



STRING DIAGRAMS FOR TEXT

VINCENT WANG-MAŚCIANICA

ST. CATHERINE'S COLLEGE
THE UNIVERSITY OF OXFORD
DEPARTMENT OF COMPUTER SCIENCE

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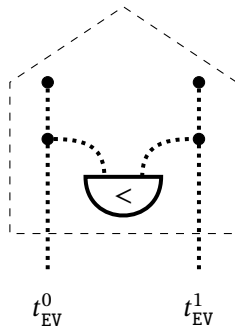
Continuous relations for semantics

We want to reason formally with and about pictorial iconic representations, of the sort one might draw to solve a problem in elementary geometry stated in words, involving topological concepts such as **touching** and **inside**. To do this in string diagrams, I introduce and investigate the category of continuous relations, **ContRel**.

1.0.1 A text-circuit analysis of temporal anaphora

Definition 1.0.1.

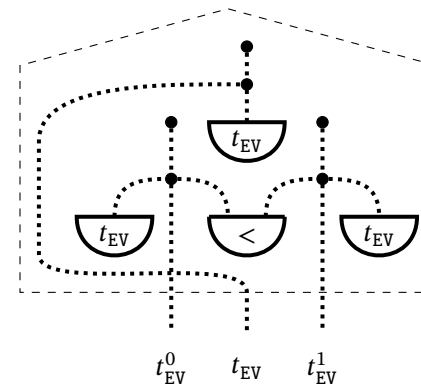
Episodic event
(Interval determined by ordered endpoints)



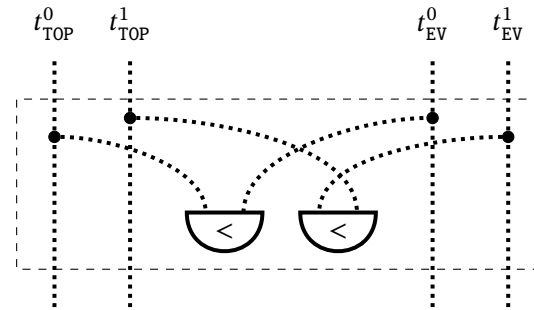
Habitual event (as constraint)
(An arbitrary open set on $[0, 1]$)



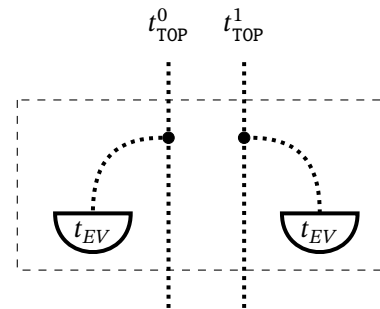
Hybrid event
(Open set with endpoints)



Perfective: $t_{EV} \subseteq t_{TOP}$
 (Event time contained within topic time)



Imperfective: $t_{TOP} \subset t_{EV}$
 (Episodic time contained within habitual event time)



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Bibliography