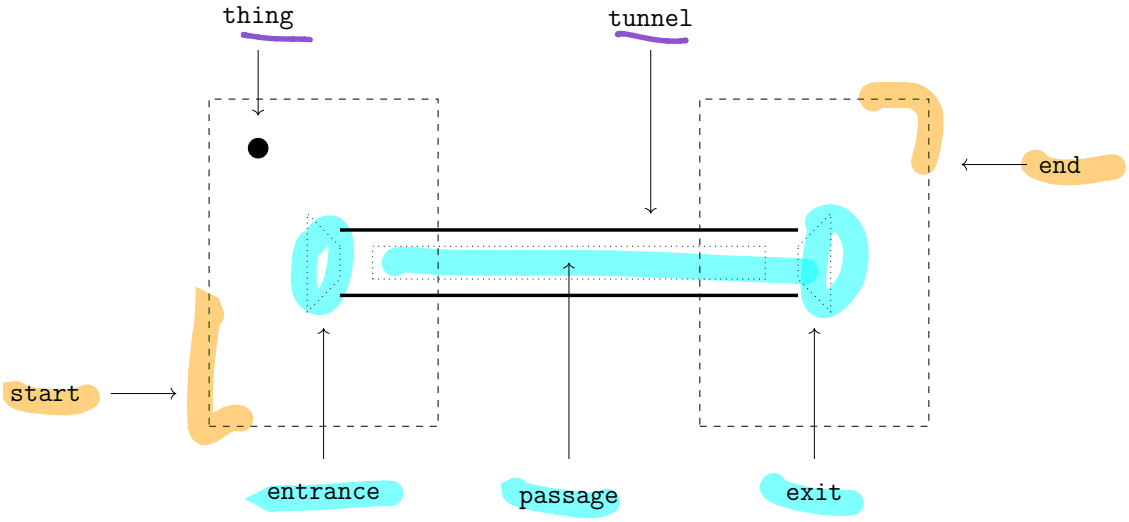
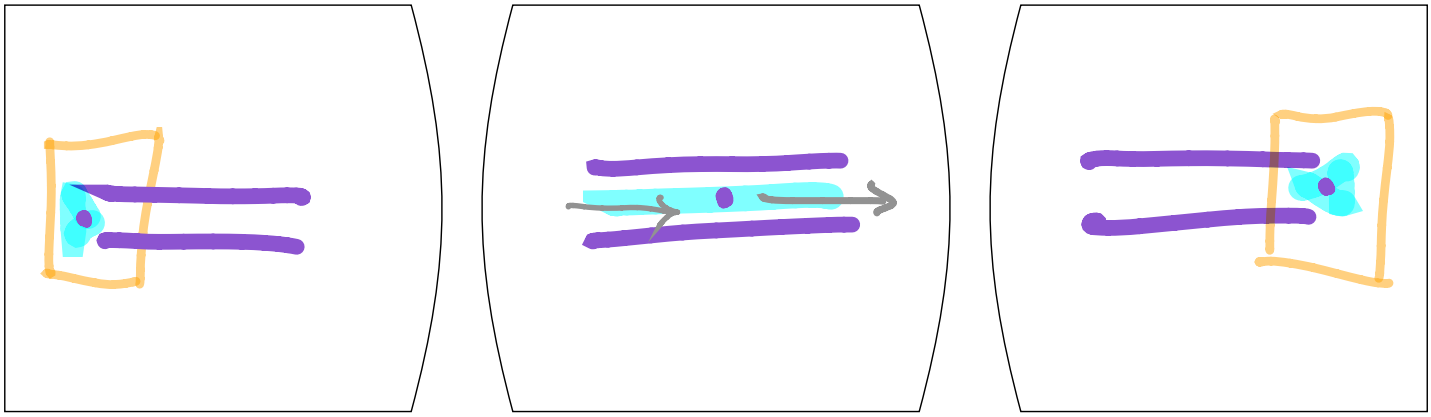
Prof. [redacted]
[redacted]: Diagrammatic Methods in [redacted]
Date: [redacted], 20[redacted]

Problem Sheet [redacted] (due Week [redacted])

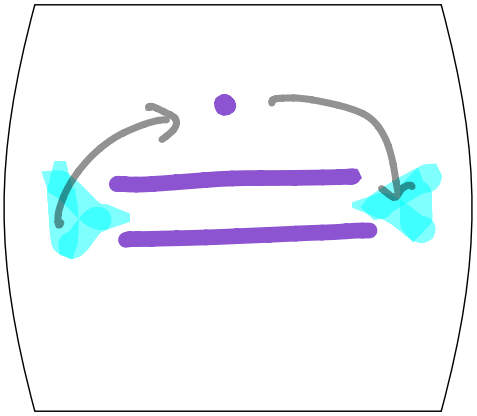
Question 1.
You may assume standard semantics of motion.
Consider the following iconic signature for the `TUNNEL` concept, with two movable shapes (in bold) and two place-indexings (indicated by dashed and dotted lines.)



a) Fill the 3-panel vignette in the `TUNNEL` signature for `thing goes through the tunnel`.



b) Depict an intermediate panel such that its splice **is not** a 3-panel vignette for the same sentence.

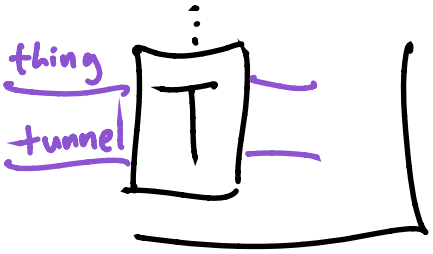


c) Briefly justify your answer for part b).

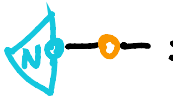
Through ⇒ Across (start → end), but converse doesn't hold.

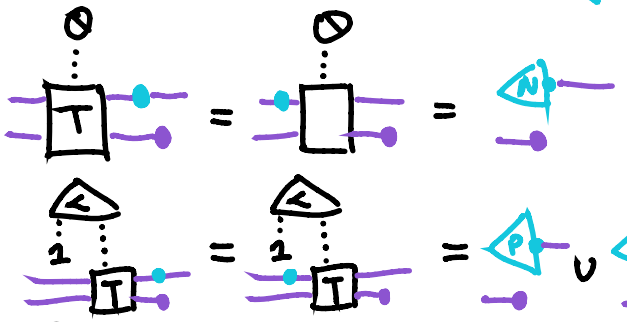
d) Hence, or otherwise, provide process typing and relations for `through` in `TUNNEL`.

Assuming through is dynamic in config space of {thing \ tunnel}

type is: 

we want thing to move in (start & entrance) → pass. → (exit ↓ End) order.

Assume ent. c start, i.e.  [symmetrically for exit c end]

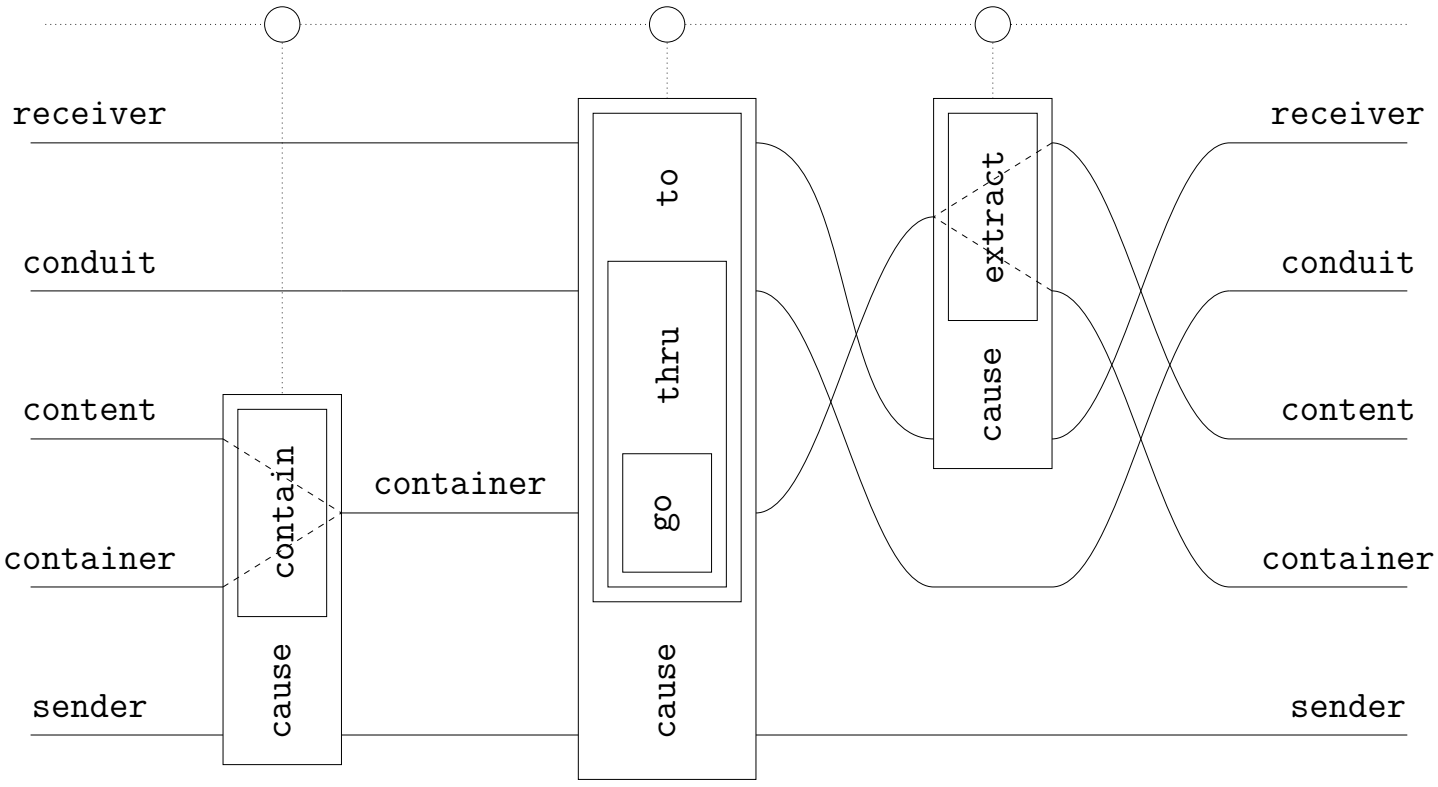


[typing by config-space of rigid mot. in plane.
"At time 0 thing is at entrance"
"At time 1 thing is at exit (by sym.)]

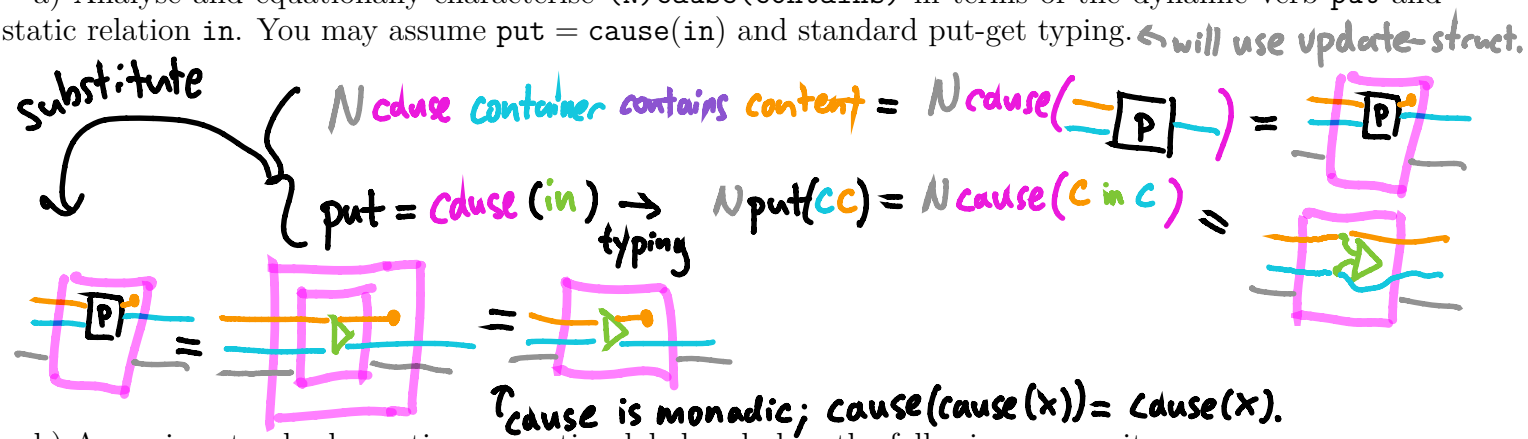
["At time < 1 thing is either at ent. or in passage"
This rules out counterex. in part b) of Q.]

Question 2.

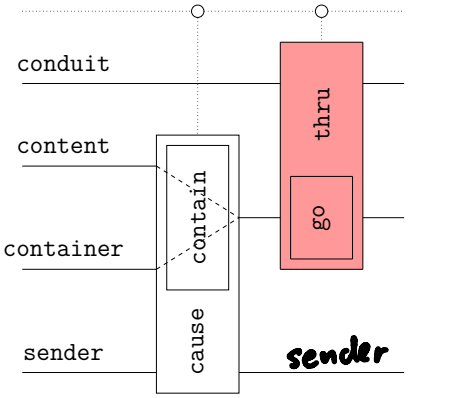
Consider the following to be the characteristic process of the `CONDUIT` metaphor.



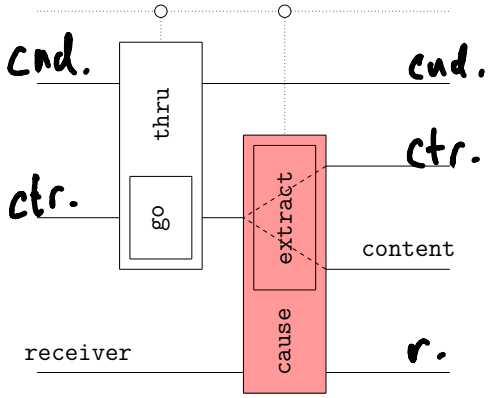
a) Analyse and equationally characterise `(N)cause(contains)` in terms of the dynamic verb `put` and static relation `in`. You may assume `put` = `cause(in)` and standard put-get typing.



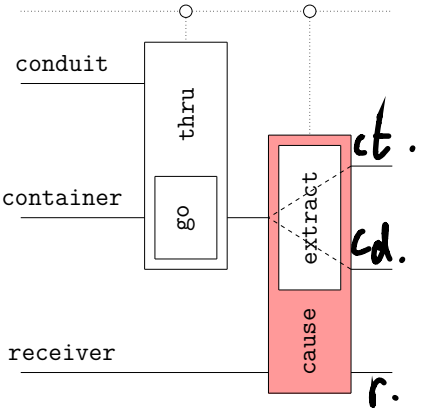
b) Assuming standard negation semantics, label and gloss the following composites.



put in but not go through.
container



gone through but (could/did) not extract from container.



container goes through. contents extracted but not by receiver (e.g. falls out)

c) For each composite, give an example of a matching sentence in the `CONDUIT` metaphor, along with with brief justification.

1. The painstaking speech fell on deaf ears.

J: painstaking speech ⇒ ideas put in words deaf ears ⇒ words did not go through.

2. They heard him, but they didn't listen.

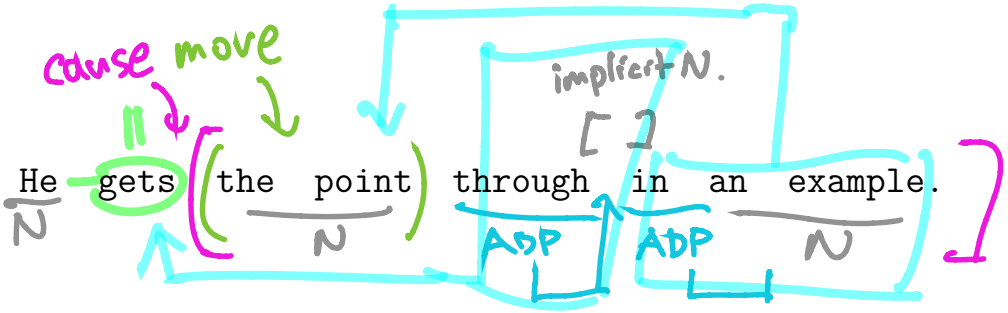
J: heard him → words came through didn't listen → ideas/meaning not extracted from words.

3. His message was crystal-clear.

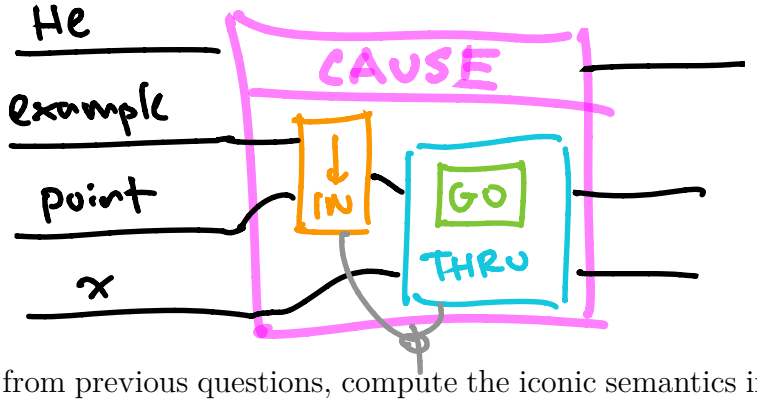
J: crystal-clear ≡ transparent → contents extracted without effort (visible)

Question 3.

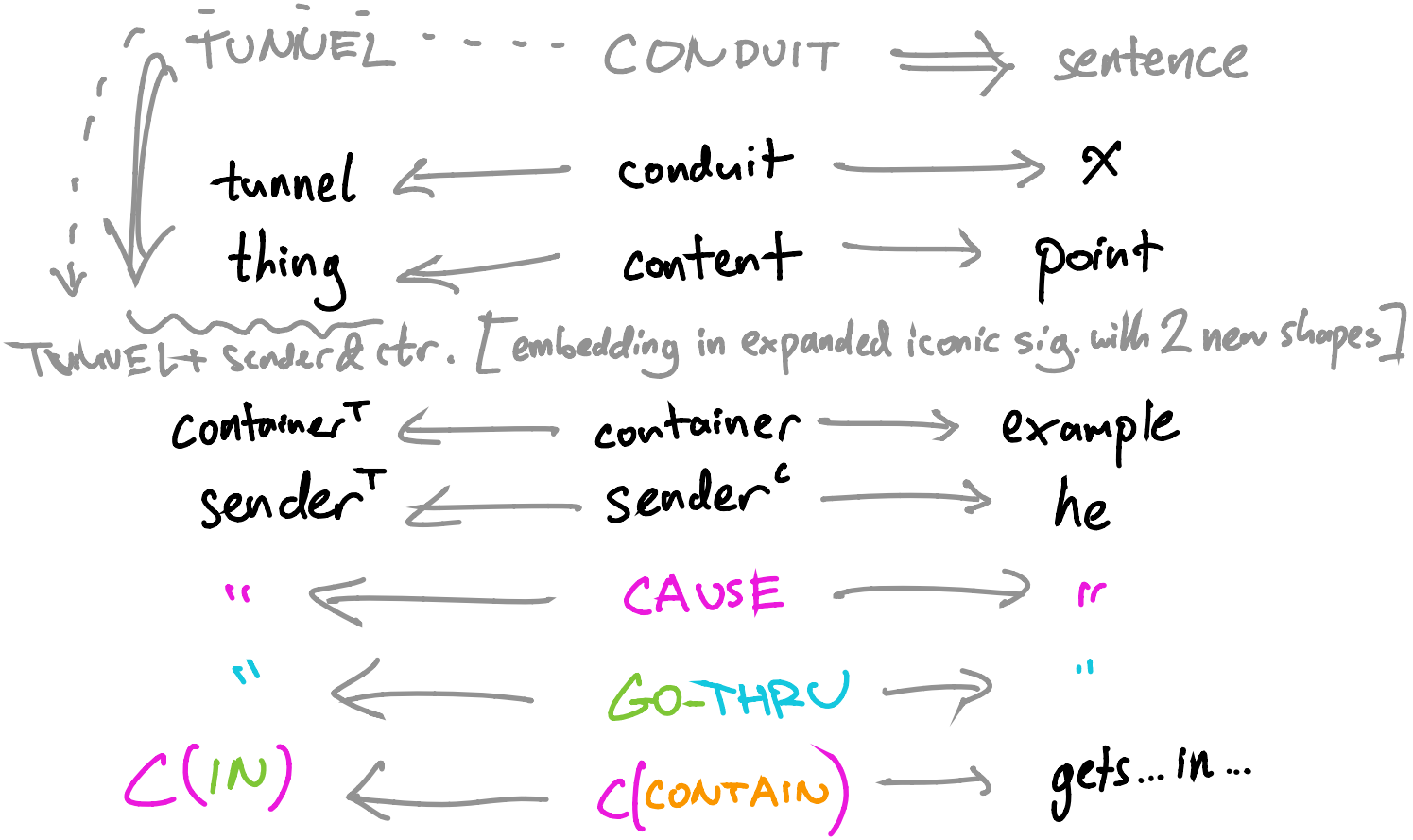
a) Provide a phrasal analysis. You may ignore contextual determiners.



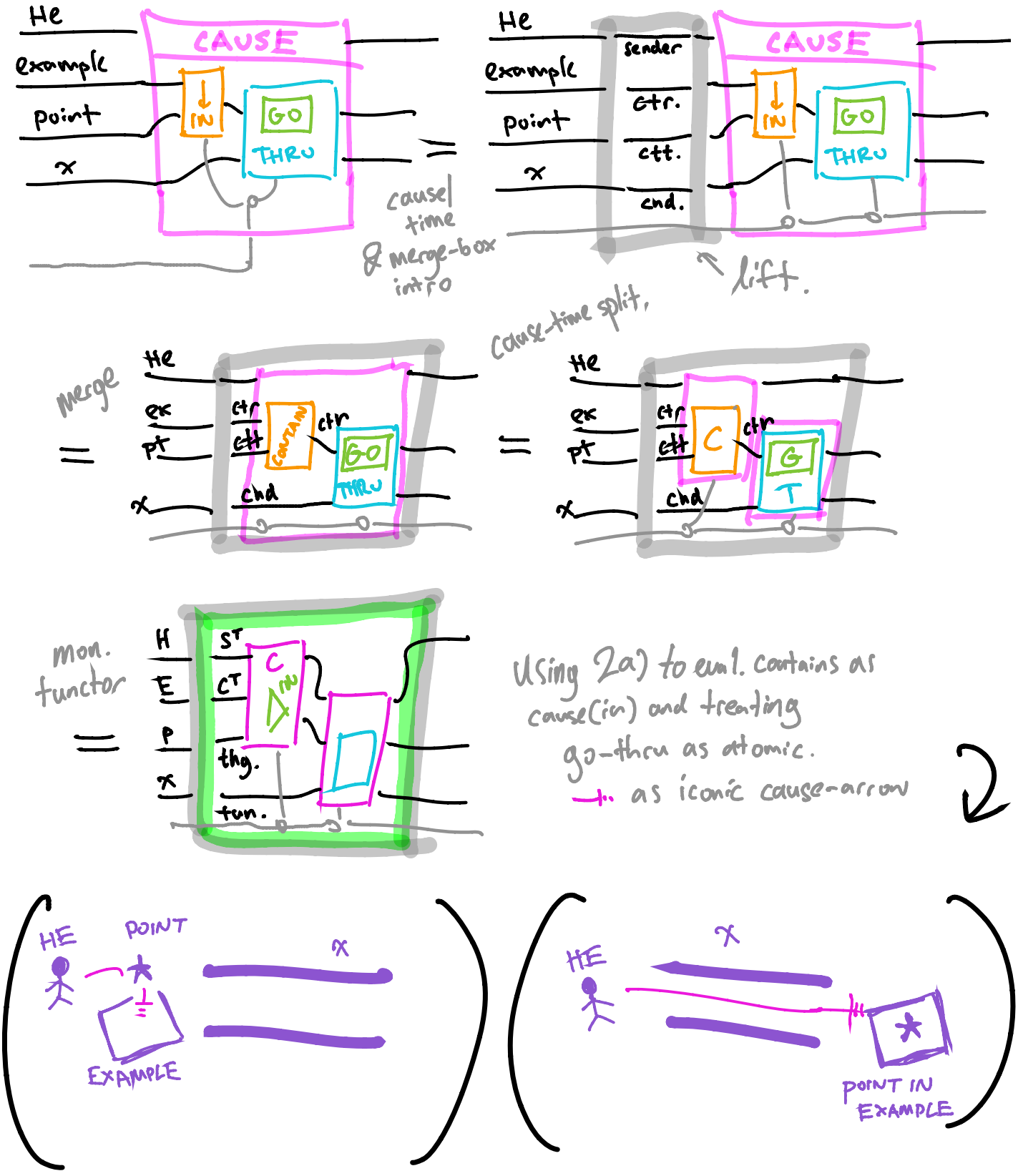
b) Hence, or otherwise, provide a text circuit for the sentence.



c) Using your answers from previous questions, compute the iconic semantics in `TUNNEL` by merge-boxes. You may assume standard causal semantics and notation. Justify nonstandard notations.



(An additional blank page is provided for calculation, should you need it.)



Notices: Due to an ongoing [redacted] weather-event there is a [redacted] infestation in Hall [redacted]. Next week's lectures will take place on [redacted]-[redacted]: a reminder that non-[redacted] students must have their [redacted]-modules [redacted]ed and [redacted]ing AT ALL TIMES WITHOUT EXCEPTION.

[redacted] University