



POTSDAM INSTITUTE FOR
CLIMATE IMPACT RESEARCH

ESCAPE FROM THE CLIMATE PRISON!

Jobst Heitzig

LET'S RECALL...

CO₂



Jobst Heitzig Escape from the climate prison

POPULAR METAPHOR FOR CONFLICTS: THE „PRISONERS' DILEMMA“



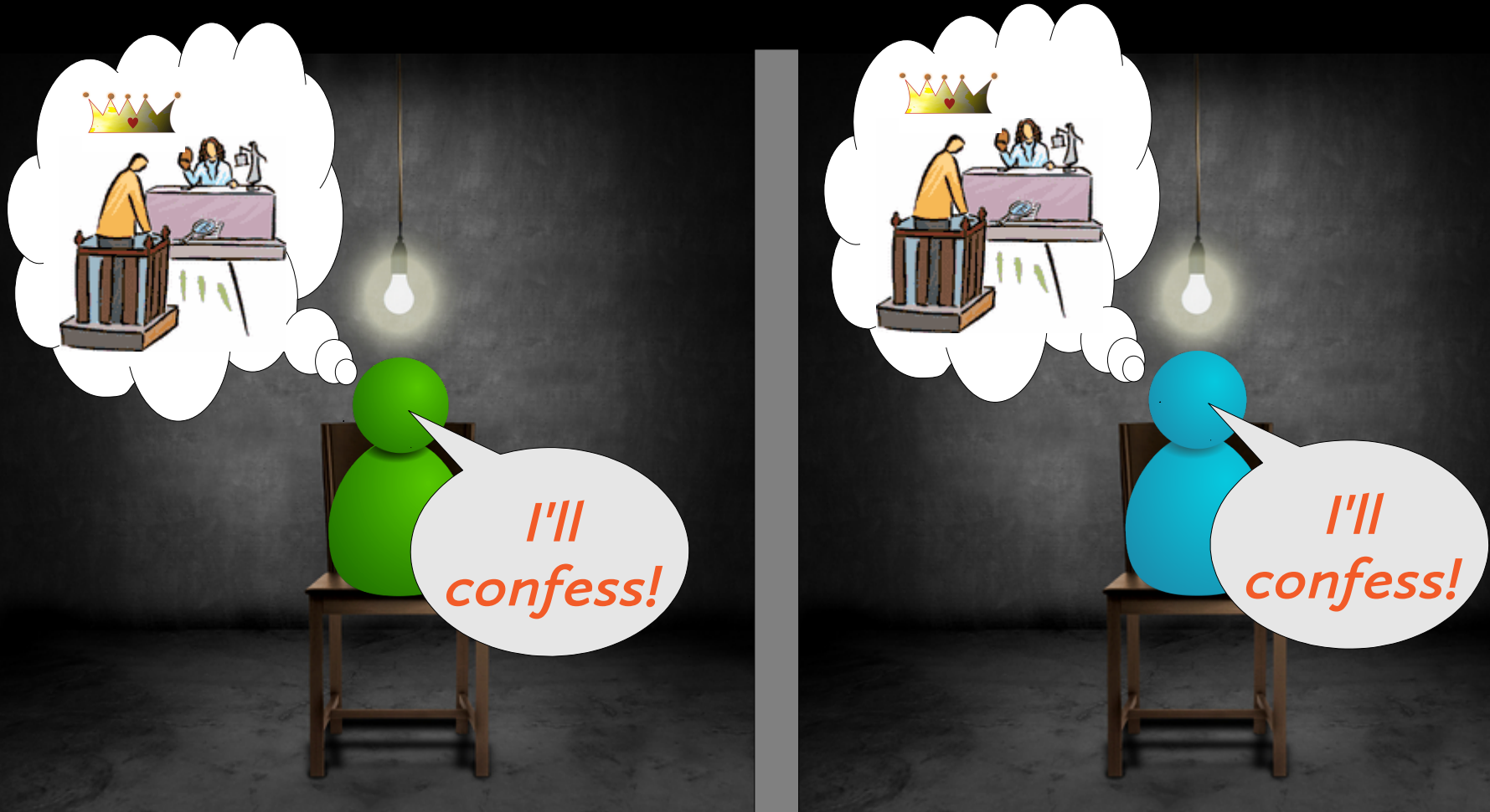
SEPARATE GRILLING, NO CONTACT!



SEPARATE GRILLING, NO CONTACT!



SEPARATE GRILLING, NO CONTACT!



both confess → no leniency → shit happens!

PRISONERS' DILEMMA

*„cooperative“
behaviour*

remain silent

*„non-
cooperative“
behaviour*

confess

*strategic
equilibrium*

CLIMATE PROBLEM = PRISONERS' DILEMMA ??

emit less GHG

*„cooperative“
behaviour*

remain silent

business as usual

*„non-
cooperative“
behaviour*

confess

CLIMATE PROBLEM $\neq$ PRISONERS' DILEMMA !!

*binding agreements
are possible!*

emit less GHG

*„cooperative“
behaviour*

remain silent

business as usual

*„non-
cooperative“
behaviour*

confess



ESCAPE! BUT WHO WILL GO FIRST?



The threatening climate change



The Prisoners (Selection)



ASSUME TWO SUFFICE TO OVERPOWER HIM...



*A possible (but inefficient)
coalition*

*Let the
others solve
the problem
for me...*



THEN IT'S UNCLEAR WHO WILL DO IT...

*Let the
others solve
the problem
for me...*



*Another, more efficient,
possible coalition*

EACH WILL TRY TO MAKE THE OTHERS GO FIRST...

Let's roll!



*When two people agree,
a third rejoices*



THIS IS CALLED „FREE RIDING“!



*When two people agree,
a third rejoices*



BUT THE BEST COALITION WOULD BE ALL THREE!



COALITION FORMATION

= A DYNAMIC PROCESS WITH UNCERTAINTIES

