Conflict in Cyberspace

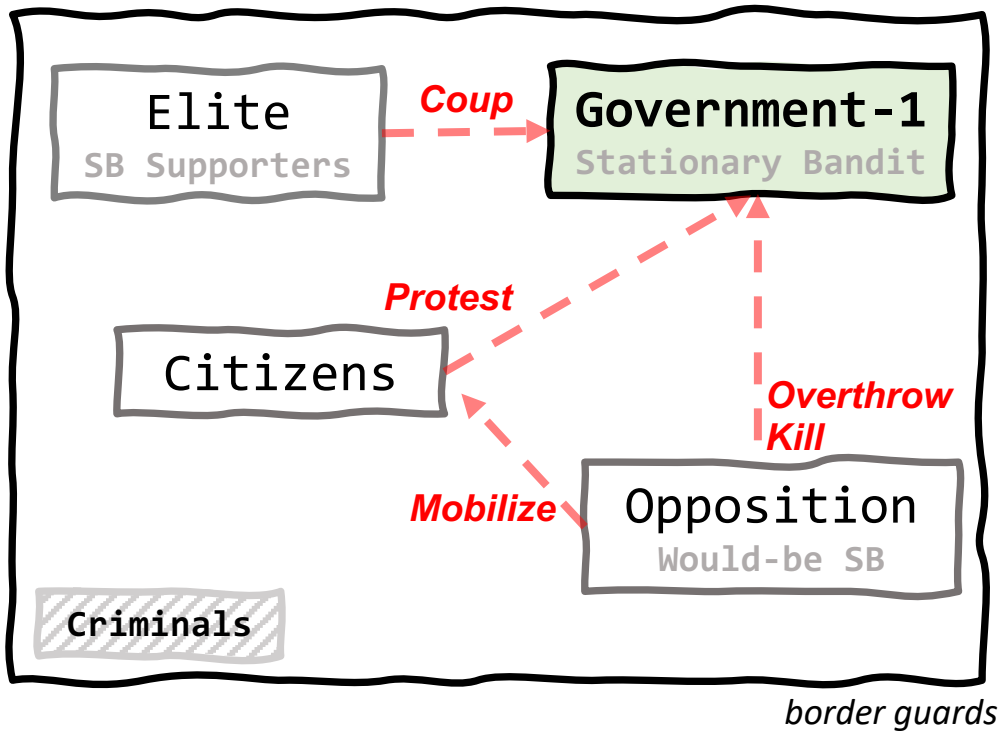
Graduate Seminar, Fall 2023

Instructor: Anton Sobolev

Week 09
Seminar: *Cyber in Military Operations*
Lecture: *Cyber & Domestic Conflict*

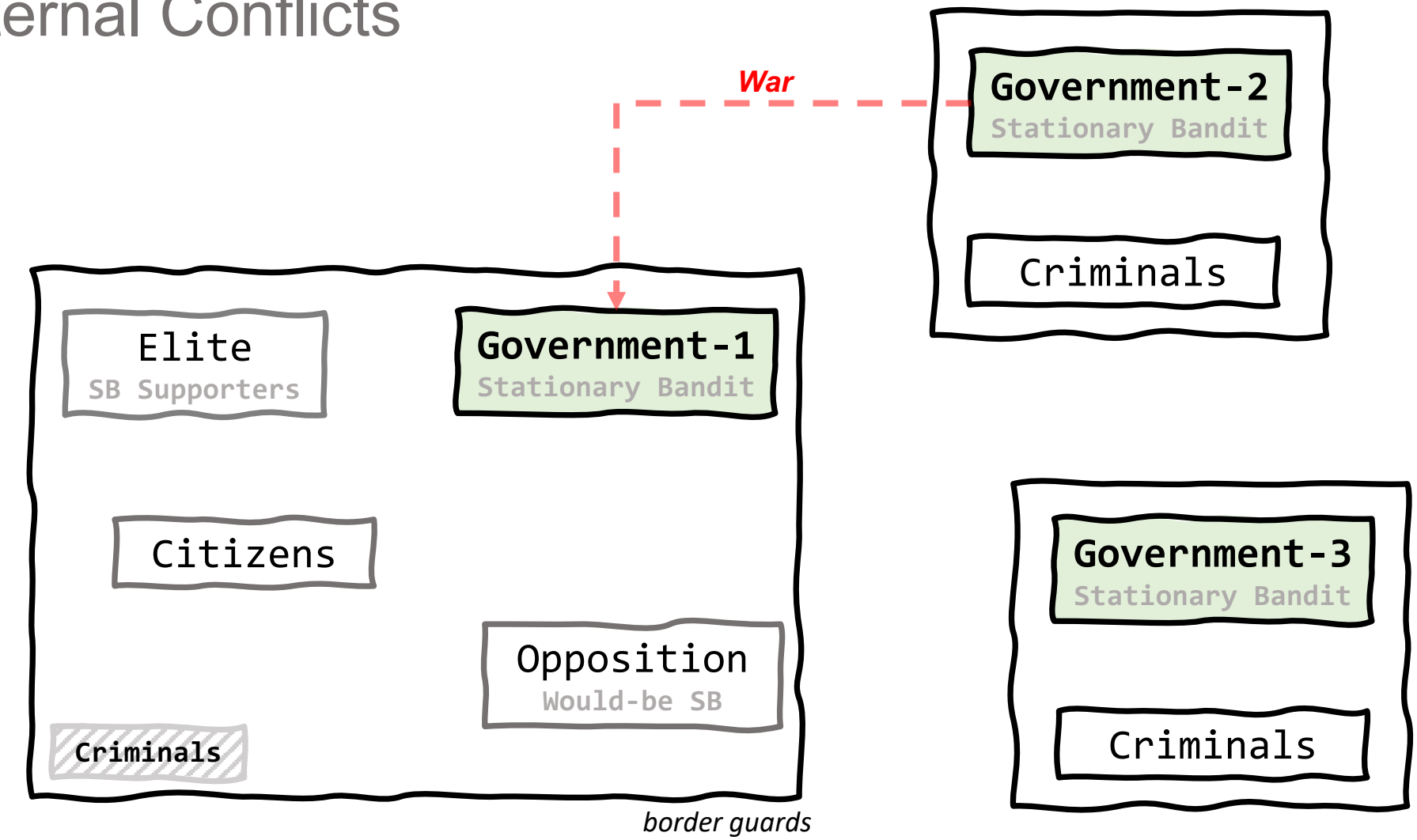
Conflict Framework Before Cyber

Internal Conflicts



Conflict Framework Before Cyber

External Conflicts



Conflict Framework Before Cyber

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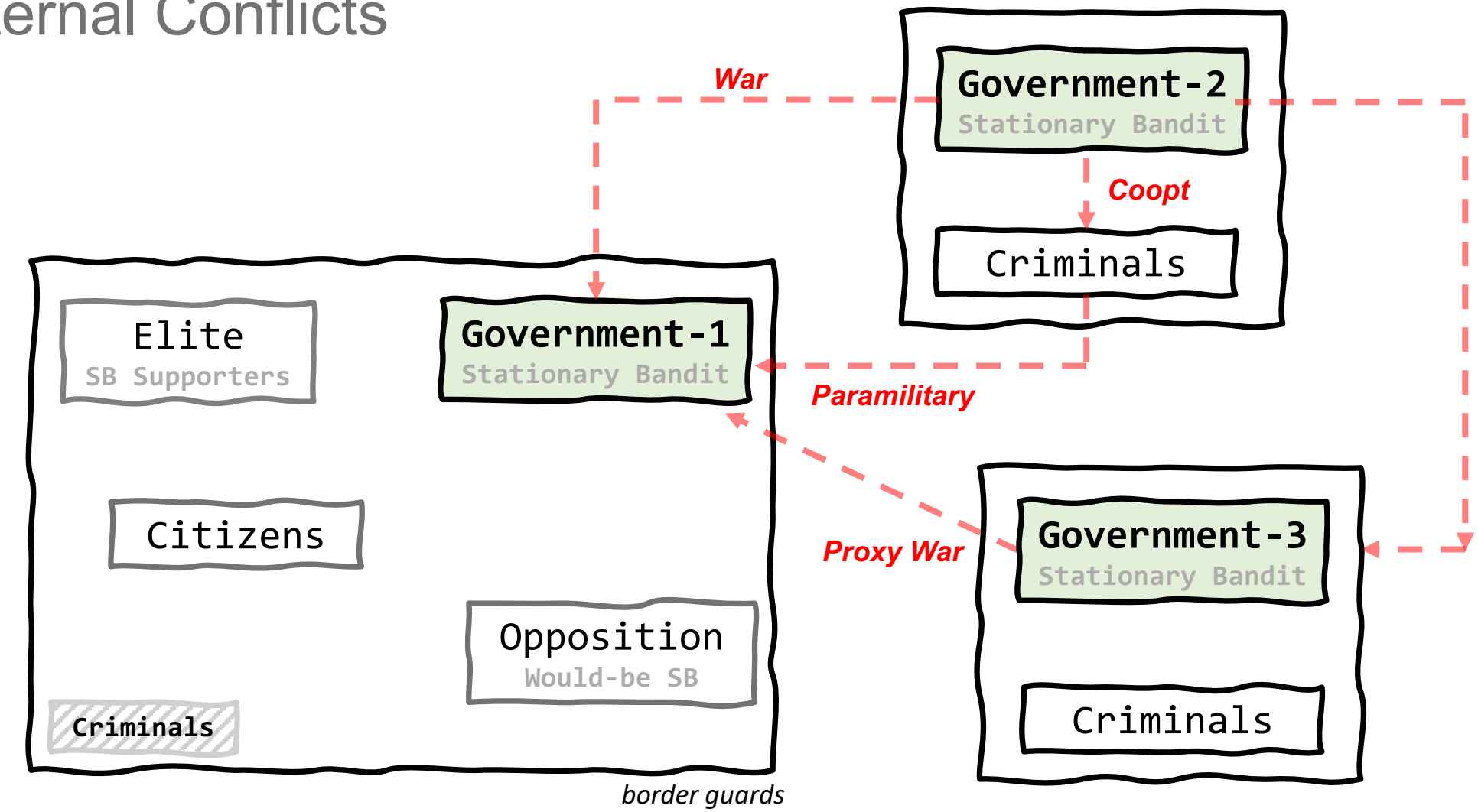
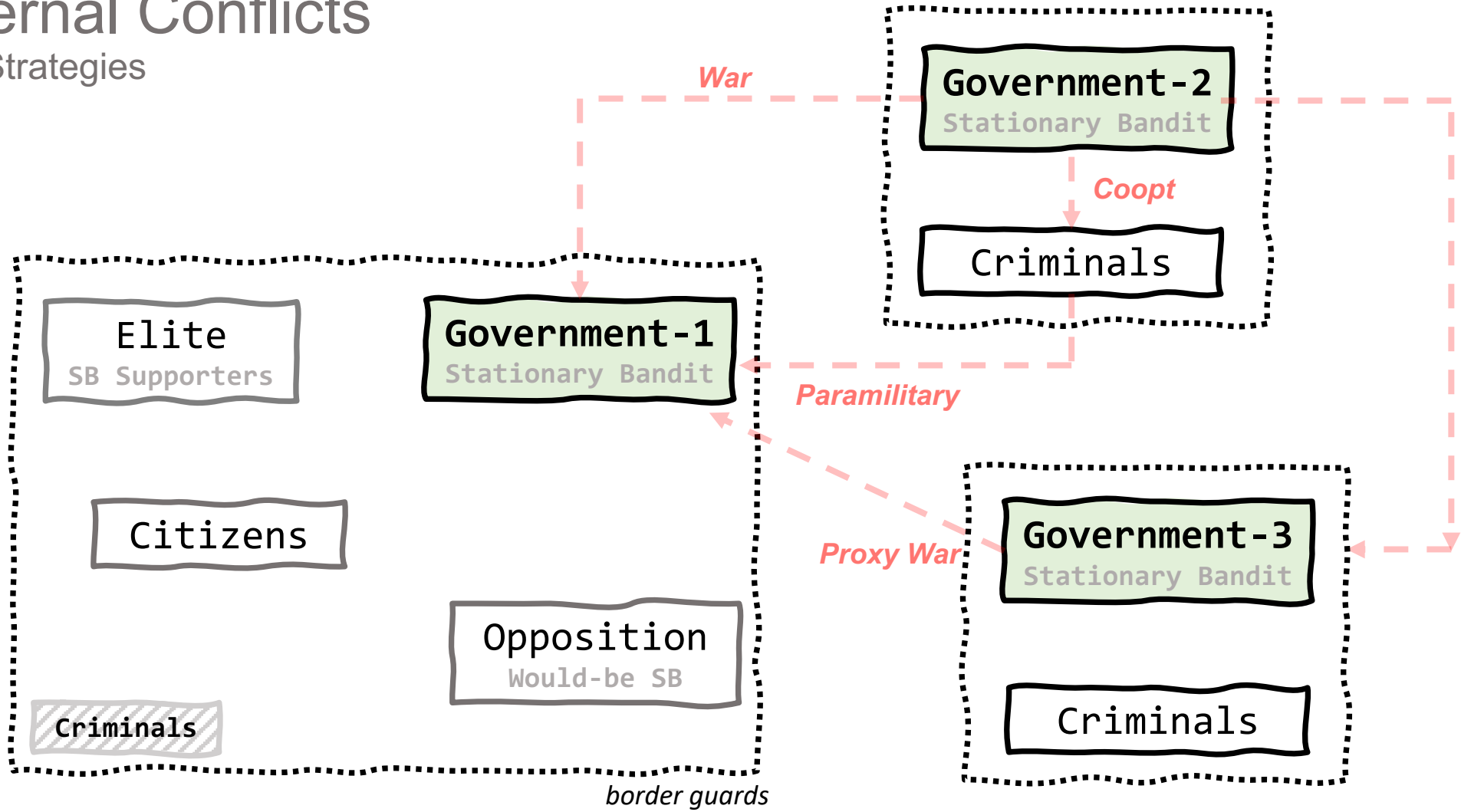


Conflict Framework Cyber

External Conflicts

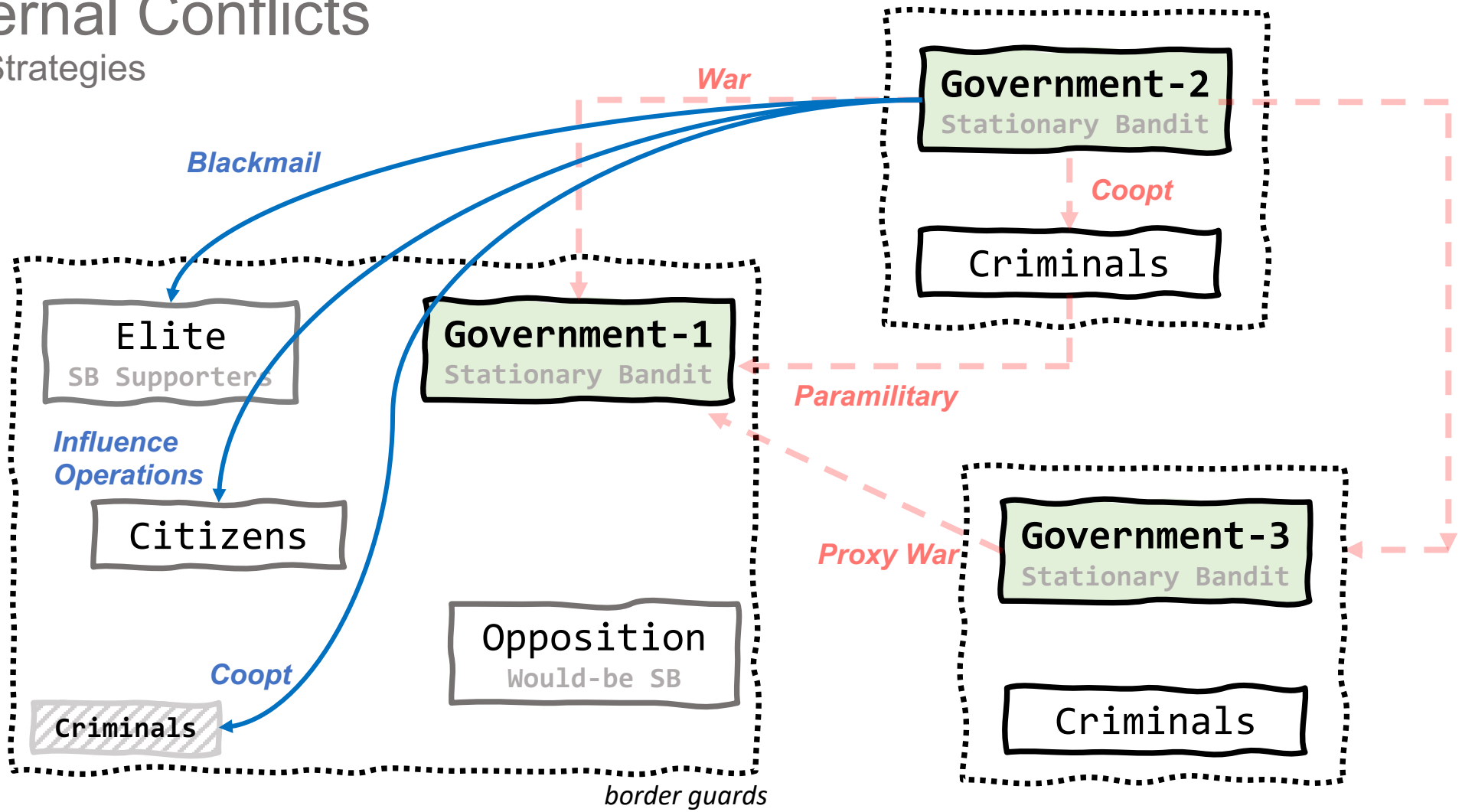
New Strategies



Conflict Framework Cyber

External Conflicts

New Strategies

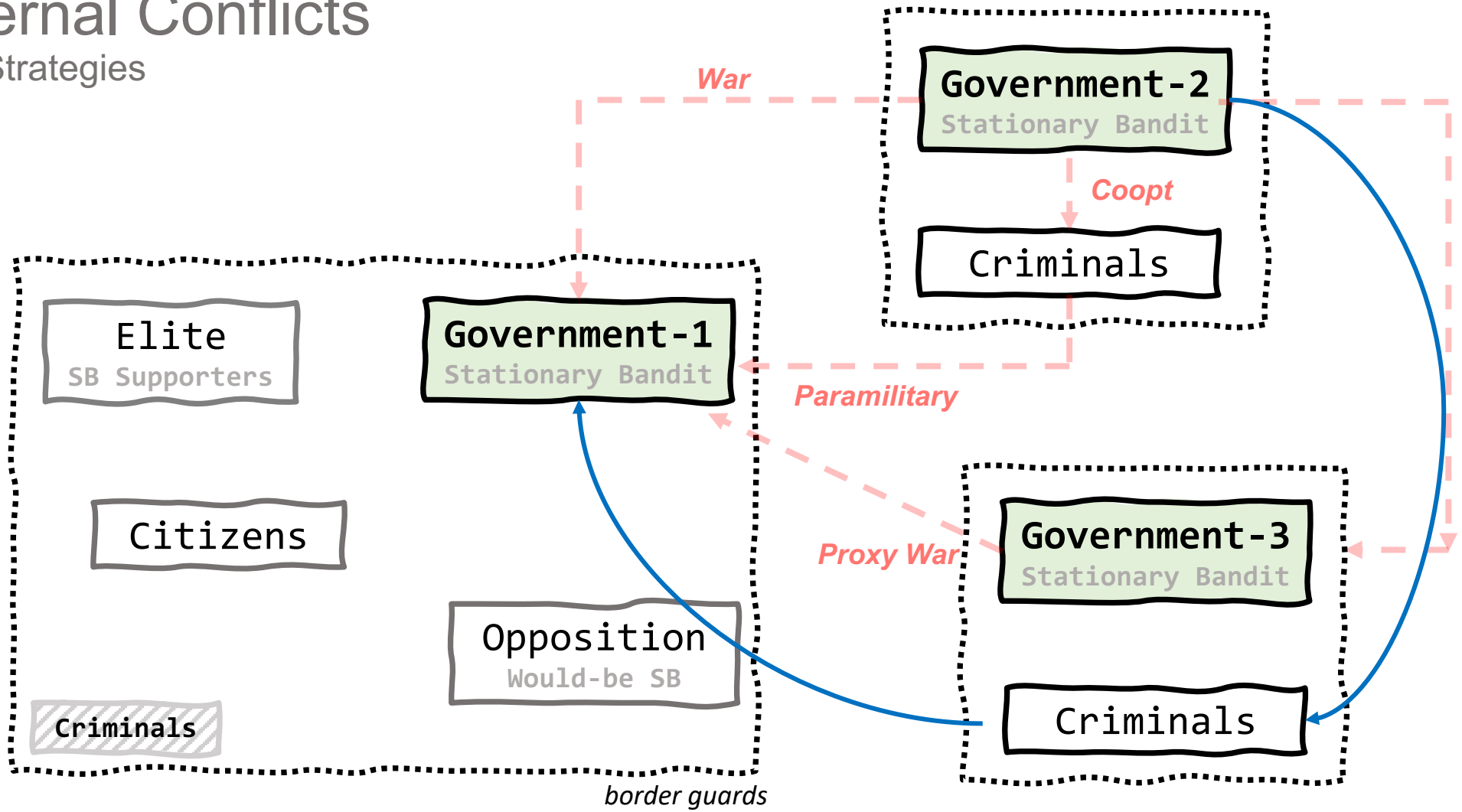


Borderless Cyberspace -> New Strategies

Conflict Framework Cyber

External Conflicts

New Strategies

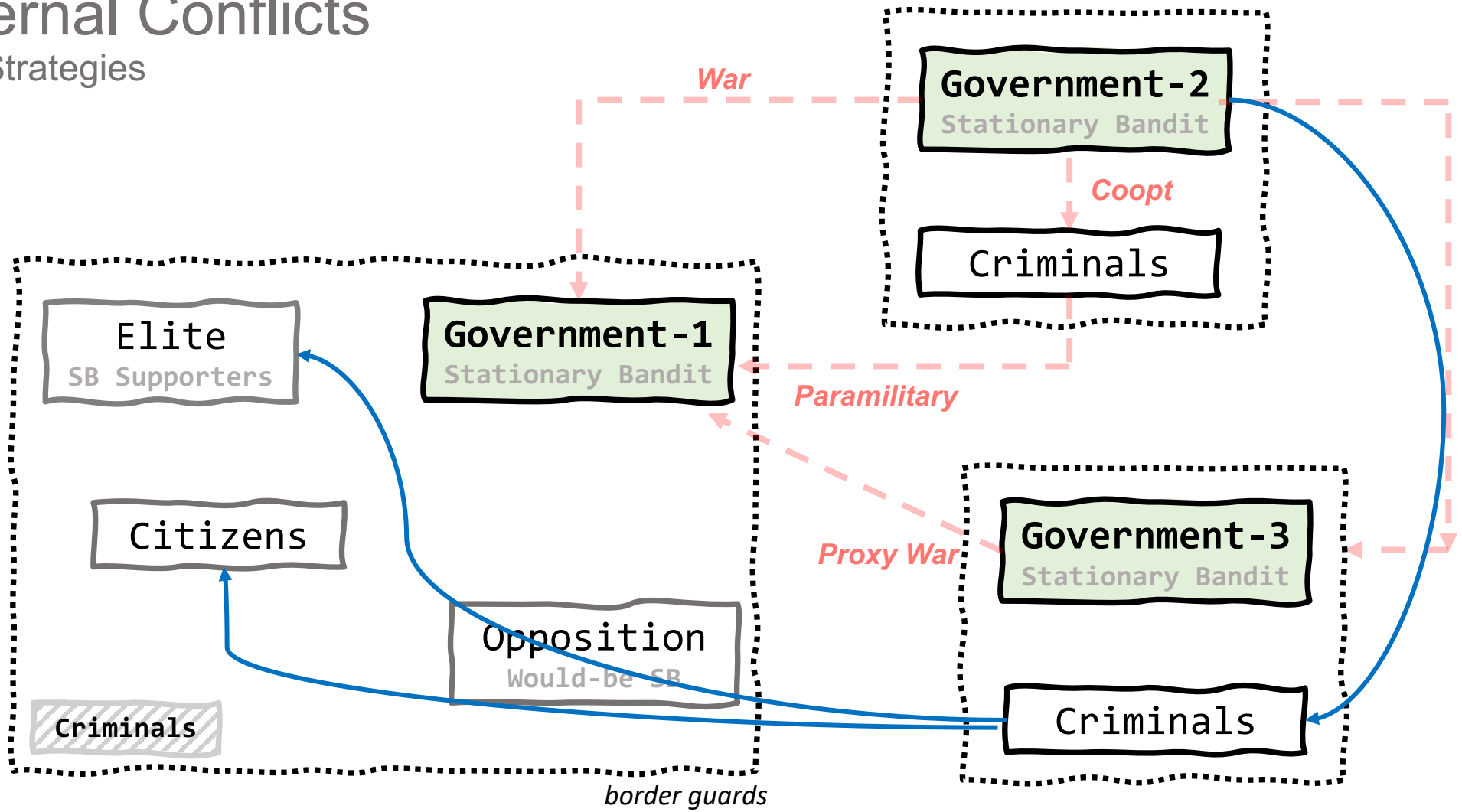


Attack Government

Conflict Framework Cyber

External Conflicts

New Strategies

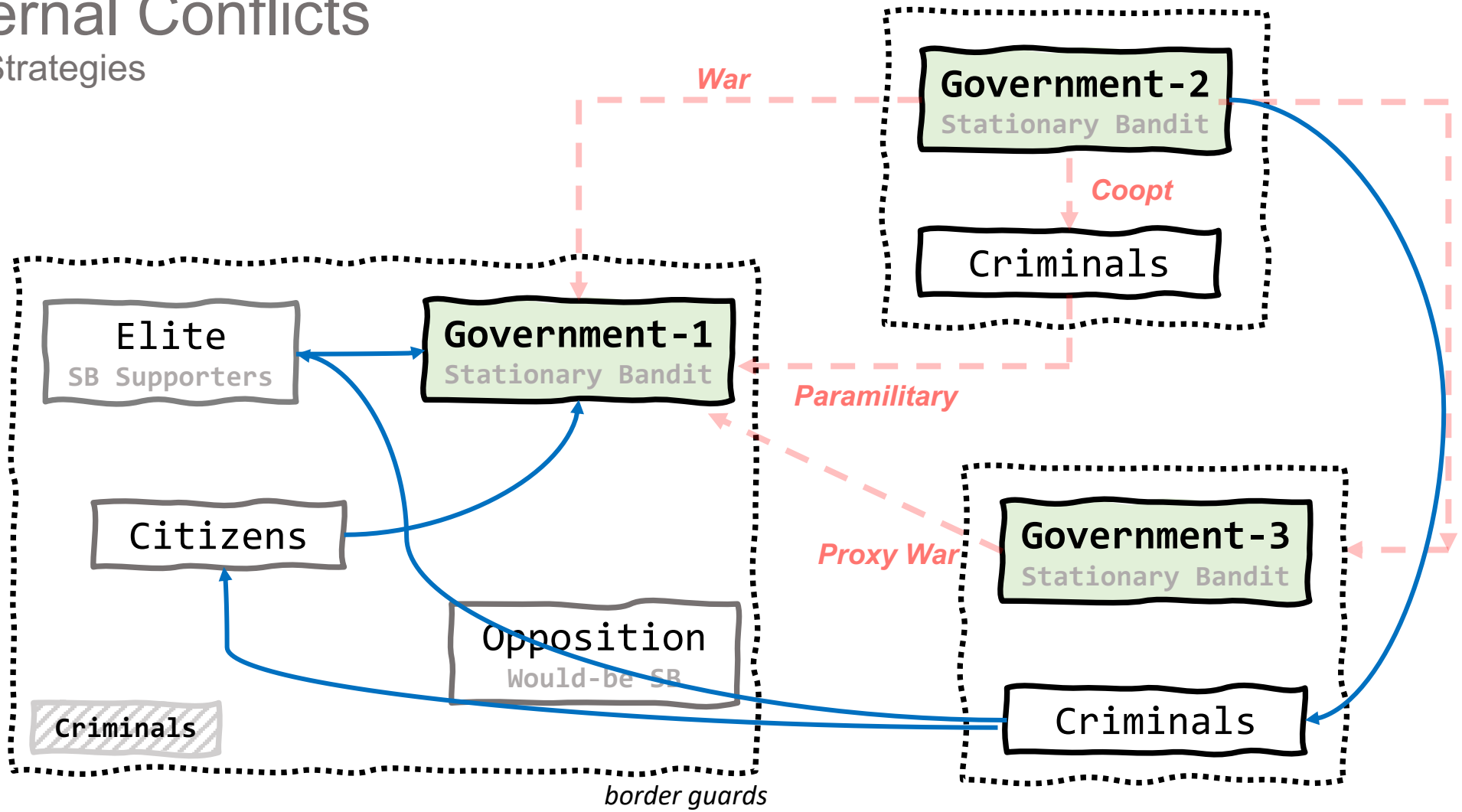


Attack others to weaken the government

Conflict Framework Cyber

External Conflicts

New Strategies

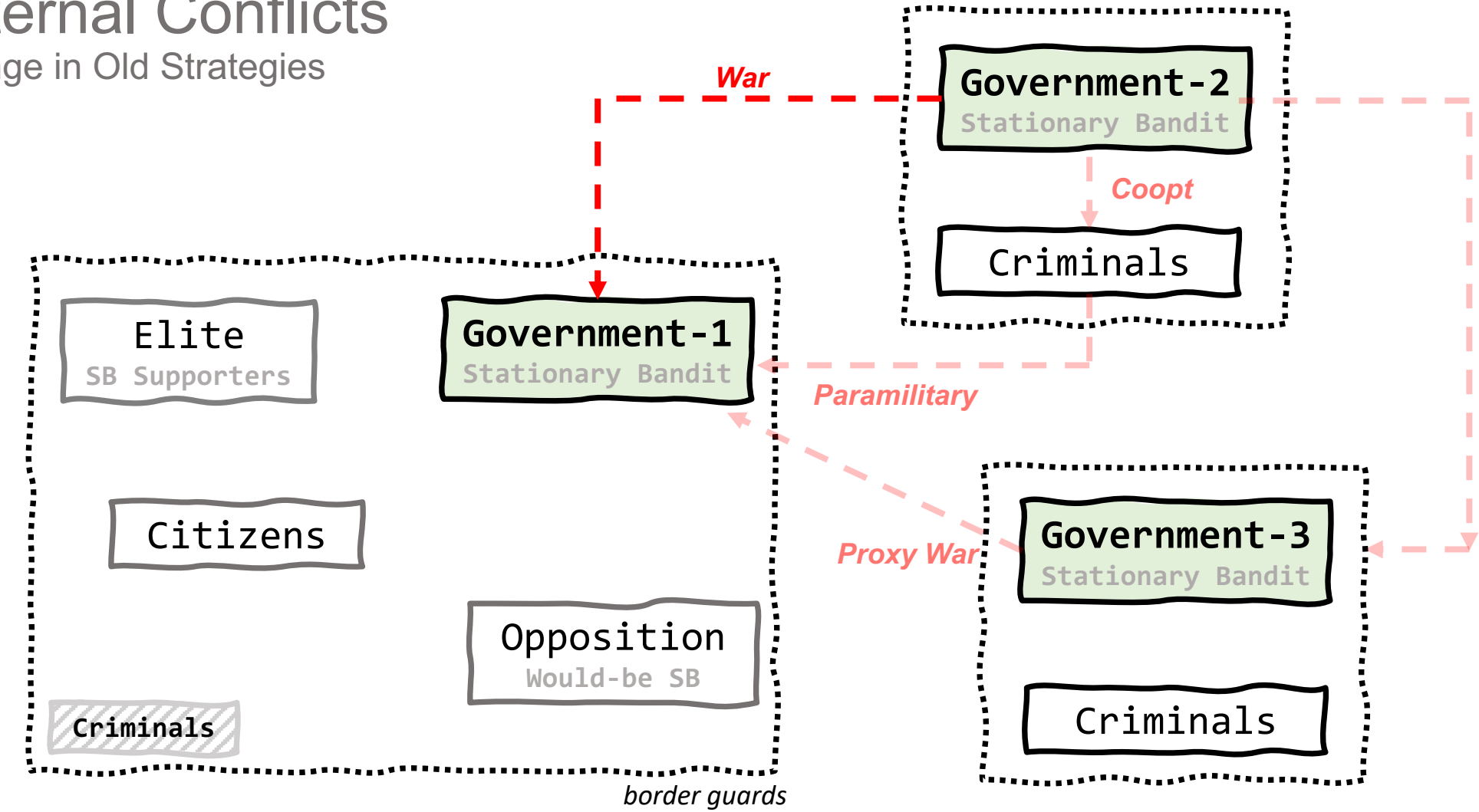


Influence others to attack the government

Conflict Framework Cyber

External Conflicts

Change in Old Strategies



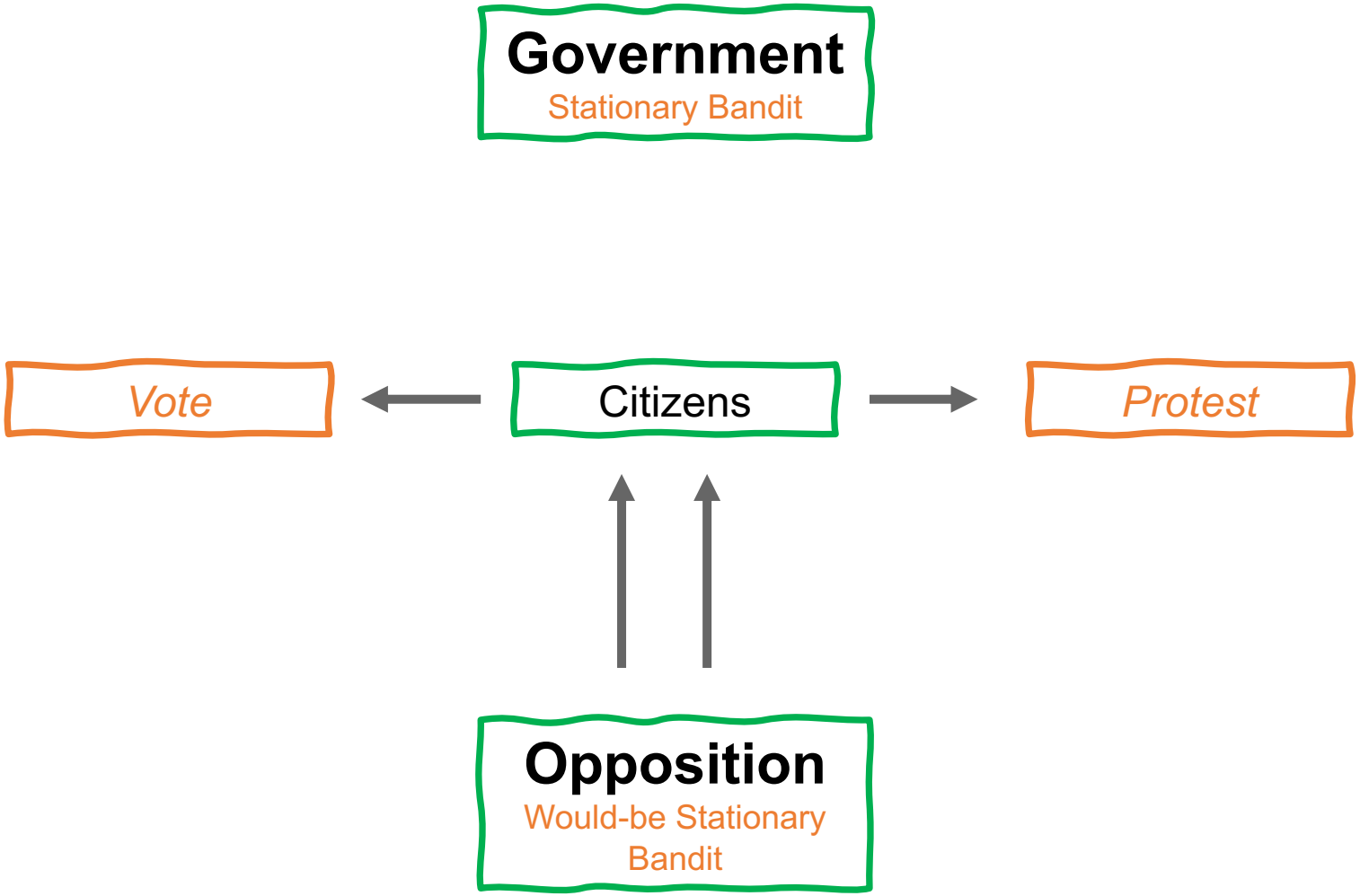
Cyber in Military Operations *VS* Cyber Military Operations

Let’s discuss readings!

Domestic conflicts

Types of conflict

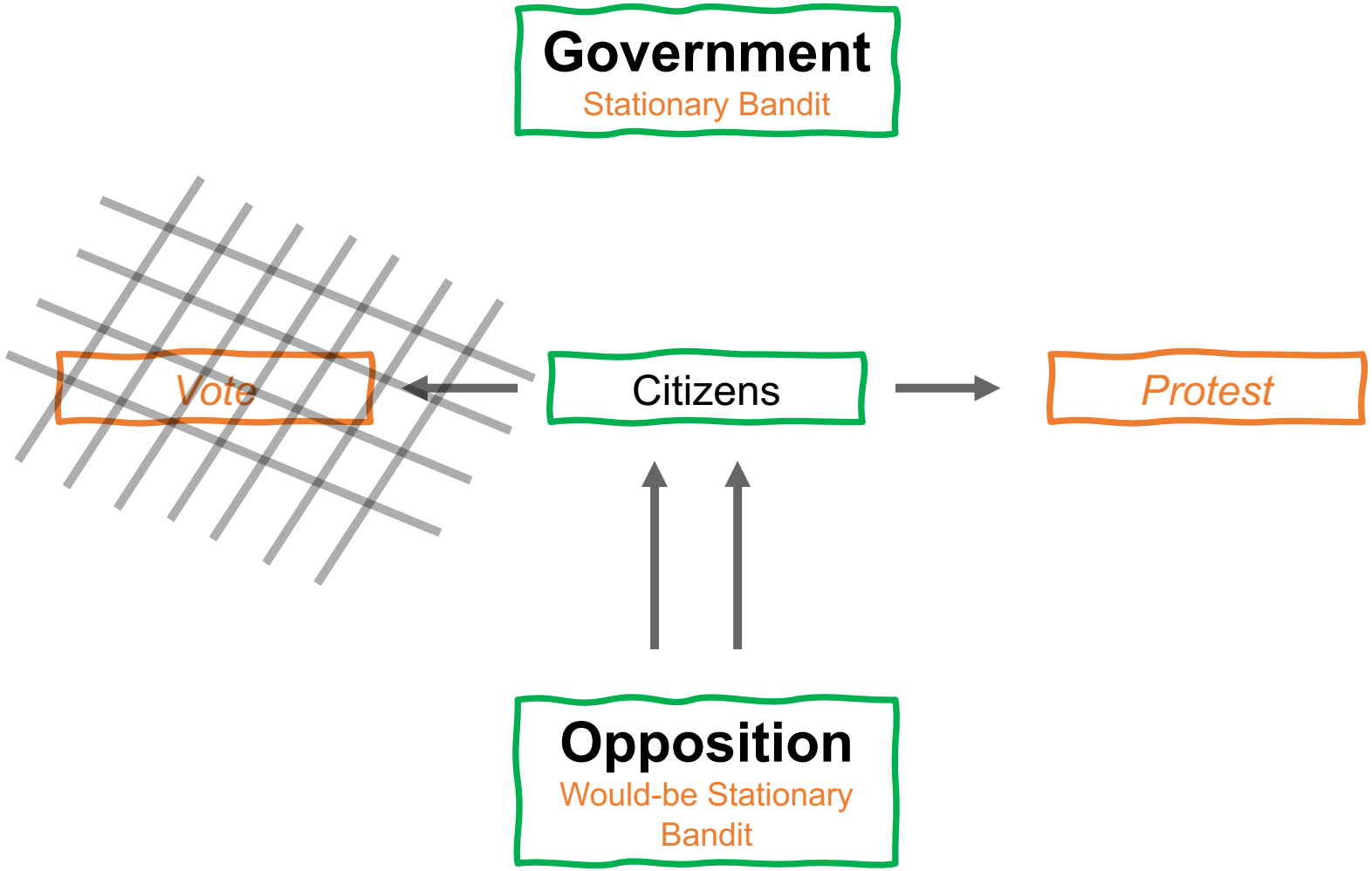
Non-democratic competition *VS* *Democratic competition*



Domestic conflicts

Types of conflict

Non-democratic competition *VS* *Democratic competition*



Domestic conflicts

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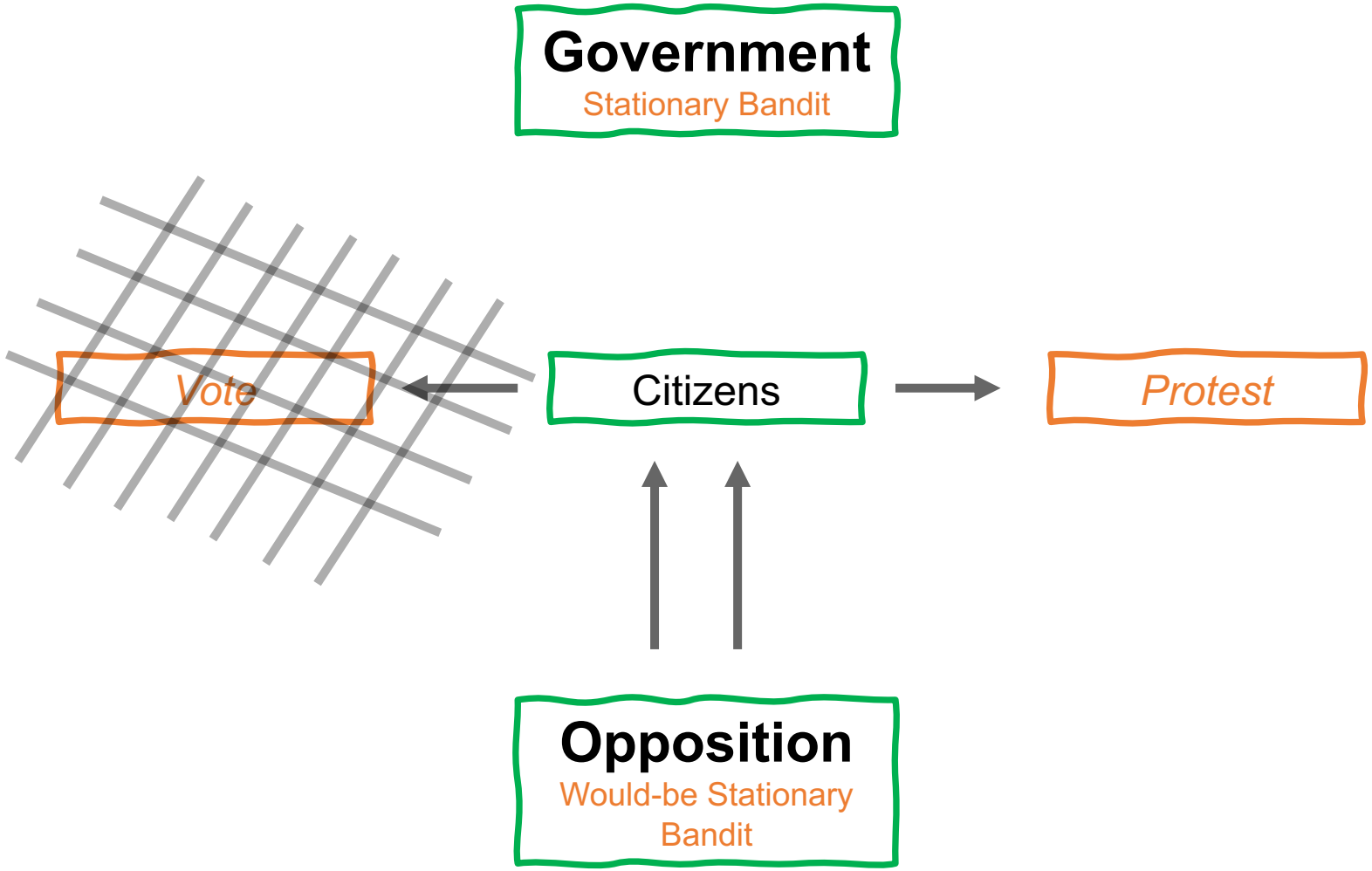

Cyber aspect of democratic competition follows the same logic with few exceptions

Domestic conflicts [Non-democratic]

Types of Opposition

Government
Stationary Bandit

Citizens

Opposition
Would-be Stationary Bandit

Domestic conflicts [Non-democratic]

Types of Opposition

Inside the Government [non-public]

Cyber plays no role

[or no data]

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Domestic conflicts [Non-democratic]

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Inside the Government [non-public]

Public Opposition

Cyber plays no role

[or no data]

Cyber impacts [almost] everything

Domestic conflicts [Non-democratic]

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Inside the Government [non-public]

Cyber plays no role

[or no data]

Public Opposition

Cyber impacts [almost] everything

Secessionists

Cyber plays an important role

Challenges to study:
Domestic VS Interstate
Violent VS Non-Violent

Domestic conflicts [Non-democratic]

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Cyber plays no role

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Challenges to study:
Domestic VS Interstate
Violent VS Non-Violent

Starting case:

- ☐ Domestic conflict
- ☐ Non-democratic competition
- ☐ Public Opposition

Domestic conflicts [Non-democratic]

Opposition perspective

Government
Stationary Bandit

Citizens

No independent public information

Opposition
Would-be Stationary Bandit

Domestic conflicts [Non-democratic]

Opposition perspective

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Information Distribution
Government failures

→

Learning
Share of dissatisfied citizens

→

Mobilization
Persuade dissatisfied citizens to protest

→

Coordination
Time and place to take to the streets

Domestic conflicts [Non-democratic]

Opposition perspective

Government
Stationary Bandit

How do I know if my problems are caused by the government?

How can I get this information?

Citizens

Should I spend my time on it? *Rational Ignorance*

No independent public information

Opposition
Would-be Stationary Bandit

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Domestic conflicts [Non-democratic]

Types of Opposition

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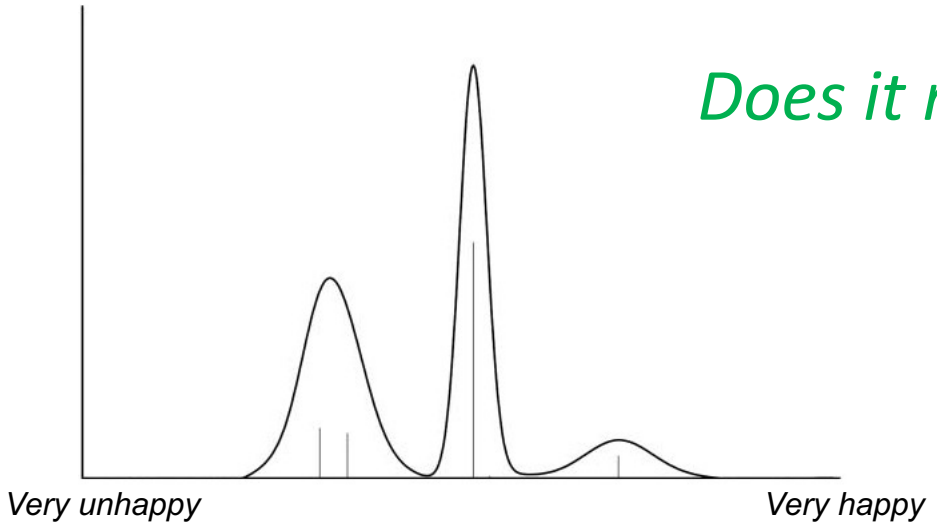
How many more are unhappy with the government ?
Does it make to sense to protest?

Citizens



No independent public information

Opposition
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Domestic conflicts [Non-democratic]

Types of Opposition

Do we have a chance to succeed?

How risky?

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Stationary Bandit

Citizens

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When?

Where?

Citizens

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Domestic conflicts [Non-democratic]

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It's simple: Repress!

Citizens

No independent public information

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Domestic conflicts [Non-democratic]

Types of Opposition

Government
Stationary Bandit

Disrupt
Internet Blackouts
DDos attacks

Threat
Activists or Citizens

Censor
Information

Manipulate
Information

Surveil
Activists or Citizens

Citizens

No independent public information

Opposition
Would-be Stationary Bandit

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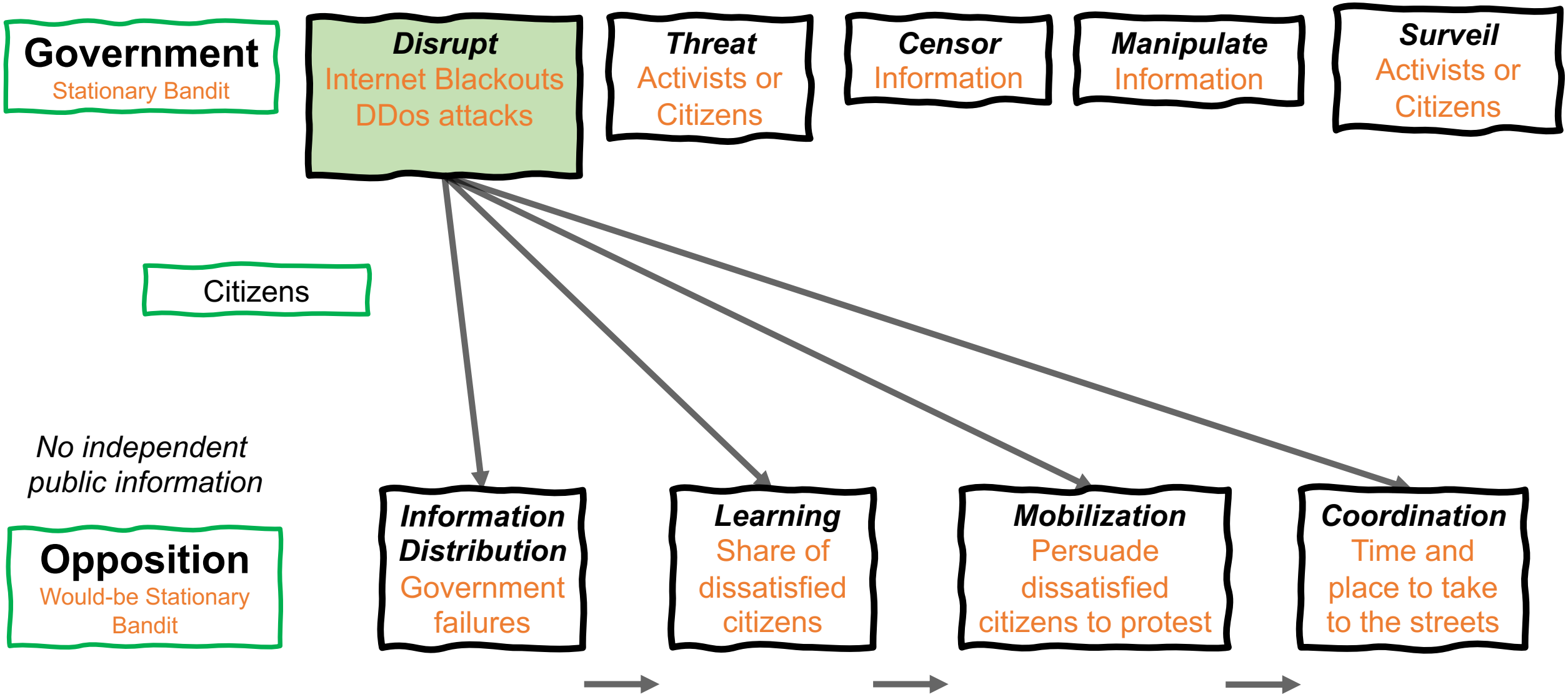

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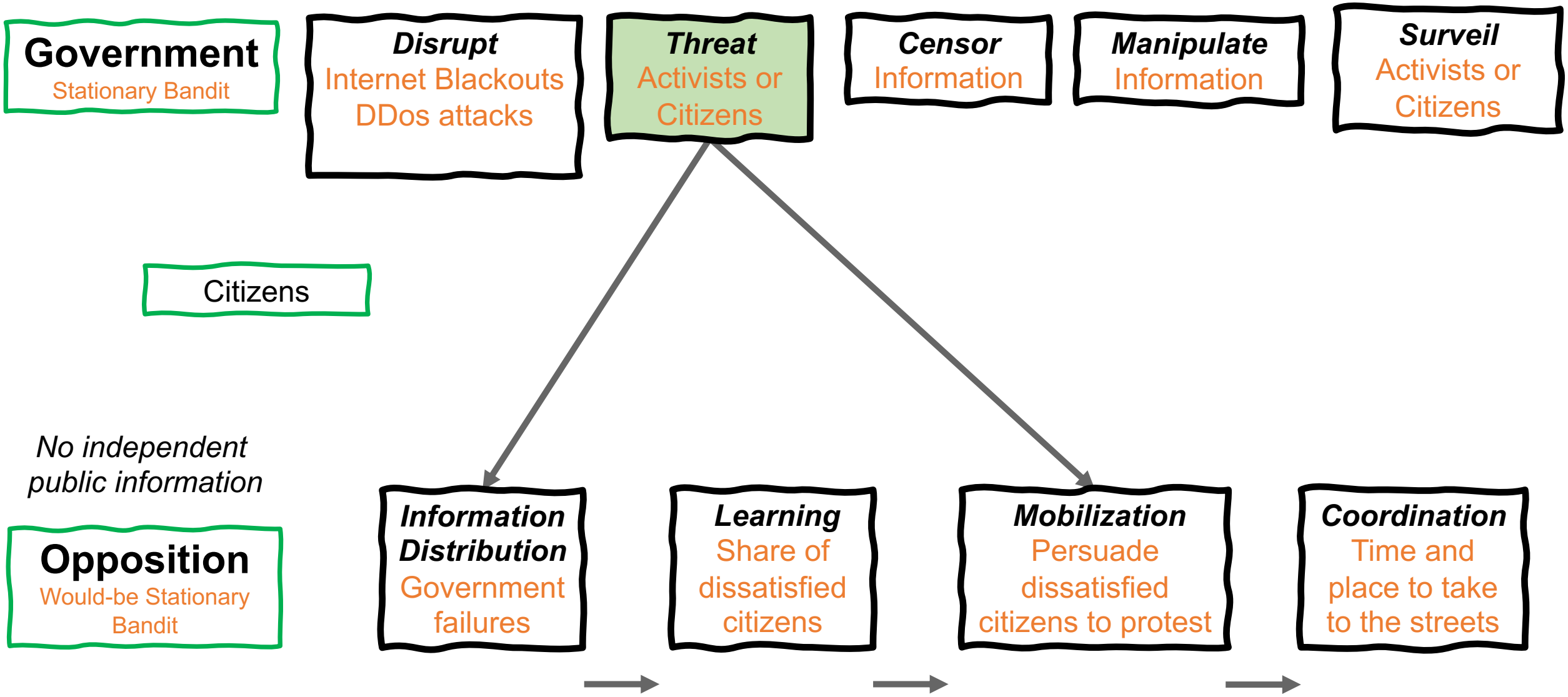

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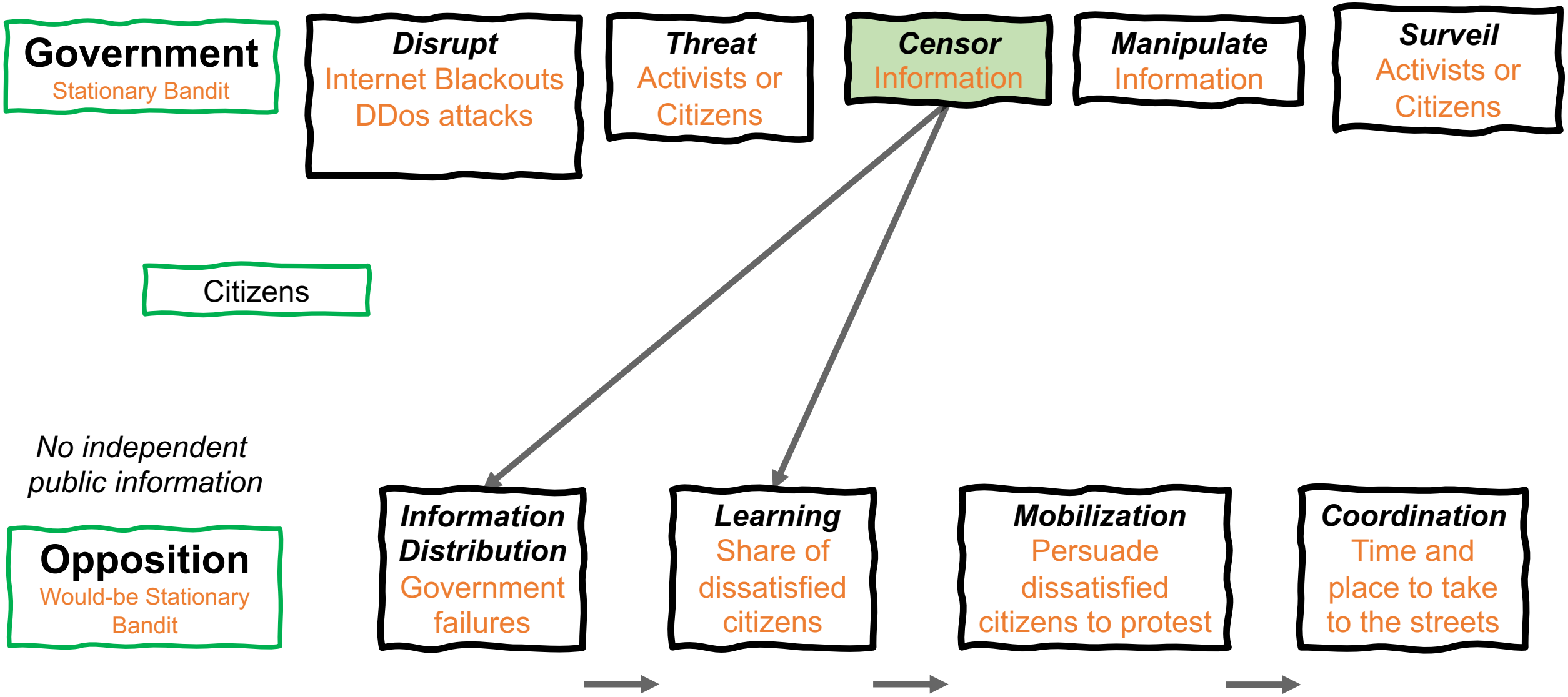

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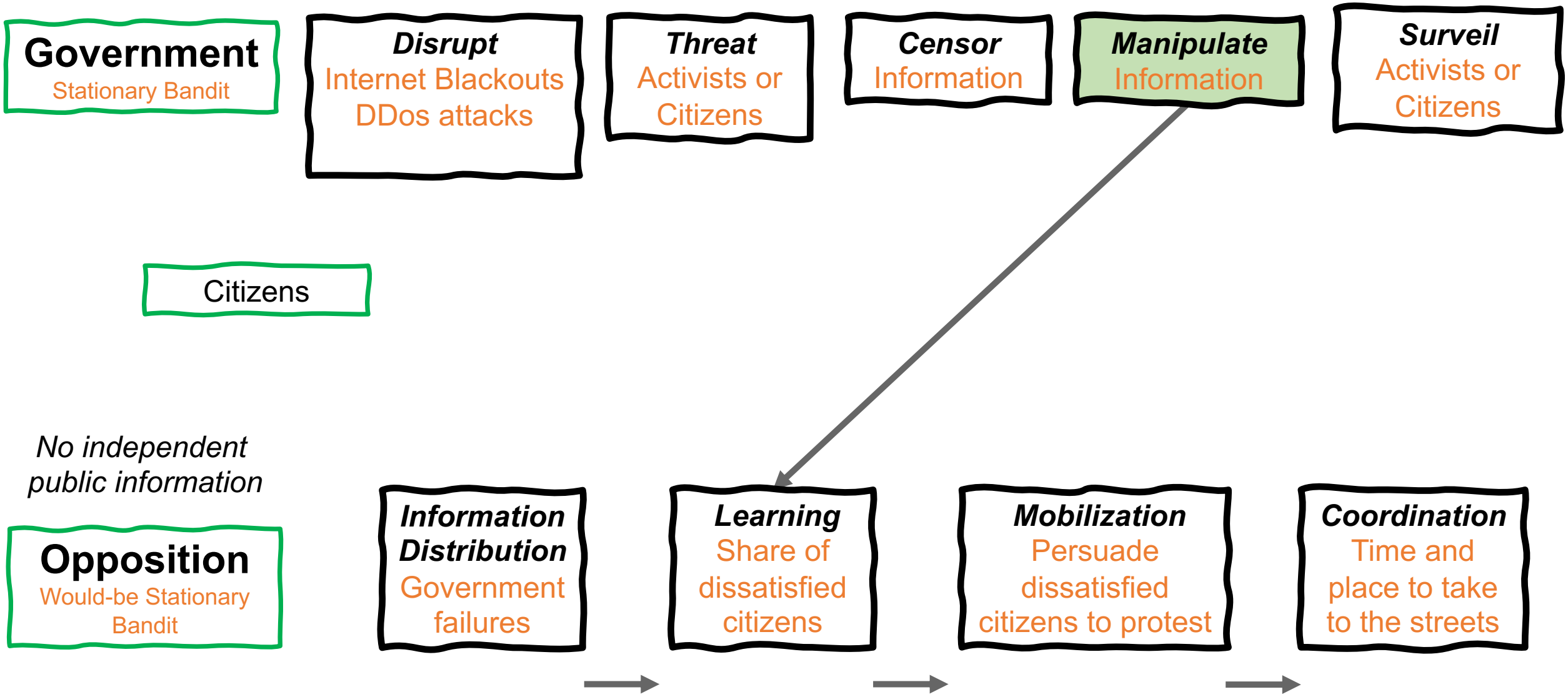

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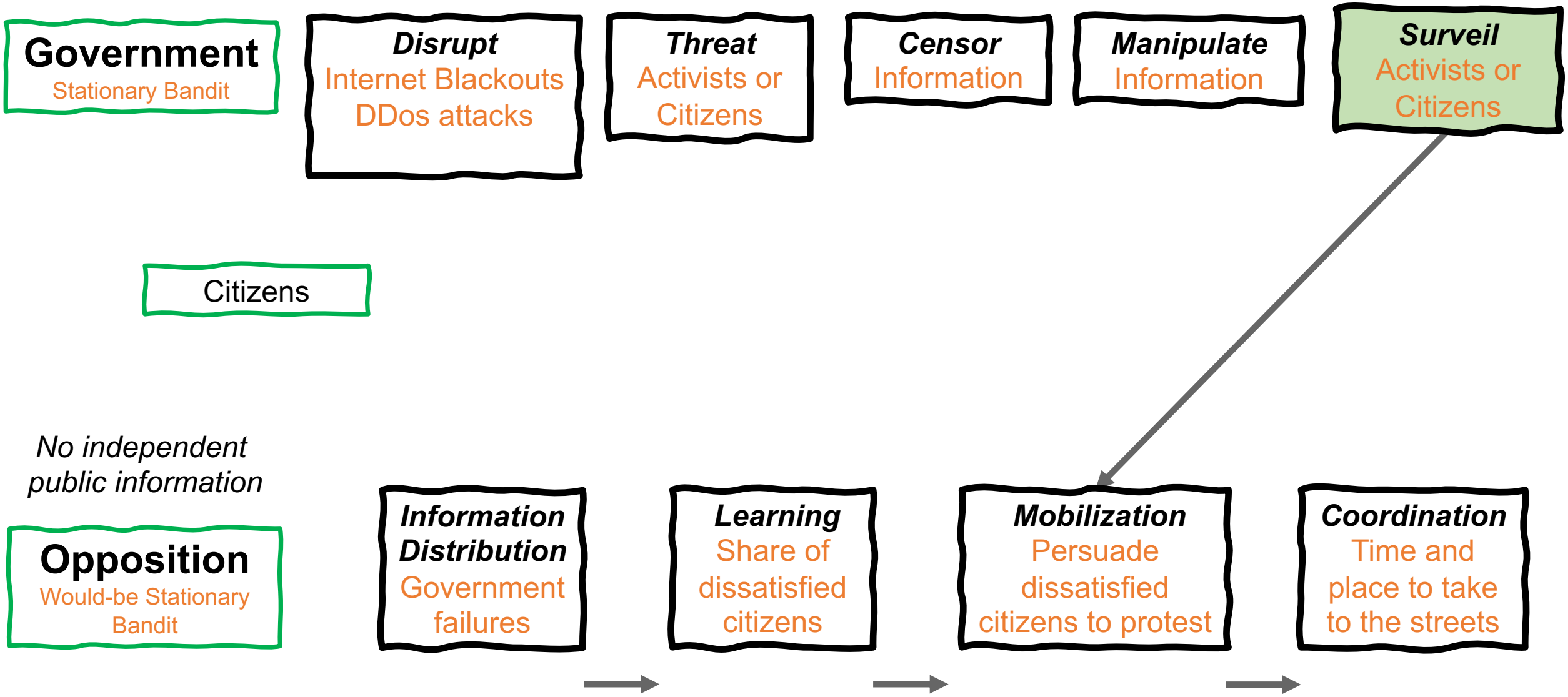

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Manipulate
Information

Surveil
Activists or Citizens

Citizens

What strategy to choose? Readings

No independent public information

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Would-be Stationary Bandit

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Government failures

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