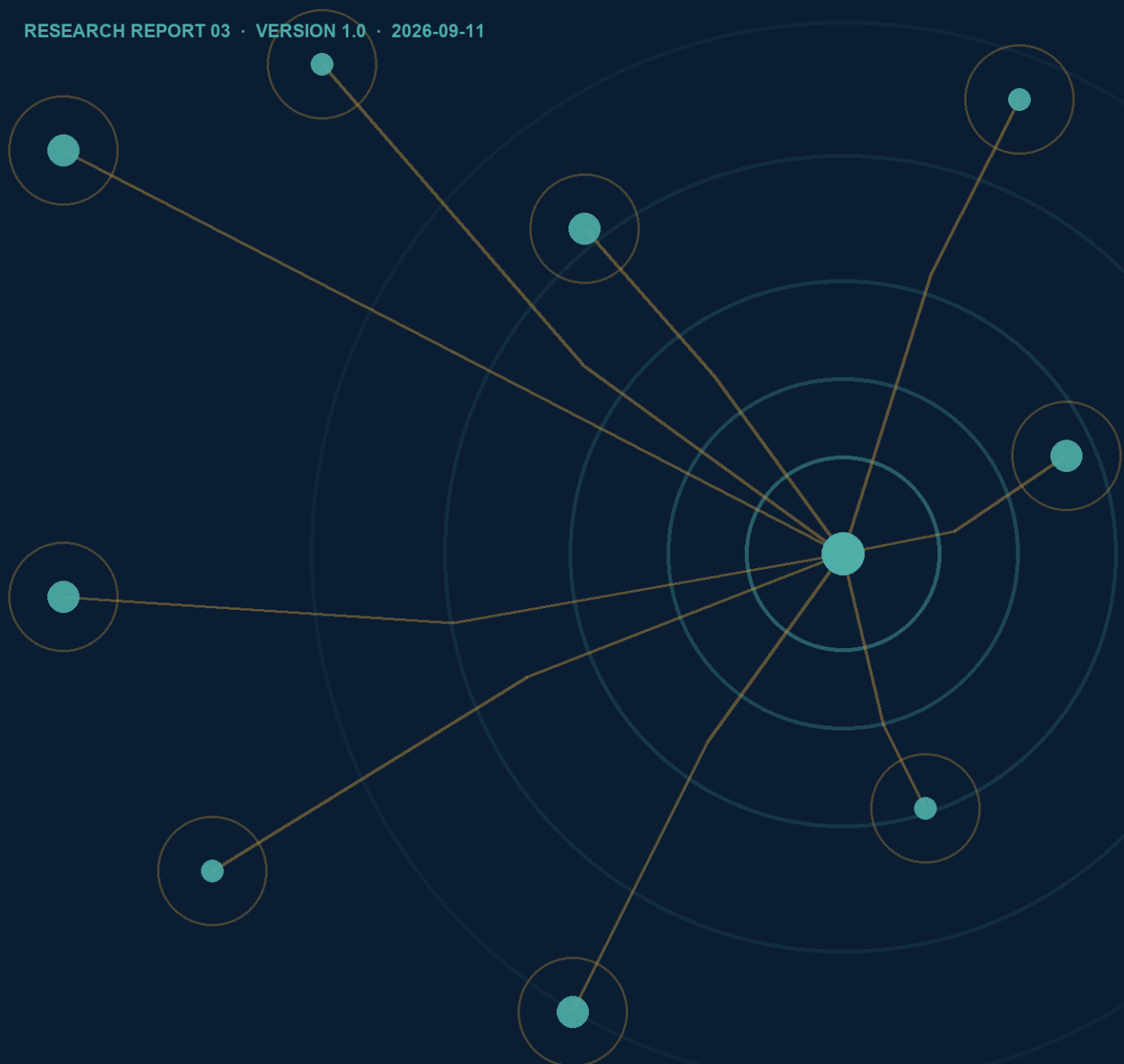




FrameNet as an Atlas of Semantic Scenes

Full review, typed crosswalks, and conflict-safe canonical integration

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Michael Reich · Atlas of Language · 11 September 2026

Abstract

The FrameNet research track reviews all 1,028 canonical Atlas concepts against Berkeley FrameNet 1.7. It asks which Atlas concepts can be clarified through semantic scenes, perspectives, and participant roles without conflating an Atlas concept, an English word form, a lexical unit, a frame, or a frame element. The full review is complete. The current Atlas contains 532 editorially accepted FrameNet crosswalks for 465 concepts: 530 links to frames and two links to frame elements. Fifty-nine Atlas concepts require two or three external targets, while 563 concepts have no positive canonical crosswalk. A concrete lexical unit serves as an evidence anchor in 414 records. This report reconstructs the path from the 25-concept pilot through conflict adjudication and the additive V2 architecture to complete integration. It documents mapping types, case decisions, negative findings, technical gates, and the limits of an English-language lexicographic comparison system.

Metric	Value
Atlas concepts fully reviewed	1,028 / 1,028
Canonical FrameNet crosswalks	532
Linked Atlas concepts	465 · 45.2%
Frame and frame-element targets	530 / 2
Crosswalks with LU evidence	414 · 177 LU-IDs
Accepted Inbox packages	7

REPORT

PROFILE

Research: full review of all 1,028 concepts. Canonical read layer: 532 typed V2 crosswalks for 465 concepts; 563 remain unlinked for documented reasons. Effect of this report: documentation only, with no import or publication.

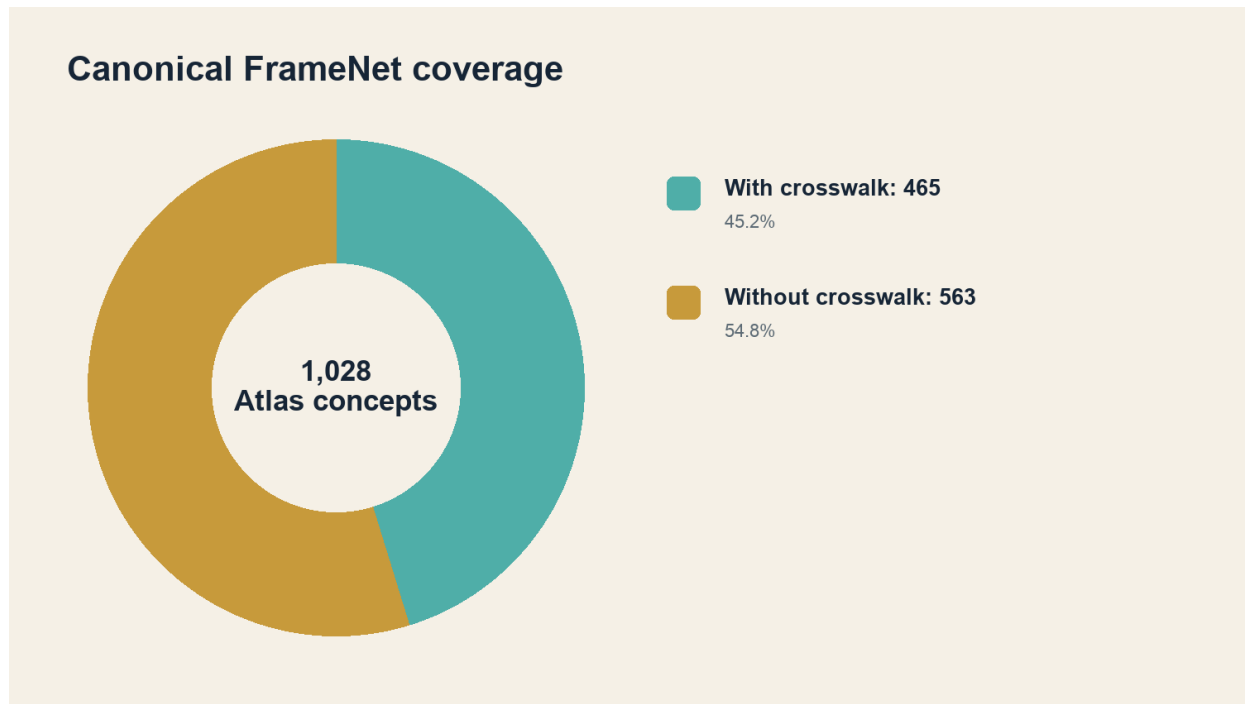


Fig. 1 Research findings and canonical scope remain distinct.

1 Research question and epistemic boundary

FrameNet models word senses against typical situations, relations, or entities. The Atlas of Language serves a different purpose: it organizes rhetorical figures, pragmatic procedures, grammatical categories, sound patterns, modes of argument, and concepts from the philosophy of language. The study therefore does not ask whether the systems share a vocabulary. It asks whether a FrameNet scene offers a defined perspective on an Atlas concept and how far that perspective extends.

The central boundary is that identical words do not establish identity. A frame is a schematic situation; a frame element is a frame-bound role; a lexical unit links an English lemma in a particular sense to a frame. These entities remain distinct from the persistent Atlas concept ID. Even a same-named frame may be unsuitable, while a differently named frame may supply a defensible partial perspective.

CORE

Identical words are a retrieval signal. A crosswalk requires an external ID, reviewed meaning, mapping type, and documented scope.

RULE

2 Berkeley FrameNet 1.7 as a comparison system

Berkeley FrameNet is a corpus-supported lexicographic resource for English. Frames describe situations together with their participants and other conceptual roles. Lexical units pair a lemma with a frame; annotated corpus sentences show how frame elements are realized syntactically. The official data interface distinguishes the Frame Index, the Lexical Unit Index, and full-text annotation. The current project overview describes more than 1,000 frames, more than 13,000 lexical units, and over 200,000 manual annotations.

The Atlas did not use the moving website as its authority. It used Release 1.7 and a pinned mirror at commit 495d0adf527684f0e2df00b0c2440e12a4106310. This matters because the official download page notes that visible website data may be newer than Release 1.7 and does not carry the same completeness and consistency guarantees. Each frame ID and frame name was therefore read against the pinned index, while lexical units were checked by ID, name, and parent frame.

3 Canonical basis and reproducibility

This report reads GitHub main at 8e676f019f2031c58f51e42a25f899c4bdf577ef and binds the canonical read layer to Atlas 249, Sites 212, and data model 1.5.0. The manifest records checkpoint atlas-249-wals-phase2-checkpoint and export commit 85ba65244988b1aa6d89e0af960109edc3192b7a. Repository HEAD and the export commit recorded in the manifest remain distinct: this report does not imply that every later publication change altered the canonical data export.

Machine-readable evidence takes precedence over report prose. The controlling artefacts are CURRENT_MANIFEST.json, concepts.jsonl, external_crosswalks_v2.jsonl, accepted Inbox packages, migrations, and the SQLite readback. This report summarizes that layer; it does not replace it and performs no import of its own.

4 Review procedure

The pilot began with 25 Atlas concepts. Its purpose was not representativeness but the development of a defensible typology. Exact word matches, semantic neighbourhoods, frame relations, selected frame elements, and null findings were then reviewed separately. Each positive research row documented the Atlas ID, FrameNet target, mapping type, rationale, evidence, confidence, and review status. A lexical unit was included only when its specific sense materially supported the mapping.

Conflicts were not flattened into a majority decision. Batch 006 underwent a full review, an independent review of positive candidates, and explicit adjudication of eight disagreements. Three cases were rehabilitated with more precise mapping types; five remained rejected. Later batches followed the same principle: a search candidate, a research decision, package-wide editorial acceptance, and a canonical import are distinct states.

The final full review partitioned the complete concept inventory without overlap or omission into 415 previously reviewed concepts and 613 open concepts. The open set produced 290 positive research crosswalks and 323 bounded null findings. Together with earlier batches, this provided an explicit research decision for each of the 1,028 concepts.

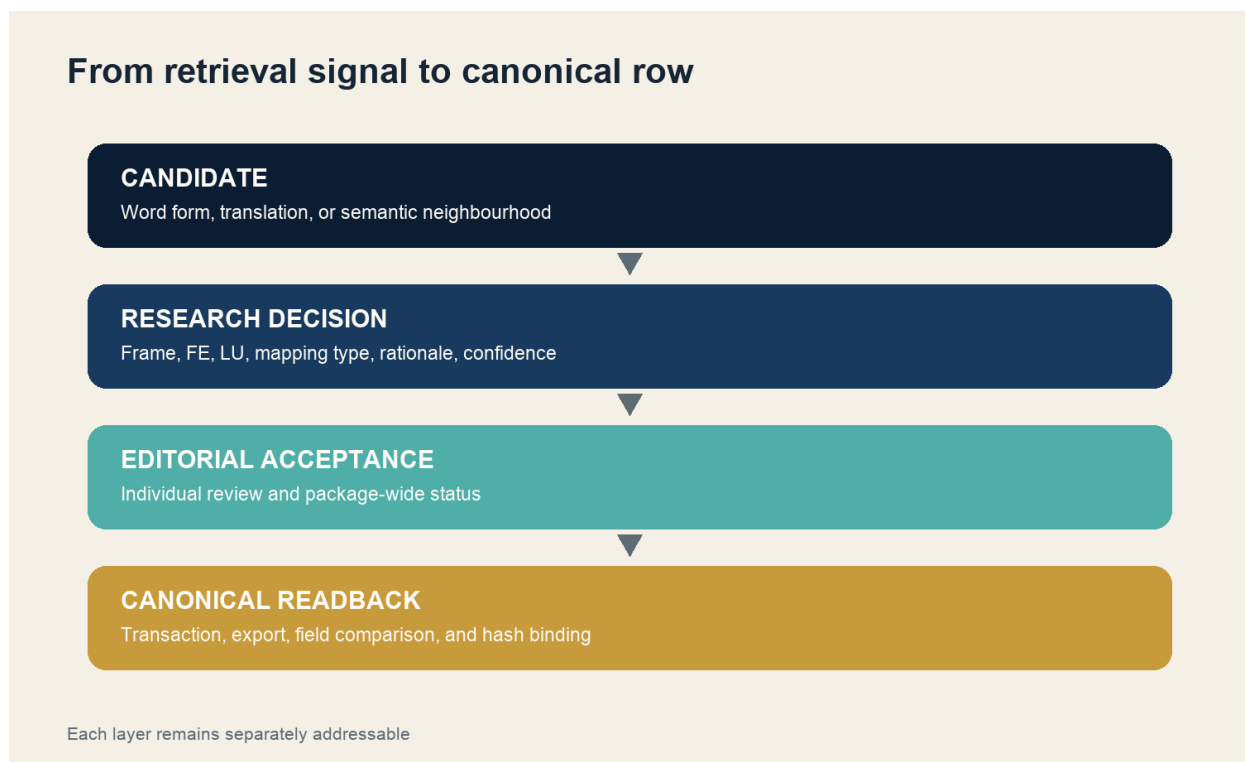


Fig. 2 Four states prevent a candidate from becoming an unreviewed identity claim.

5 Mapping typology

The typology expresses scope, not word similarity. atlas-narrower-than-frame means that an Atlas concept specializes a broader frame. atlas-broader-than-frame describes the reverse. multi-frame-component decomposes an Atlas concept into several necessary scene perspectives. lu-mediated-related marks a relation that is defensible only through a documented lexical unit. Frame-element mappings also bind the parent frame because the role has no unambiguous external identity outside that frame.

Negative classes are part of the method. no-safe-mapping records that no sufficiently appropriate frame and lexical-unit combination was found. false-friend-rejected documents a reviewed but misleading word match. semantic-near-miss-rejected marks thematic proximity that fails on participant structure, perspective, or mode of representation. Such findings remain in the research layer and are not exported as positive crosswalks.

6 Results of the full review

The canonical V2 inventory contains 532 FrameNet links for 465 Atlas concepts. Thus 45.2 percent of the 1,028 concepts have at least one accepted positive crosswalk, while 563 do not. The 532 rows reference 123 distinct frame IDs and two frame-element IDs. Four hundred and six Atlas concepts have one crosswalk, 51 have two, and eight have three. Multiple mappings are limited in extent but methodologically important.

The most frequent mapping type is multi-frame-component with 451 rows. This does not show that Atlas concepts can be decomposed arbitrarily. It shows that many Atlas profiles combine relational, functional, or cross-disciplinary meanings that FrameNet describes from more than one scene perspective. Seventy rows are atlas-narrower-than-frame, five atlas-broader-than-frame, and three lu-mediated-related; the remaining three rows consist of direct-frame and the two frame-element types.

A concrete lexical-unit evidence anchor appears in 414 crosswalks, covering 177 distinct LU IDs; 118 crosswalks do not use an LU anchor. Confidence values range from 0.74 to 0.99, with a mean of 0.84. These values describe the reviewed defensibility of each crosswalk. They are neither probabilities of ontological identity nor substitutes for the documented editorial decision.

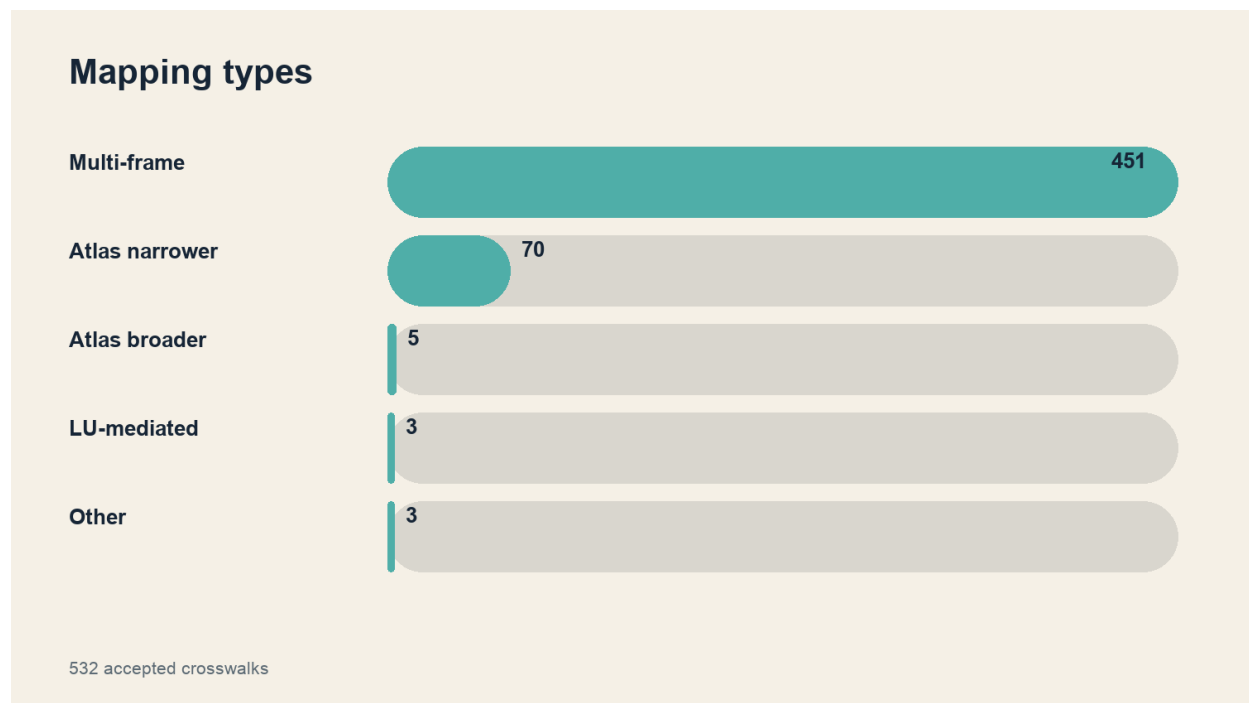


Fig. 3 Most crosswalks describe components of layered Atlas concepts.

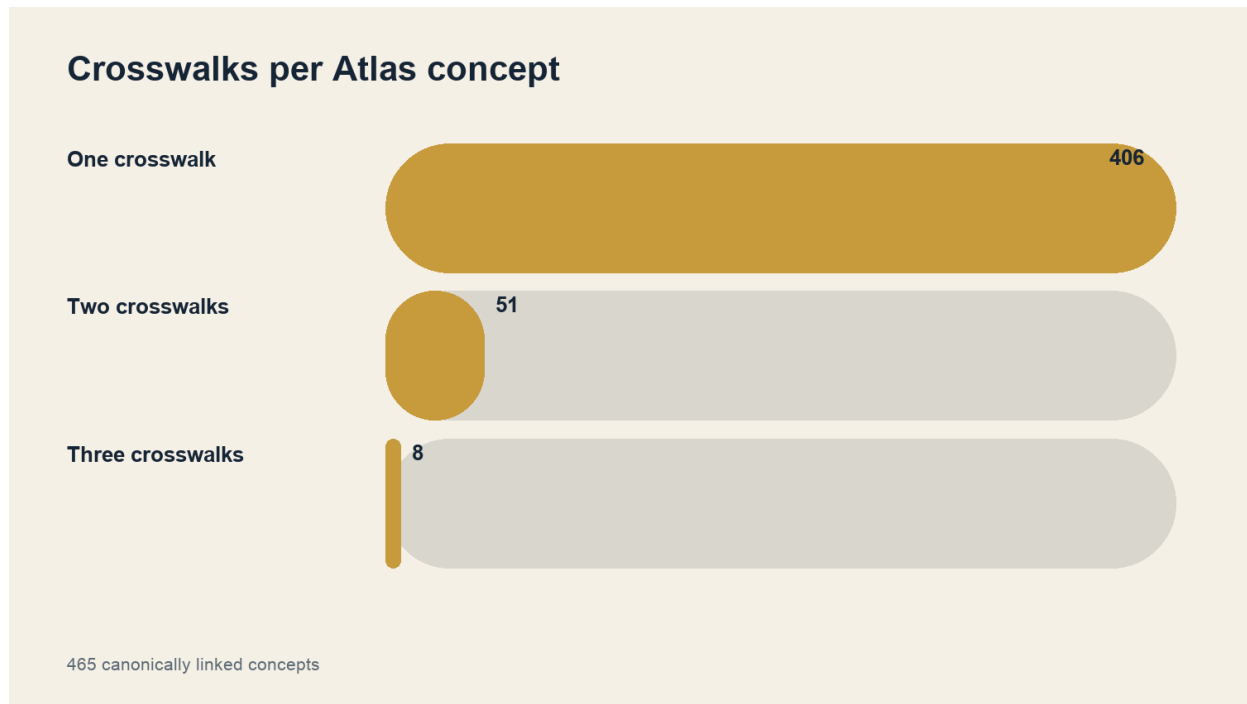


Fig. 4 Multiple mappings are limited to 59 Atlas concepts.

7 Case studies

Resonance is linked as a multi-frame-component to Response and Sound_movement. Neither scene covers the Atlas concept alone: Response contributes a relational structure of answering, while Sound_movement contributes acoustic motion. The double link makes the concept's internal layering visible without declaring either frame or its English label synonymous with resonance.

Agent shows why frame elements require their own target type. The Atlas concept is linked to Agent in Intentionally_act as near-equivalent-frame-element and to Agent in Cause_change as atlas-broader-than-frame-element. The roles share a visible label but have different IDs and parent frames. A global Agent label would therefore be too coarse both conceptually and technically.

Palimpsest was linked only to Text and typed as atlas-narrower-than-frame. The also-reviewed frame Erasing remained rejected because the historical carrier and layered traces of writing are not explained by an act of erasure alone. Dysphemism, by contrast, was linked to Judgment_communication through the lexical unit insult.n. Without that LU anchor the frame would be too broad, so the mapping remains explicitly lu-mediated-related.

8 Negative findings and protective decisions

The rejection of Empathy to Empathy was recorded during the pilot. The shared word form obscures a difference in scope between an Atlas concept with rhetorical, dialogical, and epistemic dimensions and a FrameNet frame with its own scene structure. Other rejected conflict cases included Interaction order to Social_behavior_evaluation, Deautomatization to Custom, Semantics to Linguistic_meaning, and Blending to Amalgamation.

After the full review, 563 Atlas concepts have no positive FrameNet crosswalk. This is neither a weakness of the Atlas nor a defect in FrameNet. Many Atlas concepts are text types, procedures, specialist terms, historical categories, or reflexive models, whereas FrameNet primarily records English word senses and their valence in scenes. A reasoned null finding therefore protects the specific level of the Atlas.

9 Canonical integration

The 532 crosswalks were integrated through seven accepted Inbox packages: Pilot 0001, Batch 006, Batches 007 through 010, and the completion package for 011 through 106. Each operation was bound to the current manifest

hash and the SHA-256 of the affected concepts.jsonl row. External IDs, package collisions, and existing V2 identities were checked before import. Import was transactional and completed by canonical export and field-level readback.

The V2 architecture was introduced additively. Importer, exporter, schema, and tests were later decoupled from the physical legacy table. The historical 18-row WordNet export remained byte-identical during observation and is reproduced from V2. This technical history matters for FrameNet because it demonstrates that a new external authority can be added without rewriting existing IDs or earlier export contracts.

10 Value for the Atlas

FrameNet gives the Atlas a second descriptive layer. An Atlas concept can be read as a scene, a participant role, or a bundle of perspectives. This reveals distinctions that a pure synonym or hypernym structure cannot express: who acts, what an action targets, which perspective is profiled, and which parts remain implicit. These questions improve definitions and cross-references even when no crosswalk is exposed in the public interface.

The most important result is controlled difference. The 59 multiply linked concepts show where the Atlas deliberately combines several scenes. The 563 unlinked concepts show where an English frame-semantic resource does not safely support the Atlas meaning. Both are positive research results because they make the Atlas's own structure more precise.

11 Limitations and open research

Berkeley FrameNet 1.7 is English-centred and incomplete despite its scale. The absence of a frame or lexical unit therefore proves neither linguistic nor conceptual impossibility. An existing frame may also conceal cultural, register-specific, or domain-specific differences. The Atlas must not derive a universal structural claim from an English crosswalk.

Further research should focus on three bounded tasks: the stability of the 123 used frames across later FrameNet states; whether additional frame elements can represent particular role concepts more precisely; and comparative review against FrameNets for other languages. Each extension requires a new source binding and must not silently reinterpret the accepted 1.7 identities.

12 Conclusion

The full review confirms FrameNet as a productive but bounded comparison system. Five hundred and thirty-two typed crosswalks open almost half of the Atlas inventory to analysis through scenes and roles. The other half remains unlinked for documented reasons. What matters is the form of the connection: external identity, scope, evidence, confidence, and review status are explicit, while word equality alone has no canonical effect.

The research track therefore meets its methodological purpose. It extends the Atlas without subordinating its concepts. FrameNet answers the Atlas with scenes; the Atlas answers with precise boundaries, multiple perspectives, and documented non-mappings.

Appendix A Decision and crosswalk matrix

The matrix presents selected positive and negative decisions. FrameNet labels aid readability; identity derives from release, target kind, external ID, and, where applicable, the parent frame.

Atlas concept	FrameNet target	Decision	Scope rationale
Resonanz	1302 Response	multi-frame-component	Relational response structure
Resonanz	860 Sound_movement	multi-frame-component	Acoustic movement
Agens	FE 1610 Agent / 198	near-equivalent-frame-element	Role bound to parent frame
Agens	FE 4502 Agent / 683	atlas-broader-than-frame-element	Same label, different identity
Palimpsest	298 Text	atlas-narrower-than-frame	Erasing rejected
Dysphemismus	219 Judgment_communication	lu-mediated-related	LU insult.n supports proximity
Empathie	Empathy	false-friend-rejected	Word equality is insufficient
Blending	Amalgamation	semantic-near-miss-rejected	Mode of representation mismatched

Appendix B Hash binding

Artefact	SHA-256 / Commit
GitHub main	8e676f019f2031c58f51e42a25f899c4bdf577ef
CURRENT_MANIFEST.json	76bacf1f995e099d8f7bfd6d702dfbb18eae589a9fd9c4770bdc48e8c3770f4
concepts.jsonl	3565bc1b1d5f79b4f6d9c43fe06f445b0b2fa17e133affec1e86bfa846790f9
external_crosswalks_v2.jsonl	7cd82b9991fbdaa55503b6cc36b9ef778c0dd58061cd37a6cc7d1755b690c705
typological_crosswalks.jsonl	db3261255beffbd5a4918760dd951c2f2e75d2a06b9f2c78042b0a158696d950
evidence.jsonl	4bd0c0809412339d5498dcfc111f4cf27537dabf8c30ab4a7c90ca76b5e9b97a
change-package.schema.json	9f95a51b13038d5f6580851e9604281d372ed158cfa6037e89dc419b42f216bd

STATUS

These hashes evidence the report's read basis. The report itself is a research artefact and changes neither the manifest nor canonical records.

BOUNDARY

Appendix C Quality assurance

1. Atlas ID and external ID remain in separate fields.
2. Identical words, labels, or translations do not establish identity.
3. Every positive relation states a mapping type and scope.
4. Evidence, interpretation, confidence, and review status are separate.
5. Inbox packages are schema- and hash-bound; a preflight is not acceptance.
6. Transactional import, canonical export, and post-import readback form one chain of evidence.
7. Negative findings and deferred cases remain part of the research record.

Data products and citation

Machine-readable exports and packages control any verification. The editorial DOCX and PDF editions explain method and result; they are neither import sources nor approval documents for new data.

RECOMMENDED

CITATION

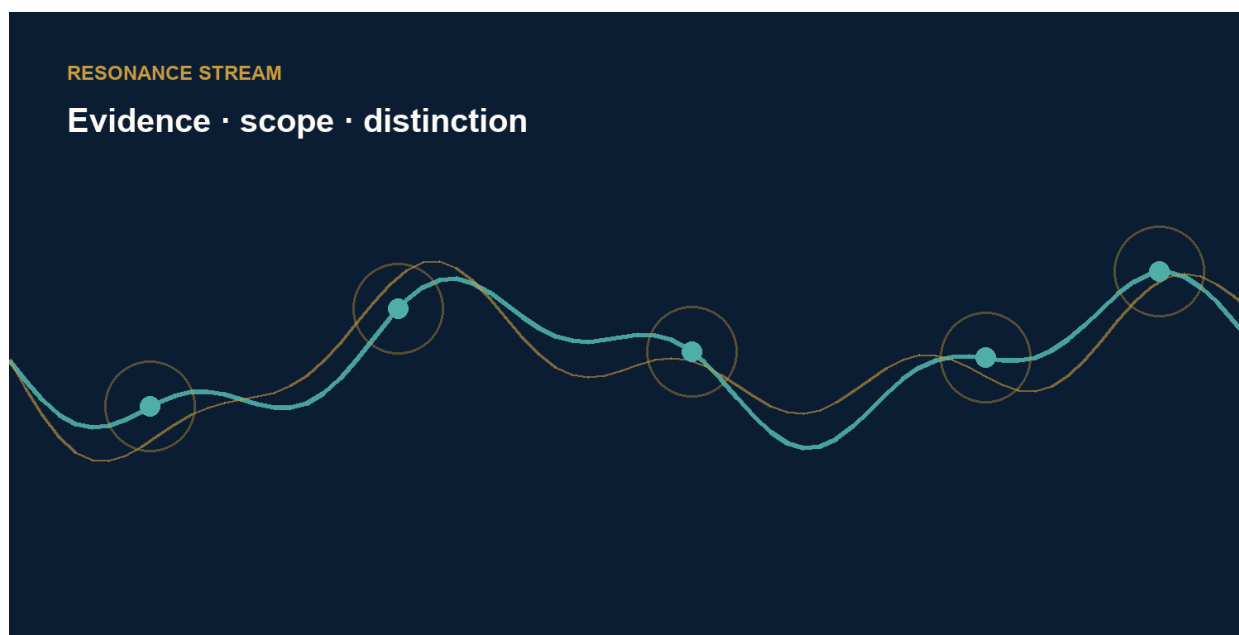
Reich, Michael (2026): FrameNet as an Atlas of Semantic Scenes. Full review, typed crosswalks, and conflict-safe canonical integration. Research Report 03, version 1.0. Atlas of Language / Atelier der Resonanzen.

References and sources

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- Berkeley FrameNet: FrameNet Data. Documentation of the Frame Index, Lexical Unit Index, XML data, and Release 1.7. https://berkeleyfn.framenetbr.ufff.br/framenet_data
- International Computer Science Institute: FrameNet Project. Project overview and current inventory figures. <https://icsi.berkeley.edu/projects/framenet-project/>
- Atlas of Language: research/framenet, accepted FrameNet Inbox packages, the External Crosswalk V2 export, and canonical SQLite readback.

Transparency note

The visual design belongs to the Atlas research perspective. Charts visualize only the Atlas counts reported here; they do not replace analyses of the external dataset. Interpretation and metaphor remain identifiable as editorial layers and must not be confused with findings from the external resource.



Closing image External data answer best when their boundaries remain visible.