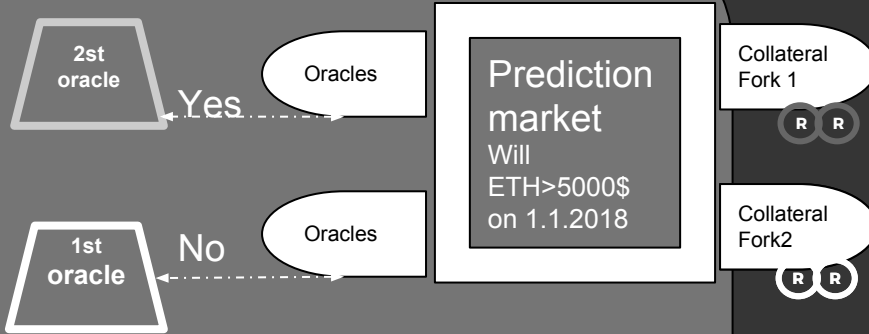# Reality Tokens

Schrodingers Prediction Markets in subjectivocracy

Unknown space

2st oracle

Yes

Oracles

Prediction market
Will ETH>5000$ on 1.1.2018

Collateral Fork 1

R R

1st oracle

No

Oracles

Collateral Fork2

R R

$\frac{1}{\sqrt{2}}|\text{cat}\rangle + \frac{1}{\sqrt{2}}|\text{dead cat}\rangle$

Oracles

Measured space

Public Market

R R

R R

IN UR QUANTUM BOX...
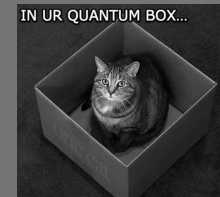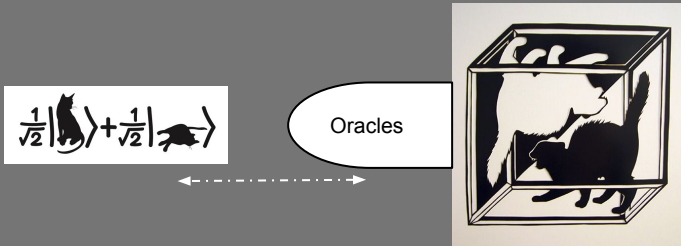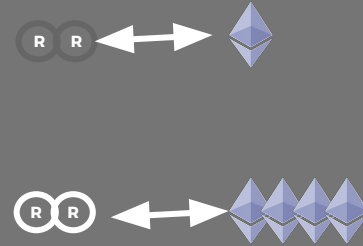
Viable Oracle solutions:
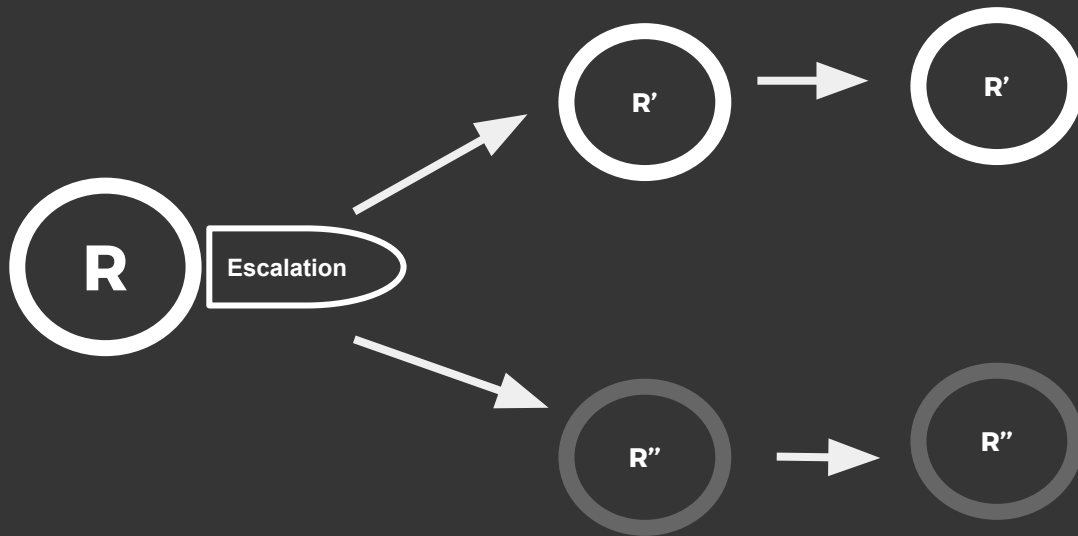
1. Ultimate Oracle + Ethereum hardfork
2. **Reality Tokens**
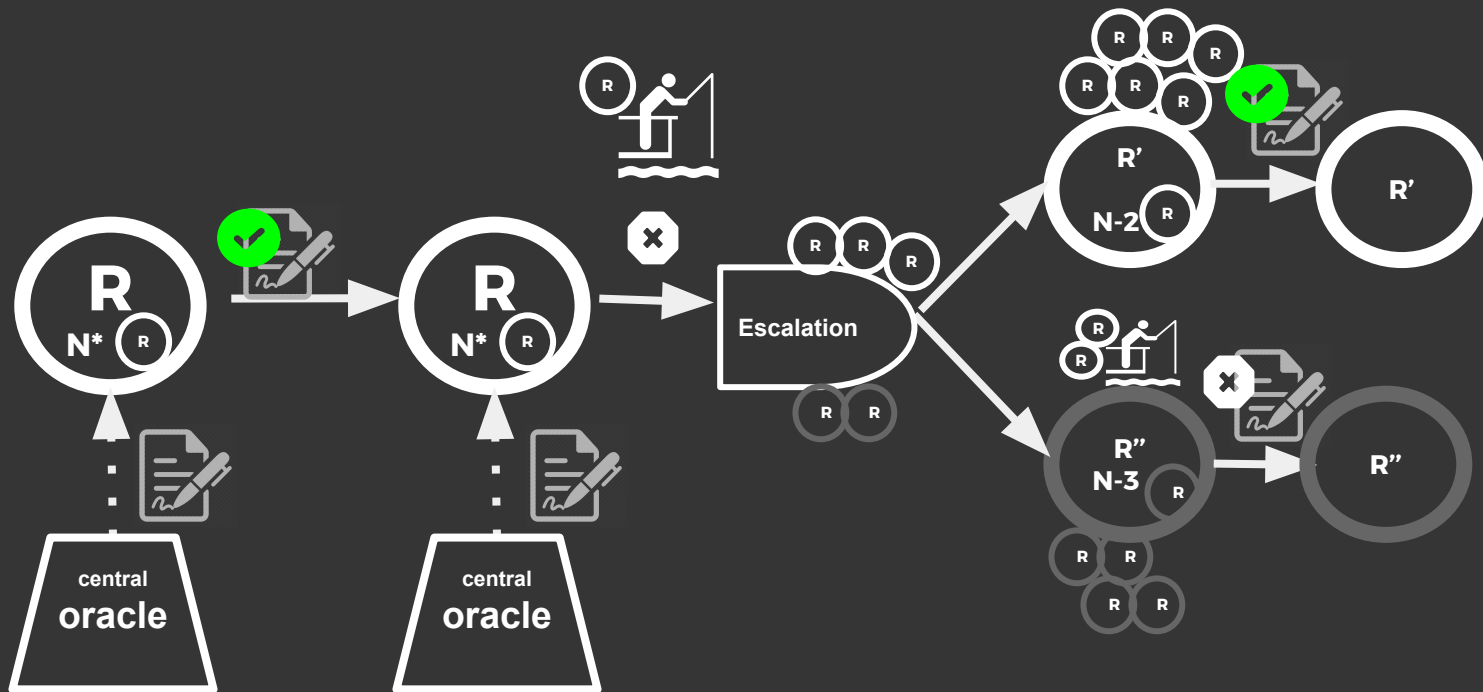3. Oracle cages
4. ERC20 unions

Reality Token

Idea: Subjectivocracy presented via reality tokens
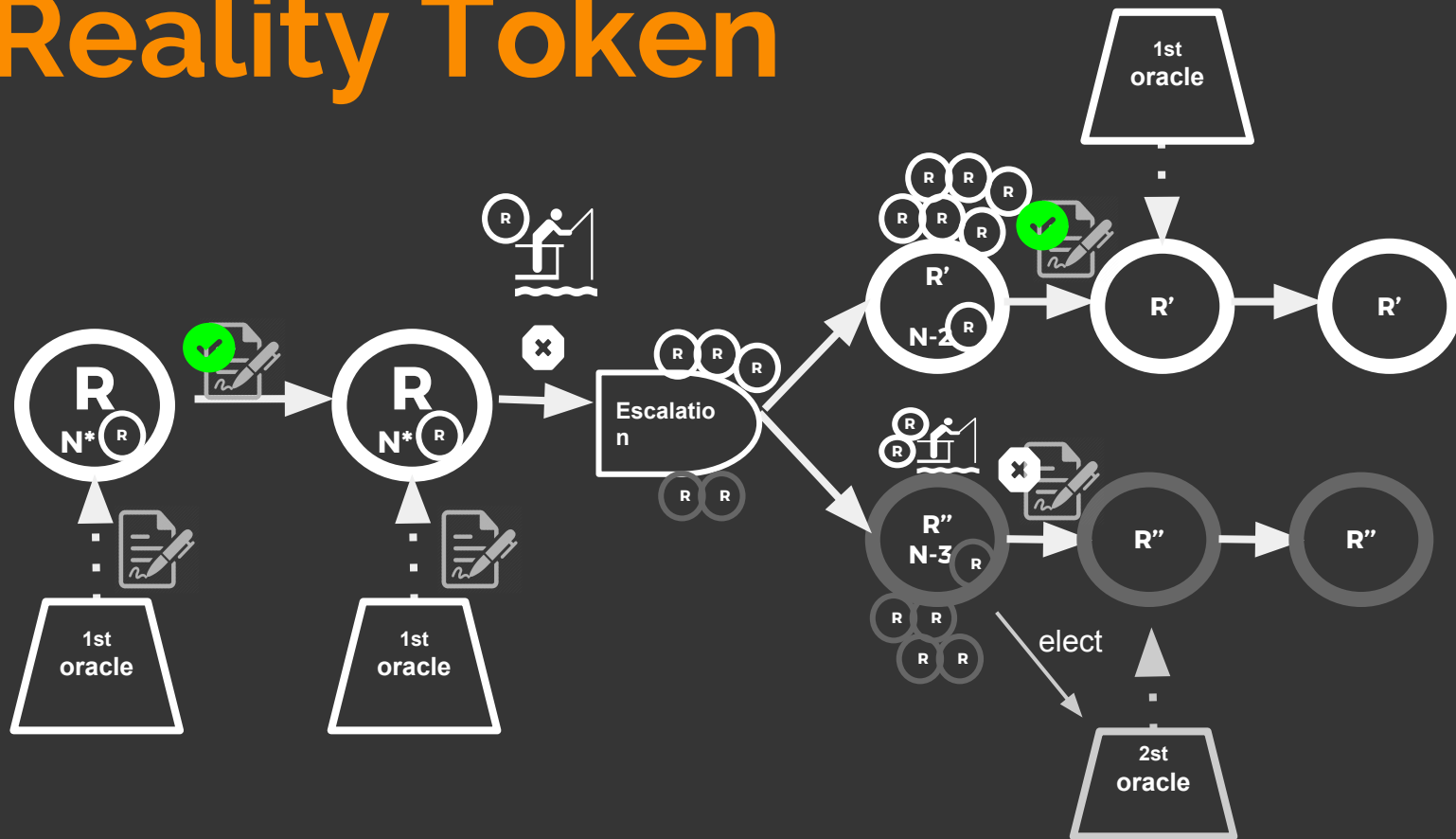

Trick

Arbitrators are tokenholder of the Reality Token. No objective arbitration process is given.

Reality Token

Reality Token

Reality Token

And Prediction Markets

Oracles

Prediction market
Will BTC>5000$ On 1.1.2018
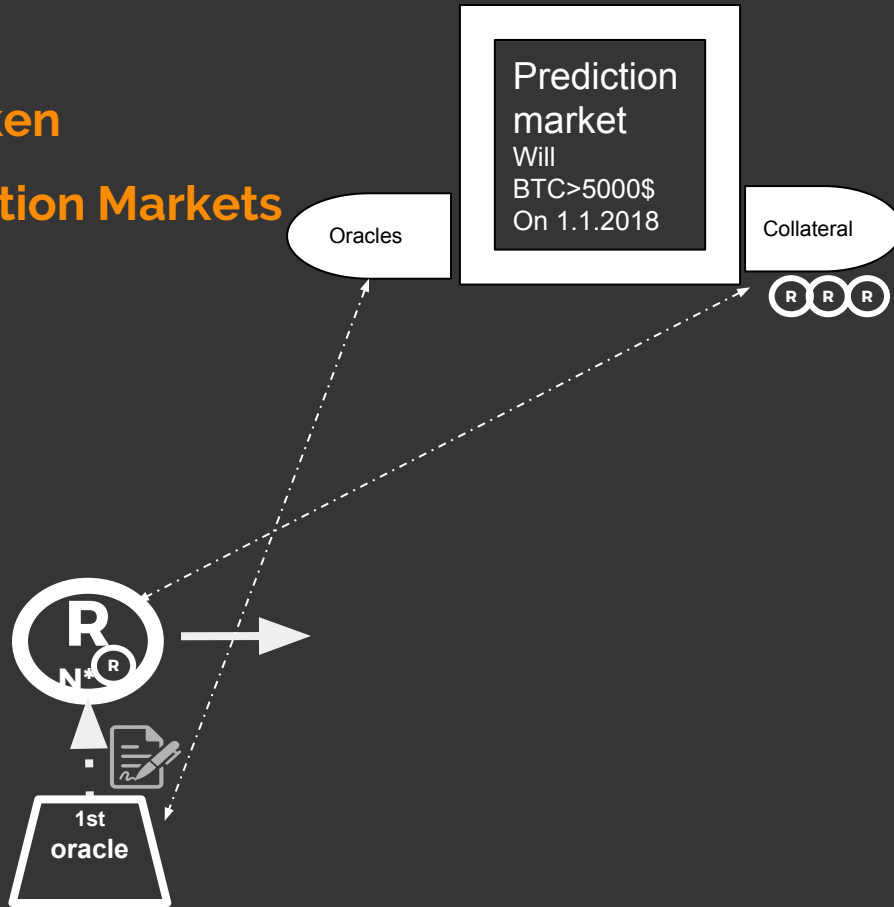
Collateral

1 step

A reality token is put as collateral in the prediction market

1st oracle

Reality Token
And Prediction Markets

Oracles

Oracles

Prediction market
Will BTC>5000$ On 1.1.2018

Collateral
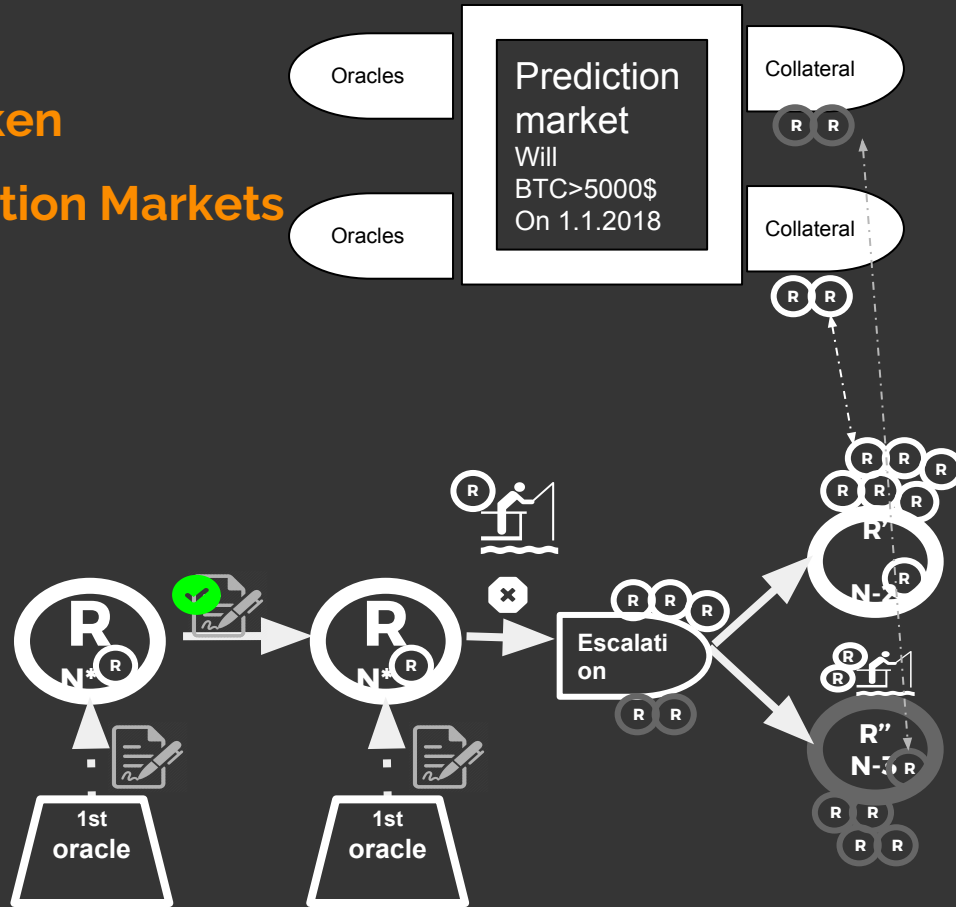
Collateral

2 step

Collateral Reality token splits each time the prediction market splits

Escalation

1st oracle

1st oracle

Reality Token

And Prediction Markets

Oracles

Oracles

Prediction market
Will
BTC>5000$
On 1.1.2018

Collateral

Collateral

1st oracle

1st oracle

1st oracle

2st oracle

R
N*

R
N*

Escalation

R'
N-2

R"
N-1

R'

R"

R'

R"

Reality Token

And Prediction Markets

2st oracle

Oracles

Yes

1st oracle

Oracles

No

Prediction market
Will
BTC>5000$
On 1.1.2018

Collateral

Collateral

Public Market

R R ⬌ ◆

R R ⬌ ◆◆◆
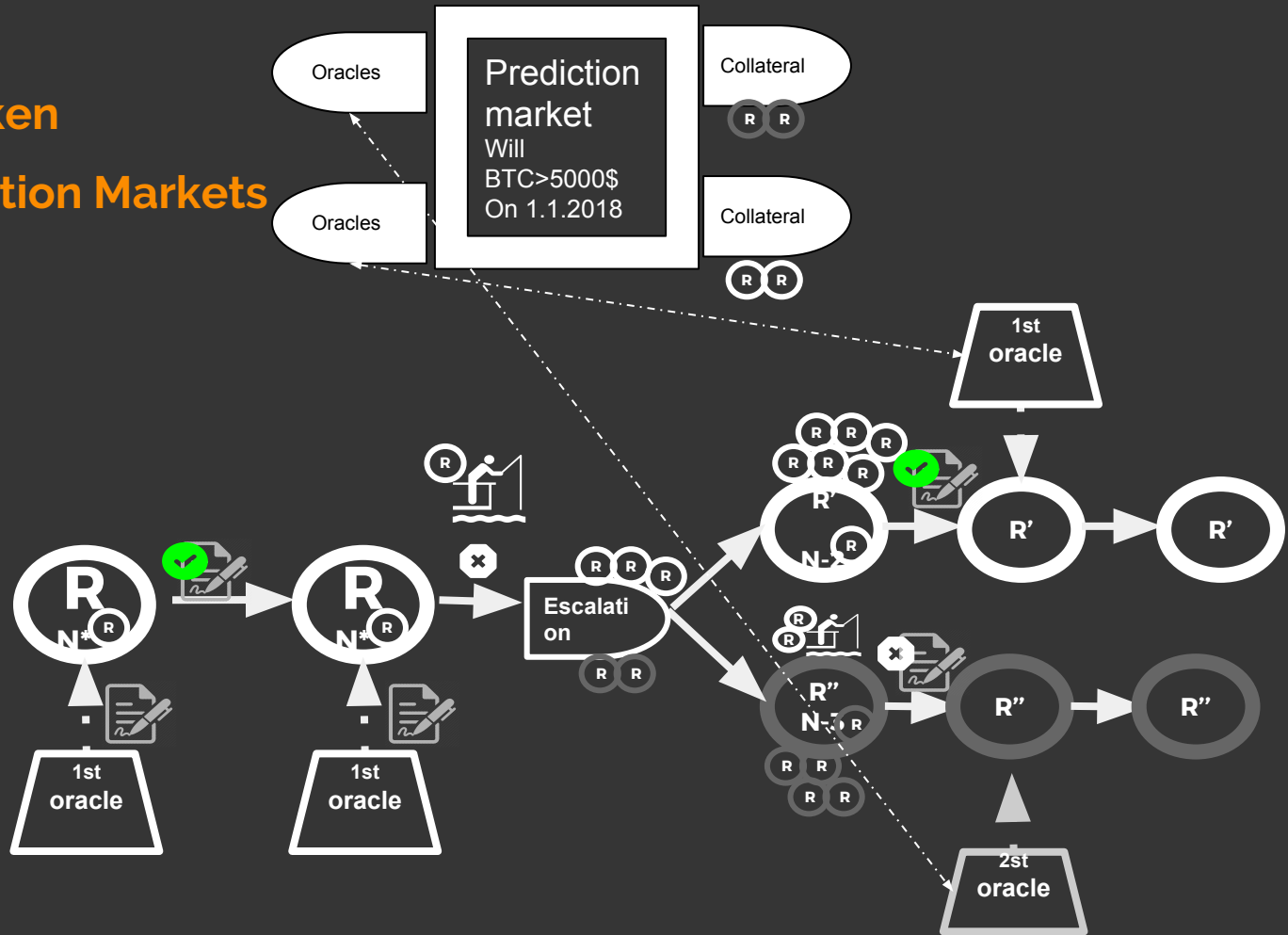
Trick

Prediction market will not do the arbitrator decision, the aftermarket will do it.

Fancy

Prediction market will never the less return the right probabilities.

Why should the Reality Token have any value:

Because it can be used as **collateral** to **leverage** the **truth**

Usecases:

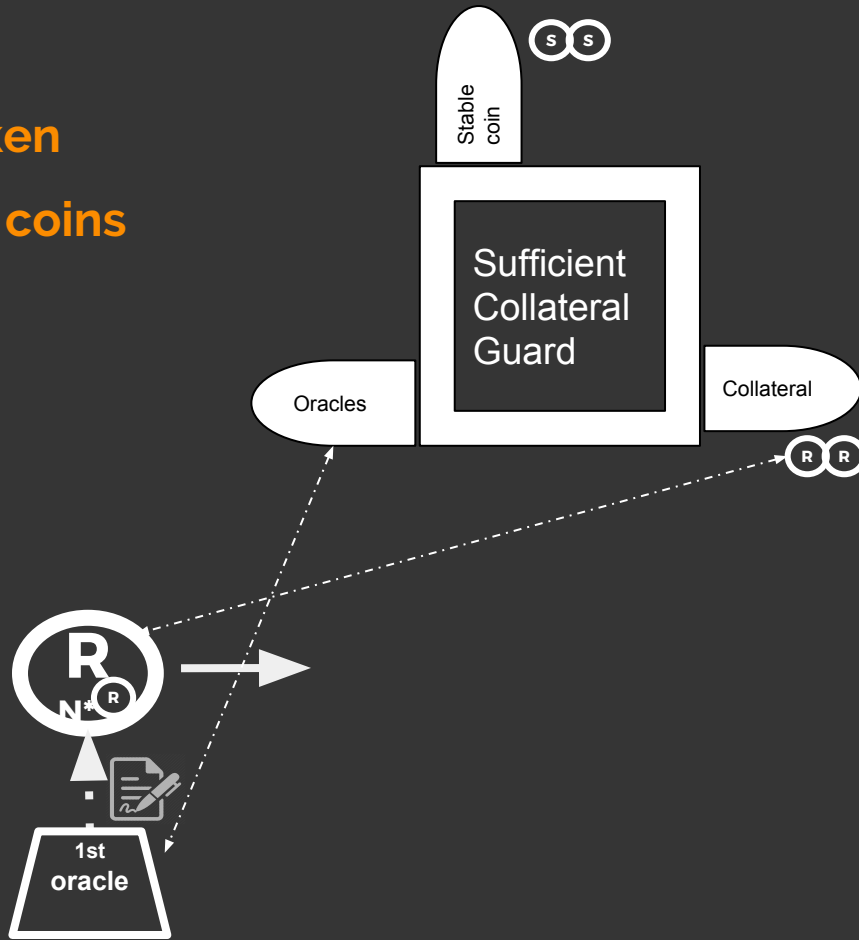Collateral for **stable tokens**

Collateral for **derivatives**

Collateral for **insurances**
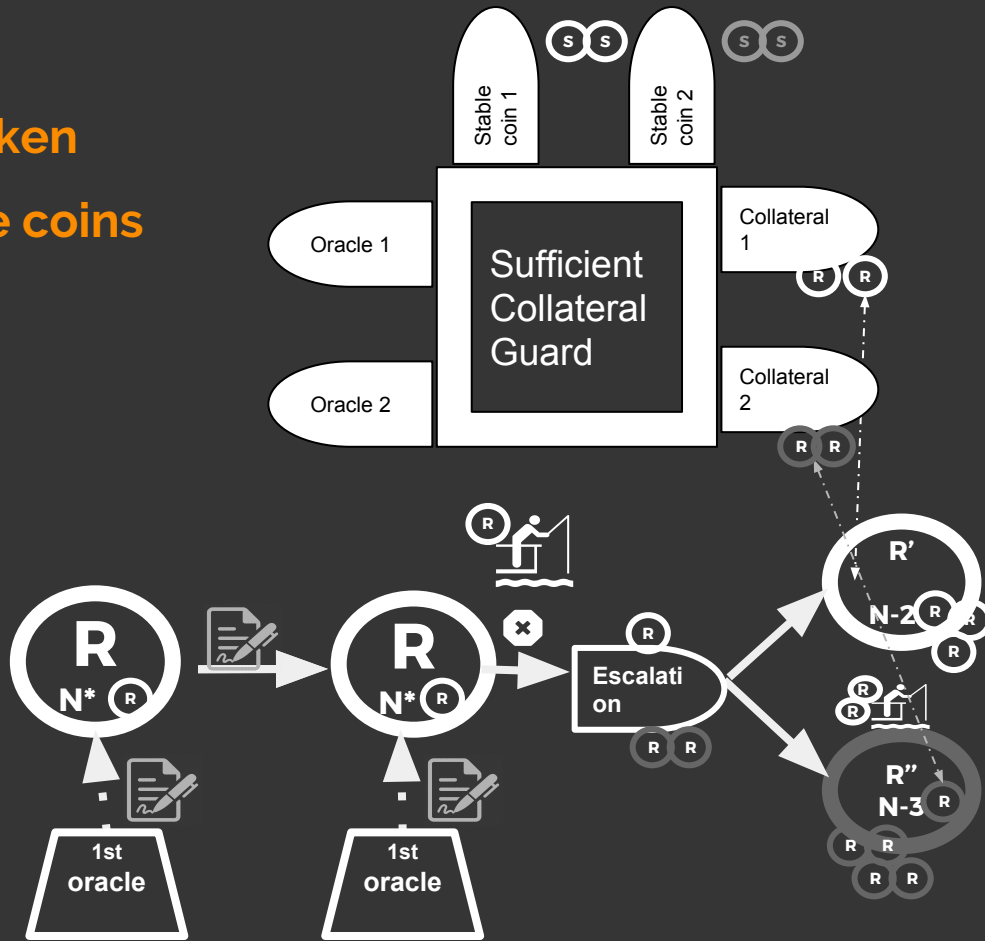
Collateral for **prediction Markets**

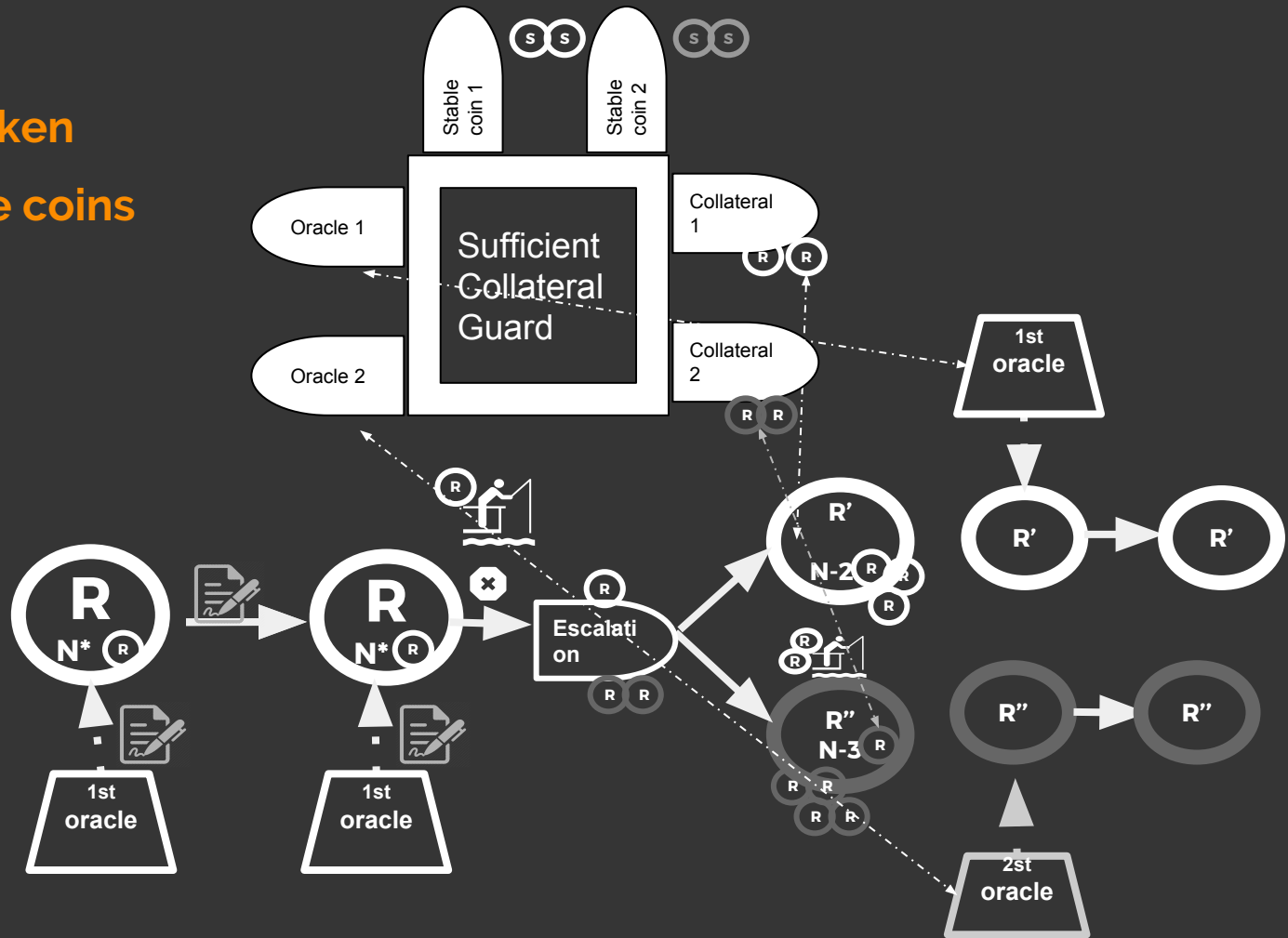Global reality token, new judiciary for the internet based on subjetivocary

Reality Token
And stable coins

Stable coin

S S

Sufficient Collateral Guard

Oracles

Collateral

R R

R

N* R

1st oracle

Reality Token

And stable coins

Reality Token
And stable coins

Reality Token

And stable coins

1st oracle — No Margin call

2st oracle — Margin call

Stable coin 1

Stable coin 2

Oracle

Sufficient Collateral Guard

Collateral

Collateral

Oracles

Sufficient Collateral Guard

Collateral

Collateral
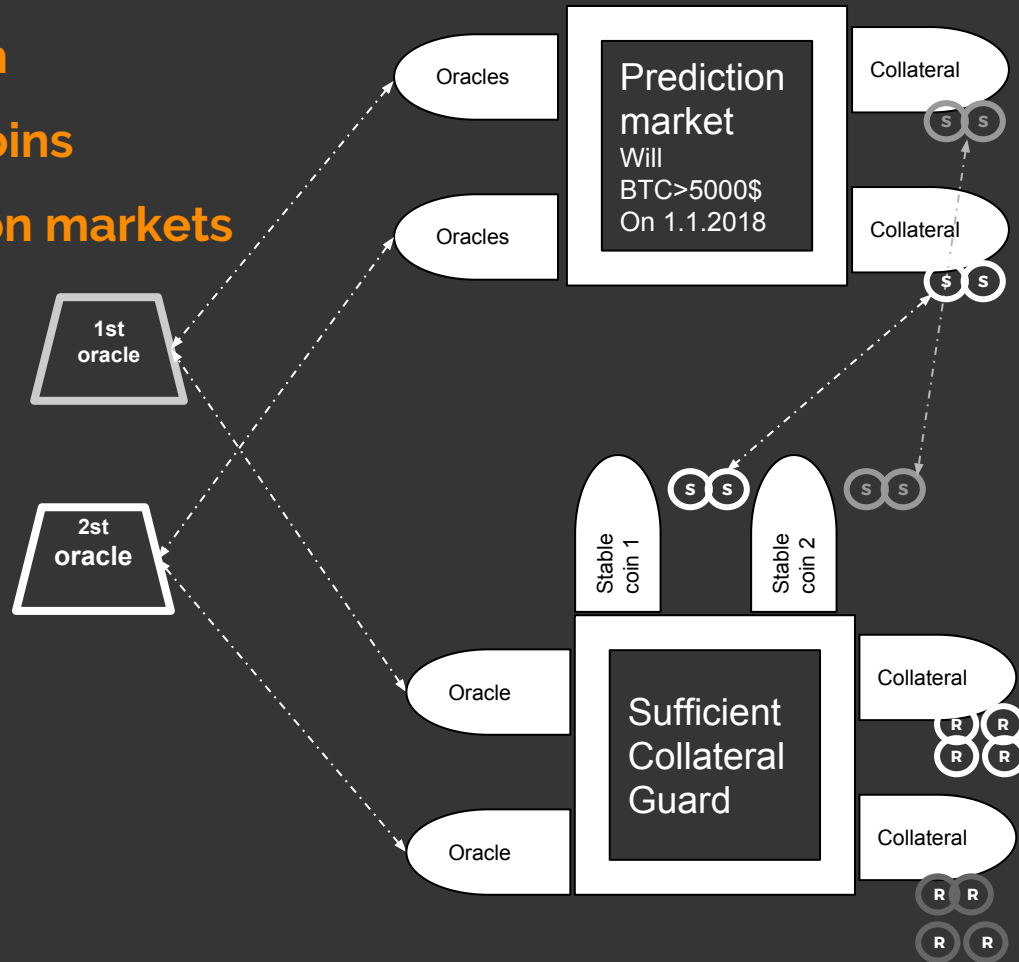
Auction over ratio R<1
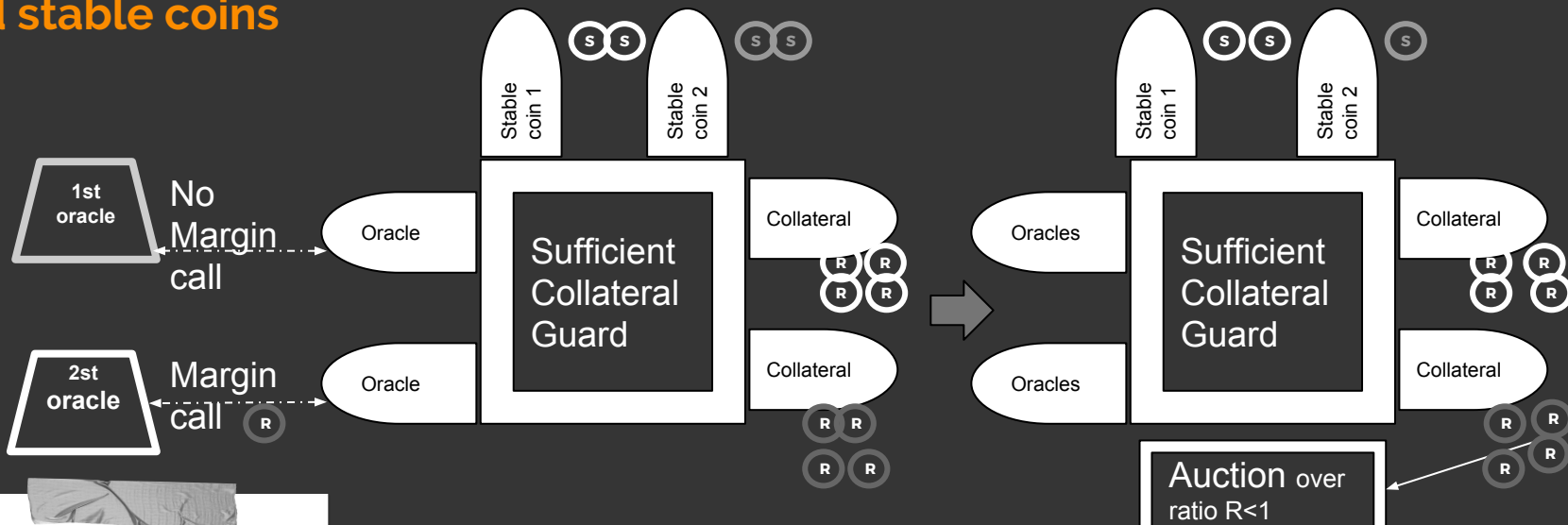
Incentivising

Collateral to Stable coin should have a higher ratio than 2:1, otherwise a margin call is triggered

	Input: Collateral	Output: Unbounded
Actor 1 Profit taker	S	(R) R + R
Actor 2, Margin Called	R R	(1-R) R

Reality Token

And stable coins

And prediction markets

Oracles

Prediction market
Will
BTC>5000$
On 1.1.2018

Collateral

S S

Oracles

Collateral

$ S

1st oracle

2st oracle

S S

S S

Stable coin 1

Stable coin 2

Oracle

Sufficient Collateral Guard

Collateral

R R
R R

Oracle

Collateral

R R
R R

User experience

Participation in Markets with stable coins.
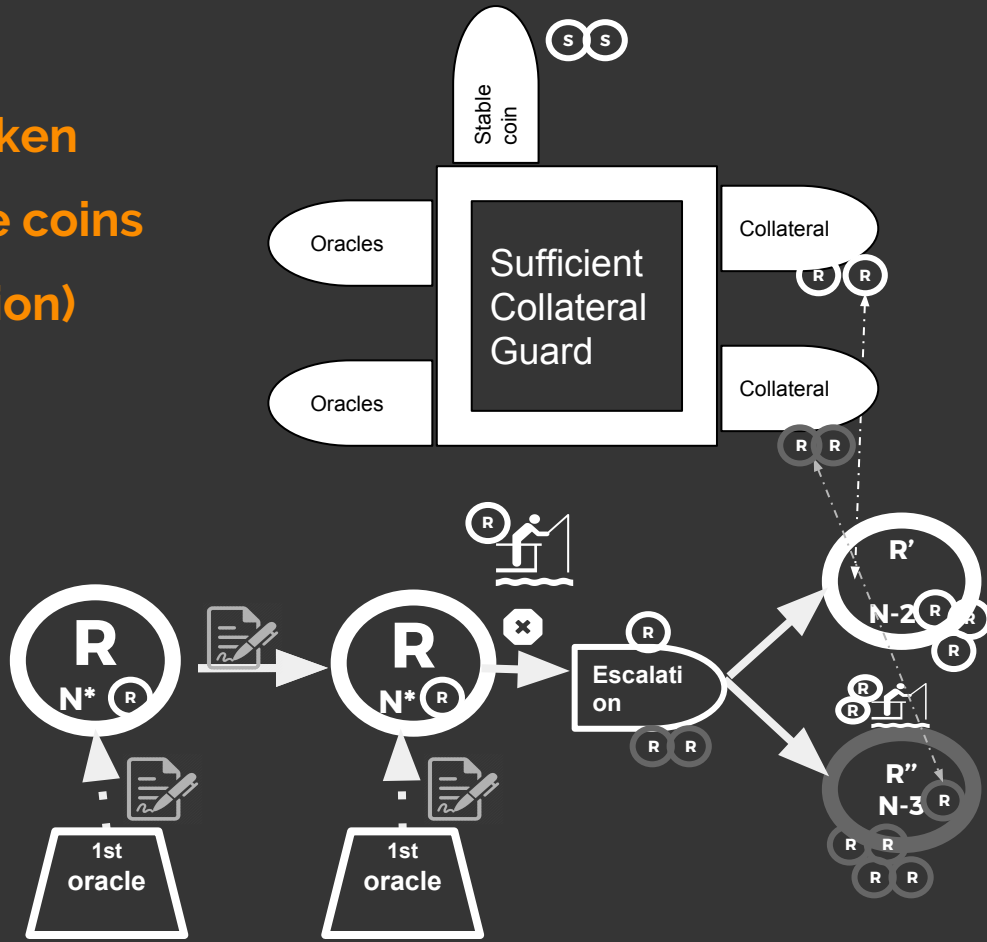
Security assumptions
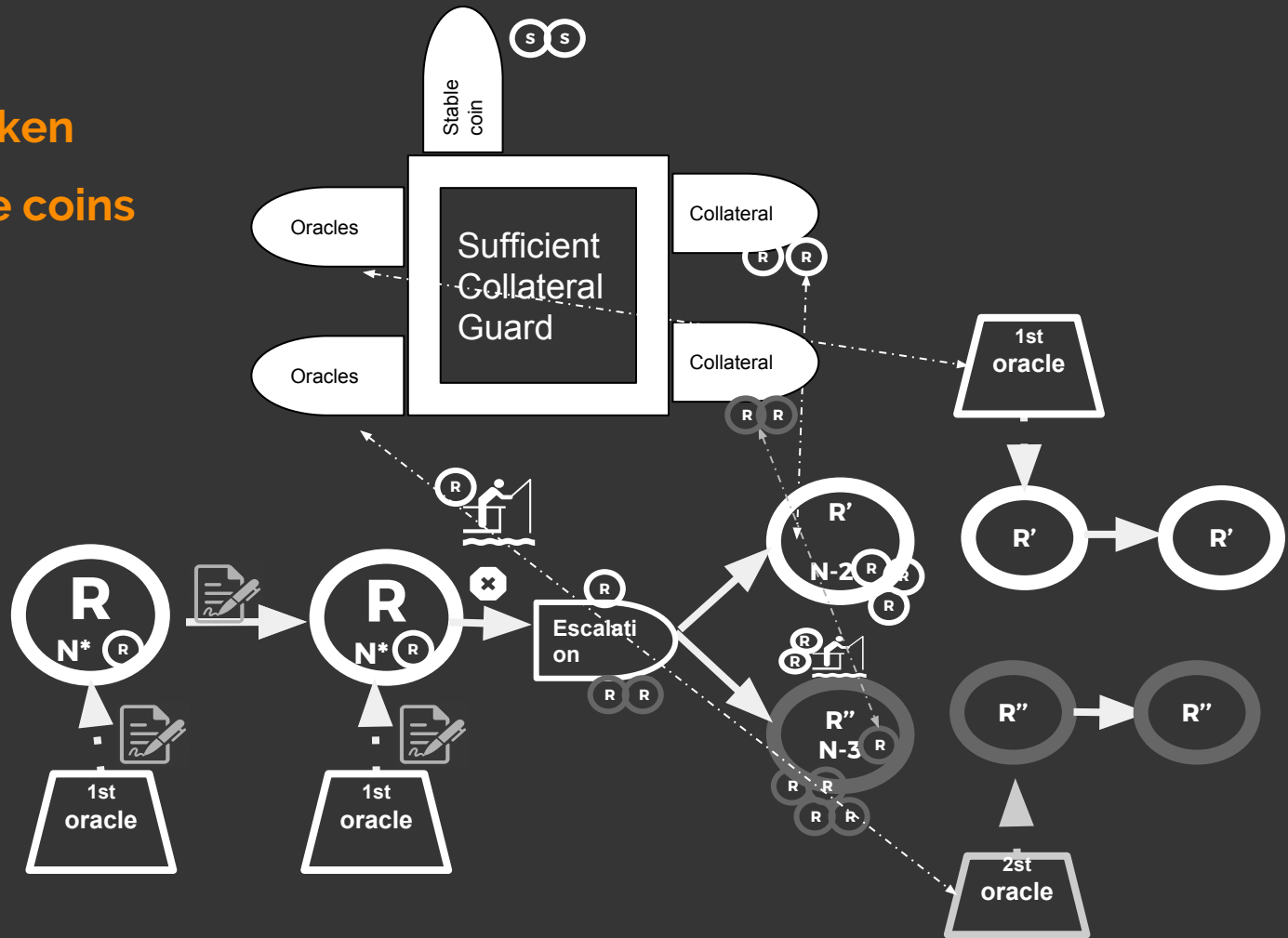
Reality will fork in case of manipulation

One Reality fork will continue to have value

ValueProposition:

RealityToken should be implemented as a DAO giving people the chance to lend out stable tokens and thereby earning money. Then RealityToken has a value in itself.
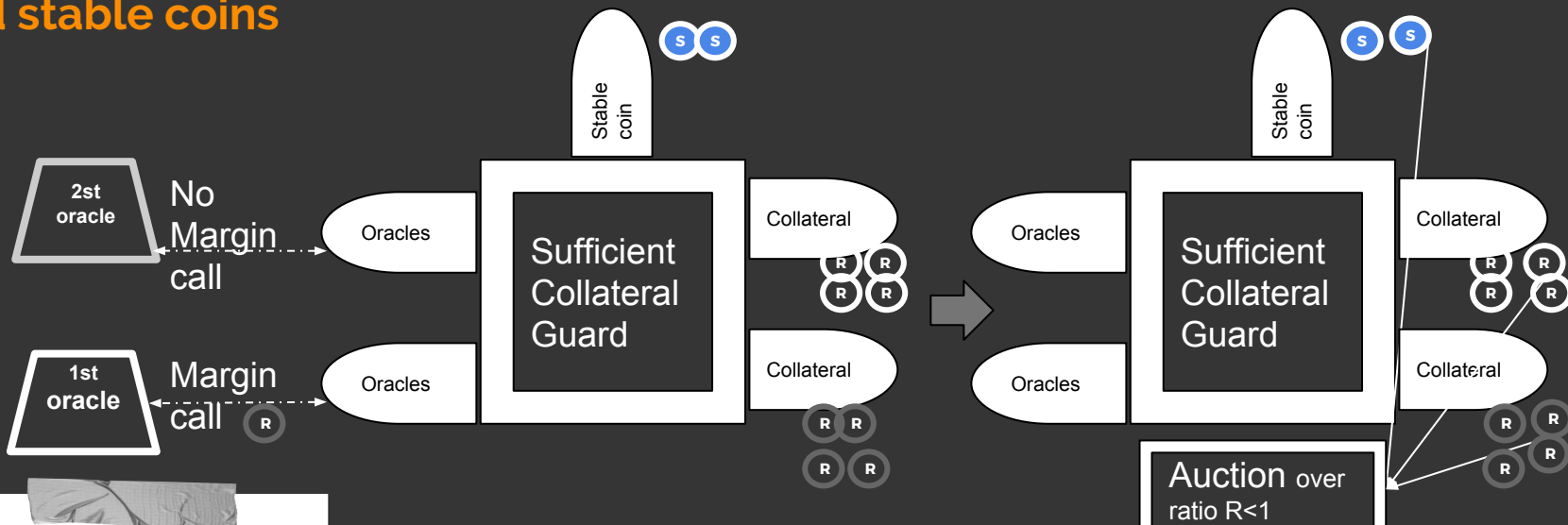
**Reality Token
And stable coins
(other option)**

Reality Token

And stable coins

Reality Token

And stable coins

Stable coin

S S

2st oracle

No Margin call

Oracles

Sufficient Collateral Guard

Collateral

R R
R R

1st oracle

Margin call

R

Oracles

Collateral

R R
R R

Stable coin

S S

Oracles

Sufficient Collateral Guard

Collateral

R R
R R

Oracles

Collateral
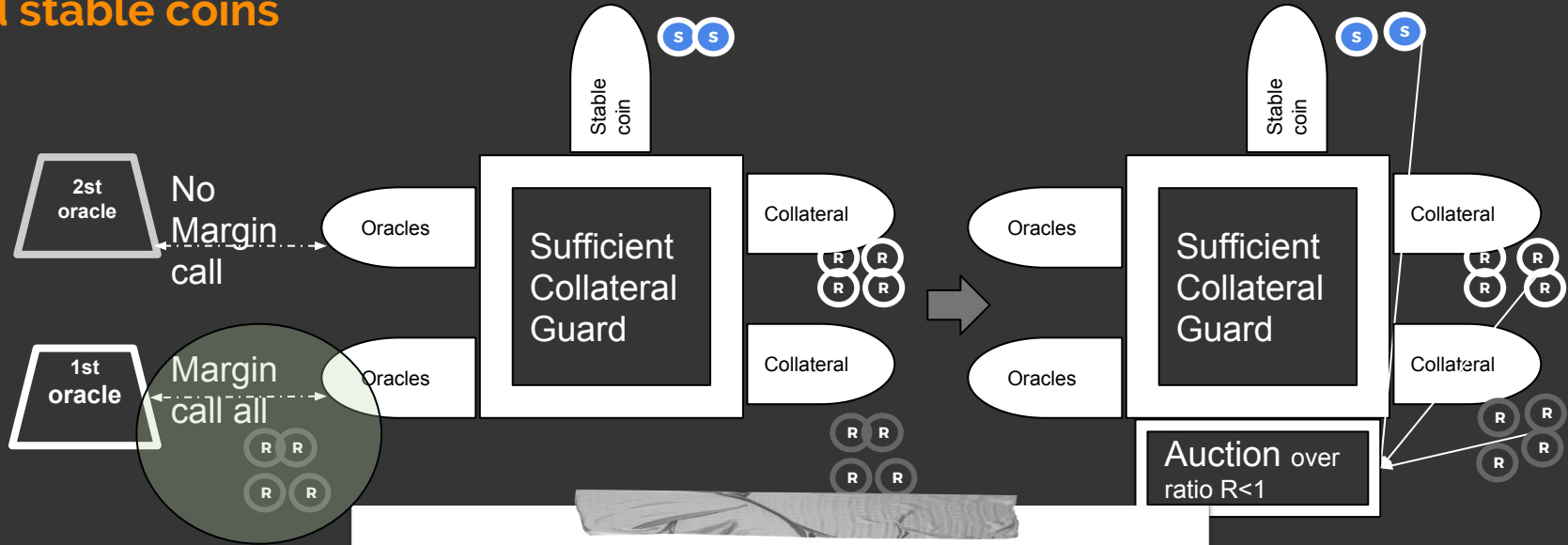
R R
R R

Auction over ratio R<1

Incentivising

Collateral to Stable coin should have a higher ratio than 2:1, otherwise a margin call is triggered

	Input: Collateral	Output: Unbounded
Actor 1 Profit taker	R R S	(R) R + R R
Actor 2, Margin Called	R R	(1-R) R

Reality Token

And stable coins

Stable coin

S S

2st oracle

No Margin call

Oracles

Sufficient Collateral Guard

Collateral

R R
R R

1st oracle

Margin call all

Oracles

R R

R R

Oracles

Collateral

R R
R R

Stable coin

S S

Oracles

Sufficient Collateral Guard

Collateral

R R
R R

Oracles

Collateral

Auction over ratio R<1

R R
R

Margin call over all Reality Token in one Fork

In this case, not enough people from the non-liquidated fork might be willing to liquidate.

Then there will be just a payout of forked liquidated collateral to stable coin holders and the stable coin live on with collateral of only one Reality Token fork.

Oracle solutions:

1. Ultimate Oracle + Ethereum hardfork
2. Reality Tokens
3. **Oracle cages**
4. ERC20 unions