

Planetary Defense as Entrepreneurial Politics

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Executive Summary

- **Opportunity:** Investments into effective planetary defense readiness.
- **Obstacles:**
 - **Natural:** Low likelihood/High consequence NEO hazard
 - **Political:** Limitations of the majoritarian¹ policy approach.
- **Solutions:** Consideration of non-technical factors necessary to attain greater political viability.
 - **Constituency-building:** Concentrating planetary defense benefits as to raise policy support.
 - **Coalition-building:** Alternatively, disperse costs to assuage budget-minded opposition.
- **Consideration:**
 - Transitional stage of Entrepreneurial Politics

Efficient Planetary Defense

- **Assets**
 - Advanced Warning
 - Adaptable Mitigation Capabilities and Contingencies
- **Opportunities for Improvement**
 - Procedural/Methodological Refinement
 - A Routine Service

The Wilson-Lowi Matrix

		Benefits:	
		Concentrated	Dispersed
Costs:	Concentrated	Interest Group Politics	Entrepreneurial Politics
	Dispersed	Client Politics	Majoritarian Politics

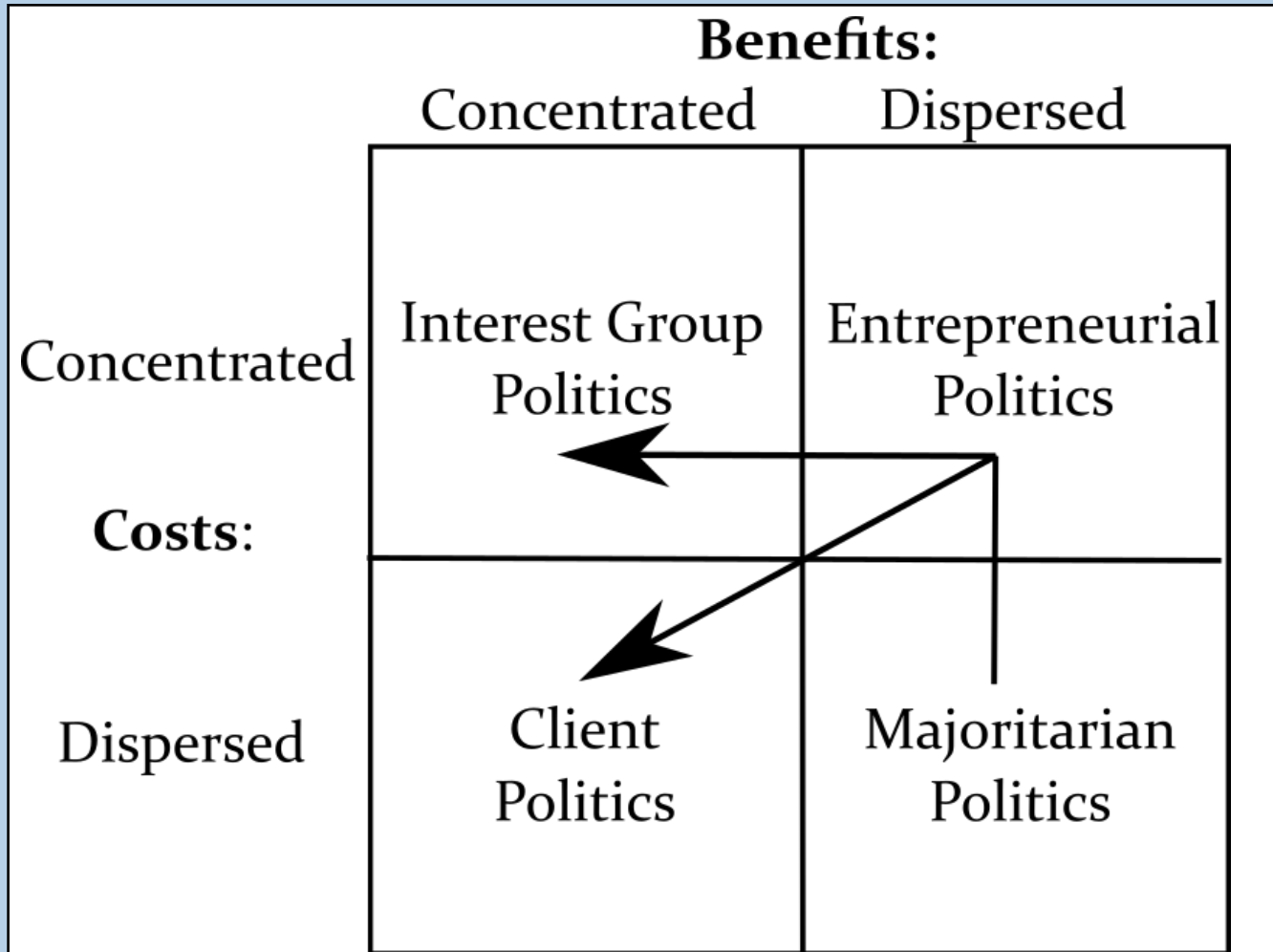
The Obstacle to Effectiveness: Entrepreneurial Policy

- **An imperfect cost-benefit balance:**
 - **Concentrated Costs**
 - Incentivizes Organized Fiscal Opposition
 - **Dispersed Benefits**
 - Non-excludable benefit causes “free riders” Problem
 - Disincentivizes Investment
 - Limited Advocacy, No “Planetary Defense Lobby”
 - Constricts Organization, No “Future Meteor Targets Association”

Wilson-Lowy Matrix

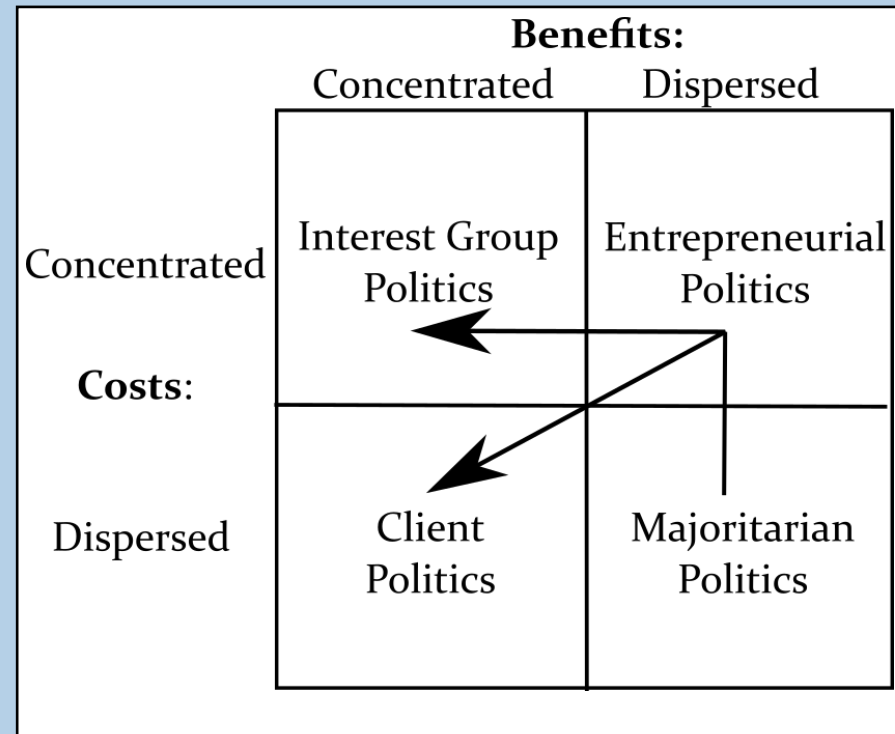
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Tools for Optimization: Creating a Constituency



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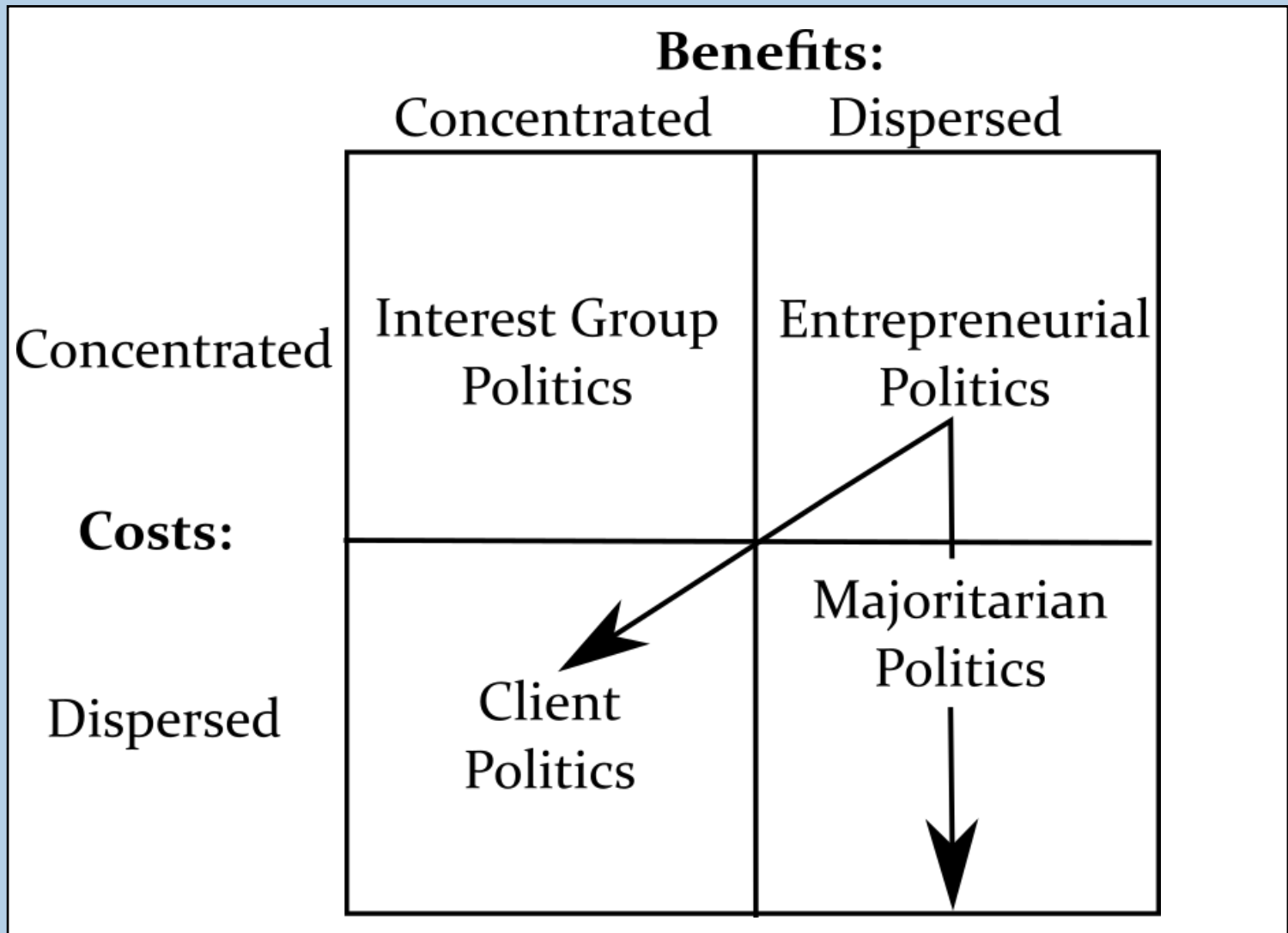
- **Concentrating Benefits**
 - **Returns on Investment**
 - Expanding Markets ^{2 3}
 - Space Industry
 - Lifter Manufacture
 - **Supporting Parallel Opportunities**
 - Linking R&D Projects
 - Energy Collection
 - Asteroid Mining
 - Space Vehicle Development
 - Supporting State Priorities
 - Satellite replacement
 - Facilitating increased space activities
- **Increasing Organization**



2. George 2019

3. M. Stanley 2017

Tools for Optimization: Distributing Costs



Tools for Optimization: Distributing Costs

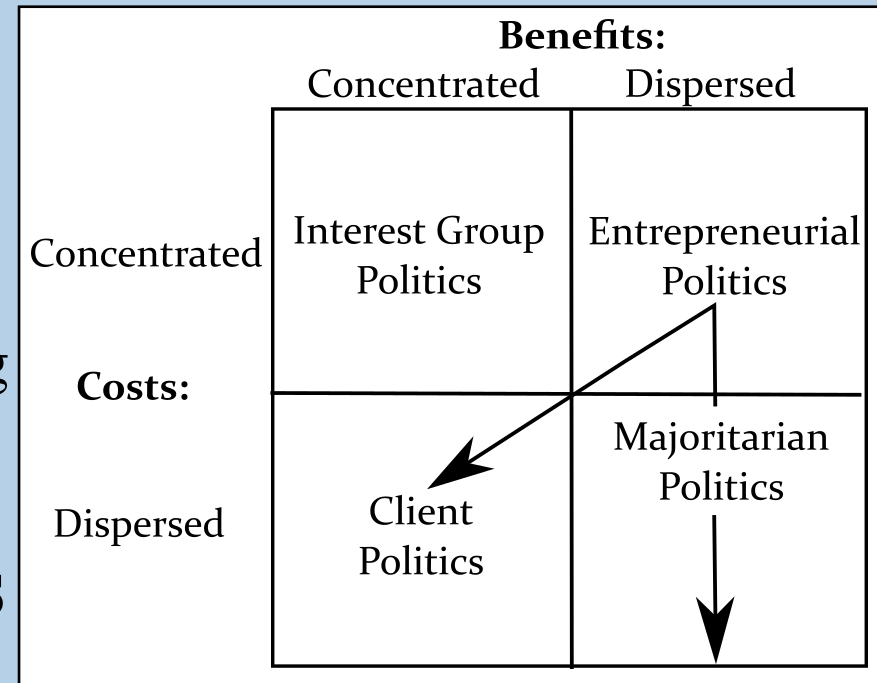
- **Deepening Majoritarian Politics**

- **Multilateral Planetary Defense**

- International Cost-Sharing
- Incremental Improvement

- **Reaching Client Politics**

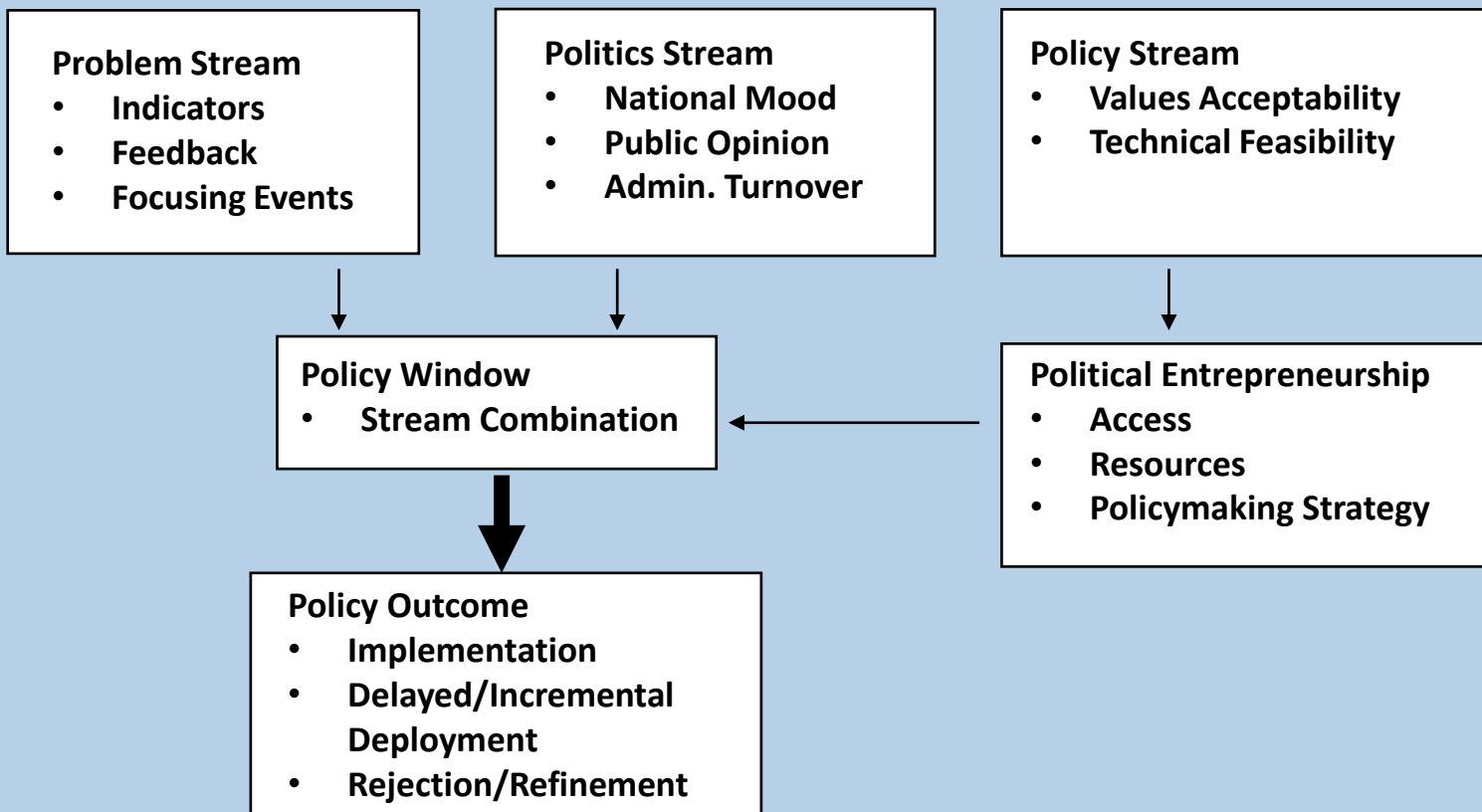
- Organizing Support and Dispersed Costs = Optimal Advocacy



Tools for Optimization: Crafting Entrepreneurial Policy

• Further Lessons from Public Policy

• Multiple-Streams Framework



Summary

- **Moving from the majoritarian status quo**
 - Effective entrepreneurship can help achieve efficient planetary defense.

References

- [1] Cameron, Charles. “Assessing the Lay of the Land: The Interest Group Matrix.” *The Political Analysis Toolkit*, Tokyo, 2016, pp. 16, 20-21 (Working Paper).
- [2] George, Kelly Whealan. "The economic impacts of the commercial space industry." *Space Policy* 47 (2019): 181-186.
- [3] M. Stanley. "Space: investing in the final frontier." 2018-11-07. <https://www.morganstanley.com/ideas/investing-in-space> (2019).