Independent relative whose:

From syntactic gap to pragmatic constraint

Brett Reynolds ©*

Humber Polytechnic & University of Toronto

brett.reynolds@humber.ca

September 26, 2025

^{*}I am grateful to members of the Semantics and Syntax reading groups at University of Toronto for helpful discussions. Joniel Sordilla found (40). I used ChatGPT o3 (OpenAI, Apr 2025) and Claude 4 (Anthropic, May 2025) extensively, restructuring an earlier draft and drafting new sections and many paragraph-level passages. I reviewed, edited, and approved all the material, and I take full responsibility for the final text and conclusions.

Abstract

This paper refutes Hankamer & Postal (1973)'s claim that English lacks independent relative whose (where whose appears without a following noun). Through corpus and historical evidence spanning seven centuries, I demonstrate that this construction exists across a range of syntactic environments: oblique genitives, predicative complements, subjects, auxiliary-stranding contexts, and fused relatives. Rather than facing syntactic prohibition, independent relative whose requires specific information-structural conditions that ensure the recoverability of the elided possessum: contrastive focus, structural parallelism, or deictic anchoring. These constraints explain both the construction's grammaticality when licensed and its extreme rarity otherwise. Cross-linguistic evidence from German and Japanese reveals identical pragmatic constraints despite different syntactic systems, suggesting universal principles of information packaging rather than language-specific gaps. The analysis demonstrates how pragmatic constraints can masquerade as syntactic impossibilities when researchers rely solely on introspective judgments. What Hankamer and Postal mischaracterized as non-existent proves to be a grammatical option whose severely restricted distribution creates an illusion of absence. This finding has broader implications for how we investigate apparent gaps in grammatical paradigms and underscores the necessity of methodological diversity in syntactic research.

Introduction: From synchronic gap to pragmatic licensing

This paper shows how a synchronic gap disappears once pragmatic licensing options enter regular usage. In 1973, Hankamer & Postal (1973) documented a curious asymmetry in English grammar. While identity-of-sense pronominalization (where an already-mentioned noun is recovered through its sense, as in my book...yours) freely strands interrogative whose (Whose is that banging at the window?), it apparently cannot strand relative whose:

- (1) * My gorilla is over there drinking punch. The guy [whose you saw banging at the window] is over there watering the rubber tree.
- (2) * Melvin, [whose is banging at the window], is over there watering the rubber tree.

Unable to explain this asymmetry within their transformational framework, they concluded: "Will anybody whose can please step forward?"

The corpus evidence suggests their descriptive generalization was accurate for 1973; their theoretical diagnosis was not. Systematic searches of historical and contemporary corpora reveal a striking temporal pattern. Identity-of-reference stranding (where no antecedent noun exists, as in the man whose these are) has existed since Middle English, but identity-of-sense stranding – apart from one questionable 17th-century example – only emerges in the 1990s.

This distribution reveals that Hankamer and Postal correctly identified a genuine gap in their synchronic grammar. The theoretical question is why that gap existed – and why it has since been filled.

The answer lies not in properties specific to identity-of-sense pronominalization, but in general constraints on possessum recoverability. Independent relative whose – whether IoS or IoR – requires information-structural conditions that ensure the elided possessum remains accessible to the hearer. My corpus analysis identifies three licensing conditions through explicit criteria:

- 1. Contrastive parallelism: The construction appears in coordinate structures where possessors contrast (e.g., X whose... Y whose)
- 2. **Deictic anchoring**: A demonstrative immediately precedes or follows whose (e.g., whose these/this)
- 3. **Structural integration**: The possessum appears as head of the phrase containing *whose* (e.g., *a friend of whose*)

Compare these examples:

(3) The offenders whose actions lead to harmful results pose a greater risk than those [whose do not].

[IoS, contrastive parallelism]

(4) * The guy whose you saw banging at the window...

[IoS, no parallelism]

(5) The man whose these are hath gotten me with child.

[IoR, deictic anchoring]

(6) * The man whose I took had taken my bag. [IoR, no anchoring]

Examples (3) and (5) succeed because contrastive parallelism and deixis respectively ensure possessum recoverability. Examples (4) and (6) fail – regardless of whether they involve IoS or IoR – because no such support exists. The syntax permits stranding in principle; pragmatics determines when that option can be successfully exercised.

This analysis explains both the historical gap and its recent filling. Identity-of-reference stranding has always had natural licensing contexts: deictic pronouns and fixed constructions like the oblique genitive. Identity-of-sense stranding lacked an obvious licensing strategy until usage patterns in academic and journalistic prose conventionalized contrastive parallelism as a licensing environment. These registers favour list-like enumerations and explicit contrast sets (e.g., patients whose symptoms improved vs. those whose didn't), which maximize antecedent salience and thus enable possessum recovery even across clause boundaries.

The present paper provides a unified account of independent relative whose across both construction types and historical periods. Through analysis of naturally-occurring data, I demonstrate that:

1. The same pragmatic constraints govern both IoS and IoR stranding: successful examples exhibit one of the three licensing conditions iden-

tified above.

- 2. The emergence of IoS stranding in the 1990s reflects not syntactic change but the conventionalization of contrastive parallelism as a recognized licensing strategy.
- 3. Register effects follow from discourse structure: genres that build explicit contrasts provide ideal environments for the construction.

This case illuminates how apparent syntactic "gaps" may reflect the absence of recognized licensing strategies rather than categorical prohibitions. What linguists analyze as impossible, speakers may simply not yet have discovered how to make possible.

(7) IoS examples

a. ...with whose flesh oil'd together, they make a him to dye in the most blessed estate...accounting all that suffered not immolation, and [whose was not feasted with].

(EEBO: Heywood 1657)

- I knew someone whose greatest love affair was with objects,
 another [whose was with books] and a third [whose was with
 ideas]. (Cantwell 1997, The New York Times Magazine)
- c. The idea was to include one film clip whose episode was relatively ambiguous and one whose was not, in case this may have an impact on the results.

(Håkansson Eklund 2006, Scandinavian Journal of Psychology)

- d. A team from the Institute of Aging Research in New York found
 that a variant of a cholesterol enzyme is more common in
 elderly people whose mental faculties are intact than in those
 [whose are not]. (Goymer 2007, Nature Reviews Genetics)
- e. Additionally, the odds of early-onset smoking versus nonsmoking was larger for youths whose mothers did not quit smoking after smoking during pregnancy (OR = 2.75) than for those whose did (OR = 2.12), albeit not statistically significantly so.

(Weden & Miles 2012, American Journal of Public Health)

f. "From our research, we could quickly distinguish between a patient whose chance of being violent was 1-in-10 from one [whose was 1-in-2]," he said.

(Brown 2013, The Washington Post)

- g. In order to justify differential punishment in reference to incapacitation, therefore, it must be the case that, holding action and mental states constant, those offenders whose actions lead to harmful results pose a greater risk to society than those [whose do not]. (Boeglin 2017, Vanderbilt Law Review)
- h. These, and similar, comments clearly demonstrate that the debate is not about emotion versus reason, but rather it is a fight over whose emotion is promoted and [whose is repressed].

(Forero Angel, González Quintero & Wolf 2021, book)

(8) IoR examples

a. (c. 1325; *OED*)

When he kyng wil bat iustice be don ... he wile bat hit When the king wants that justice be done he wants that it be don after be wille of him [hos be werkes bez]. be done according to the will of him whose the works are 'When the king wants justice to be done ... he wants it to be done according to the will of him whose works they are.'

b. The man [whose these are] hath gotten me with child (1611, OED)

- c. The daughter of baleful Atlas [whose are the pillars that prop the lofty sky]. (Lawrence 1932, translation)
- d. Everything depends on the person whose this administration is.

 (2018, Russia & CIS General Newswire)

The present paper shows that independent relative whose, far from being an accidental gap in the English relative pronoun paradigm as claimed by Hankamer & Postal (1973), is a grammatical form whose extremely restricted distribution is governed primarily by information-structural factors operating within specific syntactic environments. The specific information-structural conditions under which it's felicitous ensure high accessibility and recoverability of the elided possessum through: (i) contrastive focus, often realized through structural parallelism; (ii) advantageous structural anchoring, notably via the oblique genitive construction; or (iii) direct deictic reference. Hankamer and Postal's examples systematically violate these conditions—their possessa lack accessibility, their contexts create no contrastive focus, and their structures permit no parallel interpretation—yielding the misleading impression of categorical ungrammaticality.

This paper makes three primary contributions:

- It establishes the empirical reality of independent relative whose across
 five distinct syntactic environments: oblique genitive constructions,
 supplementary relatives, integrated relatives, fused relatives, and elliptical auxiliary stranding contexts.
- 2. It identifies the specific constraints governing the distribution of this construction, demonstrating that attested examples predominantly feature contrastive focus, typically exhibit parallel structure in auxiliary stranding contexts, and show significantly shorter referential distance

in grammatical versus ungrammatical cases.

3. It validates the proposed analysis through cross-linguistic evidence showing parallel pragmatic constraints despite structural differences.

Beyond resolving a specific descriptive puzzle, this analysis holds broader theoretical implications for understanding apparent gaps in grammatical paradigms. The case of independent relative whose demonstrates how the interaction of syntax with information structure can create the illusion of categorical prohibition. This analysis suggests that what has been dismissed as a gap in the paradigm is not a matter of syntax but of pragmatics; what was deemed absent by rule is merely elusive by circumstance; and what was mistaken for the impossible is simply the exceptionally rare.

The remainder of this paper is organized as follows. Section 1 presents systematic empirical evidence for independent relative whose across five syntactic environments. Section 2 details the grammatical constraints governing its distribution, including information-structural conditions that license the construction and an analysis of why Hankamer and Postal's examples fail while other instances succeed. This section also includes cross-linguistic validation of the proposed analysis. Section 3 concludes with broader implications for linguistic theory and methodology.

1 Empirical evidence of existence

Claims of non-existence are refuted by existence. This section documents attested instances of independent relative whose across the following distinct syntactic environments: oblique genitive, predicative complement (with and without subject postposing), subject (with and without elliptical auxiliary stranding), and fused-relative constructions. The evidence stretches from Middle English manuscripts to contemporary corpora and usage, representing both formal and informal registers. The range of data confirms that this construction has been a grammatical option in English for at least seven centuries.

1.1 The oblique genitive construction

Example (9) illustrates the oblique genitive construction (also known as the "double genitive"; CGEL: 268–269). It's the construction in a friend of mine or no fault of yours. The structure in (9) is significant: the possessum (friend) appears as the head of the relative phrase within the relative clause, while whose marks the possession relationship without a following nominal. This construction with independent relative whose is rare but attested in both historical and contemporary usage (10–12).

- (9) I was going to visit Lucy, a friend of whose had told us of the accident.
- (10) You may trust your Informant for the Truth of this; [a Friend of

- whose lately fell into their Company] ... (Mist 1722)
- (11) This is a concept he may have to explain on the stand, in a liability lawsuit brought in part by Mississippi lawyer-turned-novelist John Grisham, [a friend of whose was gunned down by a young couple] ...

 (1996 via COCA)
- (12) During August, Churchill left England for a prolonged holiday on
 the Continent. From Switzerland, he went to Berlin and then
 travelled to Silesia as the guest of the Kaiser [an uncle of whose
 was Edward VII] ...
 (Glueckstein 2020)

1.2 Predicative complement

Predicative complement uses represent another environment where independent relative whose appears. Examples can be found from Middle English (13) to contemporary usage (17), all taken from *The Oxford English Dictionary*'s entry for whose.

- (13) Whan he kyng wil hat iustice be don ... he wile hat hit be don after he wille of him [hos he werkes bez]. (1325)
- (14) Syk lay the housebond man [whos pat pe place is]. (c. 1410)
- When she was brought forth, she sent to her father in law, saying,

 By the man, [whose these are], am I with child: and she said,

 Discern, I pray thee, whose are these, the signet, and bracelets, and staff.

 (1611)

- (16) Again, debts due to the man [whose the goods were], or debts he himself owed, neither the bonorum possessor nor the bonorum emptor in strict law owes or has owed him. (1885)
- (17) Everything depends on the person [whose this administration is].
 (2018)

Example (18) is from the online Cambridge dictionary.

(18) What is the name of the man [whose this book is]? (source)

These attestations refute the claim that the construction is categorically ungrammatical and support my intuition that it appears in more than just the oblique genitive construction. The 2018 example is particularly significant, demonstrating the construction's continued acceptability in formal written English well into the 21st century.

Contemporary informal usage provides additional evidence. Examples (19–21), found by searching the web for likely strings (e.g., a person whose was), aren't from edited sources but represent authentic language use. Other such examples can be found.

- (19) That would be a huge honour for me (and Molito, [whose this idea is]). (source)
- (20) Did find out how the arrow got here and the guy [whose it was]
 seemed to get mad at me just for calling him and asking about it.

 (source)

(21) What happened to the guy [whose this was]? (source)

The relatively informal register of these examples suggests that the construction persists in everyday language rather than being restricted to literary or archaizing usage.

1.2.1 With subject postposing

A construction that seems dated or literary now is independent relative whose in predicative complement function with what CGEL (p. 243) calls subject postposing. Examples are attested across multiple centuries, as in (22–24) from The Oxford English Dictionary's entry for whose.

- (22) My brethren..the israhelites,..[whose also are the fathers] (1526)
- (23) The most generous patron..continues to be our ..Pittsburg and
 Allegheny auxiliary, [whose also is the largest contribution to the
 rent of our Association's new office]. (1904)
- (24) The daughter of baleful Atlas [whose are the pillars that prop the lofty sky]. (1932)

1.3 Subject

CGEL's star for (25) notwithstanding, examples of independent relative whose in subject function, such as (26 & 27) strike me as grammatical and can be found on the web, though they are by no means common.

- (25) Students whose papers were marked by Jones were at a significant disadvantage relative to those [whose were marked by Smith].

 [CGEL's (50), p. 472, where it's marked with an asterisk]
- (26) When I entered in 1977, I actually had the longest ash, but mine was bent. I came second to a woman [whose was straight]. (source)
- (27) My trigger is medical stuff like needles, which mostly people are sympathetic to. But I did know another woman [whose was set off by morning urination]. (source)

1.3.1 With elliptical auxiliary stranding

Contexts featuring elliptical auxiliary stranding (*CGEL*: Ch 3 §2.1.4) provide particularly compelling evidence for the information-structural account of independent relative *whose*. In this construction, *whose* functions as the subject of an auxiliary verb whose complement is elided, as exemplified in (28). The auxiliary stranding creates ideal conditions for possessum recoverability – the parallel structure establishes both the possessor and the possessum type in the first clause, allowing the subsequent relative clause to elide the possessum while maintaining interpretability. Additional attestations of this pattern, though rare, can be found in informal contexts, as shown in (29–32).

- (28) Norway, whose standard of living is the envy of the world, has thicker kids than Singapore, whose isn't.
- (29) Head shaved? Mine wasn't but the guy [whose was] had to give a

pubic sample. (source)

- (30) Thankfully neither of my children have died, but I've known people [whose have]. (source)
- (31) Get tested because even though your symptoms may be mild, you
 may give it to someone's [sic] [whose won't be]! (source)
- (32) A: You should be happy it hasn't caught on fire several times by now.

 B: I know a guy [whose did]. (source)

1.4 Fused relatives with whosever or whoever's

This case doesn't deal with independent relative *whose* per se, but rather with its *-ever* forms in fused relatives NPs (free relatives), with examples from *CGEL* (33), the *OED* entry for *whosever* (34), and the web (35 & 36).

- (33) Take [whosever you like]. (CGEL: fn 17, 1075)
- (34) [Whosever the footprint may be], the story is gospel among

 Mahometans. (1865)
- (35) Oh, boy, there's a good deal of blood in this stool. [Whoever's] it is should see a doctor. (2005)
- (36) We've got to get away from this constant effort to destroy a presidency, [whosever it is]. (2018)

While these forms might be considered distinct lexical items from *whose*, they demonstrate that the English grammar permits the expression of genitive

possession in relative constructions without an overt possessum.

1.5 Summary and evaluation of empirical evidence

The empirical record is unequivocal: independent relative whose exists. It crosses formal and informal registers, it traverses diverse syntactic environments, and it endures across seven centuries. This historical depth, evident from Middle English manuscripts to contemporary usage, is matched by its syntactic breadth, appearing in oblique genitive constructions, predicative complements, subject positions, elliptical auxiliary stranding contexts, and fused-relative constructions. Although rare, such consistent attestation identifies a grammatical construction with specific distributional patterns, refuting any dismissal as mere error or idiosyncrasy.

The editorial judgment of the OED – whose lexicographers are hardly naïve about grammatical niceties – is particularly telling. They include multiple examples without any indication of questionable status, effectively treating independent relative *whose* as standard, if uncommon, English. The presence of the construction in contemporary edited sources like the Cambridge dictionary further supports its status as a grammatical, if highly marked, construction.

Following Pullum (2017), the epistemology of syntax involves a triangular reflective equilibrium, seeking an optimal fit between intuitive grammaticality judgments, general grammatical principles, and attested linguistic behaviour observed in corpora, with none holding absolute authority.

While attestation alone is insufficient proof of grammaticality, the consistent appearance of a construction across periods, registers, and structural environments provides strong evidence for its grammatical status. And, as Hankamer & Postal (1973) themselves acknowledge, there is no theoretical reason to expect this particular gap in the paradigm.

Hankamer and Postal's constructed examples accurately reflect the ungrammaticality of independent relative *whose* in certain contexts, but their methodology – relying exclusively on introspective judgments of constructed examples – prevented them from discovering the specific licensing conditions under which the construction is grammatical. Their error was not in their grammatical intuition about their specific examples, but in generalizing from these limited cases to a systemic conclusion.

Having established the empirical reality of independent relative *whose*, I now turn to explaining its extreme rarity. Why does a construction with seven centuries of attestation appear so elusive?

2 Licensing conditions

Independent relative *whose* is grammatical in English but remains extremely rare. An examination of COCA reveals that dependent genitives (e.g., *my book*) outnumber independent ones (e.g., *mine*) by two orders of magnitude. This extreme rarity of the superset of independent genitives – a pattern documented for forms like independent *its* by Taylor (2000: 315) – helps

explain why the even rarer subset of independent relative *whose* might be mistaken for a syntactic prohibition rather than a pragmatic constraint.

This rarity is not random. It's a direct consequence of specific constraints that this section will identify, explaining both the construction's grammaticality in certain contexts and its apparent absence elsewhere. While these constraints operate across syntactic, semantic, and information-structural levels, they all stem from a single, fundamental challenge: the "double anaphora" requirement (Halliday & Hasan 1976: 55) inherent in independent genitives of all sorts. Such forms are doubly anaphoric because they simultaneously depend on the discourse context for the interpretation of two distinct entities:

- 1. The possessor: The entity referred to by the genitive form itself (e.g., the antecedent of relative whose).
- 2. The possessum: The entity or concept that is possessed, which is elided following the independent genitive form.

For an utterance containing independent relative *whose* to be felicitous, the context must provide sufficient information for the hearer to readily identify both the possessor referent and the intended possessum concept. This

¹Dynamic frameworks such as File-Change Semantics (Heim 1982) or Discourse Representation Theory (Kamp & Reyle 1993) treat an utterance as a context-update. Independent relative *whose* inserts a possessor variable and presupposes recoverability of a possessum type; failure of those presuppositions predicts the ungrammaticality of the Hankamer & Postal examples.

dual referential burden is significantly more demanding than that of simple anaphora and forms the foundation for the specific constraints observed.

2.1 Information structure as the primary licensing mechanism

The fundamental challenge posed by independent relative *whose* is achieving interpretive coherence despite the possessum's non-expression. Information structure provides the crucial mechanism enabling this coherence by ensuring high accessibility of both possessor and possessum through specific configurations.

2.1.1 Contrastive parallelism

The most robust licensing environment involves contrastive parallelism:

- (37) Norway, whose standard of living is the envy of the world, has thicker kids than Singapore, whose isn't. (from 28)
- (38) Mine wasn't but the guy whose was had to give a pubic sample.

 (from 26)
- (39) I actually had the longest ash, but mine was bent. I came second to a woman whose was straight. (from 29)

In each case, two properties co-occur. First, the possessors appear as paired elements in a direct comparison (Norway/Singapore, mine/guy's, mine/woman's).

Second, the possessum establishes the dimension of comparison (standard of living, head shaving, ash). This creates a contrastive focus structure that keeps both possessor and possessum simultaneously accessible, enabling successful double anaphora resolution.

In (40), Cantwell's (1997) list-enumeration replicates the same mechanism across more than two coordinates:

(40) I knew someone whose greatest love affair was with objects, another whose was with books and a third whose was with ideas.

Once the first coordinates fixes the possessum type, each subsequent one licenses whose + auxiliary alone; the recoverability requirement is met by the discourse structure, not by syntax.

Hankamer and Postal's ungrammatical examples (1 & 2) lack any such contrast, so the possessum remains inaccessible and the clause crashes. Example (1) does contain contrast, but between mismatched types (my gorilla vs. the guy).

2.1.2 Structural proximity in the oblique genitive

The oblique genitive construction offers another favourable environment:

- (41) I was going to visit Lucy, a friend of whose had told us of the accident. (from 9)
- (42) ... John Grisham, a friend of whose was gunned down. (from 11)

This structure succeeds by positioning both the possessor and possessum advantageously. The possessor (Lucy, John Grisham) serves as the head noun immediately preceding the relative clause, while the possessum (friend) is overtly realized as the head of the relative phrase containing whose. This explicit structural integration ensures both elements of the double anaphora are highly accessible.

2.1.3 Deictic anchoring

Deictic anchoring provides a third licensing mechanism:

- (43) By the man, whose these are, am I with child.
- (44) Everything depends on the person whose this administration is.

Here, demonstratives (*these*, *this*) directly point to the possessum, making it maximally accessible through deixis. The physical or conceptual presence of the possessum removes the need for other accessibility-boosting mechanisms.

In sum, independent relative *whose* requires specific information-structural configurations that ensure the recoverability of the elided possessum. When these conditions are met – through contrast, structural foregrounding, or deixis – the construction is grammatical. The rarity stems from the limited contexts in which these configurations naturally arise.

2.2 Syntax

While syntactic factors constrain where independent relative whose can appear, syntax alone cannot explain its distribution. The construction appears successfully in both integrated relatives (e.g., a woman whose was straight) and supplementary relatives (e.g., Singapore, whose isn't), contradicting any simple syntactic account.

Similarly, the construction appears across various grammatical functions: subject position (whose these are), predicative complement (whose this administration is), and oblique contexts (a friend of whose). The absence of clear object-gap examples in the corpus likely reflects data sparsity rather than syntactic prohibition, as such examples should be constructible given appropriate information-structural support:

- (45) There are two profs one whose position I respect and one whose I reject ____.
- (46) Smith, whose manuscript I published, was pleased, unlike Jones, whose I rejected ____.

The primary role of syntax is thus to provide the structural frame within which information-structural constraints operate, not to independently license or block the construction.

2.3 Semantic properties

Several semantic factors interact with the information-structural constraints:

2.3.1 Type-level reference

Independent genitives involve type-level rather than token-level reference for the possessum (Ariel 2014: 63). In my gorilla and yours, the possessums are different tokens of the same type ('gorilla'). This explains why contrastive focus proves so potent – it directly highlights the type-token relationship that must be resolved for successful interpretation.

2.3.2 Animacy effects

While animacy facilitates double-anaphora resolution (animate possessors rank higher on accessibility hierarchies), it doesn't independently license the construction. Compare:

- (47) She is being sued by a client of hers.
- (48) * The bank is being sued by a rich client of its. [CGEL: 471]
- (49) The Guardian seems to respect its readers more than the Sun respects its.

The contrast shows that once appropriate information-structural support exists (as in the last example), even inanimate possessors permit independent genitives.

2.3.3 The -ever effect

Fused relatives with whosever/whoever's operate under distinct licensing conditions. The free-choice semantics of -ever reduces specificity requirements

for the possessor, effectively removing one element of the double-anaphora burden and explaining why these forms appear more freely than plain independent relative *whose*.

2.4 Cross-linguistic validation

If the constraints on independent relative *whose* reflected arbitrary syntactic gaps, we wouldn't expect parallel patterns cross-linguistically. However, both German and Japanese – despite employing radically different syntactic mechanisms – exhibit identical information-structural constraints.

German shows the same contrast between licensed and unlicensed contexts:

- (50) Meins funktionierte, aber ich kenne jemanden, [dessen nicht mine worked but I know someone whose not funktionierte].
 worked
 'Mine was working, but I know someone whose wasn't working.'
- (51) *Die Person, [dessen du vergessen hast], ist mein Cousin. the person whose you forgotten have is my cousin 'The person whose you forgot is my cousin.'

Japanese, despite its head-final structure and lack of relative pronouns, shows remarkably similar patterns. Corpus data reveals that independent genitives appear only under specific licensing conditions, while constructed examples demonstrate the same contrast:²

²A search of the Balanced Corpus of Contemporary Written Japanese (National In-

(52) Watashi-no-wa ugoi-te-ita ga, [ugoi-te-ina-katta]
I-GEN-TOP working-PROG-PAST but [working-PROG-NEG-PAST]
hito-mo shitte-iru.
person-also know-PROG
'Mine was working, but I also know someone whose wasn't.'

This cross-linguistic convergence strongly suggests that the constraints reflect universal principles of information packaging rather than language-specific syntactic accidents. When information-structural conditions support double anaphora resolution, independent relative possessives become possible regardless of the syntactic machinery employed. The ultimate constraint on independent relative whose, then, is not one of grammatical structure – for the structure has existed for centuries – but one of interpretive coherence.

3 Implications for linguistic theory

The case of independent relative *whose* reveals how easily pragmatic constraints can be mistaken for syntactic prohibitions. When Hankamer & Postal (1973) declared the construction non-existent based on two constructed examples, they illustrated a broader methodological hazard: the tendency to attribute to syntax what properly belongs to information structure. This error has significant implications for linguistic theory and practice.

stitute for Japanese Language and Linguistics 2023, 104.9 million words) reveals that independent genitives watashi - no - ga 'mine-SUBJ' and watashi - no - wa 'mine-TOP' yield 0 instances each, while watashi - no - o 'mine-OBJ' yields only 32 instances, compared to 143 instances of the dependent genitive watashi - no - hon 'my book'. This 0–0–32–143 distribution mirrors the extreme rarity of English independent genitives, with occurrences limited to specific licensing contexts.

3.1 Methodological lessons

The misanalysis of independent relative *whose* underscores why grammatical analysis requires diverse evidence sources. Hankamer and Postal's exclusive reliance on introspective judgments prevented them from discovering the numerous historical counterexamples – though admittedly, digital corpora and search tools weren't readily available in the 1970s.

Their intuitions about their specific examples were accurate; those sentences are indeed ungrammatical. But the leap from "these examples fail" to "this construction doesn't exist" exemplifies the danger of generalizing from limited constructed data. Especially for apparent paradigmatic gaps, claims require triangulation between intuition, corpus attestation, and theoretical principles.

The extreme rarity of independent relative whose – a subset of alreadyrare independent genitives, further constrained by its relative clause environment – makes it precisely the kind of phenomenon that introspection
alone will miss. Only by examining historical texts, contemporary corpora,
and diverse registers can we detect constructions that appear perhaps once
in millions of words, but only when specific pragmatic conditions converge.
When investigating putative gaps in grammatical paradigms, we should ask:
What information-structural or pragmatic factors might be at work here?

3.2 Theoretical implications

This analysis challenges the syntax-centrism that has characterized much formal linguistic theory. The constraints on independent relative whose aren't syntactic – there's no plausible parameter or constraint that would target this specific gap while leaving interrogative whose and non-relative independent genitives intact. Instead, the construction's distribution reflects the interaction of syntax with information structure and pragmatics.

This supports theories recognizing permeable interfaces between grammatical components. As Ariel (2009: 6) argues, "discourse and grammar are very much part of one system of linguistic behavior." The construction is grammatical precisely when information-structural conditions support the heavy interpretive burden of double anaphora – validating accessibility-based accounts of reference (Ariel 2001) over purely formal approaches.

The cross-linguistic convergence observed in German and Japanese further strengthens this conclusion. Despite radically different syntactic mechanisms, these languages show identical pragmatic constraints on independent relative possessives. This suggests we're observing universal principles of information packaging, not language-specific syntactic accidents. What appears as categorical prohibition is better understood as the manifestation of general constraints on complex anaphora resolution.

3.3 Future directions

This case study points toward several productive research directions. First, a systematic cross-linguistic investigation of possessive constructions and their information-structural constraints could reveal deeper principles governing the expression and recovery of elided possessa. Second, experimental work could test the specific predictions about accessibility and contrastive focus made here. Finally, other putative "gaps" in grammatical paradigms merit reexamination through this pragmatic lens – how many syntactic impossibilities might prove to be pragmatic rarities?

The broader lesson is clear: apparent absences in grammar may reflect not categorical rules but the convergence of constraints that create vanishingly small windows of acceptability. Ultimately, our theories have to be powerful enough to capture not only what grammar allows, but also what communication requires.

References

- Ariel, Mira. 2001. Accessibility theory: an overview. In Ted J. M. Sanders, Joost Schilperoord & Wilbert Spooren (eds.), Text representation: linguistic and psycholinguistic aspects, 29–87. Amsterdam: John Benjamins.
- Ariel, Mira. 2009. Discourse, grammar, discourse. *Discourse Studies* 11(1). 5–36. DOI: 10.1177/1461445608098496.
- Ariel, Mira. 2014. Accessing noun-phrase antecedents. Routledge (Routledge library editions: Linguistics). first published in 1990. New York: Routledge.
- Boeglin, Jack. 2017. A theory of differential punishment. *Vanderbilt Law Review* 70(5). 1499–1559.
- Brown, David. 2013. Predicting violence is a work in progress. *The Wash-ington Post*. https://www.washingtonpost.com/national/health-science/predicting-violence-is-a-work-in-progress/2013/01/03/2e8955b8-5371-11e2-a613-ec8d394535c6 story.html.
- Cantwell, Mary. 1997. Still at work on a self. The New York Times Magazine.

 57. https://www.nytimes.com/1997/03/09/magazine/still-at-work-on-a-self.html.
- Forero Angel, Ana María, Catalina González Quintero & Allison B. Wolf (eds.). 2021. Incarnating feelings, constructing communities: experiencing emotions via education, violence, and public policy in the americas.

 Springer Nature Switzerland AG. DOI: 10.1007/978-3-030-57111-5.

- Glueckstein, Fred. 2020. CB & WSC. Finest Hour (188). https://winstonchurchill.org/publications/finest-hour/finest-hour-188/cb-wsc/.
- Goymer, Patrick. 2007. Longevity allele keeps you thinking. *Nature Reviews Genetics* 8(2). 92. DOI: 10.1038/nrg2061.
- Håkansson Eklund, J. 2006. Empathy and viewing the other as a subject. Scandinavian Journal of Psychology 47. 399–409. DOI: 10.1111/j.1467–9450.2006.00521.x.
- Halliday, Michael A K & Ruqaiya Hasan. 1976. *Cohesion in English*. London: Longman.
- Hankamer, Jorge & Paul Postal. 1973. Whose gorilla? *Linguistic Inquiry* 4(2). 261. http://www.jstor.org/stable/4177771.
- Heim, Irene. 1982. The semantics of definite and indefinite noun phrases.

 University of Massachusetts, Amherst. (Doctoral dissertation).
- Kamp, Hans & Uwe Reyle. 1993. From discourse to logic: Introduction to modeltheoretic semantics of natural language, formal logic and discourse representation theory. Dordrecht: Kluwer.
- Mist, Nathaniel (ed.). 1722. A collection of miscellany letters, selected out of Mist's Weekly Journal, vol. 1. London: Printed by N. Mist. https://www.google.ca/books/edition/A_Collection_of_Miscellany_Letters/8S5WAAAAYAAJ?hl=en&gbpv=1&dq=%22A%20friend%20of%20whose%22.
- National Institute for Japanese Language and Linguistics. 2023. 現代日本 語書き言葉均衡コーパス (Balanced Corpus of Contemporary Written

- Japanese). Version 2023-03, accessed 2025-06-09. https://clrd.ninjal.ac.jp/bccwj/.
- Pullum, Geoffrey K. 2017. Theory, data, and the epistemology of syntax. In Marek Konopka & Angelika Wöllstein (eds.), Grammatische Variation: Empirische Zugänge und theoretische Modellierung, 283–298. Berlin: Walter de Gruyter. DOI: 10.1515/9783110518214-016.
- Taylor, John R. 2000. Possessives in English: An exploration in Cognitive Grammar. Oxford: Oxford University Press.
- Weden, Margaret M. & Jeremy N.V. Miles. 2012. Intergenerational relationships between the smoking patterns of a population-representative sample of US mothers and the smoking trajectories of their children. *American Journal of Public Health* 102(4), 723–731.