VILFREDO GOES TO ATHENS

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<Ahref, Consultant on eDemocracy

DCU

fondazione <ahref

living links

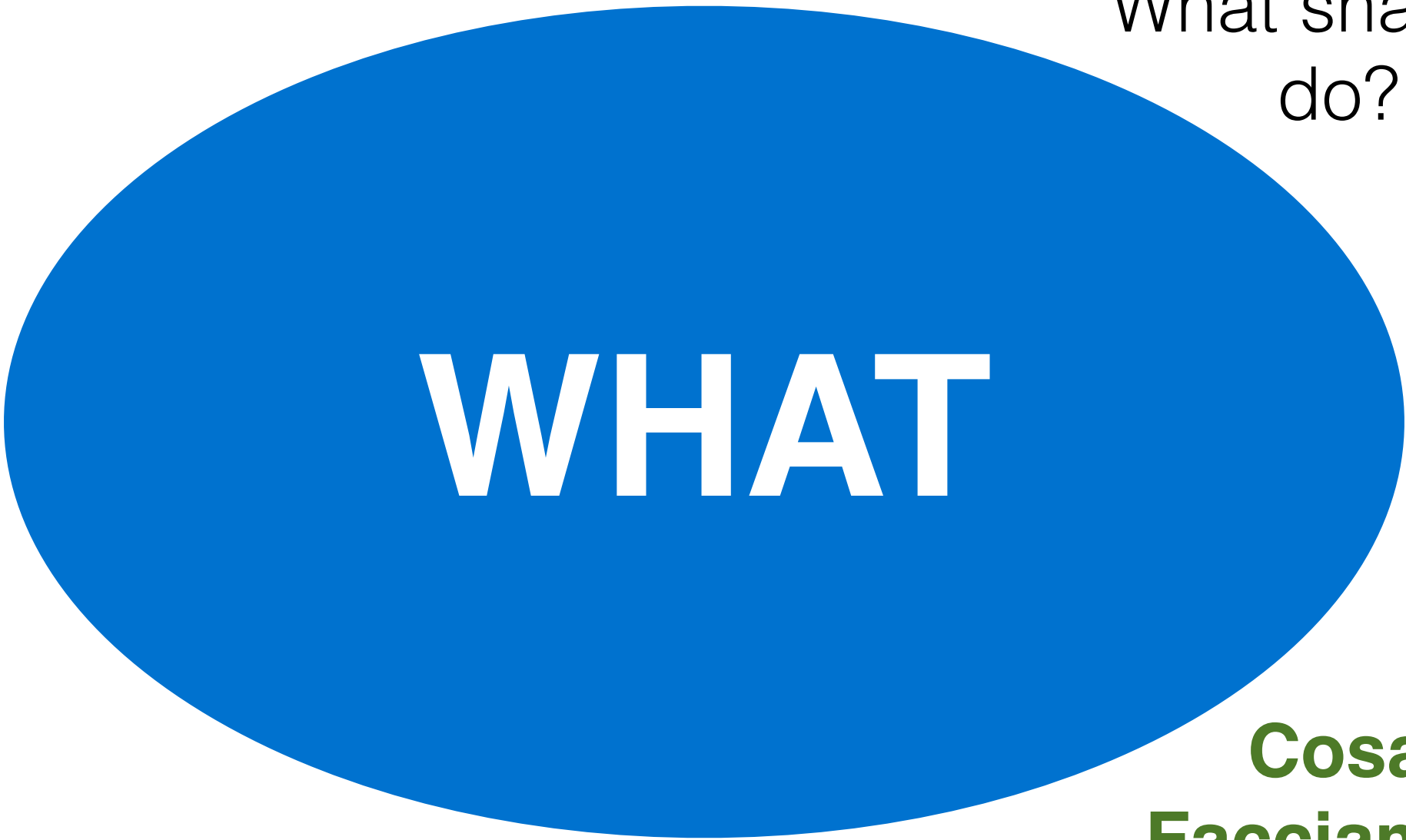
Please Moderate Us On:

ప్రపంచంలోని రాష్ట్ర చాలా
ముఖ్యమైన సమావేశం

What versus How questions

Domande Come verso domande Cosa

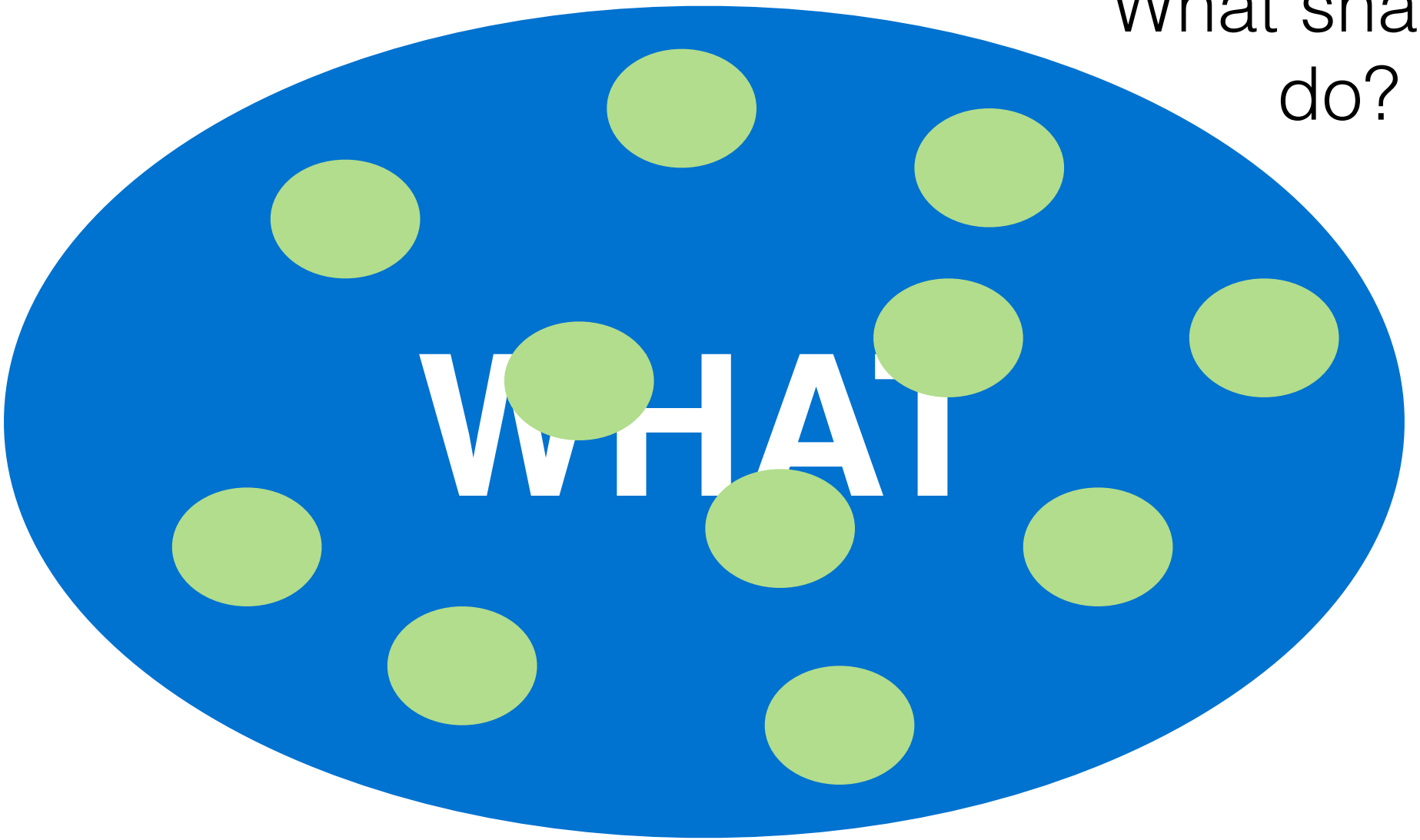
What shall we do?



Cosa Facciamo?

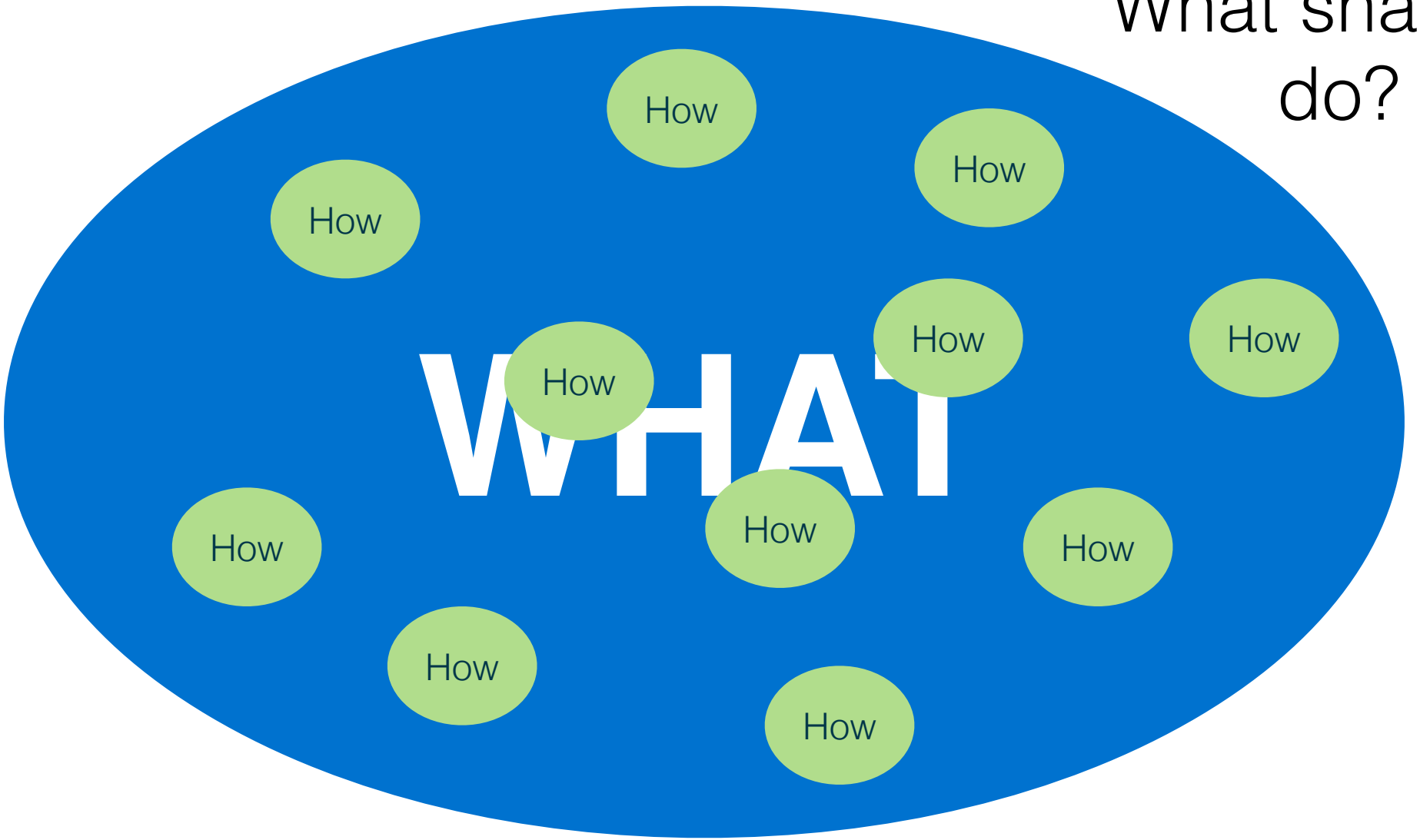
What versus How questions

What shall we do?



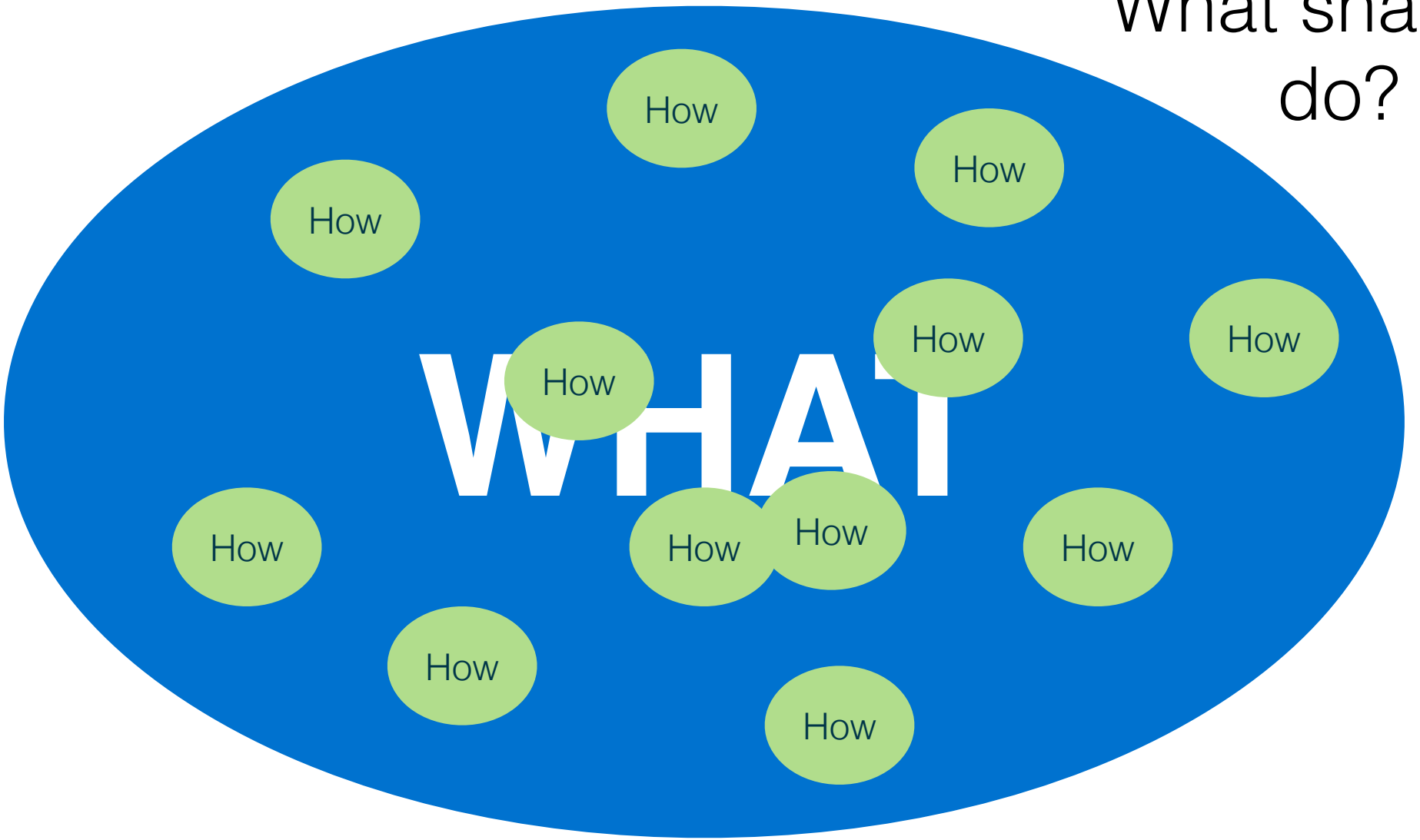
What versus How questions

What shall we do?



What versus How questions

What shall we do?



	1 Answer	M Answers	Budget
Options Known	Voting Theory Single Winner Voting Rules	Multi Winner Voting Rules and Multiple Referenda	Participatory Budgeting
Open Questions			

	1 Answer	M Answers	Budget
Options Known	Voting Theory Single Winner Voting Rules	Multi Winner Voting Rules and Multiple Referenda	Participatory Budgeting
Open Questions	Vilfredo	All Our Ideas, Airesis, Liquid Feedback	Open Participatory Budgeting (unherad)

	1 Answer	M Answers	Budget
Options Known	Voting a President or on an issue	Parliament	Budget
Open Questions	Why Questions	What Questions	

	1 Answer	M Answers	Budget
Options Known			
Open Questions	Consensus Building	Direct (or Liquid) Democracy	

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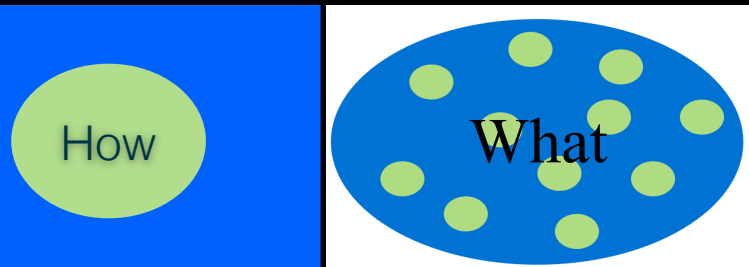
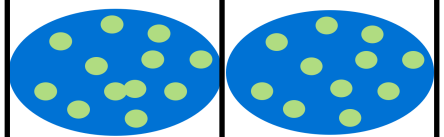
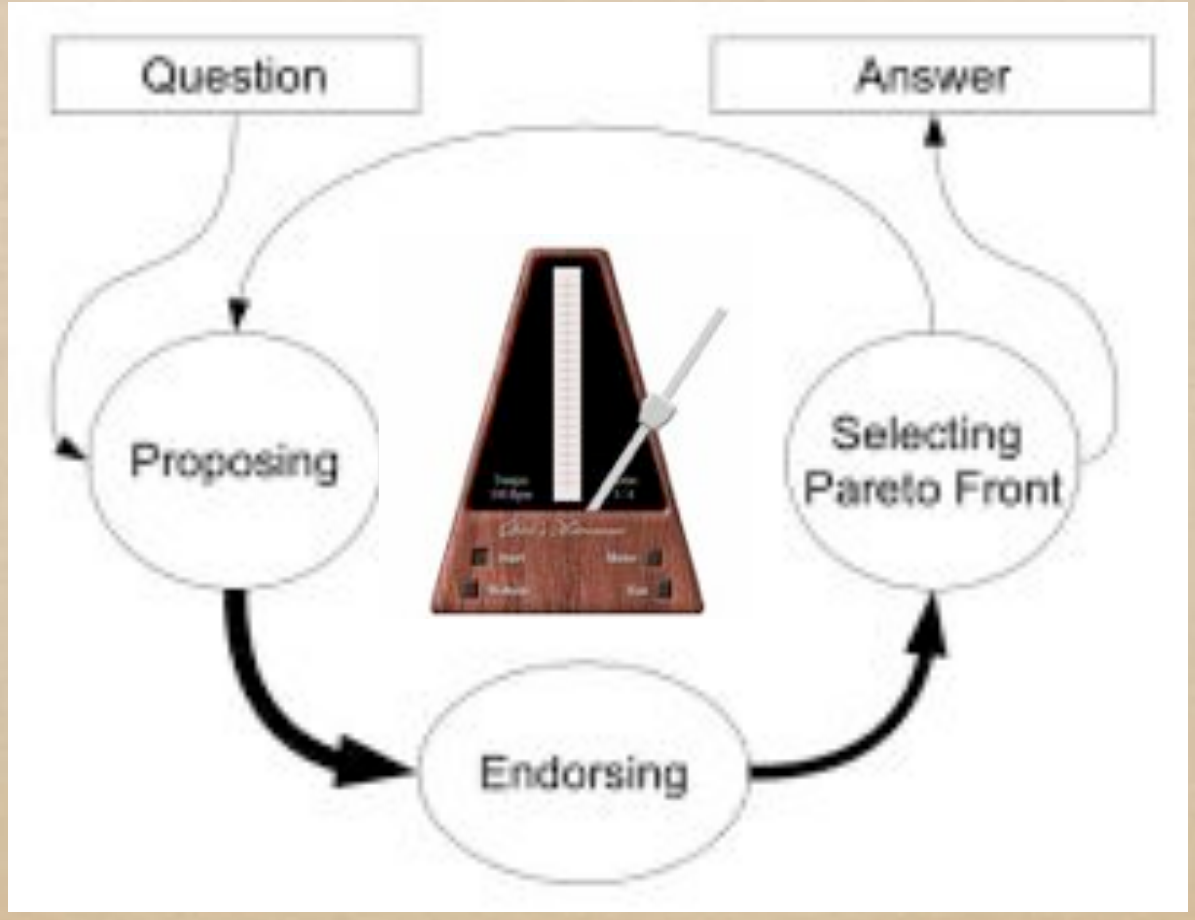
Options Known	Voting a President or on an issue	Parliament	Budget
Open Questions			

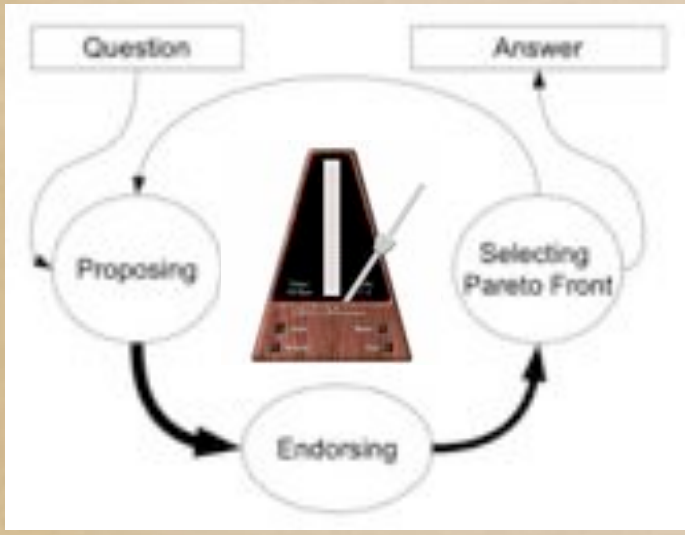
	1 Answer	M Answers		Budget
Options Known				
Open Questions	Consensus Building			

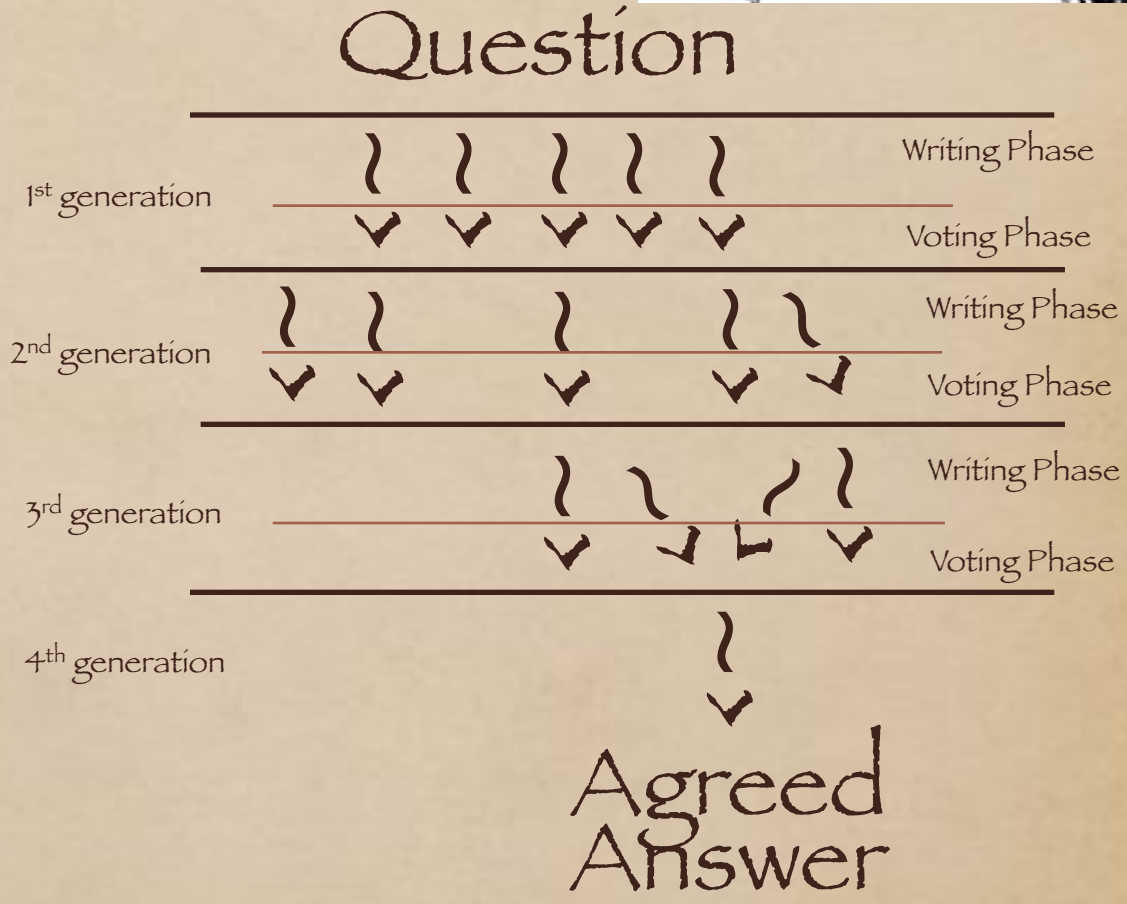
	1 Answer	M Answers		Budget
Options Known				
Open Questions	Consensus Building	Airesis, Liquid Feedback	All Our Ideas	

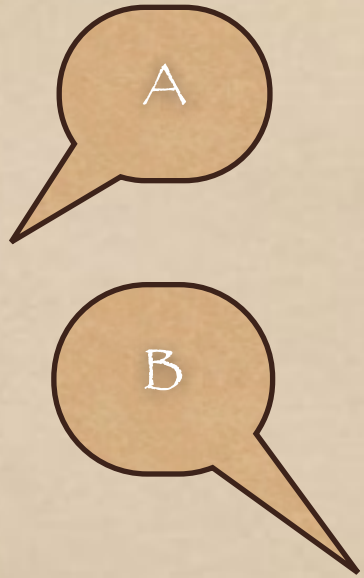
VILFREDO GOES TO ATHENS

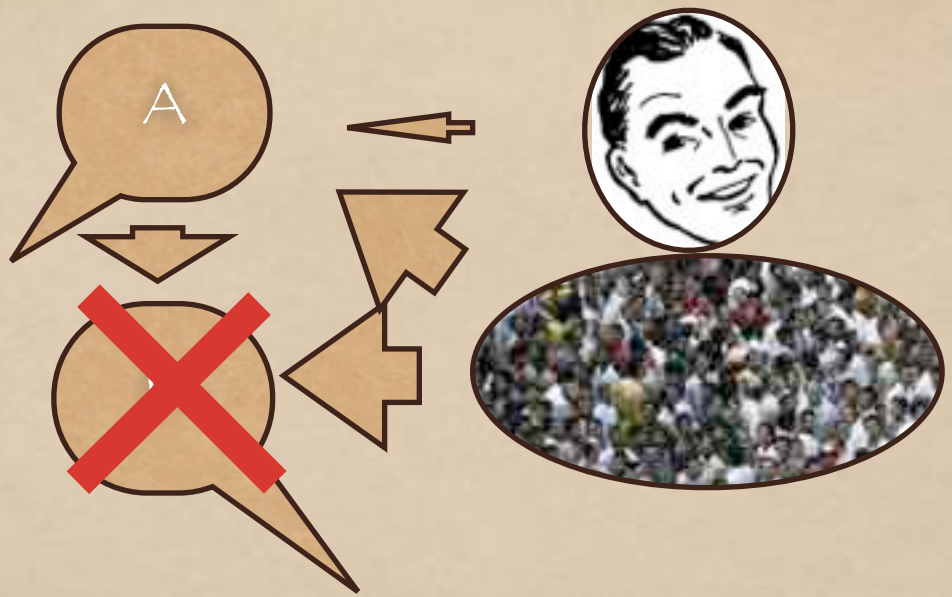


VILFREDO GOES TO ATHENS





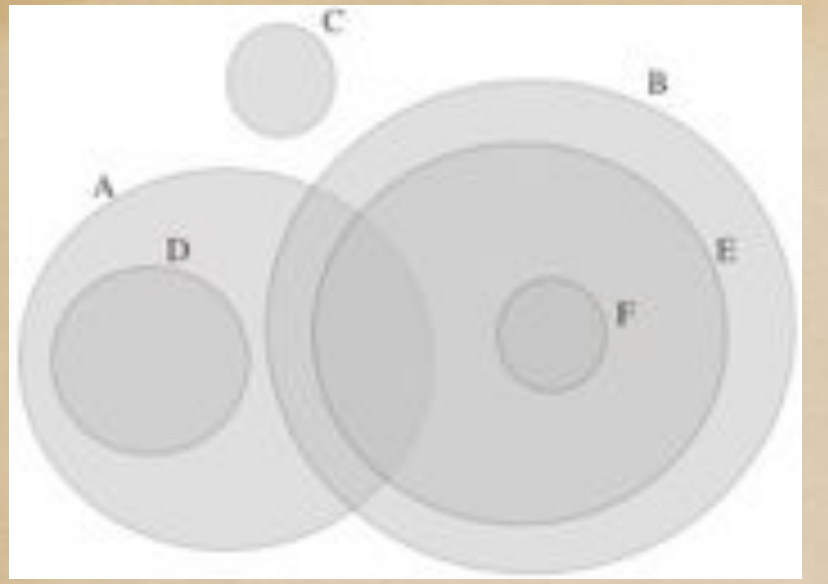

A
B



Every person that is supporting B
is also supporting A

There is at least one person that
supports A but not B

Then A "dominates" B,
and we can trash B

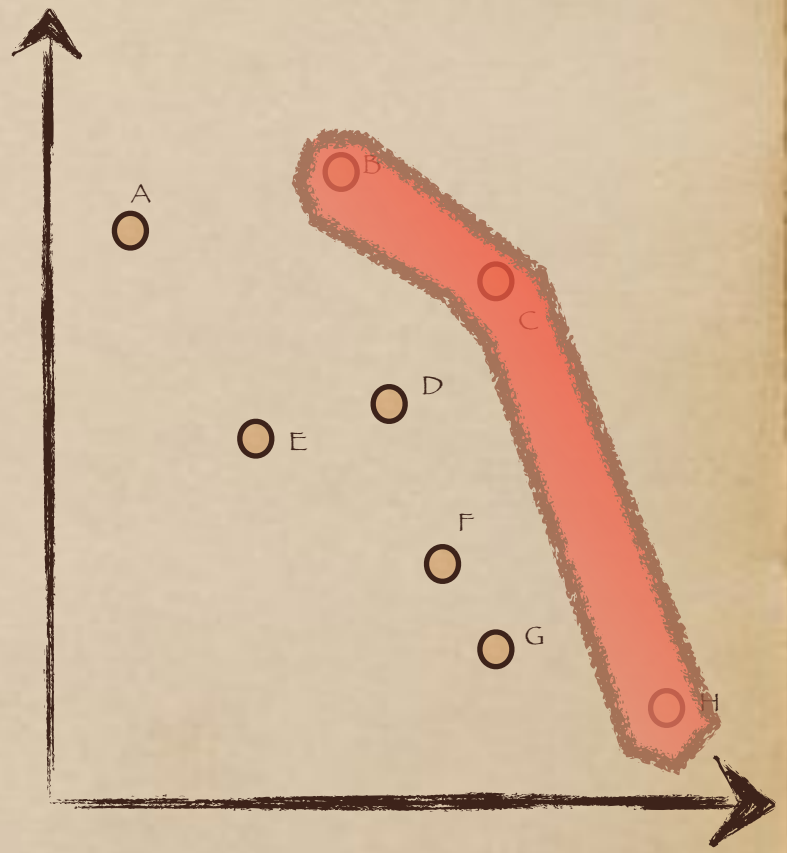


B dominates E and F
A dominates D

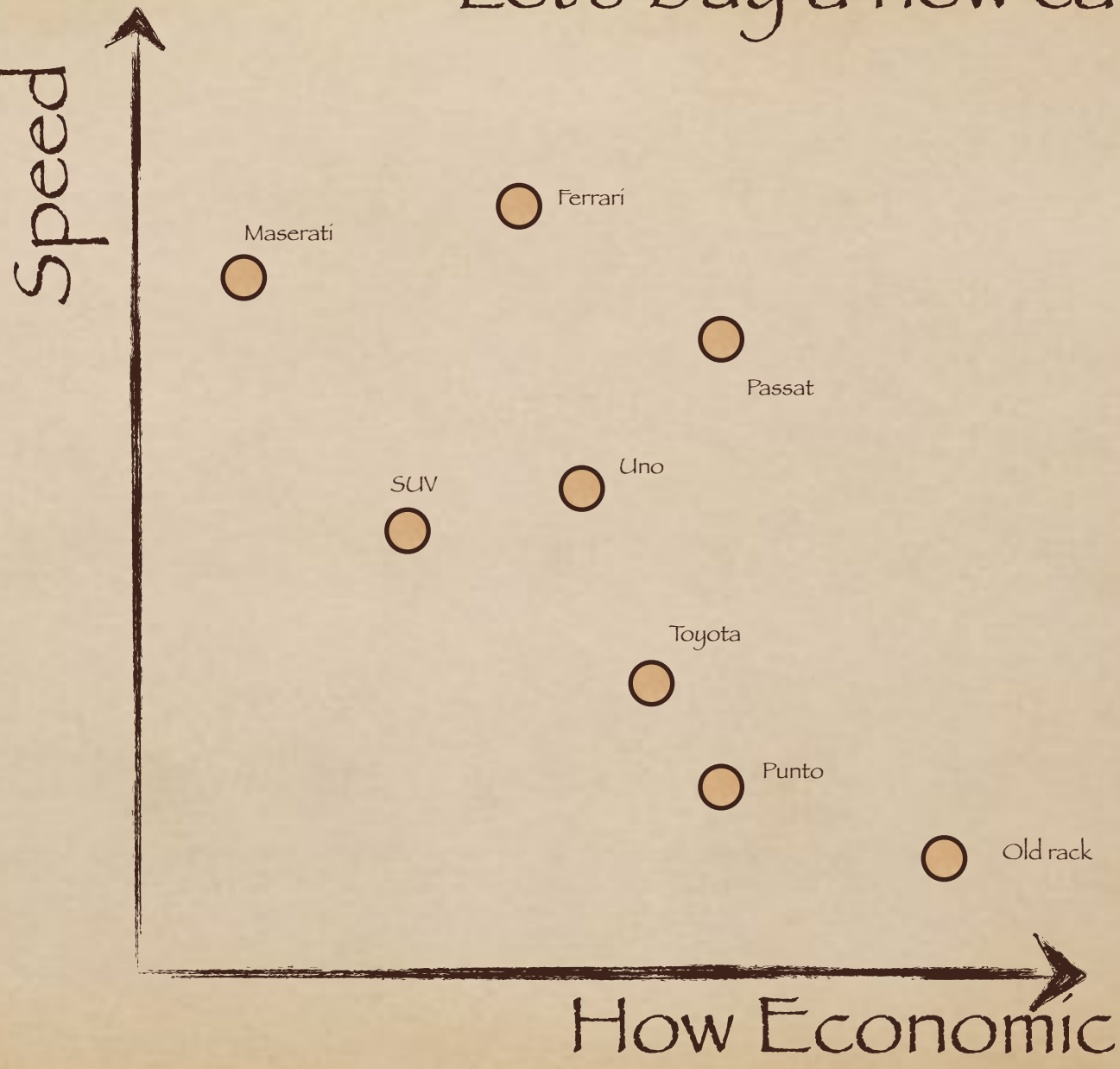
E is bigger than C, but C is undominated

We keep A, B & C

Once we take away
all the answer that are dominated
what remains is a Pareto Front (PF).



Let's buy a new car



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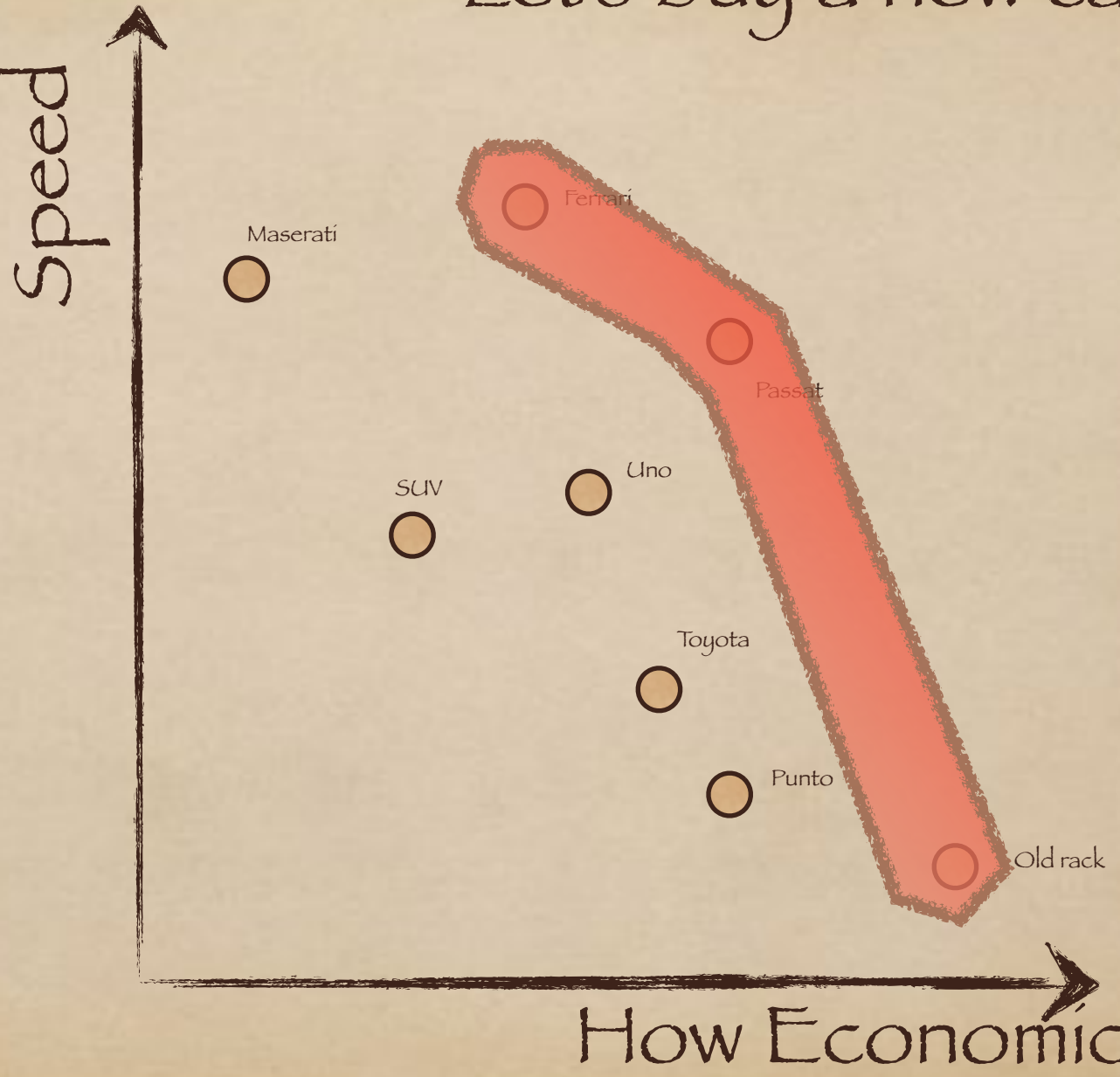
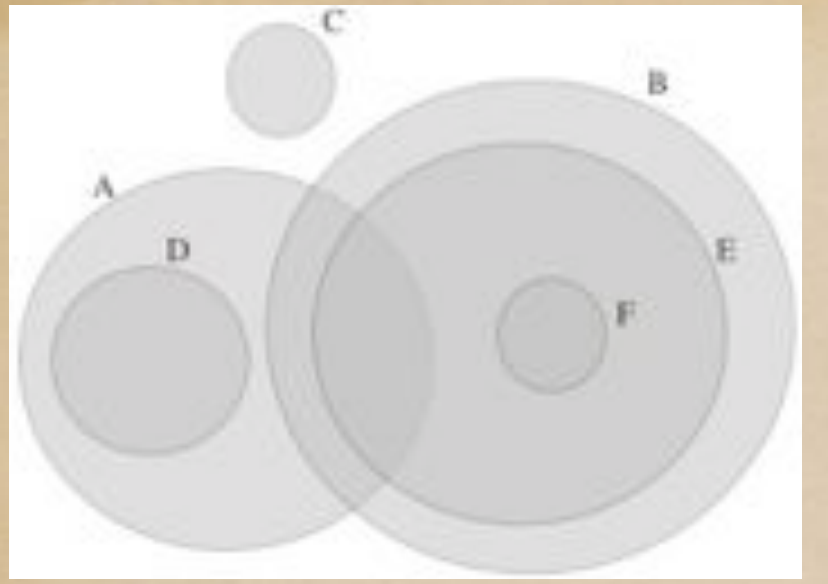
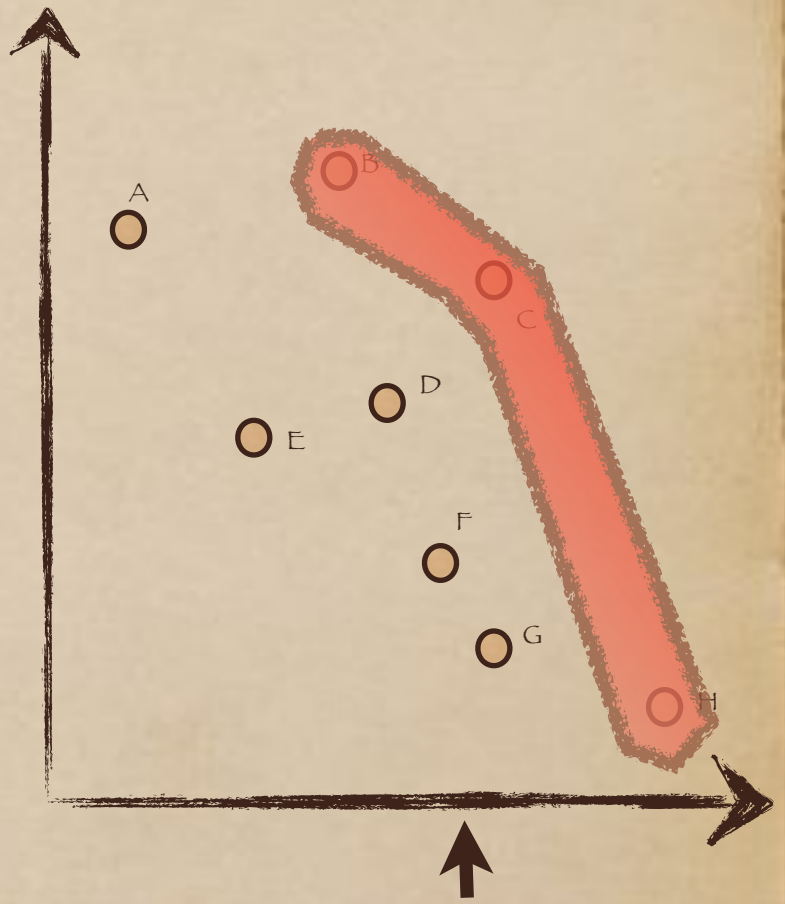




N person, each
voting yes or no



2 person/measures,
ordering the solutions

Once we take away
all the answer that are dominated
what remains is a Pareto Front (PF).

Corollaries:

If a proposal has been voted
by everybody it will be in the PF

If the PF has only one element
we have found a consensus.

The most popular answer is always in the PF.

The number of elements in the PF >=1,
but it is not predetermined.

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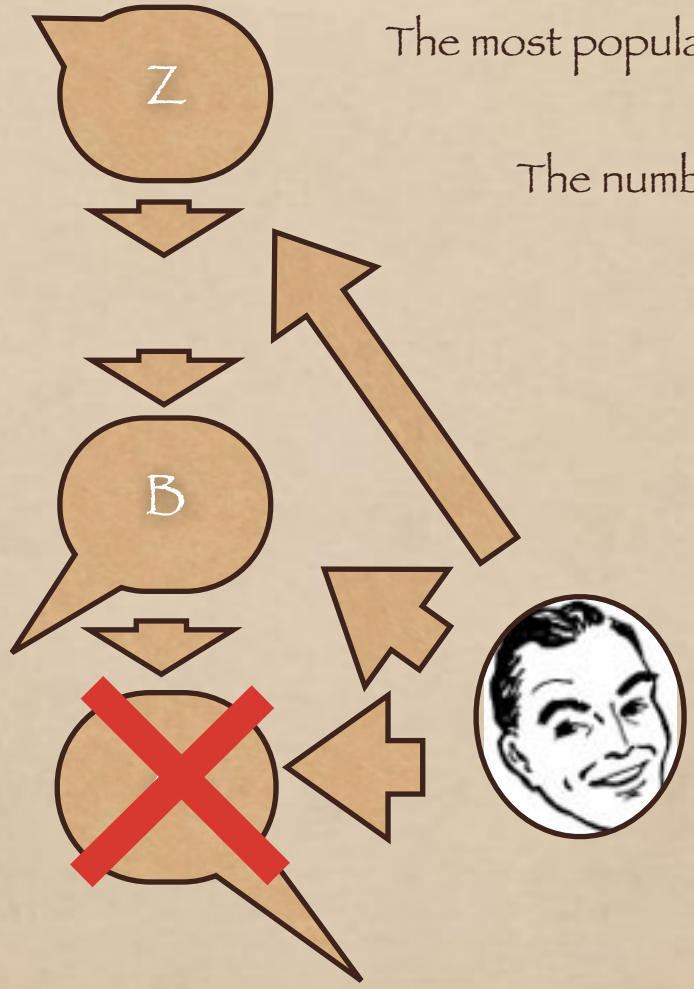

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A proposal x can be less
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Because y is dominated by z,
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Each person can force an answer to be in the PF

Each person can VETO an answer from being the consensual solution.

The Wall of Text Question

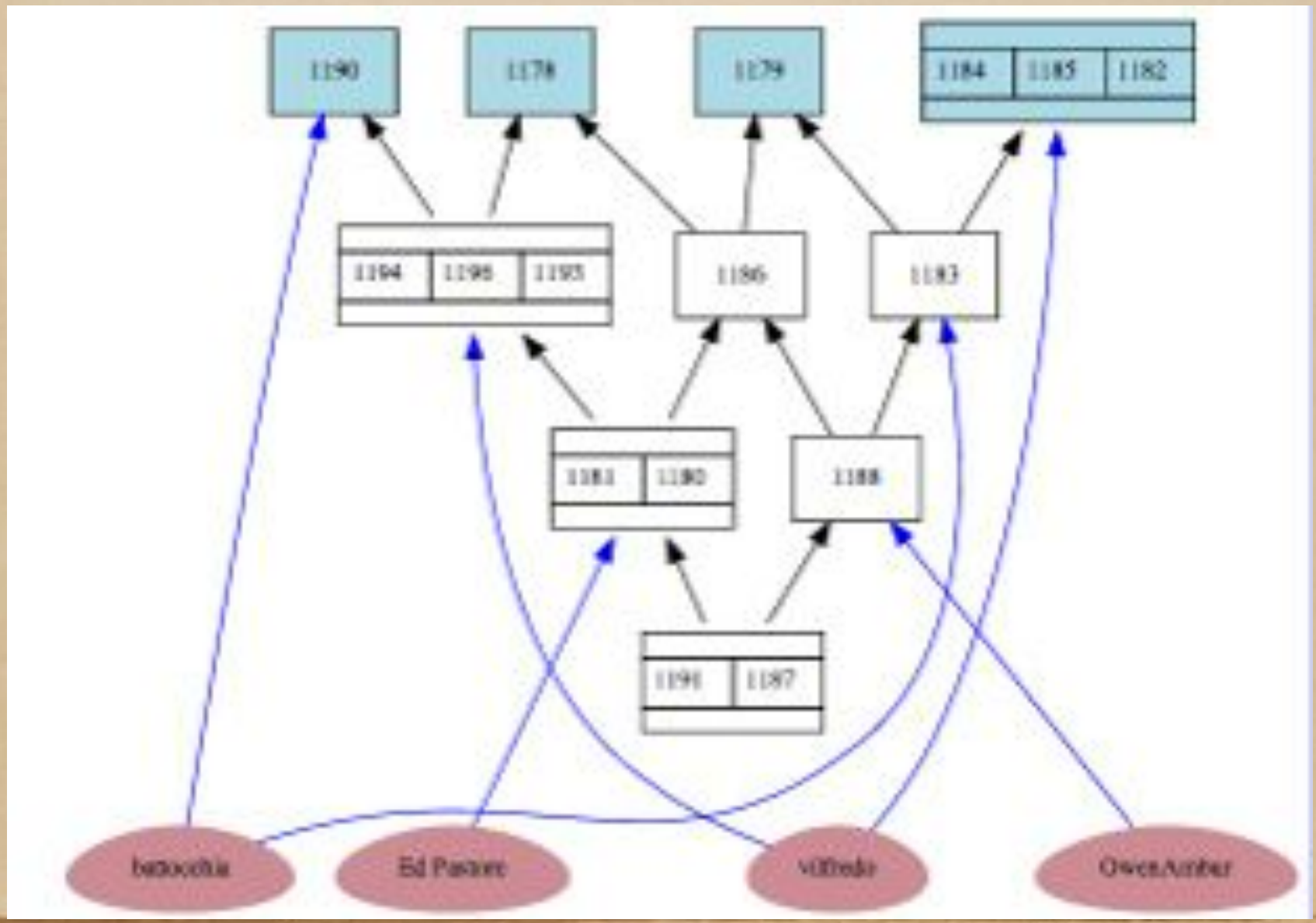
Right now there is no limit to the size of the answer that users can write. On the one side this is good, as it permit to users to spell out their idea in details, on the other it is a problem, as some users tend to write very long essays, making the participation difficult for everybody.
From a certain point of view the problem is not massive, the more an answer is long the more people that do not understand it might not vote for it, generating a *de facto*, intrinsic push toward shorter answers.
Yet many people feel a sense of duty to read all answers, and when confronted with too long answers they might simply postpone their voting process. With the result that they risk to fall out from the discussion cycle.

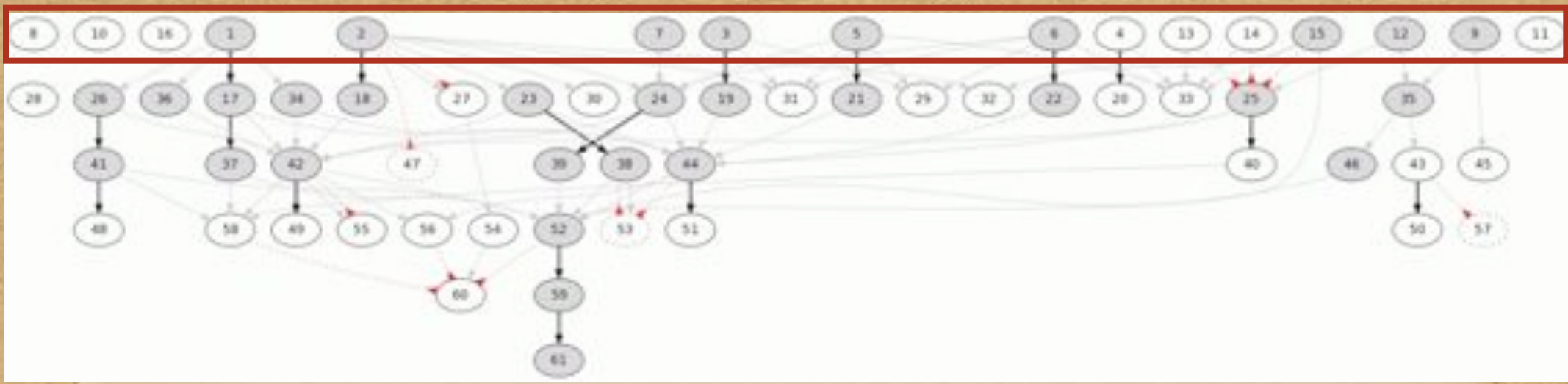
What limit, if any, there should be to the length of the answer that the users are allowed to write?

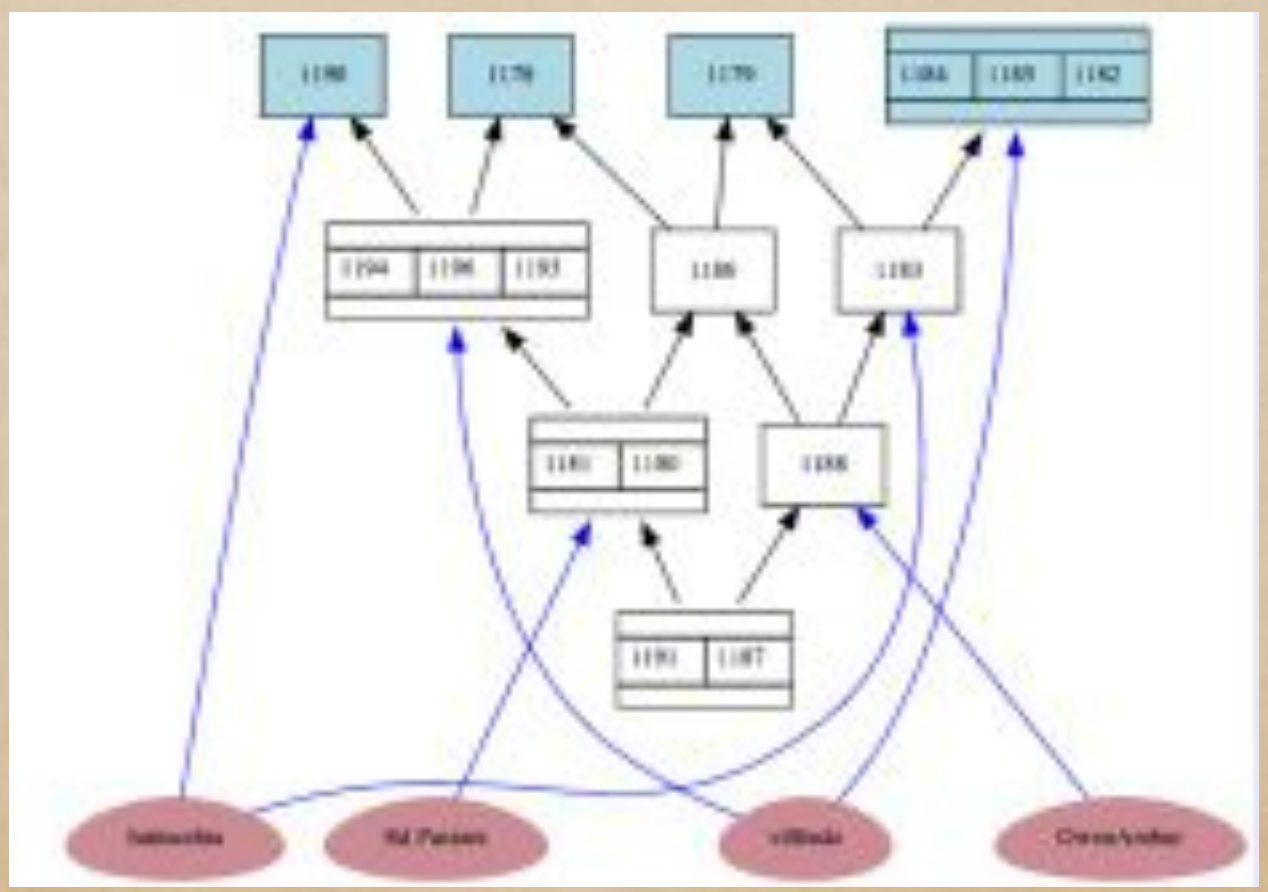
And how should this limit be imposed?

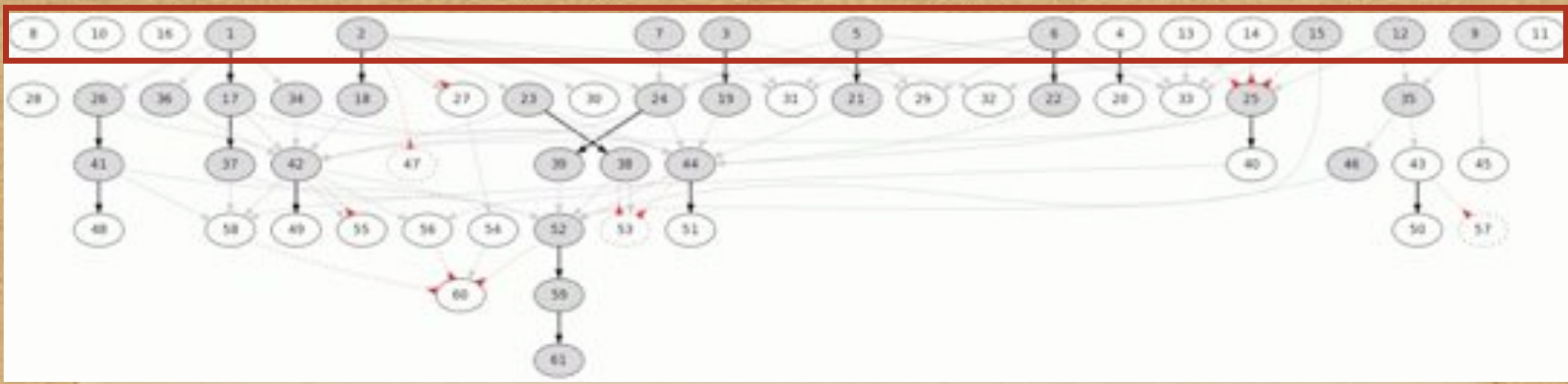
Should this limit be decided once and for all, or should each person that asks the question decides the limit for that question?
If this is the case, should the questioner be allowed to change this limit later in time?
Sometimes it is possible to impose intrinsic limits, like the one said above. For example making the edit box smaller. And others are possible as well. If you have an idea about a soft limit that we could install, please share that too.

The Wall of Text Question
Generation 1







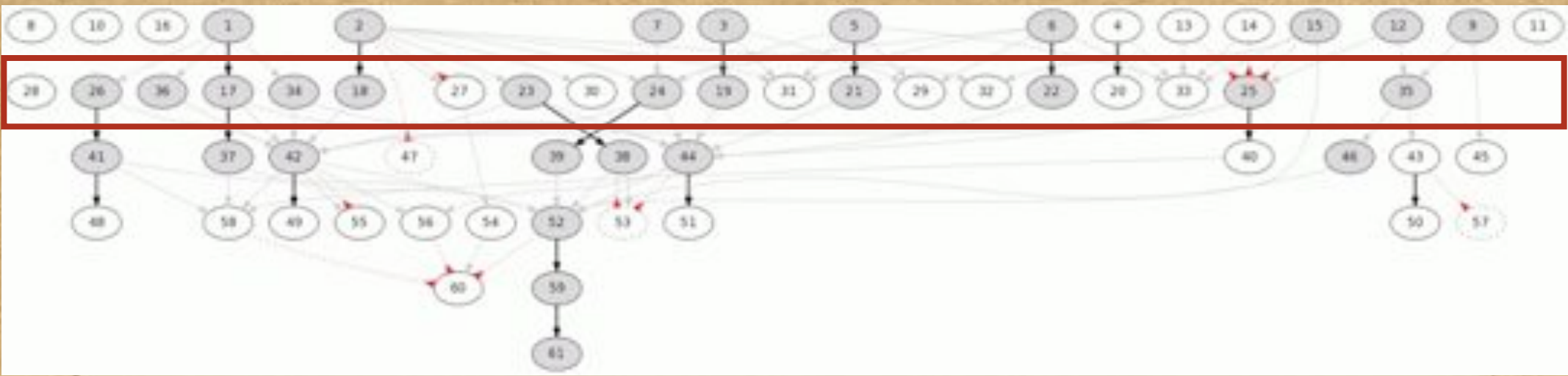


Writing an abstract of the proposal.

Shorter proposals appear in the first places of a ranking. There are two new buttons: I understand, I don't understand. Negative understanding points sink the proposal in that ranking.

The Author of a question should decide the length of the answer to that question. But then at every generation, during the voting phase, he can review this decision to permit longer or shorter proposals in the next generation. In this way he is given some ability to guide the process depending if the users are struggling to write their ideas in that space, or if the users are writing long essays, that could be easily summarised.

Rating systems. The idea being, that people will write more concisely to get a higher rating.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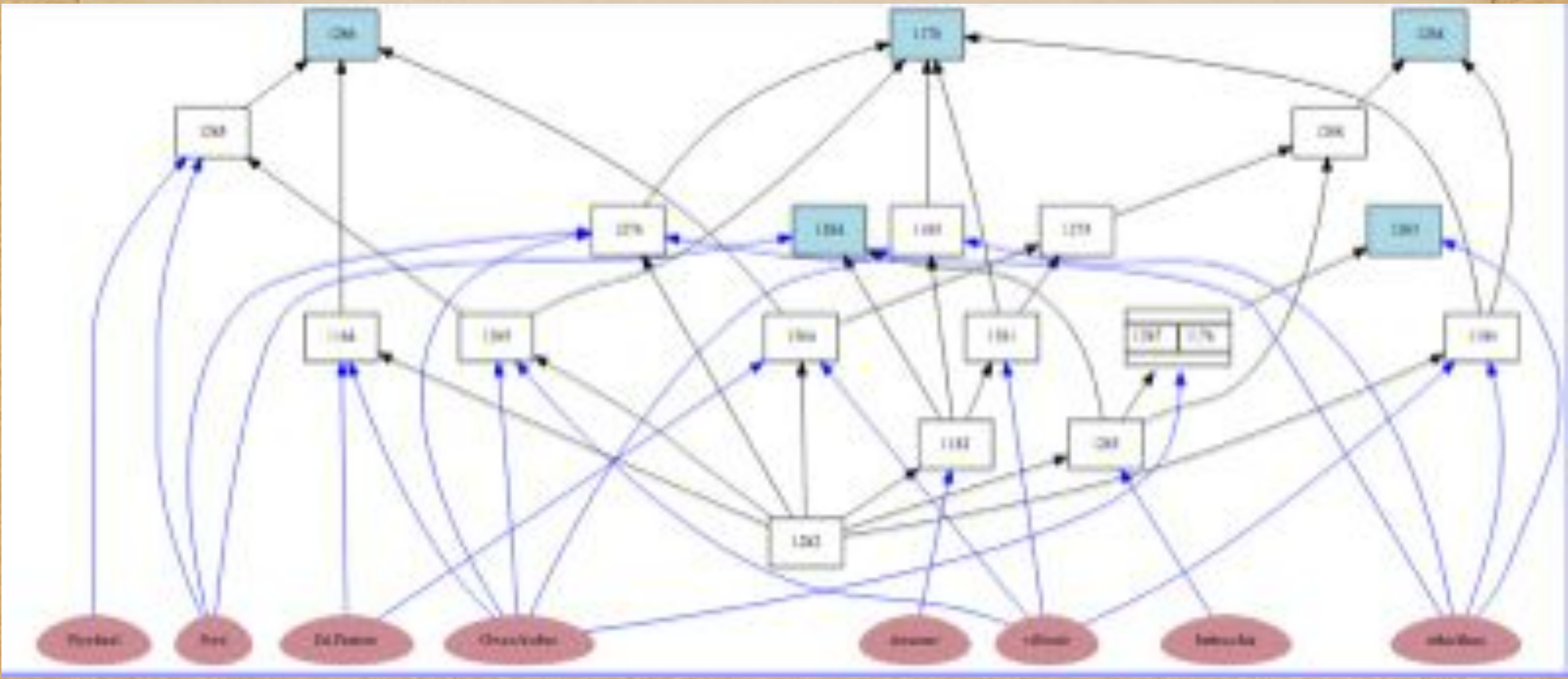

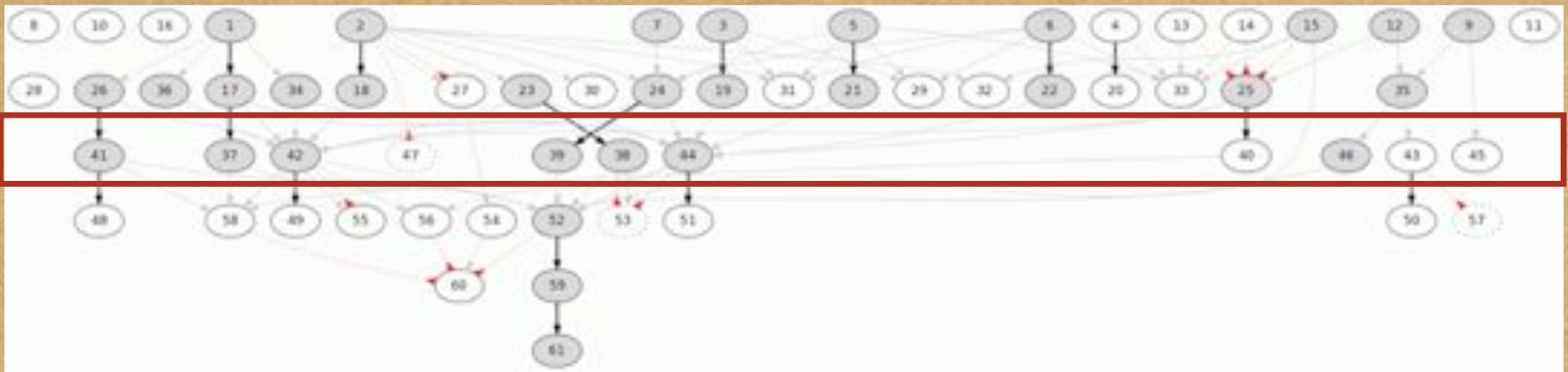

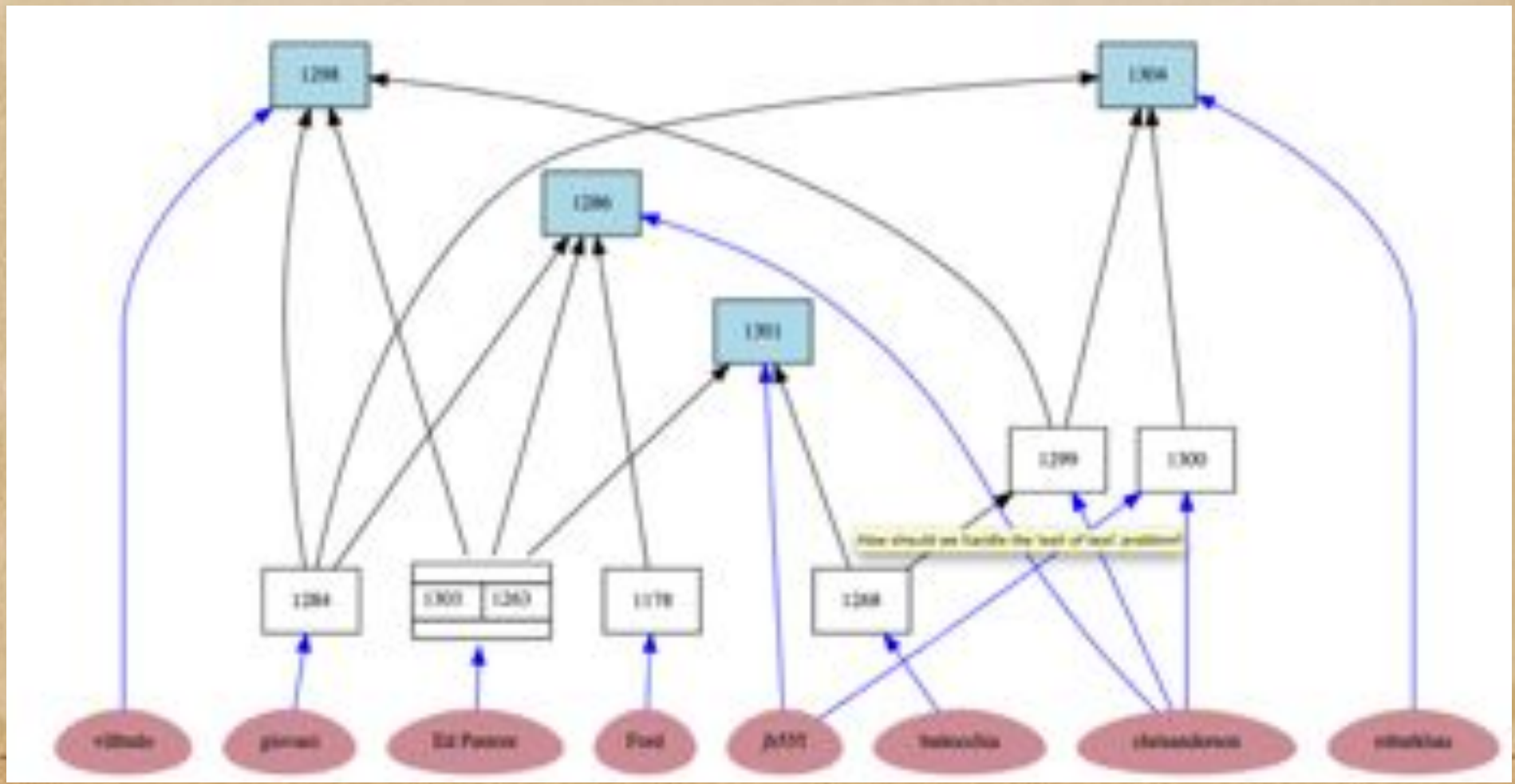
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How should we handle the 'sort of land' problem?
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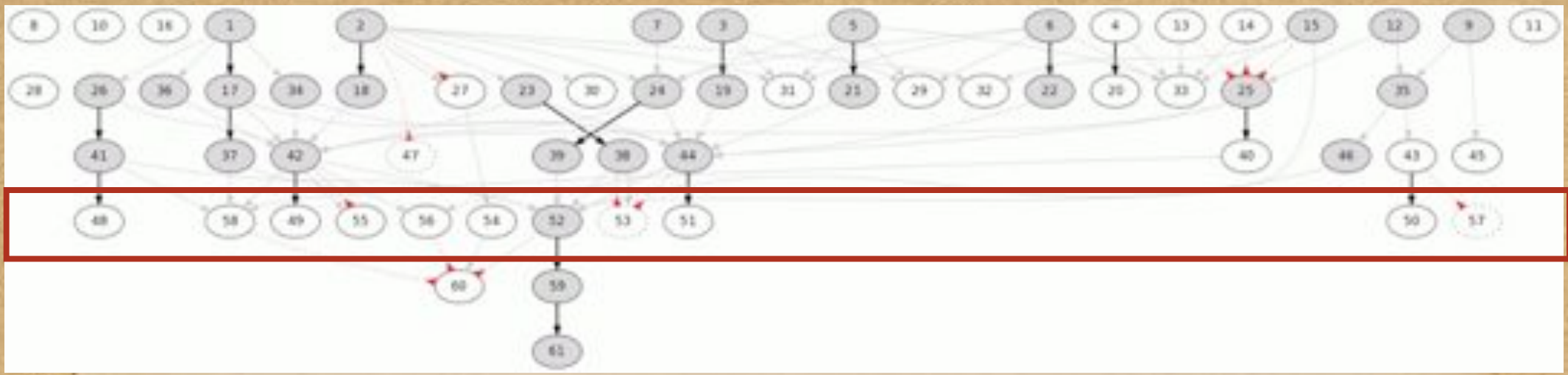
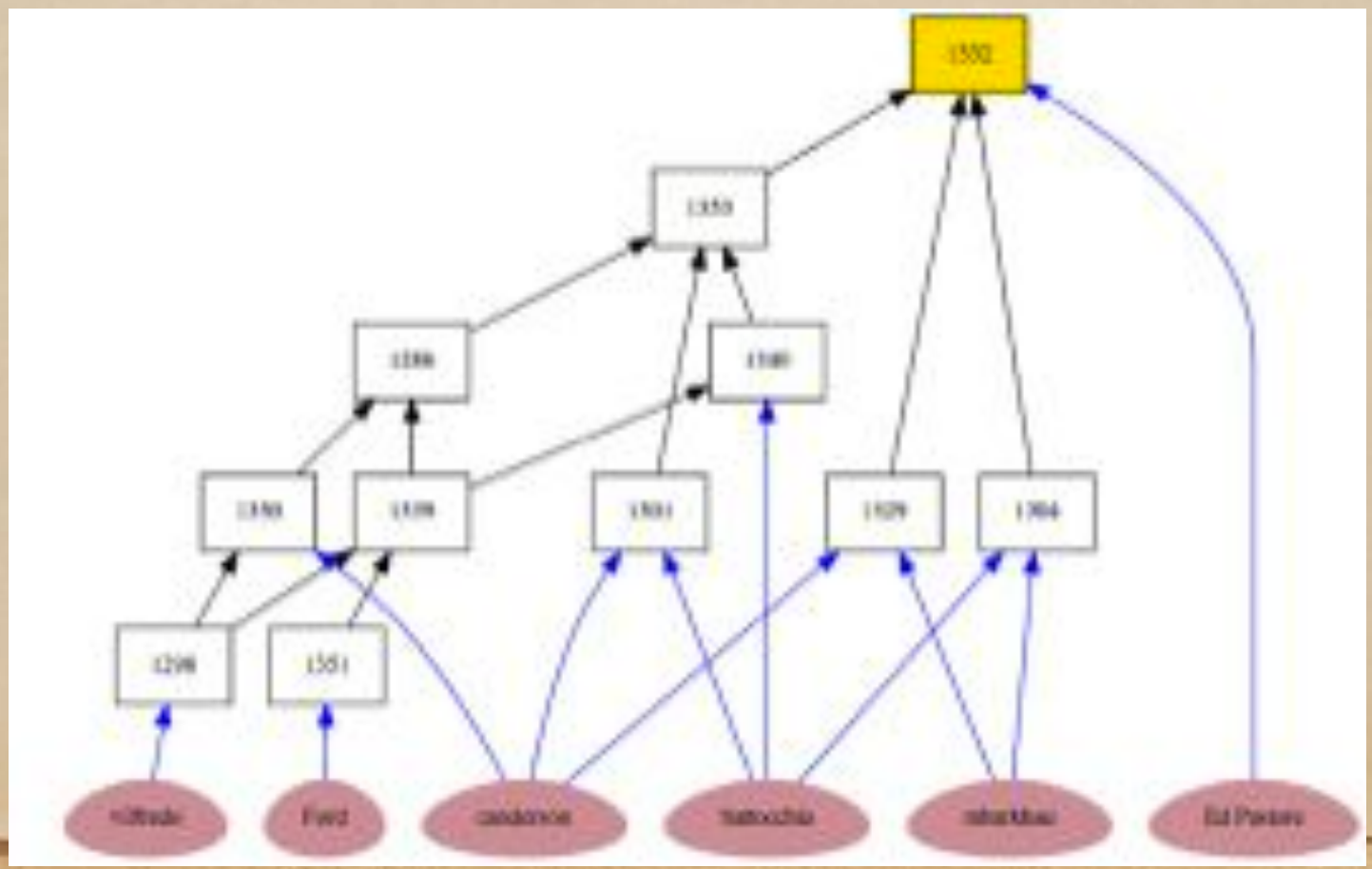
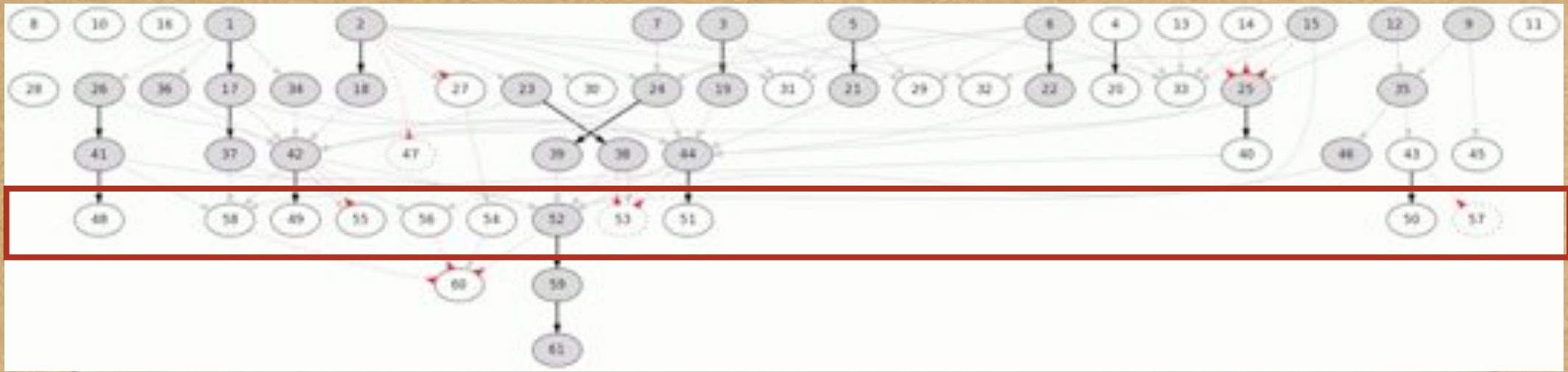






Abstract:
Require abstracts for long articles; calculate a complex score of the proposal body; give visual feedback of that score; and present proposals in order of lowest-score first.

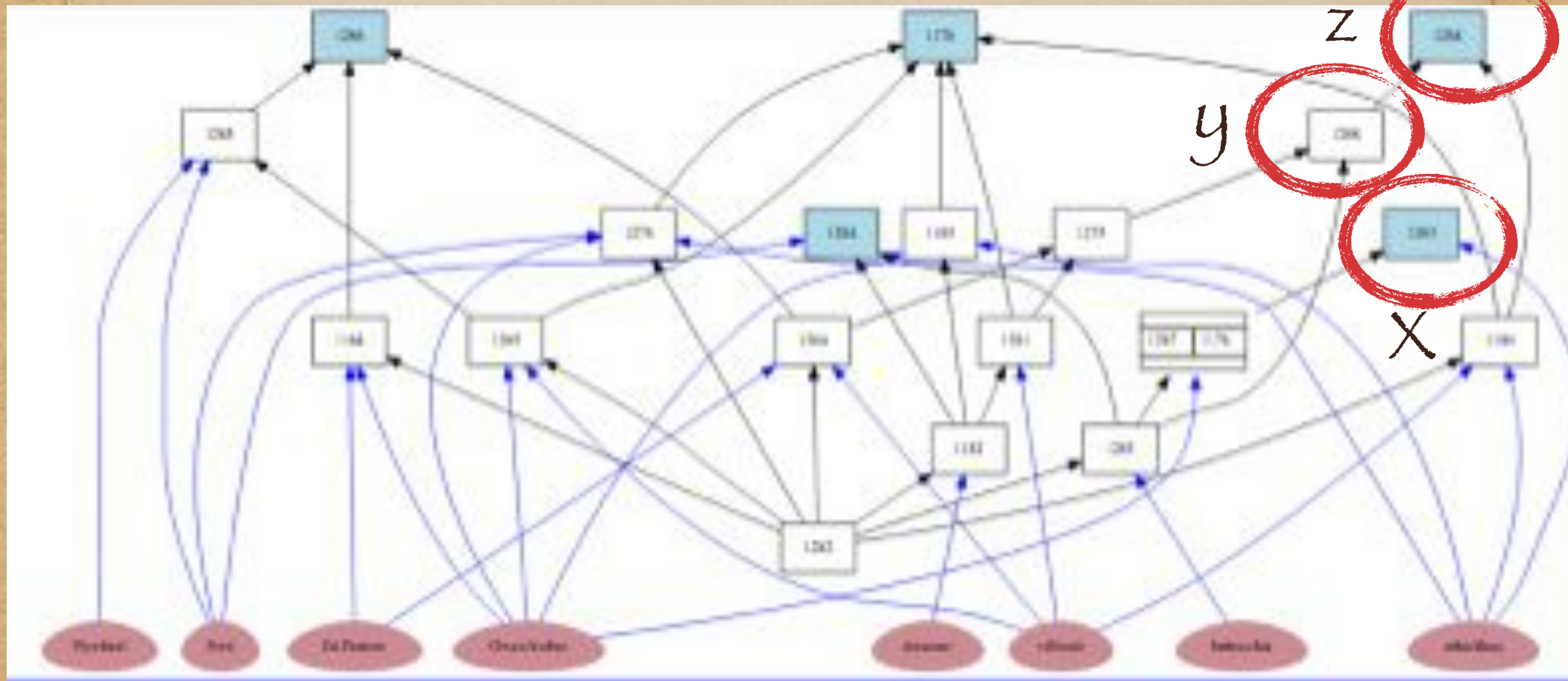
Proposal:

1. **Proposals longer than 1,000 characters require an abstract**. Abstracts are hard-limited to 500 characters. (These numbers could be tweaked.)

2. **Give visual feedback about the quality of writing of the proposal body**, perhaps in the form of a bar across to top of the input box which contains a gradation from green to red. As the difficulty score of the input goes up, the bar fills up (or a slider moves) toward the red side. Also, the number score is shown. Additionally as the score goes up, more and more text warnings/FAQs start to appear (using CSS visibility), advising against length/complexity and giving tips on how to write more concisely. Metrics for the difficulty score could include:
   - SMOG score
   - Length of proposal - weighted heavily
   - Number of other proposals by same author on same question (ie, a power law)
   - Possibly "readability-votes" by other users
   - Possibly others (though note SMOG is pretty inclusive. See source.)
3. **Proposals are presented in order of their difficulty score**. So the simpler your writing, the more likely your proposal is to appear at the top. This eliminates the need to build a karma system right away, while still providing a strong incentive (but note, it is not mutually exclusive with a karma system, and one certainly still could be implemented).

(This proposal is a synthesis of several others.)

A proposal x
can be less popular than a proposal y,
and yet x is in the PF
and y is not.
Because y is dominated by z, while x is not



Introduction to social choice

Jérôme Lang
LAMSADE, CNRS & Université Paris-Dauphine

A voting profile

candidates: $X = \{a, b, c, d, e\}$

100 votes:

- 33 votes: $a \succ b \succ c \succ d \succ e$
- 16 votes: $b \succ d \succ c \succ e \succ a$
- 3 votes: $c \succ d \succ b \succ a \succ e$
- 8 votes: $c \succ e \succ b \succ d \succ a$
- 18 votes: $d \succ e \succ c \succ b \succ a$
- 22 votes: $e \succ c \succ b \succ d \succ a$

Who should be elected?

33	$a \succ b \succ c \succ d \succ e$
16	$b \succ d \succ c \succ e \succ a$
3	$c \succ d \succ b \succ a \succ e$
8	$c \succ e \succ b \succ d \succ a$
18	$d \succ e \succ c \succ b \succ a$
22	$e \succ c \succ b \succ d \succ a$

- plurality: $a \mapsto 33$, $b \mapsto 16$, $c \mapsto 11$, $d \mapsto 18$, $e \mapsto 22$
  winner: a
- Borda: $a \mapsto (33 \times 4) + (3 \times 1) = 135$, $b \mapsto 247$, $c \mapsto 244$, $d \mapsto 192$, $e \mapsto 182$
  winner: b
- veto: $a \mapsto 36$, $b \mapsto 100$, $c \mapsto 100$, $d \mapsto 100$, $e \mapsto 64$
  pre-winners: b, c, d
- 3-approval: $a \mapsto 33$, $b \mapsto 82$, $c \mapsto 100$, $d \mapsto 37$, $e \mapsto 48$
  winner: c

Generalizing simple majority:

pairwise majority given any two alternatives $x, y \in X$, use simple majority to determine whether the group prefers x to y or vice versa.

Does this work?

- 33 votes: $a \succ b \succ c \succ d \succ e$
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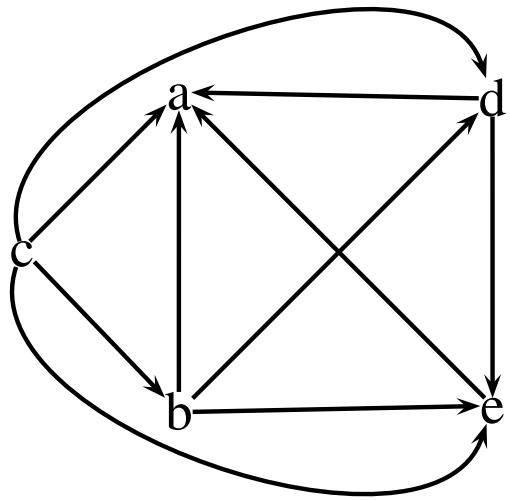
Majority graph associated with the profile ($x \longrightarrow y$ means that a majority of voters prefer x to y):



Collective preference relation: $c \succ b \succ d \succ e \succ a$

Winner: c

Generalizing simple majority:

pairwise majority given any two alternatives $x, y \in X$, use simple majority to determine whether the group prefers x to y or vice versa.

Does this *always* work?

- 33 votes: $a \succ b \succ \mathbf{d} \succ \mathbf{c} \succ e$
- 16 votes: $b \succ d \succ c \succ e \succ a$
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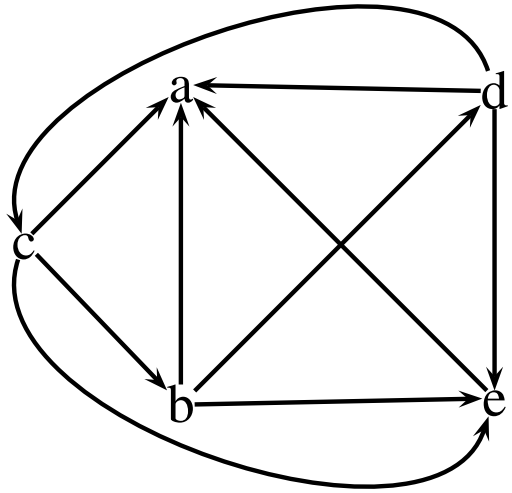


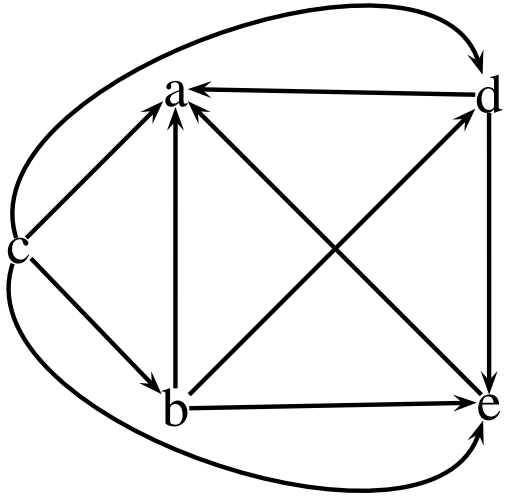
Collective preference relation: $\{b \succ c \succ d \succ b \succ \ldots\} \succ e \succ a$;

Winner: ?

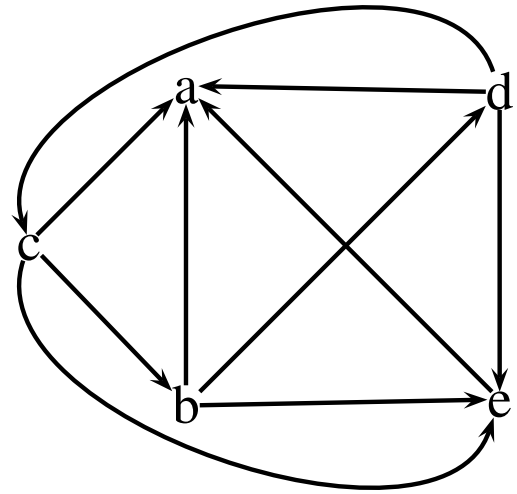
Condorcet winner

$N(x,y) =$ number of voters who prefer x to y.

Condorcet winner: a candidate x such that $\forall y \neq x, N(x,y) > \frac{n}{2}$
(= a candidate who beats any other candidate by a majority of votes).



c Condorcet winner



no Condorcet winner

- sometimes there is no Condorcet winner
- when there is a Condorcet winner, it is unique
- a voting rule is *Condorcet-consistent* if it outputs the Condorcet winner whenever there is one.

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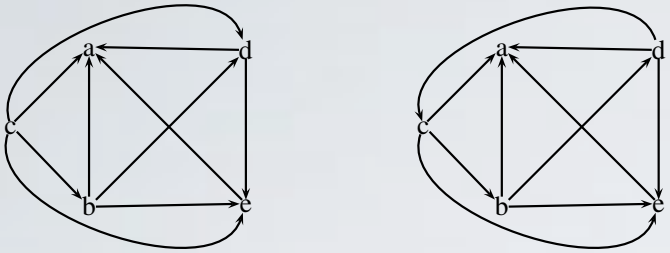

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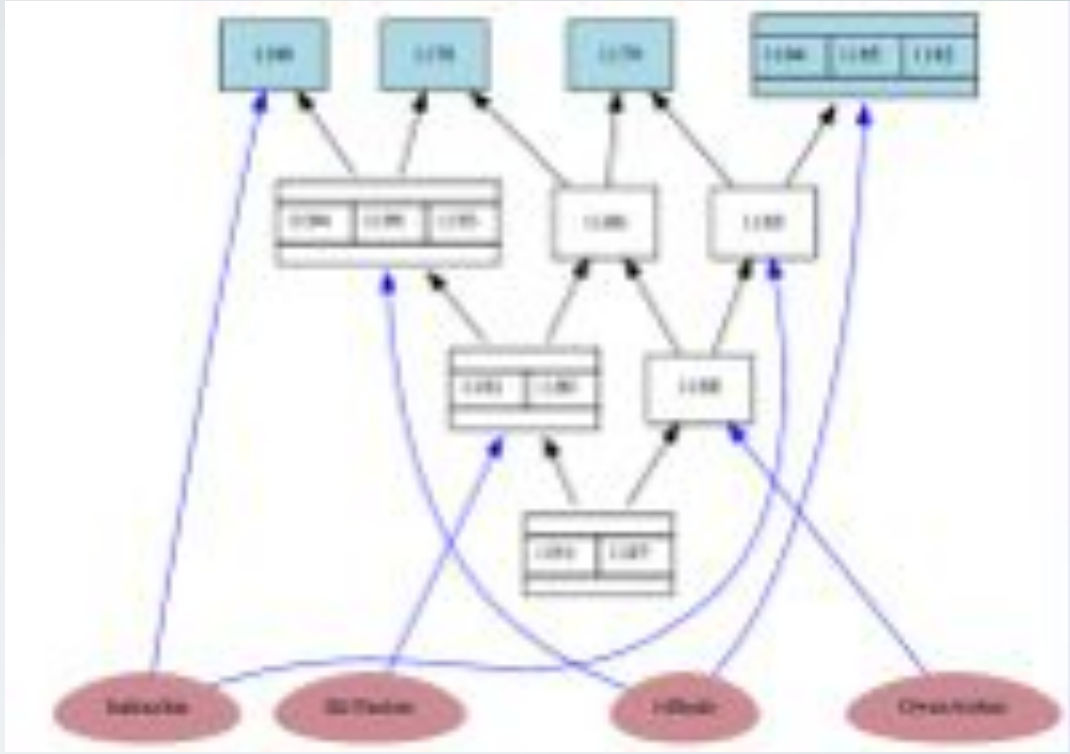
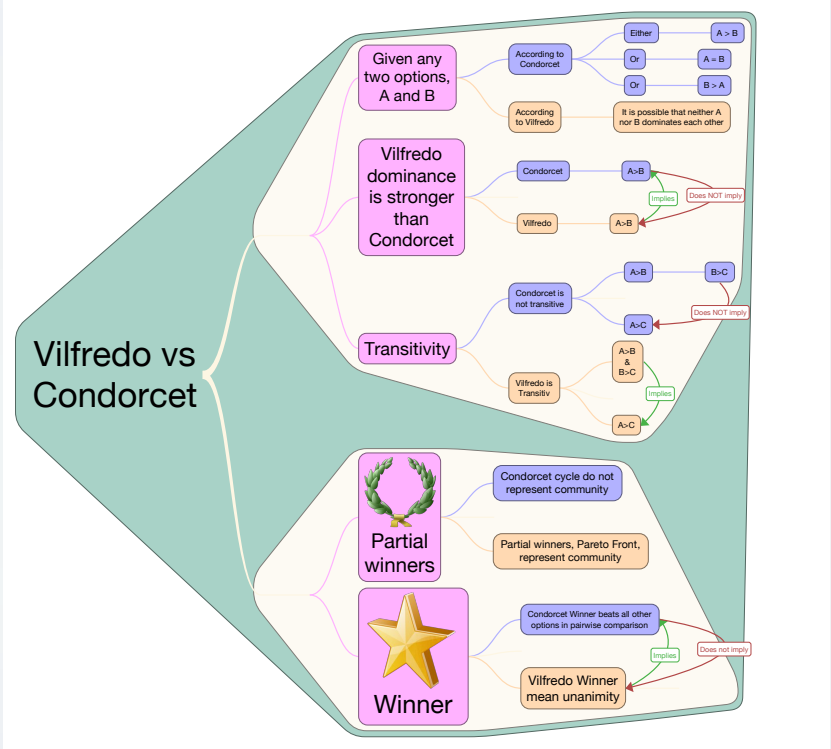
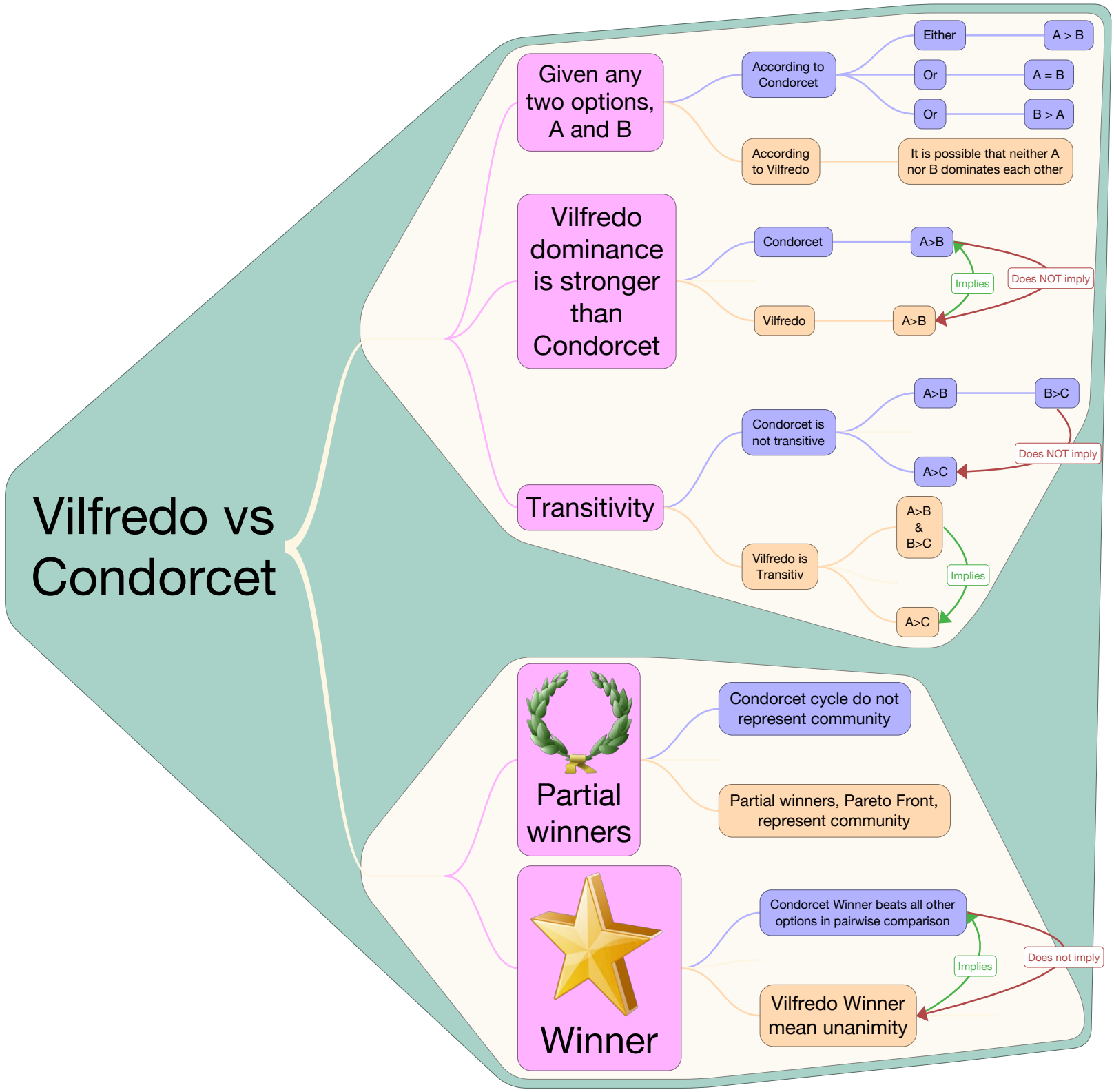
- when there is a Condorcet winner, it is unique
- a voting rule is *Condorcet-consistent* if it outputs the Condorcet winner whenever there is one.






Vilfredo vs Condorcet
Given any two options, A and B
According to Condorcet
Either
A > B
Or
A = B
Or
B > A
According to Vilfredo
It is possible that neither A nor B dominates each other
Vilfredo dominance is stronger than Condorcet
Condorcet
A>B
Implies
Does NOT imply
Vilfredo
A>B
Transitivity
Condorcet is not transitive
A>B
B>C
Does NOT imply
A>C
Vilfredo is Transitiv
A>B & B>C
Implies
A>C
Partial winners
Condorcet cycle do not represent community
Partial winners, Pareto Front, represent community
Winner
Condorcet Winner beats all other options in pairwise comparison
Implies
Does not imply
Vilfredo Winner mean unanimity

vs
cet

Given any two options, A and B

- According to Condorcet
  - Either → A > B
  - Or → A = B
  - Or → B > A
- According to Vilfredo
  - It is possible that neither A nor B dominates each other

Vilfredo dominance is stronger than Condorcet

- Condorcet → A>B
- Vilfredo → A>B

A>B Implies A>B

A>B Does NOT imply A>B

Transitivity

- Condorcet is not transitive
  - A>B
  - B>C
  - A>C

B>C Does NOT imply A>C

- Vilfredo is Transitiv
  - A>B & B>C
  - A>C

A>B & B>C Implies A>C

lo vs
orcet

Transitivity

Condorcet is not transitive

A>B

B>C

Does NOT imply

A>C

Vilfredo is Transitiv

A>B & B>C

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Partial winners

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Partial winners, Pareto Front, represent community

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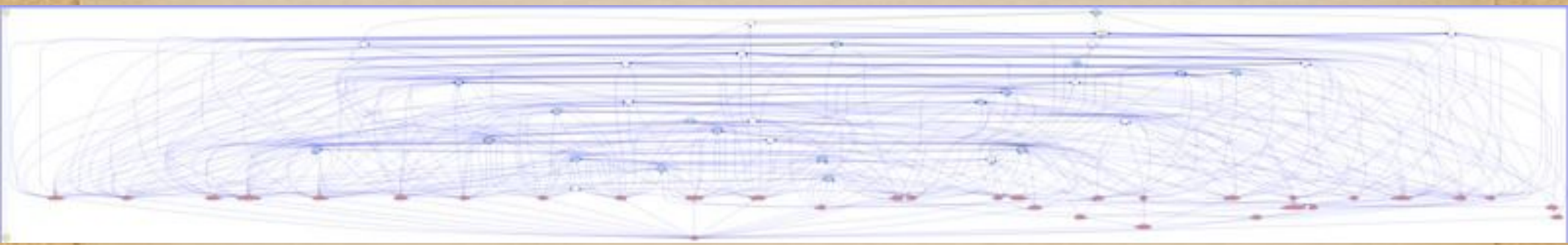
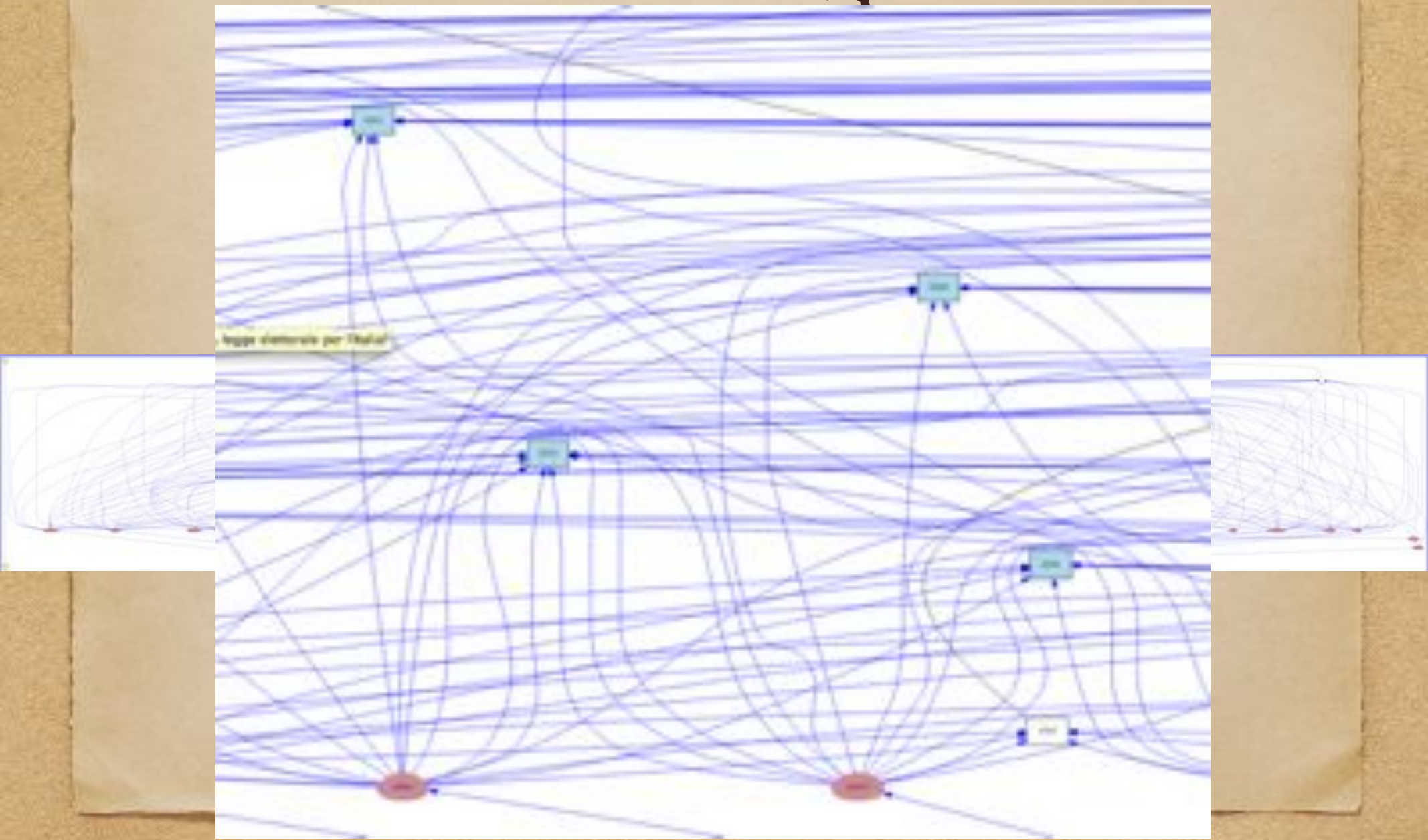
Does not imply

Vilfredo Winner mean unanimity

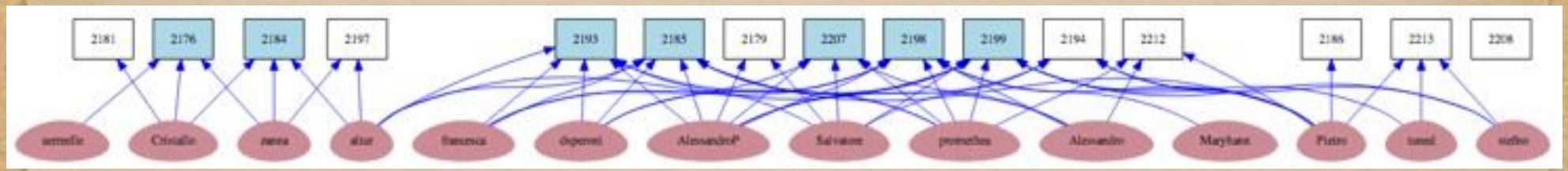
Scaling



Scaling



Better Graph



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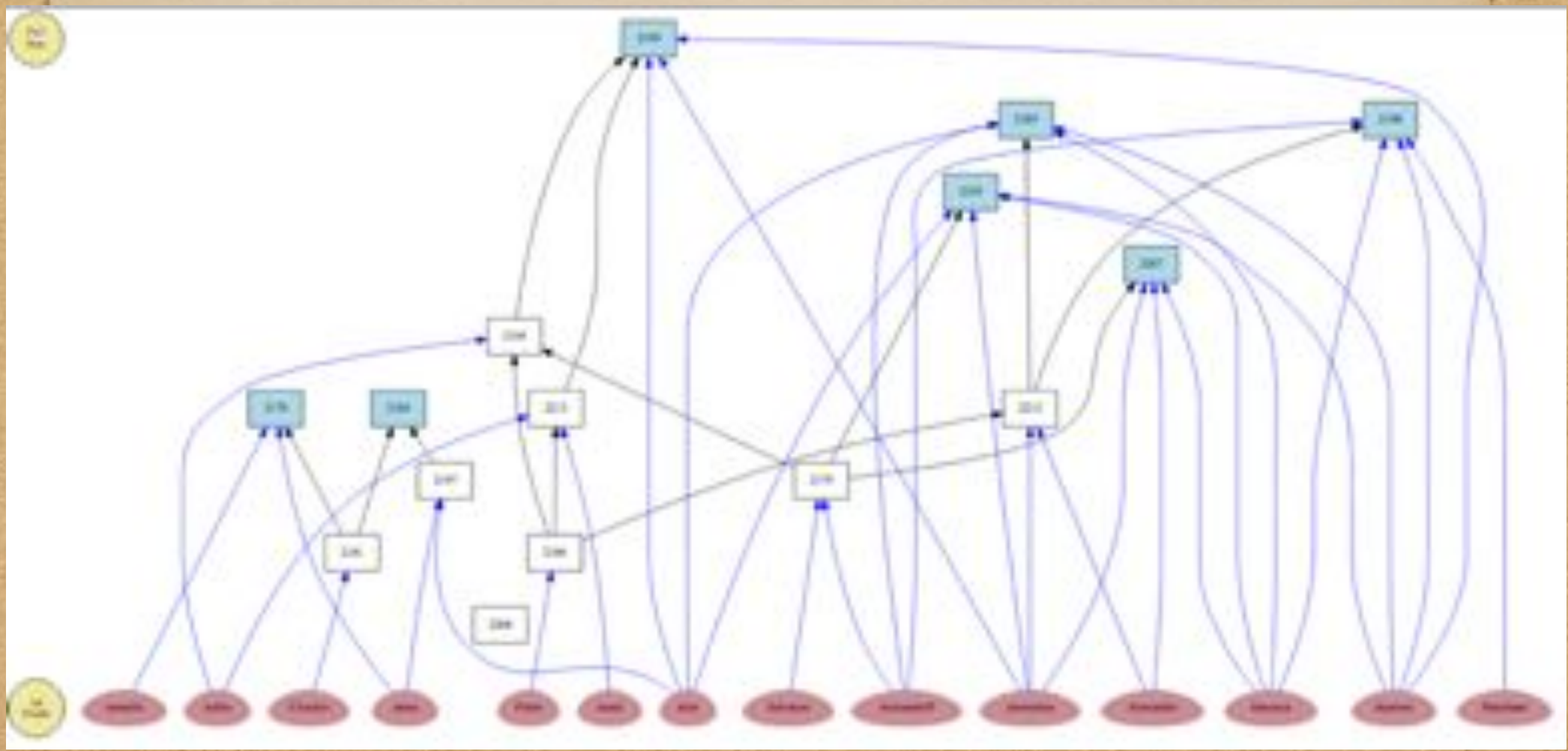

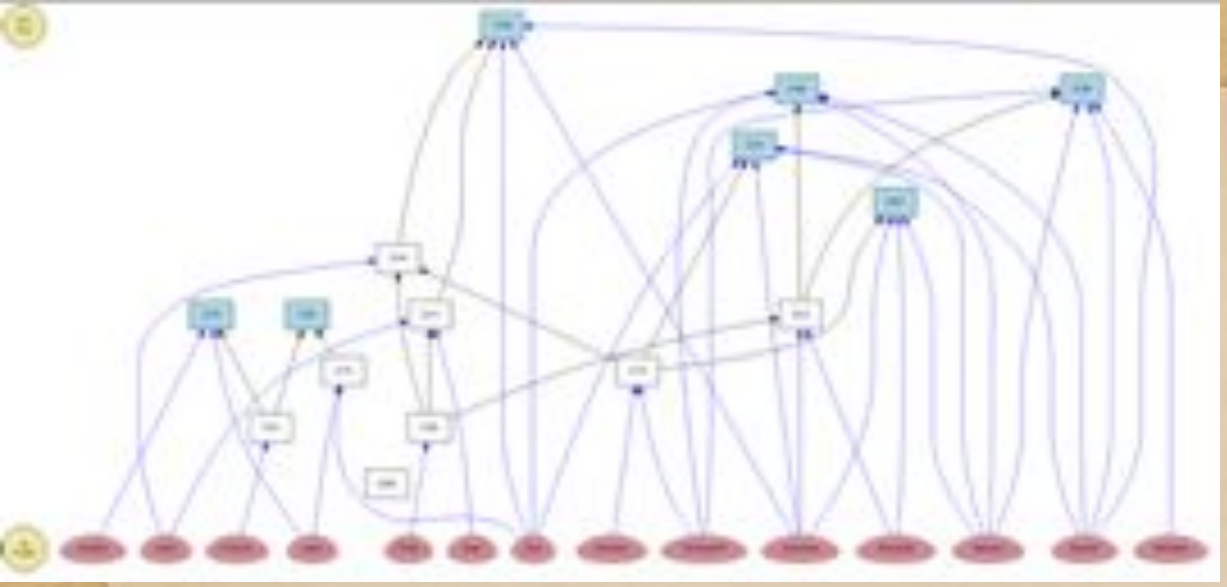

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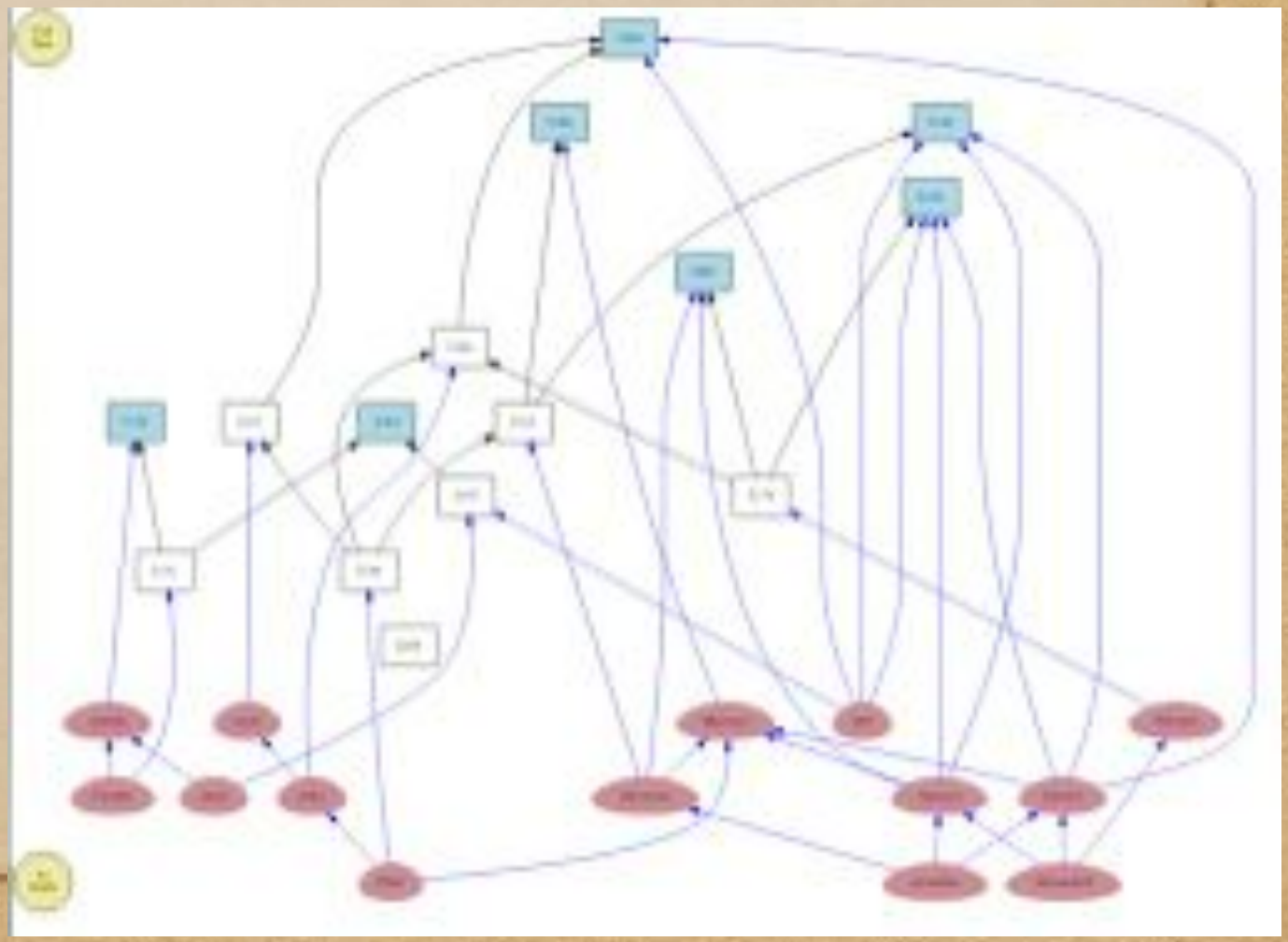
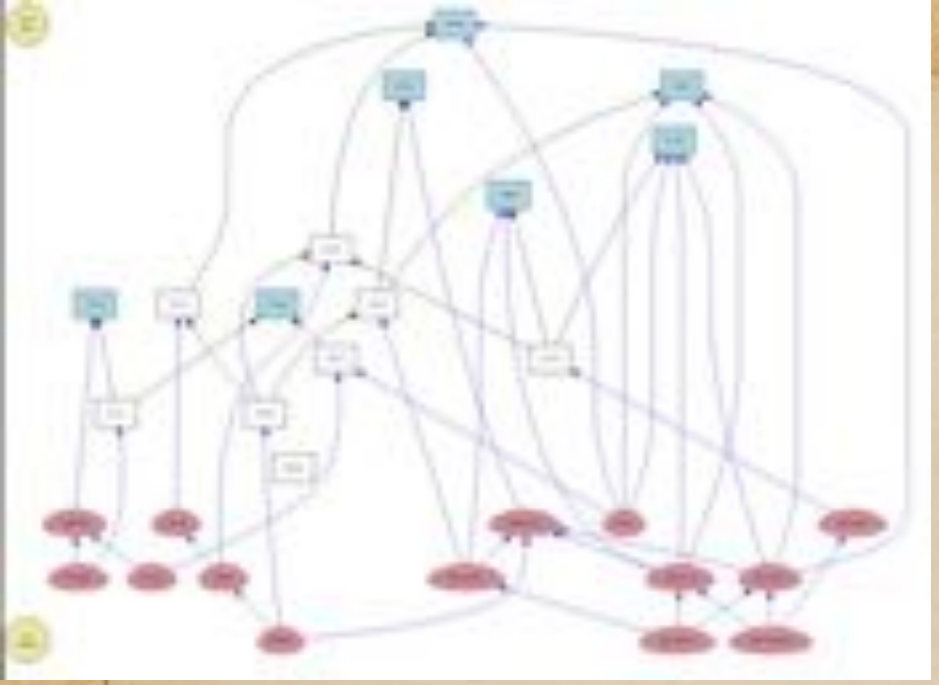
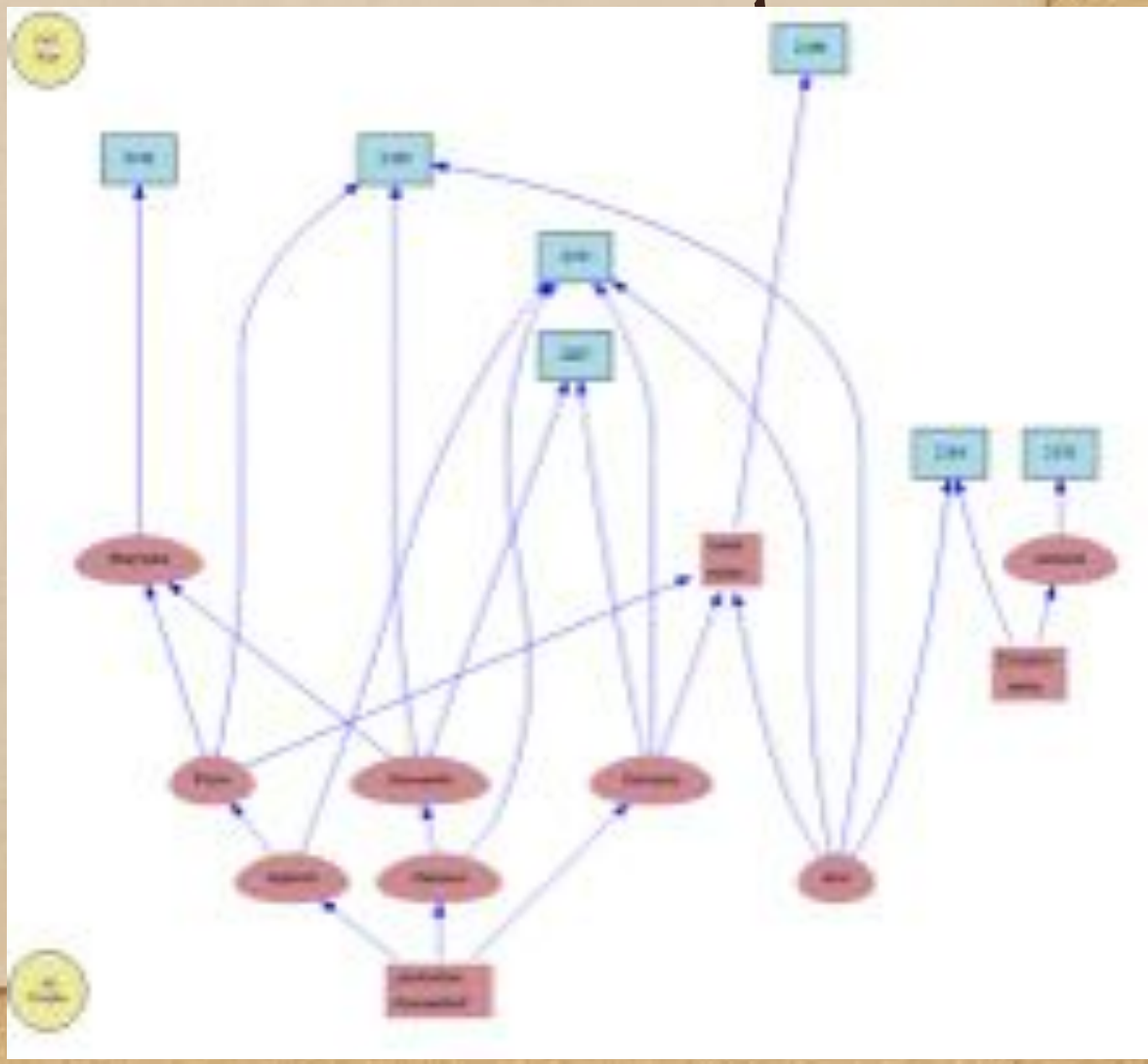
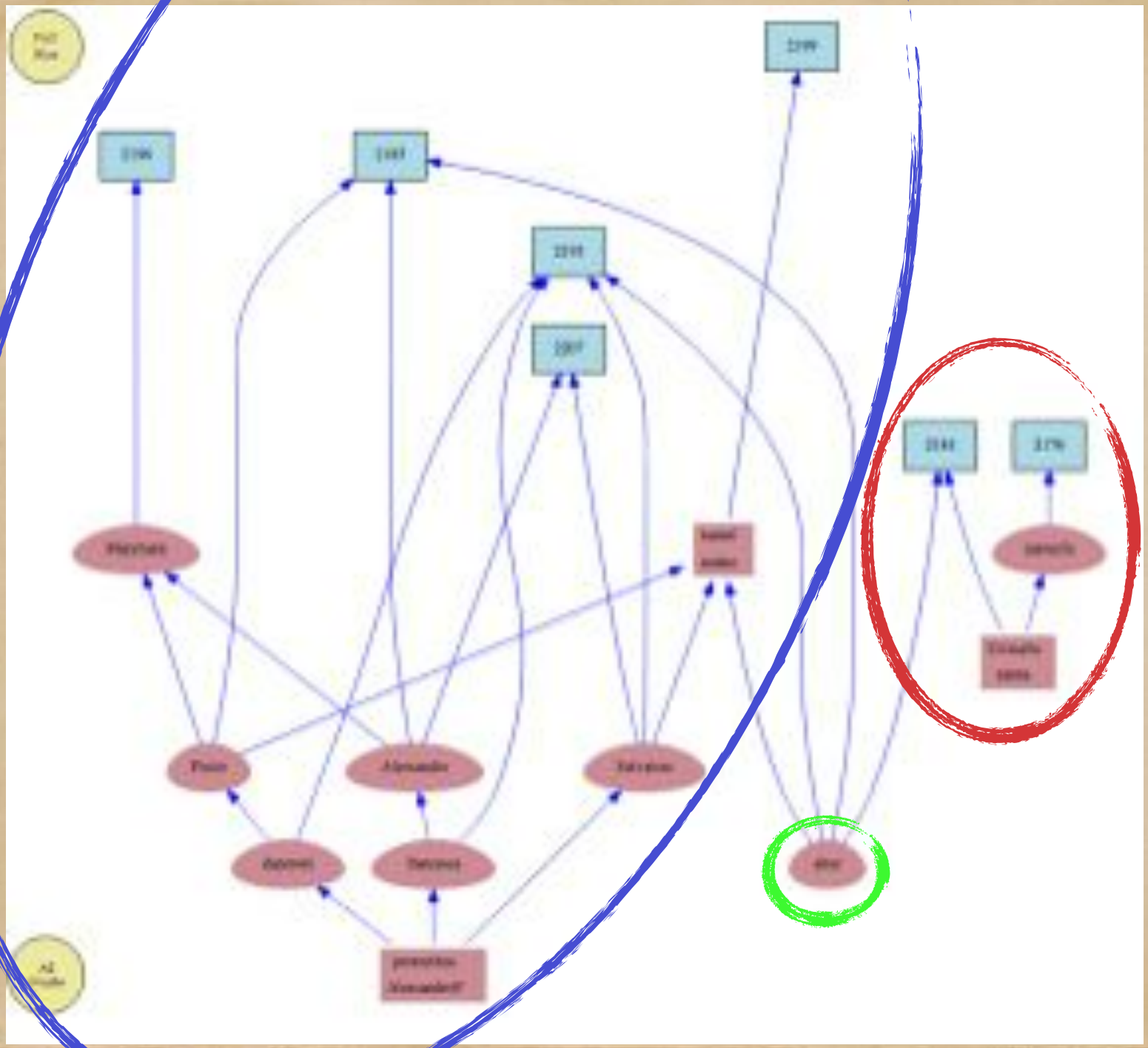
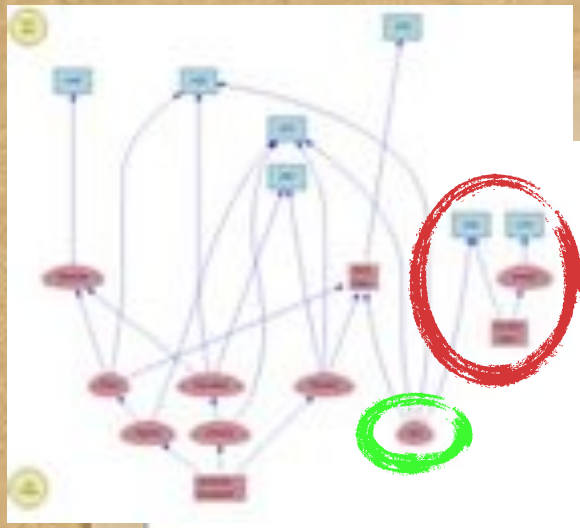




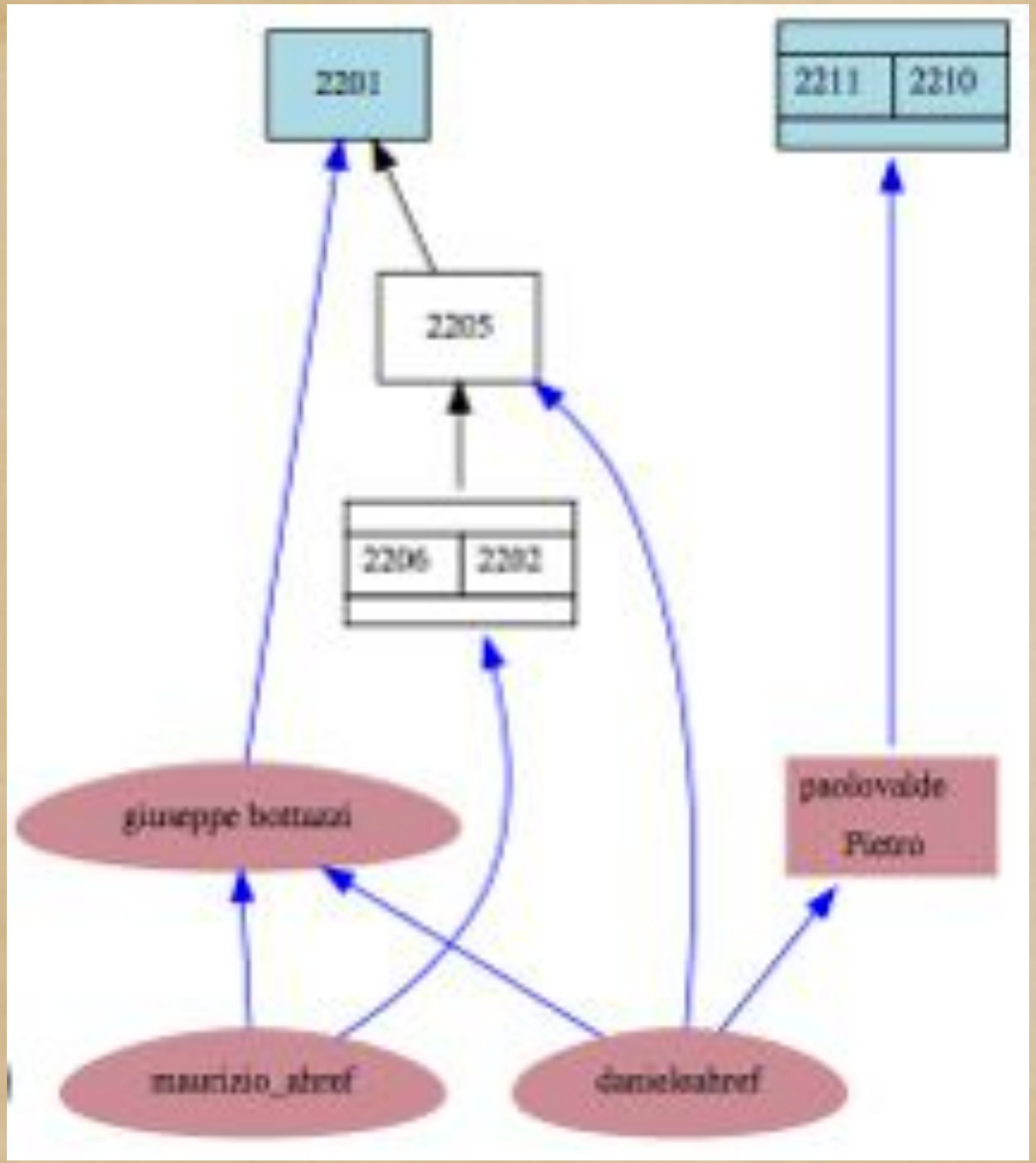
Better Graph







If a person did NOT vote for a proposal in the PF, he has also not voted for any proposal below. Ergo the PF represents different point of views



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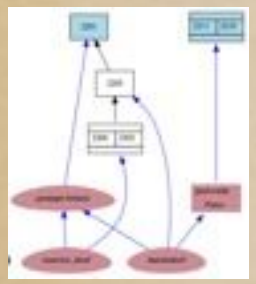

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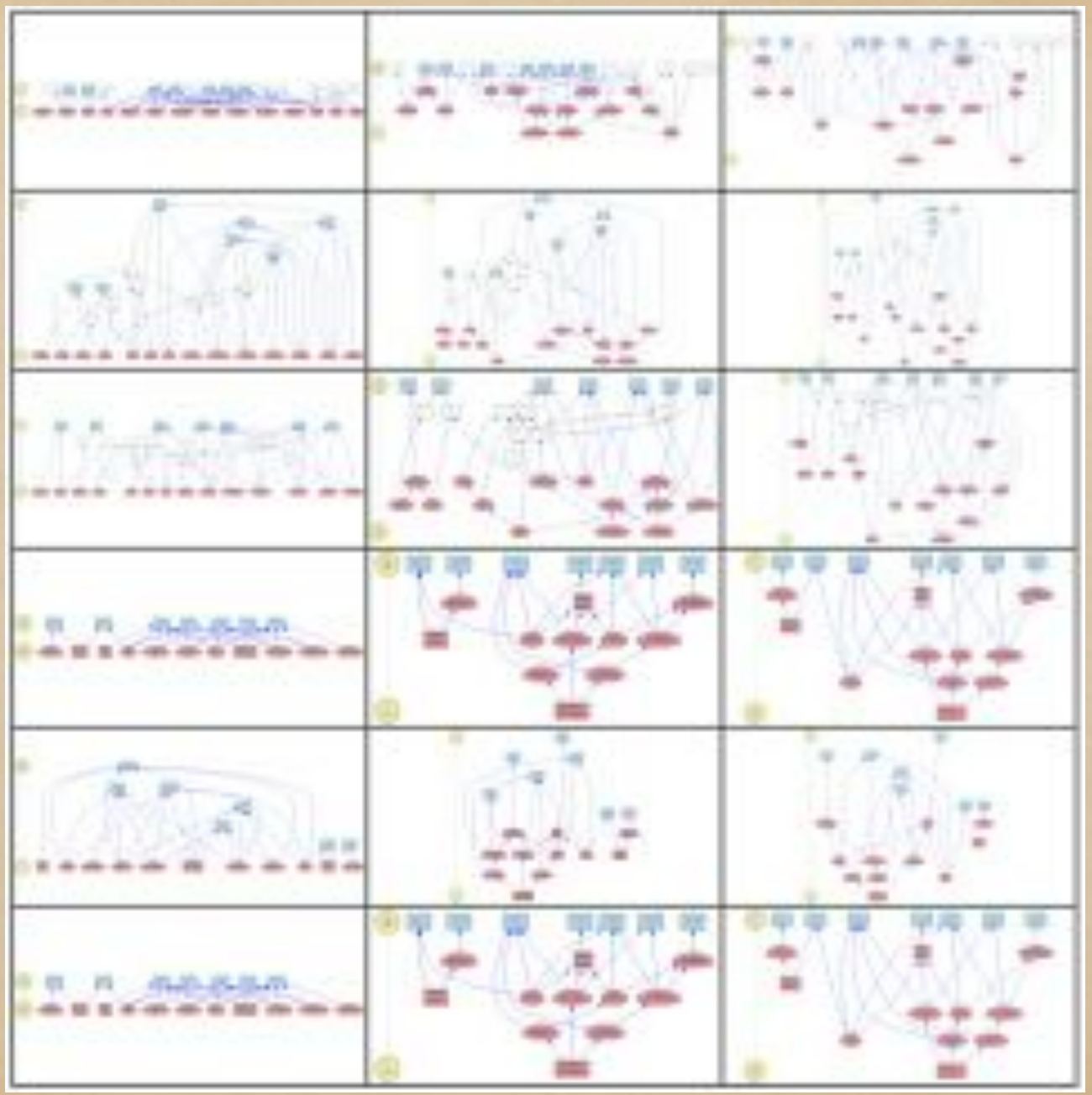
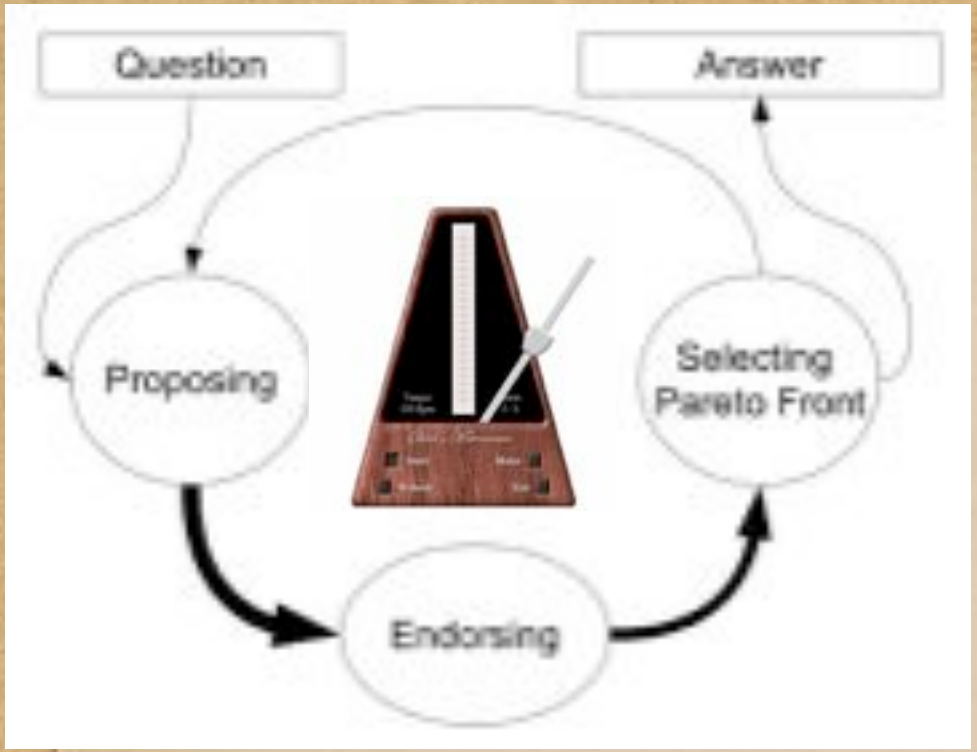
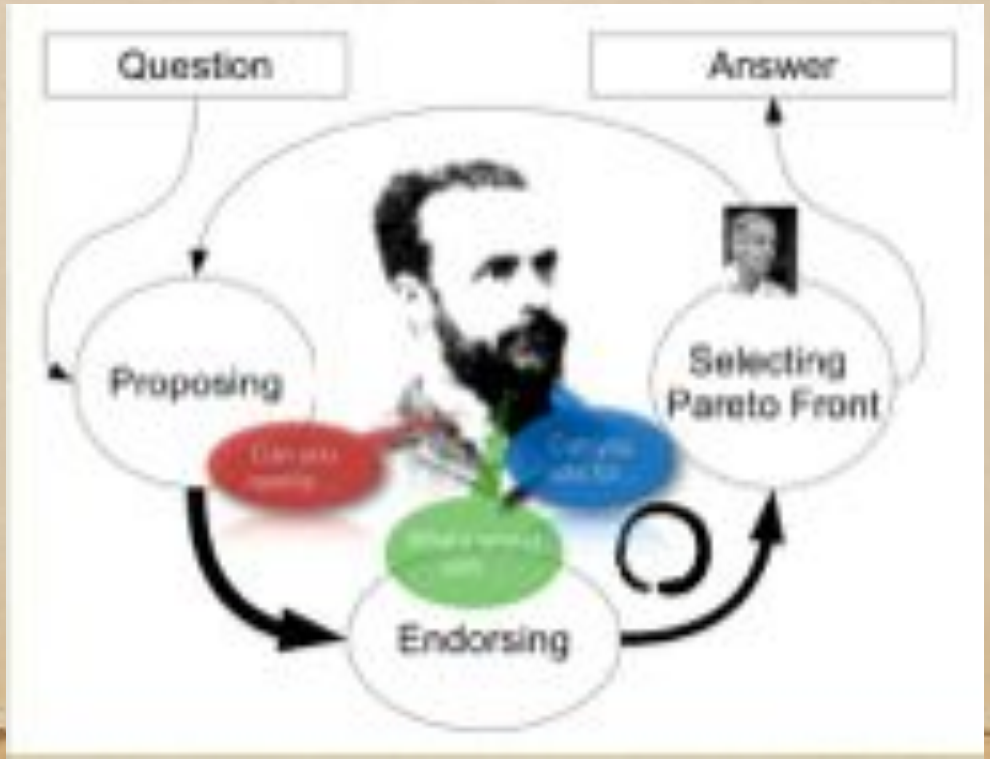


All Graphs


Question
Answer
Proposing
Selecting
Pareto Front
Endorsing


Please Moderate Us On: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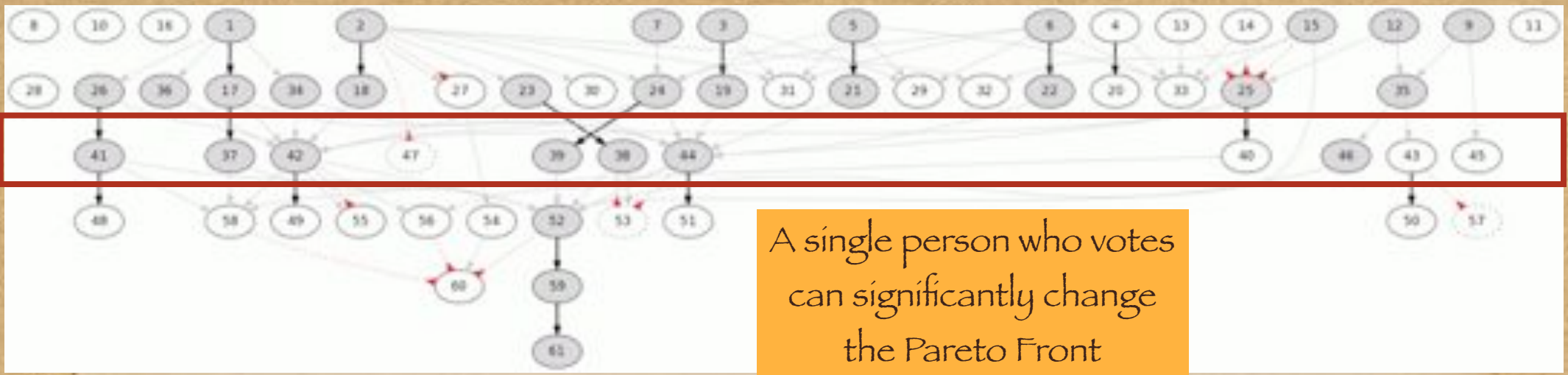
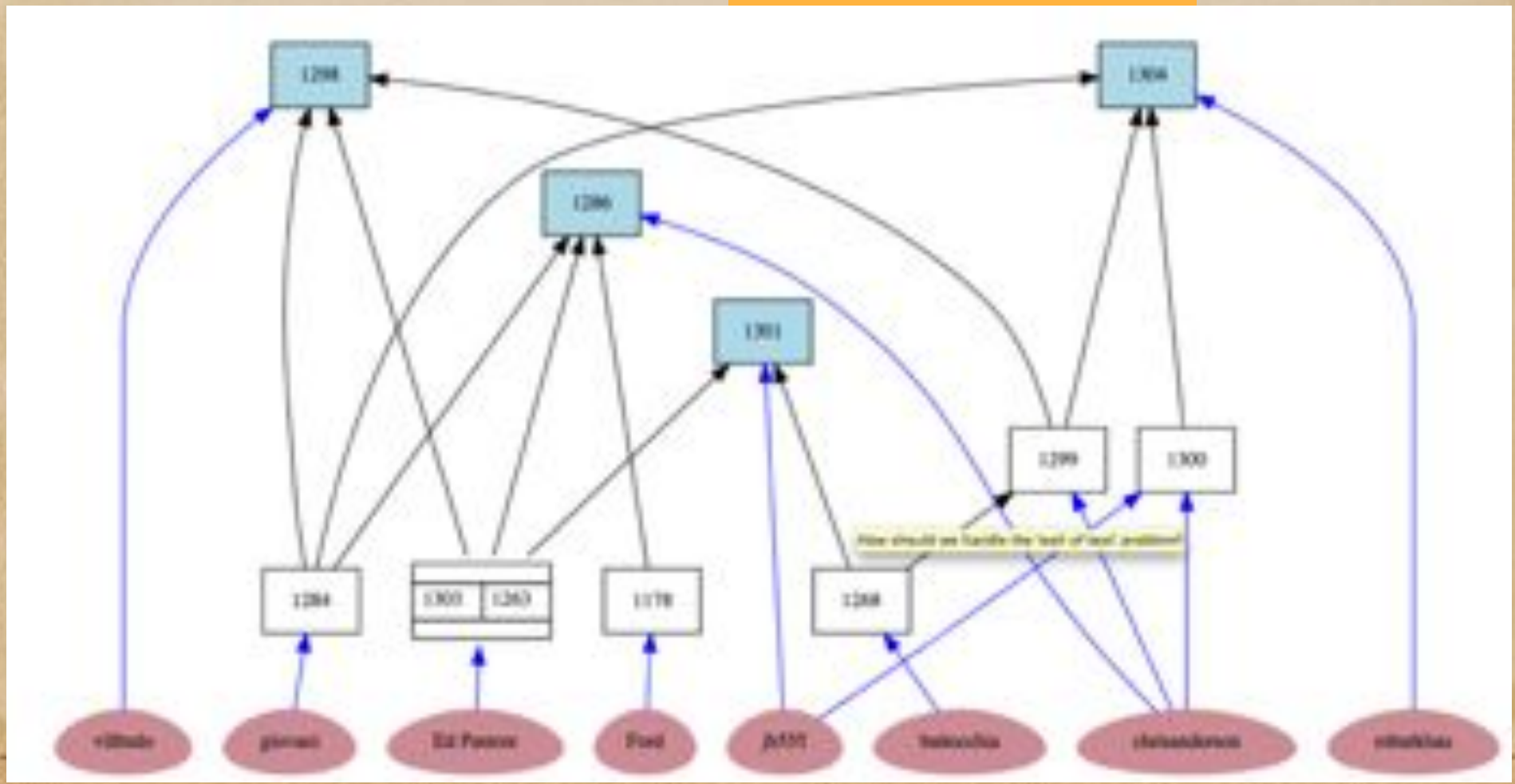
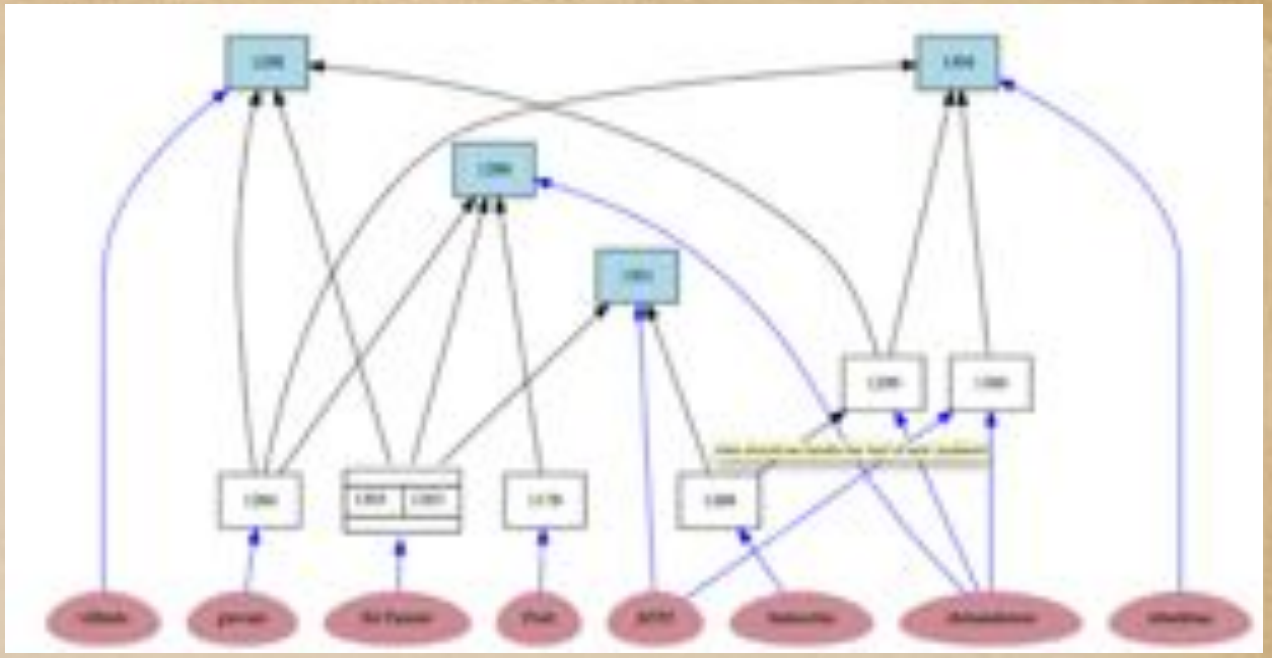


A single person who votes can significantly change the Pareto Front



The Wall of Text Question

A single person who votes can significantly change the Pareto Front



Effect Of Each Participant

By voting mbarkhau, battocchia, vilfredo, chrisanderson, giovani did not change the resulting Pareto Front.

By voting Ed Pastore have changed the resulting Pareto Front. 1301 would NOT have been in the Pareto Front, without Ed Pastore the Pareto Front would have been1286 1298 1304

By voting jb555 have changed the resulting Pareto Front. 1301 would NOT have been in the Pareto Front, without jb555 the Pareto Front would have been1286 1298 1304

By voting Ford have changed the resulting Pareto Front. 1286 would NOT have been in the Pareto Front, without Ford the Pareto Front would have been1298 1301 1304

Advanced Corollaries:

10 proposals
1023 possible outcomes

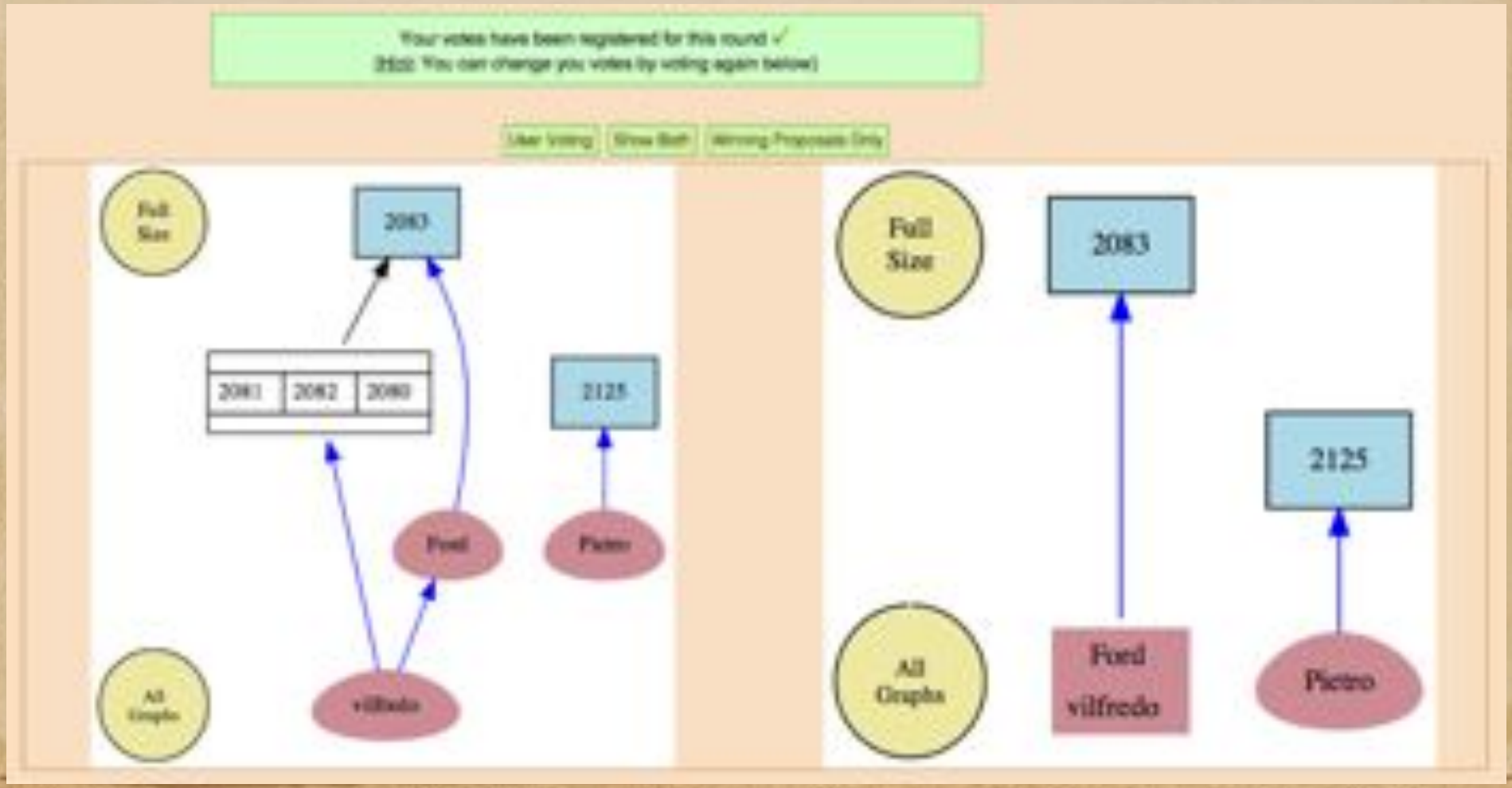
20 proposals
1.024*1.024-1 = 1.048.756 possible outcomes

A single person who votes can significantly change the Pareto Front

Iterative Voting

After you have voted you can see the graph

And change your vote

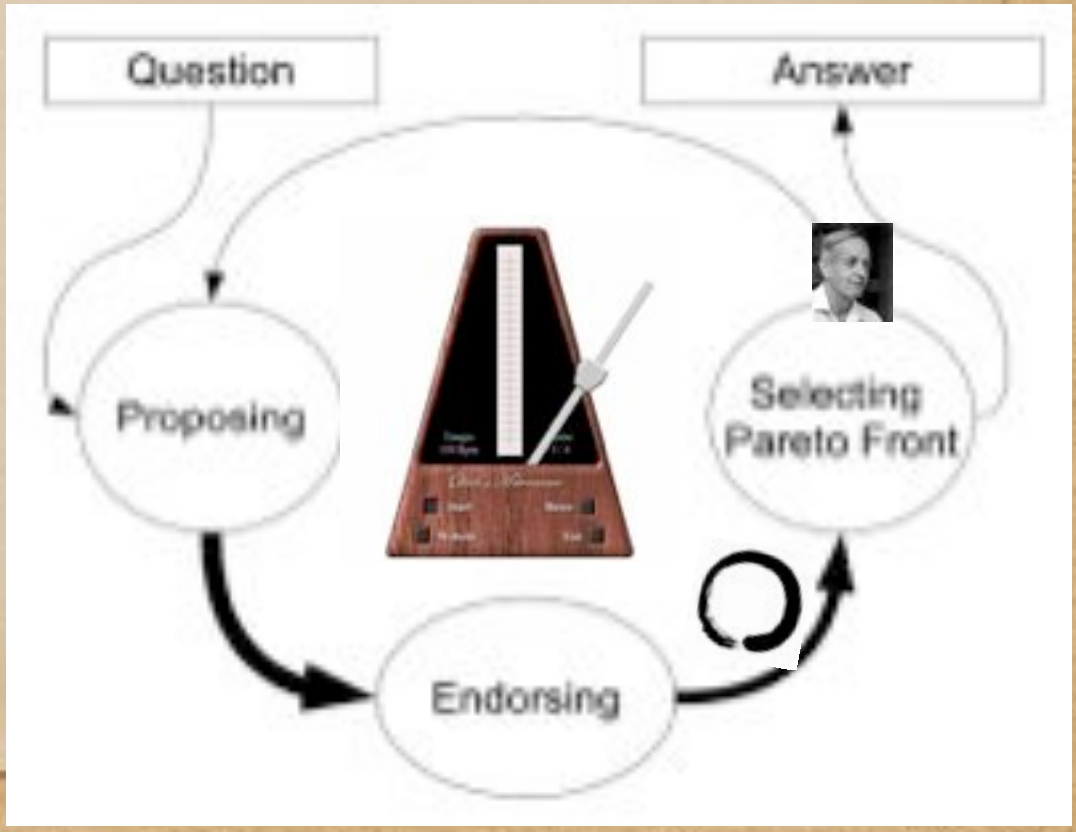


Iterative Voting

After you have voted you can see the graph

And change your vote

As everybody does that the result is the compromise of all who have participated



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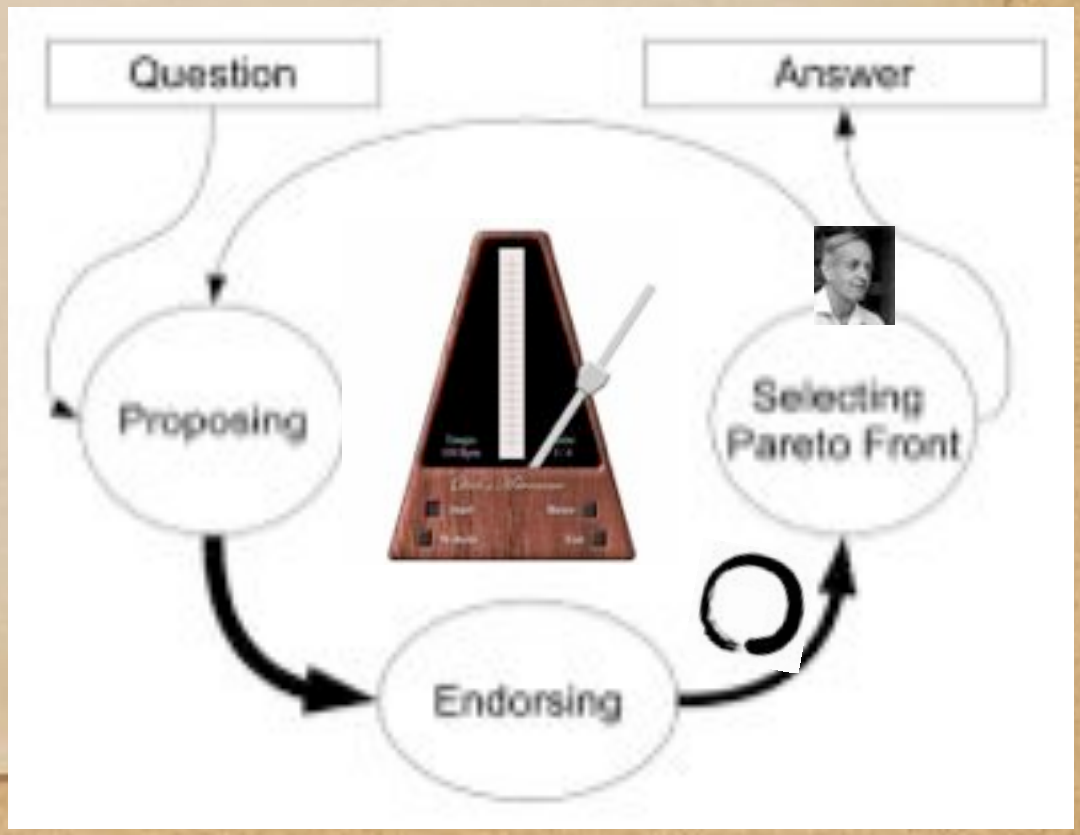

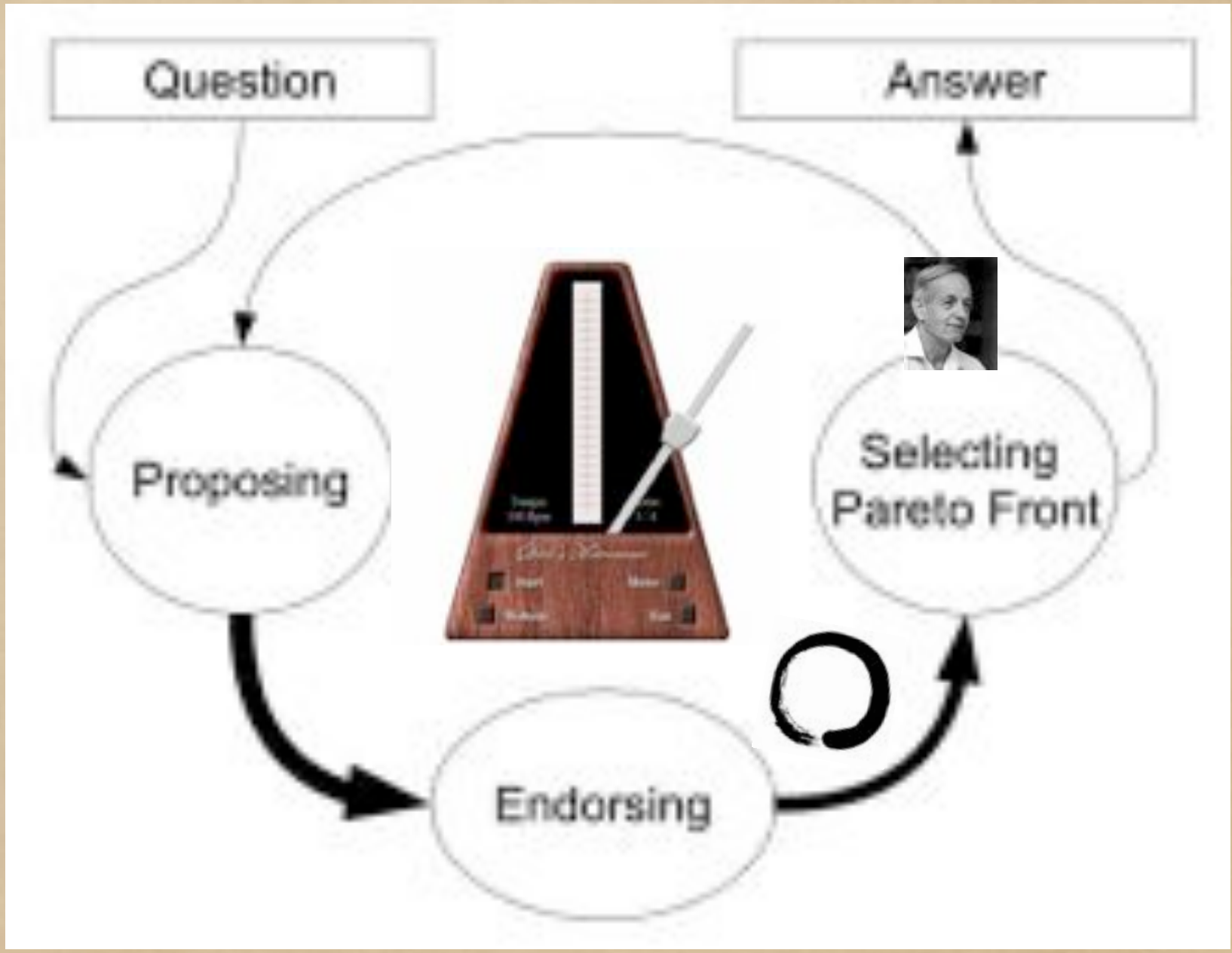
Question
Answer
Proposing
Selecting
Pareto Front
Endorsing

Advanced Corollaries:

If everybody who voted for x has also voted for y, except one persone.

We call that person a KeyPlayer.

That person can make the Pareto Front smaller just by

voting voting for y,

or

not voting for x

or

rewriting y.

A single person who votes can significantly change the Pareto Front

If a person did NOT vote for a proposal in the PF, he has also not voted for any proposal below. Ergo the PF represents different point of views

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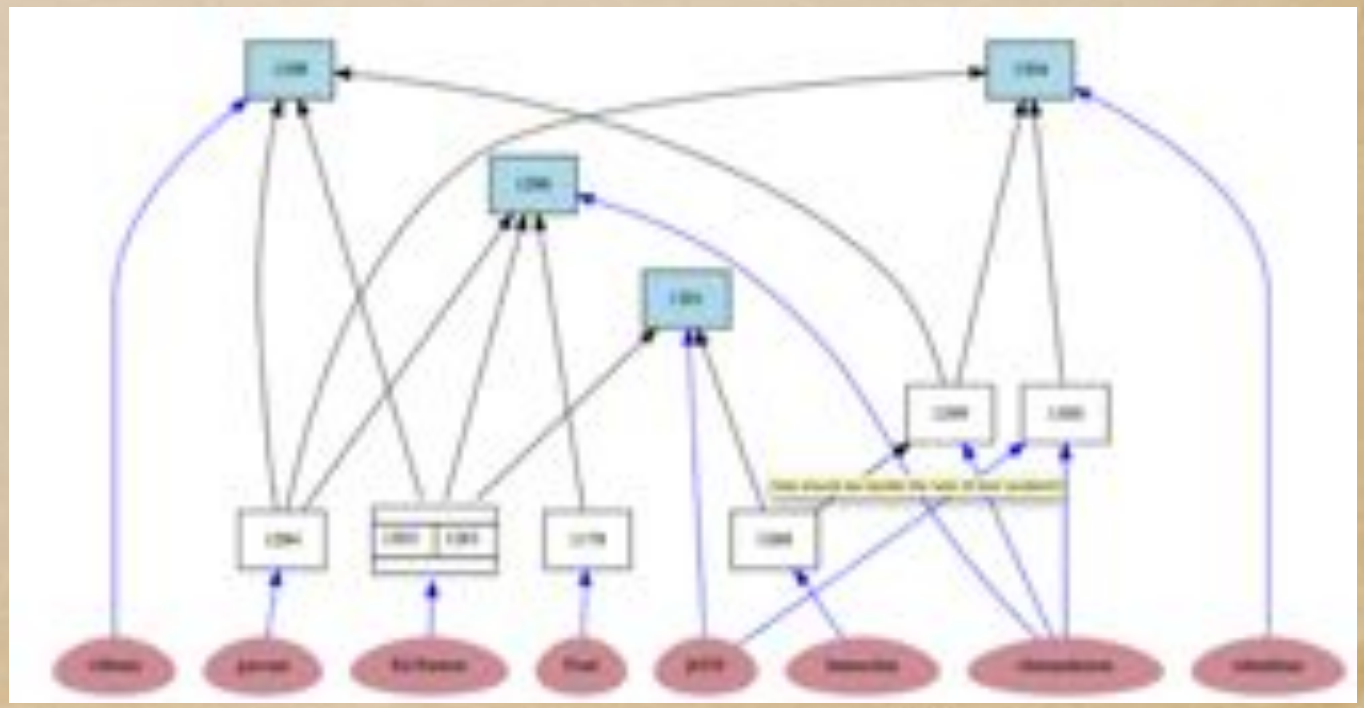

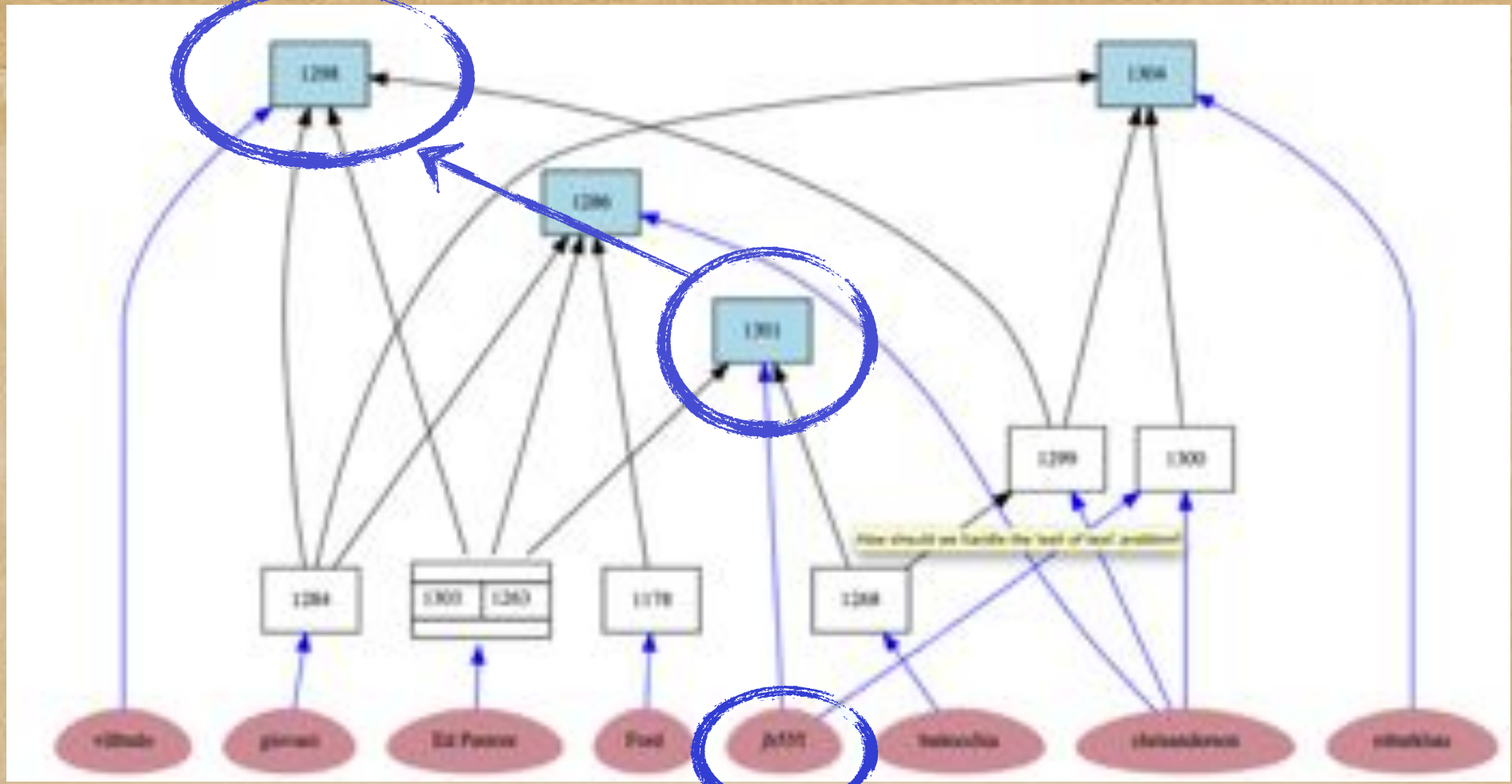

If everybody who voted for X has also voted for Y, except one persone.

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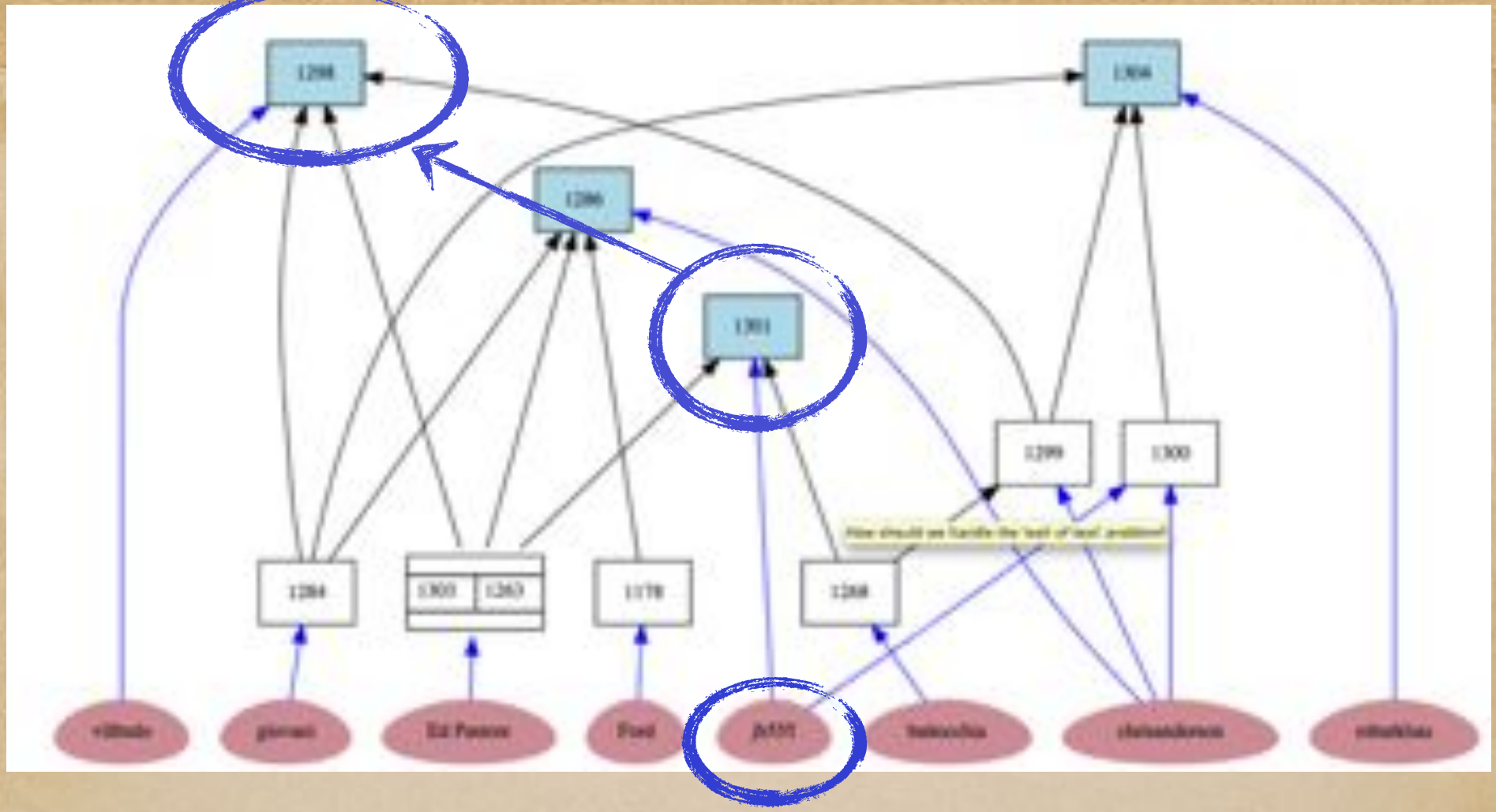


Everybody who voted for 1301 has also voted for 1298, except JB555.

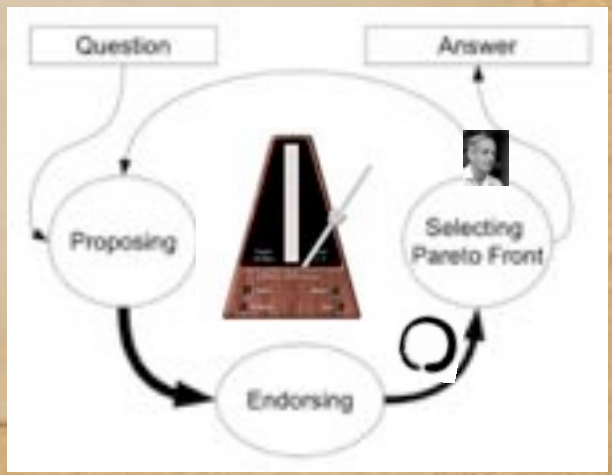
We call JB555 a **KeyPlayer**.

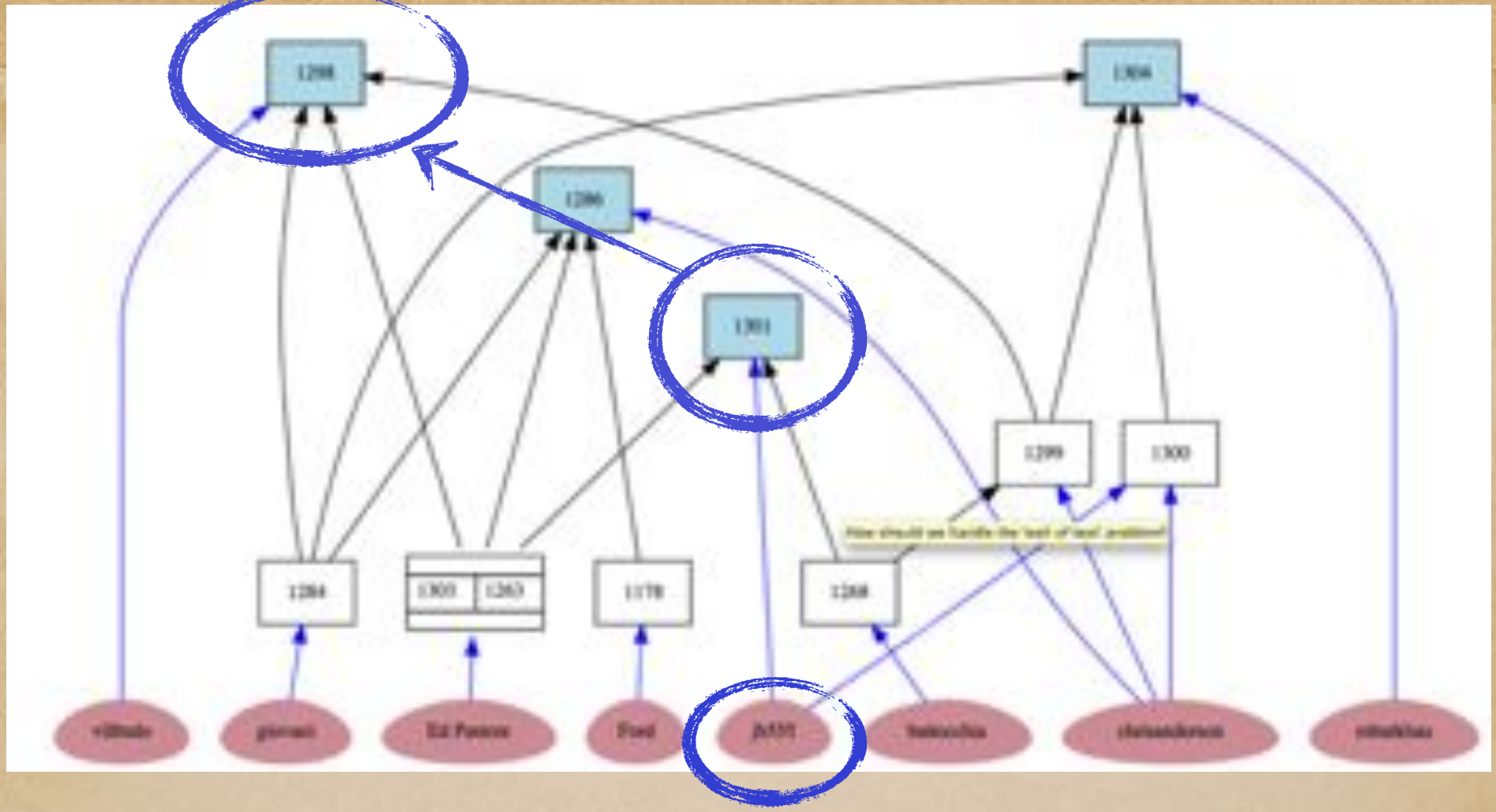
JB555 can make the Pareto Front smaller just by

1) voting for 1298,

or 2) not voting for 1301

or 3) rewriting 1298.





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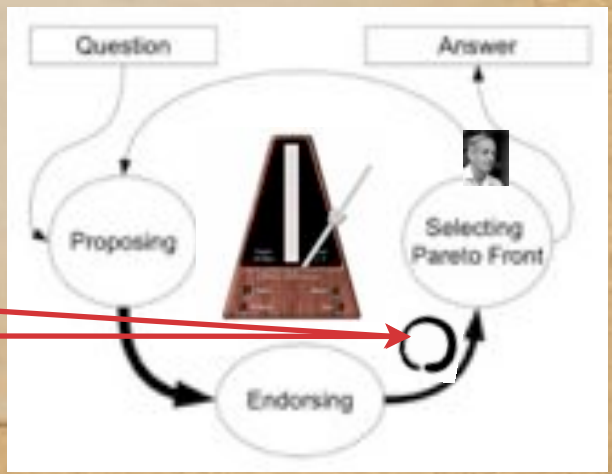

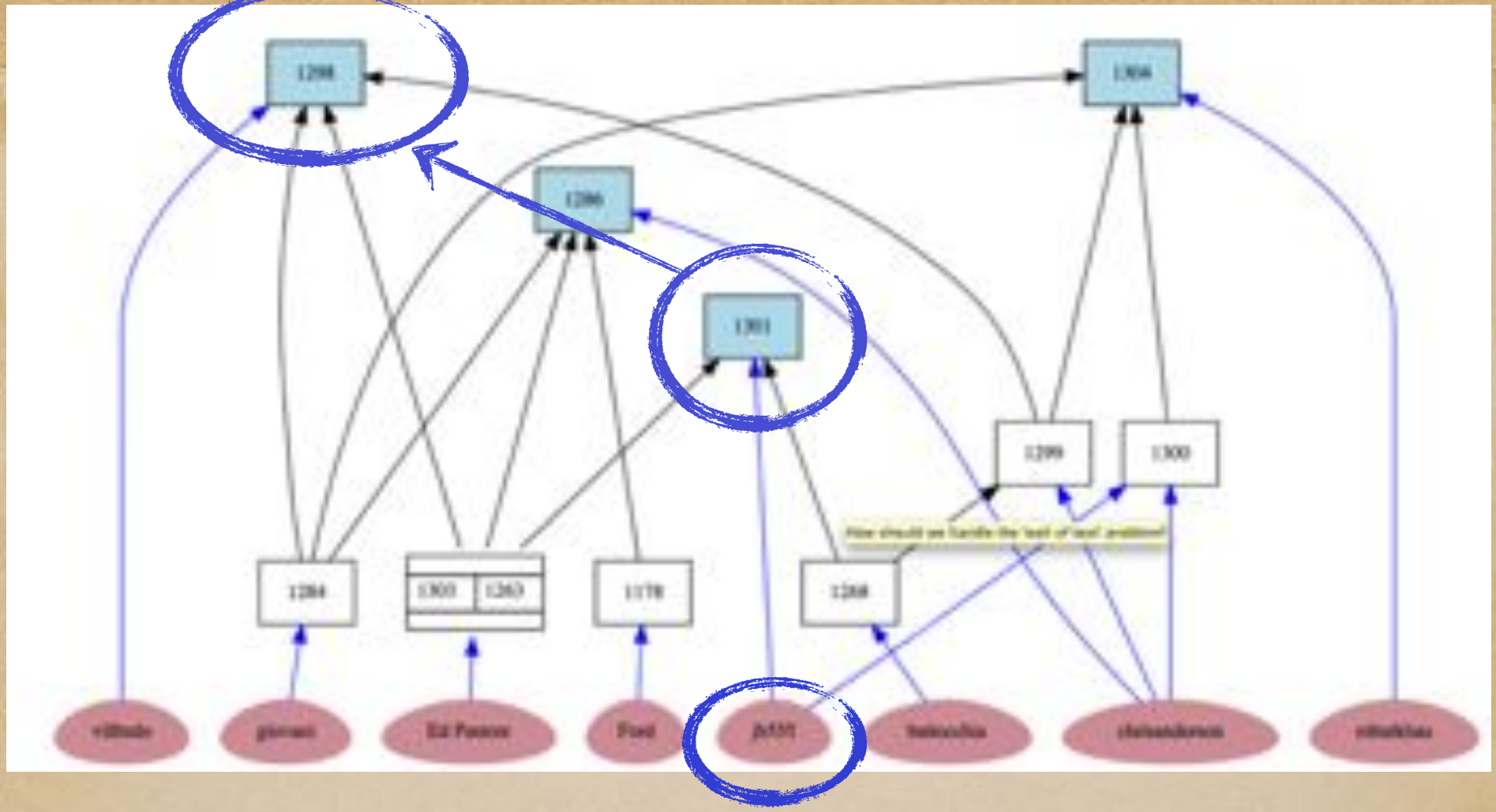

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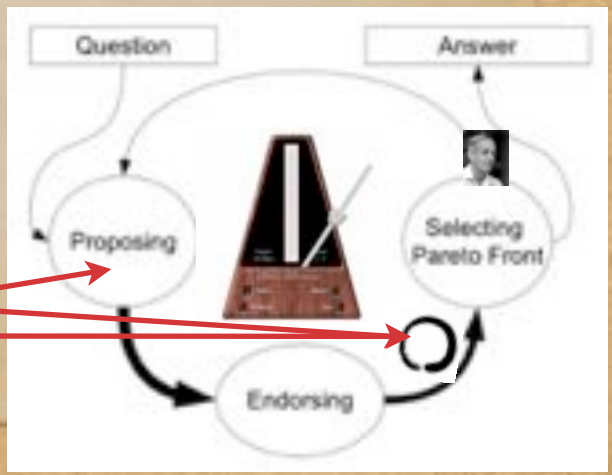

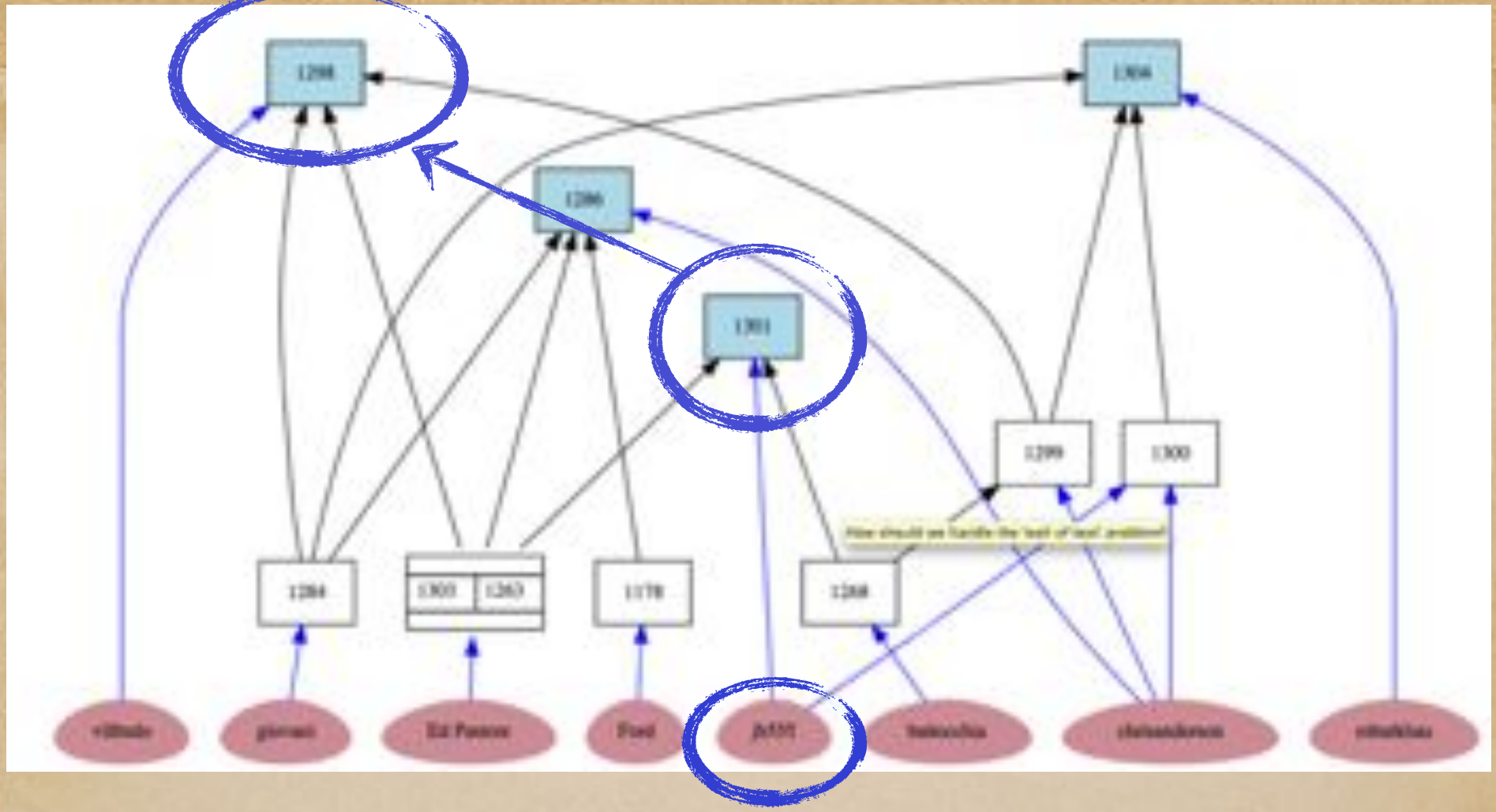

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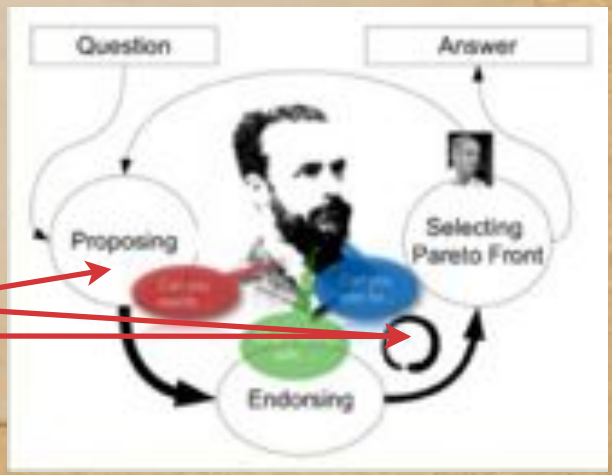
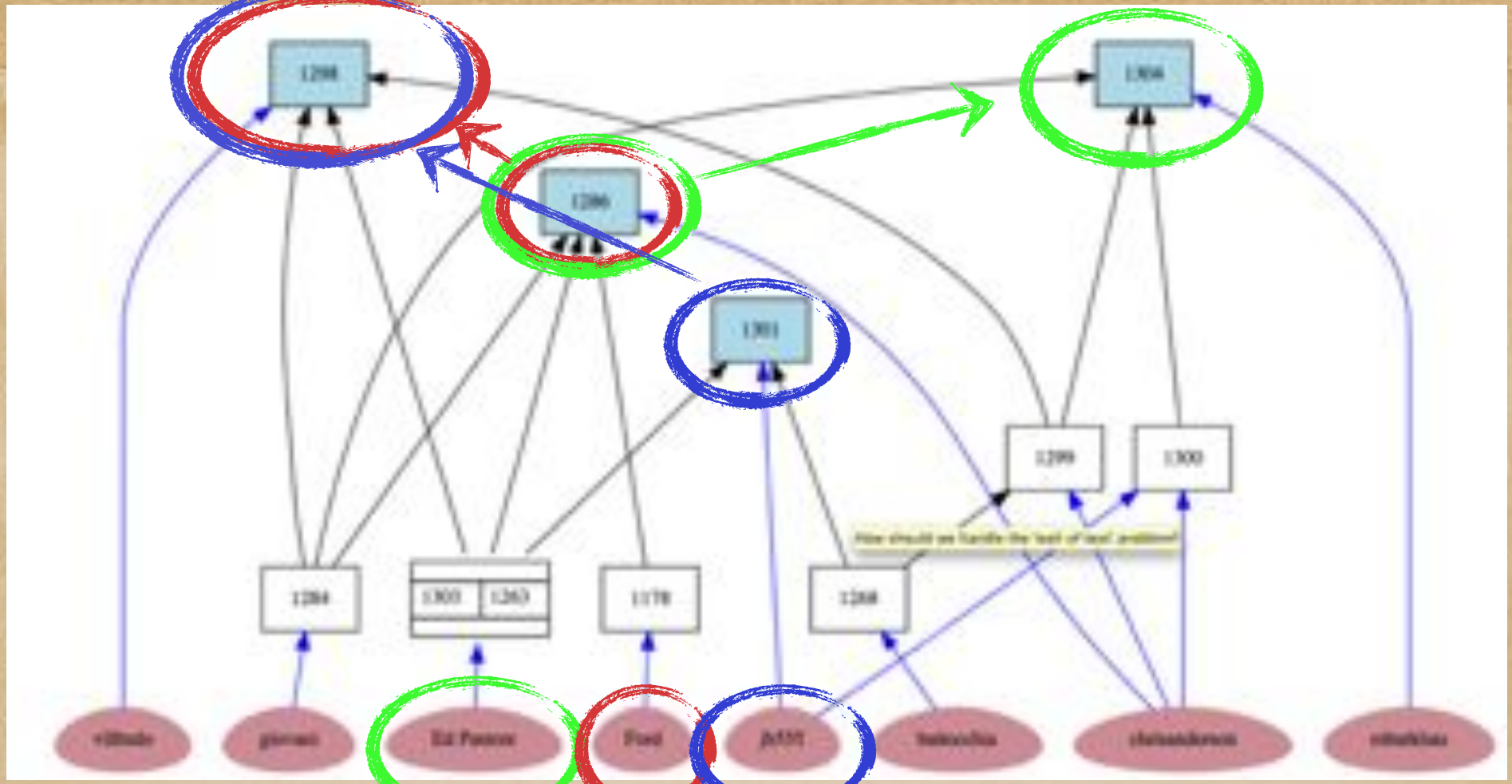
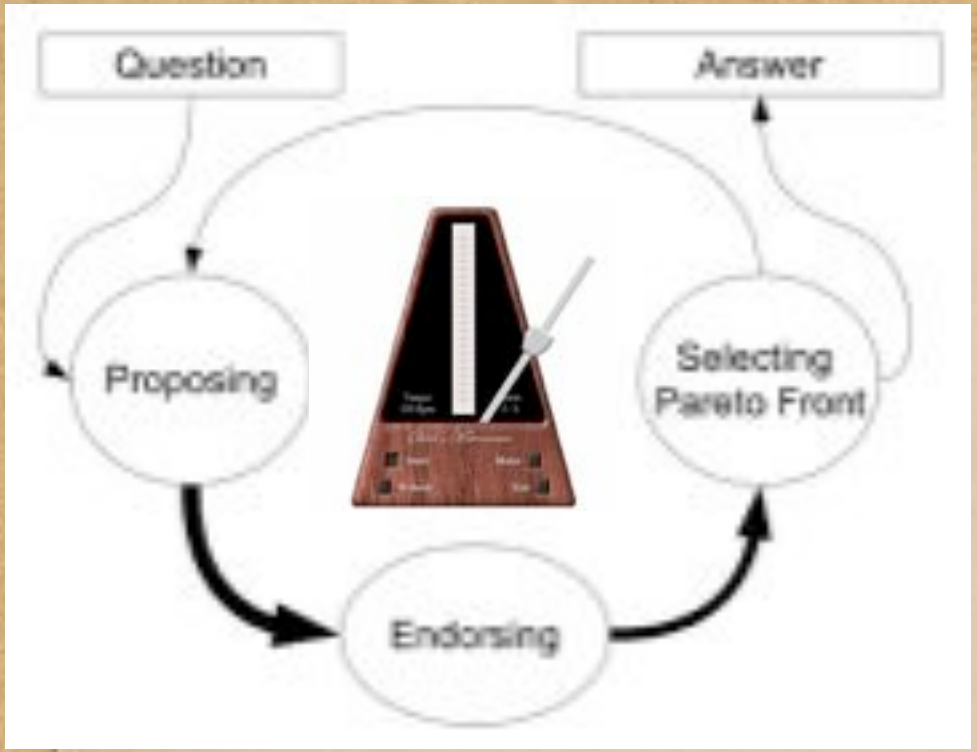



1298
1304
1286
1301
1299
1300
How should we handle the 'lack of text' problem?
1284
1303
1263
1178
1268



Possibility to change your vote

Key Players are invited to change specific votes

Other Players are invited to convince Key Players

Key Players are invited to rewrite proposals they dislikes

What's wrong with?

Please tell us why you don't like this proposal.

Select a comment you agree with (if there are any) or write your own below.

Characters left: 100

What's wrong with?

Players have to write why they dislike a proposal

Please tell us why you don't like this proposal.

Select a comment you agree with (if there are any) or write your own below.

Characters left: 100

Other Players are invited to convince Key Players (based on what the Key Players feedback)

Possibility to change your vote

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Introducing the "I do not Understand" button

Please tell us why you don't like this proposal.

Select a comment you agree with (if there are any) or write your own below.

Characters left: 100

Please tell us why you don't understand this proposal.

Select a comment you agree with (if there are any) or write your own below.

Characters left: 100

Possibility to change your vote

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(based on what the Key Players feedback)

Other Players are invited to explain to Key Players
(based on what the Key Players feedback)

Key Players are invited to rewrite proposals they dislikes

Possibility to change your vote

Change your vote to get a better result

See the graph and vote

Key Players

Possibility to change your vote

Key Players are invited to change specific votes

Change your vote to get a better result

See the graph and vote

Can you vote for...

Key Players

Possibility to change your vote

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Change your vote to get a better result

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speak with

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See the graph and vote

speak with

Can you vote for...

Can you rewrite ...

Key Players are invited to rewrite proposals they dislikes

vilfredo.org

The End

@pietrosperoni