```
source("synthesis_maximin.R")
# source("synthesis.R")
```

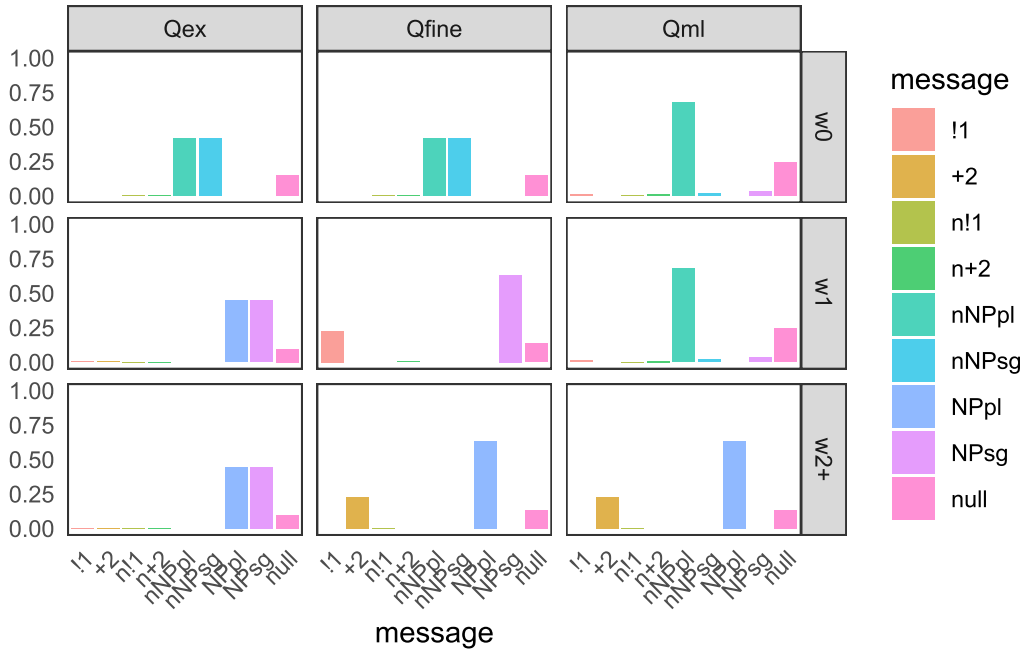
Parameters and initial setup

```
lambda <- 5 # Rationality parameter
n <- 1

cost_orig <- costp()
cost_neg_cheap <- costp(nNPsg = 0.1, nNPpl = 0.1, `n!1` = 2.6)
cost_neg_exa_cheap <- costp(nNPsg = 0.1, nNPpl = 0.1, `!1` = 0.9, `n!1` = 1,
`+2` = 0.9, `n+2` = 1, `null` = -0.1)
# cost_neg_exa_cheap <- costp(nNPsg = 0.1, nNPpl = 0.1, `!1` = 0.9, `n!1` = 1)
# cost_neg_exa_cheap <- costp(nNPsg = 0.1, nNPpl = 0.1, `!1` = 100, `n!1` = 100)
# cost <- cost_neg_cheap
cost <- cost_neg_exa_cheap
# cost <- cost_orig

P_w_flat <- P_wp()
P_w_sg_odd <- P_wp(w1 = 1 / 10)
P_w_pl_odd <- P_wp(`w2+` = 1 / 10)
P_w_sg_odd_extreme <- P_wp(w1 = 1 / 1000)
P_w_pl_odd_extreme <- P_wp(`w2+` = 1 / 1000)

P_Q_flat <- P_Qp()
P_Q_Qml <- P_Qp(Qml = 10)
P_Q_Qex <- P_Qp(Qex = 10)
P_Q_Qfine <- P_Qp(Qfine = 10)

P_i_flat <- P_ip()
P_i_penalize_embedded <- P_ip(ExhExh = 1, ExhLit = 1.1, LitLit = 1.21)
# P_i_penalize_embedded <- P_ip(ExhExh = 1, ExhLit = 1.4, LitLit = 2)
# P_i_penalize_embedded <- P_ip(ExhExh = 1, ExhLit = 3, LitLit = 9)
# P_i <- P_i_penalize_embedded
P_i <- P_i_flat
P_i("iLitLitLitLit")
```

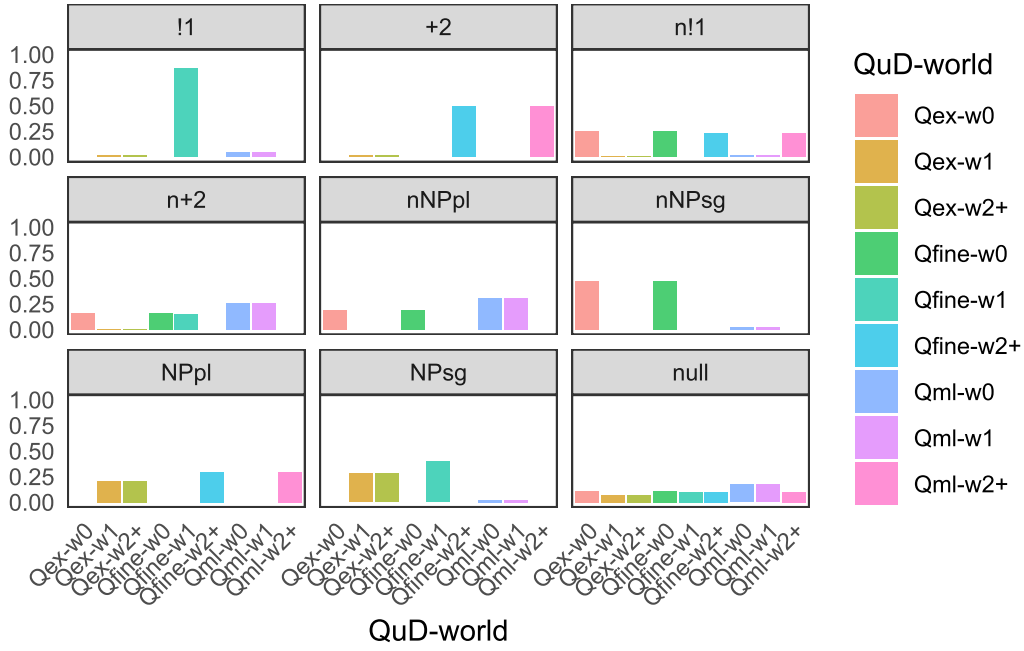
```
[1] 0.0625
```

Flat world and QuD priors

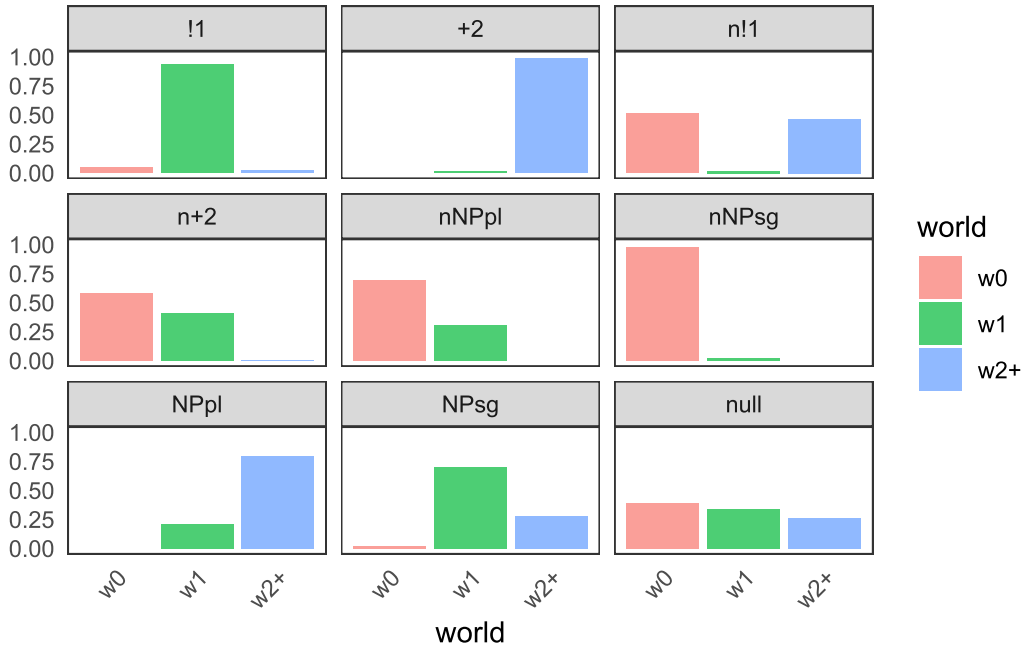
```
P_w <- P_w_flat
P_Q <- P_Q_flat

check_Sn(n)
```




```
check_Ln(n)
```

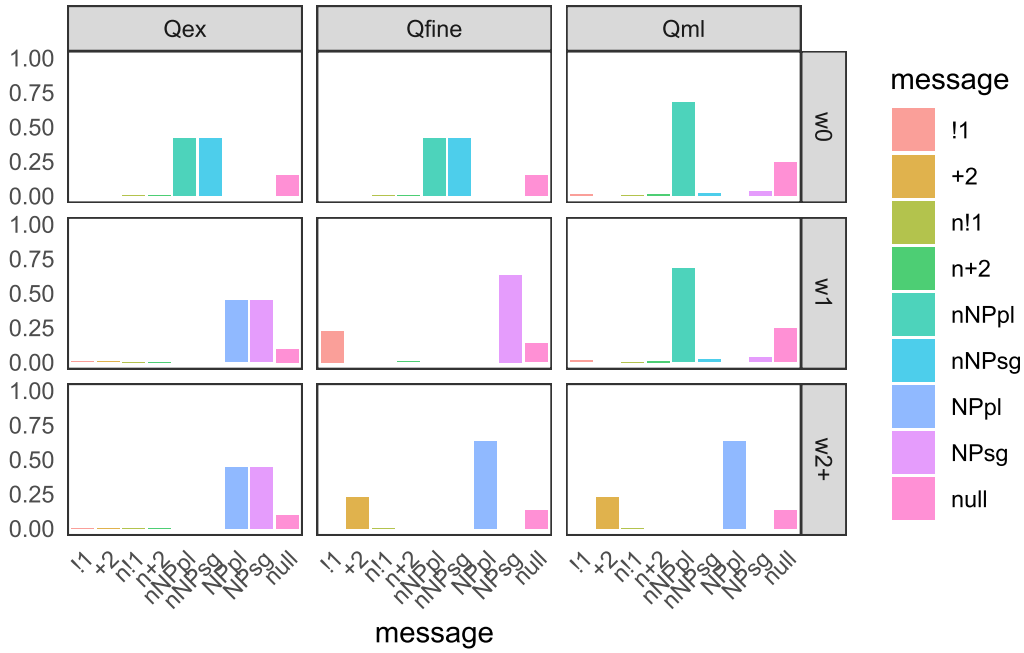



```
check_Ln_w(n)
```

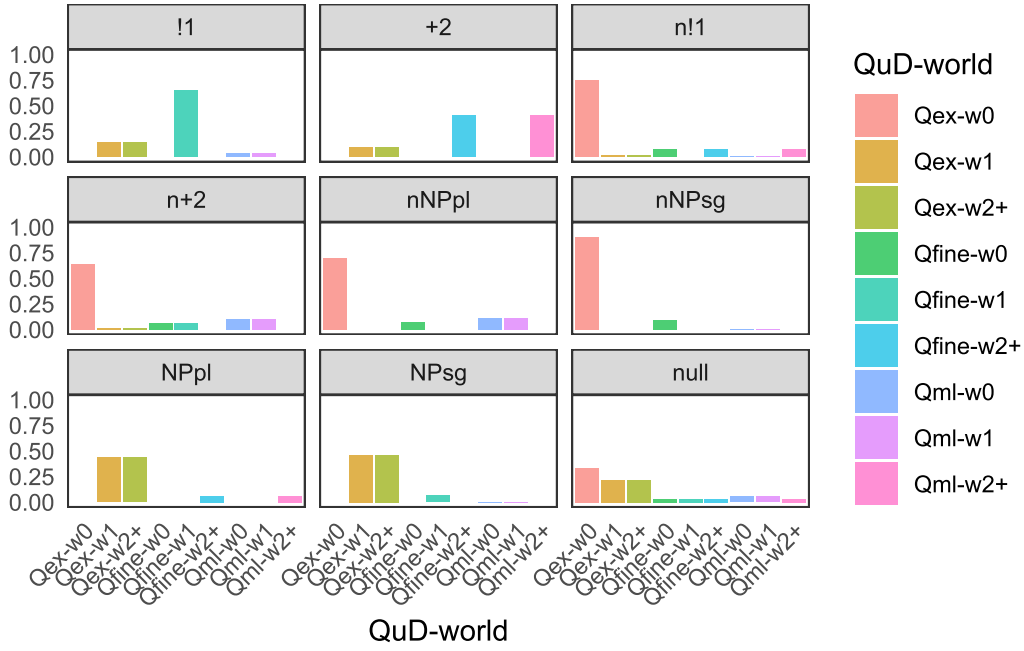


Flat world priors, Qex bias

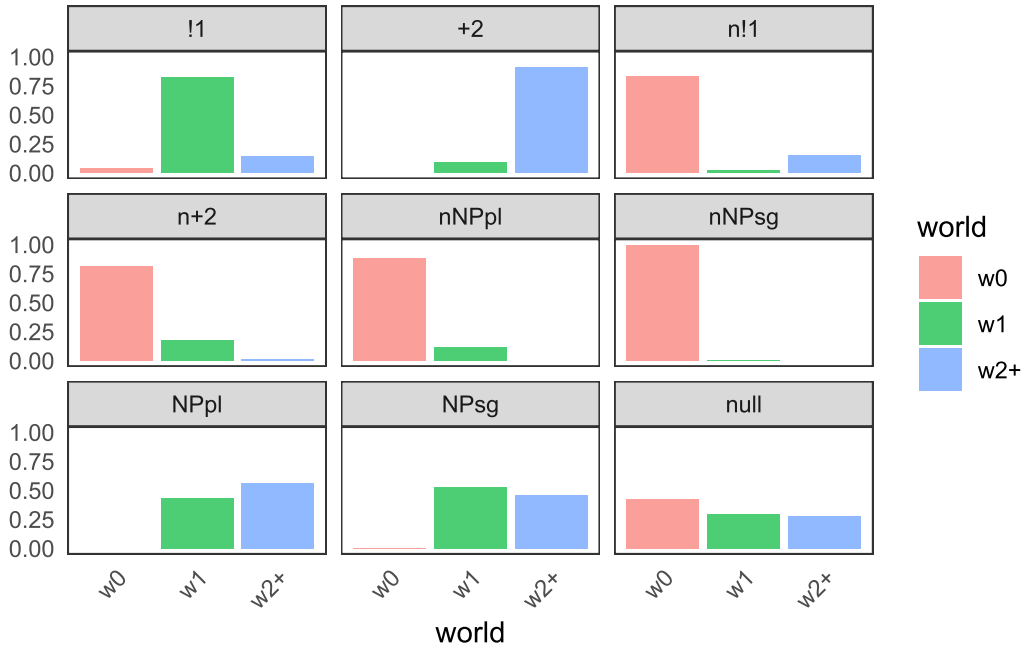
```
P_w <- P_w_flat
P_Q <- P_Q_Qex

check_Sn(n)
```




```
check_Ln(n)
```

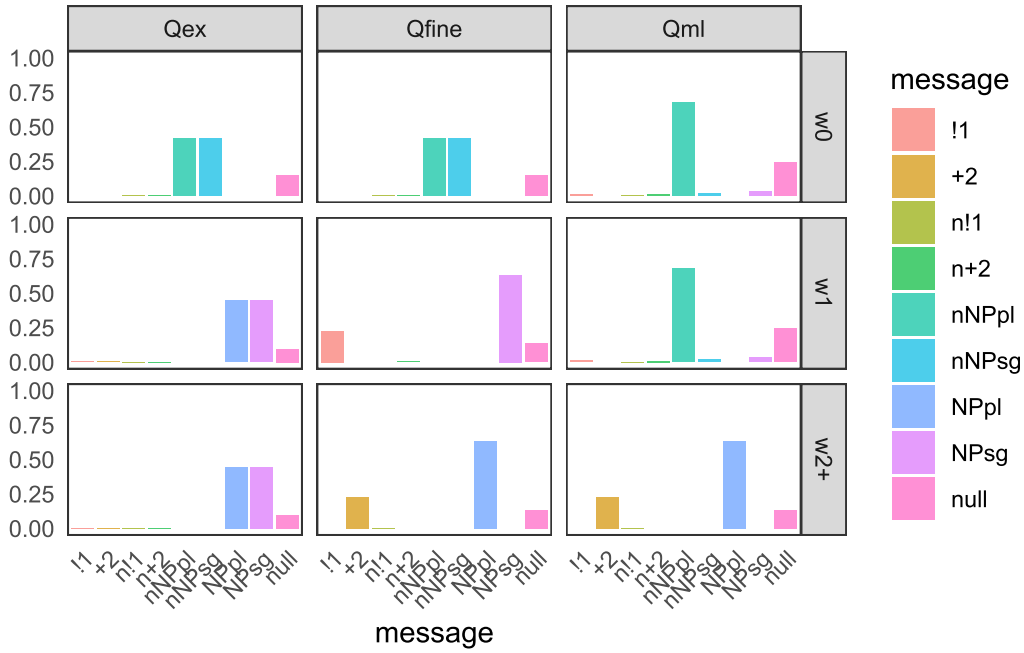



```
check_Ln_w(n)
```

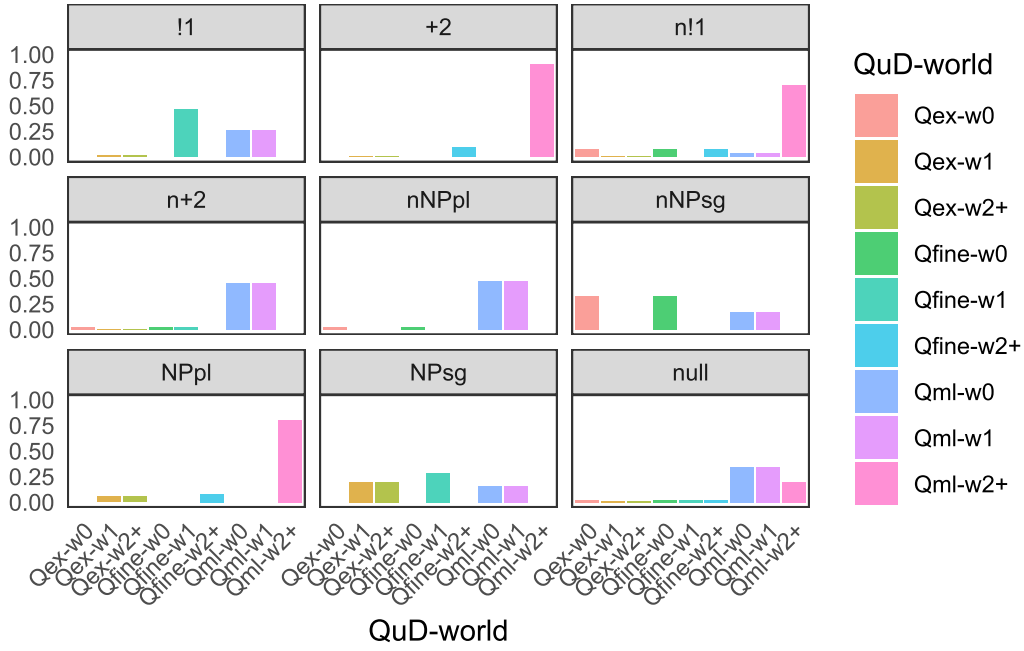


Flat world priors, Qml bias

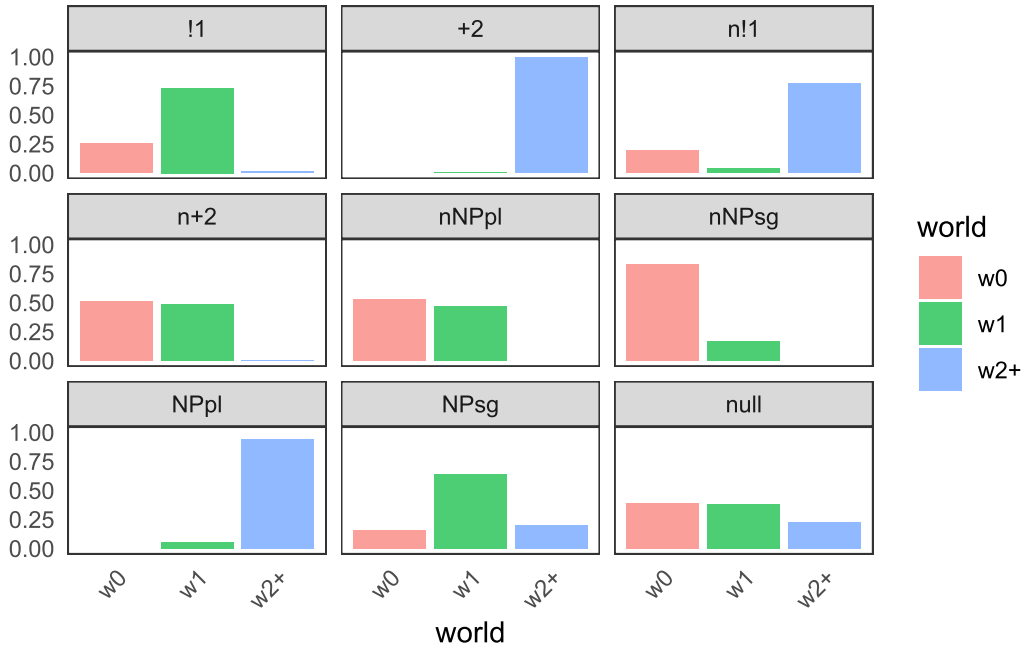
```
P_w <- P_w_flat
P_Q <- P_Q_Qml

check_Sn(n)
```




```
check_Ln(n)
```



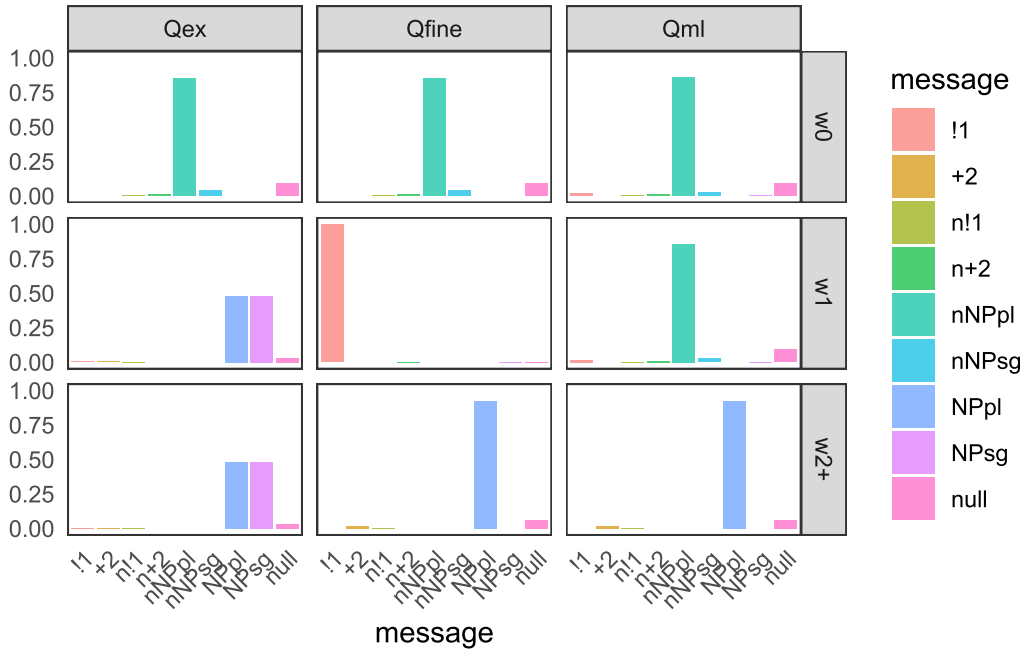

```
check_Ln_w(n)
```



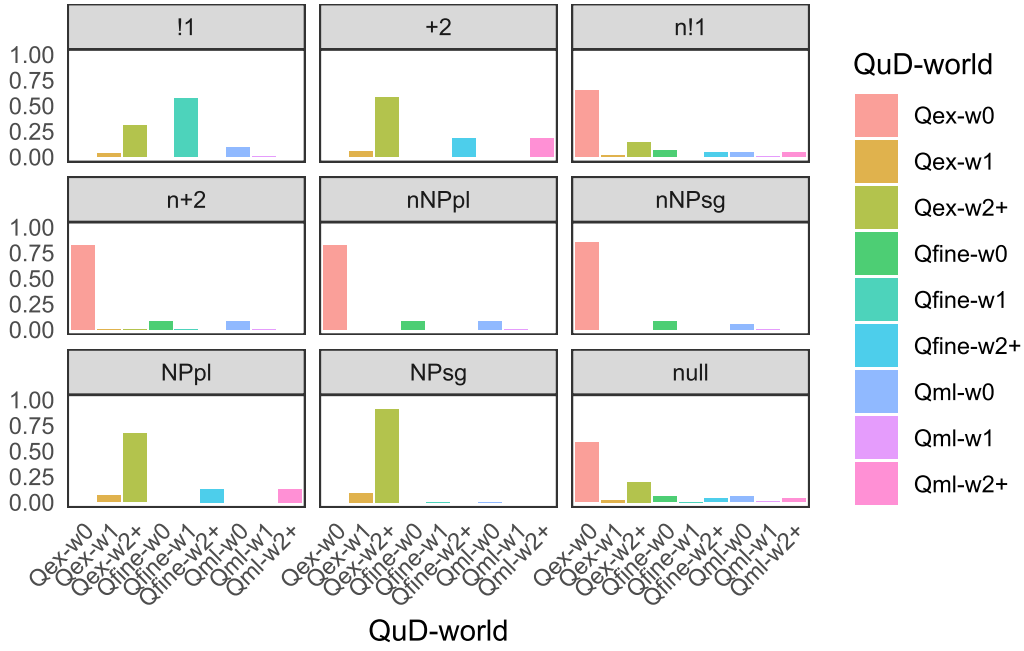

```
# check_Sn_w(2)
```

nNPsg oddness (w1 biased against, Qex bias)

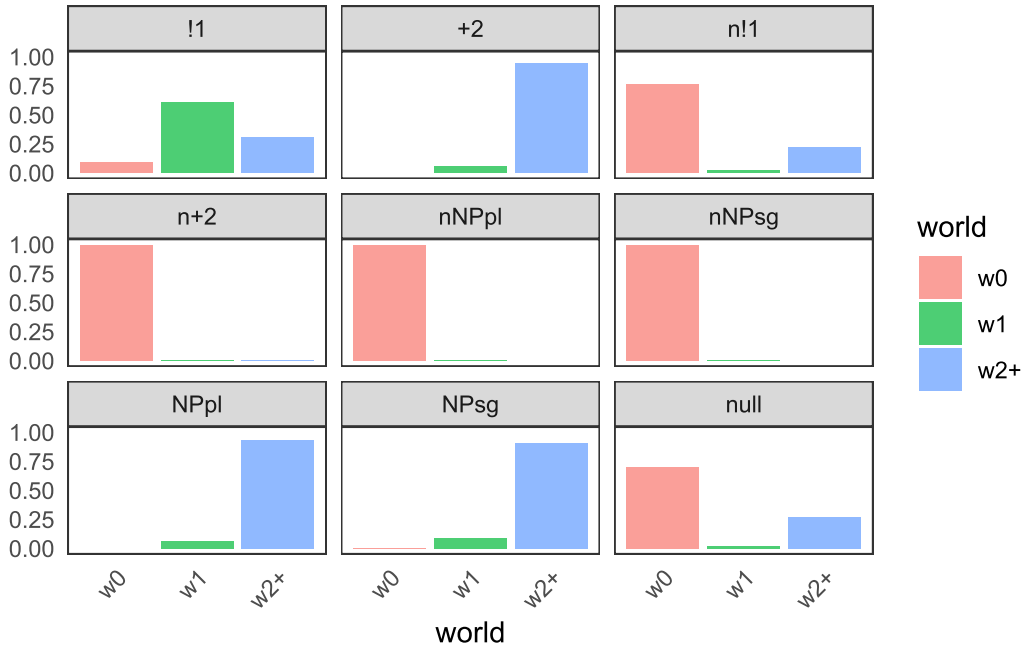
```
P_w <- P_w_sg_odd
P_Q <- P_Q_Qex

check_Sn(n)
```




```
check_Ln(n)
```




```
check_Ln_w(n)
```

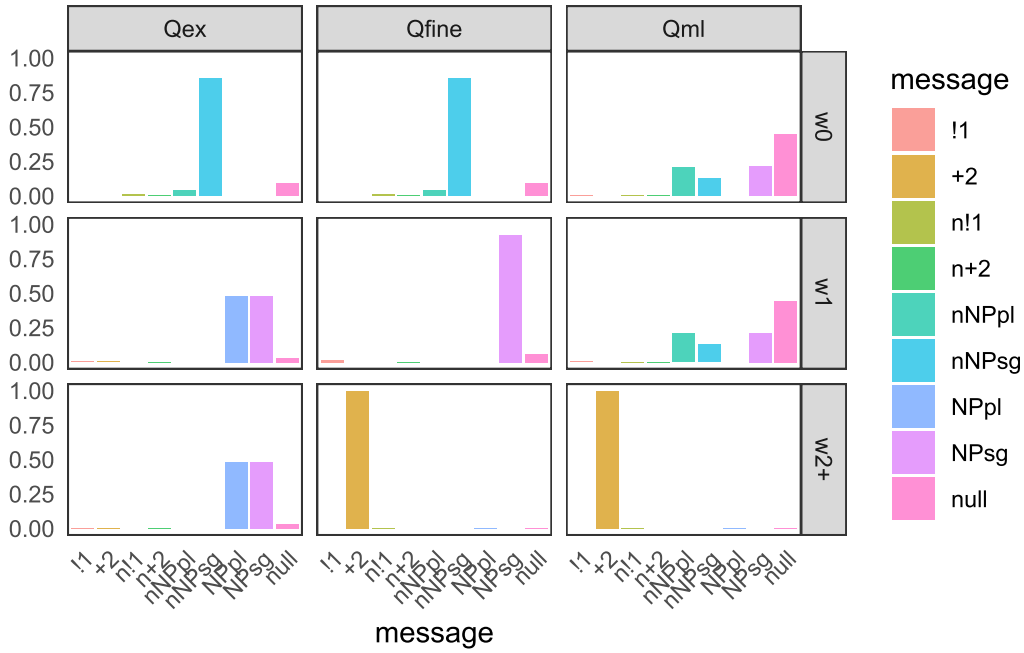


nNPpl oddness (w2+ biased againt, Qex bias)

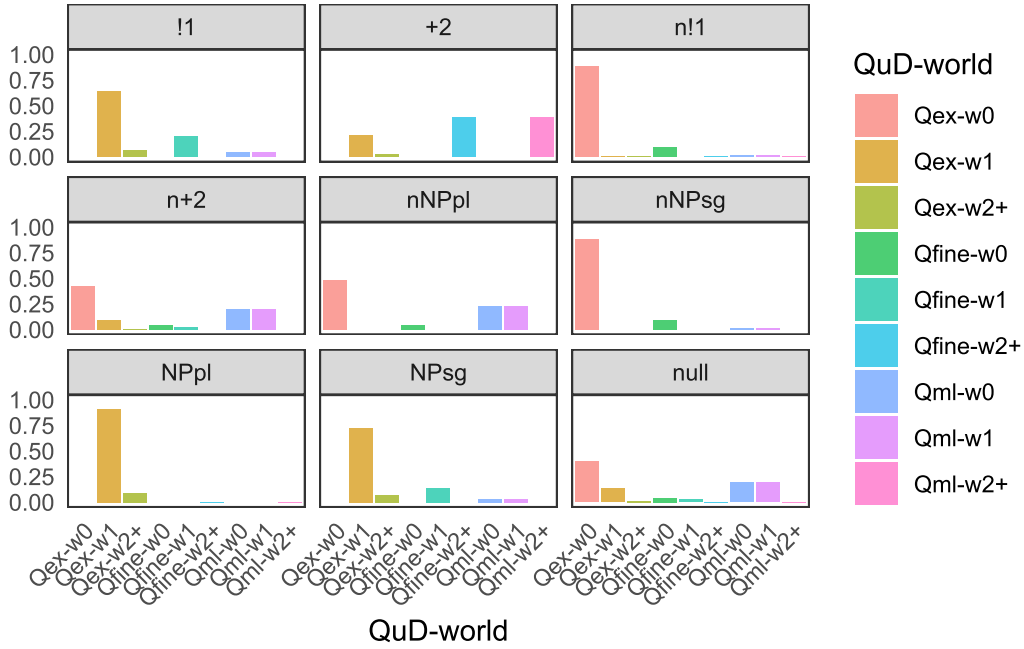
```
P_w <- P_w_pl_odd
P_Q <- P_Q_Qex
L0() %>% filter(QuD == "Qml" & world == "w0")
```

```
# A tibble: 144 × 5
   world QuD   message inter          prob
   <chr> <chr> <chr>   <chr>         <dbl>
 1 w0    Qml   !1      iExhExhExhExh     0
 2 w0    Qml   !1      iExhExhExhLit     0
 3 w0    Qml   !1      iExhExhLitExh     0
 4 w0    Qml   !1      iExhExhLitLit     0
 5 w0    Qml   !1      iExhLitExhExh     0
 6 w0    Qml   !1      iExhLitExhLit     0
 7 w0    Qml   !1      iExhLitLitExh     0
 8 w0    Qml   !1      iExhLitLitLit     0
 9 w0    Qml   !1      iLitExhExhExh     0
10 w0    Qml   !1      iLitExhExhLit     0
# ℹ 134 more rows
```

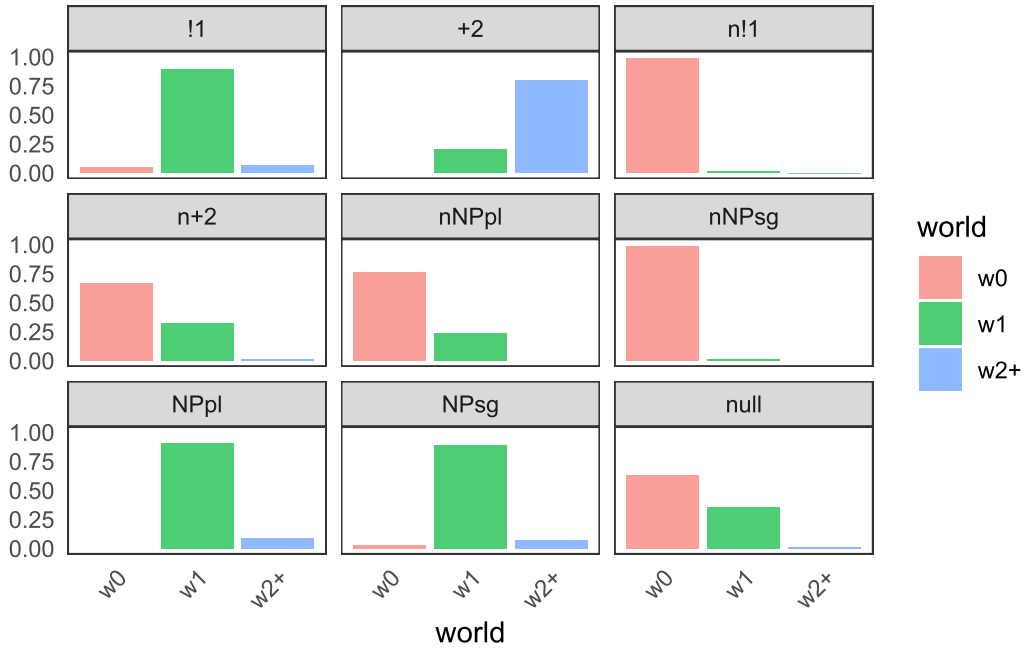
```
check_Sn(n)
```




```
check_Ln(n)
```




```
check_Ln_w(n)
```


!1
+2
n!1
n+2
nNPpl
nNPsg
NPpl
NPsg
null
1.00
0.75
0.50
0.25
0.00
w0
w1
w2+
world
world
w0
w1
w2+