

For a Patrimonialization of the Rhumel's Gorges in Constantine, Evaluation of the Actor's Game in the Rehabilitation Project of the Tourist Path

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Abstract

This article addresses the problem of the patrimonialization of a natural and very famous site in Algeria; the Rhumel gorges in Constantine. The objective is the evaluation within the framework of a prospective vision of the game of actors intervening in the project of rehabilitation of the path of the tourists; a tourist circuit skirting the bottom of the gorges.

The study is articulated around two main axes: the first presents the patrimonial and tourist characteristics of the gorges of the Rhumel and the problem related to the project of rehabilitation of the Tourist trail.

The second one gives the results of the application of the Mactor method which, thanks to associated software, analyzes the interactions between the actors facing several determined objectives. It identifies the influences, dependencies, power relationships, convergences, and divergences that condition the success of the project.

The results show a diversity of actors, aiming at a multitude of objectives whose strategies are not really visible. Nevertheless, they reveal several points in which the behaviors, attitudes, actions, and involvement of the actors are the variables.

Key words: Patrimonialization, Rhumel's gorges, the game of actors, tourists' path, Constantine.

INTRODUCTION

The rehabilitation project of the tourists' path is a real opportunity to revive the tourism dynamics of the Rhumel Gorge in Constantine. This project, topical since 2004, was considered one of the flagship projects on which the local authorities of Constantine to succeed the event Constantine capital of Arab culture in 2015. Six years after the completion of the event, this project is still at a standstill.

In fact, the Rhumel Gorge, this tourist potential with multiple cultural and natural heritage values, is worthy of being integrated into a process of territorial development of the city. Despite their classification as natural heritage, the city's actors are little aware of their development. They take care of the visible stratum of the corpus in priority: the built cultural heritage located on the rock.

For us, the Rhumel Gorge is a site through which we try to highlight the close relationship between heritage and tourism dynamics as two co-constitutive processes (Duval, 2007). We say that the success of the rehabilitation project of the tourist path ensures a tourist attractiveness of the Rhumel gorges and generates a process of patrimonialization around which a territorial development project of the city could be set up. However, to think about the setting in tourism of the gorges raises many questions related essentially to the implication of the actors intervening in this project whose success is largely dependent on their recognition of the patrimonial values of this site.

The objective of this article is the evaluation, within the framework of a prospective vision, of the game of actors intervening in the rehabilitation project of the tourist path by the analysis of the interactions between its actors facing several determined stakes. From a methodological point of view, we opted for the Mactor method because of its double virtue of evaluation and perspective. The emphasis is placed on the influences, dependencies, power relationships, convergences, and divergences between the project's actors and their mobilization and involvement around the project's major objectives. We could thus synthesize the apparent strategies of these actors which are able to reveal the awareness and recognition of the heritage value of the Rhumel Gorge.

Constantine: The Development of Tourism in the Rhumel Gorges Facing a Heritage Problem

Constantine is a city with a very assertive image within the Algerian territory (Côte, 2007). Its reputation is largely due to the picturesque Rhumel Gorge, a natural site composed of the canyon, rocky cliffs, and caves, which houses a good part of the city's archaeological heritage (Figures 1 and 2). In fact, this site was accessed, partially, since the Roman period by a small road dug in the rock leading to the Baths of Caesar; a natural thermal bath located at the bottom of the gorges. The small way will be destroyed by the floods of the Rhumel, and the gorges will be difficult to access thereafter.

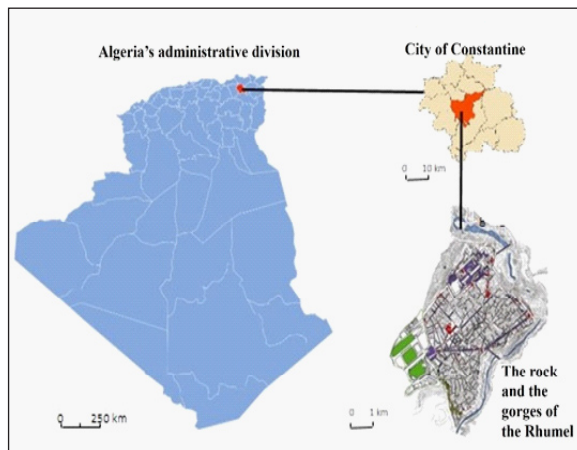


Figure 1. The geographical location of Constantine, Rock, and Rhumel Gorges (Source: Authors)

In 1895, it was decided to build the tourist path to allow the discovery of the exceptional heritage sites that existed at the bottom of the gorges. At that time, it was a unique work of its kind which presented an unprecedented feat and innovative construction techniques. Its course consisted of a pathway attached to the walls of the ravine, more than two kilometers long and with a height that varies between thirty and fifty meters above the water, allowing to follow the bottom of the Rhumel Gorge over its entire length (Figure 3).

Since the end of the nineteenth century, the Rhumel Gorge has been visited by many tourists and the tourist path has become one of the most beautiful features of the city. It was distinguished by national and even international notoriety (Alquier, 1930). Constantine reached, at the turn of the last century, the peak of tourist attractiveness, it was named Queen of North African tourism and erected as a tourist resort by the decree of 31 January 1924 (Figure 4).



Figure 2. The Rhumel gorges (source:http://www.constantine-hier-aujourd'hui.fr/Yann_Arthus-Bertrand)



Figure 3. Map of the bottom of the gorges: Tourists' path circuit (Source: http://www.constantine-hier-aujourd'hui.fr/chemin_touristes. according to Alphonse Marions' plan)

The tourist path was closed in 1958 following important floods which had affected it durably. Since then, the Rhumel gorges have been abandoned and have not seen a visible decline in tourist accessibility or heritage enhancement. There is a great discrepancy between their reality and the strategies determined by some of the city's development and urban planning tools, even if they are timidly mentioned. Left to their fate, the Rhumel gorges would be doomed to a continuous

degradation at the risk of losing the archaeological sites that exist there. Despite the diversity of the latter, they are very little explored they are not all classified; their inventory is not updated and therefore their valorization is far from being considered among the major concerns of the decision-makers of the city (Baka, 2015).

After more than 60 years since its closure, the Tourist Way remains a great unknown for a majority of citizens (Figure 5). The tourism offer in Constantine is centered around the visit of a few heritage sites located on the rock, whose economic return is very low.



Figure 4. The tourist's path in 1940 (Source: http://www.constantine-hier-aujourd'hui.fr/chemin_touristes)



Figure 5. The tourist path today; the exit of the gorges (Source: Baka, 2021)

The Rehabilitation Project of the Tourist Path

The project of rehabilitation of the tourist path goes back to the year 1997 when the local authorities of the time had decided to put back operation this path. In March 2004, it was decided, after two decades of procrastination, to proceed to an exhaustive assessment of the damage caused to this work long left to abandon. However, the succession of extensions that followed, for budgetary reasons in particular, as well as the difficulties related to the complexity of the work delayed the launch of the project until 2014, on the occasion of the event Constantine capital of the Arab culture 2015.

This project, located in a safeguarded sector and highlighting a doubly classified heritage, had to comply with both the regulations relating to natural sites and those of protected cultural property. It required the intervention of specific actors concerned with the protection measures inherent to these two types of heritage. However, this project is experiencing many delays and setbacks; catching up is a major challenge.

Table 1 presents a brief overview of the historical evolution of the project from its financial registration in 2014 to the fragmentation of its route and the choice of a section to be rehabilitated as a priority in 2021. In order to draw chronologically this evolution, we have resorted to the analysis of the content of several archival sources including those belonging to the wilaya of Constantine, as well as a confrontation of several press articles addressing the subject for years. The choice of this panel was made simultaneously with the exploratory interviews carried out with some of the actors, with the aim of comparing facts and statements.

Table1. Historical evolution of the project(Source: Authors)

	Date	Step	Actors	Observations
	30/12/2012	Constantine named Capital of Arab Culture 2015	ALESCO	An opportunity to re-launch the CDT rehabilitation project
	02/01/2014	Financial registration of the project	MDF	A program authorization of 60 billion cents
	-/03/2014	Elaboration of the specifications for the study and the rehabilitation	DTA	With non-updated data from a preliminary study

10/06/2014	Designation of the CAN- ALGERIE group for the project management	WALI DTA	Proposed by DTA and approved by WALI
23/07/2014	Designation of the CACT study office for the follow-up of the project	WALI DTA	Proposed by DTA and approved by WALI
-/09/2014	Cancellation of the services of the CAN- Algeria grouping	WALI DTA	Grouping deemed unqualified. Exceeded deadlines for the launch
03/12/2014	Local registration of the project at the wilaya level	WALI DTA	For a tourist attractiveness of Constantine
18/12/2014	Designation of the EPE-SPA SAPTA for the project management	WALI DTA	Designation of the Wali due to the urgency of the CCCA event.
22/12/2014	Stop of the works	DTA	a problem with the CACT
-/01/2015	Designation of a foreign partner to subcontract the study.	SAPTA IMSRN	A qualified partner designated according to the public procurement code
04/04/2015	Start of rehabilitation work on the first section	WALI SPTA	By order of the Wali: completion of the first section without study or follow-up
17/07/2015	Delivery of the study of the first section to the owner.	SAPTA DTA	study carried out after the realization and before the elaboration of the contract
04/08/2015	Elaboration of the study and rehabilitation contract n° 421/01/2015	DTA SPTA	Set the deadline to zero from this date. Expected end 04-02-2017
23/09/2015	Cancellation of CACT services	DTA	Irresponsibility and delay
23/09/2015	Designation of the CTTP for the follow-up and control of the project	WALI CTTP	Designation of the Wali (supreme authority)
23/09/2015	Resumption of work with caution and little consultation between actors	SAPTA CTTP	A slow pace despite the presence of all the actors
30/09/2015	Transmission of the 1st section study to the CTTP for approval	DTA CTTP	relatively long period; 02 months and 13 days for approval
19/10/2015	Ouverture d premier cahier de chantier	DTA	Le début officiel du suivi de projet
de /11/2015 au /01/2016	SAPTA decides to stop the works until the payment of the section1	DTA SAPTA	SAPTA's non-compliance with contract requirements
12/11/2015	Creation of a technical commission of wilaya in charge of follow-up and approval of the project studies	WALI DTA	For the consultation between actors representing the departments and for the smooth running of the work
03/01/2016	The beginning of the study after signing a subcontract	SAPTA IMSRN	Field diagnosis started Extension of time 05 months
31/08/2016	Cancellation of CTTP services	DTA	Workat a standstill
08/08/2017	Launching of a call for tenders for the follow-up and control of the rehabilitation of the road	DTA	Replace CTTP after one year of downtime
14/09/2017	Awarding of the contract to the engineering firm SEPT	DTA SEPT	A relatively experienced design office in the field
09 2018	A relatively experienced design office in the field	WALI	Change of the main actor of the project causes a further delay
13/04/2019	According to the DTA, a risk study entrusted to IMSRN for one year	DTA IMSN	To evaluate the risks during the construction and operation phases
-/02/2020	Risk study completed and approved by SEPT	IMSRN SEPT	SEPT refuses to quantify the section1, SAPTA stops the project
Project stopped due to the Covid 19 pandemic until November 2020			

12/11/2020	The prefect asks to start the project with a fragmented route	WALI SAPTA	New prefect to give new impetus to the project
Early 2021	Fragmented project layout, section to be prioritized	DTA SAPTA	SAPTA refuses to take over until the 1st section is paid for

In reading this table, we distinguish several constraints that negatively impact the progress of the project, which consequently presents visible gaps in all its phases, we will retain the following:

- The project is part of different programs belonging to several successive prefects mandates, it has been interrupted and its main actors have changed several times;
- A diversity of actors facing different issues and whose relations are often characterized by the presence of tensions and conflicts. It is precisely this diversity that is perhaps the source of difficulty in establishing strategic decisions and operational actions for the success of the project.
- A project owner who operates under the administrative supervision of the prefect, who himself operates under the financial supervision of the Minister of Finance.
- Time frames exceeding the deadlines in relation to the missions entrusted to the actors, particularly those related to financing, which causes large gaps between decisions and actions.
- Instances are often caused by the urgency of other facts and events, generally suffered by the project owner who directs the actions of other actors without referring to a visible strategy.

METHODS AND MATERIALS

The Mactor Method

Given the complexity of the subject, we chose the MACTOR (Actors, Objectives, Power Relations) method of prospective reflection, which allows for an in-depth analysis of the interactions between the project's actors based on the matrix interpretation of information from the survey. This method makes it possible to take into account the richness and complexity of qualitative information in particular. It provides intermediate results that shed light on certain dimensions of the problem (Godet, 1997) and thus allows the most appropriate scenarios to be proposed.

We have particularly adapted the Mactor approach to analyze the rehabilitation project of the tourist trail because of the large number of actors and the diversity of objectives. The confrontation of objectives and the examination of the power relations between these actors are essential factors for highlighting the evolution of the project and thus posing key questions for its future, arising from foreseeable conflicts (Godet, 2007). The resolution of these conflicts leads to the identification of the main areas of potential convergence and divergence and results in imagining the possible rules of the game for the future (Bassaler, 2004).

This method consists in going through four main steps: The identification of the main actors of the project, the major stakes, and the objectives pursued. Ranking of the actors and their positions in relation to the defined objectives. Positioning the actors according to their influences, dependencies, and power relationships. And finally, the proposal of logically possible scenarios that result, to a large extent, from the interaction between the actors, the most appropriate of the scenarios will be chosen.

In this paper, we specify that the Mactor method is particularly used to evaluate the set of actors in the rehabilitation project of the tourist path and thus synthesize the apparent strategies of these actors. We identify the factors that hinder the success of the project. We will not develop the possible scenarios, which do not compromise the eminently prospective character of the method.

Actors, Issues, and Objectives: Basic Data for the Mactor

This stage is the result of a survey that varies between documentary research, collection of archives, content analysis, participant observation, and, in particular, interviews conducted with the actors involved in the project. These interviews, conducted in semi-directive mode, specify the actors' missions, their means of action, the environment in which they work, the internal and external constraints with which they are confronted, and the relationships and mechanisms of interaction between them. The objective is to know their attitudes towards the project and to detect, within the limits of what each one expresses, their strategies.

Nevertheless, several principles guided the proper representation of the diversity of the actors surveyed. We targeted actors operating at different levels (communal, city scale, and national). We have associated actors of public and private status. And we chose actors in the different prerogatives (project owner, project manager, local community, civil society, ministry, etc.). In total, eleven interviews were carried out of seventeen identified contacts, given that six of the requested actors did not respond favorably to our request for an interview.

This step is crowned by the establishment of a first list identifying the key actors of the project, i.e. those who can influence or command, directly or indirectly (the financial actor and the project owner for example). Also, the less influential actors were identified, i.e. potential actors (associations for example) who are not very active at present but who could be in the future.

Through the interviews, the stakeholders' concerns were converted into major issues that were grouped, along with the objectives pursued, in a second list in order to position the stakeholders in the next step. In the end, 12 stakeholders were selected (Table 2) for a list of 16 objectives. (Table 3). They were coded according to the requirements of the operation by the Mactor software.

Table 2. List of stakeholders in the Tourist Route Rehabilitation Project(Source: Authors)

Actors	Abbreviation
Ex-owner: prefect of Constantine	Ex- MO
Ex- Delegated Project Manager: Previous Tourism Manager.	Ex- MOD
Project owner: prefect of Constantine.	MO
Delegated project manager: Director of tourism.	MOD
Design and rehabilitation project manager: Algerian Bridges and Works of Art Company.	SAPTA
Project management, monitoring, and control: Setif Technical Studies Company.	SETS
Study and rehabilitation subcontractor project manager: Soil Movements and Natural Risks Engineering Office.	IMSRN
Technical monitoring unit: directorates representing the various ministries.	CTS
Popular Communal Assembly of Constantine.	APC
Financial actor: Ministry of Finance.	MDF
Civil society: Association for the protection of heritage and environment.	ASS
Population: citizens living in the rock of Constantine.	POP

Table 3. List of objectives(Source: Authors)

Issues	Objectives	Abbreviation
Heritage and environmental issues	Valuation of the natural heritage	Ob-1
	Conservation of the archaeological heritage at the bottom of the gorges	Ob-2
	Fight against the pollution of the ravine	Ob-3
Tourism and economic issues	Revitalization of the tourist attractiveness of the gorges	Ob-4
	Revaluation of the image of Constantine	Ob-5
	Diversification of the tourist offers of Constantine	Ob-6
	Promotion of tourist investments for economic return	Ob-7
Social issues	Job creation	Ob-8
	Citizen participation in decision making	Ob-9
	Raising public awareness of the importance of natural heritage	Ob-10
Political issues	Political support for the project	Ob-11
	Financing the project	Ob-12
	Making a success of the event Constantine Capital of the Arab Culture	Ob-13
control issues	Control assistance and monitoring of the project	Ob-14
	Implement a new project to meet a demand	Ob-15
	Arbitration between project actors	Ob-16

The Input Matrices

The second step of the Mactor method consists of describing the functioning of the set of actors through two input matrices that are indispensable for the proper functioning of the MACTOR software. Thus, the data collected from the survey work was carefully invested to fill these matrices.

a- The Direct Influences Matrix (MID): evaluates, qualitatively and quantitatively by a score of 0 to 4, the direct influence capacities between the project actors, taking into account the indirect means of the action of each of them (Figure 6).

MID	Ex-MO	Ex-MOD	MO	SAPTA	SETS	IMSRN	CTS	APC	MDF	ASS	POP
Ex-MO	0	0	1	1	0	0	0	0	0	0	0
Ex-MOD	0	0	1	1	0	0	0	0	0	0	0
MO	0	0	0	4	4	4	4	2	0	1	1
MOD	0	0	3	0	4	4	4	2	0	1	1
SAPTA	0	0	1	1	0	3	4	1	0	0	0
SETS	0	0	1	1	3	0	1	1	0	0	0
IMSRN	0	0	1	1	2	1	0	1	0	0	0
CTS	0	0	1	2	2	2	2	0	1	0	0
APC	0	0	1	1	0	0	0	2	0	0	2
MDF	0	0	4	4	4	4	4	3	0	0	0
ASS	0	0	0	1	0	0	0	0	1	0	0
POP	0	0	0	0	0	0	0	0	0	1	0

0 : No influence
1 : Operating processes
2 : Projects
3 : Missions
4 : Existence

Figure 6. The influence matrix(Source: investigative work)

We would point out that the Ministry of Finance has overall financial authority over all the players. There is a very strong relationship between the project owner and his delegate insofar as the former is indispensable for the existence of the latter. The missions of the project managers (SAPTAS, SETS, IMSRN) are related to the decisions of the delegated project manager, who is at the top of the technical steering of the project, even if he does not participate in strategic decision-making.

b- The Valued Position Matrix (2MAO): evaluates the position of each stakeholder on each of the project objectives. It describes both the valence of a stakeholder on an objective and the intensity of his or her position, which characterizes his or her degree of priority (Figure 7).

2MAO	Ob-1	Ob-2	Ob-3	Ob-4	Ob-5	Ob-6	Ob-7	Ob-8	Ob-9	Ob-10	Ob-11	Ob-12	Ob-13	Ob-14	Ob-15	Ob-16
Ex-MO	3	2	2	4	4	4	4	4	3	0	2	4	1	4	1	0
Ex-MOD	3	2	2	4	4	4	4	3	0	2	3	0	4	1	0	4
MO	3	2	2	4	4	4	4	3	0	2	4	1	4	1	0	4
MOD	3	2	2	4	4	4	4	3	0	2	3	0	4	1	0	4
SAPTA	2	2	0	1	1	1	0	0	0	0	0	0	0	0	4	0
SETS	2	1	0	1	1	1	0	0	0	0	0	0	0	4	4	0
IMSRN	1	1	0	1	1	1	0	0	0	0	0	0	0	0	4	0
CTS	2	1	1	3	3	2	1	0	0	1	1	0	3	4	0	2
APC	3	1	3	4	4	3	3	2	1	1	1	0	3	0	0	2
MDF	0	0	0	0	0	0	1	2	0	0	3	4	4	0	0	3
ASS	4	4	4	4	4	3	3	3	4	4	0	0	4	0	0	0
POP	2	2	2	2	2	2	1	4	4	2	0	0	2	0	0	0

0 : the small objective
1 : The essential objective of its operating processes
2 : The essential objective for its projects
3 : The essential objective of its missions
4 : The essential objective of its existence

Figure 7. The matrix of valued positions(Source: investigative work)

Thus, it should be noted that the objectives arising from the tourism and economic issues aimed at revitalizing the tourist attractiveness of the gorge, the revaluation of the image of Constantine, and the diversification of tourism offerings are the most targeted. This explains the political will to promote tourism investments ensuring an economic return to the city. The objectives relating to social issues, in particular, citizen participation in decision-making and raising the population's awareness of the importance of the natural heritage, are given little consideration. The objectives of project management are the least targeted, and the decision-makers have little interest in them. Consequently, two groups of actors are identified: actors who are strongly involved and concerned by a large number of objectives: the project owner, the communal people's assembly, the associations and the technical monitoring unit, and actors who are not very involved: the project owners and the financial actor.

RESULTS AND DISCUSSION

The third step of the Mactor method consists in representing the results of the study. Thus, the actors are positioned according to influences, dependencies, and power relationships. The most motivating objectives are identified. Convergences are studied, agreements, disagreements, and even neutralities are highlighted.

The Structure of Influences, Dependencies, and Power Relations

a- Direct and indirect influences between actors: identified by the matrix (MIDI) which provides, through two calculated indicators, a more complete vision of indirect influences between actors and elucidates how one actor can limit the choices of another by acting on him through an intermediary (Figure 8).

MIDI	Ex-MO	Ex-MOD	MO	MOD	SAPTA	SETS	IMSRN	CTS	APC	MDF	ASS	POP	Ii
Ex-MO	0	0	2	2	2	2	2	2	2	0	2	2	18
Ex-MOD	0	0	2	2	2	2	2	2	2	0	2	2	18
MO	0	0	8	11	15	14	15	13	6	0	5	5	84
MOD	0	0	8	10	14	13	14	12	6	0	5	5	77
SAPTA	0	0	5	5	8	7	8	5	3	0	2	2	37
SETS	0	0	5	5	7	7	7	5	3	0	2	2	36
IMSRN	0	0	5	5	6	6	6	5	3	0	2	2	34
CTS	0	0	7	7	9	8	8	7	4	0	3	3	49
APC	0	0	3	5	4	4	4	4	4	0	5	5	34
MDF	0	0	12	14	19	18	19	17	8	0	4	4	115
ASS	0	0	2	2	1	1	1	2	2	0	3	3	14
POP	0	0	0	1	0	0	0	0	1	0	1	1	3
Di	0	0	51	59	79	75	80	67	40	0	33	35	519

Figure 8. The matrix of direct and indirect influences. (Source:Mactor result)

Thus, the most influential actor was the financial provider (Ii=115), followed by the project owner and his delegate, whose influence is relatively decisive when compared to that of the project owners. The least influential actors are the population (Ii=3) and the associations (Ii=14). The project managers are the most dependent (Di from 75 to 80).

b- Influences and dependencies between actors: positioned by the plan (PID) according to the degrees of influence and direct and indirect dependency. This positioning, calculated from the MIDI matrix, shows that the structure of actors relating to the project is divided into four parts (Figure 9).

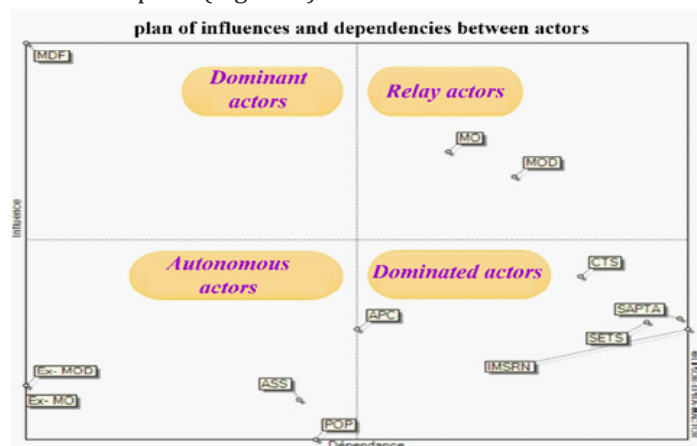


Figure 9. Influences and dependencies plan (Source:Mactor result)

-A single dominant actor: the financial actor, plays an important intermediary role in the accomplishment of the missions of the other actors. It is of great importance, influential, and less dependent. His actions ensure the dynamics of the project.

-Relay actors: the project owner and the delegated project owner. Influential but highly dependent, these actors are the most involved in the project, particularly at the level of implementation. The dynamism and evolution of the project are largely based on their decisions and actions. Their power is relatively high because they have the possibility to slow down the evolution of the project and even stop it. They can limit the missions of the project managers and cancel the participation of the associations and the population.

-Dominated actors: the project managers, the communal people's assembly, and the technical monitoring unit are the dependent but less influential actors with very limited power and often positive reactions. They obey the fallout from the other actors, whether it be alliances or conflicts. They are always under threat, only adapting to the circumstances of the project in order to avoid being pushed aside. They are all in a weak position, even for the technical monitoring unit (CTS), which is close to the relay actors, and the communal people's assembly (APC), which is close to the non-playing actors.

-The autonomous actors: are the population, the associations for the protection of heritage and the environment as well as the former project owners. They are also called offside actors because they are the least connected to the project and their involvement does not contribute to achieving their own objectives. They are relatively independent with little influence on the project. Their actions are less perceived by the other actors and their interventions are limited.

c- The power relations between the actors: measured by the force vector R_i (an indicator of the relative weight of each actor) and represented in the histogram (MIDI). The higher R_i is, the stronger the influence of the actor and the lower the dependence. In contrast, if R_i is low, the actor is in a weak position and cannot defend its interests (Figure 10).

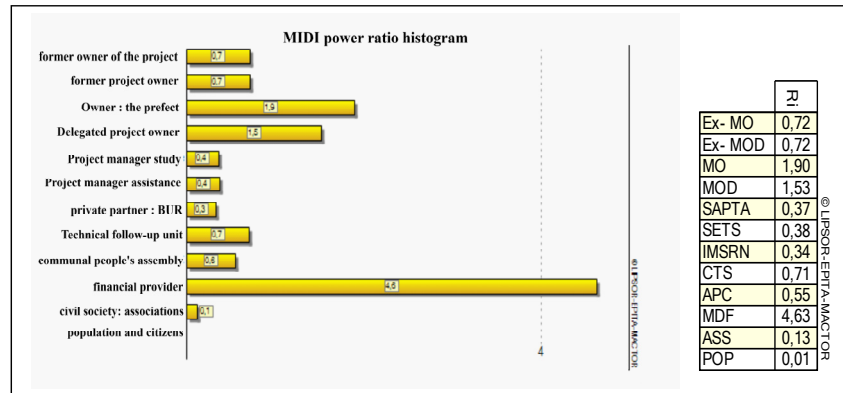


Figure 10. Power relations actors(Source: Mactor result)

Thus, the analysis of the different values of the R_i vector relating to the project allows us to group the actors in decreasing order according to their dominance. In the first position, the very high R_i (4.63) is that of the financing actor because of its exclusive capacity to feed the project. In the last position come the population and the associations whose R_i is very low (from 0.01 to 0.13). However, it is noted that the R_i values are relatively average for the project owner and his delegate (from 1.53 to 1.90). These actors could experience a decrease in influence and power relations if the other actors, particularly the project owners (R_i of 0.34 to 0.38), become more autonomous and if the population and the associations become more involved in decision-making.

The Positioning of the Actors Around the Objectives

a- The weighted positioning of the actors: is represented by the 3MAO matrix and described by the degree of mobilization (Mob) which indicates the positioning of each actor by taking into account both his valence on each objective and his power ratio. It, therefore, allows for a better evaluation of the actors' roles by analyzing their actual mobilization on the objectives. (Figure 11)

3MAO	O-1	O-2	O-3	O-4	O-5	O-6	O-7	O-8	O-9	O-10	O-11	O-12	O-13	O-14	O-15	O-16	Mobilisation
Ex- MO	2,2	1,4	1,4	2,9	2,9	2,9	2,9	2,2	0,0	1,4	2,9	0,7	2,9	0,7	0,0	2,9	30,4
Ex- MOD	2,2	1,4	1,4	2,9	2,9	2,9	2,9	2,2	0,0	1,4	2,2	0,0	2,9	0,7	0,0	2,9	29,0
MO	5,7	3,8	3,8	7,6	7,6	7,6	7,6	5,7	0,0	3,8	7,6	1,9	7,6	1,9	0,0	7,6	79,9
MOD	4,6	3,1	3,1	6,1	6,1	6,1	6,1	4,6	0,0	3,1	4,6	0,0	6,1	1,5	0,0	6,1	61,1
SAPTA	0,7	0,7	0,0	0,4	0,4	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,5	0,0	4,1
SETS	0,8	0,4	0,0	0,4	0,4	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,5	0,0	0,0	5,3
IMSRN	0,3	0,3	0,0	0,3	0,3	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,3	0,0	3,0
CTS	1,4	0,7	0,7	2,1	2,1	1,4	0,7	0,0	0,0	0,7	0,7	0,0	2,1	2,9	0,0	1,4	17,1
APC	1,7	0,6	1,7	2,2	2,2	1,7	1,7	1,1	0,6	0,6	0,6	0,0	1,7	0,0	0,0	1,1	17,2
MDF	0,0	0,0	0,0	0,0	0,0	0,0	4,6	9,3	0,0	0,0	13,9	18,5	18,5	0,0	0,0	13,9	78,7
ASS	0,5	0,5	0,5	0,5	0,5	0,4	0,4	0,4	0,5	0,5	0,0	0,0	0,5	0,0	0,0	0,0	5,4
POP	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2
number of agreements	20,1	13,0	12,7	25,5	25,5	24,1	26,9	25,4	1,1	11,6	32,4	21,1	42,4	9,2	4,3	35,9	
number of disagreements	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
degree of mobilization	20,1	13,0	12,7	25,5	25,5	24,1	26,9	25,4	1,1	11,6	32,4	21,1	42,4	9,2	4,3	35,9	

Figure 11. The matrix of valued positions(Source: Mactor result)

Three groups of actors are identified according to the degree of mobilization (Mob):

-The first group includes the most mobilized actors in the project, mainly made up of the dominant actors: the project owner (Mob=79.9), the delegated project owner (Mob=61.10), and the financial actor (Mob=78.7). The strong

mobilization of these actors is explained by the fact that they play a role as project leaders and intervene at almost all levels of the project;

- The second group is made up of former project owners (Mob of 29 to 30). These actors are not very involved in the project because of their minimal power of influence and their weak bargaining power, even if they are independent.

- The third group brings together actors who are not very involved in the objectives. The third group is made up of actors with little involvement in the objectives, i.e. the project managers (Mob 3.0 to 5.3). It is important to note that the population and the associations lose their effective involvement in a significant number of objectives (Mob from 0.2 to 5) because of their relative dependence even though they are autonomous and strongly concerned by these objectives.

b- The mobilization of actors on the objectives: The 3MAO histogram, constructed from the 3MAO matrix, allows us to identify for each objective the rate of favorable and unfavorable positions (Figure 12).

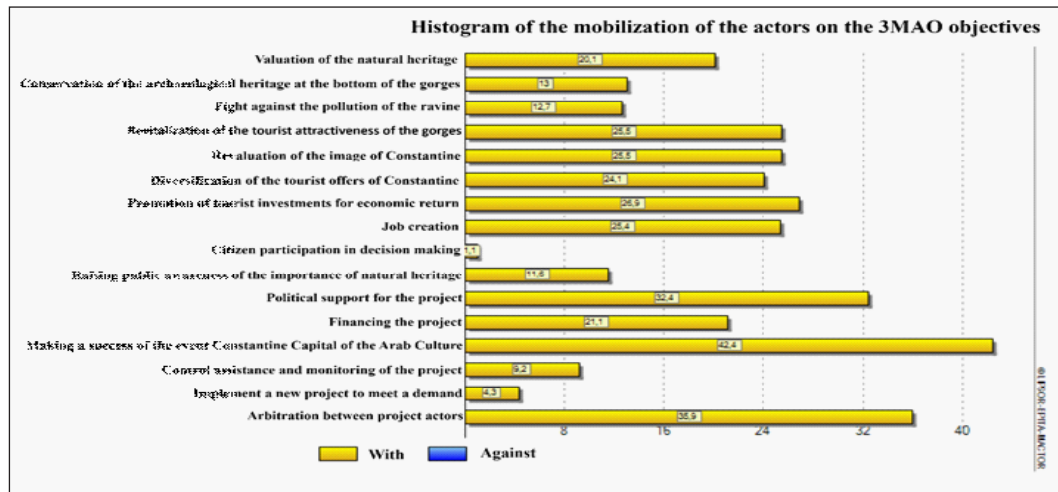


Figure 12. Histogram of the mobilization of actors on the objectives. (Source:Mactor result)

It is clear that the majority of actors are mobilized mainly on three objectives: the success of the event Constantine Capital of Arab Culture (42.4%), the project management (35.9%), and the political support of the project (32.4%). While there are seven objectives on which the actors are moderately mobilized (between 20.10% and 26.9%) namely: the enhancement of natural heritage, the financing of the project, the diversification of tourism offers of Constantine, the revitalization of the tourist attractiveness of the gorge, the revaluation of the image of Constantine, the creation of jobs and the promotion of tourism investments providing an economic return to the city.

Convergence of Objectives between Actors

It is important to specify that there are no disagreements between the project actors, the objectives bring them together in a positive way and do not constitute a subject of divergence, even if the positions are relative.

Thus, the convergences are evaluated by three levels of analysis using a matrix (1CAA, 2CAA, and 3CAA). The results can be represented in the form of a graph that positions the actors on a mapping that geometrically highlights the alliances according to the existing convergences.

- The first level analyzes the simple convergences of objectives. It identifies for every two actors the number of objectives on which they converge, without taking into account neutral positions; only potential alliances (favorable or opposed) are counted (Figure 13).

The results of this level show a very important number of alliances (14) between the former and the current project owner. This is explained by the shared political ownership of the project in the succession. This number is relatively important (13) between the project owner and his delegate because of the missions and also the common spin-offs. It is less important with the communal people's assembly, the population, and the associations (10) since they are all in the same area of dependence. It is very weak with the financial actor (6) whose interest is limited to financing the project. The project managers are isolated from the other actors with a very low number of alliances (from 5 to 6).

- The second level analyzes the valuated convergences. It identifies for each pair of actors with the same valence

(favorable or opposed to the objective) the average intensity of the convergences. The numbers no longer measure the number of potential alliances, but rather the intensity of these alliances integrating the preferences of the objectives. The higher the intensity, the more convergent the interests of the actors (Figure 14).

The results show that the interests of the current project owner and his delegate converge strongly with those of the previous one and his delegate (from 40.5 to 42). They converge moderately with the associations and the control unit (from 30.5 to 34.5) and weakly with the project owner and the financial actor (from 11 to 18.5).

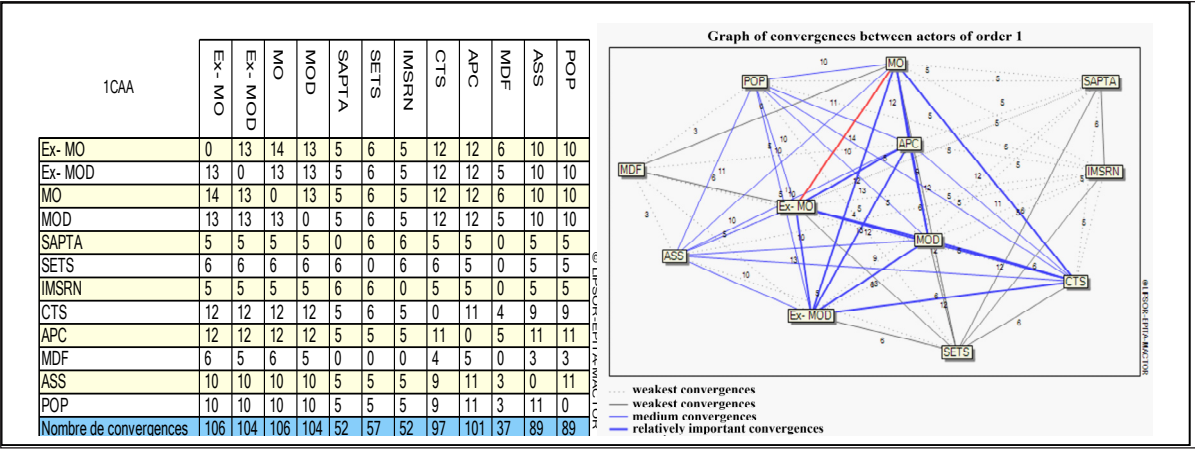


Figure 13. The first-order convergence: 1CAA matrix, and graph. (Source: Mactor result)

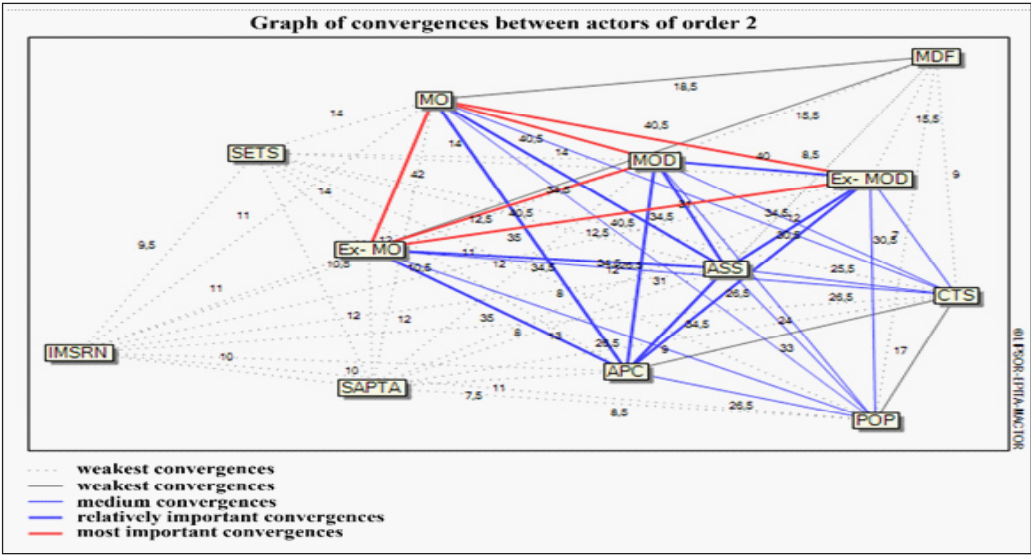


Figure 14. The second-order convergence: 2CAA graph (Source: Mactor result)

- The third level analyzes weighted valued convergences. It identifies for each pair of actors, having the same position towards an objective, the average intensity of the convergences integrating their preferences of the objectives and their power relations (Fig 15).

The results confirm a very considerable intensity of convergence between the project owner and his delegate (69.5). It is less weak with the former project owner (55.2) in view of his very weak power relationship linked to his completed mandate. Despite the low number of alliances between the financial provider and the project owner expressed in the AAC1, it is clearly remarkable at this level of analysis that the intensity of convergence is important between these two actors (58.4) who alone, allied, can act in the decision making of the project because of their high Ri. The associations converge with the population since their missions are oriented towards the satisfaction of this category without really having the power to change the situation. The project managers have a very low intensity of convergences with all the actors; this explains the low impact role they play in the project, even if the quality of the realization is dependent on the success of their missions. They only align themselves with the decisions, and their role is limited to providing a paid service without getting involved in the project's primary objectives.

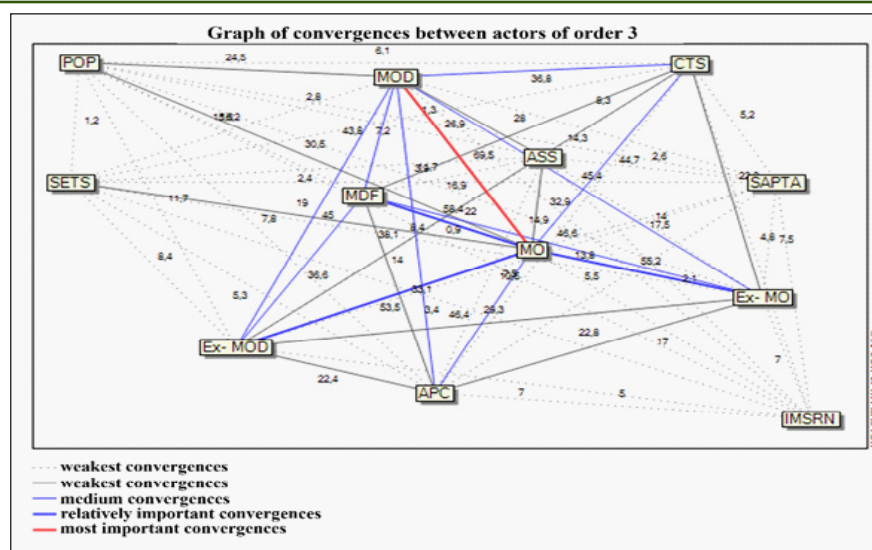


Figure 15. The 3rd order convergence: 3CAA graph(Source: Mactor result)

To Synthesize the Preceding Discussions, below are Identified the Main Apparent Strategies of the Stakeholders in the Tourist Route Rehabilitation Project

- The financial actor is the most influential dominant actor, with considerable weight and a very high balance of power; it exerts more influence than it receives. He has a large amount of power even if he is only marginally involved in the objectives. Through his financial authority, he can compromise the different phases of the project. He is an actor who faithfully obeys the classic procedures of the financial set-up of an exclusively publicly funded project.

- The project owner is an influential intermediary, but highly dependent on the financial actor's decision-making. He is very involved in the implementation of the project because he is concerned with a large number of objectives. He remains very flexible with the other actors in order to manage delicate project situations. He has a lot of room to maneuver but his power is relatively limited by the financial actor. He has the possibility to slow down the evolution of the project and even to stop it in case of emergency if we refer to his decision to stop the first phase of rehabilitation until the elaboration of the risk study for safety reasons. Its interests converge moderately with the associations and the control unit and weakly with the project managers and the financial actor.

- The delegated project manager is also a relay actor who is very important for the success of the project. He is the link between the project owner and the project managers since he sets up the programs, the balances, the deadlines of the various phases as well as the conditions of realization. The qualification of these missions directly influences the quality of the realization.

- The communal people's assembly is the dominant actor with a medium influence, limited power, and a weak balance of power. It is strongly involved and concerned by a large number of objectives, but its strong dependence makes its negotiating capacity conditional, and its reactions are often positive. It is an actor highly influenced by the higher hierarchical concentration of power (financial actor, project owner, and delegated project owner), which makes its actions very limited.

- The technical monitoring unit is the representative actor of the state sectors. It is a dominated actor with a strong dependence and a weak influence. It is heavily involved and concerned with many objectives. Given the nature of its mission, it is able to unblock problematic situations in the project, although its power relationship is very limited, as evidenced by its often-positive reactions even in the most critical phases of the project.

- The associations for the protection of heritage and the environment are relatively independent non-players but with very little influence. They are strongly involved and concerned with many objectives, but their very weak bargaining power limits their fields of action. They converge relatively with the project owner, but they do not really have the authority to act. With a defensive position and a fairly high degree of dependence, they aim to optimize their objective of the heritage of the Rhumel Gorge by aligning their interests with those of the population.

- The project owners are dominated, dependent actors, with very little influence, very limited power, and often neutral reactions to the project's objectives. Their role is primordial in the realization and indispensable for the success of the project. However, they converge weakly with the other actors and are far from the primary objectives. Also, the hierarchical chain of power managing the project negatively influences their missions.

CONCLUSION

This article has addressed the problem of the heritage of the Rhumel Gorge in Constantine, Algeria, by evaluating the game of actors involved in the rehabilitation project of the tourist trail. The objective was to elucidate, within the framework of a prospective vision, the reasons for the failure of the project of putting in tourism the gorges. The research mobilized the Mactor method to evaluate the set of actors in question.

The results of this study show that the project has demonstrated a diversity of actors who, subdivided by scale and prerogatives, aim at a multitude of objectives without having visible strategies. The results also revealed several points where behaviors, attitudes and actions are variable.

The actors with an important power relationship: the financial actor, the project owner, and the delegated project owner are mainly mobilized in the objectives related to the success of the event Constantine Capital of Arab Culture despite its completion. They are interested in the political support of the project, because of its financial registration and the obtaining of an annual budget requiring consumption. Their mobilization is average on the objectives related to the revaluation of the image of Constantine and the revitalization of the tourist attractiveness of the gorges. On the contrary, the actors whose power ratio is low: the communal popular assembly, the associations, and the population are strongly involved and concerned by a great number of objectives linked in particular to the regeneration of the tourist dynamics of the gorges. The latter has very limited prerogatives in the elaboration of a territorial strategy.

The Mactor method of stakeholder analysis has proven to be effective in many areas of research. Its major limitation lies in the difficulty of estimating the time needed to collect and verify the data resulting from the survey work. The problem lies in the coherence of the actors' statements, and the validity of the results is relative to the reliability of these statements.

Finally, let us say that this study constitutes a basis for the construction of several future scenarios based on the reduction of dependencies, the reinforcement of convergences, and the balance of power relationships between the actors, to facilitate decision-making and to succeed in the project of rehabilitation of the tourist path and in return the patrimonialization of the Rhumel gorges. It also contributes to the elaboration of strategies of actors intervening in other projects of taking charge of heritages in Constantine.

ABBREVIATIONS

ALESCO	Arab Organization for Education, Culture and Science
CDT	Tourists PATH
MDF	Ministry of Defense
DTA	Directorate of Tourism and Handicrafts
WALI	The highest authority representing the State in Constantine.
CAN- ALGERIE	Franco-Algerian Engineering Group
CACT	CACT design office
EPE- SAPTA	Public Economic Enterprise-Société Algérienne Ponts Travaux D'arts
CCCA	Constantine Capital of Arab Culture
IMSRN	Engineering of Ground Movements and Natural Hazards
CTTP	Technical Control of Public Works
SEPT	design office SEPT

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