

# Nominal event synset identification and classification

Project Elective in AI

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## Results HW1b

NOMINAL SYNSETS	11751
Event synsets:	3480
Ambiguous:	965
Non ambiguous:	2515
Not event synsets:	8271
Ambiguous:	1860
Non ambiguous:	6411

# Event identification

Adding new nominal event synsets by using neural networks

# Dataset – Event identification

## Label “event”

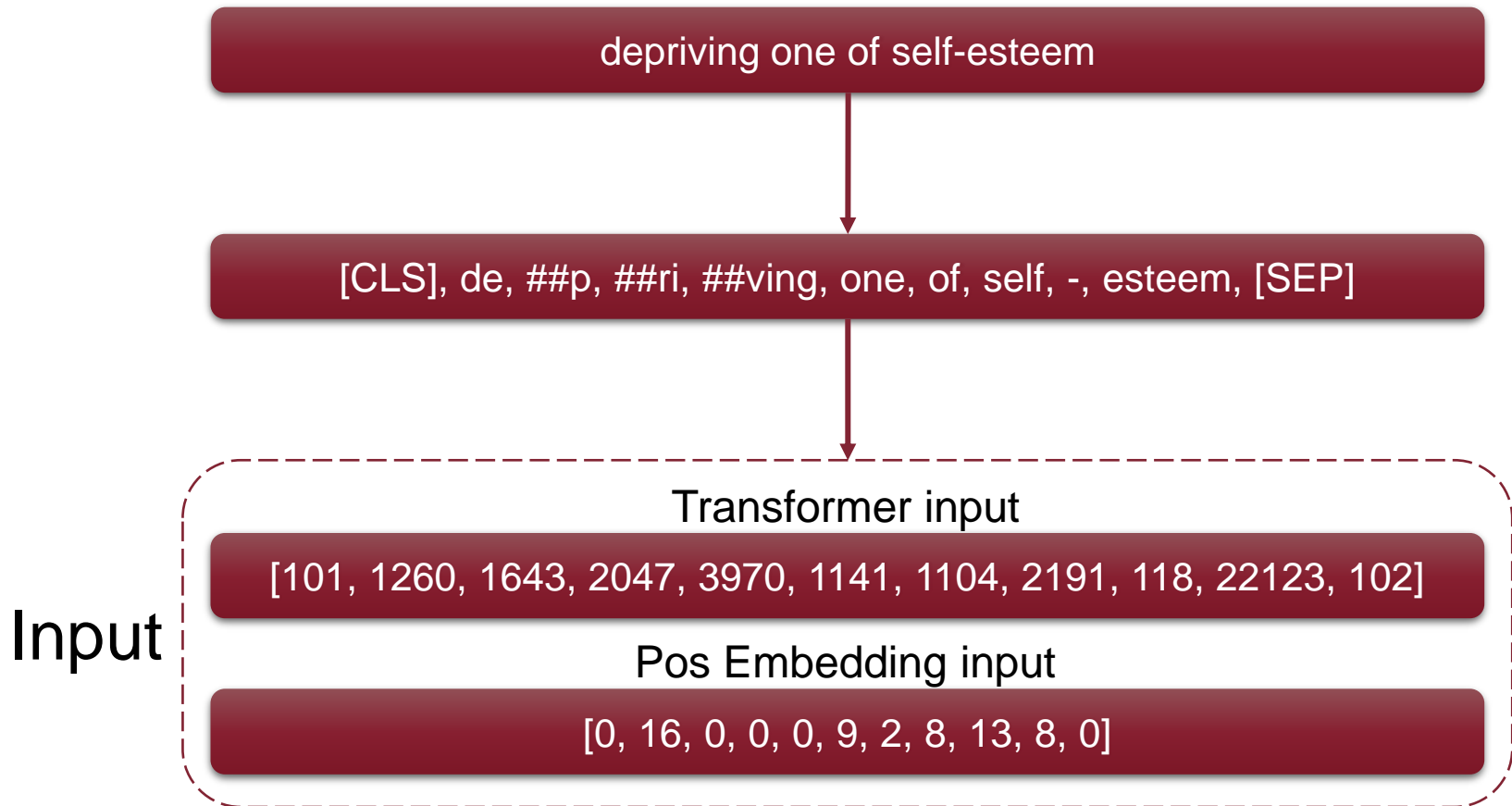
- All the synset in the hyponym tree of the synset event

## Label “not event”

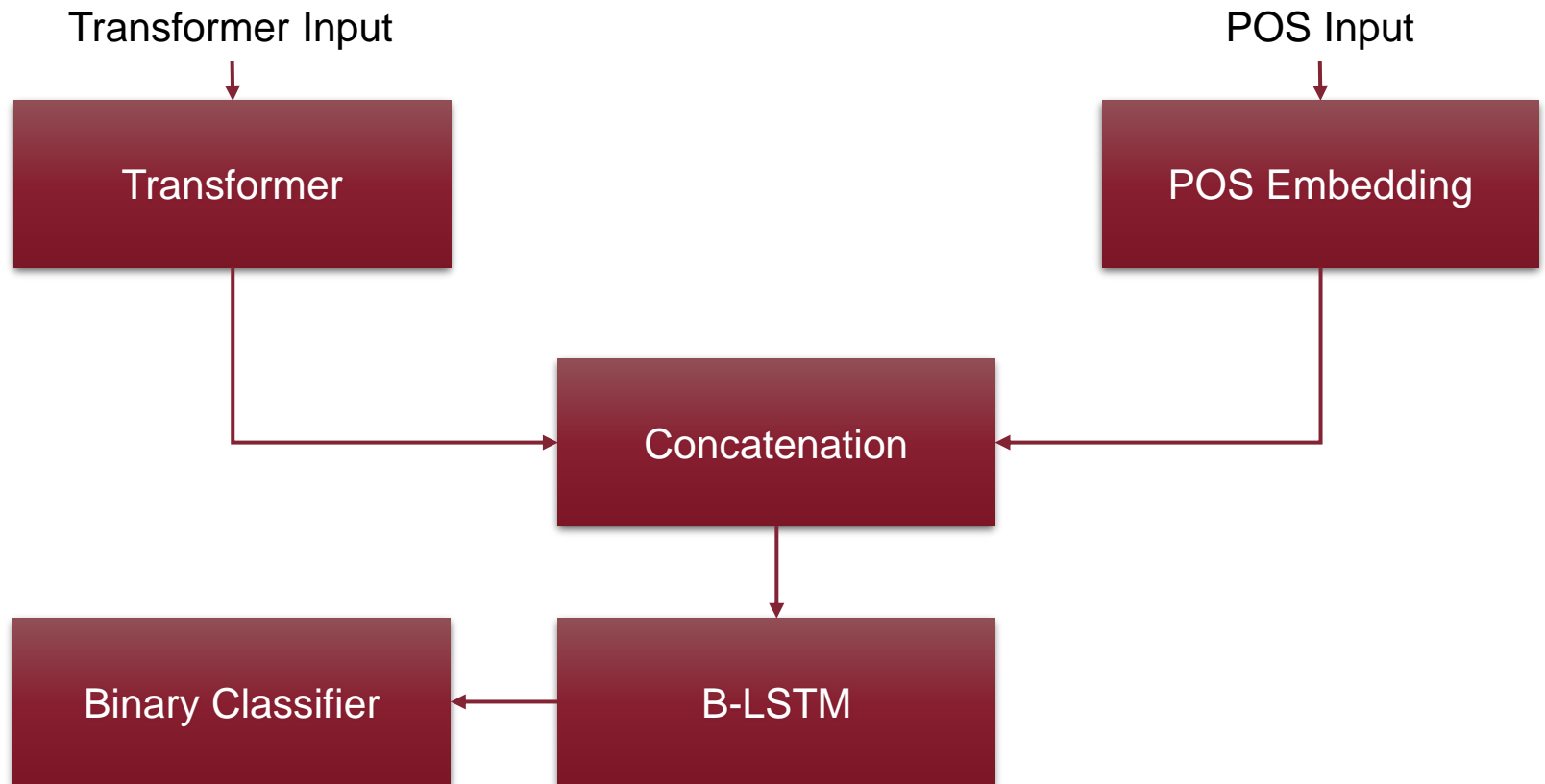
- All synsets in the hyponym tree of some key “not event” synset: e.g. “physical object”
- The "not event" synsets found in the homework are already classified in this way

To balance the dataset prioritize the nominal “event” and “not event” sysents found in the Homework

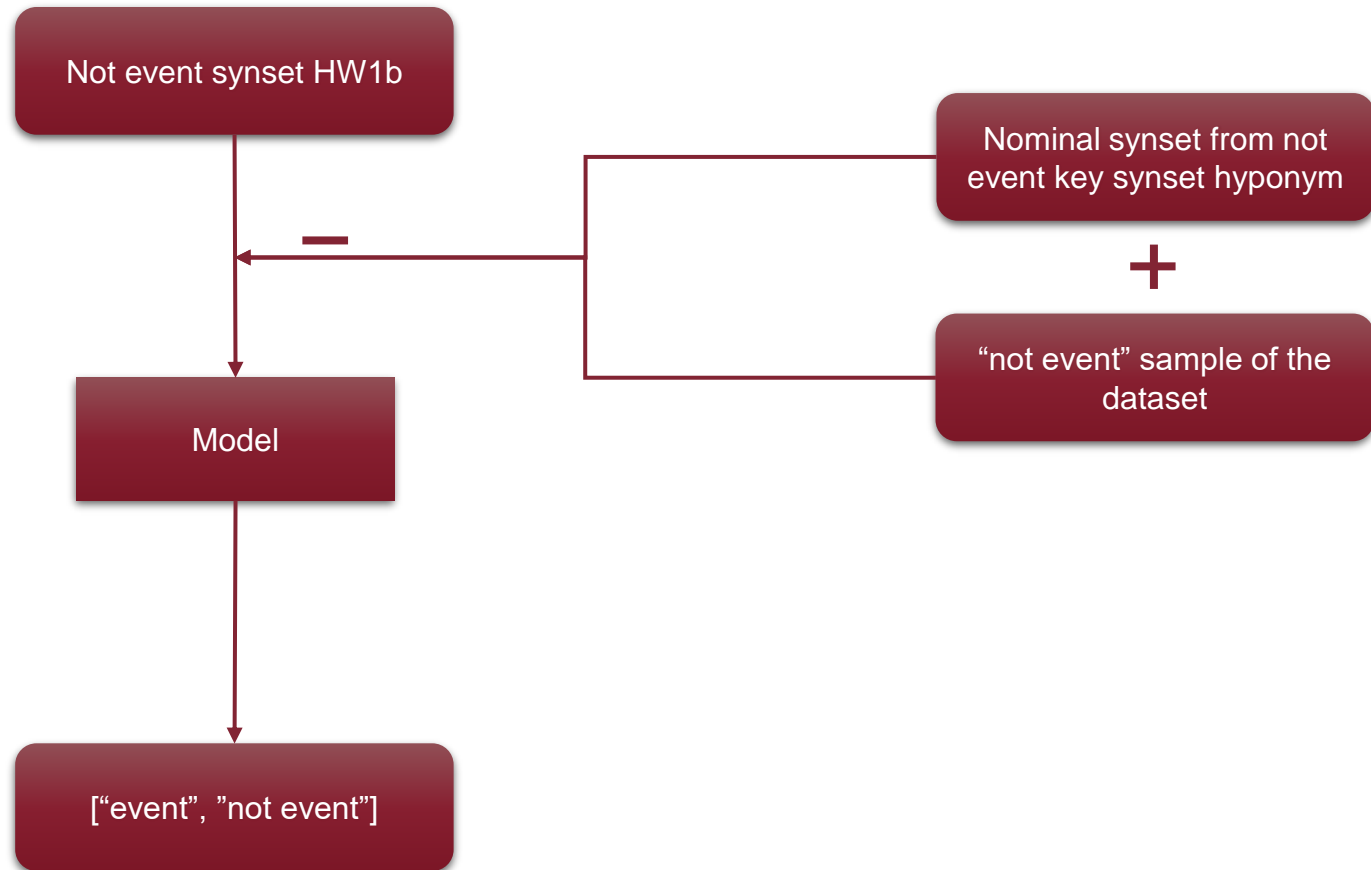
# Model input – Event identification



# Model – Event identification



# Identification



# Event classification

Disambiguate nominal event synsets by using neural networks



# Dataset – Event classification

## Train + Validation + Test

Unambiguous nominal event synsets from:

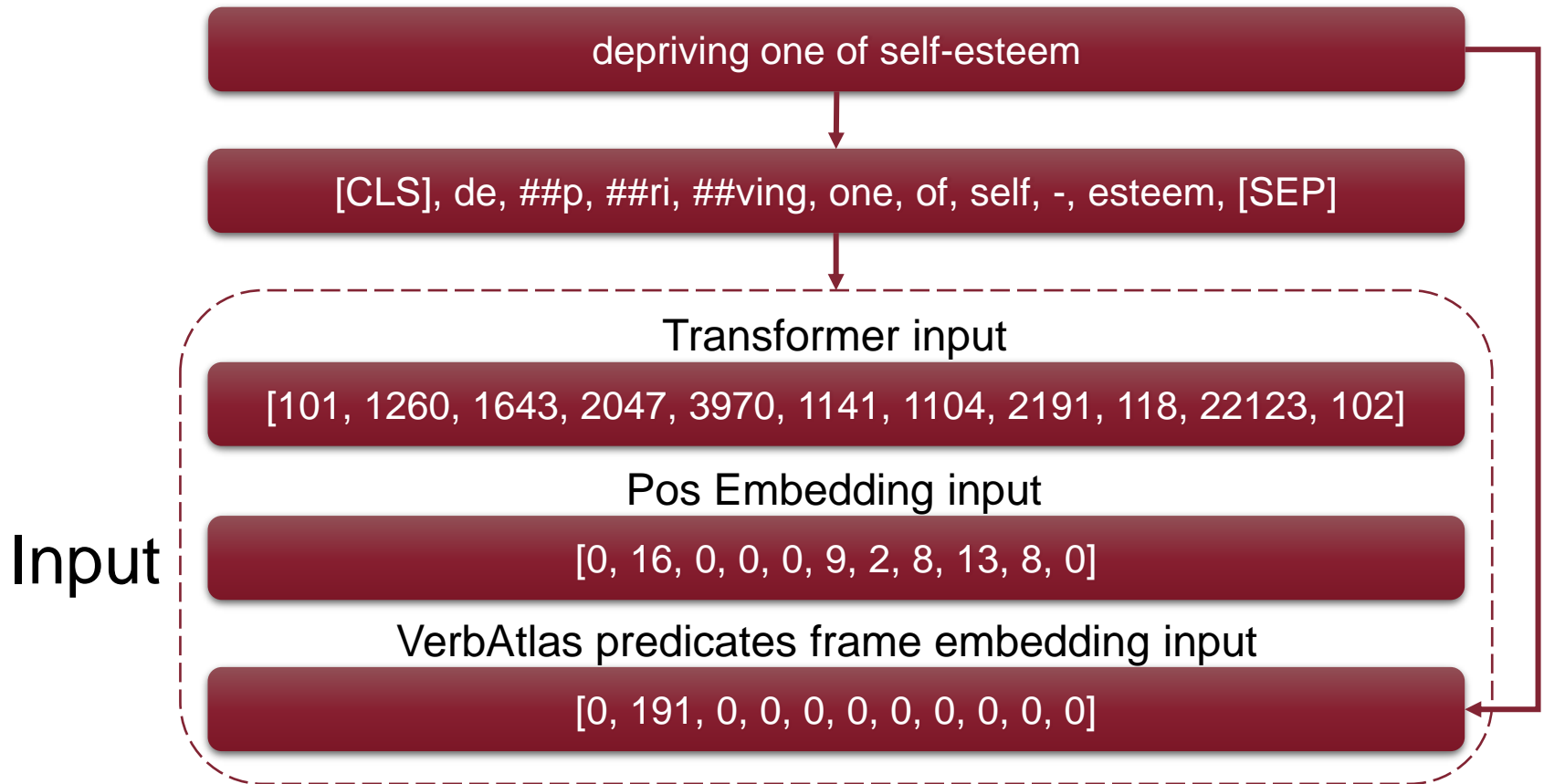
- Homework 1b
- Event identification step

## Disambiguation

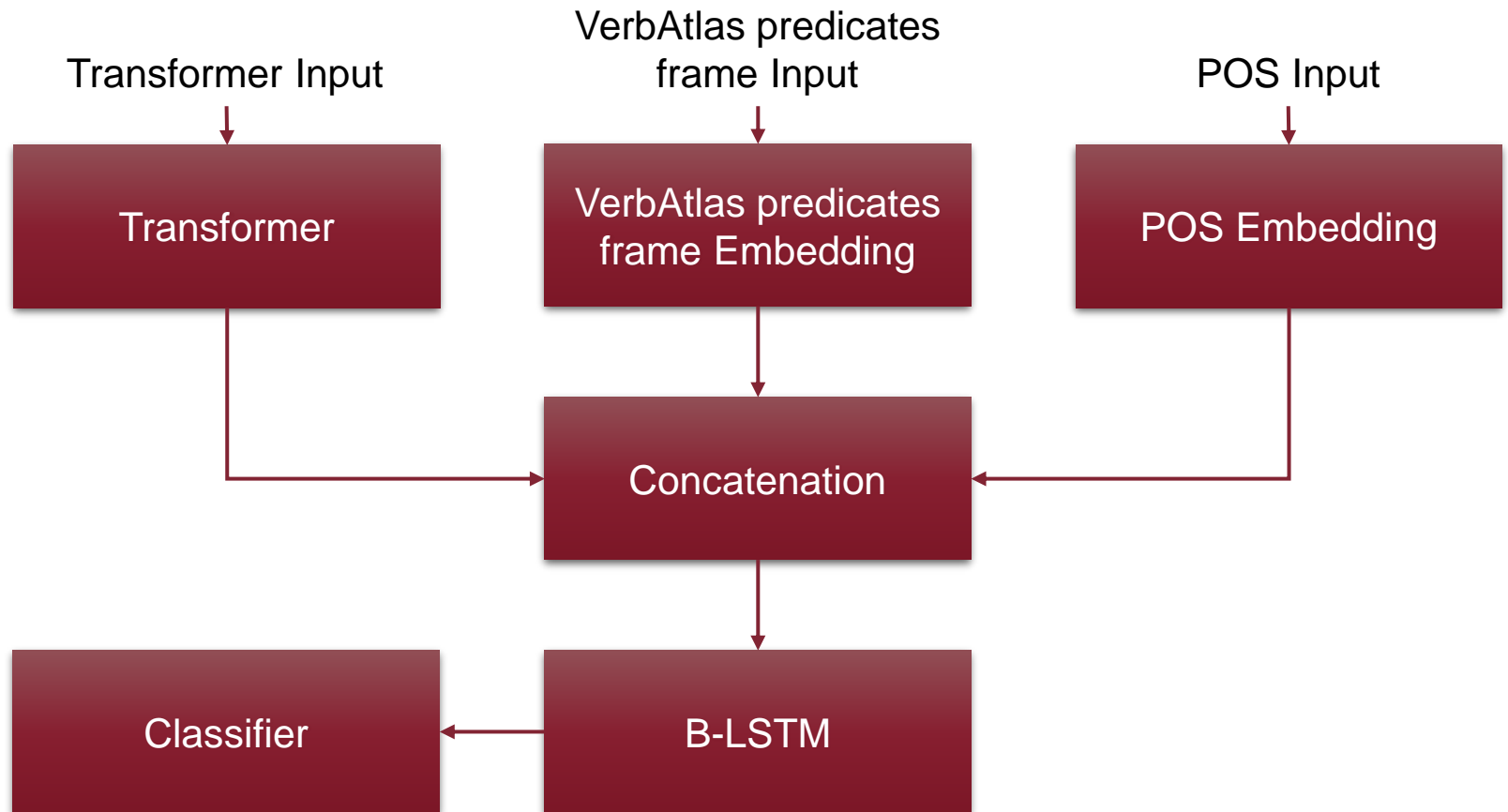
Ambiguous nominal event synsets from:

- Homework 1b
- Event identification step

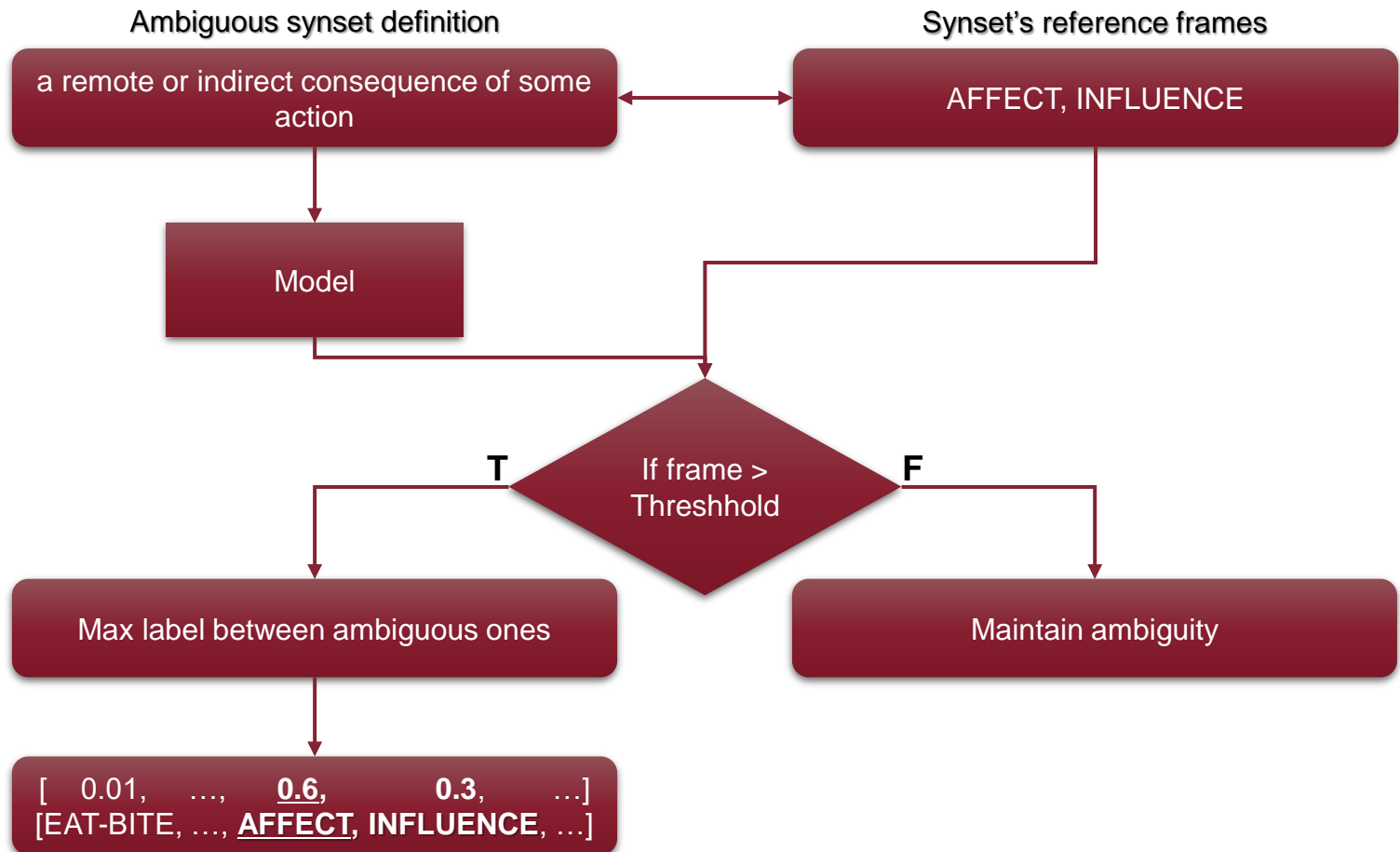
# Model input – Event classification



# Model – Event classification



# Disambiguation



# Evaluation – Identification & Classification

- Model scores:
  - Precision
  - Recall
  - F1
- Identification and classification:
  - Manual checking

# Thanks for your attention!



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