (Pitteroff 2014), and complex predicates (Taraldsen 1983, 1984, Folli and Harley 2007). An example of an Icelandic IC is given in (1a) and an ordinary causative is given in (1b).^{1,2}

- (1) a. Ég lét byggja hús.
I.NOM let.PST build.INF house.ACC
'I made (someone) build a house.'
- b. Ég lét Guðrínu byggja hús.
I.NOM let.PST Guðrún.ACC build.INF house.ACC
'I made Guðrún build a house.'

(1a) means that I made someone build a house; the causee, however, is not expressed overtly. In (1b), the causee is explicitly named, and marked with accusative case.

ICs have been well studied in the literature on Scandinavian languages (Taraldsen 1983, 1984, Christensen 1986, Herslund 1986, Platzack 1986, Vikner 1987, 1989, Johnson and Vikner 1995, Lundin 2003, McFadden 2004:200ff., Wood 2011, Wood and H.Á. Sigurðsson 2014, and Lødrup 2017). However, the actual status of the implicit argument of ICs has not received much attention in the Scandinavian literature, which has focused more on the issues of clausal architecture (such as the size of infinitives), reanalysis/clause-union effects, word order, and case-assignment. When the issue of the implicit causee is addressed at all, it is generally assumed that the causee is not present syntactically or semantically.³ Most work has assumed that 'let' and the embedded verb

together assign a single subject theta-role to the matrix subject.

Research on other languages has more explicitly connected the status of the implicit causee to voice alternations such as active versus passive. Causatives in French, and subsequently many other languages, have been divided into *faire-infinitif* (FI), as in (2a), and *faire-par* (FP), as in (2b).

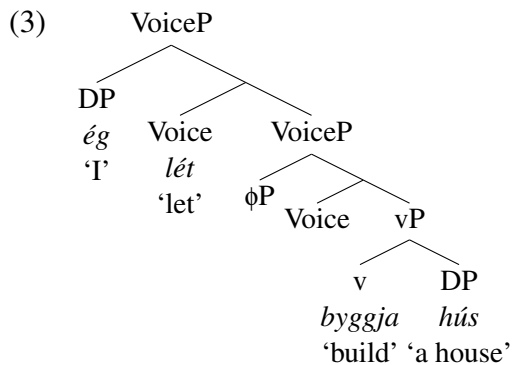
- (2) a. Marie fera boire cette eau à son chien.
Marie will.make drink this water to her dog
'Marie will have her dog drink this water.'
- b. Marie fera boire cette eau par son chien.
Marie will.make drink this water by her dog
'Marie will have this water drunk by her dog.' (Kayne 1975:239)

The intuition found throughout the literature is that in the FP, the embedded verb phrase is essentially detransitivized—lacking an external argument—such as through a sort of a passivization or nominalization, while in the FI, the embedded verb phrase is transitive (with the causee being projected in the syntax) (Kayne 1975; Folli and Harley 2007). As discussed by Folli and Harley (2007), FP is illicit when the embedded verb is not passivizable, and is subject to several other restrictions as well. Focusing on Georgian, Nash (2017) argues that the embedded verb phrase is really detransitivized as a middle voice (in the sense of Doron 2003, 2013), accounting for why the causee lacks certain agentive properties, and that (part of) Georgian causative morphology really reflects this detransitivizing middle voice. Her intuition is that the indirect causative reading arises when the embedded agent is maximally underspecified. We will build on this intuition, but we will propose that middle voice is not the only way to derive the maximally underspecified argument involved in the construction of the indirect causative reading.

The goal of this paper is to investigate the syntax of Icelandic ICs, with a focus

on the embedded clause structure and the status of the implicit causee. We contribute to the broad formal typology of ICs by showing how Icelandic ICs are not exactly active, passive, or middle, but share various characteristics with all three. We will propose that, contrary to previous work on Scandinavian (including Icelandic), there is a syntactic manifestation of the implicit causee in the embedded clause in the external argument position, SpecVoiceP, as one might expect from an active analysis (like Folli and Harley’s (2007) account of FI, but with a silent causee). However, ICs do not have all the properties of an active VoiceP. We propose that this is because the causee is not represented by a full, referential DP, but rather by a ϕ P, as proposed for “Grammatical Object Passives” (to adopt the term from Legate 2014) and various other constructions in Icelandic (E.F. Sigurðsson 2017). We refer to such VoicePs as “quasi-active” to emphasize that although they are syntactically active, in the sense that they contain a syntactic external argument in the specifier of VoiceP, they have various characteristics in common with middles and passives.⁴

We further propose that the matrix causative verb realizes a second Voice head on top of the embedded Voice head, adapting aspects of Nash’s (2017) analysis of Georgian (see also Nie 2019, who generalizes a version of this structure to morphological causatives in general). We will occasionally refer to this aspect of the analysis as Voice-stacking. The structure we ultimately propose for (1a) is presented in (3).⁵



Note that many of the facts discussed in this article would be compatible with there being a *v* head between the two Voice heads in (3). However, there are a number of facts that are difficult to account for on that view, including facts connected to control and decreased agency available to ϕ P in comparison to overt DP causees. We will show how the Voice-stacking analysis accounts for these facts in a way that is able to incorporate insights found in previous literature on ICs, in Scandinavian and elsewhere.

However, some of the arguments in favor of our analysis, and against an analysis involving an embedded passive or middle Voice head, will depend on the ways that Icelandic is different from languages that have been argued to use those means to construct ICs. This suggests that some languages, unlike Icelandic, do use passive or middle Voice to build ICs. That is, there are different syntactic paths to the same (or very similar) semantic result (indirect causation semantics). Which path(s) a language makes available depends on what primitives are independently available. Some languages use a passive Voice, others a middle Voice, and others (including Icelandic) a quasi-active Voice with a highly underspecified argument in its specifier (making it syntactically active, but with some properties in common with passives). The commonality underlying this variation is that the IC reading involves stacked VoicePs, with the embedded VoiceP as the locus of a highly underspecified thematic argument.

The article is structured as follows. We first provide some basic background on implicit external arguments, their connection to the voice system, and discuss how ICs bear on the issue (§2). We then start with what we call the “bare *v*P” analysis, which has been assumed in most of the Scandinavian literature in one form or another (§3). We then turn to evidence that the embedded verb phrase must contain at least a VoiceP layer, but remain agnostic as to whether there is an external argument in that layer (or whether it is a passive VoiceP, for example) (§4). We then provide evidence that in fact

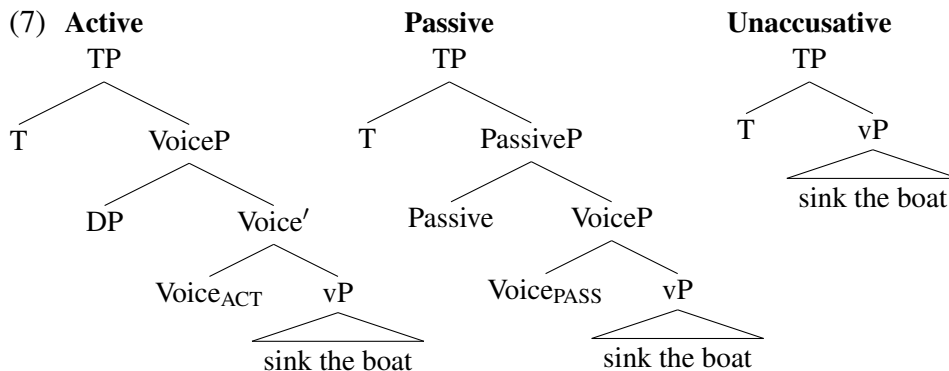
(5) **Passives**

- a. The boat was sunk by the enemy captain. (Agentive by-phrase)
- b. The boat was sunk with a hammer and a nail. (Instrument)
- c. The boat was sunk in order to collect the insurance. (Purpose)

(6) **Unaccusatives/Anticaustives**

- a. The boat sank (*by the enemy captain). (*Agentive by-phrase)
- b. The boat sank (*with a hammer and a nail). (*Instrument)
- c. The boat sank (*in order to collect the insurance). (*Purpose)

The generally held view is then that passives have a genuine implicit argument, in the semantics (or even the syntax) while unaccusatives do not. Drawing on ideas in Kratzer 1996, Pytkänen 2002, and others, Alexiadou et al. (2015) propose the difference has to do with whether there is a VoiceP.⁷ Thus, Alexiadou et al. (2015) take the structural difference between actives, passives and unaccusatives to be (roughly) that in (7).



In both the active and passive structures, there is a Voice head that introduces agentive semantics. In actives, the agent is projected syntactically in SpecVoiceP. In passives, the agent remains part of the semantics of Voice, but is not projected syntactically.⁸ In the unaccusative structure, however, there is no Voice head, and therefore no agentive semantics, whether explicit or implicit. Even if we know from world knowledge that

there is an agent, such as in sentences like *We hit the boat with the missile and it sank*, the unaccusative is built/packaged in a way that excludes a representation of the agent in its meaning (Rappaport Hovav 2014).⁹

As mentioned above, indirect causatives (ICs) are also constructions where the causee is left implicit. Note that in the Icelandic example (1a), there is no overt argument or morpheme (such as a passive or intransitivizing affix) corresponding to the causee. Nevertheless, speakers have a strong intuition that there is a causee in the meaning of this sentence: someone built the house, and it was not the subject of the matrix clause.

The question at the center of this paper is what the nature of the implicit argument in (1a) is. It is quite clearly not PRO, at least not a familiar kind of PRO. It is not controlled by the overt subject, and in fact, as we discuss below, it must be understood as distinct from it. Nor is it coreferential with a speech act participant like the speaker or addressee (cf. Landau 2015b), except perhaps incidentally or accidentally. Finally, the complement of causative *láta* ‘let’ in ICs is quite small, apparently smaller than a CP or even a TP (Pitteroff 2014), but at least as large as a vP (Ingason and Wood 2017). This too makes it unlikely (though perhaps not impossible) that ICs are control constructions.¹⁰

In order to develop our analysis of Icelandic ICs, we will start with the least structurally elaborated option, which has been the majority analysis in the literature to date (see references above). In this view, the complement is a bare vP, with no external argument or passive voice head. The implicit causee is implied pragmatically, and does not correspond to anything in the syntactic structure directly.

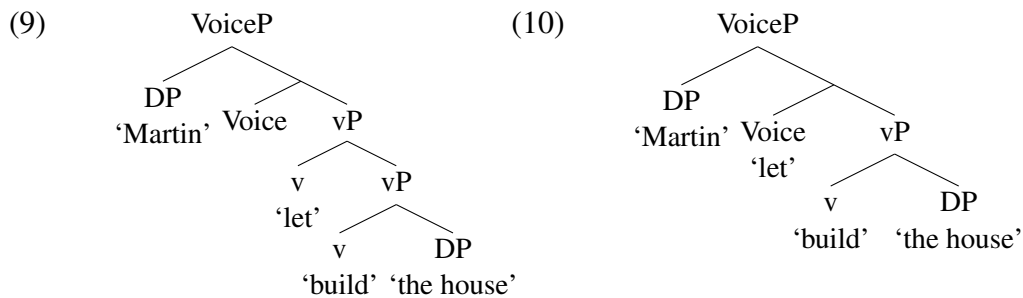
3 Bare vP Analysis

As mentioned above, previous work on Scandinavian ICs has assumed that the implicit causee is syntactically just not there. In this view, *láta* ‘let’ takes a bare vP complement, with no external argument. This analysis has been proposed

for Scandinavian (Taraldsen 1983, 1984; Christensen 1986; Vikner 1987; Lundin 2003; McFadden 2004; see Wood 2011; Wood and Sigurðsson 2014 for Icelandic specifically),¹¹ Hiaki (Harley 2013a), and Italian (Folli and Harley 2007), among other languages. One general claim in this literature is that ICs come in two different kinds: one kind allows passive by-phrases, and another kind does not.¹²

- (8) a. Er lässt den Wagen (von dem Mechaniker) reparieren.
 he lets the.ACC car (by the mechanic) repair.INF
 ‘He makes the mechanic repair the car.’ (**German**) (Pitteroff 2014:80)
- b. Han lod kapellet udsmykke af Matisse.
 he let.PST chapel.the decorate.INF by Matisse
 ‘He had the chapel decorated by Matisse.’ (**Danish**) (Vikner 1987:271)
- ?? Martin lät bygga huset af Peter.
 Martin let.PST build.INF house.the by Peter
 ‘Martin had the house built by Peter.’ (**Swedish**) (Vikner 1987:271)

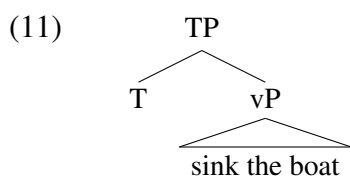
The idea would be that when by-phrases are not allowed, the complement of ‘let’ is just a bare vP, with no syntactic representation of the agent, as in (9).¹³ An alternative variant of the bare vP analysis is that ‘let’ is itself a realization of Voice, so that the structure is even smaller (as proposed by Lundin 2003), as in (10).



The question on this view is what the interpretation of the construction is that gives rise to the very salient reading that there is an implicit agent. Much of the literature on Scandinavian has been more or less silent on the issue. Vikner (1987) says explicitly

that the embedded verb has no subject thematic role at all, and argues (p. 270) that instrument phrases are not acceptable (cf. the instrument test above). The implication of an argument must then come from somewhere else.

Harley (2013a) proposes that even in a system where agents are introduced syntactically by Voice, they can be implied at the level of the vP. Thus, the higher causative verb, in addition to expressing causation, existentially closes over the open implicit argument of the complement vP (much as the passive head of Bruening (2013) existentially closes over the implicit argument of its VoiceP complement). However, this does not provide an account of the unavailability of agentive readings in unaccusative anticausatives. If a vP without a VoiceP layer (or with an expletive VoiceP layer) can imply an agent, we would expect *The boat sank*, with the structure in (11), to have a reading with an implicit agent (and license by-phrases and instrument phrases, etc.).



Since Harley's (2013a) analysis introduces an agent at the vP level, it accounts for the availability of a passive by-phrase to express the causee overtly: the by-phrase saturates the agent role introduced at the vP level. This, however, is only correct for languages that allow such by-phrases, and does not account for languages where the by-phrase is unavailable or highly restricted (despite the presence of an implicit agent semantically).

To address this issue, Lundin (2003) presents an insightful idea which she refers to as agent splitting. Her analysis focuses on Swedish, a language where ICs imply a causee argument semantically, but by-phrases cannot express the causee syntactically. Her idea is that a canonical agent involves two components: an INITIATOR who is responsible for the agentive, sentient aspects of bringing the event about, and a DOER who is responsible

for performing the physical actions that bring the event about. Canonical agents do both things. What ‘let’ does is split the two components, so that the overt subject is understood only as an INITIATOR. This leaves one-half of the “agency” unexpressed syntactically and semantically. We can then easily imagine that the implication of a DOER is pragmatic. The implied argument is truly implied, on this view, with no syntactic representation at all. We will propose below that the basic idea of agent splitting is on the right track, and connect it to the interpretation of the stacked VoicePs presented in the structure in (3) above. However, although we agree that ‘let’ in ICs is the realization of an external-argument-introducing head, we provide evidence in the remainder of the paper that there is, in fact, more structure than the above analysis would suggest. We will first provide evidence that there is an additional VoiceP layer in the complement of ‘let’.

4 Evidence for a VoiceP layer

In this section, we provide evidence that there is, in fact, a VoiceP in the complement of the IC verb. We provide four pieces of evidence for this. First, while agentive by-phrases are restricted in Icelandic ICs, under certain circumstances they are possible. Second, instrument phrases are possible. Third, transitivity restrictions on the embedded event follow from the presence of VoiceP. Fourth, the morphological form of the embedded verb suggests a VoiceP layer. We review each of these points in turn.

4.1 Agentive by-phrases

Icelandic has generally been thought to be among the languages that do not allow by-phrases with ICs, implying that there is no VoiceP (Jónsson 2009, Wood 2011, Wood and H.Á. Sigurðsson 2014). Indeed, speakers consistently reject *af Jóni* ‘by Jón’ in (12), and this is different from parallel examples in German, Danish, Italian or French.

- (12) Ég lét gera við tölvuna (*af Jóni).
 I.NOM let.PST repair.INF computer.the.ACC (*by Jón)

‘I had the computer repaired.’

(Jónsson 2009:294)

However, it turns out that by-phrases are possible under certain circumstances in Icelandic ICs (see E.F. Sigurðsson 2012:5). Some attested examples are shown in (13).

- (13) a. Það er ónotaleg tilhugsun að eiga í vændum **að láta sinna**
it is unpleasant thought to expect.INF to let.INF look.after.INF
sér af fyrirtæki sem lítur á það sem hlutverk sitt að skapa arð...
REFL.DAT by company who look at it as role its to collect profits...
‘It’s an uncomfortable idea to expect to have yourself looked after by a company who sees it as its role to collect profits...’¹⁴
- b. æjji ekki gott..... en getur þú ekki talað við leigusalann og **látið**
oh not good but can you not talk.PTCP to landlord.the and let.PTCP
athuga þetta af fagaðila?
check.INF this.ACC by professional
‘Ohhhh not good... but can’t you talk to the landlord and have this checked by a professional?’¹⁵
- c. frekar en **að láta stjórna landinu af einhverjum samtökum**
rather than to let.INF rule.INF country.the.DAT by some association
‘... rather than have the country ruled by some association...’¹⁶
- d. það á ekki **að láta stjórna landinu af fjármálastofnunum**
EXPL ought not to let.INF rule.INF country.the.DAT by financial.institutions
‘We ought not let the land be ruled by financial institutions.’¹⁷

Numerous similar examples can be found, and speakers generally find at least some of them acceptable.¹⁸ The possibility of by-phrases suggests that there is a VoiceP layer, introducing an external argument role that they can identify. Recall from the discussion of (5a) and (6a) above that by-phrases cannot, on their own, introduce agents. The same is true in Icelandic, as illustrated by (14). (See section 4.4 for discussion of the *-st* marker.)

(14) * Svona gluggar opna-st af fagaðila.

such windows open-ST by professional

INTENDED: ‘Such windows are opened by a professional.’

We will discuss below why by-phrases are acceptable in (13) but not (12). For now, we simply point out that the possibility of by-phrases suggests the presence of a VoiceP.

4.2 Instrument Phrases

As discussed by Bruening (2013), instrumentals are also diagnostic of VoiceP. They tend, for example, to be banned from the same environments as by-phrases. Instrument phrases turn out to be grammatical in Icelandic ICs, as illustrated in (15).

(15) a. Jón lét mála húsið með mjög litlum penslum.

John let.PST paint.INF house.the.ACC with very small paint.brushes

‘John had people paint the house with very small paint brushes.’

b. Sjálfur vildi ég láta lýsa það með stórum ljóskösturum.

self wanted I let.INF light.up.INF it.ACC with large flood.lights

‘I myself wanted to have it lit up with large flood lights.’¹⁹

c. Ekki það alvinsælasta að láta stinga í sig með nálum.

not the most.popular to let.INF stab.INF in REFL with needles

‘Not the most popular thing to have yourself stabbed with needles.’²⁰

These instrument phrases clearly modify the actions of the implicit agent. Whoever is painting the house (not Jón) is using the small paint brushes; whoever is lighting it up (not ég ‘I’) is using a large floodlight. Whoever is doing the stabbing is using the needles. As with by-phrases, the availability of instrument phrases modifying the actions of an agent suggests the presence of a VoiceP layer representing such an agent.

4.3 Transitivity Requirement

Another possible reason to think that the embedded verb phrase in Icelandic ICs is a VoiceP, and not just a vP, involves a transitivity constraint on the construction: the

embedded verb phrase must have an external argument. Unaccusatives and transitives are in principle structurally identical up to the level of vP; it is the VoiceP layer that encodes the distinction.²¹ Verbs that cannot take an external argument, such as unaccusatives (whether their sole argument is expressed or not) or dative subject verbs (whether the dative subject is expressed or not), are not possible.²²

- (16) a. * Þær létu koma (fangana).
 they.NOM let.PST arrive.INF (prisoners.the.ACC)
- b. * Þær létu fölna (blómin).
 they.NOM let.PST wilt.INF (flowers.the.ACC)
- c. * Ég lét líka (mér) tvær bækur.
 I.NOM let.PST like.INF (me.DAT) two books
- d. * Hún lætur líða (honum) illa.
 she.NOM lets.PRS feel.INF (him.DAT) badly

Note that all of these sentences are in principle grammatical if the argument shown in parenthesis is moved to the left of the embedded verb. However, this would not be an IC, and there would be no implicit argument. It would simply be an ordinary causative, with all arguments expressed, and the higher one moving to the edge of the lower VoiceP or vP.

Further evidence of the external argument restriction comes from verbs which may be transitive or unaccusative/anticausative.

- (17) a. Þær dýpkuðu holuna. b. Holan dýpkaði.
 they deepened hole.the.ACC hole.the.NOM deepened
 ‘They deepened the hole.’ ‘The hole deepened.’
- c. Þær létu dýpka holuna.
 they let.PST deepen.INF hole.the.ACC
 ‘They made someone deepen the hole.’ / *‘They made the hole deepen.’

A verb like *dýpka* ‘deepen’ can be transitive or unaccusative/anticausative. However, when used in the IC construction, it is unambiguously understood as transitive.²³

The fact that an external argument is required suggests the presence of VoiceP. Previous work accounted for this restriction through a process of “projection compounding” (Taraldsen 1984; Platzack 1986) which said that when the verb ‘let’ and the embedded verb combine as a kind of semantic compound, they had to have the same argument structure grid. However, the status of such theta-grids in current theory is dubious at best, and the effects of processes like projection compounding are generally derived through independent means. For example, Wurmbrand (2015) accounts for argument-sharing in restructuring configurations by proposing that a Voice head in the embedded clause raises to the matrix verb, and on to the matrix Voice head. This complex head then must share a single external argument. Such a process cannot be extended to ICs, because although the embedded and matrix verb must each have an external argument, the external arguments must be distinct, not identical.

Similarly, Lundin (2003) proposes that the external argument requirement in Swedish ICs (which are parallel to Icelandic ICs in the relevant respects) follows from the behavior of the light verb as an ‘agent splitter’. In her analysis, ‘let’ is the realization of the external-argument-introducing head (Voice for us, *v* for her), and it ‘splits’ the agency of main verb as described above. As such, it is only compatible with verbs that take an external argument to begin with. Here, however, the details of how agent splitting works matter. To truly imply the causee, her analysis requires that the AGENT role is stored with the lexical verb, not ‘severed’ onto the Voice head, as has generally been assumed following Kratzer (1996). If the AGENT role is stored with the verb, then the Voice/*v* head realized as ‘let’ has to have access to this information, and discard the DOER half of the agent role. It is not clear what mechanism or interpretive process would do this.²⁴

An alternative conception of agent splitting would be to say that ‘let’ reflects a Voice head with a special interpretation. The AGENT role is not stored with the verb, but with Voice, and a special Voice head (realized by ‘let’) can introduce just the INITIATOR half of the AGENT role. Only verbs compatible with an AGENT will be compatible with an INITIATOR, accounting for the transitivity requirement. However, this version of the analysis predicts that unaccusative variants of alternating verbs should allow an unaccusative reading in sentences like (17c). These verbs allow an AGENT, but they do not require one, so they should not require a DOER either. The Voice head could project an INITIATOR role (rather than a full AGENT role), but there is nothing forcing the reading that there is a DOER causee. There is no reason that an initiator cannot indirectly cause an event without an agent. This is in fact the reading that is found in a sentence like *She caused the vase to break (indirectly, by insisting that it be hung from the ceiling by dental floss)*. The external argument requirement, thus, cannot be accounted for simply by appealing to the fact that *láta* ‘let’ introduces an external argument, and therefore can only occur with vPs compatible with such an argument. The implication of an *embedded* external argument is forced.

In contrast, according to our proposal, the external argument requirement is straightforward: ICs are built by stacking a VoiceP directly on top of another VoiceP, which ultimately leads to the IC reading (in a manner discussed in more detail below). Thus, the IC reading would not arise in the absence of an embedded external argument. The embedded Voice head could at this point either be a passive or medio-passive (“middle”) Voice, with an implied external argument as part of the semantics, or an active Voice with a silent causee. We show in the next subsection that it is not a medio-passive/middle Voice, as proposed for Georgian by Nash (2017), before turning to the question of active versus passive.

4.4 Verb Stem Morphology

A final consideration in favor of an embedded VoiceP involves the morphological form of the embedded verb. In Icelandic, alternations between transitives and unaccusatives are often marked with stem morphology. Consider (18) and (19).

- (18) a. Skipstjórinn hefur **sökt** skipinu.
captain.the.NOM has sunk.TRANS ship.the.DAT
'The captain has sunk the ship.'
- b. Skipið hefur **sokkið**.
ship.the.NOM has sunk.INTRANS
'The ship has sunk.'
- (19) a. Skipstjórinn hefur **brotið** glasið.
captain.the.NOM has broken.TRANS glass.the.ACC
'The captain has broken the glass.'
- b. Glasið hefur **brotnað**.
glass.the.NOM has broken.INTRANS
'The glass has broken.'
- (20) a. Kennarinn hefur **fel**t hana á prófinu.
teacher.the.NOM has failed.TRANS her.ACC on test.the
'The teacher has failed her on the test.'
- b. Hún hefur **fallið** á prófinu.
she.NOM has failed.INTRANS on test.the
'She has failed the test.'

Various linguists have proposed that this morphology marks the presence or absence of a Voice head (Schäfer 2008, 2012a, Pitteroff and Alexiadou 2012, Pitteroff 2014, 2015, Wurmbrand 2015) or the distinction between a transitive and unaccusative Voice head (Wood 2015). Note that passives take the “transitive” form, indicating the presence of a Voice head in passives, as is standardly assumed.²⁵

- (21) a. Skipinu var {**sökkt** / ***sokkið**} af skipstjóranum.
 ship.the.DAT was {sunk.TR / *sunk.INTR} by captain.the
 ‘The ship was sunk by the captain.’
- b. Glasið var {**brotið** / ***brotnað**} af skipstjóranum
 glass.the.NOM was {broken.TR / *broken.INTR} by captain.the
 ‘The glass was broken by the captain.’
- c. Barnið var {**fellt** / ***fallið**} á prófinu af kennaranum.
 child.the.NOM was {failed.TR / *failed.INTR} on test.the by teacher.the
 ‘The child was failed on the test by the teacher.’

Like actives and passives, ICs take the transitive form.²⁶ This state of affairs follows straightforwardly on the view that there is a Voice head in the embedded clause.

- (22) a. Ég lét { **brjóta** / ***brotna** } rúðuna.
 I.NOM let.PST { break.TR / *break.INTR } window.the.ACC
 ‘I made (someone) break the window.’
- b. Ég lét { **fella** / ***falla** } hana á prófinu.
 I.NOM let.PST { fail.TR / *fail.INTR } her.ACC on test.the
 ‘I made (someone) fail her on the test.’

In order to maintain the bare vP analysis, one would have to say that the stem morphology is dependent on the higher Voice head. This, however, faces some challenges. First, the verb does not even form a complex head with the single Voice head, which is realized as ‘let’, and readjustment rules or stem suppletion rules generally cannot be triggered by one M(orphological)-word onto another. Second, there is a problem with locality: however the alternations are done, the verb stem would have to “see” past its own vP, and past the higher vP, to the presence of Voice. This would require the lower verb stem and higher Voice head to be in the same phase or spellout domain (Embick 2010a,b, 2013). However, there are no other effects of this locality: the interpretation is totally predictable and compositional, for

example. Moreover, Ingason and Wood (2017) provide independent evidence that vP complements in Icelandic ICs do in fact form their own phase boundary.²⁷ Combined with other evidence in this section, the verb stem morphology seems to point to the conclusion that there is some Voice head in the embedded verb phrase of Icelandic ICs.

The morphological form of the embedded verb also shows that Icelandic ICs are not built from a middle Voice head in the sense of Doron (2003, 2013) (see also Alexiadou and Doron 2012 and Alexiadou et al. 2015), as proposed for Georgian by Nash (2017). The above stem alternations are not a realization of a middle Voice, since one of the characteristics of middle Voice is that it has not only anticausative readings (as shown above), but also reflexive, reciprocal, dispositional middle, and medio-passive readings. The above forms have none of these other readings.

The closest candidate to middle Voice in this sense is the *-st* morpheme in (23b).

- (23) a. Guðrún opnaði gluggann.
 Guðrún.NOM opened window.the.ACC
 ‘Guðrún opened the window.’
 b. Glugginn opnaði-st (*af Guðrúnu).
 window.the.NOM opened-ST (*by Guðrún)
 ‘The window opened (*by Guðrún).’

This marker does have some reflexive, reciprocal, and dispositional middle readings (Ottósson 1986, 1989; H.Á. Sigurðsson 1989; Anderson 1990; Kissock 1997; Wood 2014, 2015).²⁸ However, middle Voice is not the only way to derive this collection of readings, since reflexive pronouns and clitics can be shown to do the same (see Schäfer 2008, 2012a, 2015). Icelandic *-st* has been argued to be an argument clitic rather than a verbal head (see Wood 2015:ch.2 for thorough discussion, but also Eythórsson 1995, Kissock 1997, Svenonius 2005, 2006, and H.Á. Sigurðsson 2012). Moreover, its reflexive and reciprocal uses are actually quite restricted (Wood 2014, 2015), and, as

shown above, it does not generally have the option of a passive reading.²⁹

These considerations show that Icelandic ICs are not built from a middle Voice head. First, Icelandic arguably has no middle Voice head in this sense. If Icelandic does not have a dedicated middle Voice head, then of course such a Voice head cannot be involved in deriving ICs. Second, even if Icelandic does have a middle Voice head, then it would be the *-st* morpheme that expresses it (see note 30). It would then be straightforward to verify that middle Voice is not involved in building ICs, since the *-st* morpheme is nowhere to be found in ICs. We thus conclude that Icelandic ICs involve a Voice head, but not a middle Voice head. In the next section, we will argue also that it is not a passive Voice head.

5 A Silent External Argument

Given the conclusions of the previous section, we might consider analyzing the embedded Voice head as passive, as in Pitteroff's (2014) analysis of similar constructions in German. This would be in principle compatible with what we have seen so far. Passives allow by-phrases, instrument phrases, must have an external argument, and, as we saw, yield transitive stem forms of the verb. In fact, by-phrases are often taken to be one of the defining features of the passive, so the possibility of by-phrases might lead one to consider this to be the null hypothesis at this point.³⁰

There are reasons, though, to think that in fact, the construction is more “active” than that, with a silent, syntactically projected argument in the causee position. We will first, in this section, present the arguments for thinking that there is *something* there. These include the following: (i) restrictions on the availability and nature of (the above-mentioned) agentive by-phrases; (ii) the impossibility of A-moving the embedded object when *láta* ‘let/make’ is passivized; (iii) the possibility of explicitly recovering the implicit agent under sluicing; (iv) the acceptability of indirect causatives formed with verbs that do not normally passivize. In addition, we will argue that the

availability of by-phrases does not preclude a more “active” analysis in principle. After establishing that some kind of argument is there, in the next section, we will turn to the nature of that argument, and propose that it is a ϕ P, as in Legate’s (2014) analysis of “Grammatical Object Passives”. The result of this is that although the structure is in a sense syntactically active, it shares various properties with canonical passives—hence our use of the term quasi-active.

5.1 The nature of the by-phrase

Earlier, it was noted that by-phrases are sometimes available in Icelandic ICs, and that this suggests the presence of a VoiceP layer. It may seem to suggest that it must be a passive VoiceP layer. After all, that would account for all the previous facts, including the fact that the implicit argument is silent in the first place. However, by-phrases are not as closely tied to passives as is often thought, and their availability does not preclude a structure with a syntactic external argument. We do agree that by-phrases diagnose Voice, but they do not unambiguously diagnose passive.³¹

We cannot ignore the fact that there is still a big difference between, for example, German, which allows definite by-phrases (e.g. ‘by John’) in ICs quite freely, and Icelandic, which does not. In Icelandic, by-phrases are subject to somewhat gradient restrictions in ICs. Definite DPs are out, as shown in (24a). Indefinite DPs are better, as shown in (24b). Even indefinite DPs improve if the whole clause is impersonal or generic, as shown in (24c).³²

- (24) a. * Hann lét gera við bílinn af bifvélavirkjanum.
 he.NOM let.PST repair.INF car.the.ACC by mechanic.the
 INTENDED: ‘He had the car repaired by the mechanic.’

- b. ? Hann lét gera við bílinn
 he.NOM let.PST repair.INF car.the.ACC
 af einhverjum hræðilegum bifvélavirkja.
 by some terrible mechanic
 ‘He had the car repaired by some terrible mechanic.’
- c. Það væri hræðilegt að láta gera við bílinn
 it were terrible to let.INF repair.INF car.the.ACC
 af einhverjum hræðilegum bifvélavirkja.
 by some terrible mechanic
 ‘It’d be terrible to have the car fixed by some terrible mechanic.’

What is this telling us? By itself, it reminds us that there is still an important difference between German-type ICs and Icelandic-type ICs, so we do not want to make the analyses of ICs in these languages too similar.³³ It also shows us that the embedded structure is distinct from Icelandic passives. Beyond that, however, the nature of the restrictions on by-phrases shows that the structure could be closer to an active: there are other syntactically active or quasi-active constructions that allow by-phrases with very similar restrictions. In this section, we will review two such constructions: English tough-constructions and Icelandic Impersonal Modal Constructions.

To be clear, there are also some clearly non-active constructions that have similar effects, so examples like those in (24) do not alone argue that the embedded construction is active. But given that they suggest a VoiceP layer, and there are other reasons to assume a syntactically present implicit causee, it is telling that there are other constructions with syntactically present implicit arguments that allow by-phrases in similar circumstances.

5.1.1 English tough-constructions

The infinitives of English tough-constructions are widely considered to be active constructions with a PRO subject. In the standard analysis of the tough-movement derivation (going back to Chomsky 1977), a null operator moves to SpecCP to be bound by the overt subject, which is base-generated in the matrix clause.

- (25) a. It is tough [_{CP} C [_{TP} PRO_{ARB} to read such books]].
 b. Such books_i are tough [_{CP} OP_i C [_{TP} PRO_{ARB} to read ⟨OP_i⟩]].
↑

Alternatively, the matrix subject is base-generated as the object and moves to the subject position, a derivation which raises some problems, but perhaps solvable ones (Obata and Epstein 2008, 2012; Hicks 2009; Richards 2010; Messick 2012; E.F. Sigurðsson 2016). Either way, there is a general consensus that the embedded infinitive clause of a tough-construction is active, with a silent (PRO) subject. As we would expect, by-phrases are generally unacceptable.

- (26) That book is tough to read (*by Jessie).

However, it turns out that by-phrases can improve quite dramatically, under very similar conditions as noted above: if the matrix subject or the DP in the by-phrase is indefinite or generic (making the overall sentence more generic), the by-phrase improves.³⁴

- (27) a. * That book is easy to read by Jessie.
 b. ?? Such books are easy to read by anyone.
 c. ? Books like that are generally easy to read by people who know the field.

These examples may still not be perfect, but the attested examples in (28) are perfect for many speakers that we have asked, as well as the second author of this paper.³⁵

- (28) a. Classroom teachers have historically been easy to ignore by those who are working beyond the classroom.

- b. Not to mention that polls are so easy to manipulate by those who know how.
 - c. Most of these are relatively easy to identify by anyone with practice.
- (29) a. ...in which individuals become easy to manipulate by those in power.³⁶
- b. ...most of these being fairly simple to properly identify by anyone with practice.³⁷

See E.F. Sigurðsson (2015) for similar examples with Icelandic tough-constructions.³⁸

What should we conclude from facts like (27)–(29)? We do not think that the right approach would be to conclude that tough-constructions can be passive under certain gradient, hard-to-define circumstances. Rather, we would suggest that by-phrases can occur with some syntactically active constructions under such gradient, hard-to-define circumstances. We do not mean to imply, in any way, that these circumstances are beyond the scope of formal analysis; the ingredients seem relatively consistent, and we suspect that the improvement comes from manipulations that make the semantic representation more like the semantic representation of a passive.³⁹ The point here is that the overall picture of by-phrases in Icelandic ICs is consistent with the view that there is a syntactically-projected argument in the embedded SpecVoiceP. Another example that points in this direction is the Icelandic Impersonal Modal Construction, which we turn to next.

5.1.2 Impersonal Modal Construction

The Icelandic “Impersonal Modal Construction” (IMC) is available with about 4–6 modal verbs. It has been argued to be an active, null subject construction with a generic *pro* subject (H.Á. Sigurðsson and Egerland 2009) or a ϕ P subject (E.F. Sigurðsson 2017).

- (30) a. Nú *pro*/ ϕ P má opna gluggana.
 now may open.INF windows.the.ACC
 ‘Now one may open the windows.’

- b. Nú *pro/φP* þarf að borða fisk.
 now needs to eat.INF fish.ACC
 ‘Now one has to eat fish.’

As expected from this analysis, by-phrases are generally out. However, as before, they improve if they are generic and indefinite, and attested examples of that sort can be found. (Heaviness is also suggested to improve them in E.F. Sigurðsson 2017:289–290.)

- (31) a. Það þarf að rannsaka þetta betur (??af Jóni).
 EXPL needs to investigate.INF this.ACC better (??by Jón)
 Intended: ‘This needs to be studied further by John.’
 b. Það þarf að rannsaka þetta betur (af fræðimönnum).
 EXPL needs to investigate.INF this.ACC better (by scholars)
 ‘This needs to be studied further by scholars.’ (cf. E.F. Sigurðsson 2012)

Again, this should not lead us to conclude that IMCs are passives. Rather, they are telling us something about the licensing of by-phrases, namely that by-phrases can occur with syntactically active (or quasi-active) constructions under certain circumstances.

5.1.3 Summary: The nature of the by-phrase

We hasten to add that other constructions have similar constraints on by-phrases, and are not (as far as we know) active constructions. Marcel Pitteroff (p.c.) reminds us that German impersonal passives have similar constraints, and a reviewer points out that Greek passives do too (see Alexiadou et al. 2015:121–122). Ability adjectives do as well, as shown in (32) (Kayne 1981; Fabb 1984; Roeper 1987; Oltra-Massuet 2010), as do passives of certain Icelandic psych-verbs, like *elska* ‘love’, as shown in (33).

- (32) a. * This is readable by Jessie.
 b. This is readable by anyone with eyes.
 (33) María er elskuð { *af Guðrúnu / af öllum }.
 Mary.NOM is loved { *by Guðrún.DAT / by everybody }

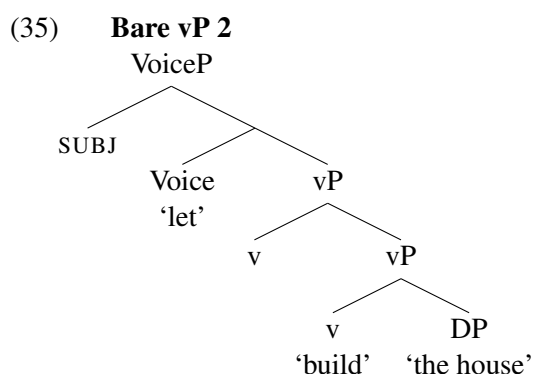
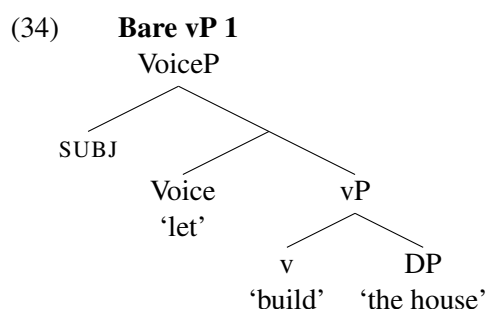
‘Mary is loved { *by Guðrún / by everybody }.’ (cf. Thráinsson 2007:253)

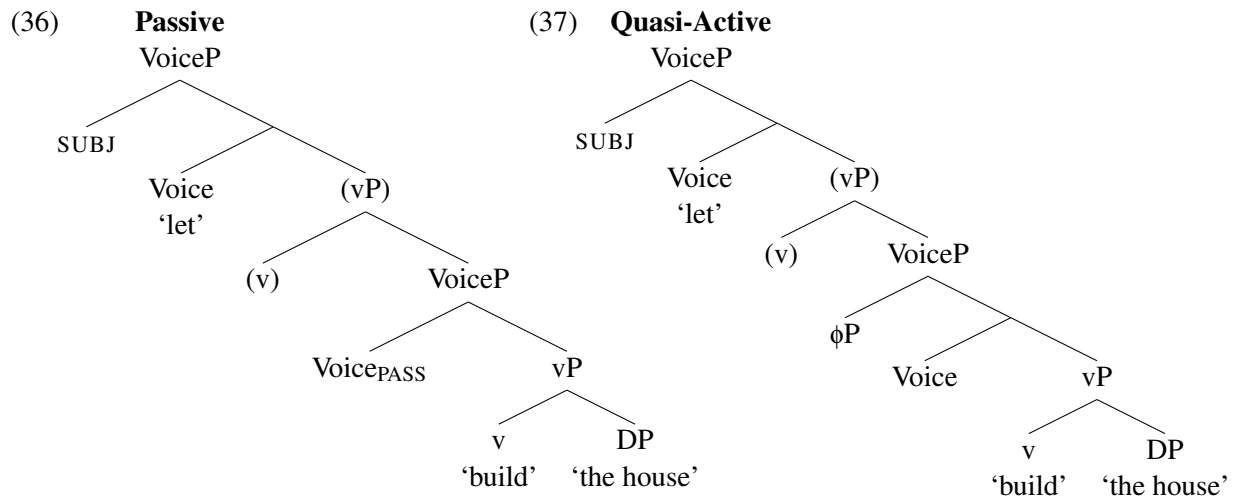
Arguably none of these constructions are “active” the way that tough-constructions and Impersonal Modal Constructions are. So we do not claim that the above-presented paradigm is a morphosyntactic signature of active constructions with by-phrases.

Rather, the conditions on by-phrases tell us several things. First, they remind us that while by-phrases diagnose a VoiceP layer, they do not unambiguously diagnose a passive construction. Second, they cast doubt on the passive analysis, since that would leave us with no account of how German and Icelandic are different. One may be convinced that there is an embedded VoiceP, but that does not mean that the issue with by-phrases is solved. Finally, when combined with further evidence that there is an embedded causee present in the syntax, they fall in plausibly with the other active or quasi-active constructions that occur with a restricted kind of agentive by-phrase.

5.2 Impersonal Passives

A second reason to think that the embedded construction has an argument in SpecVoiceP comes from impersonal passives. Consider the four logically possible structures under consideration for the analysis of ICs. (Here, for the active and passive structures, we abstract away from whether there is a *v* head in the matrix clause, since this is not strictly relevant for the present point.)⁴⁰





Now suppose we passivize ‘let’ in the matrix clause. Under the bare vP and the passive analyses, we expect one of two things. First, the resulting sentence could be ungrammatical (some kind of “voice matching” failure, or general problem passivizing ‘let’). This is what happens in German, Norwegian, and Swedish ICs.⁴¹

- (38) * Det ble latt løslate fangene.
 it was let release prisoners.the
 INTENDED: ‘Someone let someone release the prisoners.’ (Taraldsen 1984:5)

Second, if passivization succeeds, the embedded object becomes nominative and raises to become the subject, as in German restructuring passives (Wurmbrand 1998).

- (39) a. weil Hans den Traktor zu reparieren versuchte.
 because Hans.NOM the.ACC tractor to repair tried
 ‘because Hans tried to repair the tractor.’
 b. Der Lastwagen und der Traktor { wurden / *wurde }
 the.NOM truck and the.NOM tractor { were / *was }
 zu reparieren versucht.
 to repair tried
 ‘Someone tried to repair the truck and the tractor.’

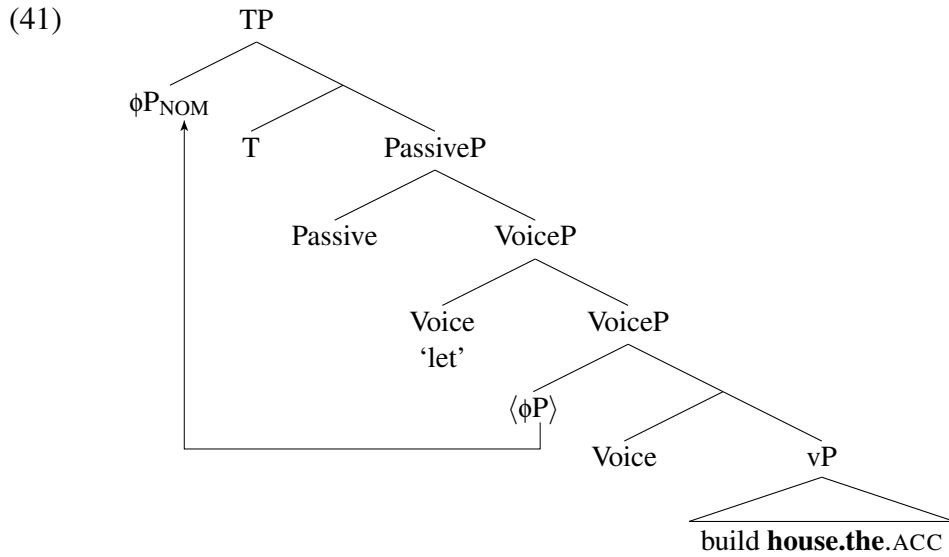
Wurmbrand (1998) argued precisely for a bare vP complement structure in the case of

(39a–b). As expected under that view, when ‘try’ is passivized, the object of ‘repair’ is promoted to the nominative subject.

However, we find neither of these results in Icelandic. What we find is that impersonal passives are possible, but the embedded DP stays accusative and cannot raise to the subject position. This is shown in (40).⁴²

- (40) a. Það var látið byggja húsið.
EXPL was let.PASS build.INF house.the.ACC
‘Someone made (someone) build the house.’
- b. Þá var látið skera í tré stimpil eða félagsmerki fyrir almanakið.
then was let.PASS carve.INF in tree stamp or badge.ACC for calendar.the
‘Then someone made someone carve a stamp or badge for the calendar into a tree.’⁴³
- c. Auk þess var þessu hagað þannig, að til þess að fá sem
in.addition was this arranged in.such.a.way that in.order.to get as
fullkomnast heildarsamræmi í matið, var látið gera
the.most.perfect whole.consistency in evaluation.the was let.PASS do.INF
mat á hverjum stað fyrir sig [...]
evaluation.ACC at each place for itself
‘This was, in addition, arranged in such a way that in order to get as perfect consistency into the evaluation as possible, someone made (someone) do an evaluation in each place...’⁴⁴

Under the quasi-active analysis—and only under this analysis—this is exactly what is expected.⁴⁵ Since there is an argument in the embedded SpecVoiceP, the embedded object is predicted to stay accusative.⁴⁶



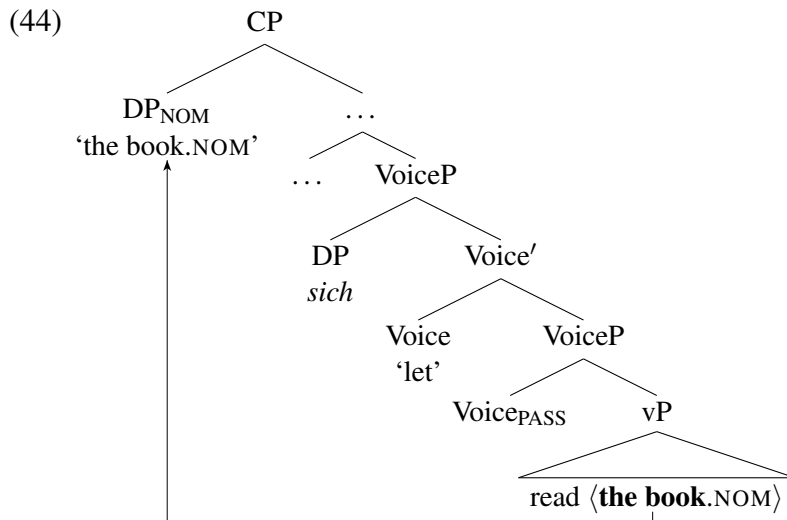
That the argument in the embedded SpecVoiceP conditions accusative case, moves to SpecTP, and prevents the embedded object from moving is supported by the fact that when the causee is overt, in ordinary causative constructions, this is exactly what we see: the overt causee in (42b), *ég*, moves to subject position (as there is no syntactically projected implicit argument to block its movement), prevents the movement of the embedded object to the subject position, and is nominative (conditioning accusative case on the embedded object).

- (42) a. Hún lét mig keyra bílinn.
 she.NOM let.PST me.ACC drive.INF car.the.ACC
 ‘She made me drive the car.’
- b. Ég var látinn keyra bílinn.
 I.NOM was let.PASS drive.INF car.the.ACC
 ‘I was made/forced to drive the car.’

Note in contrast, that while German does not allow passivization of ‘let’ at all, it can, according to Pitteroff (2014, 2015), form an anticausative of ‘let’, which then allows the embedded object to get nominative case and move to the matrix subject position. Vikner (1987) discusses what appears to be the same construction in Danish, and gives

essentially the same kind of analysis that Pitteroff (2014, 2015) defends for German. In Pitteroff's analysis, the reflexive *sich* merges in the matrix VoiceP to eliminate the matrix external argument position (Schäfer 2008), freeing the embedded theme to move into the matrix clause; this is shown in (44). (See Schäfer 2008, 2012a and Pitteroff 2014 for discussion of how the theme moves past the reflexive and gets nominative case.)

- (43) a. Das Buch lässt sich (von kleinen Kindern) gut lesen.
the.NOM book lets REFL (by small children) good read
'The book can be read easily (by small children).'
- b. Das Buch lässt sich leicht von einem Antiquar beschaffen.
the.NOM book lets REFL easily by an antiquarian obtain
'The book can be obtained easily by an antiquarian.' (Pitteroff 2014:47)



The Icelandic data in (40) and the German data in (43) do not form a minimal pair, since in German we are looking at anticausativization whereas in Icelandic we are looking at a passive. But it shows the kind of contrast we expect. If the matrix external argument is removed, either by passivization or anticausativization, then the embedded object should become nominative—unless there is another embedded argument. We view this as a strong argument in favor of a non-passive analysis, and one with a VoiceP in the complement of the causative verb.⁴⁷

5.3 Sluicing

Another reason to think that there is a syntactically projected null causee comes from a kind of ellipsis known as ‘sluicing’. Consider the sentence in (45):

- (45) % Kóngurinn_i lét myrða hetjuna_j, en ég veit ekki **hvern**_k.
king.the.NOM let murder.INF hero.the.F.ACC but I know not who.M.ACC
‘The king_i made (someone_k) murder the hero_j,
but I don’t know who_k he_i made ~~<who_k>~~ murder the hero.’

(45) provides striking evidence for a syntactically active causee for speakers who accept it. While verb-phrase ellipsis may in some cases allow voice mismatching, sluicing does not (Merchant 2013). Icelandic is no exception. Consider the sentences in (46), which form near-minimal pairs with (45), except that we know the embedded clause is passive.

- (46) a. * Hún taldi hafa verið veidda marga fiska, en ég veit ekki **hvern**.
she believed have been caught many fish but I know not who.ACC
INTENDED: ‘She believed many fish to have been caught, but I don’t
know who she believed <who> to have caught many fish.’
b. * Hún taldi hetjuna_i hafa verið drepna,
she believed hero.the.F.ACC have been killed
en ég veit ekki hvern_j.
but I know not who.M.ACC
INTENDED: ‘She believed the hero to have been killed,
but I don’t know who she believed <who> to have killed the hero.’

That (45) is acceptable for some speakers strongly suggests the presence of a silent causee for those speakers, and other factors may be at play for speakers who reject it.⁴⁸

5.4 Embedded verbs that cannot passivize

A final argument in favor of a silent causee in SpecVoiceP, as opposed to an embedded passive structure, comes from the possibility of embedded verb phrases that

cannot passivize. For example, the verb *finna* ‘find’ in (47a) cannot be passivized, as shown in (47b) (Thráinsson 2007:152). However, ICs are possible with *finna* ‘find’ in this sense, as illustrated by the attested example in (48).⁴⁹

- (47) a. Hún fann slíkan fugl kl. 10 í gær.
 she.NOM found such bird.ACC ten o'clock yesterday
 ‘She found such a bird at ten o'clock yesterday.’
 b. *Slíkur fugl var fundinn (af henni) kl. 10 í gær.
 such bird.NOM was found (by her) ten o'clock yesterday
 INTENDED: ‘Such a bird was found (by her) at ten o'clock yesterday.’
- (48) Hann lét finna slíkan fugl og hafði hann í búi hjá sér,
 he.NOM let.PST find.INF such bird.ACC and had it in cage by him
 hlustaði á hann daglega og dáði hann mjög.
 listened to it daily and admired it much
 ‘He made (someone) find such a bird and raised/put it in a cage at his place,
 listened to it daily and admired it a lot.’⁵⁰

Two more attested examples of *finna* ‘find’ in an IC are shown in (49), and as illustrated in (50), the corresponding passives are unacceptable. Note that in active, perfect constructions, the perfect participle that the passive would be based on is well-formed. Moreover, the participle in this case (but not necessarily all of the cases below) can also form an agreeing adjectival passive; it is the eventive, verbal passive that is unacceptable.

- (49) a. sjálfur Al Capone [...] bauðst til að láta finna barnið
 self Al Capone offered for to let.INF find.INF child.the.ACC
 ‘Al Capone himself offered to have (people) find the child.’⁵¹
 b. Dierk Schmäscke [...] brást snögg við, lét finna
 Dierk Schmäscke reacted quickly with let.PST find.INF
 skóna og senda þá með hraði til Hamborgar.
 shoes.the.ACC and send.INF them.ACC with speed to Hamburg

‘Dierk Schmäscke reacted quickly, had the shoes found and rushed to Hamburg.’⁵²

- (50) a. * Barnið var fundið (af Al Capone) kl. 10 í gær.
 child.the.NOM was found (by Al Capone) 10:00 yesterday
 INTENDED: ‘The child was found (by Al Capone) at 10:00 yesterday.’
 b. * Skórnir voru fundnir (af Dierk Schmäscke) kl. 10 í gær.
 shoes.the.NOM were found (by Dierk Schmäscke) 10:00 yesterday
 INTENDED: ‘The shoes were found (by Dierk Schmäscke) at 10:00 yesterday.’
 (51) Al Capone hefur fundið barnið.
 Al Capone has found child.the.ACC
 ‘Al Capone has found the child.’

Two other verbs that show this behavior are *týna* ‘lose’ and *annast* ‘look after/supervise’. Thus the attested IC examples in (52a) and (53a) are acceptable, but the corresponding passives in (52b) and (53b) are not, even though the participles (when active) are well-formed morphologically, as shown in (52c) and (53c).⁵³

- (52) a. ...ríkislögreglustjóri, sem hótaði manni lífláti
 ...national.police.boss who threatened man execution
 og lét síðan týna gögnum frá vitnum málsins.
 and let.PST then lose.INF documents.DAT from witnesses case.GEN
 ‘...the national police commissioner, who threatened a man with death
 and then had documents from the witnesses of the case get lost.’⁵⁴
 b. * Gögnunum í málinu var týnt.
 documents.the.DAT in case.the were lost
 INTENDED: ‘The documents of the case were lost.’
 c. Ríkislögreglustjóri hefur týnt gögnum í málinu.
 national.police.boss.NOM has lost documents.the.DAT in case.the
 ‘The national police commissioner has lost the documents of the case.’

- (53) a. ...skal húsnæðismálastjórn annast eða láta
 ...shall State.Housing.Board.NOM supervise.INF or let.INF
 annast allan tæknilegan undirbúning framkvæmda...
 supervise.INF all technical preparation.ACC projects.GEN...
 ‘The State Housing Board shall supervise or have (someone) supervise
 all technical preparation of projects...’⁵⁵
- b. * Tæknilegur undirbúningur framkvæmda var annastur
 technical preparation.NOM projects.GEN was supervised
 (af húsnæðismálastjórn).
 (by State.Housing.Board)
 INTENDED: ‘Technical preparation of projects was supervised (by the
 State Housing Board).’
- c. Húsnæðismálastjórn hefur annast allan tæknilegan
 State.Housing.Board.NOM has supervised all technical
 undirbúning framkvæmda.
 preparation.ACC projects.GEN
 ‘The State Housing Board has supervised all technical project preparation.’

These mismatches follow straightforwardly from the present account, which takes them to be syntactically active, rather than passive, but they are a challenge for an account that derives ICs from an embedded passive VoiceP.⁵⁶

5.5 Cross-linguistic variation

The question remains why Icelandic ‘let’ cannot combine with a passive VoiceP, while other languages seem to be able to do so. While we do not have a definitive answer to this, we speculate that it is related to the generally restricted nature of Icelandic passives. As discussed in detail by Thráinsson (2007:251–257), Icelandic passives generally require the implicit argument to be understood as a volitional agent—there

are exceptions to this, but Icelandic is “more strict” (p. 257) in this regard than many other languages. We propose below, however, that the implicit argument of an IC is not a full agent, and that this is a fundamental part of the IC interpretation. It is plausible that Icelandic ‘let’ cannot embed a passive VoiceP because the IC interpretation that this would induce is not compatible with the interpretation of the passive.

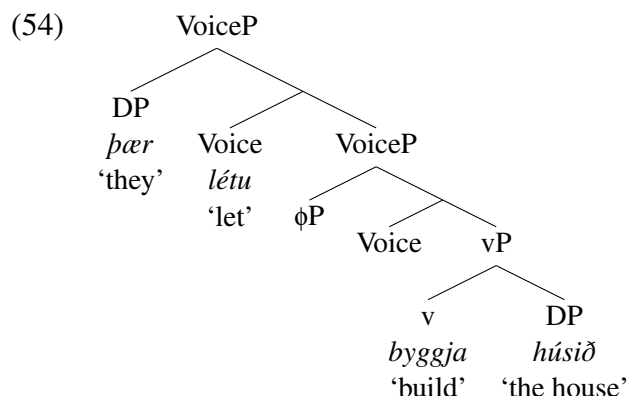
Cross-linguistically, then, languages build ICs by making use of the syntactic resources that are independently available to them. The IC interpretation is the result of a particular configuration, as we argue below, and part of that configuration requires an underspecified embedded VoiceP. There are different ways of achieving this. Icelandic has no middle Voice head, and its passive Voice resists the necessary interpretation. However, as we discuss below, it has a number of quasi-active constructions built with a ϕ P in the specifier of VoiceP, so this option is available to it for building ICs as well.⁵⁷

6 The nature of the implicit argument

All together, the facts discussed in the previous sections support the proposal that in Icelandic ICs there is a silent external argument syntactically projected in the embedded VoiceP. Let us review briefly how we come to this conclusion. First, we find evidence that there is at least a VoiceP layer of some sort (the existence of by-phrases, instrument phrases, the transitivity restriction requiring an external argument and morphologically transitive verb forms). Then we find a variety of indications that there is a silent external argument that is syntactically projected. The nature of the agentive by-phrases that we find reminds us of other examples of active constructions that allow by-phrases. The fact that ‘let’ can be passivized, and that the object is not promoted to subject suggests that there is another argument in the structure. The possibility of recovering the causee under sluicing strongly suggests that the embedded Voice cannot be passive, and follows neatly from assuming an active Voice with a null causee in its specifier. Finally, the availability

of embedded verbs that cannot passivize follows from this account as well.

All of this, together, suggests that *something* is there, in the embedded external argument position, but leaves open a characterization of what that might be. In this section, we turn to the properties of this embedded subject, and propose that it is smaller than a DP—it contains no D-layer—but may be as large as a ϕ P, a structurally reduced kind of pronoun. To repeat, the structure we propose is as in (54).



Even though the embedded VoiceP may seem active syntactically, the structurally reduced nature of the external argument makes it in many ways more like a passive. The absence of a D-layer has at least two relevant effects.

First, it is the D-layer that “maps an NP predicate to an argument denotation” (Landau 2010:360) (here Landau cites Longobardi 1994), so without such a layer, a ϕ P cannot saturate a syntactic predicate. Legate (2012, 2014) and E.F. Sigurðsson (2017) argue that ϕ Ps combine semantically by Restrict, rather than Saturate (see Chung and Ladusaw 2004 on Restrict). Since the thematic role of the embedded VoiceP is not saturated, but is instead restricted by the content of ϕ P, this thematic role must be existentially closed, much as the external argument of a passive is standardly assumed to be.⁵⁸ E.F. Sigurðsson (2017) takes existential closure of an external argument to be the defining characteristic of passive constructions. Thus, even though the structure is

syntactically active (in that the SpecVoiceP is filled), it is semantically like a passive, due to the structurally reduced nature of the external argument.

Second, Landau (2010) argues that a D-layer is needed in order for an argument to bind an anaphor. Landau explains this requirement on the basis of Reuland's (2001) Agree-based theory of anaphor binding (Landau 2010:379). According to that theory, an anaphor and its antecedent enter into an Agree relation with an external head (such as T), and the anaphor's interpretable features are deleted because they are fully recoverable from the antecedent. The anaphor and antecedent (and the external head) form an A-chain that is effectively interpreted as binding. However, in order for this to work, the anaphor must have a D-feature (or else it would not be able to saturate the argument position of a syntactic predicate)—therefore, its antecedent must have a D-feature in order to form an A-chain with that anaphor and be construed as a binding relation.

With this background in place, we will now turn to evidence for the ϕ P nature of the causee. We first discuss secondary predicates, which support the absence of a D-layer, followed by binding effects, which also support the absence of a D-layer but in addition support the presence of something (our ϕ P). We then discuss animacy restrictions, and propose that they are tied to the ϕ P layer. Finally, we turn to the reduced agency of the causee, and argue that this follows from the interpretation of a semantically underspecified argument in a Voice stacking configuration.

6.1 Secondary predicates

Ordinary causative constructions in Icelandic allow secondary predicates predicated of the overt causee. (Note that such predicates must agree with the causee in case, gender and number. We gloss only case here.)

(55) Overt Causee – Secondary Predicate Possible

- a. Við látum ekki neinn aðstoða börnin okkar { *fullur / ?fullan }.
 we let.PRS not anyone.ACC assist.INF children our { *drunk.NOM / ?drunk.ACC }
 ‘We don’t let anyone assist our children (while he or she is) drunk.’
- b. María lét Guðmund skoða þetta { *þreyttur / þreyttan }.
 María let.PST Guðmundur.ACC examine.INF this { *tired.NOM / tired.ACC }
 ‘María made Guðmundur examine this tired.’⁵⁹
- c. Það væri ljótt að láta hann lesa bókina (nakinn).
 it would.be mean to let.INF him.ACC read.INF book.the (naked.ACC)
 ‘It would be mean to make him read the book naked.’

However, in ICs, secondary predicates modifying the implicit causee are impossible.

(56) **No Overt Causee – Secondary Predicate Impossible**

- a. Við látum ekki aðstoða börnin okkar { *fullur / *fullan }.
 we let.PRS not assist.INF children our { *drunk.NOM / *drunk.ACC }
 ‘We don’t let (people) assist our children (*while the people are drunk).’
- b. María lét skoða þetta { *þreyttur / *þreyttan }.
 María let.PST examine.INF this { *tired.NOM / *tired.ACC }
 ‘María made (someone) examine this (*tired).’
- c. Það væri ljótt að láta lesa bókina (*nakinn).
 it would.be mean to let.INF read.INF book.the (*naked)
 ‘It would be mean to make (people) read the book (*naked).’

Note that we cannot just assume that a silent embedded subject rules out secondary predication, since controlled PRO can take a secondary predicate, as illustrated in (57).

- (57) a. Mér_i mislíkar að PRO_i lesa bækur nakinn.
 me.DAT dislike.PRS to PRO.NOM read.INF books naked.NOM
 ‘I dislike reading books naked.’
- b. Það væri leiðinlegt að PRO_{ARB} lesa bækur nakinn.
 it would.be annoying to PRO.NOM read.INF books naked.NOM
 ‘It would be annoying to read books naked.’

This difference with secondary predicates suggests that we are not dealing with an ordinary silent DP like PRO. As discussed above, however, this is predicted if the nonovert causee is a ϕ P, since it lacks the D-layer needed for it to saturate a predicate.⁶⁰

6.2 Binding Effects

It was also noted above that, according to Landau (2010), D-layer is needed for an argument to bind an anaphor. For Icelandic reflexives, at least two subcases need to be considered: simplex reflexives like *sig* and complex reflexives like *sjálfan sig*. In fact, the silent causee cannot bind any kind of reflexive. First, note that simplex reflexives can in principle be construed locally or long-distance. In (58), *sig* can be bound by the local antecedent *hann* ‘he’, or the long-distance antecedent *hún* ‘she’. In ICs, however, only the higher, overt DP can bind the simplex reflexive, as shown in (59).

- (58) Hún_i hélt að hann_j hefði rakað sig_{i/j}.
 she.NOM thought that he.NOM had shaved REFL.ACC
 ‘She_i thought that he_j shaved her_i/himself_j.’

- (59) Hún_i lét ϕ_j raka sig_{i/*j}.
 she.NOM let.PST shave.INF REFL.ACC
 ‘She made (someone) shave her.’

The same holds for possessive reflexives, which can normally be construed locally or long-distance. In ICs, however, only the overt, matrix DP is available as an antecedent.

- (60) Konungurinn_i lét ϕ_j myrða þrælinn sinn_{i/*j}.
 king.the.NOM let.PST murder.INF slave.the.ACC his.REFL.ACC
 ‘The king_i had his_i slave killed.’ / *‘The king made someone_j kill his_j slave.’

Complex reflexives can only be bound locally. In (61), *sjálfa sig* can be bound by the local antecedent *hún* ‘she’, but not by the long-distance antecedent *hún* ‘she’.

- (61) Hún_i hélt að hún_j hefði gagnrýnt sjálfa sig_{*i/j}.
 she.NOM thought that she.NOM had criticized SELF.ACC REFL.ACC

‘She_i thought that she_j criticized {herself_j/*her_i}.’

In ICs, complex reflexives are impossible: the matrix subject is too far away for local binding, and the silent causee cannot bind anything.

- (62) * Hún_i lét ϕ_j gagnrýna sjálfa sig_{i/j}.
 she.NOM let.PST criticize.INF SELF.ACC REFL.ACC
 INTENDED: ‘She made (someone) criticize herself.’

At this point, one might wonder if the causee is completely inert for binding theoretic purposes. In fact, it is not. First, the causee serves as a subject for the purposes of closing off the binding domain of the reflexive in (62). If there were no structural embedded subject, we would expect the matrix subject to be a possible antecedent to the reflexive.⁶¹ This is especially so on the analysis in Lundin 2003, where the causative verb is the realization of Voice, and ICs have the same structural size as ordinary transitives.

Moreover, Landau (2010) argues that ϕ P implicit arguments (without a D-layer), while unable to bind anaphors, are able to trigger Condition B and Condition C effects. Indeed, Condition B and C effects seem to be present in ICs. The silent causee cannot be coreferent with the matrix subject or the embedded object.

- (63) Hún_i lét $\phi_{*i/*j/k}$ drepa hann_j.
 she.NOM let.PST kill.INF him.ACC
 a. = ‘She_i made *someone else*_k kill him_j.’
 b. \neq ‘She_i made herself_i kill him_j.’
 c. \neq ‘She_i made someone_k kill himself_k/herself_k.’

Reading (b) is out because the silent causee would be bound by the (local) matrix subject. Reading (c) is out because the embedded pronoun would be bound by the local silent causee. Assuming the causee is subject to Condition B accounts for why only the (a) reading is available. The same readings apply with an overt pronominal causee.⁶²

- (64) Hún_i lét hana_{*i/*j/k} drepa hana_j.
 she.NOM let.PST her.ACC kill.INF her.ACC
 a. = ‘She_i made *someone else*_k kill her_j.’
 b. ≠ ‘She_i made herself_i kill her_j.’
 c. ≠ ‘She_i made someone_k kill herself_k.’

Condition C effects seem to be present as well. (65) cannot mean that the mother simply caused a result where the children were washed, with the identity of the washer being immaterial or underspecified. It necessarily means that someone other than the children washed them. This follows if the pronoun is present for binding theoretic purposes, since Condition C would rule out the (b) reading.

- (65) Móðirin lét þvo börnunum.
 mother.the.NOM let.PST wash.INF children.the.DAT
 a. ‘The mother made someone wash the children.’
 b. *‘The mother made the children wash themselves.’

In sum, while ϕ P lacks the D head necessary for it to antecede an anaphor, assuming its presence accounts for several binding effects. First, it closes off the binding domain, accounting for the fact that local anaphors cannot be bound by the matrix subject. Second, it is subject to Condition B, accounting for the fact that the implicit causer cannot be coreferential with the matrix subject. Third, it triggers Condition C effects, accounting for the fact that the embedded object cannot be construed as acting on itself.

6.3 The implicit argument must be animate

Another important property of the implicit argument is that it must be animate/human/sentient. Consider the sentence in (66) from Ottósson (1989).

- (66) Stormurinn kastaði skipinu til.
 storm.the.NOM tossed ship.the.DAT about
 ‘The storm tossed the ship about.’

One might imagine that this event could be described with an IC, if we focus on an entity that can be construed as being in charge of a storm, as in (67a).⁶³

- (67) a. Guð lét storminn kasta skipinu til.
 God.NOM let.PST storm.the.ACC toss.INF ship.the.DAT about
 ‘God made the storm toss the ship about.’
- b. # Guð lét kasta skipinu til.
 God.NOM let.PST toss.INF ship.the.DAT about
 = ‘God made (someone/*the storm) toss the ship about.’

However, the implicit argument in (67b) cannot correspond to the storm. (67b) can only describe a situation where God made some other sentient entity toss the ship about. Since there is nothing conceptually wrong with the unavailable reading, we must conclude that the animacy restriction is linguistically encoded in the construction. In the present proposal, we can tie it directly to the semantics of the silent causee, which must be animate. In fact, other ϕ P constructions in Icelandic have a similar restriction, as discussed for the New Impersonal Passive by Maling (2006) and the Impersonal Modal Construction by H.Á. Sigurðsson and Egerland (2009). Since animacy and humanness is connected to ϕ -features (Harley and Ritter 2002 take it to be one of the organizing nodes for gender), it is plausible to tie this restriction to the feature-content of ϕ P.

6.4 Reduced Agency

Despite the fact that the implicit argument of Icelandic ICs has to be sentient and must occur with agentive verbs, at least two facts indicate that the causee’s agency in this construction is in fact quite reduced, compared with ordinary causative constructions.

First, unlike ordinary causative constructions in Icelandic, ICs are incompatible with VoiceP modifiers like *af kappi* ‘enthusiastically’, *viljandi* ‘intentionally’ or purpose clauses. In contrast, vP-level modifiers are fully acceptable in both constructions.

- (68) **VoiceP Modifier** (agentive modifier)

- a. Þær létu byggja húsið (*af kappi).
 they.NOM let.PST build.INF house.the.ACC (*enthusiastically)
 ‘They made (someone) build the house (*enthusiastically).’ (Wood 2011:21)
- b. Þær létu hana byggja húsið af kappi.
 they.NOM let.PST her.ACC build.INF house.the.ACC enthusiastically
 ‘They made her build the house enthusiastically.’

(69) **VoiceP Modifier** (purpose clause)

- a. Hún_i lét ϕ_j skoða þetta til þess að PRO_{i/*j} fá meiri reynslu.
 she.NOM let.PST inspect this for it to get more experience
 ‘She_i had (people_j) inspect this in order to PRO_{i/*j} get more experience.’
- b. Hún_i lét mig_j skoða þetta til þess að PRO_{i/j} fá meiri reynslu.
 she.NOM let.PST me.ACC inspect this for it to get more experience
 ‘She_i had me_j inspect this in order to PRO_{i/j} get more experience.’

(70) **vP Modifier** (eventive modifier)

- Þær létu { ϕ / hana } byggja húsið fljótt.
 they.NOM let.PST { her.ACC } build.INF house.the quickly
 ‘They made (someone/her) build the house quickly.’

If the embedded verb in an IC projects a full VoiceP with an agentive external argument, differing from ordinary causatives only in that the external argument is silent, it is not clear why agentive modifiers and purpose clauses are not possible.⁶⁴

Second, consider coordination of two vPs with a disjunction, as in (71).⁶⁵ Suppose Guðrún is in charge of rebuilding an area, and there are many tasks to do; old things must be destroyed and new things must be built. Yesterday, she decided that her crew would either destroy the car or rebuild the house, but she had no particular preference as to which she would have someone do. In this context, a speaker could say (71a), with the meaning that Guðrún made him or her do one of those two things, but he or she would be allowed

to choose. Another possible reading of (71a) is that Guðrún did tell the speaker to do something specific (such as destroy the car), but the speaker does not know or remember which. With ICs, however, the first reading is unavailable; only the second is possible.

- (71) a. Guðrún lét mig eyðileggja bílinn eða byggja húsið.
 Guðrún let me.ACC destroy.INF car.the.ACC or build.INF house.the.ACC
 ‘Guðrún made me destroy the car or build the house.’

(i) Causee had a choice (ii) Speaker doesn’t know/remember which

- b. Guðrún lét eyðileggja bílinn eða byggja húsið.
 Guðrún let destroy.INF car.the.ACC or build.INF house.the.ACC
 ‘Guðrún made (someone) destroy the car or build the house.’

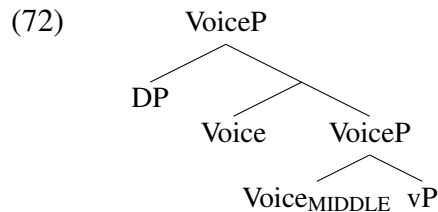
(i) *Causee had a choice (ii) Speaker doesn’t know which

Both sentences allow a reading where the speaker simply does not know what Guðrún directed someone to do. But with the causee overt in (71a), there is a reading where the causee gets to choose what to do. With the causee silent in (71b), this reading is absent; it can only mean that the speaker does not know what Guðrún made someone do.

Both of these tests have been used in the literature to diagnose the presence of agentive VoiceP. It is thus perhaps surprising that ICs fail these diagnostics. Agentive modifiers and purpose clauses attach at the VoiceP level, so if there is no embedded VoiceP in the IC, the impossibility of such modifiers makes sense; if there is a VoiceP, as we propose, their impossibility is puzzling. As for disjunction, the assumption here is that the ‘choice’ reading is a matter of the causee scoping over the disjunction, which involves coordination of vPs, with one Voice head taking the coordinated vP as a complement. If there is no embedded VoiceP in the IC, the absence of the choice reading makes sense; there is no manifestation of the causee to scope over the disjunction. If there is a VoiceP, as we propose, it is not clear why the implicit causee cannot scope over the disjunction just like the overt causee can, leading to the choice reading.

Notice that these tests have something in common. They ultimately refer to the truly “agentive” aspects of being an agent. Modifiers like ‘enthusiastically’ and ‘intentionally’ refer to an agent’s choice to carry out an action and/or how s/he chooses to go about it. Purpose clauses identify an agent’s purpose in choosing a course of action. The disjunction test refers to an agent’s choice as to which event to take part in. In both cases, what is needed is a truly autonomous agent that does as s/he pleases. But recall the insight of Lundin (2003), mentioned earlier. In ICs, the notion of ‘agent’ is split into an INITIATOR and a DOER. Thus, the embedded agent ϕ P is a “mind under the control of a mind” with no free will expressed in the constructional semantics. It must be sentient, as mentioned above, but it must not have full control over the event. The matrix argument caused the event to happen precisely by exercising his/her control over other minds.⁶⁶

As mentioned above, Nash (2017) has argued that ICs in Georgian are derived with a Voice head on top of a “deagentivized” middle Voice head.



Her intuition is that “an event denoted by the lexical stem is initiated but the initiator is not structurally realised” (p. 15), because middle Voice is projected. She hypothesizes that “when two initiation subeventualities are adjacent and maximally underspecified, they merge into one unspecified initiation subeventuality” (p. 17). In her view, then, there are not really two initiators in the interpretation, just one initiator that initiates the embedded vP in some indirect, underspecified way.

We have shown that (72) cannot be the structure of Icelandic ICs, and argued that the embedded initiator is structurally realized. However, we suggest that middle Voice is not

the only way to achieve the effects of indirect causation that Nash describes. Projecting an argument as a ϕ P is in fact one of the most underspecified ways of projecting an argument. Landau (2010:383) points out that the values of ϕ -features may restrict the interpretation of ϕ P, but beyond that, “[its value] is completely context-dependent. It could be deictic, anaphoric to some discourse antecedent or it could be bound by some default sentence-level operator—existential or generic.”

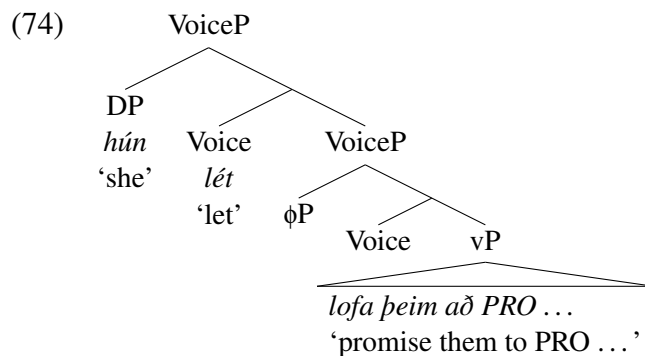
Suppose, then, that although Icelandic cannot build ICs with a middle Voice (since it has no true middle Voice), it can build a “maximally underspecified,” quasi-active VoiceP by merging a ϕ P external argument. In this way, the language builds ICs with formatives that are independently available to it: silent ϕ P external arguments have been argued to be a part of the language independently, building quasi-active VoicePs in progressive passives, aspectual passives, and the Impersonal Modal Construction (see E.F. Sigurðsson 2017:ch4). In the present case, the quasi-active VoiceP is embedded under another VoiceP, with the effect that there is one underspecified initiation.⁶⁷ The matrix subject, then, is not the agent of an event that causes the agent of a distinct, embedded event to act. Rather, the matrix subject is the “indirect” initiator of the embedded event. We propose that this is achieved by something like Lundin’s (2003) “agent splitting”. When there are two adjacent VoicePs, the higher one is interpreted as an INITIATOR, and the lower one is interpreted as a DOER. Therefore, “choice disjunction” and agentive adverbial modification of the embedded external argument is impossible: the causee is not a full agent, and is only a DOER, thus having no choice about which event to initiate.⁶⁸

The stacked VoiceP proposal can account for another curious restriction on ICs. If the implicit argument of ICs is syntactically present, we might expect it to be a possible controller for PRO. However, as illustrated in the following examples, it cannot.⁶⁹

- (73) a. Hún lét lofa þeim þessu.
 she let.PST promise.INF them this
 ‘She made (someone) promise them this.’
- b. * Hún lét lofa þeim að PRO vaska upp snemma.
 she let.PST promise.INF them to wash.INF up early
 INTENDED: ‘She made (someone) promise them to wash up early.’

(73a) shows that ICs can be formed with the verb *lofa* ‘promise’, while (73b) shows that this is not possible when *lofa* ‘promise’ takes a control complement. One might imagine that this can be reduced to whatever it is that prevents the silent causee from binding anaphors, as discussed above. That is, it cannot bind PRO either.

However, Landau (2010) argues that ϕ P can control PRO, so an alternative account is arguably needed. Consider the structure of (73b), according to our proposal.



If one adopts an Agree-based theory of control (Landau 2000, 2004, 2008), the relationship between the controller and PRO is mediated by an Agree relation with a higher functional head. If this head is missing in the structure of ICs, but is present in the structure of ordinary causatives, then the impossibility of control by the implicit argument in ICs is derived, and does not directly stem from its being a ϕ P.

Suppose that control relations can be mediated by a *v* head or a *T* head. Neither is possible in the above structure. There is no matrix *v* to mediate the relation between ϕ P

and PRO. Moreover, the T head above the matrix VoiceP would not be able to Agree with ϕ P past the overt external argument. As van Urk (2013) argues, discussing a revised formulation of Visser’s Generalization, control into a complement clause by an implicit argument is impossible if an overt DP agrees with T. The proposal that ICs are built with stacked VoicePs thus derives not only the reduced agency of the causee, but also its inability to serve as a controller for PRO.

7 Conclusion

Our study of ICs in Icelandic has emphasized that although the complement of the causative verb must be at least a VoiceP, it is not exactly an active or a passive VoiceP. Rather, it shares certain specific characteristics of both. We have shown how most of the discrepancies stem directly from the status of the silent implicit argument. Its status as an argument in SpecVoiceP gives it various active-like properties, but its status as a highly underspecified ϕ P, rather than a DP, gives it various passive-like properties.

Beyond this, the underspecified status of ϕ P has another effect on the overall structure, allowing the construction of the indirect causative meaning in the first place. Adopting a proposal by Nash (2017), when a second Voice head is added on top of such an underspecified VoiceP, an indirect causation reading is obtained. We implemented this by invoking Lundin’s (2003) notion of agent splitting: the outer Voice introduces an INITIATOR—an indirect causer—while the inner head introduces a DOER. This accounts for the fact that the causee does not have all the properties of an autonomous agent.

This proposal captures the spirit of many of the previous works on Scandinavian indirect causatives, which invoked processes of “Projection Compounding” or “Abstract Incorporation”. The intuition behind such processes was that the causative verb and the embedded verb act as a single verb. According to our proposal, there is a sense in which this is true: both VoicePs are adding thematic meaning to a single lexical verb

phrase. More broadly, our study suggests that there is more than one way to build the “maximally underspecified” VoiceP that leads to the indirect causative meaning: it can be done with a passive Voice (Pitteroff 2014), with a middle Voice (Nash 2017), or with an “active” Voice with a highly underspecified argument in its specifier. Thus, the linguistic encoding of indirect causation does not correspond to any one syntactic or semantic primitive, but rather results from the combination of independently available resources that a language may or may not make available.

Notes

We wish to thank the anonymous *LI* reviewers as well as the editor, Eric Reuland, for comments on the paper. For data judgments and comments, thanks to Þórunn Arnardóttir, Hlíf Árnadóttir, Thórhallur Eythórsson, Dagbjört Guðmundsdóttir, Hinrik Hafsteinsson, Gísli Rúnar Harðarson, Bolli Magnússon, Iris Edda Nowenstein, Eiríkur Rögnvaldsson, Halldór Sigurðsson, Sigríður Sigurjónsdóttir and Lilja Björk Stefánsdóttir. Previous versions of this work have been presented at Málvísindakaffi at the University of Iceland in December 2016; the University of Michigan in March 2017; the Yale Syntax Reading Group in Spring 2018; the Workshop on Variation and Change in the Scandinavian Verb Phrase in Oslo in May 2017; and at the Penn Linguistic Conference 42 at the University of Pennsylvania in March 2018. We thank the audiences at these venues for their comments and suggestions. We would also like to thank Idan Landau, Julie Legate, Faruk Akkuş, Halldór Sigurðsson, Marcel Pitteroff, and Greg Key for discussions related to this paper. The authors names are in alphabetical order.

¹The following abbreviations are used in this article: ACC = ‘accusative’, ACT = ‘active’, DAT = ‘dative’, EXPL = ‘expletive’, F = ‘feminine’, INF = ‘infinitive’, INTR = ‘intransitive’, M = ‘masculine’, NOM = ‘nominative’, PASS = ‘passive’, PRS = ‘present’, PST = ‘past’, PTCP = ‘participle’, REFL = ‘reflexive’, ST = ‘-st morphology’, TR = transitive’.

²Icelandic *láta* ‘let’ overlaps in meaning with *let*, *make* and *have*. In this article, we always gloss *láta* as ‘let’, but translate it as ‘let’, ‘make’ or ‘have’ where appropriate. The judgments of Icelandic examples, whether constructed or attested, reflect the judgments of the first author. We have consulted other speakers in cases where we suspected the possibility of speaker variation, and have noted such variation explicitly.

³For example, Taraldsen (1983, 1984) and Christensen (1986) propose a process of “Projection Compounding” where the embedded verb and the matrix verb simultaneously head the VP projection and act as a single verb; there is no syntactic manifestation of the causee, and no indication that it is represented in the semantics either. Platzack (1986) proposes a similar process—abstract incorporation—where the embedded verb and the matrix verb compositionally assign a single θ -role to the overt subject, and there is no *pro*, *PRO*, trace, or other silent NP representing the causee. Vikner (1987:270) proposes that the embedded verb loses its subject θ -role under reanalysis, and has no representation of the causee in the syntax.

⁴H.Á. Sigurðsson (2011:160), defending a very similar sort of analysis of the Icelandic “New Impersonal Passive” (NIP) construction, describes his analysis as suggesting that the NIP is an “unusually ‘active passive’”. We might characterize our analysis as an unusually passive active, but the general intuition is conceptually quite similar: this is a structure which shares properties with both actives and passives.

⁵A note on notation. We assume that roots are syntactically separate from verbalizers, as is standard in Distributed Morphology, and therefore represent the lexical verb layer as vP. However, we omit explicit separation of the root, and as far as we can tell, most of what we propose in this paper works just as well if vP were replaced with VP. The layer that introduces the external argument is Voice. For expositional purposes, when discussing other analyses, we adapt them to this notation—v for the lexical verb

layer, and Voice for the layer that introduces the external argument.

⁶Bhatt and Pancheva (2006:560) state that “By general assumption [...] the term ‘implicit arguments’ is reserved for those covert elements about whose syntactic representation we still have doubts”. We will generally use the term ‘implicit’ when we want to remain neutral about the syntactic status of an argument, and ‘silent’ when we are assuming it is there syntactically.

⁷Alexiadou et al. 2015 is actually a culmination of a long line of work, going back at least to Alexiadou and Anagnostopoulou 2004, and worked out in detail in Schäfer 2008—and even then building off of earlier literature. In this paper, we take Alexiadou et al. 2015 to be representative of this line of work.

⁸Note, however, that some researchers do propose that the implicit argument of passives is syntactically projected (Collins 2005; Landau 2010).

⁹In fact, another way to build an anticausative in this framework is to merge an expletive Voice head, which may be specifierless or take an expletive specifier (see especially Schäfer 2008, 2012a, to appear). This is the analysis of Icelandic *-st* anticausatives in Wood (2012, 2014, 2015), where the *-st* occupies the specifier of an expletive Voice head. See section 4.4 below for further discussion of the *-st* morpheme.

¹⁰See Landau (2013:18–21) on the cross-linguistic generalization that control complements are CPs while raising complements are TPs. Idan Landau (p.c.) points out that according to his (2015a) system, a control complement could be as small as a TP for implicative verbs (of which causative verbs such as ‘force’ are a subset). However, this is only possible if the control relation is derived by predication, which would require the presence of a syntactic argument (corresponding to the causee) to serve as the subject of that predication. Thus, if we tried to account for the implicit argument by claiming that it is PRO, we would only beg the question concerning the status of the non-overt

controller. Since we find no evidence in favor of a control analysis, and it would raise these additional difficulties, we do not pursue that line of inquiry here.

¹¹Like many of these authors, Platzack (1986) adopts “projection compounding” (the idea that ‘let’ and the embedded verb act as a single verb), although he assumes more syntactic structure in the complement of ‘let’.

¹²Within Scandinavian, there is an interesting correlation with word order. Danish allows OV order, and allows by-phrases. Swedish disallows OV order, and disallows by-phrases. Norwegian and Faroese allow either VO or OV, and allow by-phrases only with OV order. This fact has thus played a role in the research on Scandinavian. German fits this profile in that it allows by-phrases and has an OV order, but OV is typical of German in a way that it is not typical of Scandinavian. However, the correlation does not hold in Romance, where by-phrases are possible in Italian and French with a VO order. Moreover, we will see below that by-phrases are sometimes possible in Icelandic with a VO order. We therefore set aside the word order question and focus on how this variation is connected with the bare vP analysis.

¹³Vikner (1987) suggests that by-phrases in Danish are an exceptional case, and generally argues that the embedded verb has no subject thematic role to assign at all. He does not, as far as we can tell, give an account of the difference between Swedish and Danish with respect to by-phrases.

¹⁴<http://www.visir.is/g/2015706229983> Dec. 3, 2018

¹⁵<https://bland.is/umraeda/rad-vid-vondri-lykt-ur-nidurfalli/26047534/> Dec. 3, 2018

¹⁶<http://ruv.is/sarpurinn/gamlarsdagsmorgunn/31122013> Jan. 9, 2014

¹⁷<http://ruv.is/sarpurinn/gamlarsdagsmorgunn/31122013> Jan. 9, 2014

¹⁸While not all speakers find these examples to be perfect, all speakers we asked found them to be more acceptable than (12).

¹⁹<https://www.mbl.is/greinasafn/grein/661090/> Dec. 3, 2018

²⁰<http://hildigunnurr.blogspot.com/2005/05/> Dec. 3, 2018

²¹This does not imply that the causative meaning of a transitive is added by Voice; either causative meaning is present in the unaccusative, as argued by Schäfer (2012b) and others, or the presence of Voice can affect the interpretation of v, as in Wood and Marantz (2017).

²²It is generally understood that oblique subjects in Icelandic are always internal arguments that A-move to the subject position (Marantz 1984:79–83; Platzack 1987:392–394; Sigurðsson 1989; Marantz 1991/2000; Holmberg and Platzack 1995; Jónsson 1996; McFadden 2004; among many others).

²³Exactly like the examples in (16), *holuna* ‘the hole’ can precede *dýpka* ‘deepen’ in (17c), and get the unaccusative reading, but this is an ordinary causative, with the internal argument moving to the edge of the lower VoiceP or vP.

²⁴Below, we will integrate Lundin’s agent splitting idea into our proposal, in a way that does not require the AGENT role to be stored with the lexical verb.

²⁵These facts also support the view of Bruening (2013) in particular, where the passive Voice head has the same featural makeup as an active Voice head: both have selectional features selecting for a VP and an NP. In actives, an NP merges to check the selectional N-feature. In passives, the Pass head selects for a VoiceP with an unchecked N-feature, so a specifier is never merged. See also Schäfer (to appear:147fn.15).

²⁶We do not show the verb ‘sink’ here, since it does not make the transitive/intransitive distinction in the infinitive.

²⁷This in itself is evidence against Lundin’s (2003) analysis. For Lundin, the sentences *Hún skal byggja hús* ‘She shall build a house’ and *Hún lét byggja hús* ‘She made (someone) build a house’ (or its Swedish equivalent) have the same tree geometry,

and would thus have the same number of phase boundaries. Ingason and Wood (2017) provide evidence that there is an extra phase boundary between T and the embedded verb in the latter sentence which is not present in the former.

²⁸The dispositional middle reading is the one most commonly associated with generic middles in English, like *This book reads easily*; here, the verb describes a dispositional property of the subject. See Lekakou (2005) for detailed discussion, and Menéndez-Benito (2013) for general discussion of dispositional readings.

²⁹Passive readings are available when the verb that *-st* cliticizes to co-occurs with a restricted set of modals, and with a very limited set of perception verbs, such as *sjá* ‘see’, *heyra* ‘hear’ and *finna* ‘find’ (Ottósson 1986; Wood 2015). Even with the latter cases, there is generally a modal reading in the passive use. This is not the general picture we find in languages with a dedicated middle Voice head.

³⁰One might object that the passive analysis is a non-starter because there is no passive morphology (just as there is no middle morphology, as discussed in the previous section). However, as indicated in the structures in (7) earlier, passive morphology in languages like Icelandic is generally understood as not expressing passive Voice, but attaching on top of it. For example, Bruening (2013) argues that a Passive head selects for a Voice head that normally requires a specifier. Embick (2003, 2004) argues that passive is derived when an Asp head attaches on top of the external-argument-introducing Voice head (v[AG] for Embick). So while middle Voice morphology is generally a part of the VoiceP, it is reasonable to propose, as, for example, Pitteroff (2014) does for German, that a passive VoiceP could occur without the verb carrying the participial morphology characteristic of the passive.

³¹A note on terminology is warranted here. The above is true if we take a defining characteristic of the passive to be the nonprojection of a thematically interpreted external

argument in the syntax. However, E.F. Sigurðsson (2017) understands the term ‘passive’ more broadly, including any construction where the external argument is existentially closed over, whether that argument is projected in the syntax or not. It is possible that by-phrases diagnose passive in this broader sense of the term.

³²(24) reflects the judgments of the first author. Some speakers do not find the constructed examples (24b–c) to be improved over (24a), and some do not find a contrast between (24b–c). As mentioned in footnote 18, however, all speakers find some examples of the sort in (24b–c) to be improved (over examples like (24a)) or perfect.

³³Below, we will propose that the indirect causative meaning only arises when the embedded external argument is maximally underspecified. Definite DPs are at odds with this requirement. Indefinite DPs are typically possible when the by-phrase plays a role in characterizing the nature of the event and its result, but not identifying any specific participant(s), in a way that is reminiscent of the restrictions on by-phrases with adjectival passives (McIntyre 2015; Alexiadou et al. 2014). See footnote 67.

³⁴These factors might be relevant here for similar reasons as adjectival passives, the Impersonal Modal Construction (IMC), and even ICs. Tough-constructions do not refer to a specific event, so adding a by-phrase denoting a specific entity may clash with their meaning, and is at odds with the semantic relation established between the theme, the state denoted by the predicate, and the verb. Similarly with the IMCs discussed below, a by-phrase denoting a specific entity may be at odds with the modal function of the construction, where picking out possible worlds with generic events/results is what is relevant. We set aside the characterization of these factors and whether they can be united across constructions for future research.

³⁵These examples were retrieved from Google on 12/30/2011. (28a) can still be found (as of 7/25/2019) at <https://tinyurl.com/vme5fuy>, but (28b–c) no longer appear on

Google searches. The speakers who we asked about (28) include many English speakers where this work has been presented, as well as judgments elicited from Richard Kayne, Alec Marantz, Stephanie Harves, and Neil Myler. (29) was added after we discovered that (28b–c) are no longer online, and are perfect for the second author of this paper.

³⁶From *Short Route to Chaos*, by Stephen Arons (page 195), retrieved from Google books on July 25th, 2019.

³⁷From *Golden Age Gazette*, 11/2012 (pg. 2), retrieved from <https://tinyurl.com/vssewa7> on 7/25/2019.

³⁸Translations of the examples in E.F. Sigurðsson (2015) into English are acceptable to the second author (although a reviewer finds them unacceptable):

- (i) Hate speech is easy to express in oral or written form by anyone at all.
- (ii) These matters are not easy to solve by one state alone.

³⁹For example, by making the event more generic, the PRO (or perhaps ϕ P) external argument is less likely to refer to a specific individual, and has an indefinite, existential interpretation similar to the implicit argument of the passive. (The implicit argument of a passive can be definite, in a sense, when it is linked to a definite by-phrase.) Developing this suspicion goes beyond the scope of the present article, however.

⁴⁰We omit PassP in (36), following Pitteroff (2014), under the assumption that Pass would be the locus of passive morphology, but that a specifierless passive Voice head is nevertheless present. See Pitteroff (2014:ch.7) for detailed discussion of this point.

⁴¹ Lundin (2003:135) claims that the impossibility of passivizing ‘let’ is a straightforward prediction of her analysis in (34), a claim echoed in other work on light verbs, such as Folli and Harley (2013). In fact, however, the failure of passivization is not so straightforward. As mentioned above, the standard view is that in languages like English (with periphrastic, participle-based passives) a Passive head attaches outside of

a specifierless VoiceP. There is no reason Passive could not attach outside of the VoiceP in (34). One could say that ‘let’ realizes a Voice head with a filled specifier, to account for the impossibility of passives, but this is an analytical stipulation, not something that follows from the claim that a light verb realizes a Voice head.

⁴²Some speakers find the examples in (40), even the attested ones, to be degraded, but others find them acceptable and the attested ones were produced by native speakers. Halldór Sigurðsson (p.c.) suggests that (40a) becomes acceptable if the context is made clearer with more material in the sentence, as in (i):

- (i) Þess vegna var látið byggja nýtt hús handa innflytjendum.
 for.this.reason was let.PASS build.INF new house.ACC for immigrants
 ‘For this reason, someone made (someone) build a new house for immigrants.’

⁴³<http://www.almanak.hi.is/saga.html> Dec. 19, 2018

⁴⁴<https://www.althingi.is/altext/raeda/?lthing=70&rnr=3516> Sept. 3, 2019

⁴⁵We show ϕ P in this tree moving to the subject position, as pronouns do, but nothing hinges on this, and all the facts still follow if ϕ P remains in situ.

⁴⁶Here we assume a dependent case approach to morphological accusative (Marantz 1991/2000; McFadden 2004; Schäfer 2012a; E.F. Sigurðsson 2017; Wood 2017), but a theory where transitive Voice assigns accusative makes the same prediction in this case.

⁴⁷The embedded predicate in the Icelandic IC is similar in some ways to the Icelandic “New Impersonal Passive” (NIP) construction, which has an accusative object, and arguably has a silent external argument. Indeed, Legate (2014) and E.F. Sigurðsson (2017) argue in some detail for an analysis of the NIP that involves a ϕ P external argument, just as we are proposing for ICs here. ICs, however, are more widely accepted than the NIP, and the analysis of the NIP is controversial (for a range of views, see Sigurjónsdóttir and Maling 2001; Maling and Sigurjónsdóttir 2002, 2012, 2013, 2015;

Barðdal and Molnár 2003; Maling 2006; Gísladóttir 2007; Eythórsson 2008; Jónsson 2009; H.Á. Sigurðsson 2011; Árnadóttir et al. 2011; Árnadóttir and E.F. Sigurðsson 2013; Schäfer 2012a; Ingason et al. 2013; Legate 2014), so we refrain from detailed discussion of the connection. Importantly, E.F. Sigurðsson (2017) also argues that there are number of constructions in Icelandic that would qualify as quasi-active, in that they have a ϕ P external argument, but a passive-like interpretation.

⁴⁸That is, rejecting it is not necessarily evidence against the silent causee analysis.

⁴⁹There is some minor speaker variation in the acceptability of *finna*, but most speakers found it perfectly fine in ICs, even though it cannot be passivized, and nearly all speakers find at least one of the attested examples in this section perfectly acceptable.

⁵⁰https://www.atvinnuvegaraduneyti.is/radherra/raedur_JB/nr/3431 Jan. 19, 2016

⁵¹<https://www.mbl.is/greinasafn/grein/1367363/> Dec. 19, 2018

⁵²<https://www.mbl.is/greinasafn/grein/1127209/> Dec. 19, 2018

⁵³It might be argued that *annast* ‘look after/supervise’ cannot be passivized only for morphological reasons. It is a deponent *-st* verb that takes an accusative object, and such verbs generally cannot form personal passives with a nominative subject; the reason seems to be connected with the morphological agreement that generally obtains between passive participles and their nominative arguments (Wood 2015:70–72). However, this account would not apply to any of the other verbs in this subsection. Even the nature of the supposed morphological account is not clear (Wood 2015:72), so until it is, we take the facts in (53) to be a potential problem for the passive analysis.

⁵⁴<http://www.jonas.is/their-leika-lausum-hala/> Dec. 21, 2018

⁵⁵ <https://www.althingi.is/altext/raeda/?lthing=97&rnr=3251>

⁵⁶Thus, Pitteroff (2014:89) mentions a verb in German that has been claimed to occur in ICs but not passives, and makes the point that it is in fact possible in passives, and

uses this fact to support the passive analysis.

⁵⁷A reviewer asks if cross-linguistic variation should be derived by differences in selectional rules. It is possible that this plays some role (see, for example, Pylkkänen 2002, 2008), with such rules stemming from considerations of acquisition. However, ICs are wide-spread enough that they should be derivable by general principles, and ideally, their availability and properties in individual languages derived from the independent availability of syntactic primitives that can be used to build them. Note that we do not attempt in this article to develop a formal typology of ordinary causatives with overt causees; see Pitteroff and Campanini (2013) for some discussion.

⁵⁸We follow Harley (2013a) in assuming that the existential closure is brought in as part of the semantics of the causative verb—*v* for her, (the higher) Voice for us.

⁵⁹Note that not all speakers that we asked found this sentence fully acceptable, but there was a clear general preference for accusative. This sentence contrasts sharply with the IC in (56b), where secondary predicates are clearly unacceptable.

⁶⁰See also Eythórsson et al. (2016) for the Icelandic reflexive passive and H.Á. Sigurðsson (2011) for the “New Impersonal Passive.”

⁶¹We thank Alan Munn (p.c.) for pointing this out to us.

⁶²Effects like these are also found in passives, but we have already provided arguments that the embedded VoiceP is not passive.

⁶³A reviewer asks if an explicit passive (with a passive auxiliary and participle) can be embedded under ‘let’. In fact, passives are highly restricted, and generally unacceptable with ‘let’; see Wood (2011:25–26) for discussion.

⁶⁴Note that not all speakers find purpose clauses in sentences like (69b) to be acceptable with the causee controlling PRO in the first place; for those speakers, purpose clauses are not informative here. However, the fact that some speakers do allow it, but

none allow it in (69a), calls for an explanation.

⁶⁵ Harley (2017) uses it as a diagnostic for Voice, citing Kuroda (2003).

⁶⁶This is not to say that the actual doers really lack free will in the real world. If Mary “makes repair” her car, the specific people fixing it could choose to walk away, sabotage it, etc. But what the construction expresses is Mary’s ability to exert some kind of control over the world that leads a sentient “someone” to fix it—in this case, presumably, by hiring a person or business whose livelihood depends on not turning down such requests. Mary’s control, then, stems from the circumstances that lead the person to accept such requests and her ability to make such a request. The construction asserts that the matrix subject exerts control of this kind over another sentient mind.

⁶⁷This might account for why, as noted earlier, by-phrases identifying the embedded external argument (the lower VoiceP) are only possible if they, and even the event they are embedded under, are indefinite, generic, etc. A specific, definite DP would mean that the initiator is not underspecified, and the special interpretation of the stacked VoicePs—which only arises when the lower VoiceP is maximally underspecified—would not obtain. The structure would simply have two ordinary (but distinct) agents of one single event, which we presume is semantically ill-formed.

⁶⁸Our proposal bears some similarity to the proposal Myler (2016) makes for English *have* causatives. In Myler’s proposal, *have* causatives involve “semantic” Voice stacking, in that the causative *v* (that is pronounced as *have*) is semantically expletive. The higher Voice head, which adds an argument to the embedded event, is interpreted as introducing an “engineer” rather than an agent (Myler 2016:286).

⁶⁹Pitteroff and Schäfer (2019) argue that even in true passives, where the implicit argument is not syntactically projected, the implicit argument can control PRO. This makes the facts in (73) mysterious even under a passive analysis of ICs.

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