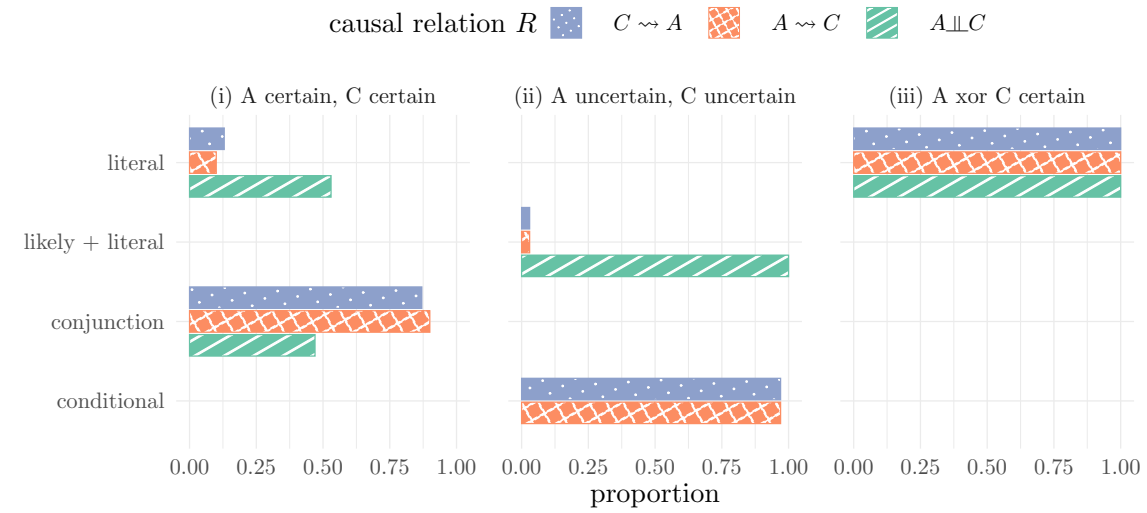
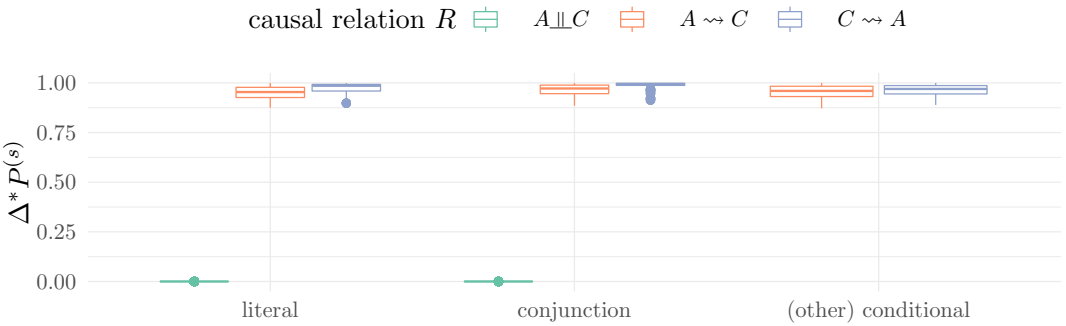
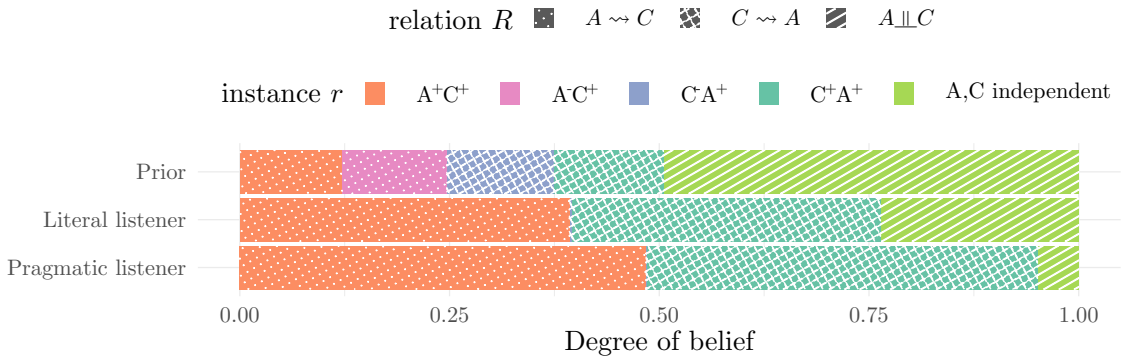
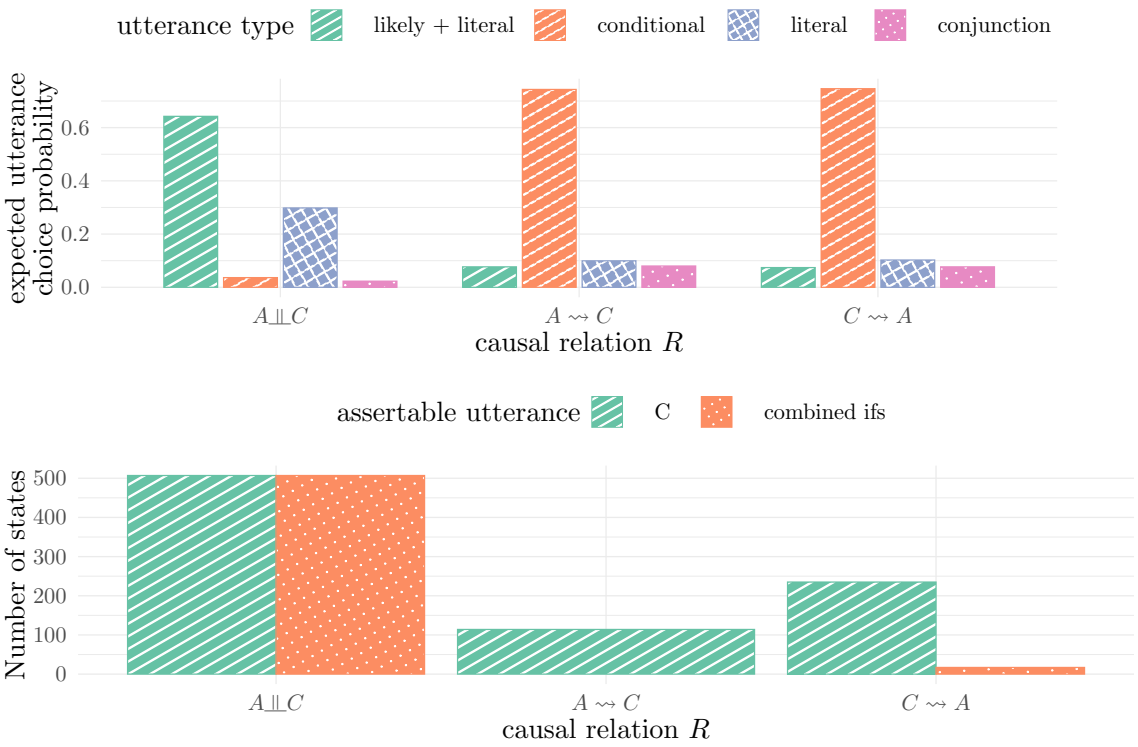
1 3-0.9

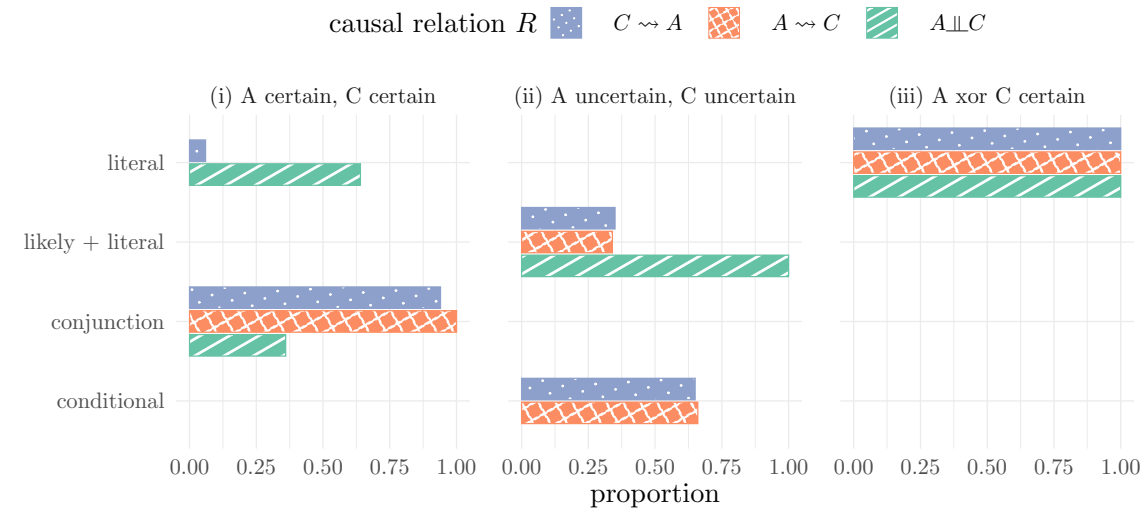

causal relation R
$C \rightsquigarrow A$
$A \rightsquigarrow C$
$A \perp\!\!\!\perp C$
(i) A certain, C certain
(ii) A uncertain, C uncertain
(iii) A xor C certain
literal
likely + literal
conjunction
conditional
0.00 0.25 0.50 0.75 1.00
proportion

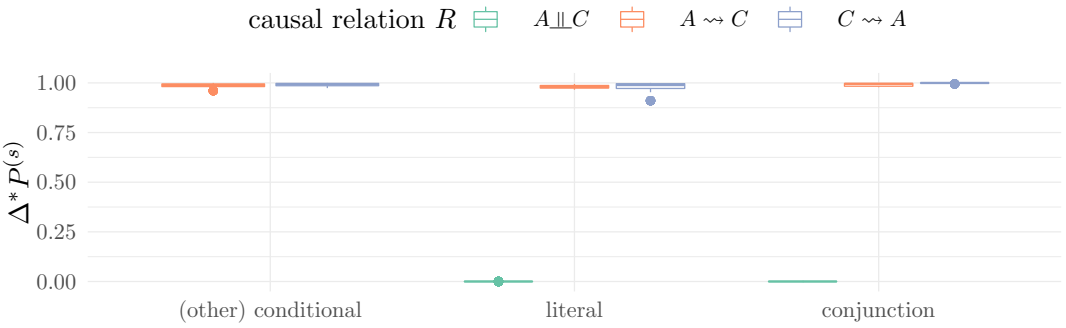

causal relation R
$A \perp\!\!\!\perp C$
$A \rightsquigarrow C$
$C \rightsquigarrow A$
$\Delta^* P(s)$
1.00
0.75
0.50
0.25
0.00
literal
conjunction
(other) conditional

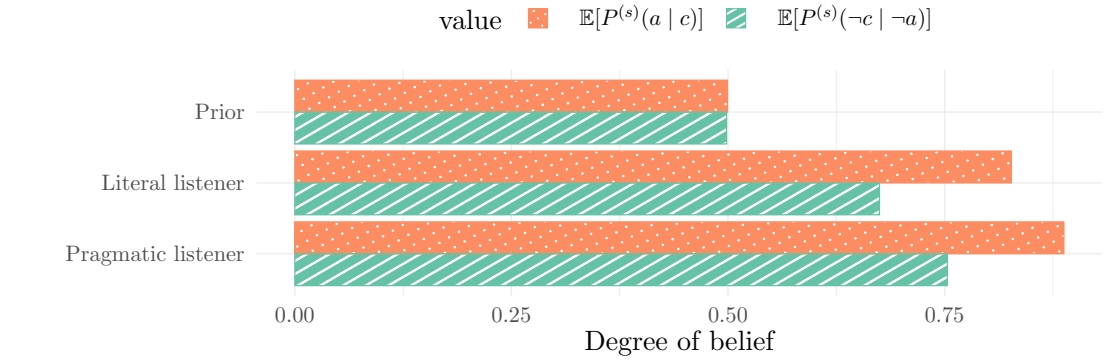

relation R
$A \rightsquigarrow C$
$C \rightsquigarrow A$
$A \perp\!\!\!\perp C$
instance r
A^+C^+
A^-C^+
C^-A^+
C^+A^+
A,C independent
Prior
Literal listener
Pragmatic listener
0.00 0.25 0.50 0.75 1.00
Degree of belief

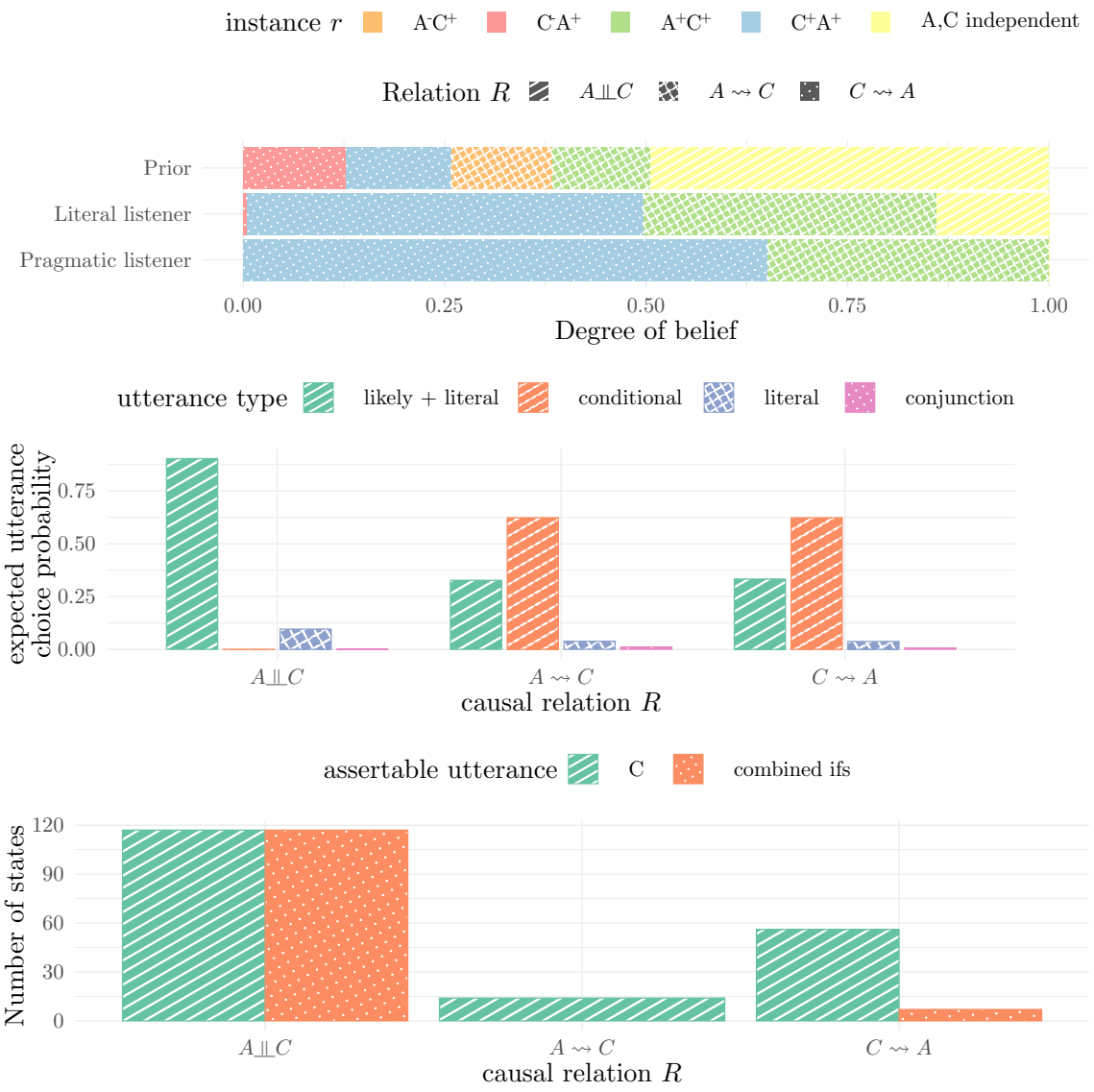

utterance type
likely + literal
conditional
literal
conjunction
expected utterance choice probability
0.0
0.2
0.4
0.6
$A \perp\!\!\!\perp C$
$A \rightsquigarrow C$
$C \rightsquigarrow A$
causal relation R
assertable utterance
C
combined ifs
Number of states
0
100
200
300
400
500
$A \perp\!\!\!\perp C$
$A \rightsquigarrow C$
$C \rightsquigarrow A$
causal relation R

2 10-0.975

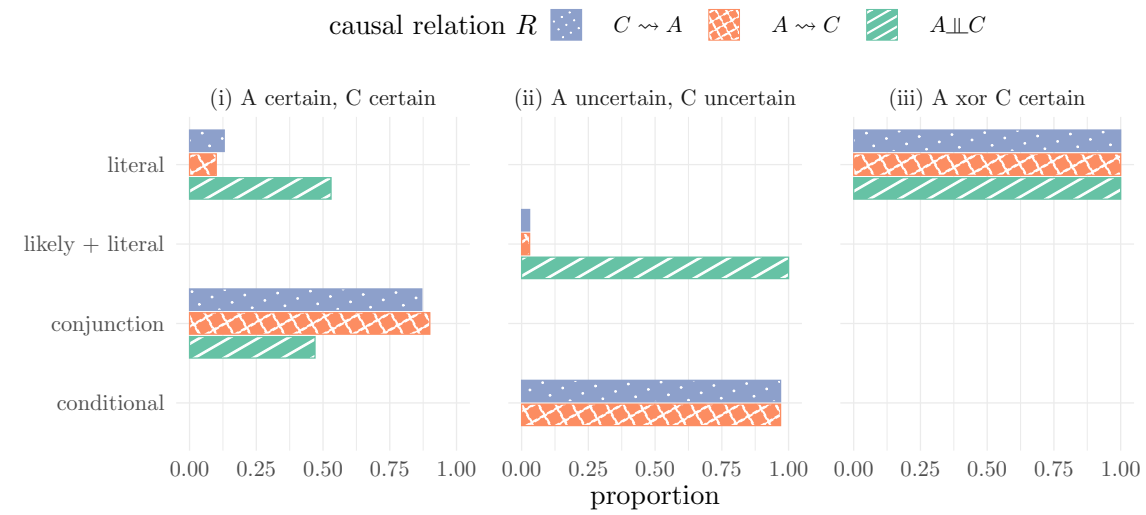

causal relation R
$C \rightsquigarrow A$
$A \rightsquigarrow C$
$A \perp\!\!\!\perp C$
(i) A certain, C certain
(ii) A uncertain, C uncertain
(iii) A xor C certain
literal
likely + literal
conjunction
conditional
0.00
0.25
0.50
0.75
1.00
proportion

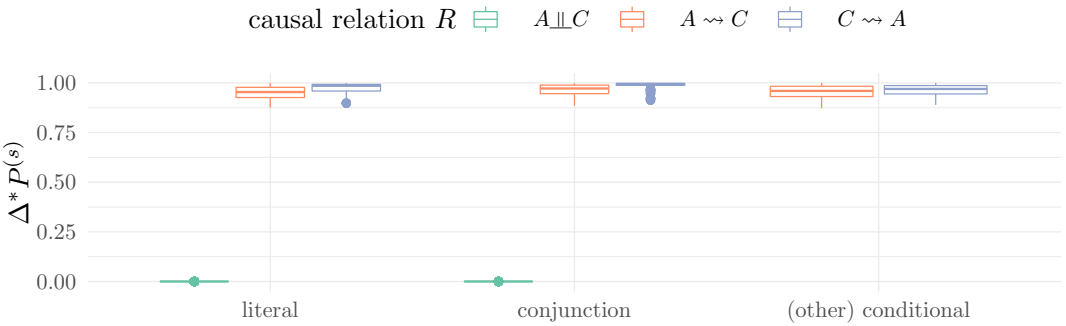

causal relation R
$A \perp\!\!\!\perp C$
$A \rightsquigarrow C$
$C \rightsquigarrow A$
$\Delta^* P^{(s)}$
1.00
0.75
0.50
0.25
0.00
(other) conditional
literal
conjunction

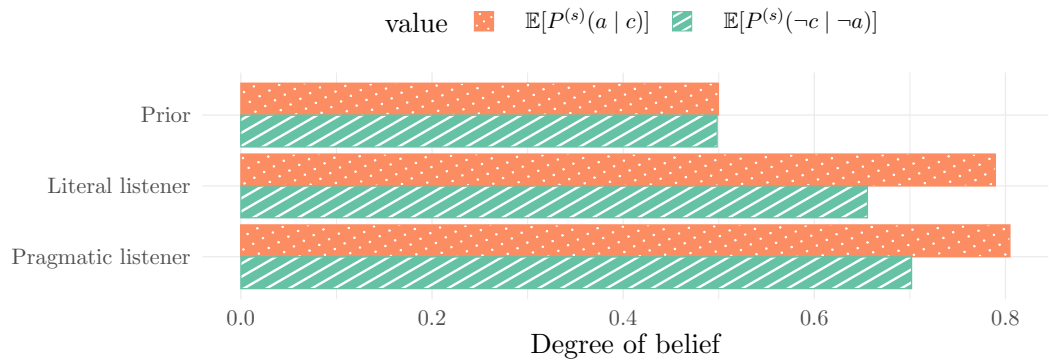

value
$\mathbb{E}[P^{(s)}(a \mid c)]$
$\mathbb{E}[P^{(s)}(\neg c \mid \neg a)]$
Prior
Literal listener
Pragmatic listener
0.00
0.25
0.50
0.75
Degree of belief

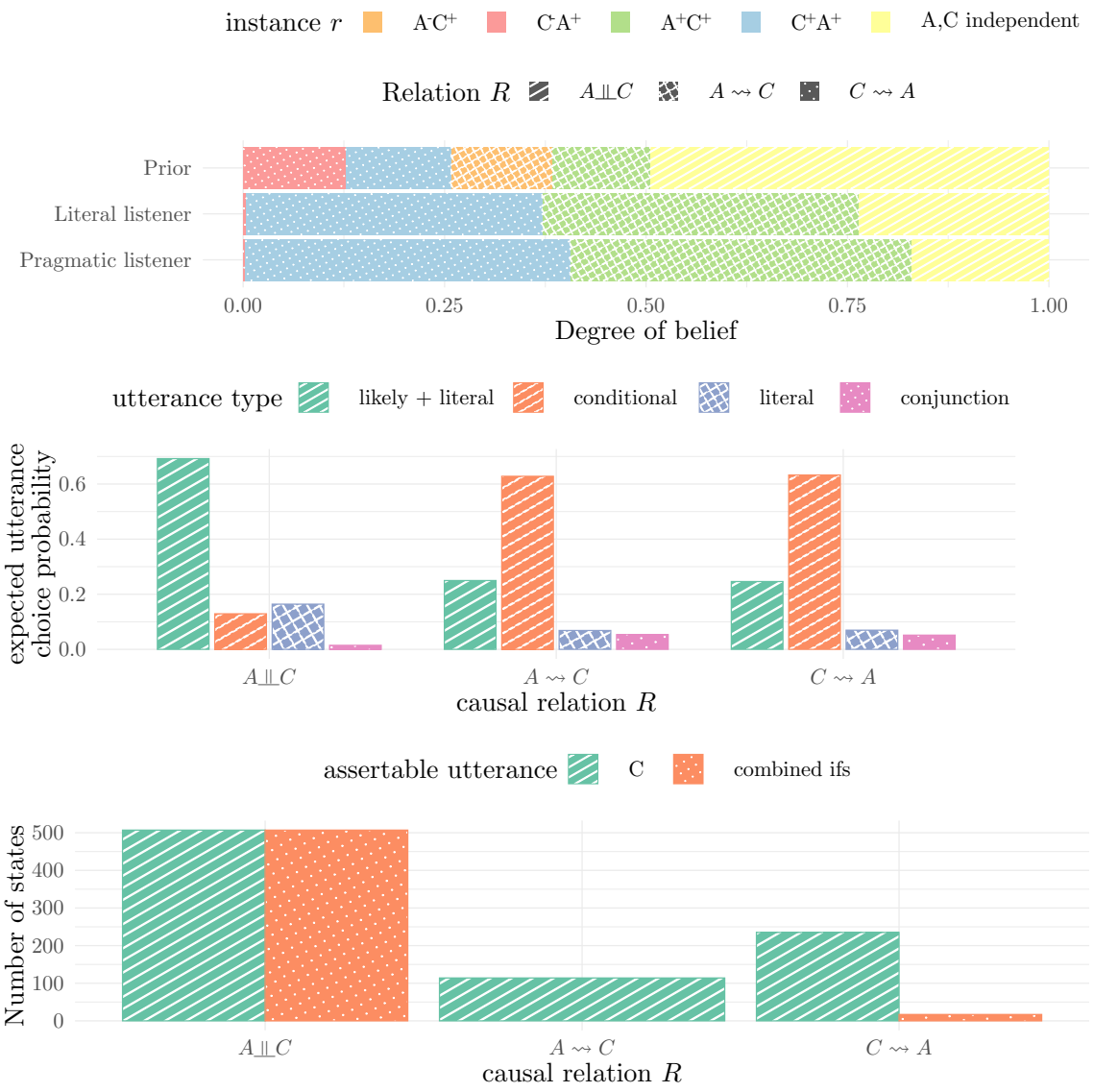

instance r
A-C+
C-A+
A+C+
C+A+
A,C independent
Relation R
$A \perp\!\!\!\perp C$
$A \rightsquigarrow C$
$C \rightsquigarrow A$
Prior
Literal listener
Pragmatic listener
0.00
0.25
0.50
0.75
1.00
Degree of belief
utterance type
likely + literal
conditional
literal
conjunction
expected utterance choice probability
0.00
0.25
0.50
0.75
$A \perp\!\!\!\perp C$
$A \rightsquigarrow C$
$C \rightsquigarrow A$
causal relation R
assertable utterance
C
combined ifs
Number of states
0
30
60
90
120
$A \perp\!\!\!\perp C$
$A \rightsquigarrow C$
$C \rightsquigarrow A$
causal relation R

3 1-0.9


causal relation R
$C \rightsquigarrow A$
$A \rightsquigarrow C$
$A \perp\!\!\!\perp C$
(i) A certain, C certain
(ii) A uncertain, C uncertain
(iii) A xor C certain
literal
likely + literal
conjunction
conditional
0.00 0.25 0.50 0.75 1.00
proportion


causal relation R
$A \perp\!\!\!\perp C$
$A \rightsquigarrow C$
$C \rightsquigarrow A$
$\Delta^* P^{(s)}$
1.00
0.75
0.50
0.25
0.00
literal
conjunction
(other) conditional


value
$\mathbb{E}[P^{(s)}(a \mid c)]$
$\mathbb{E}[P^{(s)}(\neg c \mid \neg a)]$
Prior
Literal listener
Pragmatic listener
0.0 0.2 0.4 0.6 0.8
Degree of belief


instance r
A-C+
C-A+
A+C+
C+A+
A,C independent
Relation R
$A \perp\!\!\!\perp C$
$A \rightsquigarrow C$
$C \rightsquigarrow A$
Prior
Literal listener
Pragmatic listener
0.00
0.25
0.50
0.75
1.00
Degree of belief
utterance type
likely + literal
conditional
literal
conjunction
expected utterance choice probability
0.0
0.2
0.4
0.6
$A \perp\!\!\!\perp C$
$A \rightsquigarrow C$
$C \rightsquigarrow A$
causal relation R
assertable utterance
C
combined ifs
Number of states
0
100
200
300
400
500
$A \perp\!\!\!\perp C$
$A \rightsquigarrow C$
$C \rightsquigarrow A$
causal relation R