



Digital funding of Amaravati (A.P. India)

technotopian ideas and spatial justice

Prof. Eric Leclerc, Université de Lille, France

2017 IGU Urban Commission Annual Meeting

Digital cities and spatial justice

Crowd-funding of the new green field capital of Andhra Pradesh

First case of state-driven crowd-funding of a very large scale urban project (4,5 millions – 2050) : « My brick / My Amaravati »

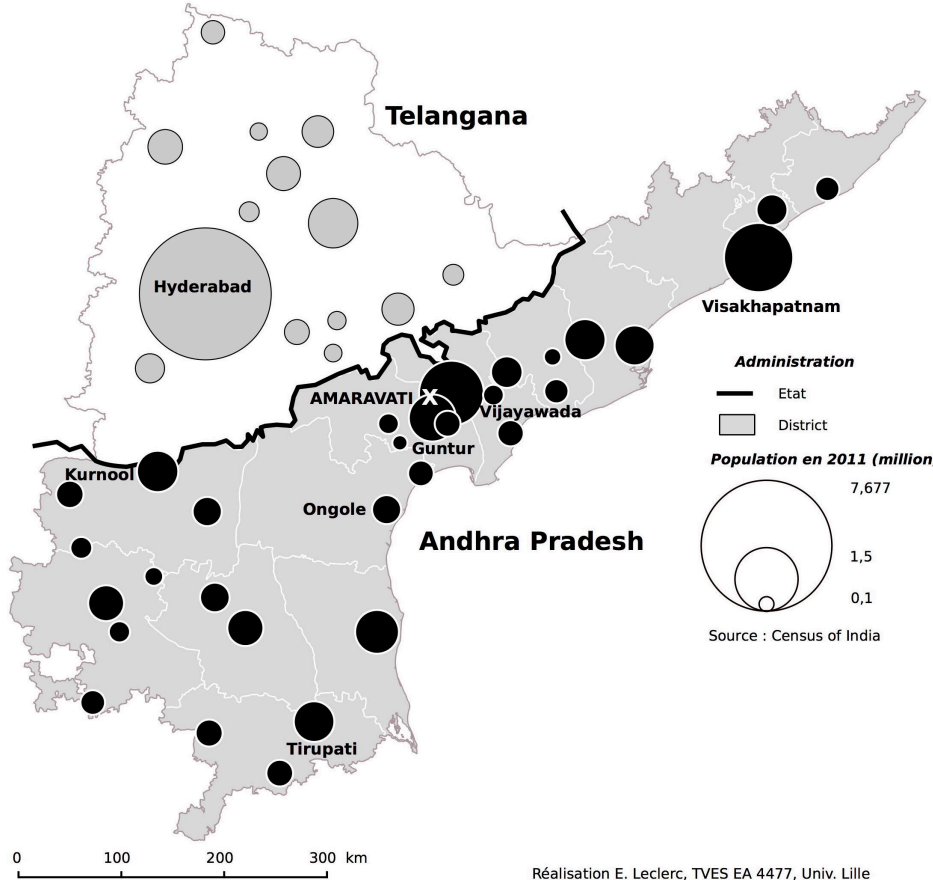
> 200.000 donations / ₹50 millions (\$0.75 million)



- What crowd-funding teach us on people's relation with space ?
- How web 2.0 could improve spatial justice ?

1.1 From digital to smart cities in Andhra Pradesh

Amaravati within the urban network of Andhra Pradesh



Web 1.0 digital city

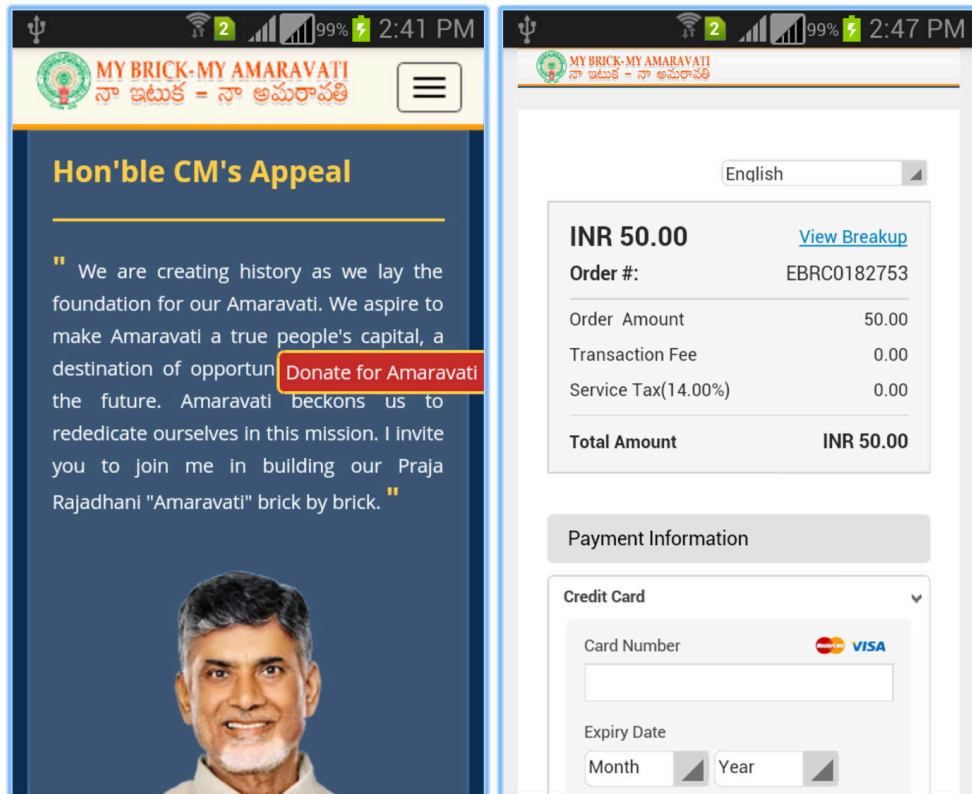
- ✓ E-government / computerisation & e-services
- ✓ TWINS (Hyderabad) top-down G2C

Web 2.0 smart city

- ✓ E-governance (Dameri-2013) bottom-up
- ✓ Centralised and real-time government
- ✓ Amaravati Project Dashboard
- ✓ Social networks mobilisation

1.2. Crowd-funding a capital : 'My brick, my Amaravati'

"crowdfunding allows an unlimited number of geographically dispersed people to be reached for the purpose of obtaining small amounts of money for financing a project or enterprise" (Mendes-Da-Silva, Wesley et al. 2016)



Academic business community :

- role of actors (funders and investors)
- reasons of success and failure
- role of distance for the success

'My brick, my Amaravati'

- Patronage model (no reward)
- Public crowd-funding
- Large scale project (unlimited)

2. Social networks and spatial methodologies

Open data for geographical analysis

- Sample : 81.500 donations (15/10/15 - 4/4/17) = 98 % e-bricks
- Heterogenous & personal data
- Inaccuracy of locational data
- Web methodology (Open Refine / Google Map API)
- ≥ 5 donations (850 places / 94% of sample)

The image displays two screenshots of a mobile application interface for 'MY BRICK-MY AMARAVATI'. The left screenshot shows a form for entering donation details, including Request Number (EBRC0182682), Aadhar Number (Optional), Type of Partner (Select), Country (India), State (Select), and City (Select). The right screenshot shows a form for entering personal and financial details, including Gender (Male/Female), PAN Card Number, Bricks Contribution* [1 Brick Cost is Rs.10], Total Amount, and Photo Upload (Max 100 kb). Both screenshots have a 'Donate' button at the bottom right.

3.1 A popular crowd-funding initiative

Fast and massive support from natives of Andhra Pradesh

Table 1 : Number and amount collected by type of donors

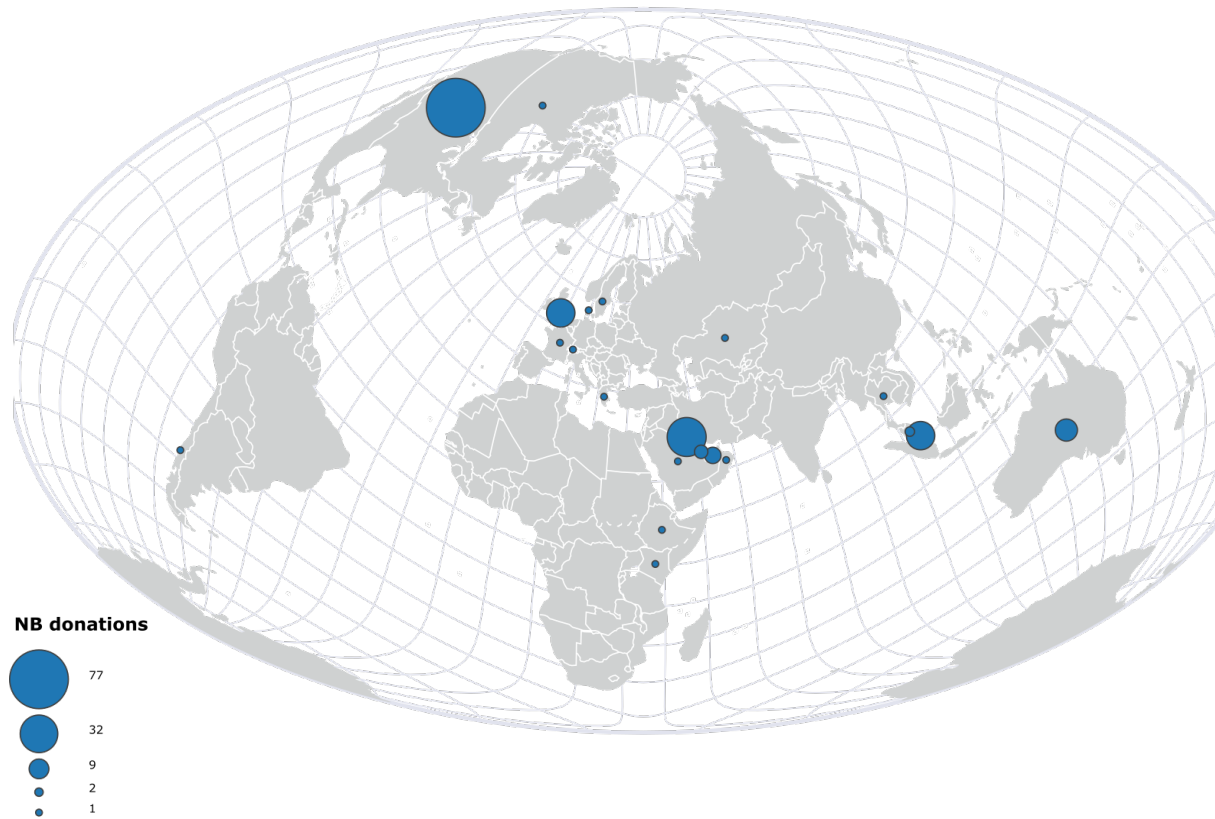
Category	Nb donations	% / tot Don	Nb e-Brick	% / tot e-brick\$	Nb e-Brick / don.
<i>Individual</i>	61 727	75,7	3 778 765	68,7	61
<i>Family</i>	15 284	18,8	1 046 480	19,0	68
<i>Organization</i>	2 163	2,7	655 865	11,9	303
<i>Friend</i>	534	0,7	20 069	0,4	38
<i>Unknown</i>	1 792	2,2	2 158	0,0	1
	81 500		5 503 337		68

Source : website <https://amaravati.gov.in/> (04/04/17)

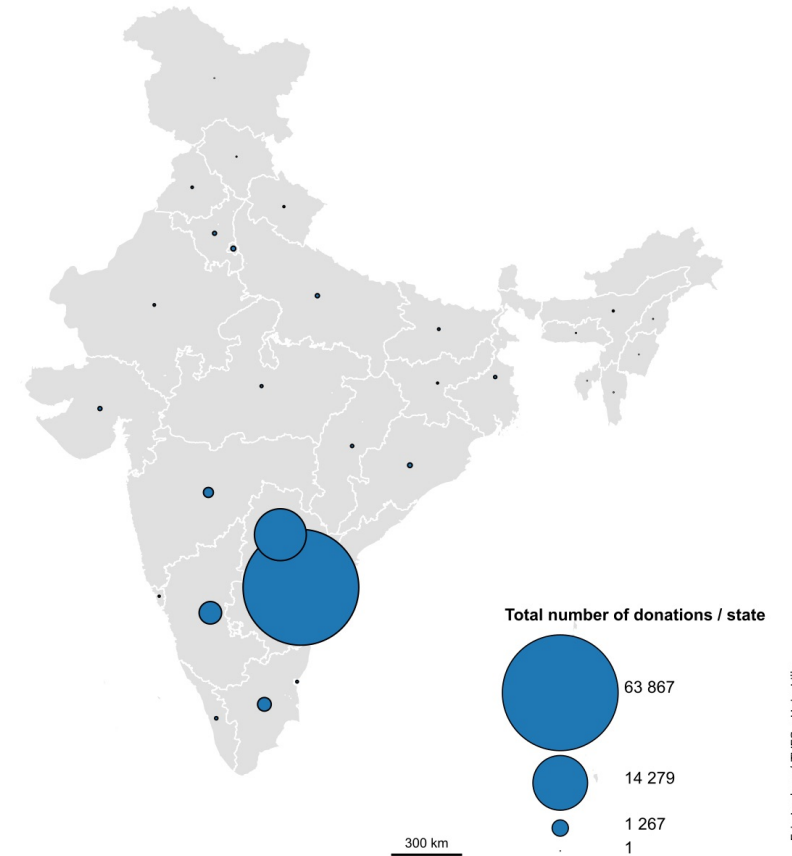
- 95 % within 2,5 month (2015)
- 95 % of individual or family donations
- 63 e-bricks, ₹630 / donation (10 % monthly income - skilled)

3.2 Impact of migrations on crowd-funding

International donations for Amaravati



State-wise national donations for Amaravati



Made with Khartis basemap from Natural Earth (CC0) Eric

Eric Leclerc / TVES : Univ-Lille

94% from pre-bifurcation Andhra Pradesh

3.3 An urban and local support for Amaravati

Geography of crowd-funding

- Political divide : rural Telangana only 1.7 % donations
- Role of distance
 - ✓ *Regional divide Rayalaseema / Coromandel coast*
 - ✓ *Proximity effect (Krishna & Godavari)*
- Economical effect

«The greater the distance between investors and the project is, the less likely the investors are to invest, and furthermore, they will probably invest less »

(Mendes-Da-Silva, Wesley et al. 2016)

4. Conclusions

Web 2.0 does not erase the spatial dimension :

- 3rd effect of distance => beneficiaries
- Failure of Telegu nation => regional differences

Web 2.0 a tool for spatial justice

- Myth of transparency
- Civic engagement = decision making



Spatial justice redifined by technological changes in power relations



Thank you for your attention ...

and to the laboratory TVES EA 4477 (Lille – France) and
Campus France (French embassy) for the financial assistance

UFMG – CEDEPLAR (Belo Horizonte, MG) for academic
assistance