



Social Networks and mitigation against climate change

The Cultural Furniture Industry Heritage – Damietta Egypt

Professor Hisham Elkadi
University of Salford-Manchester, UK



Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi



The masses have never thirsted after truth.
They turn aside from evidence that is not to
their taste, preferring to deify error, if error
seduce them

The Crowd: Gustave Le Bon, 1895



Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi



Context

This year, we are within the ten-year Decade of Action to deliver the SDGs by 2030

CRAFT project have demonstrated its ability to influence policy, planning, and decision-making. The policy areas are not limited to culture but include also communities and social services, creative economy, democratic and legal processes, and environment.

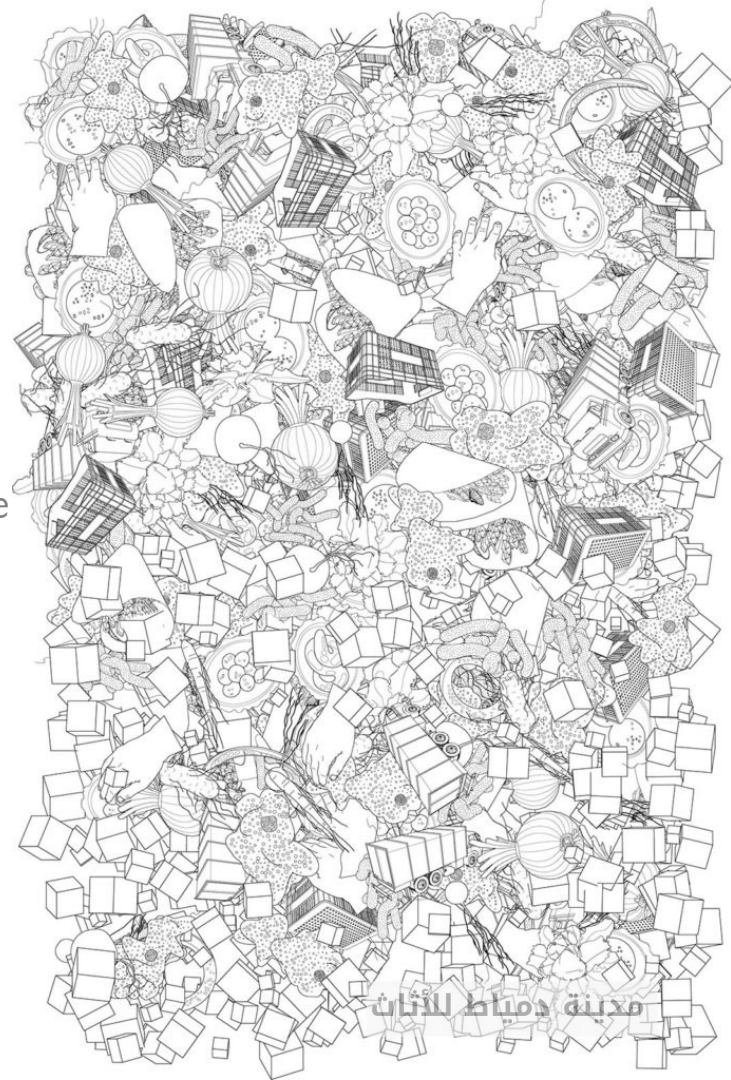


Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi



مدينة دمياط للأبحاث



Heritage & Values

- Heritage as an enabler and driver of sustainable development.
- The role of heritage in addressing global challenges.
- Heritage can be effectively mobilised to foster innovative, interdisciplinary, inclusive, human-centred, transformative, and long-term developmental approaches towards sustainable development

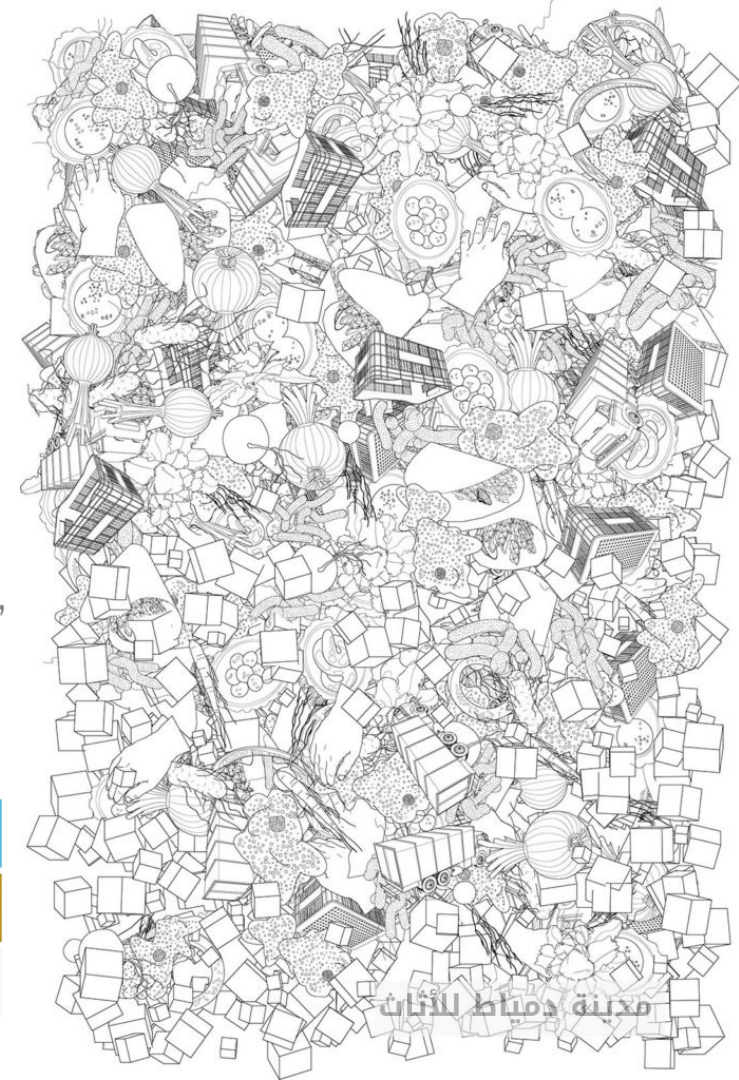


Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi



مدينة دمياط للآثار



Heritage Typologies

- Tangible
- Intangible
- Cultural
- Natural

+

IoP

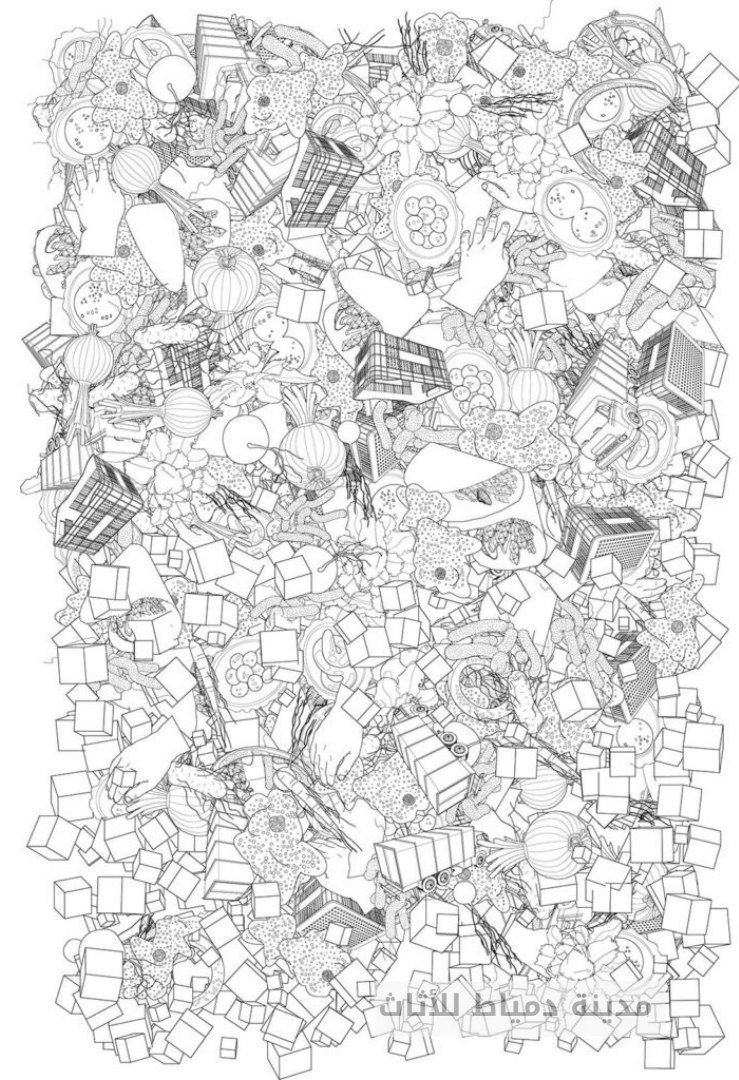


Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi

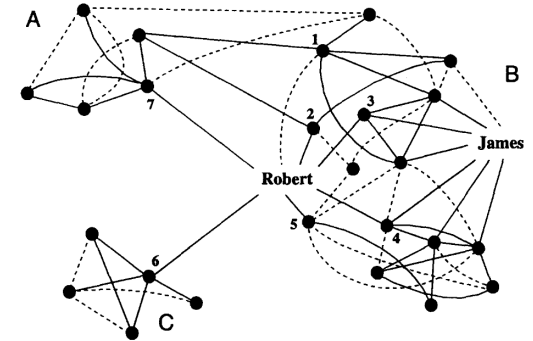


مدينة دمياط للآثار



Internet of People IoP

Internet of People refers to the digitalization of relationships between people and the collection, processing and application of personal data. It forms a network of collective intelligence and stimulates interactive communication among our digital selves through digital devices, the internet and sharing of data



Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi



Outline



Flight Plan, Auckland Art Gallery



UNESCO

Professor Hisham Elkadi

www.salford.ac.uk/built-environment

www.facebook.com/sobesalford

@SoBE_Salford



@hishamelkadi

Context



1. Impact of Climate Change



2. Design & Craft



3. Social Capital Analysis



4. Spatio-Temporal Mapping



Conclusion



1. Impact of Climate Change

Resilience Generalised



- Capacity to deal with stress, adversity
- Ability to bounce-back to normal
- Maintain well being under stress
- Have a positive outlook despite challenges
- Being adaptable in the face of change



Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi



1. Impact of Climate Change



Resilience Qualified

- How much change is ok
- The capacity to absorb stress or disturbance, to re-organise, and to continue to function in much the same way as before but not exactly
- Adaptive and transformative capacity
 - Dynamic measure of sea levels?
 - Dynamic measure of loss of land?
 - Dynamic measure of CO₂?

COMMUNITY?



Arts & Humanities
Research Council



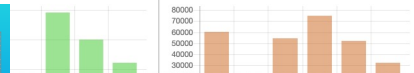
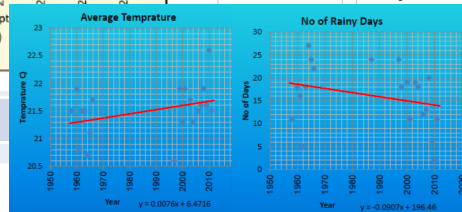
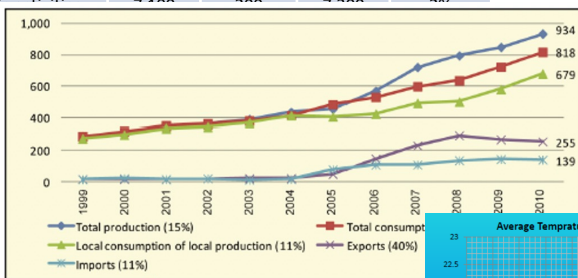
UNESCO



Code	Sector	Male	Female	Total	%
A	Agriculture, hunting, forestry & cutting of wood trees	47,000	2,900	49,900	12%
B	Mining & quarrying	0	0	0	0%
C	Manufactures	113,800	1,600	115,400	28%
D	Electric, gas, steam, air condition supplies	6,500	200	6,700	2%
E	Water support, drain recycling	2,800	800	3,600	1%
F	Construction & building	34,300	0	34,300	8%
G	Whole and retail sale vehicles, motorcycles repairing	53,000	11,600	64,600	16%
H	Transportation & storage	32,300	500	32,800	8%
I	Food, residence services	5,400	0	5,400	1%
J	Information, Telecommunication	1,400	900	2,300	1%
K	Insurance & financial intermediation	2,000	800	2,800	1%
L	Real Estate, renting	200	0	200	0%
M	Specialised technical, scientific activities	7,400	200	7,600	2%
N	Administrative activities & services	1,400	0	1,400	0%
O	Public administration, defer solidarity	1,400	0	1,400	0%
P	Education	1,400	0	1,400	0%
Q	Health & social work	1,400	0	1,400	0%
R	Amusement & creation & art	1,400	0	1,400	0%
S	Other services activities	1,400	0	1,400	0%
T	Services of home service for households	1,400	0	1,400	0%
U	International and regional organisations	1,400	0	1,400	0%
V	Activities not classified elsewhere	1,400	0	1,400	0%
Total		341,700	68,500	410,200	
%		83%	17%		

Source: IMC and EFEC, 2010^[3]

Year	Total production (15%)	Total consumption	Local consumption of local production (11%)	Exports (40%)
1999	280	280	100	100
2000	320	320	110	110
2001	350	350	120	120
2002	380	380	130	130
2003	420	420	140	140
2004	450	450	150	150
2005	480	480	160	160
2006	550	550	180	180
2007	650	600	220	220
2008	800	650	250	300




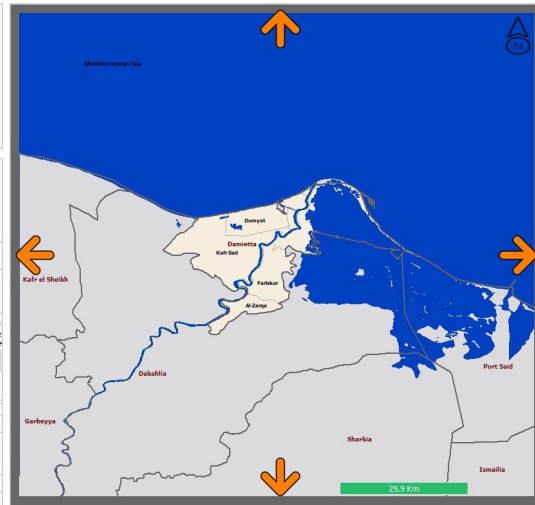
Urban Areas Select from the list	Railway Stations Select from the list	Industrial Zones Select from the list
Exchanges Select from the list	Industrial Spots Select from the list	

List of data layers. To show or hide Layers

- ☐ Main_Roads
- ☐ Urban_Areas
- ☐ LandCover
- ☐ Exchanges
- ☐ Railways_Stations
- ☐ Railways_Lines
- ☐ Industrial_Zones
- ☐ Industrial_Spots

Topography Map
 - Height Less (-2.0m)
 - Height from (-2.0m)
 To (-1.0m)
 - Height from (-1.0m)
 To (0 m)
 - Height from (0.0m) To
 (+1.0m)
 Distribution
 List of districts/
 Marakez
 Select from the list on
 for any point. Enter the
 latitude and longitude of
 the location lat :

Ing: [Locate IClear](#)
 List of SLR scenarios
 - Scenario1 - 0cm_25cm
 - Scenario1 - %
 Affected Areas
 Distribution - [Results](#)
 - Scenario2 - 0cm_50cm
 - Scenario2 - %
 Affected Areas
 Distribution - [Results](#)
 - Scenario3 - 0cm_75cm
 - Scenario3 - %
 Affected Areas
 Distribution - [Results](#)
 - Scenario4 - 0cm_100cm
 - Scenario4 - %
 Map Key
 Aff  Administrative Boundaries
 Distribution - [Results](#)



% percentage (Affected Area/District Area) - Scenario2: Number of features 6					
ID	District_Name	Governorate	Total Population	Total Number of Families	% percentage (Affected Area/District Area)
48	Dumyat	Damietta	237373	60254	5.8
49	Ras al-Bar	Damietta	11991	2992	9.3
50	Kesm Dumyat	Damietta	206664	54717	6.1
51	Kafr Sad	Damietta	291138	74786	9
52	Fariskur	Damietta	200432	52415	18.1
53	Al-Zarqa	Damietta	122713	32414	11.3
Total Population			Total Number of Families		



Social Capital for Climate Change Resilience

Damietta's Furniture SMEs



Arts & Humanities
Research Council



UNESCO

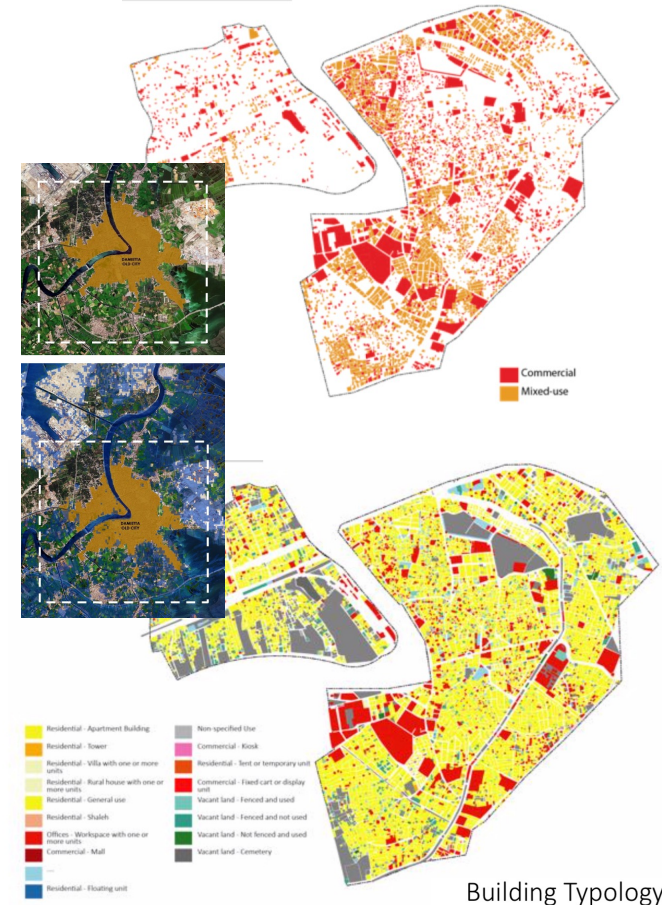
Professor Hisham Elkadi



Damietta's Furniture Craft Industry

The dynamics of Social Capital is the main success factor of the sustainability of this economic cluster.

Porter's Competitive Advantage theory and Putnam's Social Capital theory; linking networking, trust and norms to the spatial distribution of furniture enterprises in the city.



Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi



Heritage studies
climate change

CRAFT

GIS

UNESCO

field survey

Social Capital

social NETWORKS

Urban analytics

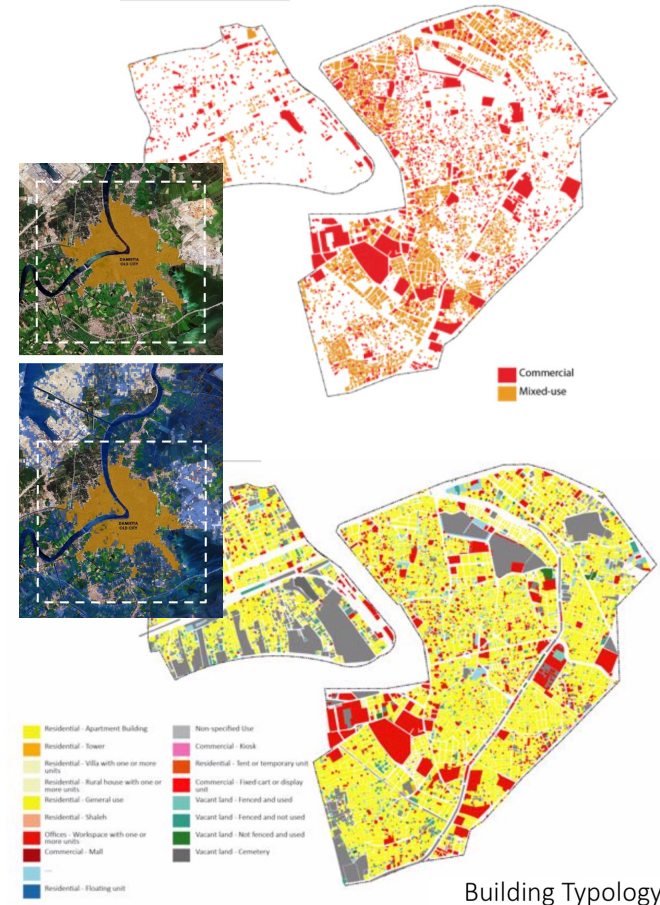


Arts & Humanities
Research Council



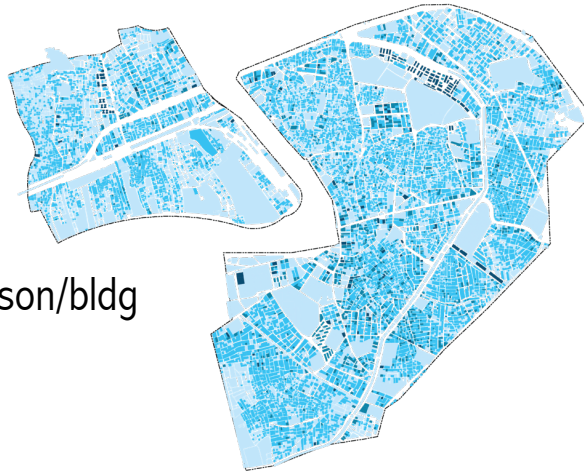
UNESCO

Professor Hisham Elkadi





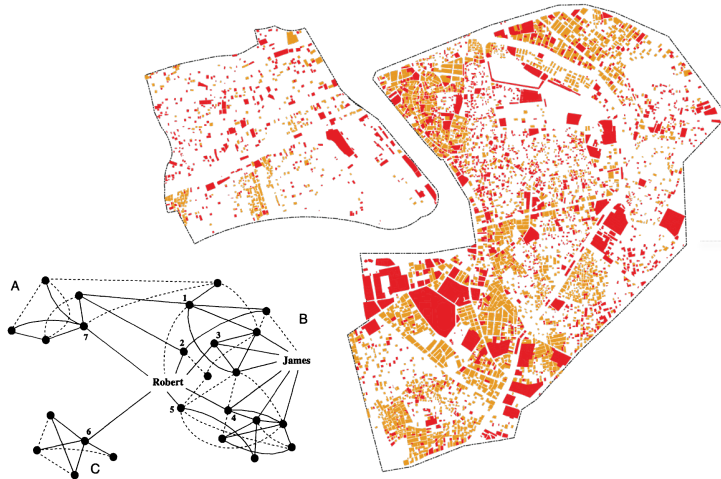
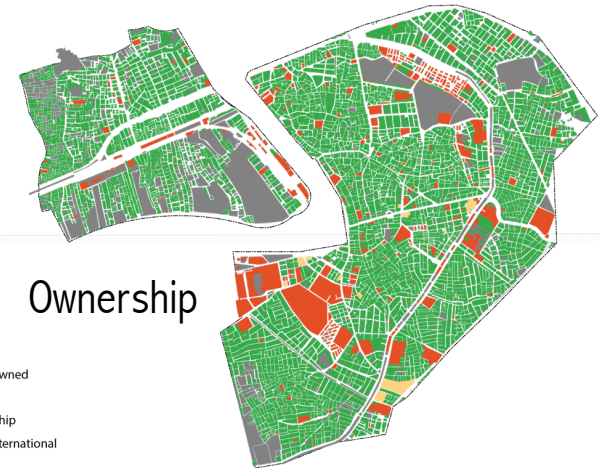
Person/bldg



Land use



Ownership



Arts & Humanities
Research Council

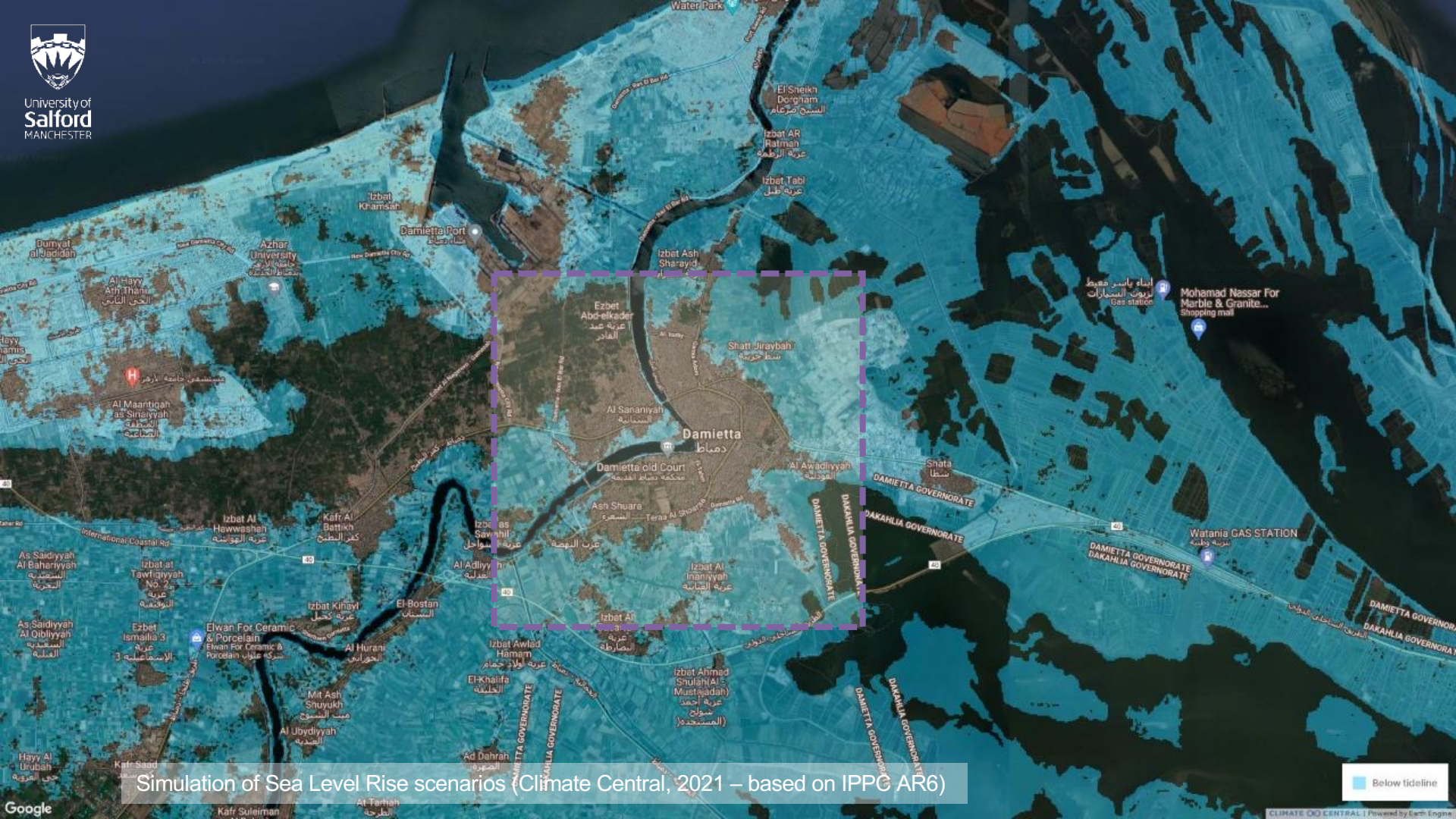


UNESCO

Professor Hisham Elkadi



University of
Salford
MANCHESTER



Simulation of Sea Level Rise scenarios (Climate Central, 2021 – based on IPPC AR6)

Below timeline



2. Design & Craft

PLACE

PEOPLE

PRODUCT

SUPPORT

Connections to other enterprise

VALUE

Priorities & Innovation



Arts & Humanities
Research Council



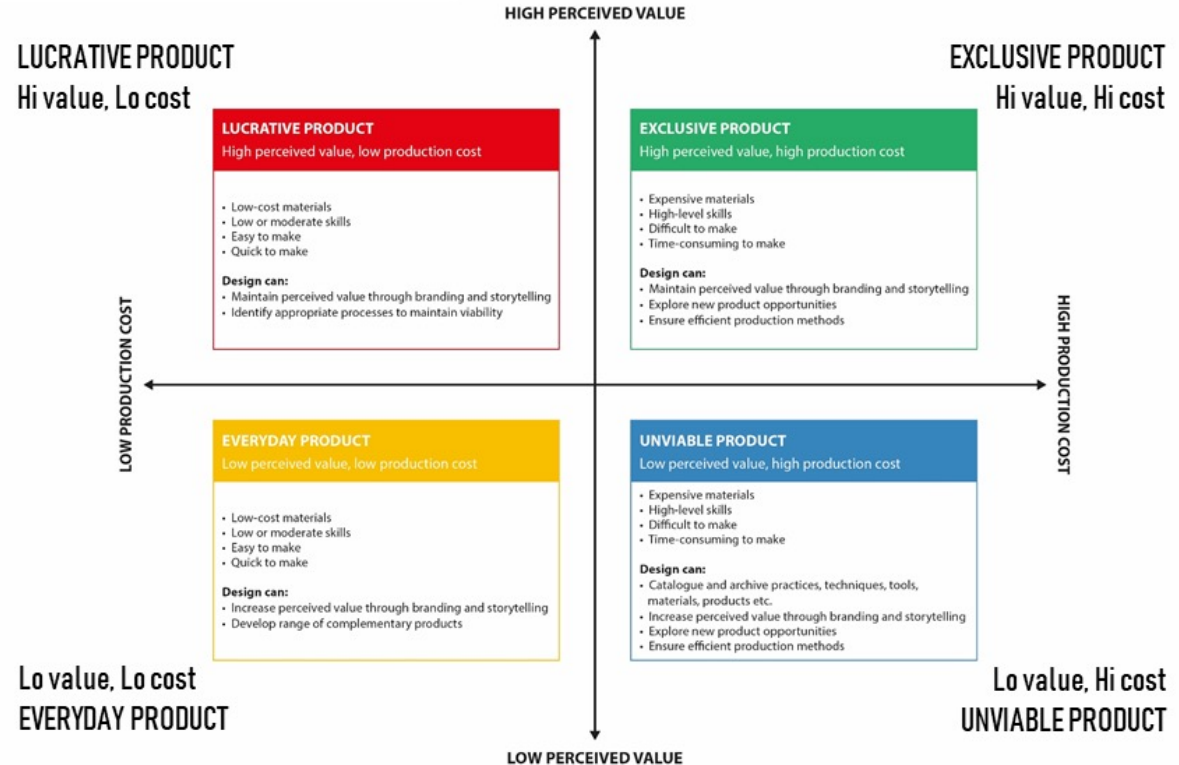
UNESCO

Professor Hisham Elkadi



2. Design & Craft

PRODUCT



Arts & Humanities
Research Council

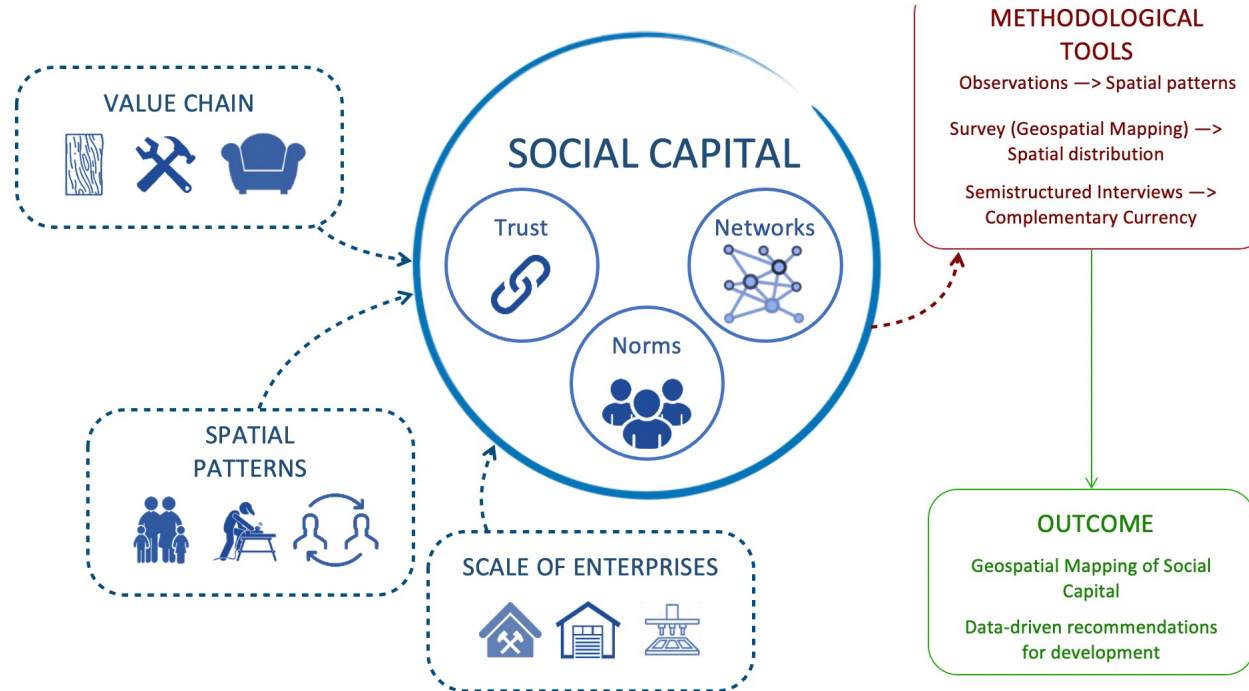


UNESCO

Professor Hisham Elkadi



3. Social Capital Analysis



Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi



Enterprise activities



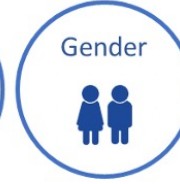
Enterprise Scale



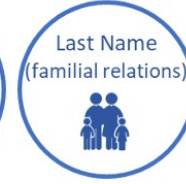
Profit & Power in Market



Age



Gender



Last Name (familial relations)

Variables on Status in Market
(dependent)

Control Variables
(independent)

Theoretical & Spatial Framework

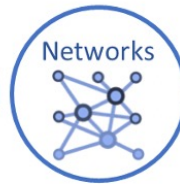
Unit of Analysis:
Enterprise/workshop/factory



Trust



Norms



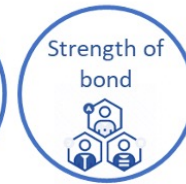
Networks



Location of Enterprise



Location of Contacts



Strength of bond

Social Capital Variables
(dependent)

Spatial Network Mapping Variables (dependent)



Arts & Humanities
Research Council



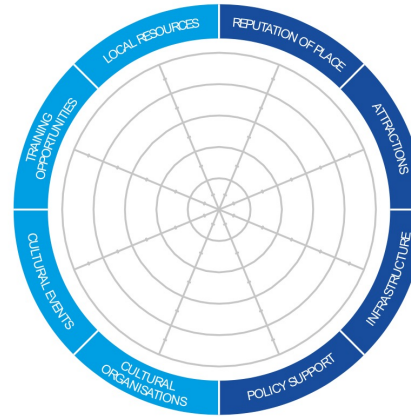
UNESCO



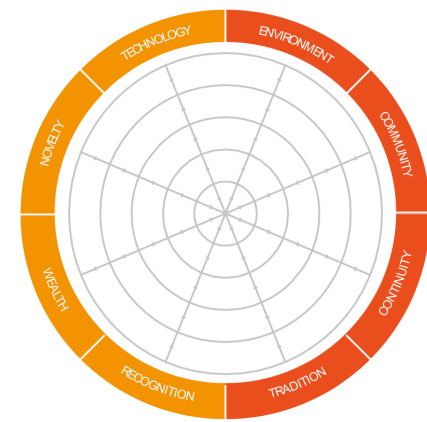
4. Value Mapping



Sustainability



Values



Place



Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi



2. Design & Craft

VALUE



Arts & Humanities
Research Council

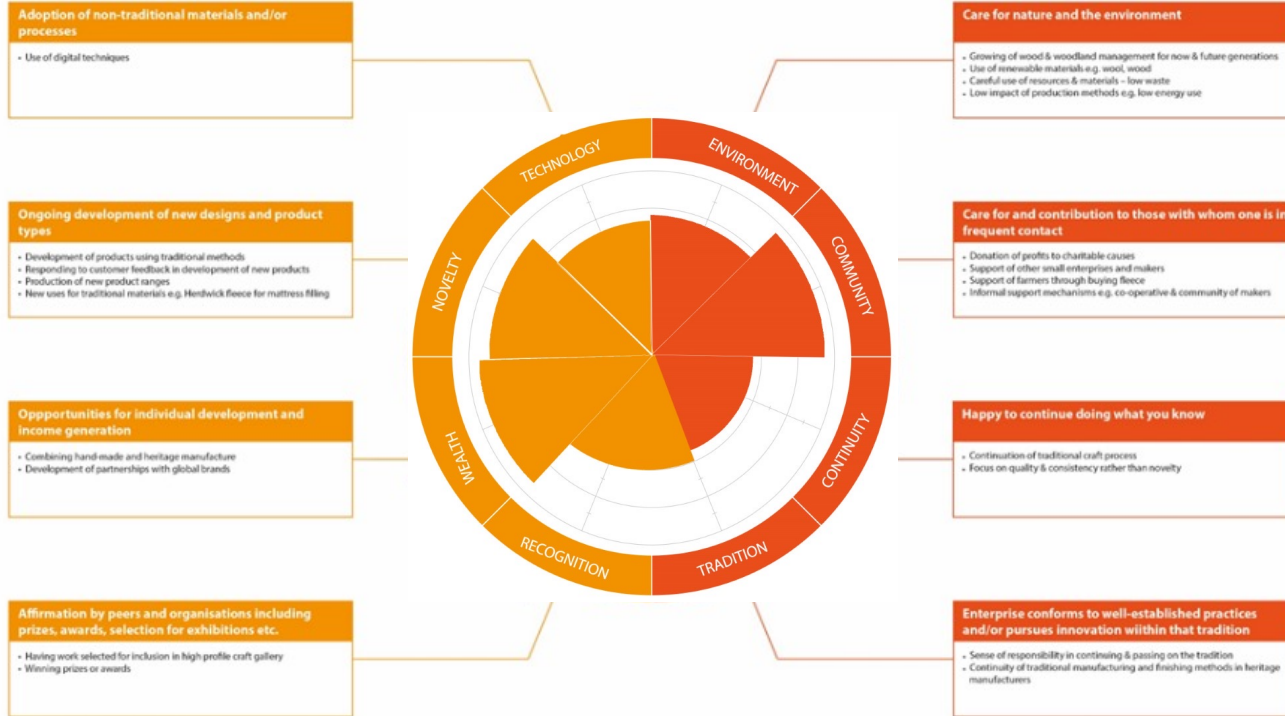


UNESCO

Professor Hisham Elkadi



2. Design & Craft: Motivations & Values



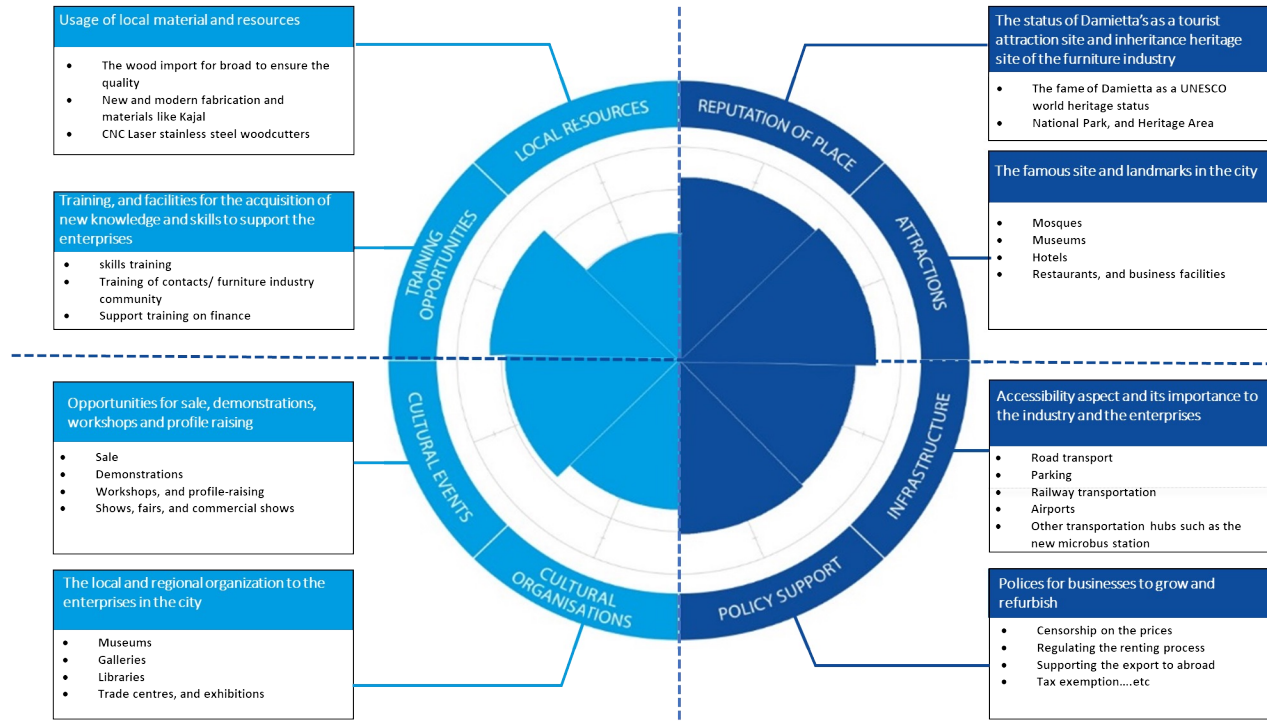
Arts & Humanities
Research Council



UNESCO



2. Design & Craft: Relevance of Place



Arts & Humanities
Research Council

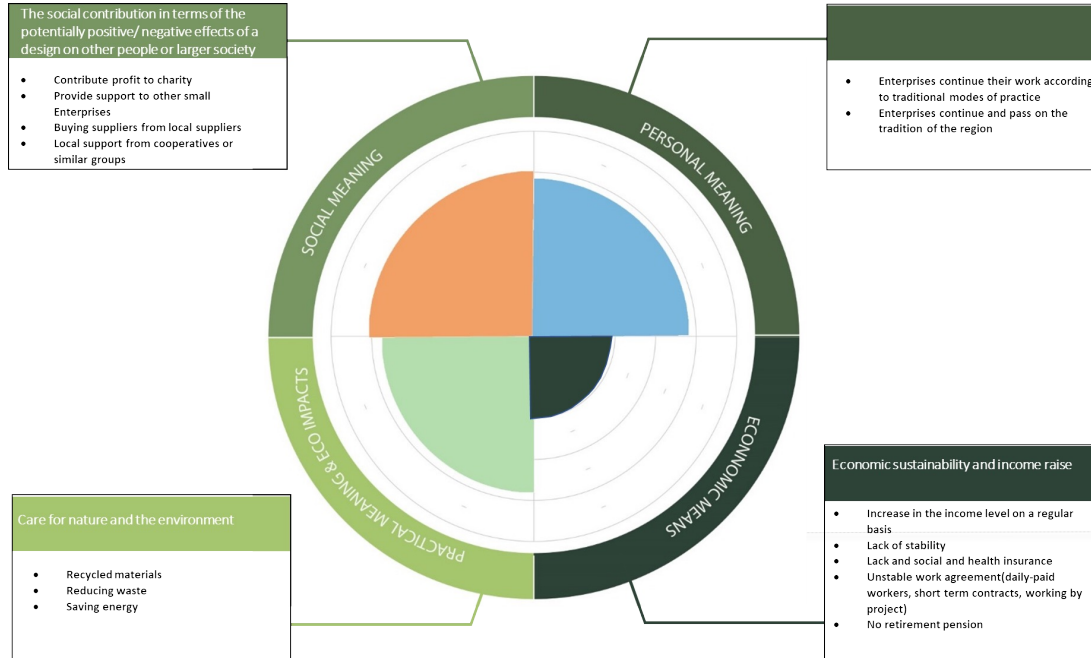


UNESCO

Professor Hisham Elkadi



2. Design & Craft: Sustainability





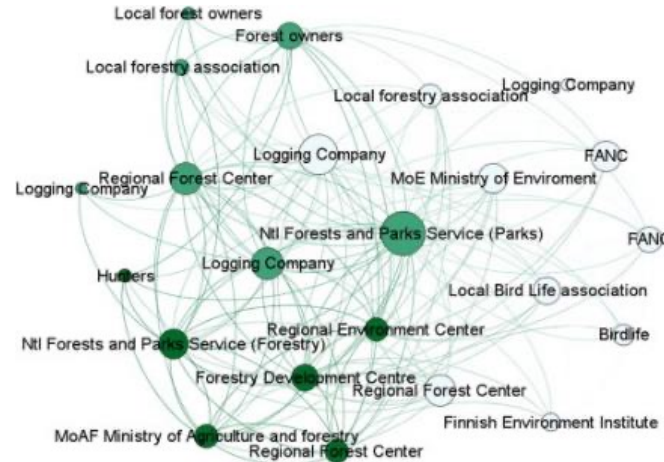
NY Fashion Industry

[illegible]

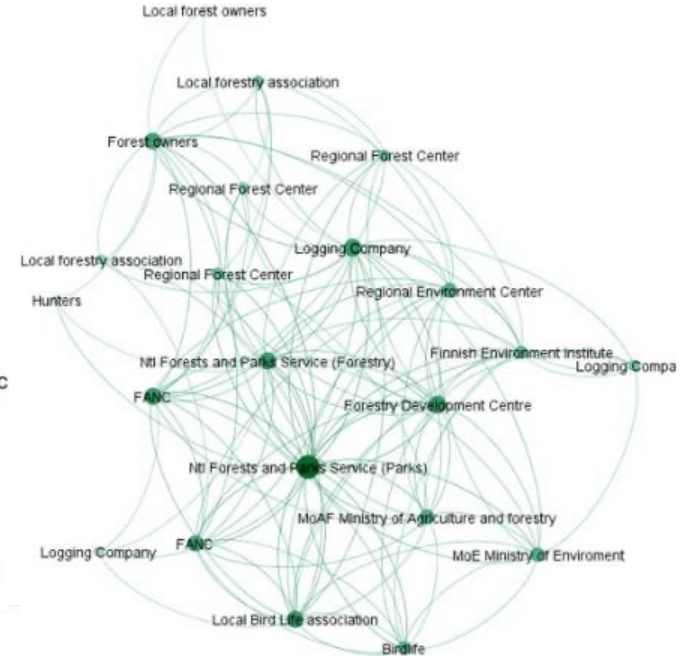


3. Social Capital Analysis

Finland Forest Industry



Network of Trust

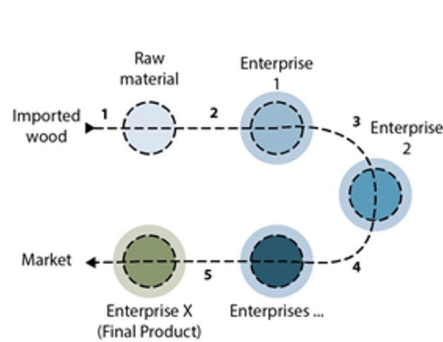


Network of Information



3. Social Capital Analysis

Damietta Furniture Industry

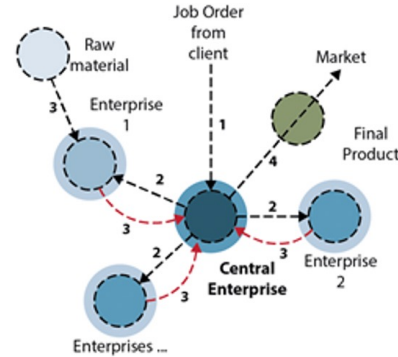


Enterprise Sequential

Product is transported from one workshop to the other along the value chain until being finally sold at a gallery.

Entails urban spatial interaction.

Used in Damietta in some cases. Exerts some Social Capital.

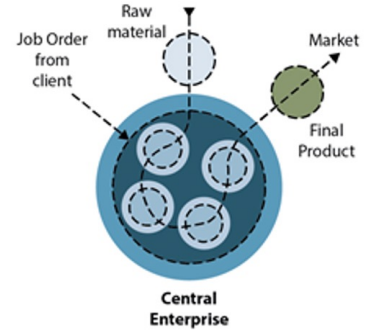


Product Order

One central business owner orders out pieces of the final product (stages) from different trusted partners, given that the final assembly and selling would take place within the central owner's enterprise.

Requires proximity and a dynamic urban spatial interaction.

Most used in Damietta. Exerts Social Capital as a currency of trust and long term relations.



Inhouse

Adopted only by major enterprises in the market (top category within MSMEs classification), where the whole process takes place within the enterprise itself without the need of any partners.

Isolated. No spatial interaction.

Used only by major enterprises. Sometimes major enterprises resort to other patterns to keep tradition of Social Capital and relations.



Arts & Humanities
Research Council

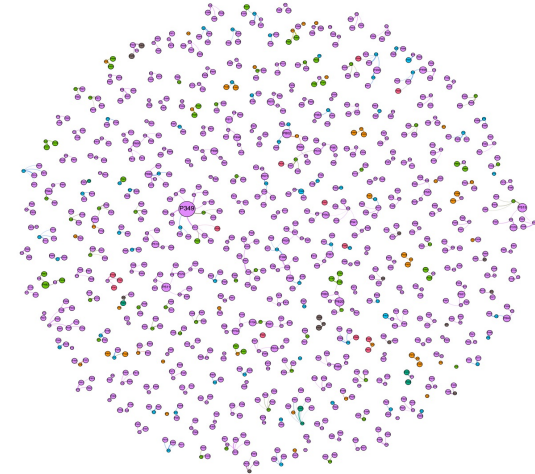
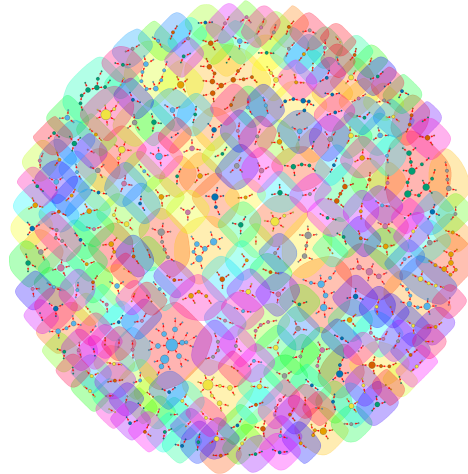


UNESCO

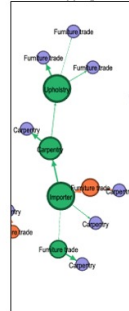
Professor Hisham Elkadi



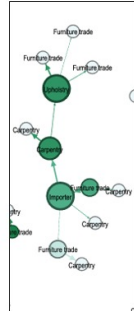
4. Spatio-Temporal Mapping Network Mapping



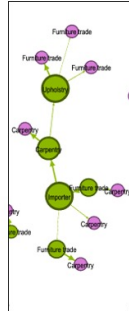
Respondents vs Contacts
Mapping



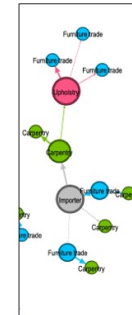
Years lived in Damietta



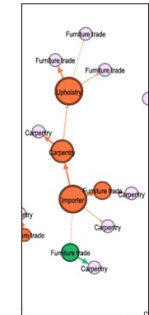
Role in Enterprise



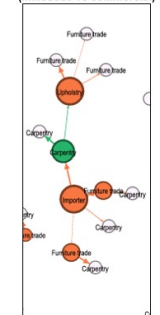
Enterprise Activity



Ownership of Enterprise



Type of Enterprise
(mixeduse vs commercial)



Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi







Conclusion

- Challenges and opportunities for Damietta
- Preserving Social Capital is key to Damietta's future
- Need for spatial analysis
- Education
- UNESCO Listing

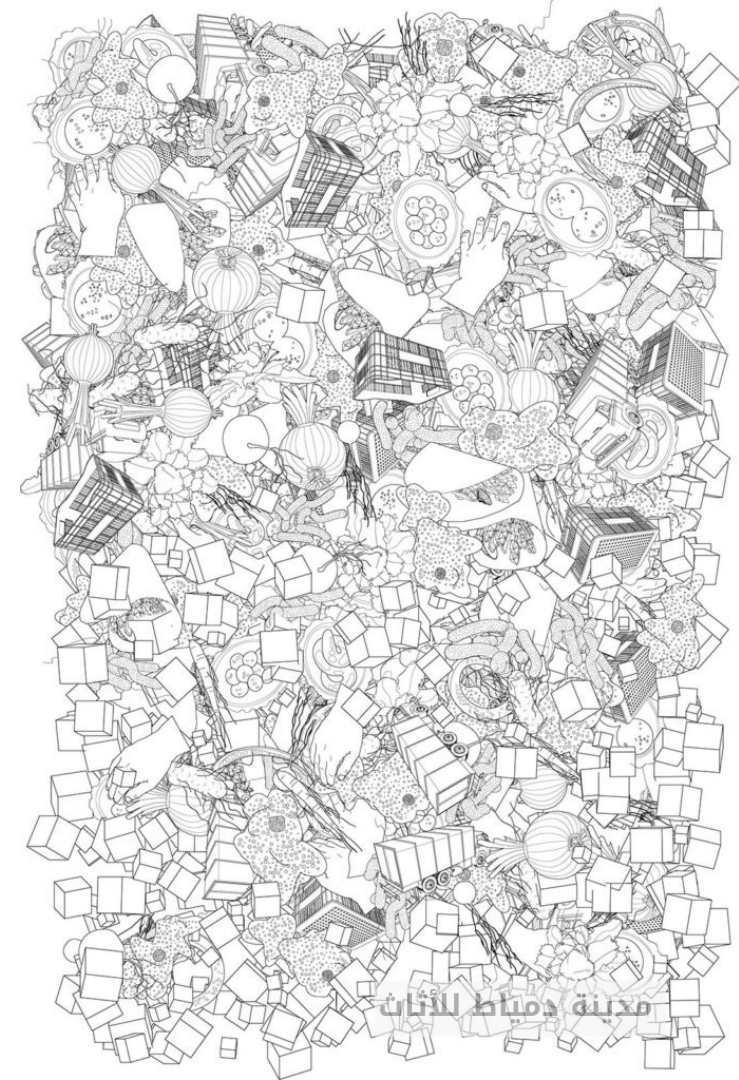


Arts & Humanities
Research Council



UNESCO

Professor Hisham Elkadi



مدينة دمياط للأثاث