



Between controversy and plebiscite: is carrying capacity useful for decision support in MPAs? Recommendations resulting from a partnership approach

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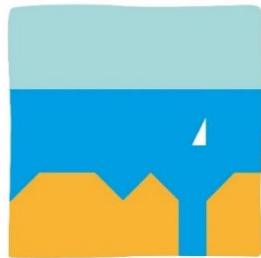
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Between controversy and plebiscite: is carrying capacity useful for decision support in MPAs?

Recommendations resulting from a partnership approach

OCEANEXT 2019

3, 4, 5 July 2019, Nantes

Eric Le Gentil, Frédérique Alban, Pascal Provost, Loury Cavalié, Diane Vaschalde, Alain Ponsero,
Harold Levrel, Gilbert David, Ingrid Peuziat, Pierre Scemama

A collective thinking process about carrying capacity

→ Two main questions about carrying capacity (CC) for decision support in MPAs

- Normativity → controversy (social scientists)
- Feasibility → plebiscite (MPAs managers)

Growth of multi-objectives MPAs with new governance models



A collective thinking process about carrying capacity

→ Two main questions about carrying capacity (CC) for decision support in MPAs

- Normativity → controversy (social scientists)
- Feasibility → plebiscite (MPAs managers)

Growth of multi-objectives MPAs with new governance models

→ Execution of the partnership approach



Survey

(14 researchers, 16 managers), Sept. 2015
Reference: Le Gentil *et al.*, 2016

National workshop

(13 researchers, 18 managers), Nov. 2015
Référence: Le Gentil *et al.*, 2016

Systematic literature review

(67 CC assessments), first half of 2017
Reference: Le Gentil, 2017

Field data collection protocols

(natural reserve: visitor counts [81], opinion surveys [246]), summer-autumn 2018
Reference: Cavalié, 2018

1

2

3a

3b

Scientific questions about CC
(research, MPA management)

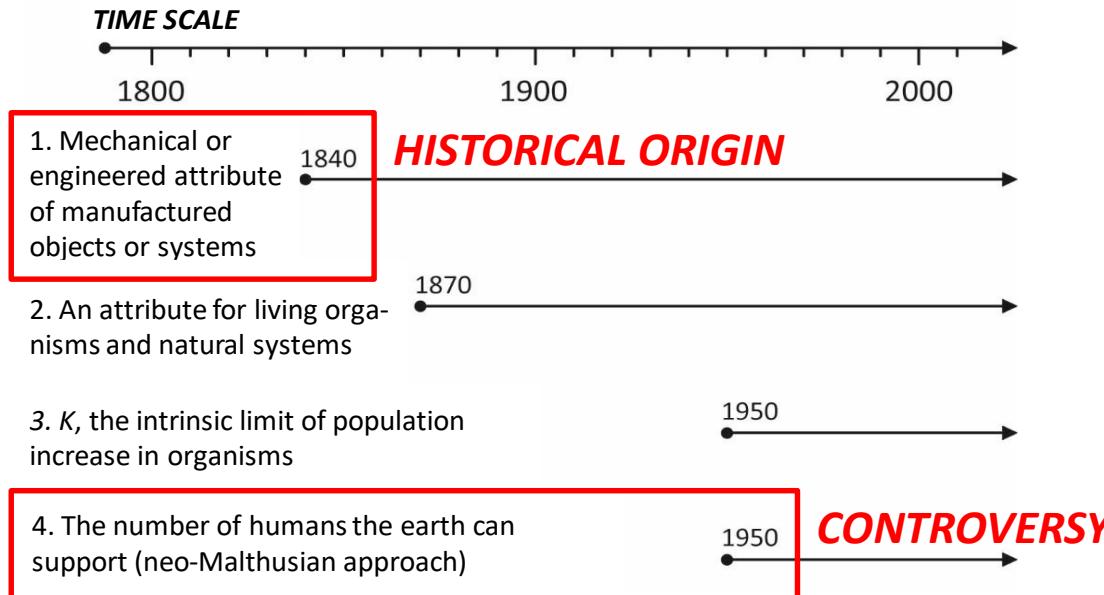
The concept of CC : meaning, advantages and disadvantages for decision-making (MPA)

Typology of analytical frameworks used to assess the different dimensions of CC

Qualify the visitor experience and the potential disturbance of avifauna (not reported)

Meaning, advantages and disadvantages of CC

→ Genesis and history of CC

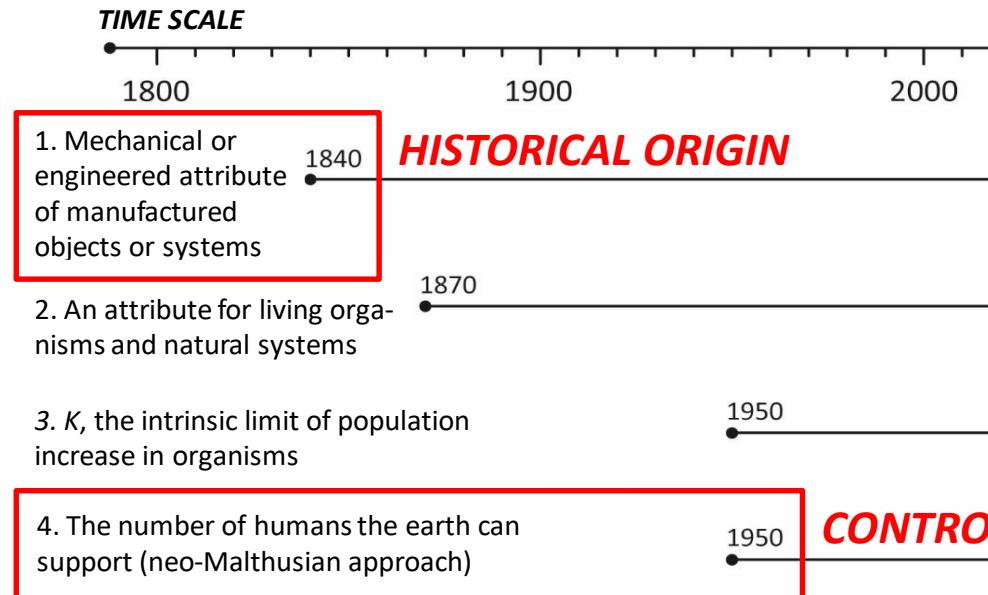


→ Actually, CC ...

- seeks to formalize the threshold effect
- refers to ≠ dimensions
- is always a controversial concept

Meaning, advantages and disadvantages of CC

→ Genesis and history of CC



→ Actually, CC ...

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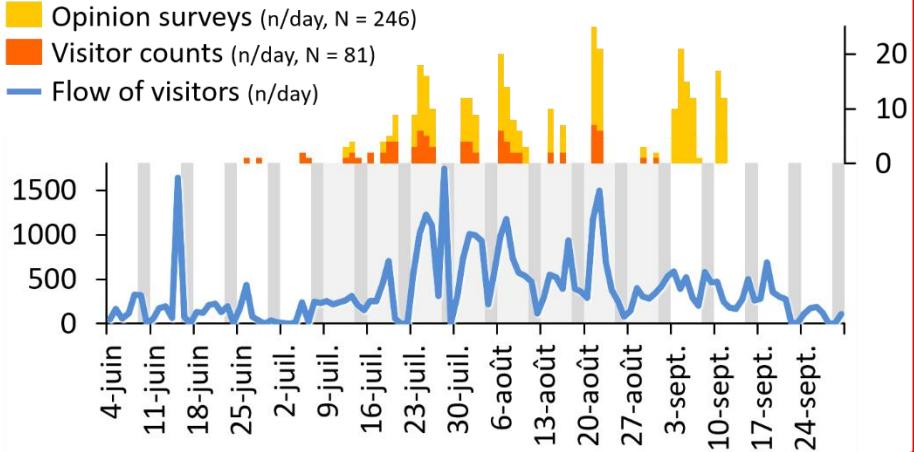
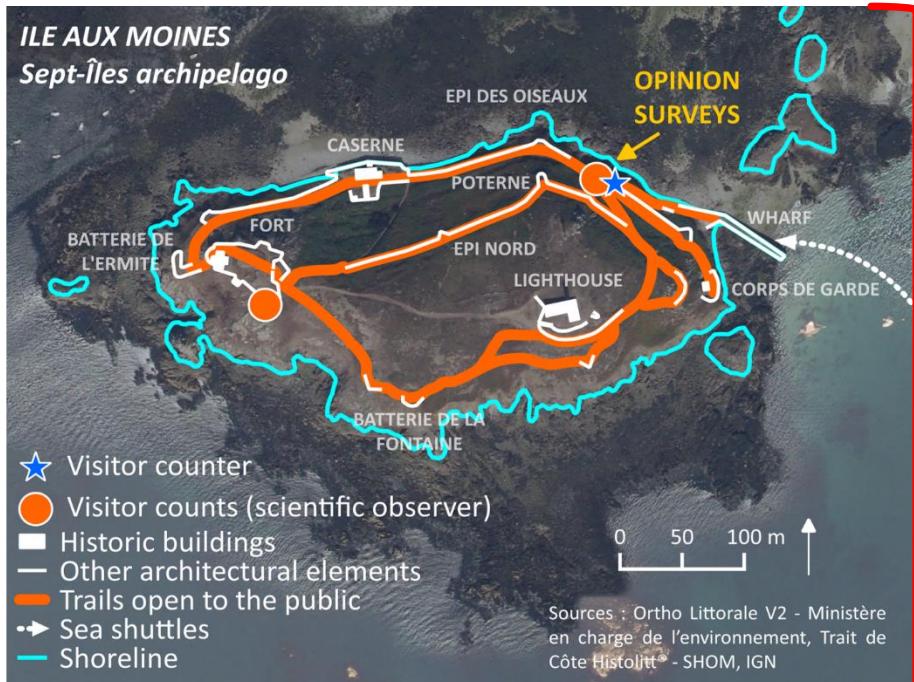
→ But also ...

- An intuitive concept
- It questions the notion of growth

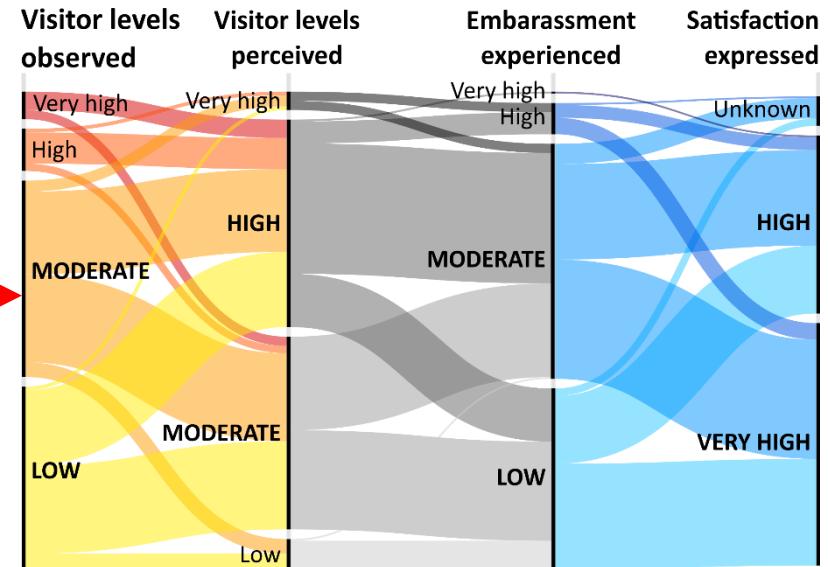
Useful for decision support?

Advantages	Disadvantages
• An integrative concept (research-management, SS-LSci)	• Several definitions, often unclear
• An intuitive concept	• Normative (<i>numerus clausus</i>)
• It questions the notion of growth and its consequences	• Often conceived as ideal, static, and numerical
• It questions nature conservation policies	• Hard to measure (thresholds or optimums)

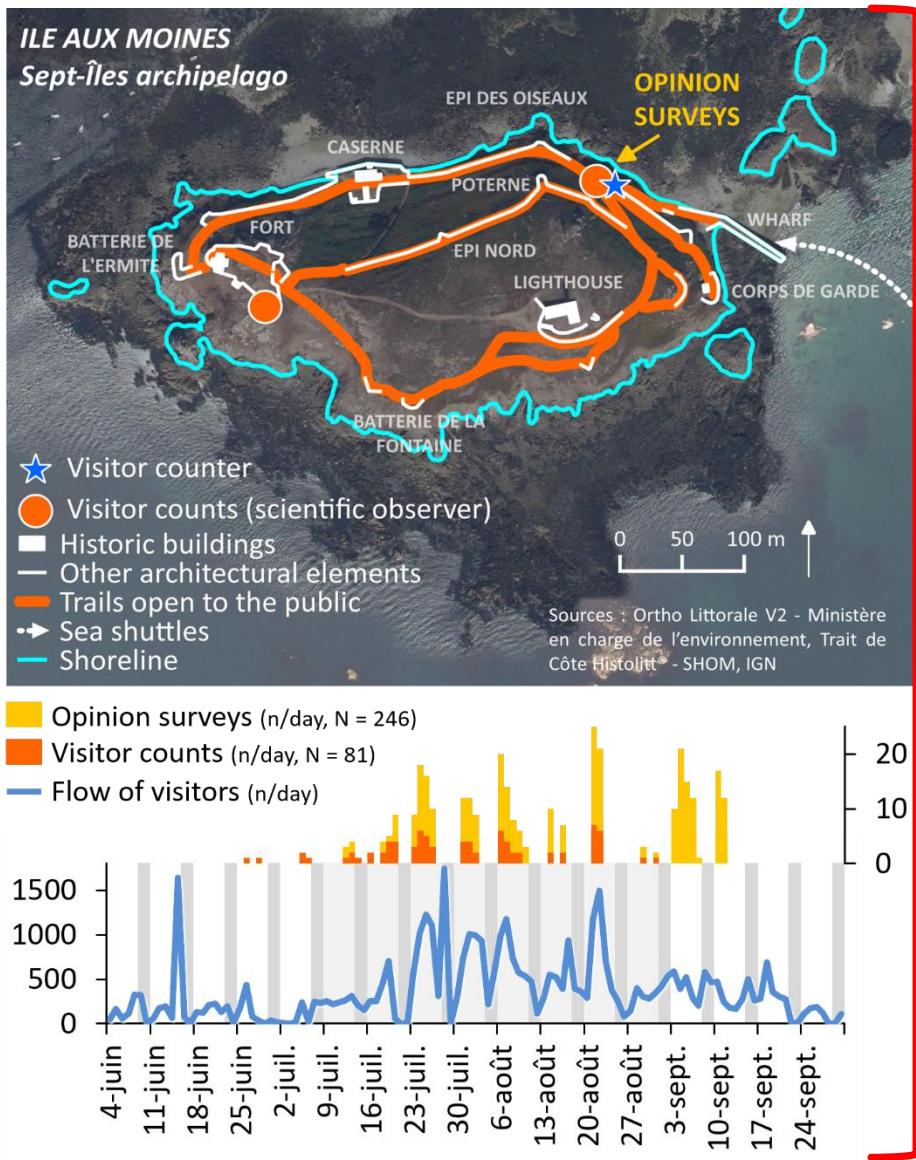
Qualify the visitor experience



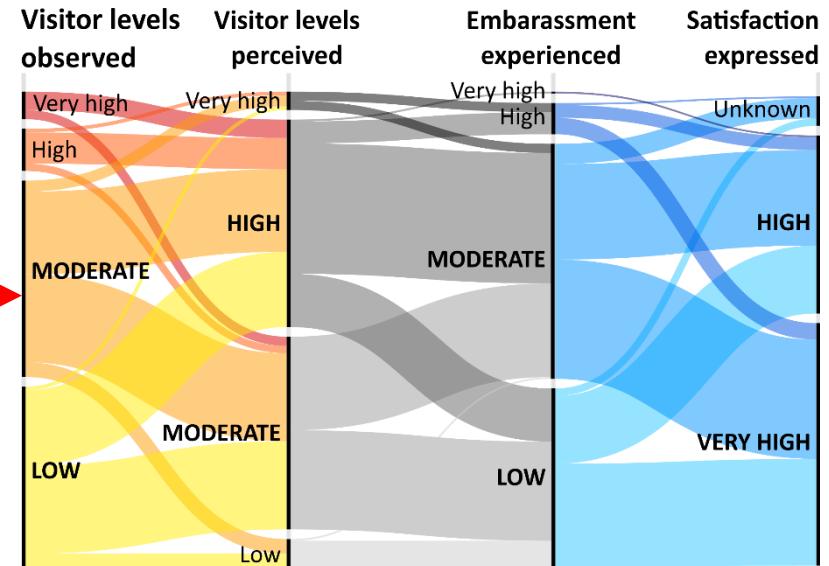
→ Systematic rev. + local assessment



Qualify the visitor experience



→ Systematic rev. + local assessment



CC → USEFUL?

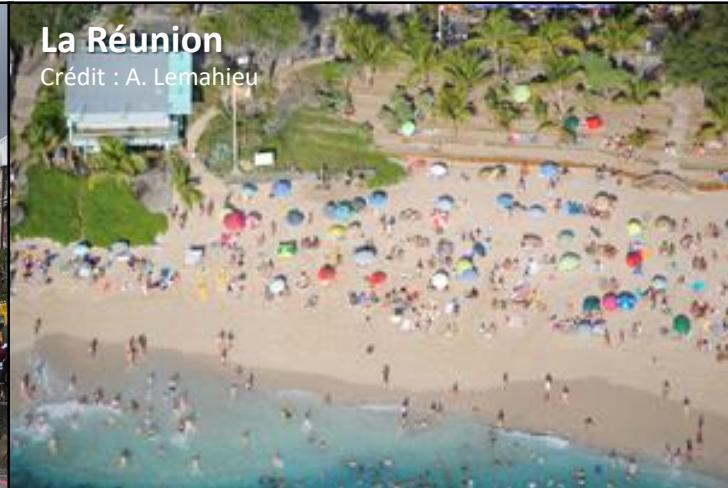
- CC: a potential reference standard for small territories and some issues
- To be discuss in the broader context of a territorial project, defined by the stakeholders

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