

## Connecting CPE to the study of socio-technical innovation and the pursuit of sustainability transitions

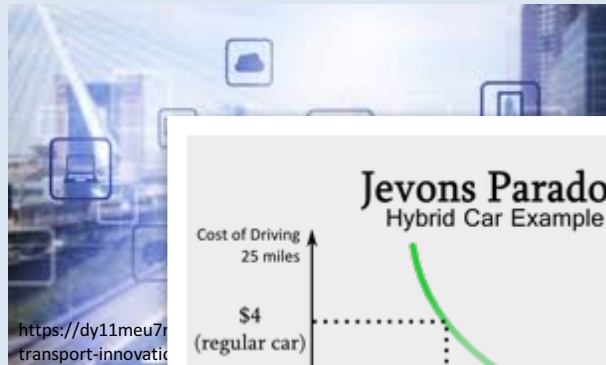


# Introduction & research background

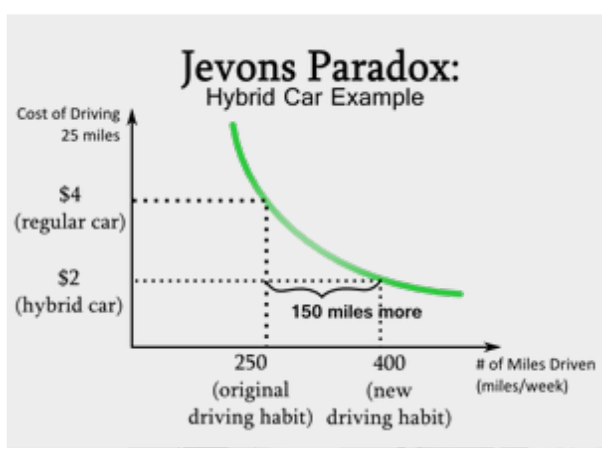
SmartCity



<http://www.eureka-smart-cities.org/>



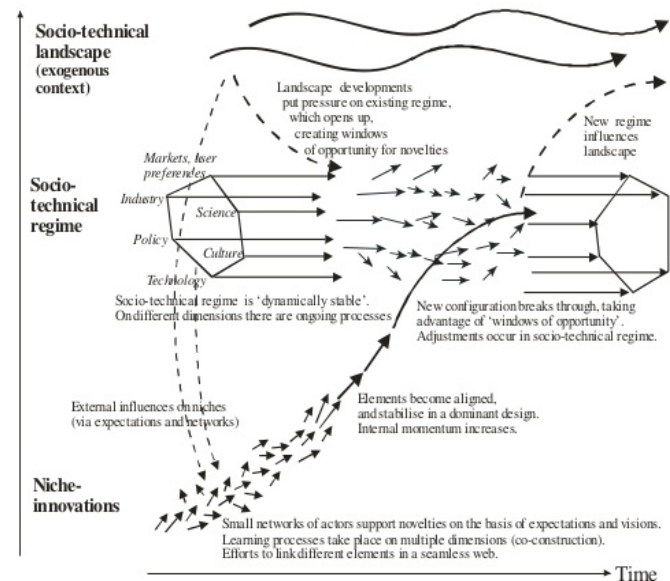
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<http://www.low-carbonscotland.scot/wp-content/uploads/2015/03/Smart-Mobility-Picture-2016.png>

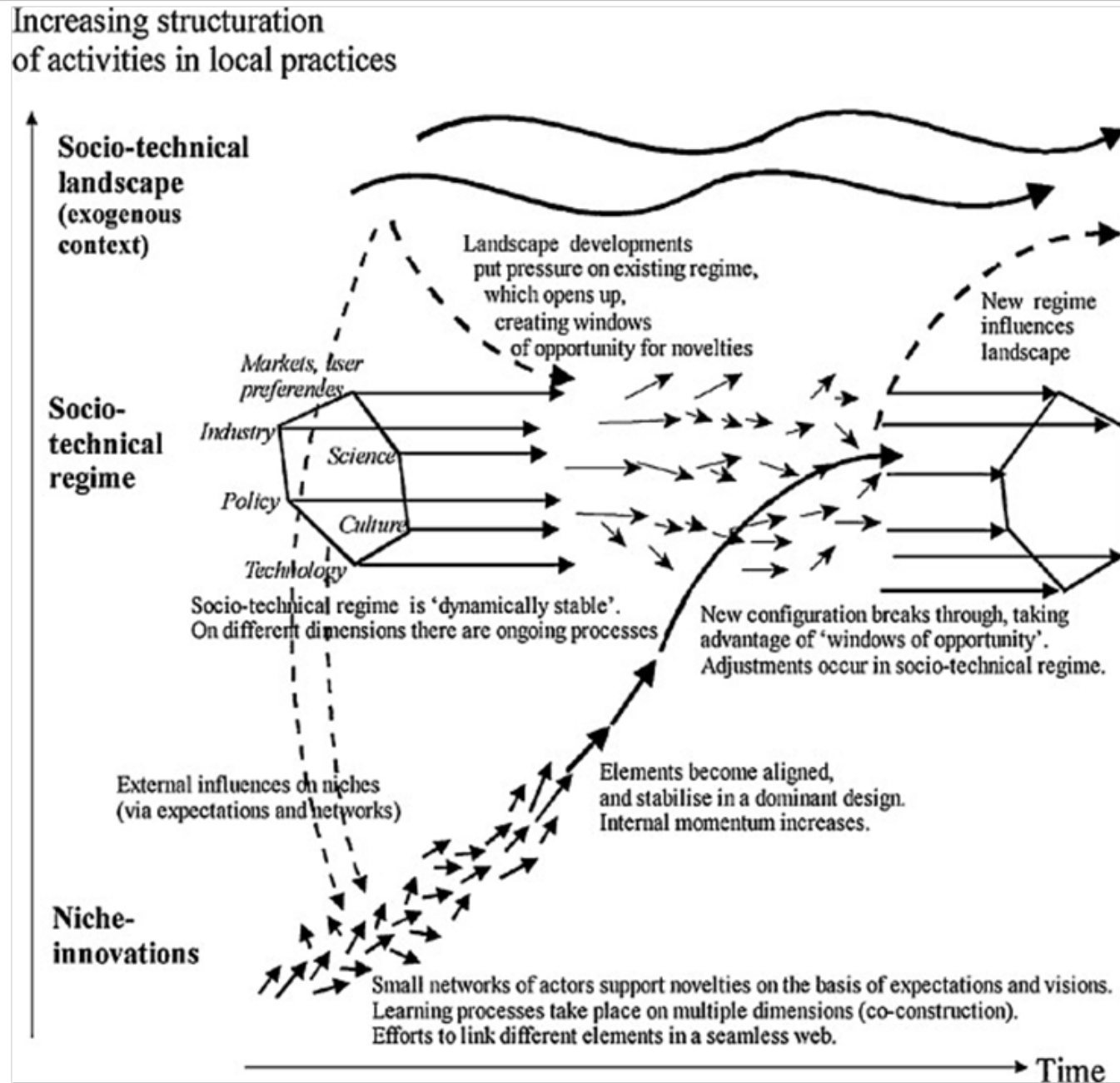
## Socio-technical innovation & transitions

Increasing structuration of activities in local practices



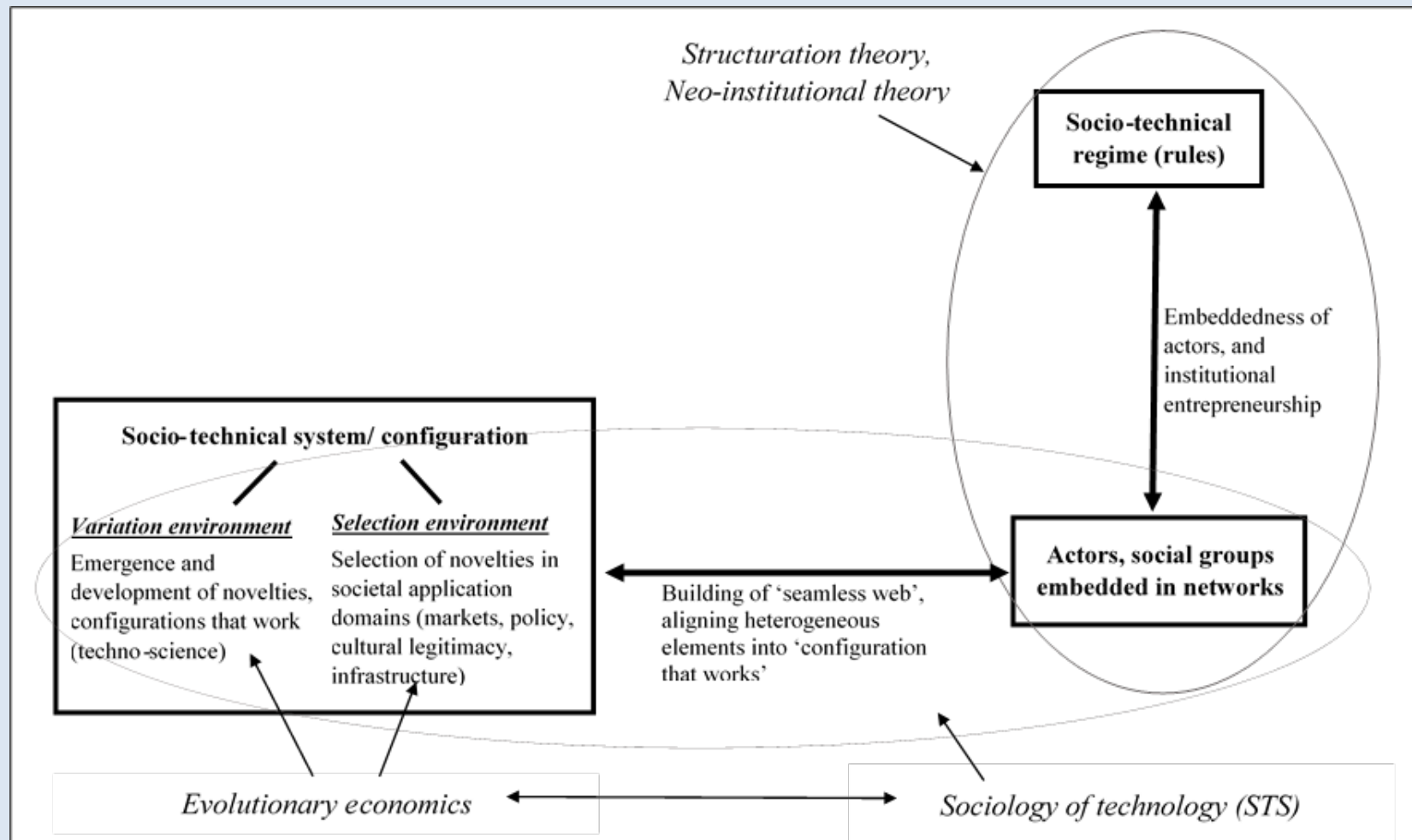
Source: Geels, 2011

# Multi-level perspective on transitions



Source:  
Geels and Schot, 2010, p.25

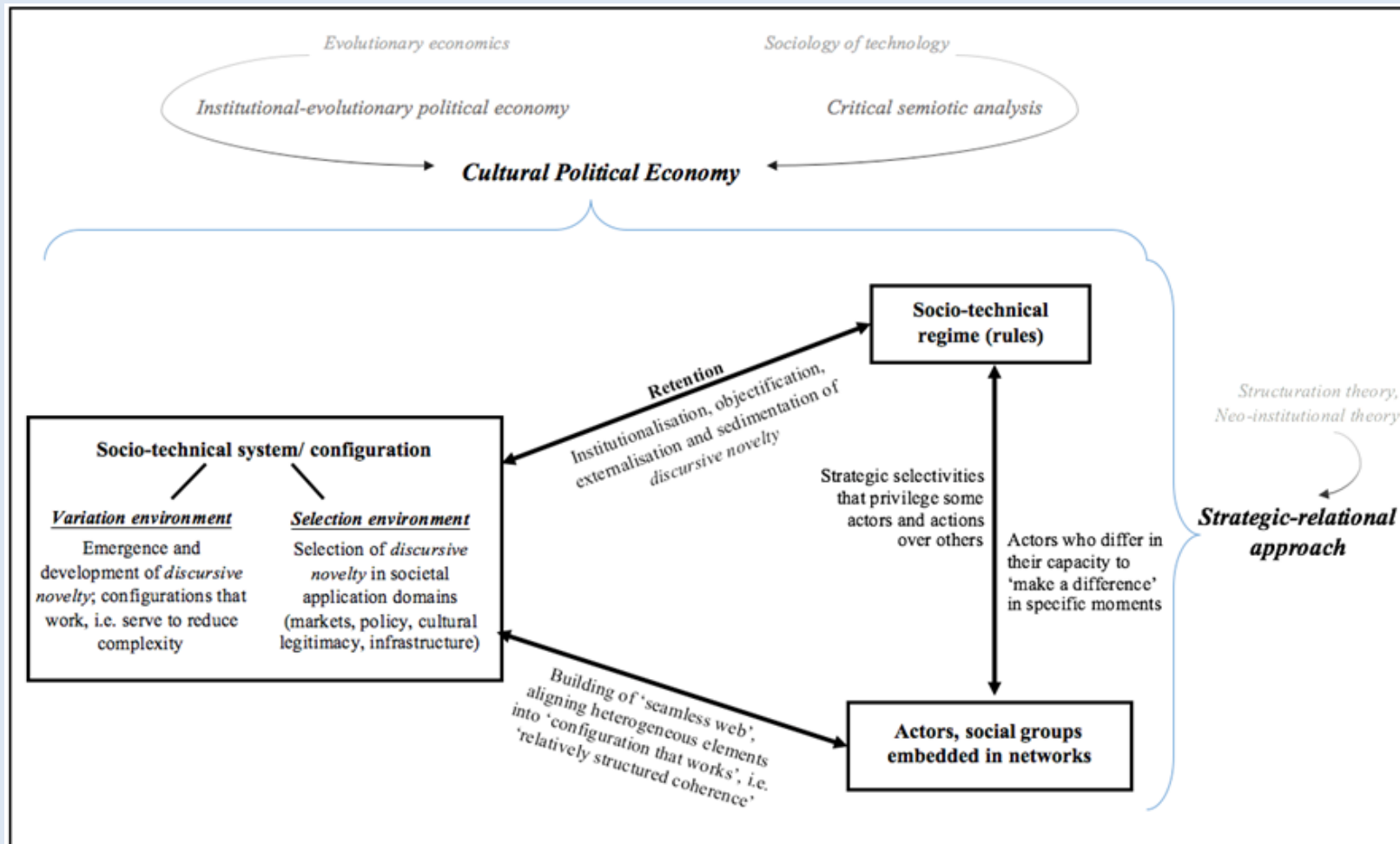
# Theoretical foundations of multi-level perspective



Recreated from Geels and Schot, 2010, p.53

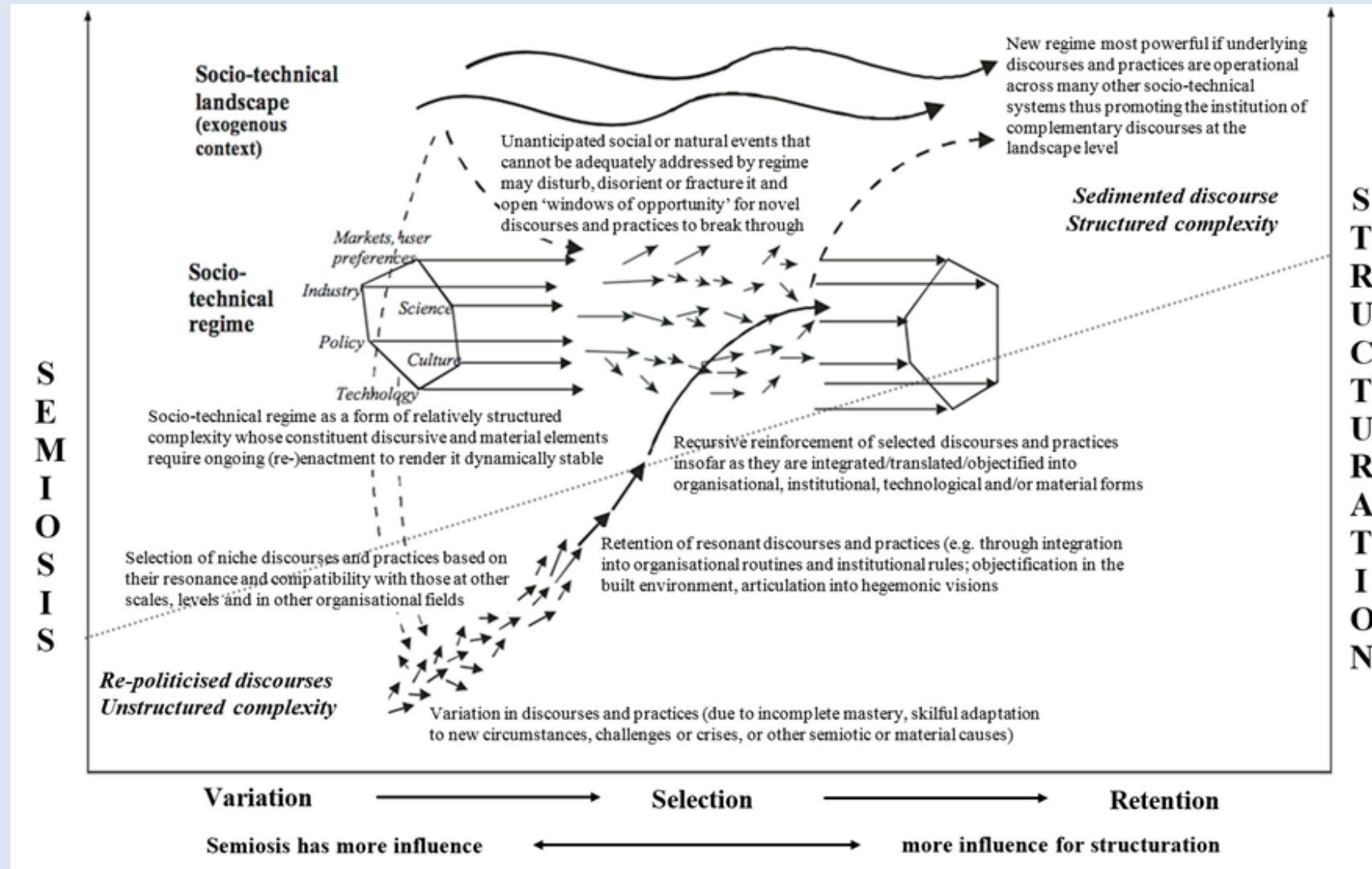


# A CPE informed multi-level perspective (I)



Adapted from Geels and Schot, 2010, p. 53

# A CPE informed multi-level perspective (II)

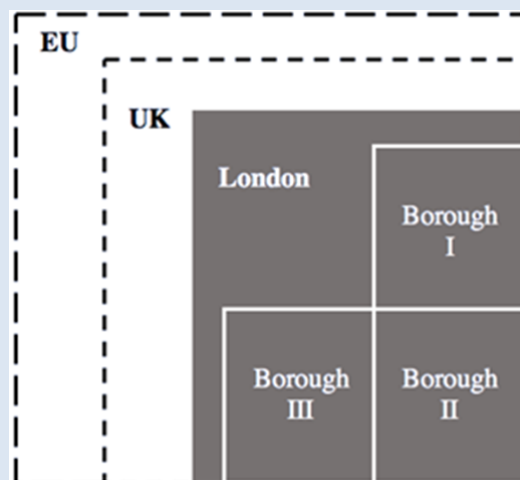
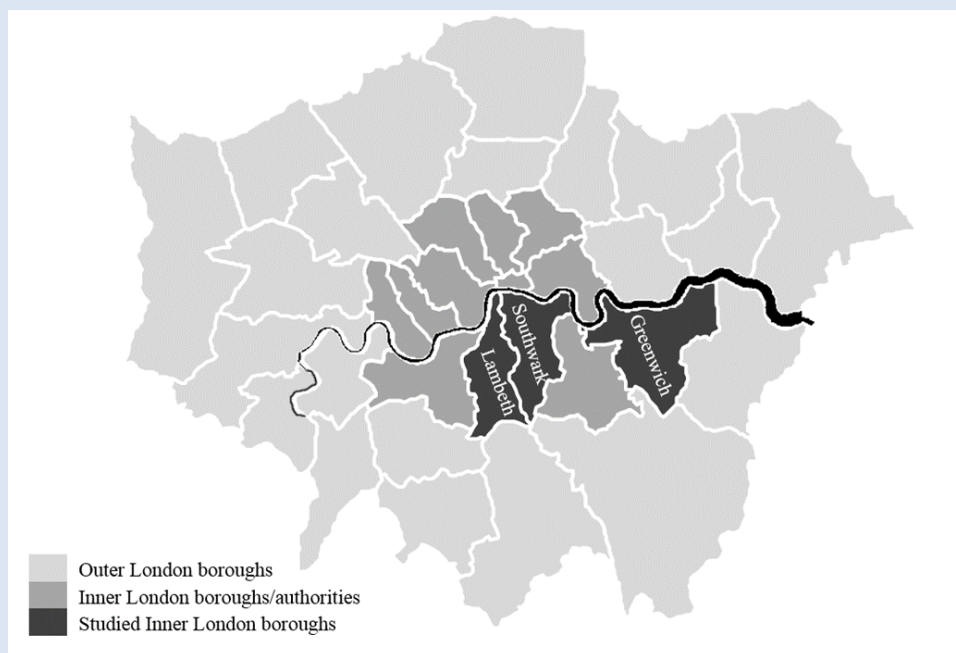


# Empirical research

- **Problem:** What is obstructing/facilitating it becoming reality?
- **Key:** Investigate selectivities as to how they (interact to) strategically privilege some actions & actors over others
- **Result:** Insight into factors perpetuating existing regimes in London road transport sector transport or obstructing diffusion of niche transport modes & practices



# Research design & methodology



	No	Role	Identifier
<i>EU</i>	1	Campaigner	EU-1
	2	EU representative	EU-2
<i>UK</i>	3	DfT officer	UK-1
	4	Transport consultant	UK-2
	5	Transport consultant	UK-3
	6	Transport consultant	UK-4
	7	Transport consultant	UK-5
	8	Transport consultant	UK-6
	9	Campaigner	UK-7
	10	Parliamentary representative	UK-8
<i>Greater London</i>	11	Campaigner	GL-1
	12	Campaigner	GL-2
	13	Campaigner	GL-3
	14	MET Police Sergeant	GL-4
	15	TfL Officer	GL-5
	16	TfL Officer	GL-6
	17	London Councils officer	GL-7
	18	London Assembly Member	GL-8
	19	London Assembly Member	GL-9
	20	Journalist	GL-10
	21	Campaigner and blogger	GL-11
<i>Greenwich</i>	22	Local campaigner	RBG-1
	23	Council officer	RBG-2
	24	Seconded consultant	RBG-3
	25	Council officer	RBG-4
	26	Council officer	RBG-5
<i>Lambeth</i>	27	Local campaigner	LBL-1
	28	Council officer	LBL-2
	29	Council officer	LBL-3
	30	Former council officer	LBL-4
	31	Elected councillor	LBL-5
	32	Elected councillor	LBL-6
<i>Southwark</i>	33	Local campaigner	LBS-1
	34	Local campaigner	LBS-2
	35	Local campaigner	LBS-3
	36	Council officer	LBS-4
	37	Council officer	LBS-5
	38	Former council officer	LBS-6
	39	Elected councillor	LBS-7
	40	BID representative	LBS-8



# Analysis

## ANALYSIS I

Examine socio-technical dominance of motorised over non-motorised modes, specifically cycling, as arising in part from dominant road transport imaginaries

### STEP I

Historical development of cycling at UK national and Greater London level

### STEP II

Relative significance of cycling discourses within road transport imaginaries

#### CYCLING IMAGINARIES & DISCOURSES

- (i) Greater London level
- (ii) Borough level

#### ROAD TRANSPORT IMAGINARIES & DISCOURSES

- (i) Supra-national level
- (ii) UK-national level
- (iii) Greater London level



## ANALYSIS II

Critique role of dominant road transport sector imaginaries in the reproduction of “one or more durable structured forms of social domination that serve particular interests” as manifested in form of e.g. policies, laws, regulations, practices, material infrastructures, technologies and the like.

### STEP I

Reconstruction of a pivotal moment in the London cycling transition

### STEP II

Examine role and interaction of strategic selectivities in perpetuating dominant socio-technical imaginaries and formations in the road transport sector

Structural selectivities

Discursive selectivities

Disciplinary—technological selectivities

Agential selectivities



## Analysis I:

*Reconstructs multi-level perspective on cycling in London*

## Analysis II:

*SRA-enabled critique of relative dominance of motorised road transport regime over non-motorised modes, specifically cycling*

# Findings (i)

## 1. Analysis I

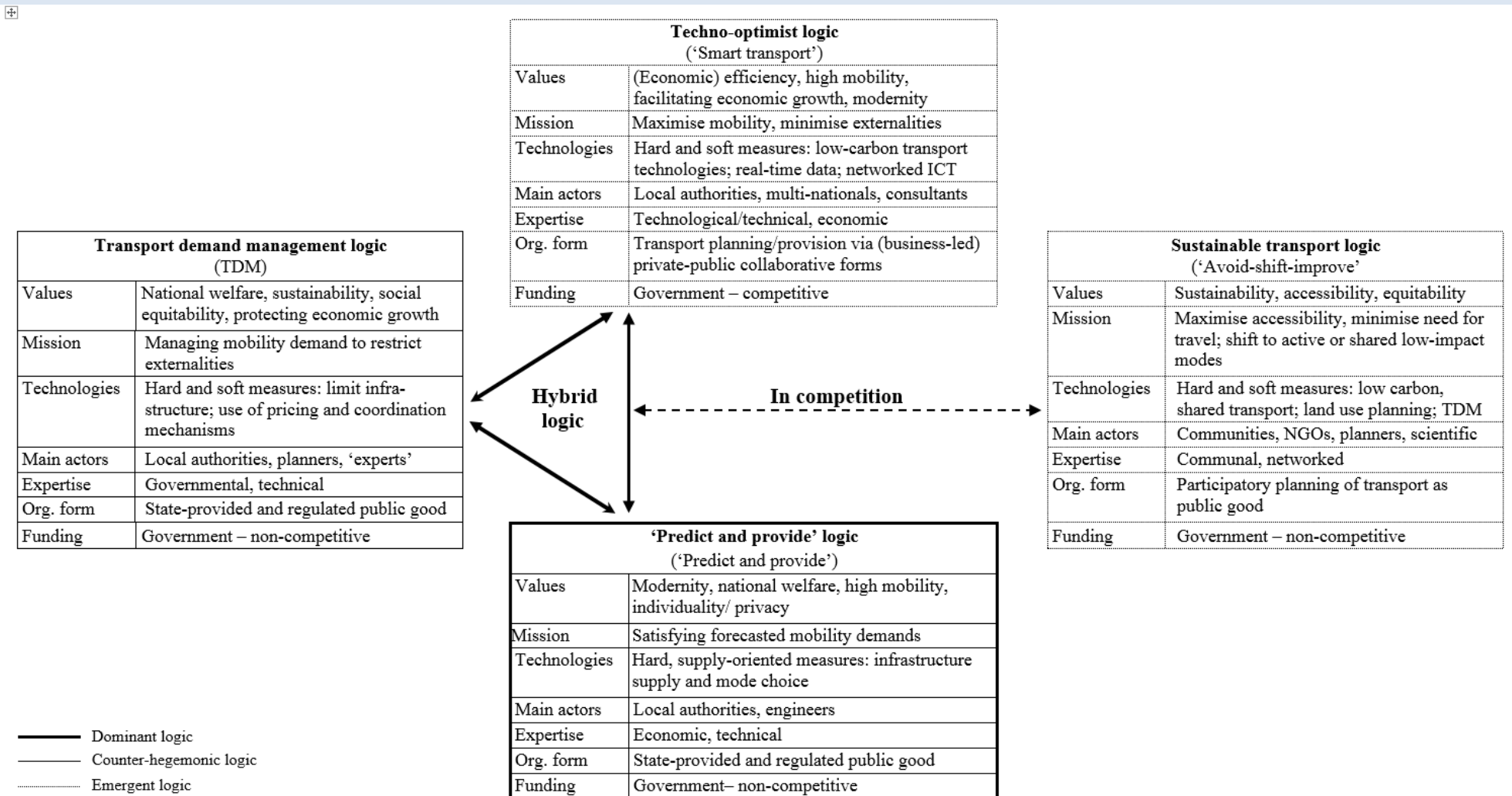
*Multi-level perspective on changes in London's road transport sector*

- Historical trends in cycling policy-making and practice → **transition in progress**
- Cycling strategies → cycling remains **constructed as subservient mode**
- Cycling as technical fix?

- Future transition pathway → Conservative reconfiguration vs radical transformation?

→ Analysis II: Focus on examining barriers/opportunities for radical transformation that challenges dominance of motorised road transport regime

# Findings (ii)



# Findings (iii)

## 2. Analysis II

*Critique of socio-technical domination in London's road transport sector*

- Identifies selectivities that perpetuate regime, such as:
  - Formal transport governance arrangements and electoral democracy as imposing structural selectivities
  - Dominant imaginary of increasing levels of transport and mobility as imposing discursive selectivity
  - Cost-benefit analysis as imposing a disciplinary-technological selectivity
- Corresponding cycling advocates' responses (agential selectivities) as instances in which niche advocates act strategically to exploit, circumvent or subvert selectivities and challenge dominant regime, e.g.:
  - Cycling strategies as self-binding / pre-commitment mechanisms
  - 'Love London – Go Dutch' & 'Space 4 Cycling' campaigns
  - Role of lobby groups for cyclists with impaired mobility, particularly disabled cyclists
  - Creative cost-benefit accounting, e.g. NHS costs savings arising from fitter more active population, reduced workplace absenteeism, etc.



# Contributions

- i. Establishes **link between CPE** and socio-technical innovation literatures and **introduces SRA** to a broader audience
  - Further **theoretical grounding** of transition research via MLP
  - Serves to **extend MLP's analytical usefulness** for the study of ongoing transitions towards more sustainable futures
- ii. Potentially useful tool for strategic context analysis by stakeholders of ongoing, contested transition processes
- iii. Entry point for an explicitly critical, emancipatory transition studies from its previous normatively naïve, managerial origins

# Conclusion

- i. **Empirical case of London cycling:** Unclear transition pathway → radical transformation or and emancipatory transition pathway?
  - Exploiting (as opposed to circumventing or subverting) selectivities of motorised road regime may act to perpetuate it
  - May also prove more effective way of challenging/ hollowing out/ supplanting motorised road regime from ‘within’
- ii. **Theoretical development:** Valuable crossover for transition scholarship as connects seemingly mundane socio-technical innovation issues to broader political economic “landscape” factors
  - Everyday socio-technical regimes develop, survive and thrive not due to objective superior functionality
  - Rather they speak to (and ultimately co-evolve with) the rationalities of broader political-economic regimes which play significant role in set the parameters for what is deemed ‘functional’

# Thank you!

Any questions, feel free to contact:

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# References

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