

PLURALITY : TOP CHOICE ONLY

◦ TOP-TWO RUN-OFF

DOUBLE PLURALITY

◦ BORDA COUNT

W
 4 — 1 choice
 3 — 2
 2 — 3
 1 — 4
 0 — 5

◦ INSTANT RUN-OFF

◦ MORE LIKE IN PLURALITY

◦ ELIMINATE THE LAST CANDIDATE



◦ SURVIVOR

CHOOSE THE LEAST FAVOURITES
 AND ELIMINATE THEM.

What's fair?

DEFINE VOTING CRITERIA:

(I) PARADO CRITERION

IF EVERY VOTER PREFERS A TO B,
THEN B SHOULD NOT WIN.

(II)? IF ~~more~~ more than half the voters
have A as their top choice,
then A should win.

PLURALITY ✓
BORDA X

(I)? IF MORE THAN HALF THE VOTERS
HAVE A AS THEIR LAST CHOICE,
THEN A SHOULD NOT WIN

BORDA ✓

(II)

CONDORCET CRITERION

PLURALITY X

IF ONE VOTEE WINS AND 2-CANDIDATE
RACE, THEN THEY MUST WIN.

ALL THE COMMON VOTING SYSTEMS
FAIL THIS CRITERION.

SOME VOTING CRITERIA ARE NOT

COMPATIBLE, EG. PARETO AND IIA.

Schulze Voting System

~ ACTUALLY COMPLICATED ~

+ SATISFIES LOTS OF NICE PROPERTIES

INVULNERABILITY TO STRATEGY

VOTERS SHOULD HAVE NO INCENTIVE TO
VOTE DISHONESTLY

25% CA / VOTING / SIM

SIMULATION

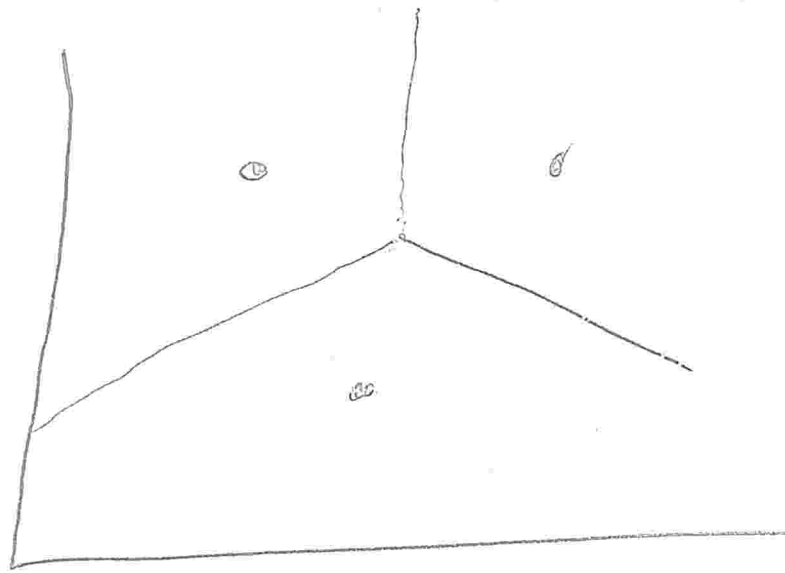
REPRESENT THE POLITICAL POSITIONS

ON A PLANE AND PUT

AN EQUILATERAL TRIANGLE WITH

VERTICES REPRESENTING VOTERS

Consumer & Producer surplus



cost - me / voting

supply - cost / profit - in the animal kingdom