

公平份额消费

用于参与式预算的
一种新投票方式

Robert Tupelo-Schneck

schneck@gmail.com

Robert Loring

votingsite@gmail.com

www.AccurateDemocracy.com

Translated by: Aixiu (Monica) Zhang, PhD

张艾秀 博士 翻译

内容

- 用于参与式预算的通常投票方法的问题
- 公平份额消费：一种新投票方法

通常投票方法的问题

- 通常投票方法：
 - 每个选民有票
 - 得票最多的项目资助，直到钱用完
- 问题
 - 战术投票
 - 复数规则
 - 没有成本意识

战术投票

- 当选民不按照“他或她真诚的选择投票，以防止不愿看到的结果” << 维基百科 >>
- 选民不想浪费自己的投票
- 投票制度迫使他们考虑如何用战术使他们的投票算数，而不仅是按照他们真诚的喜好投票

战术投票

- 不要给必输者投票，那等于把你的票扔掉
- 不要给必赢者投票，那等于把你的票扔掉
- **子弹投票**
 - 如果你**强烈**渴望一个项目，那么只给该项目投票
 - 因为给其他可能性较低的选择投票，可能让其中之一击败你最喜欢的项目，而使它输掉

战术投票

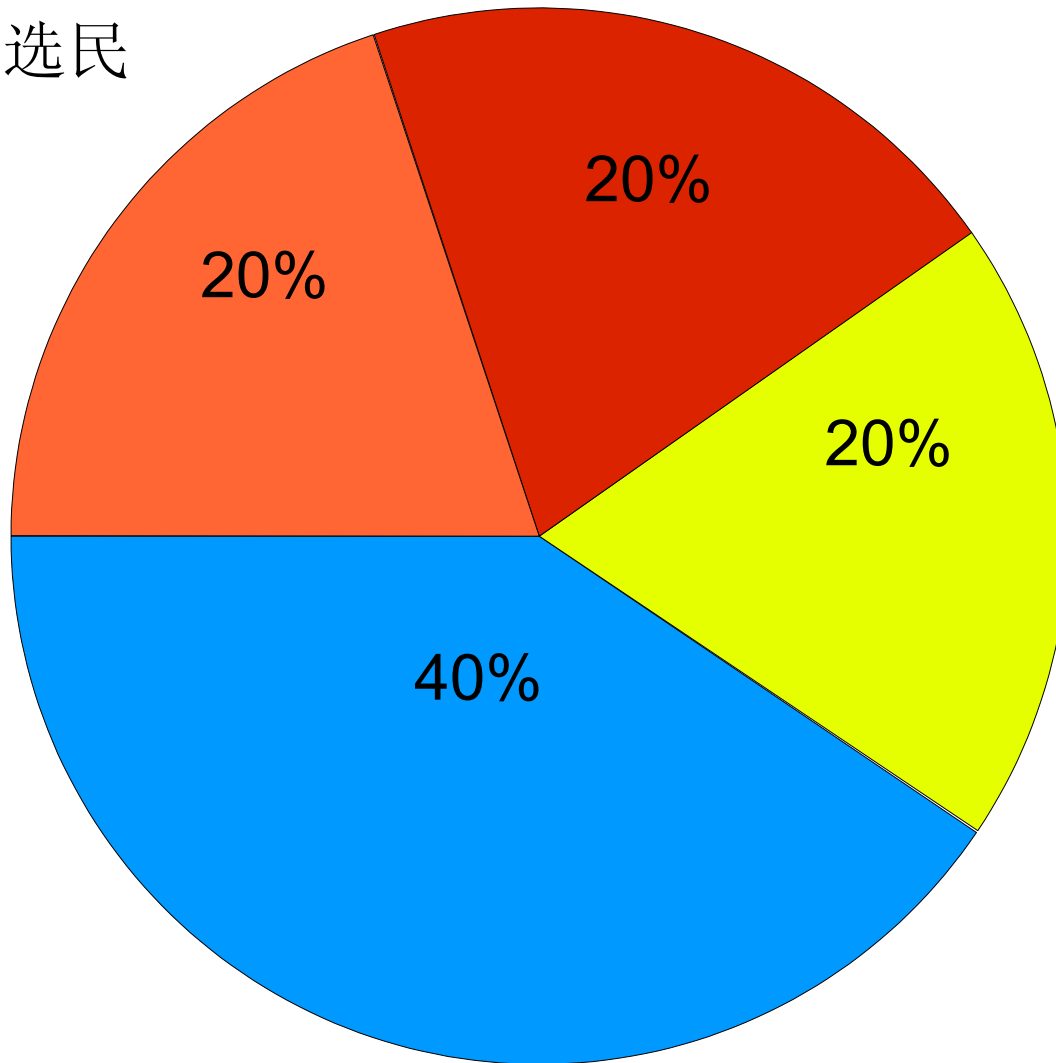
- **更好：一个让选民可以有信心地表达他们真诚的选择的投票系统**
 - 这样它不会造成投票浪费
 - 它也不会伤害他们最看重的选择

复数规则存在的问题

- 最大的一组选民可以控制**所有的钱**
- 如果最大的群体划分，少数人可以控制**所有的钱**

复数规则存在的问题

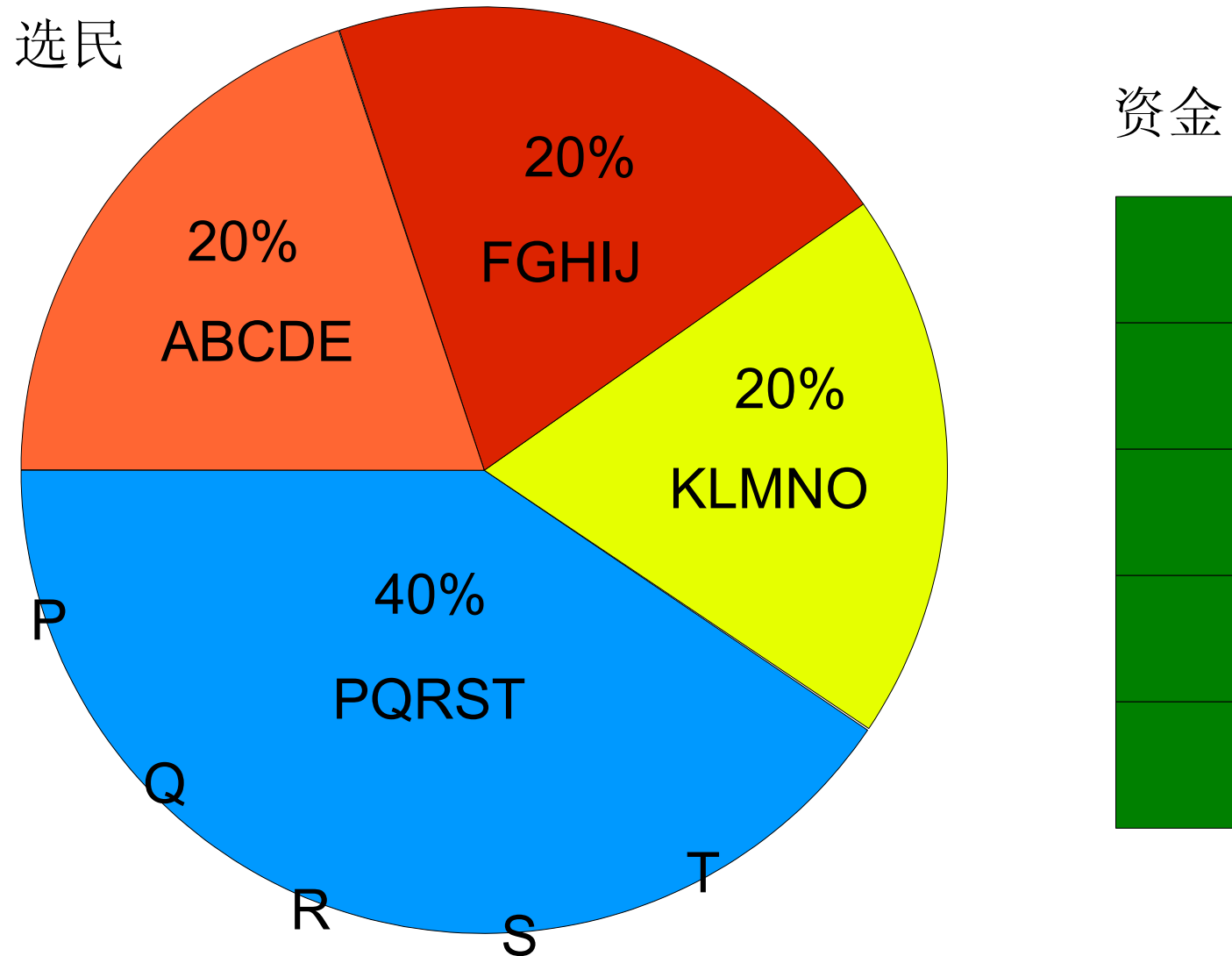
选民



资金

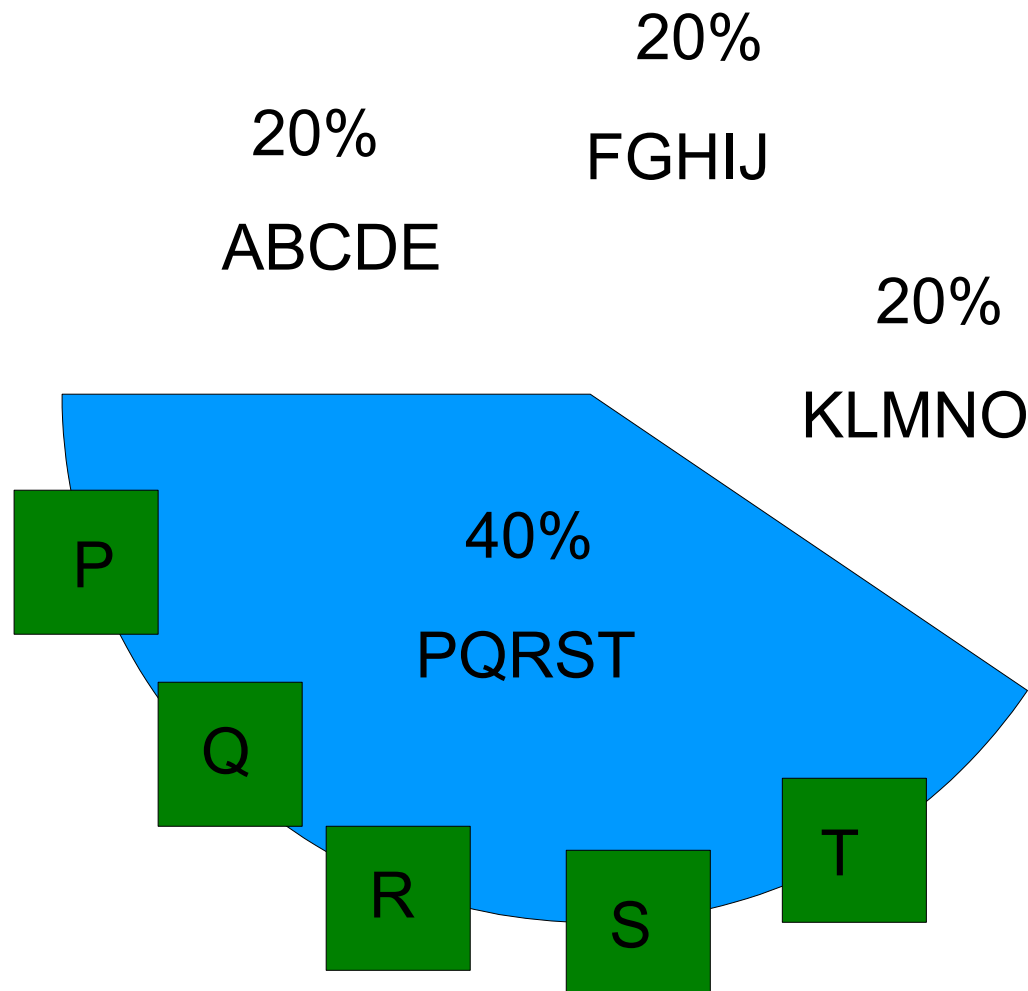


复数规则存在的问题



复数规则存在的问题

选民

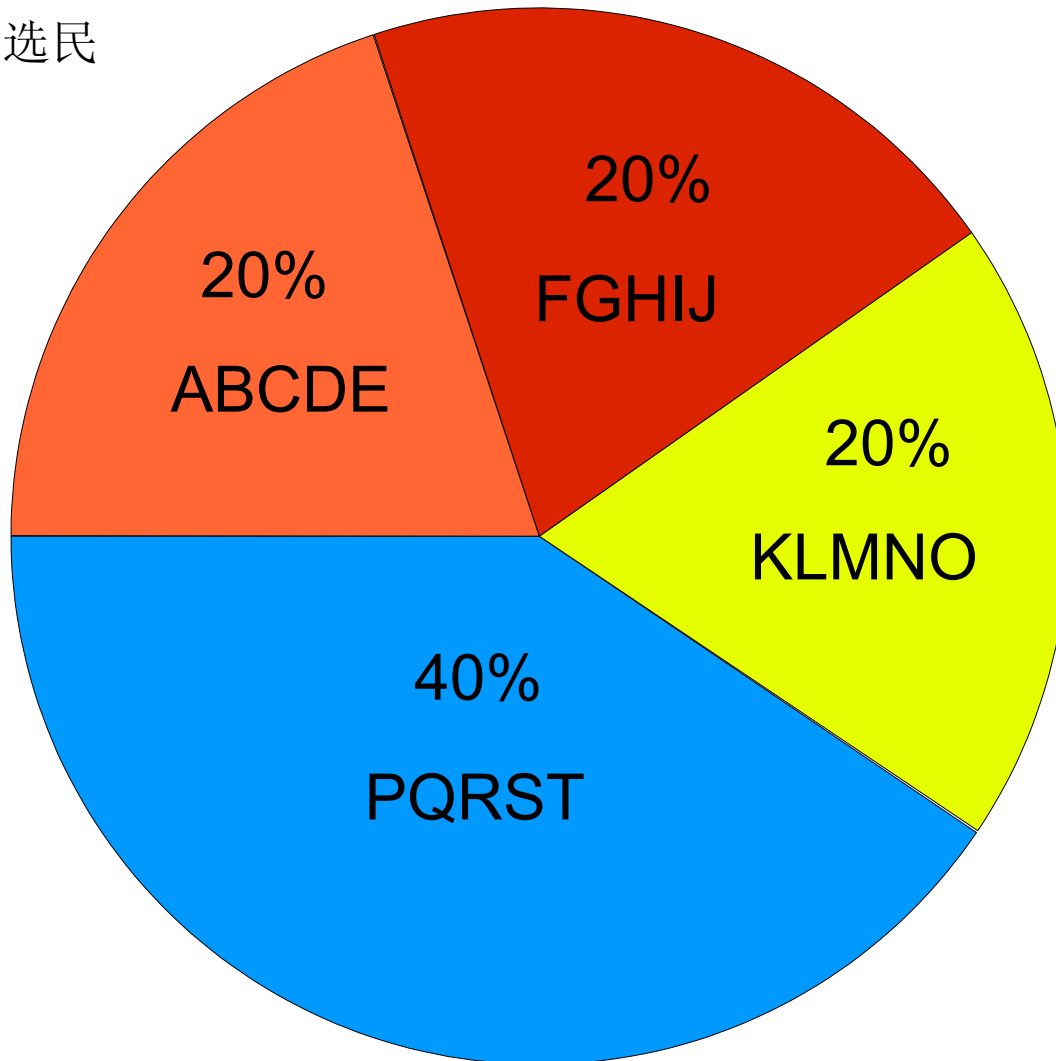


复数规则存在的问题

- **更好：** 一个有比例的，让每个足够大的群体控制自己公平份额之内的钱的投票规则

比例投票规则

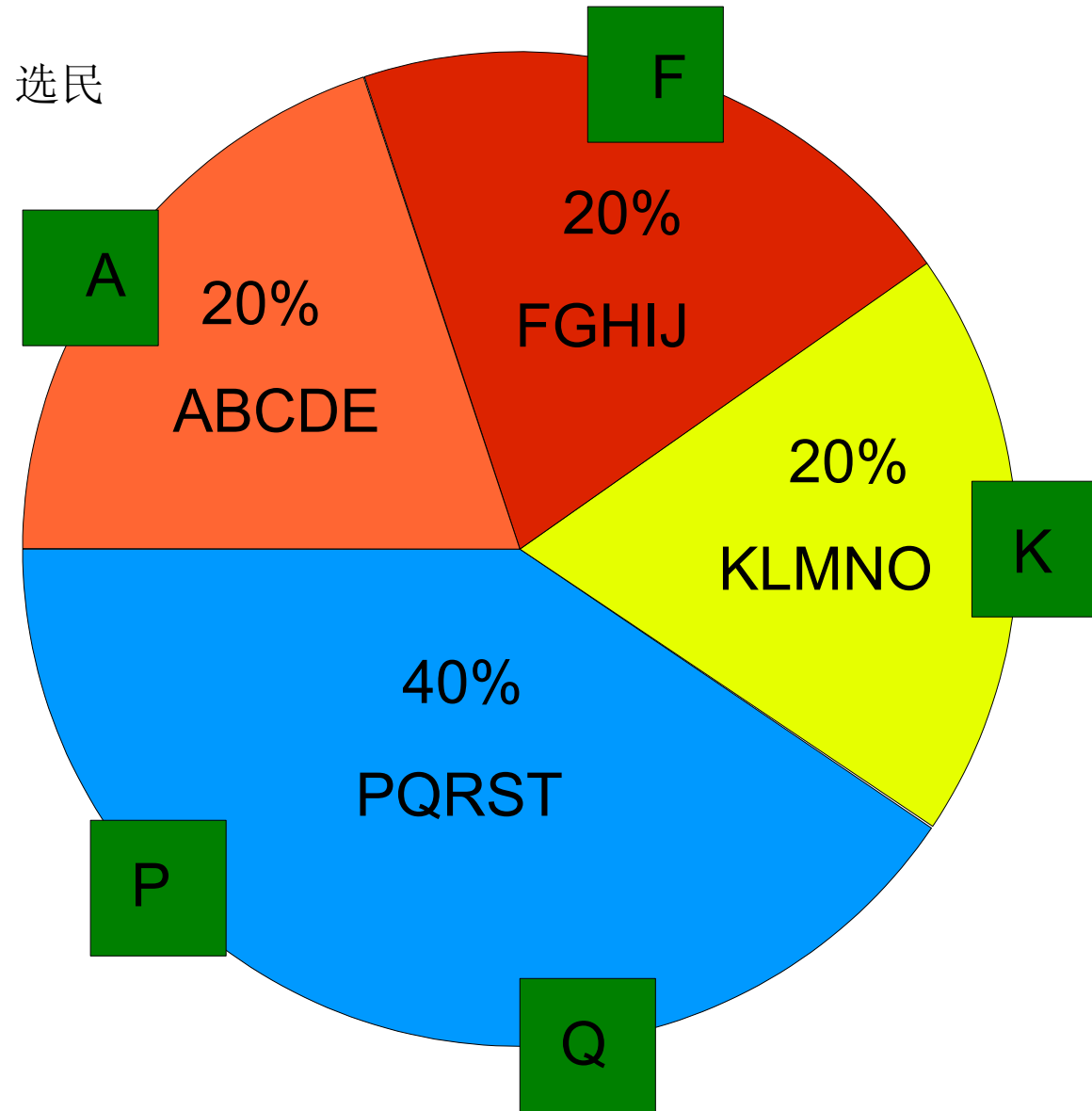
选民



资金



比例投票规则



有成本意识的投票

- 旧的投票方法不考虑项目**成本**之间的哪怕是很大的差异
- 在芝加哥的**2010年PB** (参与式预算) 先驱表决, 项目**2 600**美元至**23**万元不等.....几乎是美分和美元之间的差异
- 但便宜的项目需要赢得跟昂贵的项目一样多的票
- 而且便宜的项目的一票跟昂贵的项目的一票“用完”一样多的选民的权力

有成本意识的投票

- 最经济有效的项目最大限度地提高选民对花每美元的满意度
- 因此，考虑不仅有多少选民支持一个项目，而且其成本多少
- 在芝加哥的例子，看看用于支持资助项目，每一票，占多少美元

交通 / 行人信号：克拉克和大通交叉口：\$230,000, 494 票， \$466/ 票



交叉口安全： 克拉克和法威尔： \$2,600, 334 票， \$8/ 票

减速带： 绿叶西街 1100-1200 号： \$3,500, 181 票， \$19/ 票

警方相机： 谢尔丹与绿叶交叉口： \$13,000, 246 票， \$53/ 票

警方相机： 达蒙和罗杰斯交叉口： \$13,000, 235 票， \$55/ 票

免费 Wi-Fi 无线网络： 在霍华德西街 1600-1700 号：\$24,600, 334 票， \$74/ 票

路面修复： 贾维斯 1300-1500 号， 保利娜街 7000 号：\$13,000, 171 票， \$76/ 票

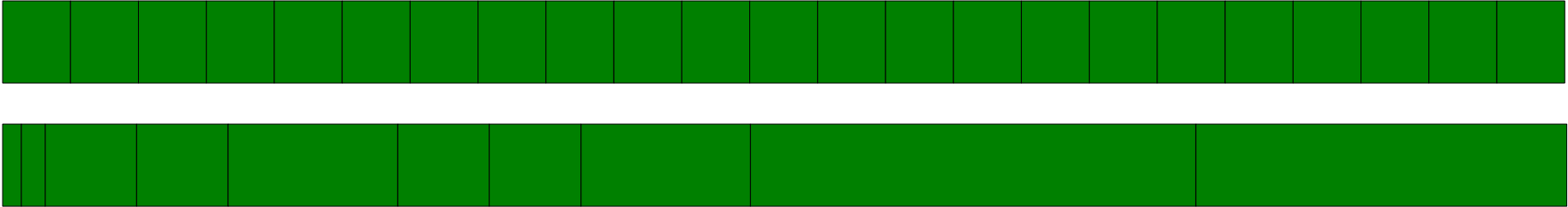
路灯： 六月西路 1400-1600： \$13,000, 161 票， \$81/ 票

装修伯杰公园文化中心： \$25,000, 269 票， \$93/ 票

路灯： 绿叶西街 1500-1600 \$65,000, 277 票， \$235/ 票

警方相机： 在伦特和宝琳娜 \$55,000, 155 票， \$355/ 票

交通 / 行人信号：克拉克和大通交叉口：\$230,000, 494 票，\$466/ 票

- 
- 10 个项目
 - \$227,700
 - 2363 票 （不是不同的选民！）
 - 平均 \$96 / 票

 - 有成本意识的投票在成本相同的情况下，给更多的选民，更多他们想要的东西
 - = 更多的满意的选民

内容

- 用于参与式预算的通常投票方法的问题
- **公平份额消费：一种新投票方法**

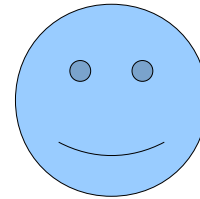
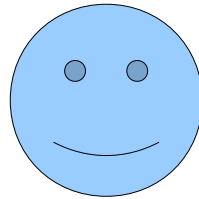
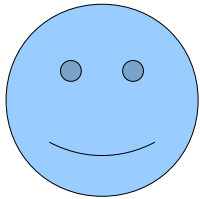
公平份额消费的核心理念

- 每个选民控制相同份额的金钱，
- 为他 / 她最喜欢的项目提供资金；
- 如果选民投票要赞助的一个项目，没有得到足够的支持，那么选民的钱就转移到他或她下一个的最喜欢的项目。

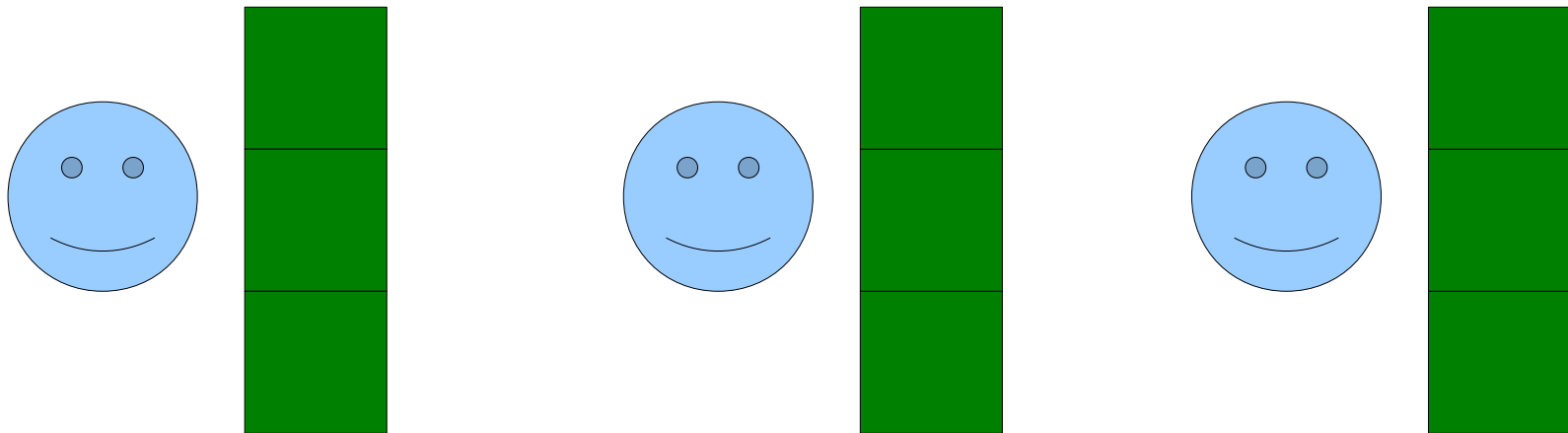
公平份额消费： 范例



- \$ 9000 , 3 个选民
- 每个选民有一 3000 美元的份额



公平份额消费：范例

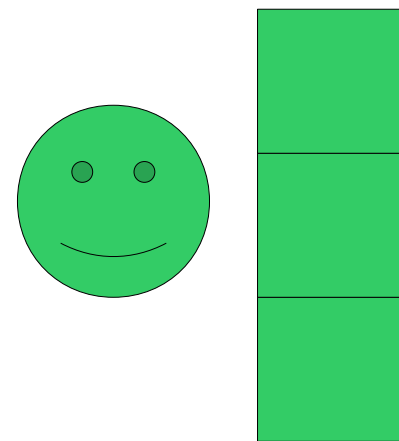
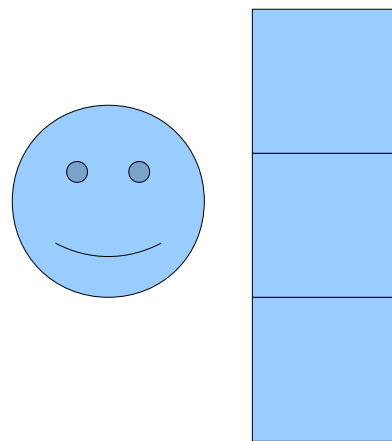
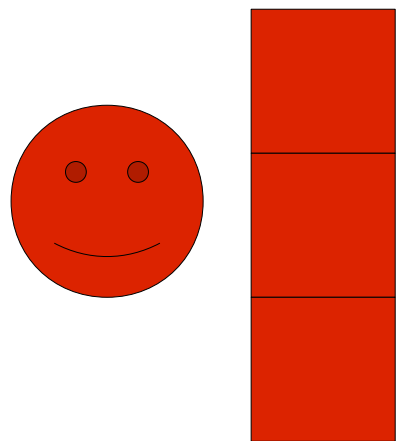
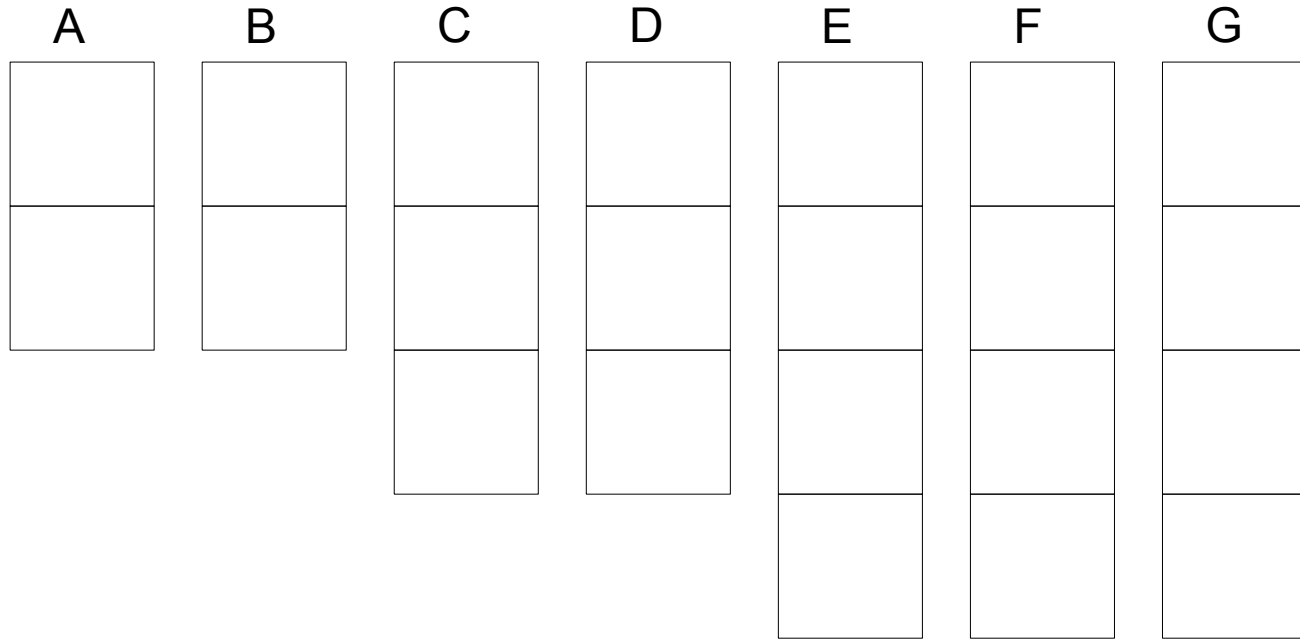


公平份额消费：范例

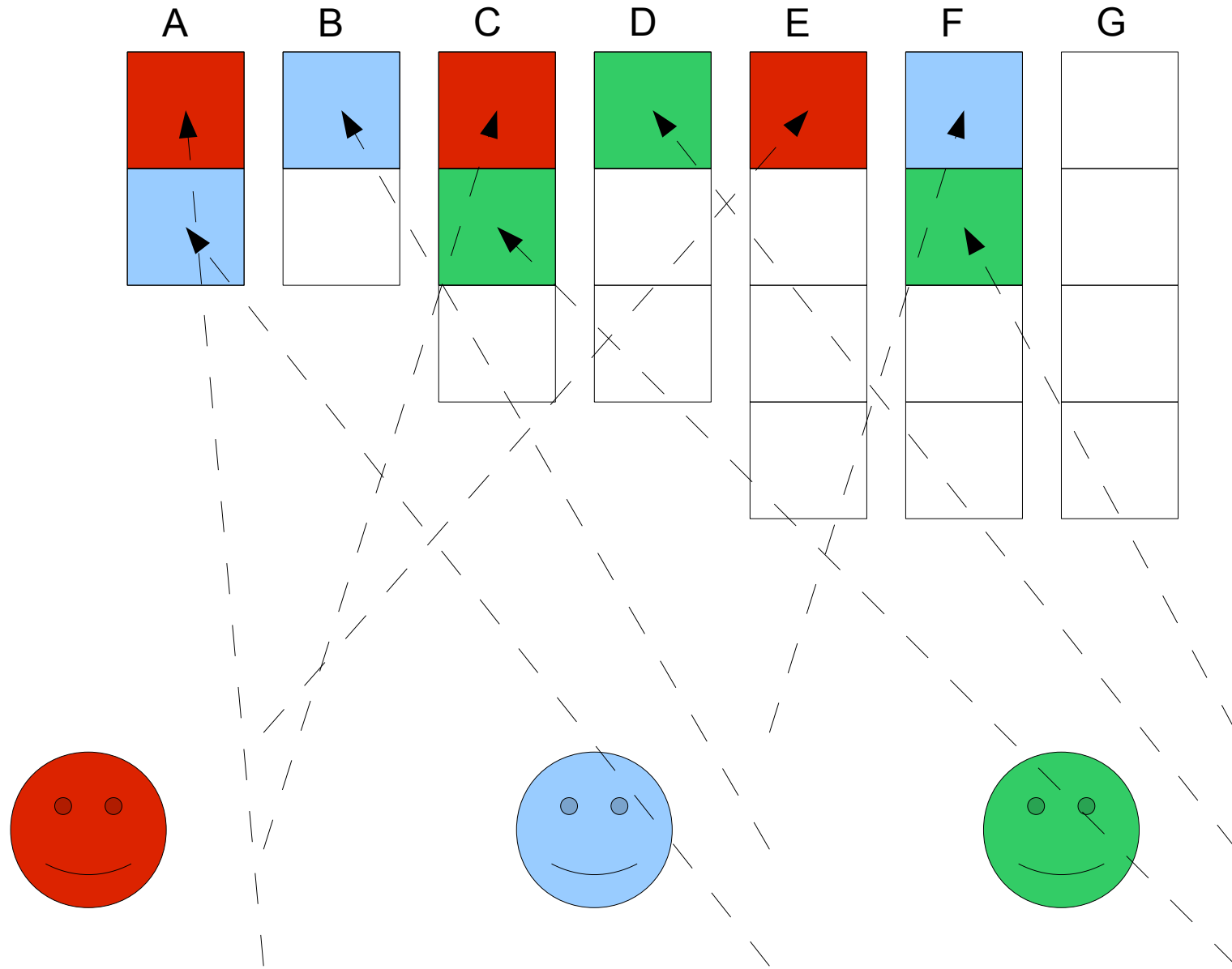
A	B	C	D	E	F	G

- 项目为2000元，3000元，或4000美元
- 每个选民可以把他的或她的份额分配给各项目

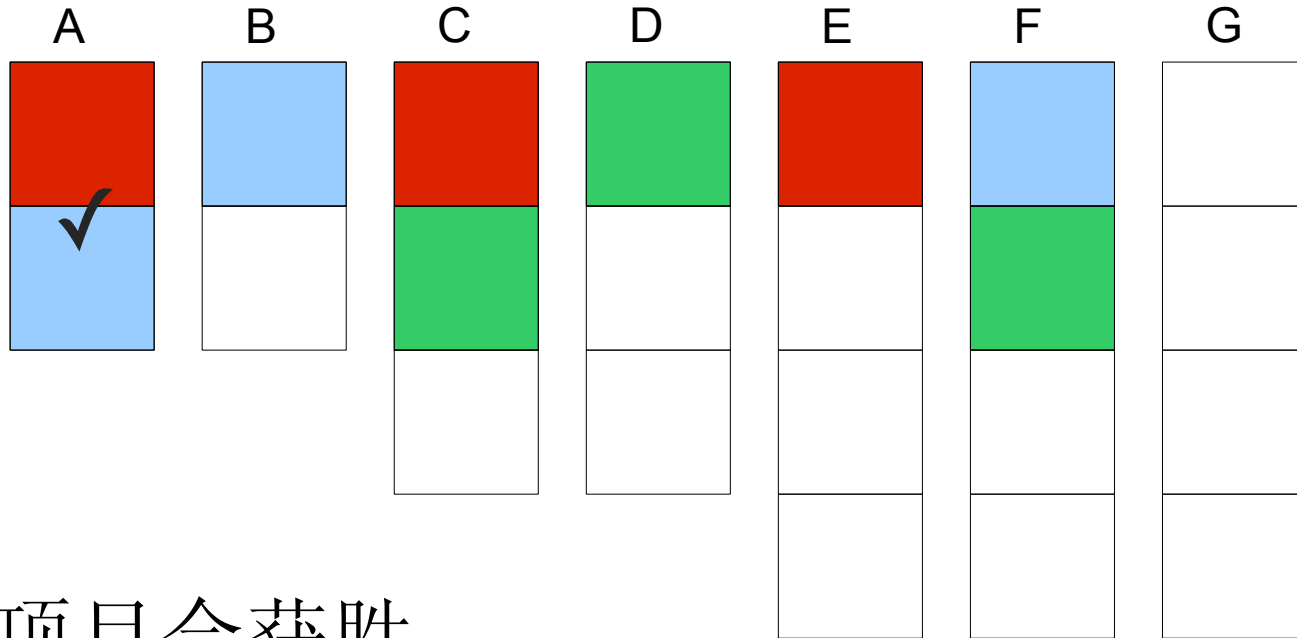
公平份额消费：范例



公平份额消费：范例

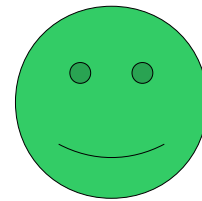
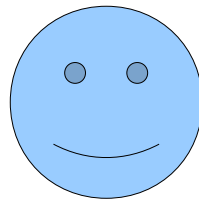
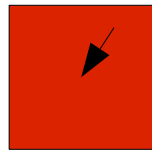
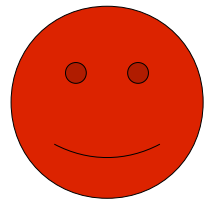
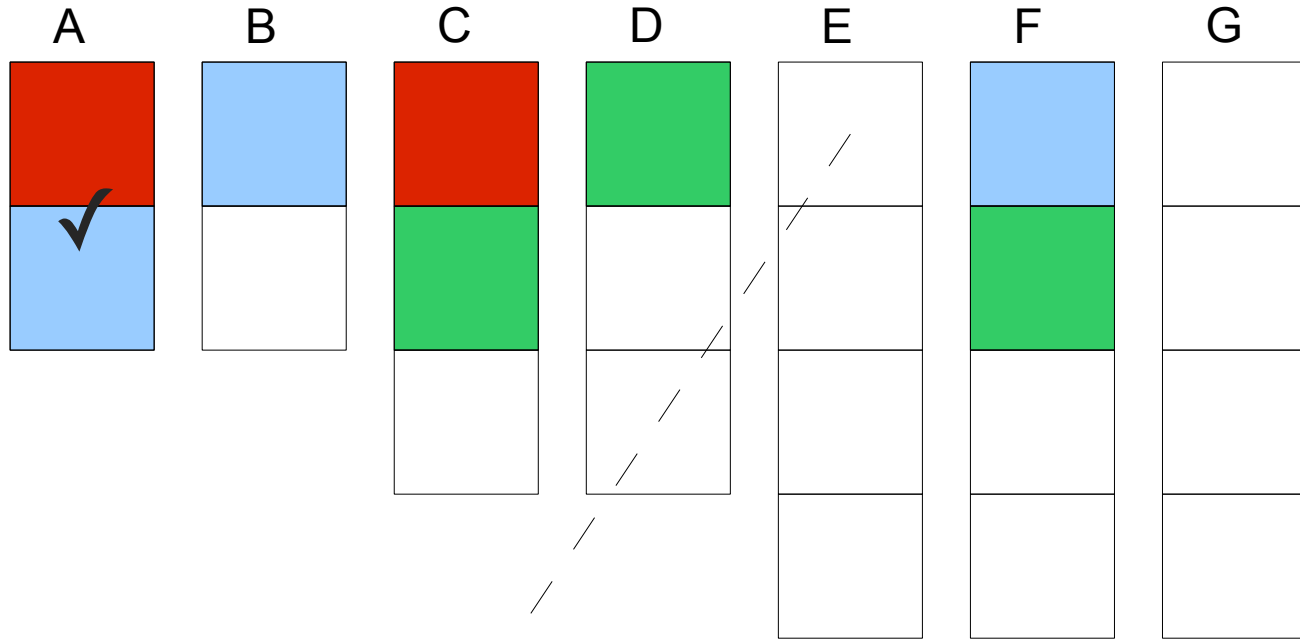


公平份额消费：淘汰

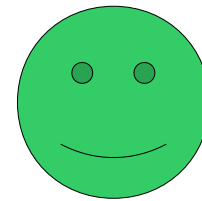
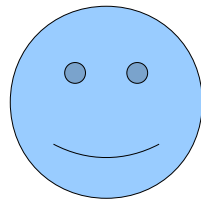
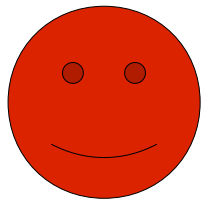
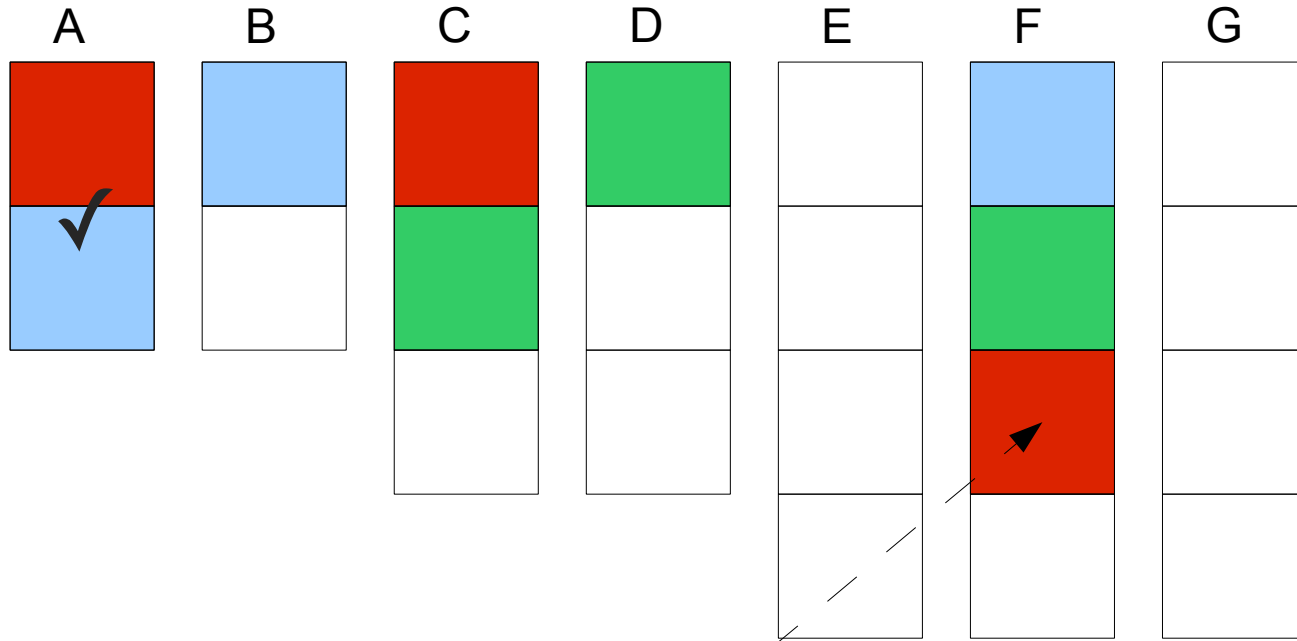


- 有些项目会获胜
- **并非**所有项目都可以**获胜**
- 因此，最不受欢迎的必输
- 但**选它的选民并没有失去他们分享的权力**
- 每个人会将他们的钱，给他们的下一个选择！

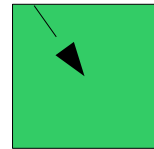
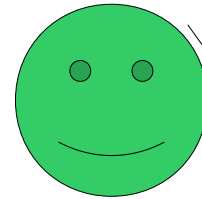
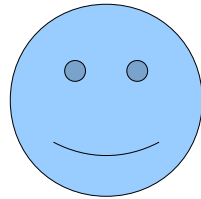
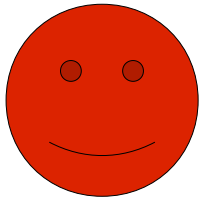
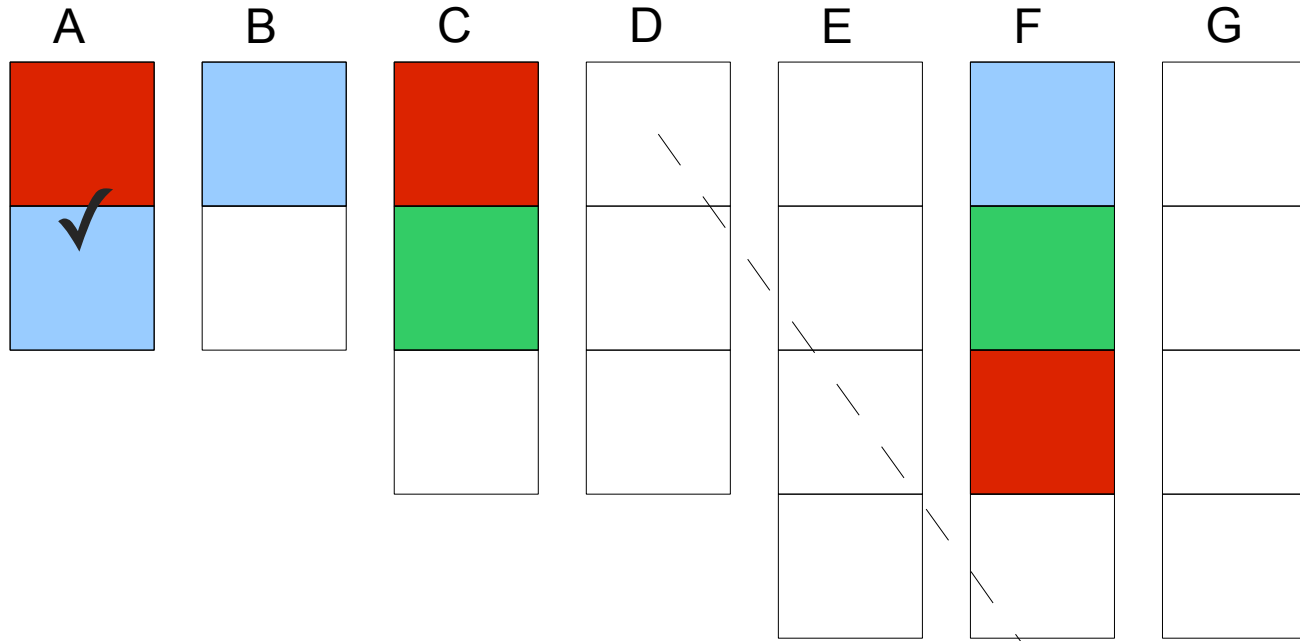
公平份额消费：淘汰



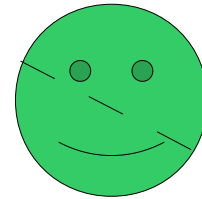
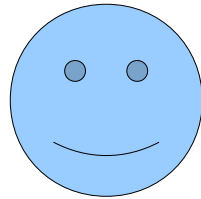
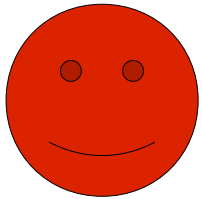
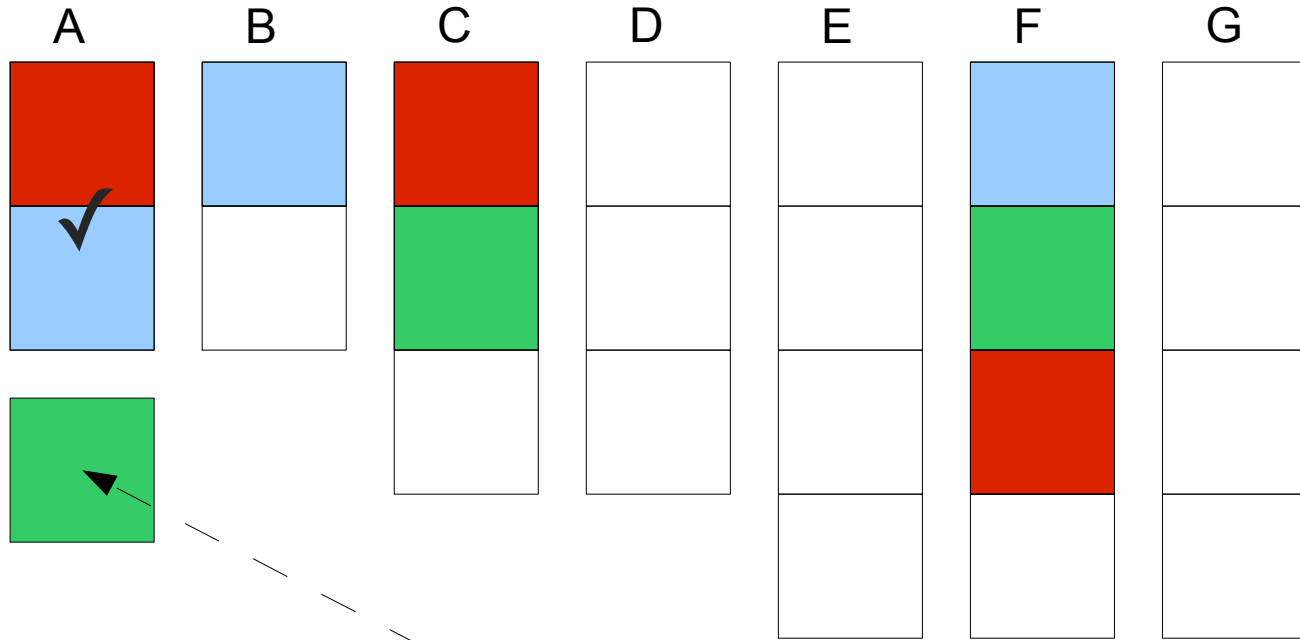
公平份额消费：淘汰



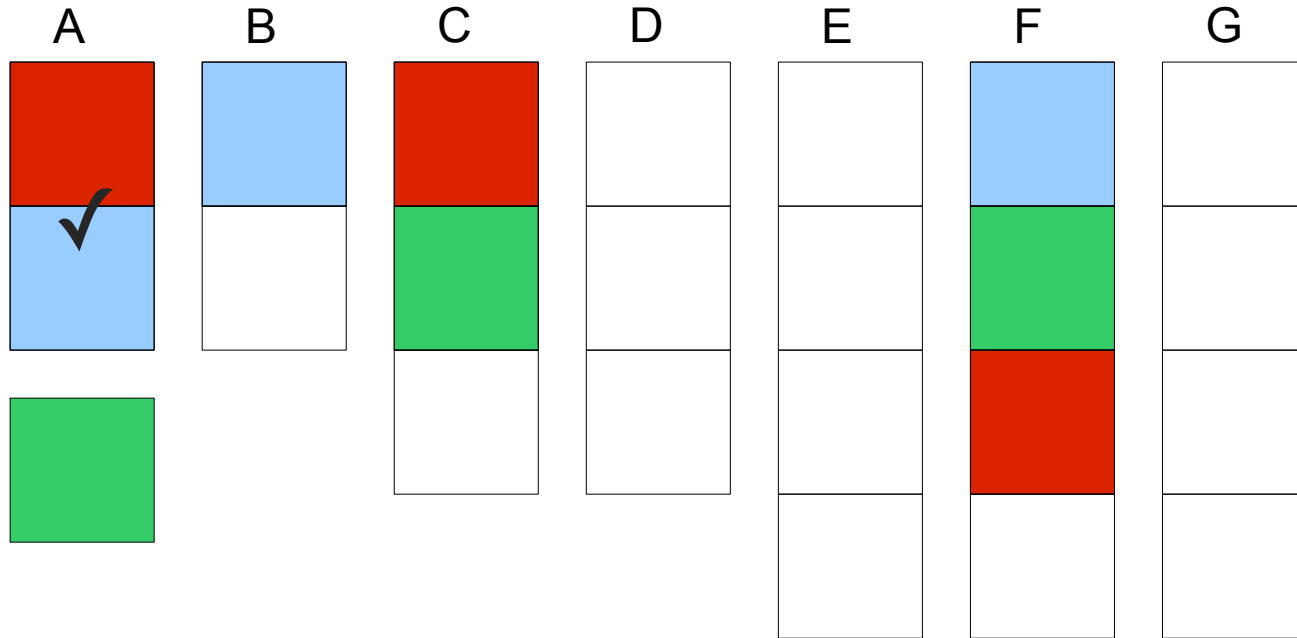
公平份额消费：淘汰



公平份额消费：淘汰

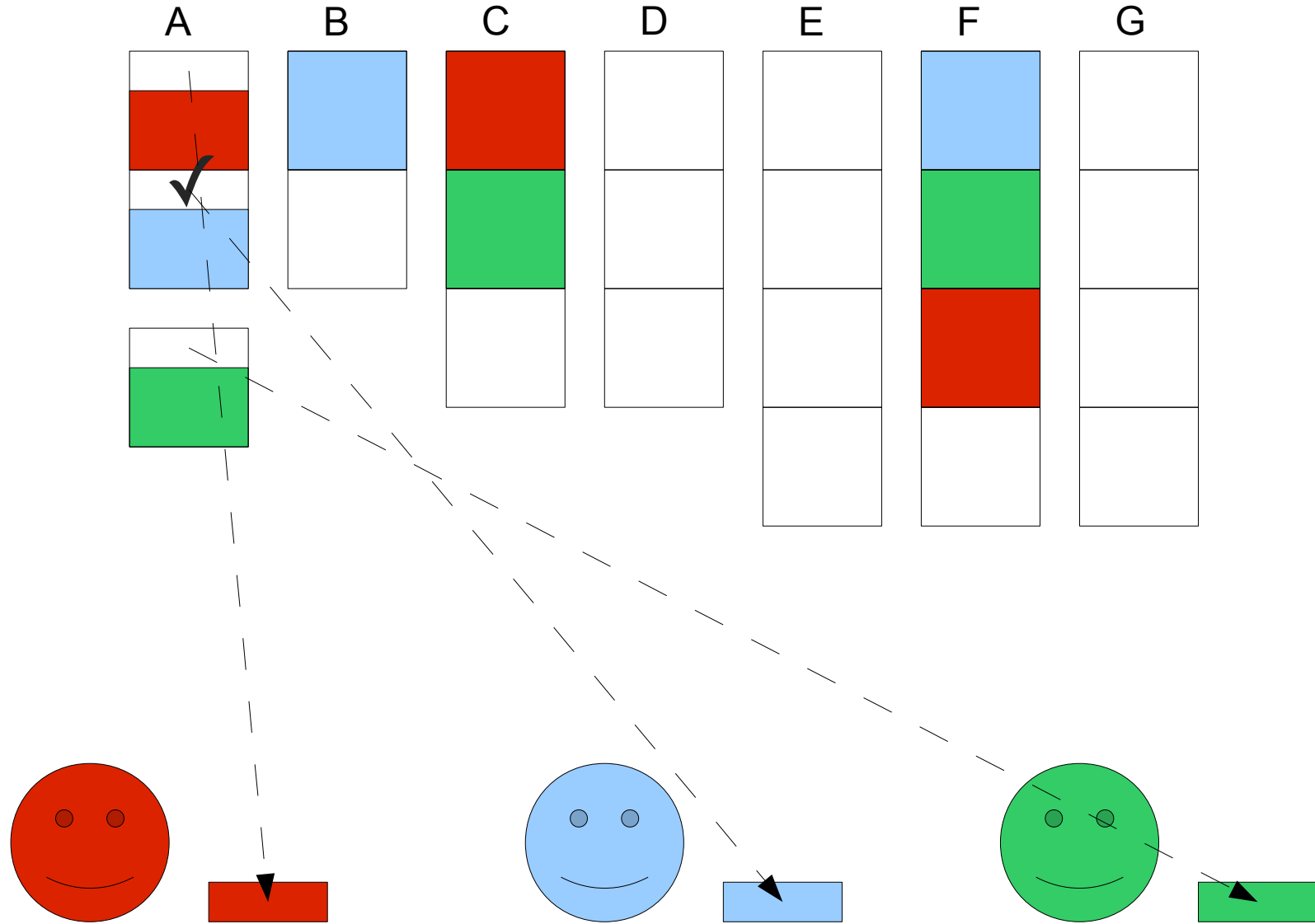


公平份额消费：剩余

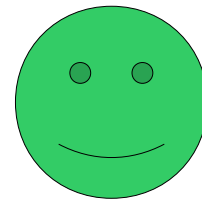
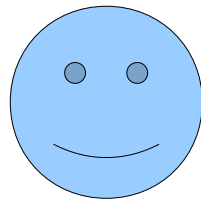
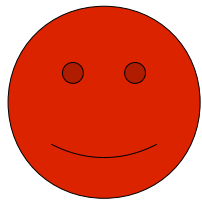
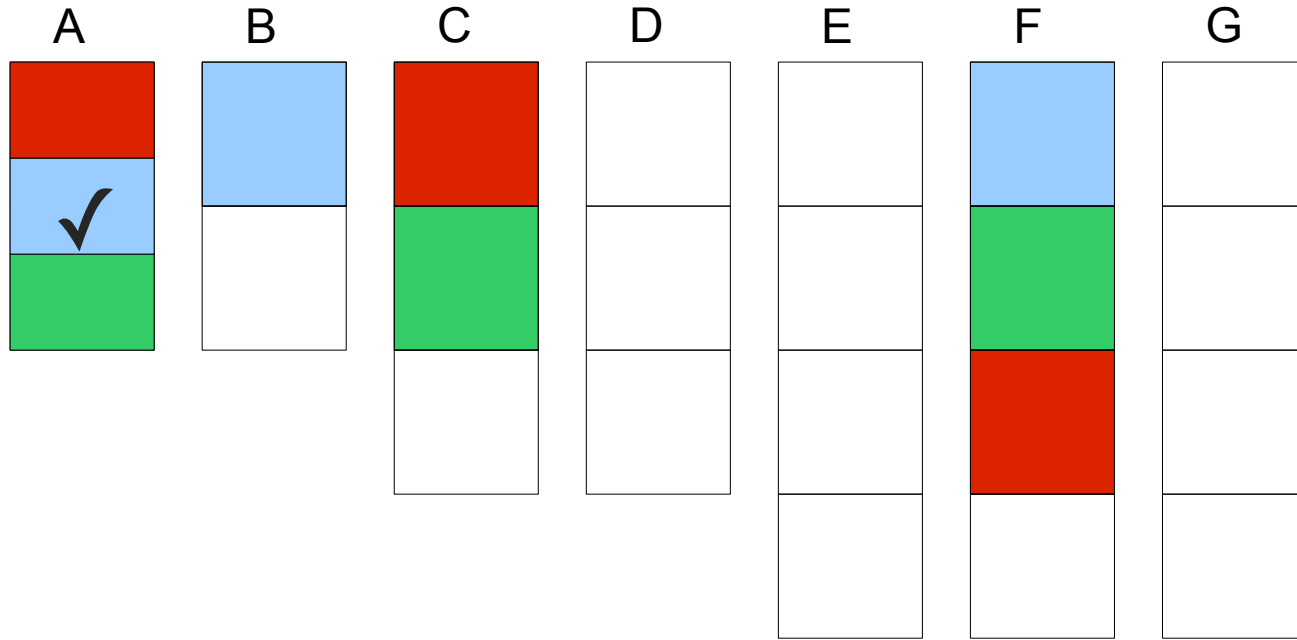


- 如果一个项目得到的钱比它需要的多：
- 那么，让每一个选民，把他/她的剩余资金转移到选民的下一个选择！
- 这样，支持有很多支持者的项目，成本更低！

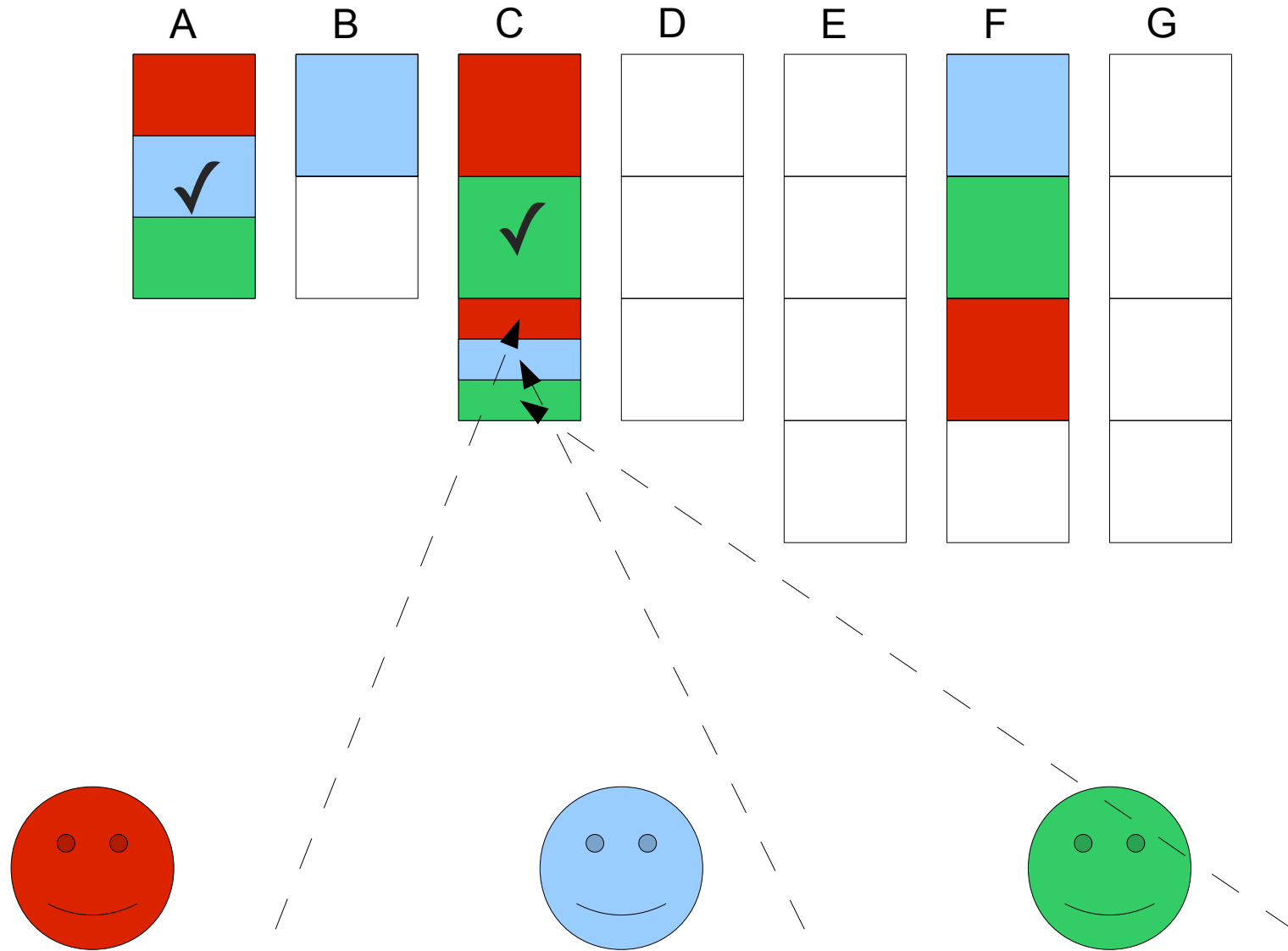
公平份额消费：剩余



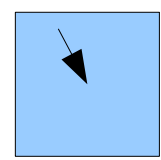
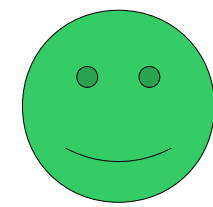
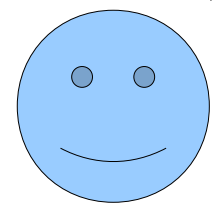
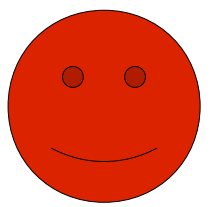
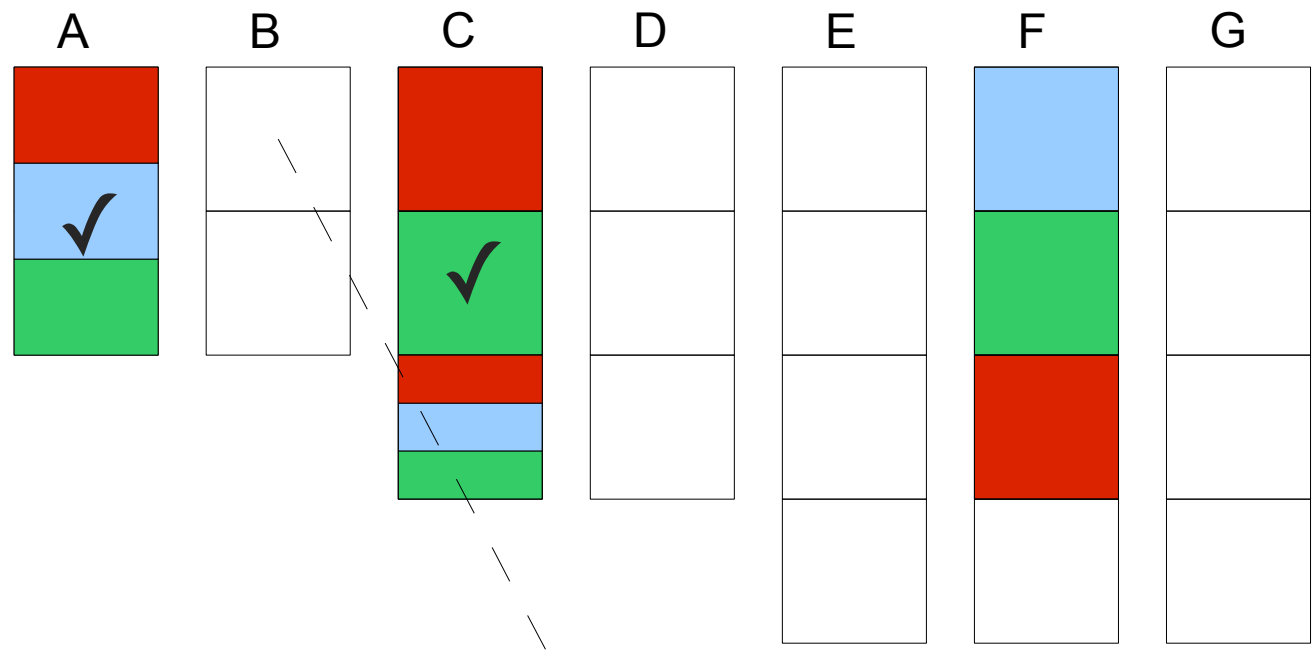
公平份额消费：剩余



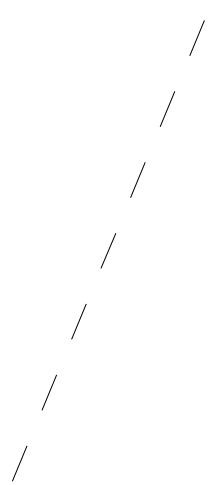
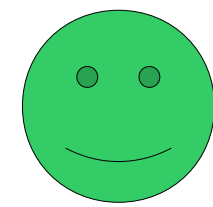
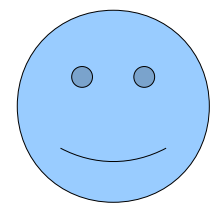
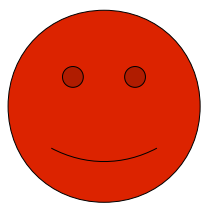
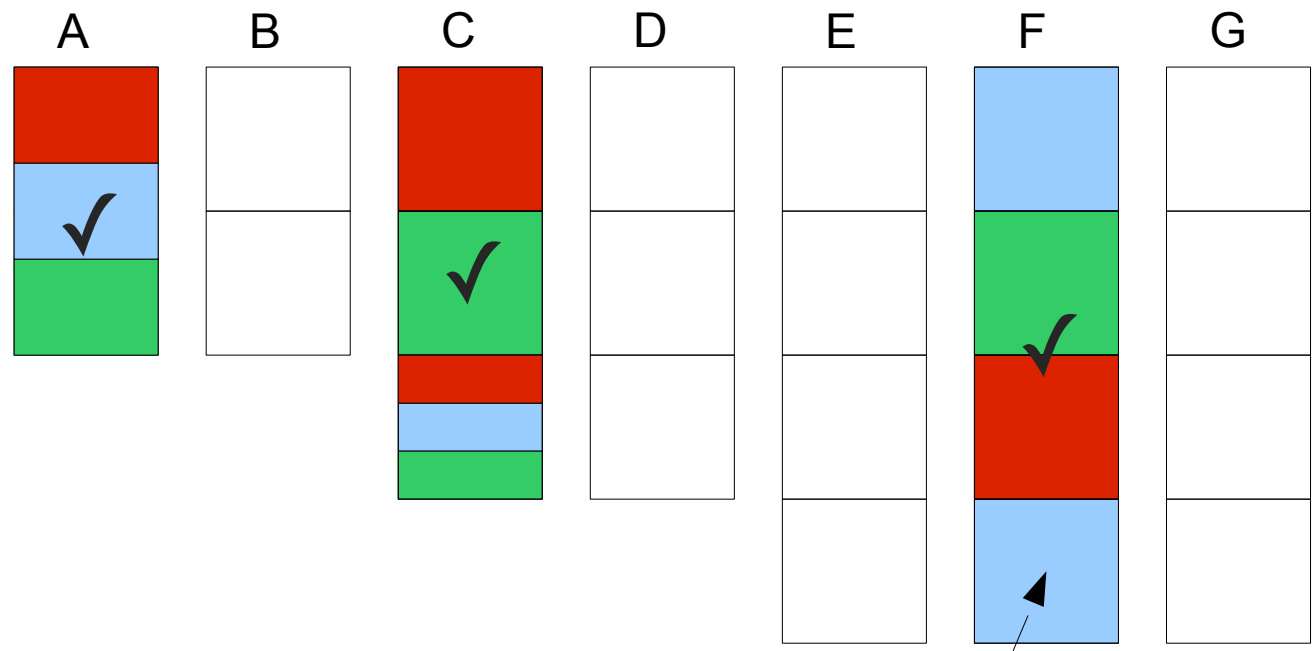
公平份额消费：剩余



公平份额消费：范例

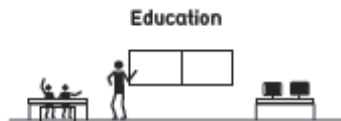


公平份额消费：范例



优先选择投票

- 真正点票时，不能停下来问每名选民：如果他们的首选落选，他们的下一个选择是什么
- 因此，我们要求每个选民给项目**排名**



A. Carroll Gardens Library Community Space
 \$250,000
 Community meeting room renovation with upgraded acoustics, energy efficient lighting, new PA system, and stage.

B. International Mother Language Monument
 \$150,000
 Monument celebrating local cultural diversity, International Mother Language Day, and Bengali language movement, at Dome Playground.

C. Kensington Library Resources and Community Space
 \$80,000
 New books/DVDs for library & equipment for room for meetings, storytelling, rehearsals, and small performances promoting Kensington's cultural diversity

D. Projector for Celebrate Brooklyn & BRIC Art Center
 \$42,000
 High powered projector for large scale, free public performances at Celebrate Brooklyn in Prospect Park and at the new BRIC Media House.

E. Bathroom Renovation for the Children of PS 124
 \$150,000
 Renovate two dysfunctional bathrooms that serve over 136 of the youngest students daily in a high-needs elementary school.

F. JHS 62 Media Center Upgrade for Journalism Program
 \$80,000
 Electrical upgrade of multimedia room and purchase of new equipment to support school's news and journalism program.

G. PS 131 Auditorium Project
 \$150,000
 Auditorium improvement, beginning with the seats, for this high needs school, which is also a Performing Arts Magnet.

H. PS 39 Cafeteria Soundproofing Project
 \$150,000
 Wall/ceiling mounted sound panels on low roofs & cement walls to lessen extraneous noise in tiny cave-like cafeteria.

I. Technology: A Better Future for PS 154 / PS 130 Students
 \$140,000
 Install 15 smartboards at PS 130; and 45 13" Macbook computers with 2 carts and 2 wireless printers at PS 154 grades 1, 3, & 4.

J. Brooklyn Neighbors Composting
 \$165,000
 Build pest-free, smell-free compost system near Gowanus Canal, which will use 1 ton/day of kitchen food scraps collected at local greenmarkets and schools to create rich soil for gardens, parks, and trees.

Council Members Sara González and Stephen Levin may also contribute to this proposal.

Choose up to Five (5) Projects.

K. Body Weight Fitness Equipment Area
 \$60,000
 Install new body weight fitness equipment in Prospect Park.

L. District 39 Tree Planting
 \$100,000
 Plant 100 new trees and install tree guards on blocks with few or no trees.

Parks Department will contribute an additional \$85,000 to this effort for tree planting if funded.

M. Pigeon Plaza Greenstreet Rehabilitation
 \$250,000
 Refurbish Pigeon Plaza (New Utrecht Ave, 45th St, Fort Hamilton Pkwy) with new landscaping, seating, fencing, and trash can.

N. Prospect Park Pedestrian Pathway Rehabilitation
 \$205,000
 Repair Prospect Park pedestrian paths near Park Circle and Long Meadow to prevent flooding, and add 10 trash cans in park.

O. 50th Street Repaving Project
 \$150,000
 Repave 50th St from Fort Hamilton Pkwy to 13th Ave to make it a safer, smoother street.

Council Member Greenfield has agreed to secure funding for repaving of blocks East of 13th Ave, which are in his district.

P. Pedestrian Hazards at the Prospect Expressway
 \$200,000
 Repairs & additions to badly damaged and dangerous 9 lane Prospect Expressway pedestrian crossing at Church Avenue, area, and landscape.

Q. Intersection Safety Improvements
 \$150,000
 Build sidewalk 'bulbs' at Carroll St & Third Ave to minimize pedestrian crossing distances.

R. E "Co
 \$50,0
 Insta
 the d
 next

*MTA
 Clock
 ward*

S. H
 Sub
 \$300
 Insta
 Carr
 can
 make

T. F
 for
 Ft H
 \$325
 Impr
 subw
 greer
 & pre

*If fun
 will b
 anoti*

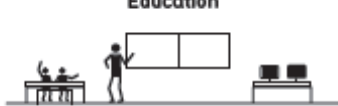
Culture and Community Facilities

Education

Environment

Parks and Recreation

Streets and Sidewalks



A. Carroll Gardens Library Community Space

\$250,000
Community meeting room renovation with upgraded acoustics, energy efficient lighting, new PA system, and stage.

E. Bathroom Renovation for the Children of PS 124

\$150,000
Renovate two dysfunctional bathrooms that serve over 136 of the youngest students daily in a high-needs elementary school.

3 J. Brooklyn Neighbors Composting

\$165,000
Build pest-free, smell-free compost system near Gowanus Canal, which will use 1 ton/day of kitchen food scraps collected at local greenmarkets and schools to create rich soil for gardens, parks, and trees.

Council Members Sara González and Stephen Levin may also contribute to this proposal.

4 K. Body Weight Fitness Equipment Area

\$60,000
Install new body weight fitness equipment in Prospect Park.

L. District 39 Tree Planting

\$100,000
Plant 100 new trees and install tree guards on blocks with few or no trees.

Parks Department will contribute an additional \$85,000 to this effort for tree planting if funded.

6 M. Pigeon Plaza Greenstreet Rehabilitation

\$250,000
Relurbish Pigeon Plaza (New Utrecht Ave, 45th St, Fort Hamilton Pkwy) with new landscaping, seating, fencing, and trash can.

N. Prospect Park Pedestrian Pathway Rehabilitation

\$205,000
Repair Prospect Park pedestrian paths near Park Circle and Long Meadow to prevent flooding, and add 10 trash cans in park.

O. 50th Street Repaving Project

\$150,000
Repave 50th St from Fort Hamilton Pkwy to 13th Ave to make it a safer, smoother street.

Council Member Greenfield has agreed to secure funding for repaving of blocks East of 13th Ave, which are in his district.

1 P. Pedestrian Hazards at the Prospect Expressway

\$200,000
Repairs & additions to badly damaged and dangerous 9 lane Prospect Expressway pedestrian crossing at Church Avenue, area, and landscape.

Q. Intersection Safety Improvements

\$150,000
Build sidewalk 'bulbs' at Carroll St & Third Ave to minimize pedestrian crossing distances.

R. E "Co

\$50,000
Insta
the d
next

8 S. H

\$300,000
Insta
Carr
can
make

T. F

for
Ft H
\$325,000
Impr
subw
greer
& pre

*If fun
will b
anoth*

Rank up to all Projects.

2 B. International Mother Language Monument

\$150,000
Monument celebrating local cultural diversity, International Mother Language Day, and Bengali language movement, at Dome Playground.

10 F. JHS 62 Media Center Upgrade for Journalism Program

\$80,000
Electrical upgrade of multimedia room and purchase of new equipment to support school's news and journalism program.

5 C. Kensington Library Resources and Community Space

\$80,000
New books/DVDs for library & equipment for room for meetings, storytelling, rehearsals, and small performances promoting Kensington's cultural diversity

9 G. PS 131 Auditorium Project

\$150,000
Auditorium improvement, beginning with the seats, for this high needs school, which is also a Performing Arts Magnet.

D. Projector for Celebrate Brooklyn & BRIC Art Center

\$42,000
High powered projector for large scale, free public performances at Celebrate Brooklyn in Prospect Park and at the new BRIC Media House.

H. PS 39 Cafeteria Soundproofing Project

\$150,000
Wall/ceiling mounted sound panels on low roofs & cement walls to lessen extraneous noise in tiny cave-like cafeteria.

7 I. Technology: A Better Future for PS 154 / PS 130 Students

\$140,000
Install 15 smartboards at PS 130; and 45 13" Macbook computers with 2 carts and 2 wireless printers at PS 154 grades 1, 3, & 4.

可转移投票法

- 公平份额消费系统 -- 包括优先选择投票和可转移选票 – 是从可转移投票法 (STV) 的投票方法发展而来
- 可转移投票法 (STV) 是按选择次序淘汰投票制，也称为另类投票或优先选择投票的优胜者版本

可转移投票法

- 国内全国使用：
 - 爱尔兰
 - 澳大利亚
 - 马耳他
- 在地方选举中广泛使用：
 - 苏格兰
 - 新西兰
- 在北美：
 - 麻省剑桥
 - 明尼苏达州明尼阿波利斯

公平份额消费：优点

- 公平份额消费是公平的
 - 每张选票控制相同的美元金额
 - 最大的群体无法控制他们自己的份额以外的份额
 - 大的少数群体可以控制自己的份额
- 公平份额消费有成本意识
 - 促进具成本效益的项目
 - 公平对待成本低的项目及其支持者
 - 增加选民对花每美元的满意度

公平份额消费：优点

- 冷门项目的票都没有白费，
流行项目的票成本更低
 - 减少了战术投票的诱因
 - 获奖项目组有更多的选票
 - 一个更强的决策命令
- 选民知道他们的票都能算数
 - 从实际上看：他们的选票控制了资金的公平份额

公平份额消费：优点

- 有了这些优势，我们可以希望：
 - 增加选民的投票率和满意度
 - 鼓励更多的官员在更多的城市把更多的钱委托给参与式预算

公平份额消费

- 选举制度的改革是艰难的
- 因为参与式预算还很年轻，我们有一个独特的机会，现在引进更好的投票方式 - 更有表现力和更公平的投票方法

公平份额消费

用于参与式预算的
一种新投票方式

Robert Tupelo-Schneck

schneck@gmail.com

Robert Loring

votingsite@gmail.com

www.AccurateDemocracy.com

Translated by: Aixiu (Monica) Zhang, PhD

张艾秀 博士 翻译