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Sign Language Phonetic Annotator-Analyzer: Open-Source Software for Form-Based Analysis of Sign Languages

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> "[T]he process itself [of doing fine-grained documentation and description of the phonology of a signed language] is painstaking and is probably impossible to do well without a digitized record of the formational content of signs that is easy to query on demand." (Morgan 2017: 113)

Generic x-slots allow for a representation of the timing relations among modules
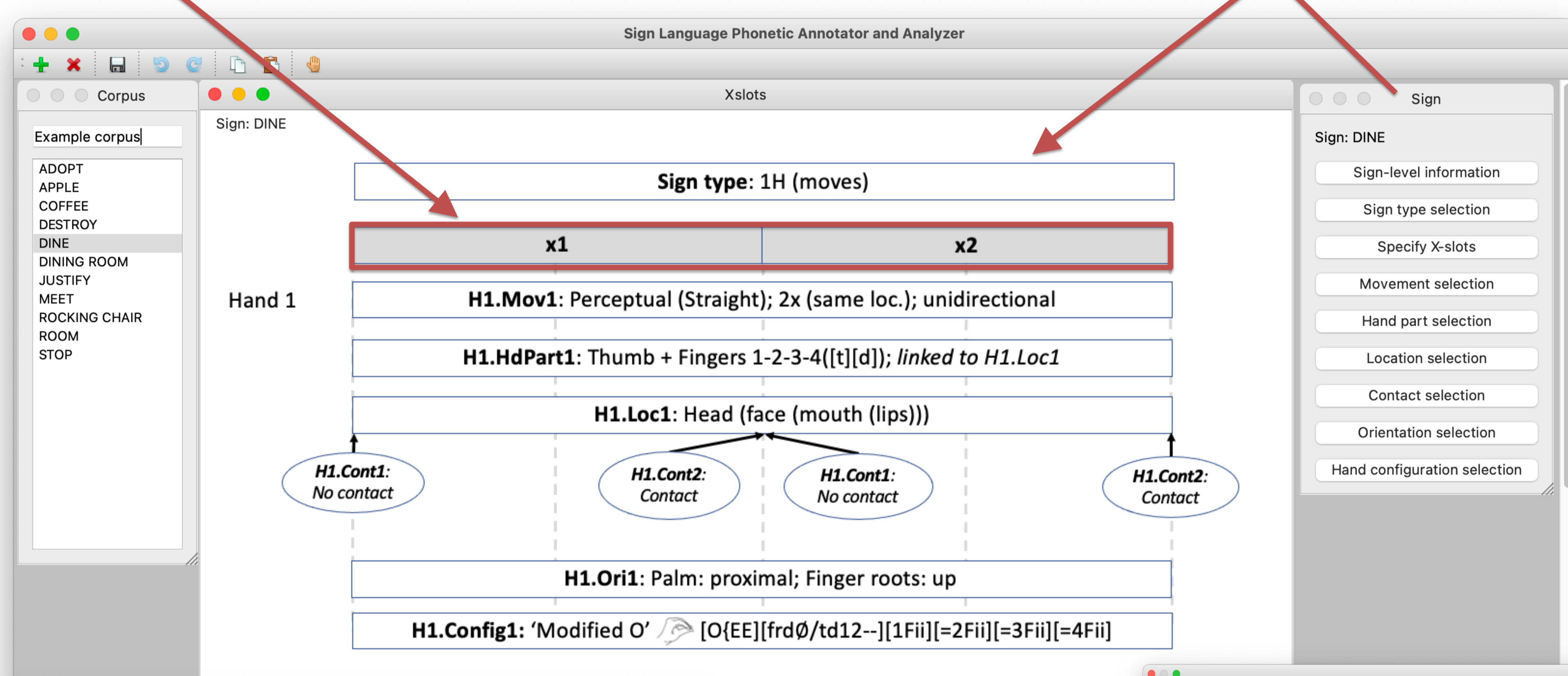
Sign to be coded: DINE in ASL

dine: *v.* to eat dinner. *We dine at a local restaurant every Sunday.*
SIGN: Fingertips of vertical right 'MODIFIED O' hand, palm facing backwards, are tapped against the mouth twice.

(from the *Canadian Dictionary of ASL*; Bailey & Dolby 2002)

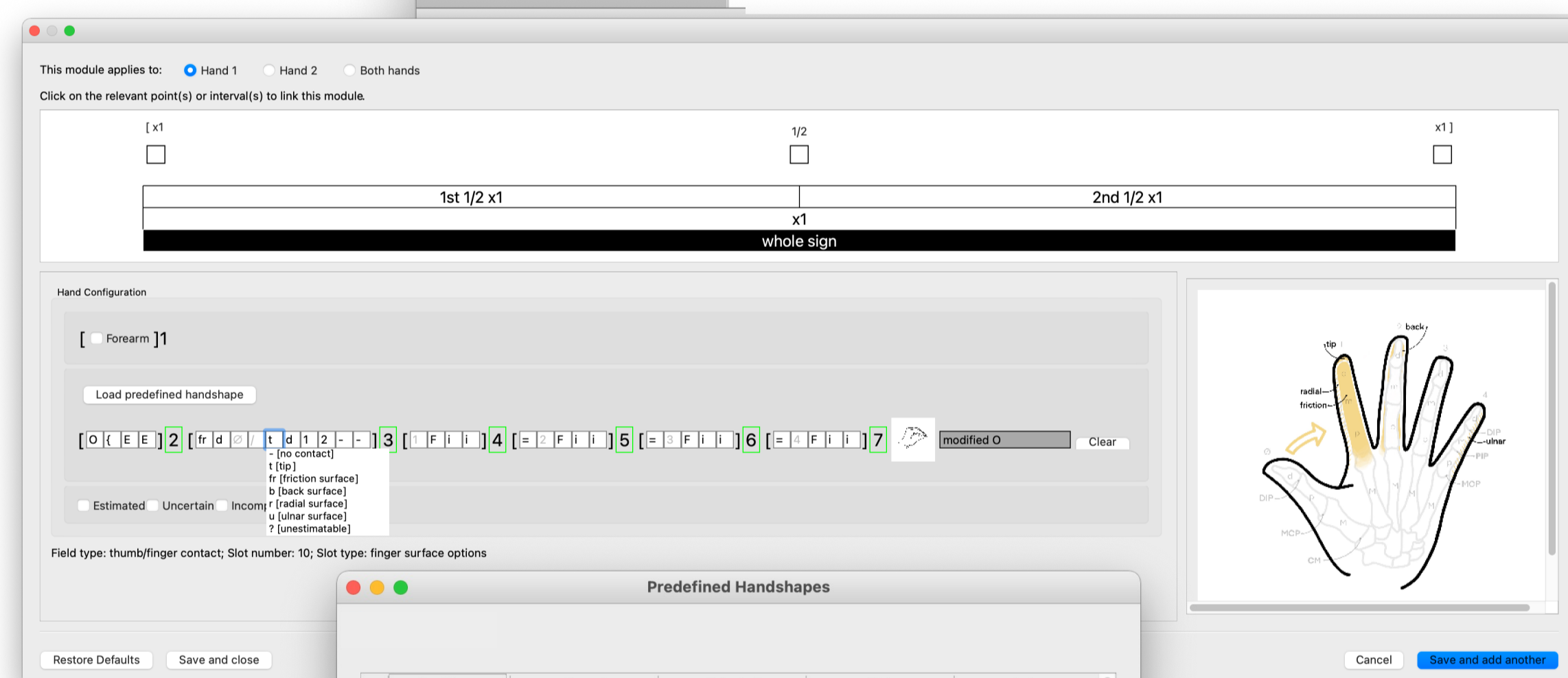**Filled-in modules get added to the summary representation**

List of coded signs

Add modules for the transcription of this sign
(NB: Modules intended to be phonetic rather than phonological in nature.)

Detailed hand configuration selection interface
(slot 10 highlighted; based on Johnson and Liddell (2011b, 2012)

Timing selection

"Predefined handshape" selection interface

Visual cues for the type of information expected in slot 10
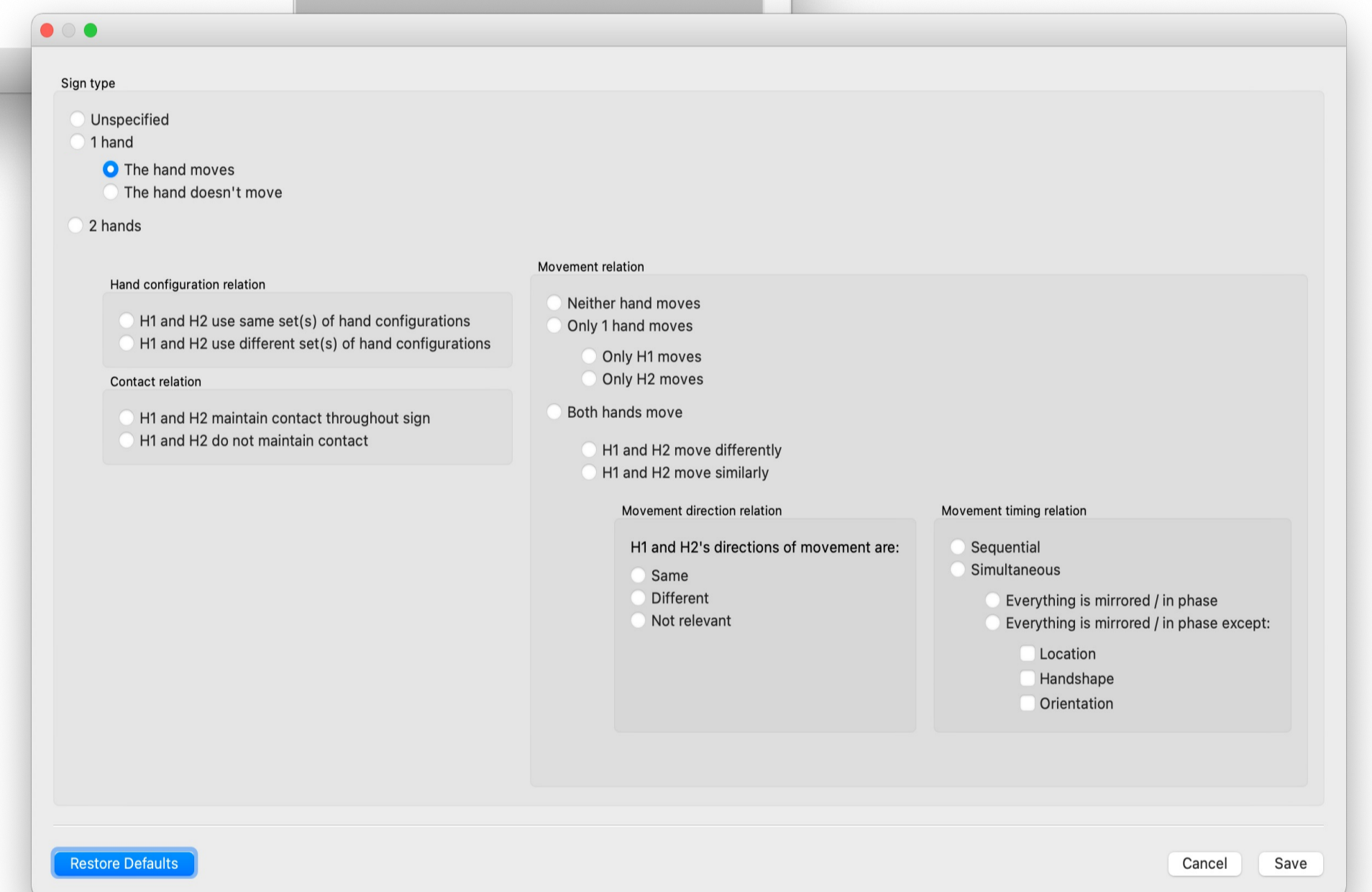
"Sign type" selection interface

Goals:

- Facilitate detailed **form-based transcription** and analysis of signed languages.

- Allow transcription of a variety of languages and dialects, registers, and phenomena.

- System to be phonetic in nature:
  - As descriptive as possible;
  - Not tied to particular phonological frameworks.

- Analysis will include e.g. phonological searches and measures of phonological distance.

- User-friendly, GUI-based software (still under development!).

- Free and open source.

Questions for you!

- If you were to use the software, what key features would you want to have? What should we prioritize? What past barriers to transcription have you experienced?

- Would integration with something like iLex (Hanke & Storz, 2008), SignStream (Neidle et al., 2018), or ELAN (Crasborn & Sloetjes, 2008) be useful, and if so, which one(s)?

- Are there particular phonological analyses that you'd like to see developed?

https://github.com/PhonologicalCorpusTools/SLPAA
Click link / scan above for access to the software and a recorded demonstration!
Comments / Questions? kathleen.hall@ubc.ca

References & Acknowledgments:

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