

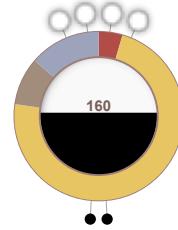
projet MEMORIA: <http://memoria-dev.gamsau.archi.fr/projet/objectives.php?lang=fr>  
avec soutien de: <http://memoria-dev.gamsau.archi.fr/projet/support.php?lang=fr>

## process

13/11/2024

full version

workflow diagram: [http://memoria-dev.gamsau.archi.fr/is/enter.php?show=process&id=160&\\_op=set](http://memoria-dev.gamsau.archi.fr/is/enter.php?show=process&id=160&_op=set)  
process as activities' proportion ring: <http://memoria-dev.gamsau.archi.fr/is/analyse.php?viz=1&v=160>



title > citadelle Saint-Nicolas, subdivided into 5 elements, chronographs

remarks >

The above analysis is the second phase of a study of the evolution of Fort Saint-Nicolas in Marseille, based on the conservatory's report (I. Guérin). It stems from a lack of satisfactory level of clarity of the chronographs - in particular the diachrogram - representing the understanding of the evolution of the fort as a whole. The premise of this second wave was that the level of understanding of the diachronic analysis presented in the report in question would not depend on the way in which the object was mentally subdivided by the person analysing the text. In other words, breaking the object down into separately analysed structures will not alter the analyst's understanding of the object's evolution. This is why the fort was 'broken down' into five zones that were analysed independently of each other. Another objective was to check the legibility of the chronographs.

date of the beginning > 2024-09-17 (conceptual modelling)

date of the end > 2024-10-09 (schematic representations)

last update > 2024-11-13 15:22:53

inputs > 1 input

[258] - diachronic tables (Fort Saint-Nicolas, Marseille) - the fort considered as a whole

sources > 47 individual sources (stored in 15 records)

[158] - « Expertise Patrimoniale du Fort d'Entrecasteaux », Notice patrimoniale,  
[159] - Fort d'Entrecasteaux, Diagnostic Patrimonial,  
[160] - Plan de la Citadelle de St. Nicolas pour servir à son Projet (1701)  
[161] - Plan de la citadelle de Marseille, de Saint-Victor et de quelque partie de la ville : [dessin] / par Desjardins suivant le desseing de M. de Clerville com.re gn.al des fortifications de france (1663)  
[162] - L'Entrée du port de Marseille. ( au premier plan J. Vernet dessinant) (1754)  
[163] - Minute du plan manuscrit de Marseille : 2ème quart, feuille supplémentaire du fort Saint-Nicolas. - [1801-1808]  
[164] - Citadelle Saint-Nicolas - Les travaux exécutés en 1664 [SHD]  
[165] - Vue aérienne de Marseille - le Vieux Port, la citadelle, [1923-11-06]  
[166] - Vue aérienne de Marseille - le Vieux Port, la citadelle, [1931-10-11]  
[167] - Vue aérienne de Marseille - la citadelle, [1960-01-01]  
[168] - Vue aérienne de Marseille - le Vieux Port, la citadelle, 1960-05-27  
[169] - [Plan d'une partie de la Ville et du] Port de Marseille [avec la] citadelle, Abbaye St. Victor, [le] Fort St.Jean [et le] Nouvel Arsenal (1685)  
[170] - Plan de la citadelle St. Nicolas, et fort St. Jean de Marseille [1752]  
[171] - Maquette du fort Saint-Nicolas en XVII.  
[172] - list of sources used to enrich analysis process > 160 - citadelle Saint-Nicolas subdividen into 5 elements, chronographs

outputs > 4 outputs

 [259] - diachronic tables (Fort Saint-Nicolas, Marseille) - the fort subdivided into 5 components  
 [261] - citadelle Saint-Nicolas subdividen into 5 elements, chronographs  
 [262] - citadelle Saint-Nicolas subdivided into 5 subparts (schemas PPTX)  
 [265] - diagrams showing the breakdown of Fort Saint-Nicolas into separately analysed components

outputs modified by the process > -

compositions >

publications > 1 publication

 [23] - Diachrograms – a theoretical framework for the modelling and analysis of a heritage artefact's diachronic evolution. Extension of the model and of the corresponding visual formalism.

expertise > -

preceding processes > -

infrastructure > 1 infrastructure  
[7] - VPN Campus DR12 - Virtual Private Network - Campus DR12; activity concerned: U4

instruments > 2 instruments  
[70] - 2D display equipment > Écran tactile Dell 24: P2418HT  
[103] - computer > DELL Precision 7740 (Astrolabe)

software > 6 software  
[1] - word processor - Microsoft Word  
[19] - presentation software - Microsoft PowerPoint  
[47] - 2D computer graphics - PaintShop Pro  
[164] - Web search engine - Google Search  
[167] - Web browser - Firefox  
[176] - data management - phpMyAdmin

individuals (creators) > 2 individuals  
Dudek Iwona > UPR2002 MAP  
Dudek Iwona > UMR 3495 CNRS/MC MAP

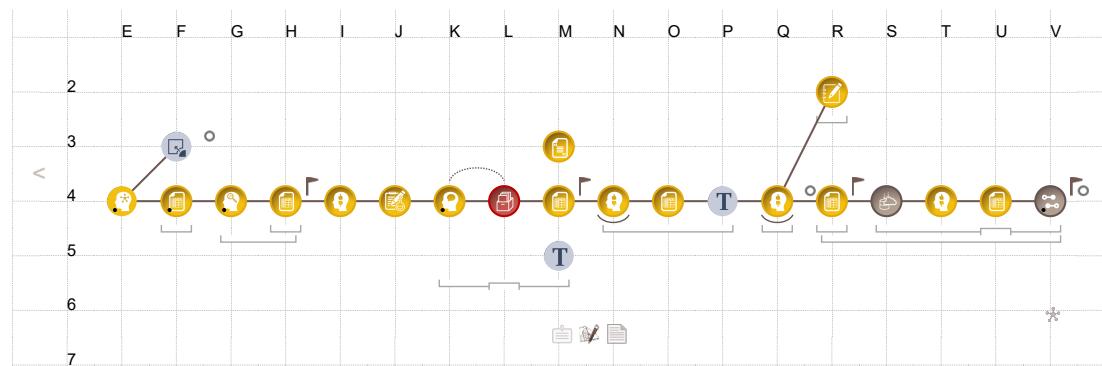
organisations (creators) > -

project(s) > 1 project  
[16] Citadelle - Accord de coopération MAP/Citadelle de Marseille  
30/04/2024 - 30/04/2029

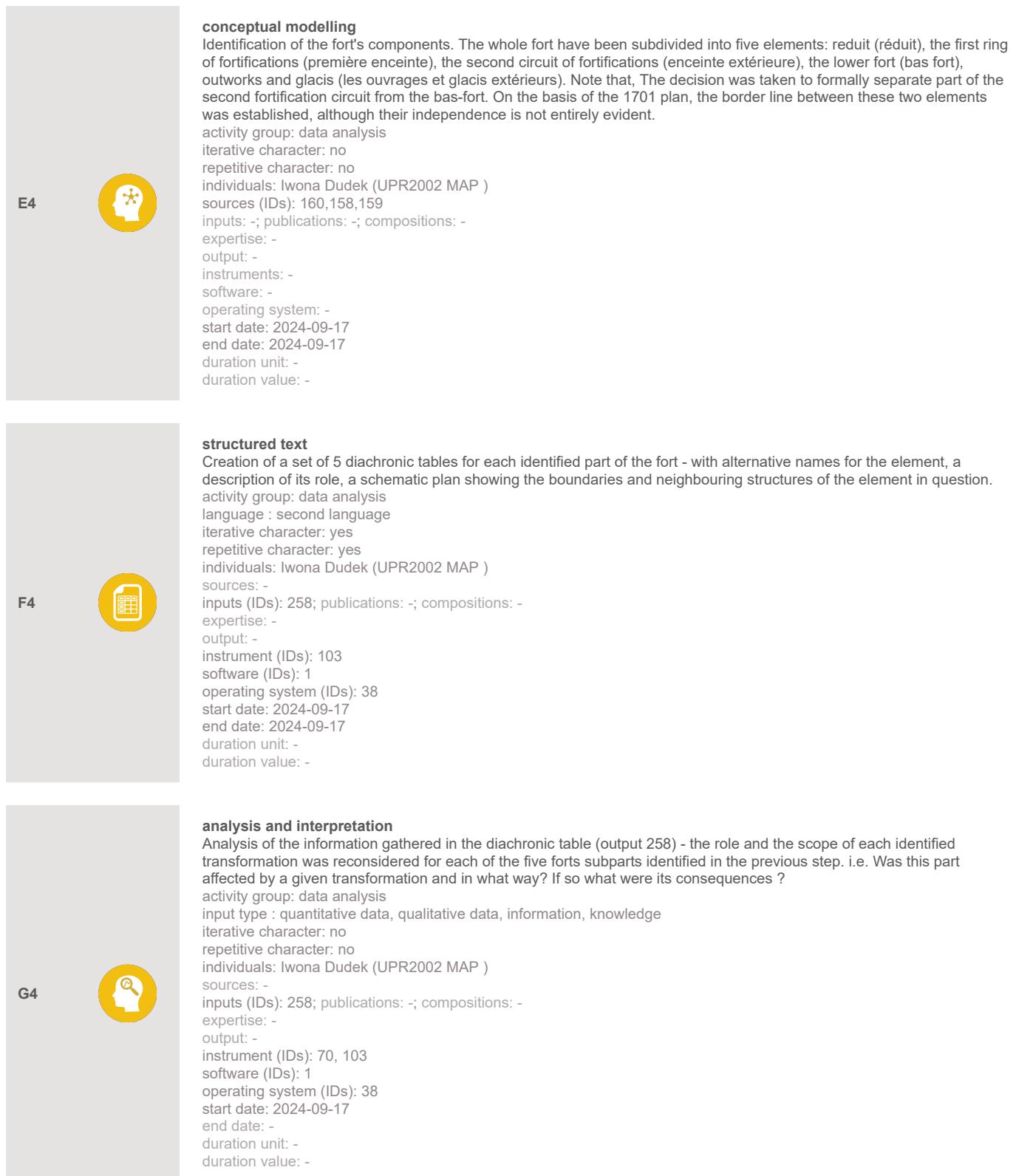
OS(s) > 1 operating system  
[38] Windows 10, Microsoft Windows

**Memoria workflow diagram:**

160 - citadelle Saint-Nicolas, subdivided into 5 elements, chronographs



## Memoria workflow diagram:



J4



#### verification

Verification of the content of the five diachronic tables. A lot of ambiguous or incomplete information was found in the documents. It was decided that a re-analysis of both initial documents was necessary. The spatial granularity of the first analysis proved insufficient to serve as a basis for the second stage.  
activity group: data analysis  
verification means : logical  
evidence types : logical deduction, testimonial evidence  
iterative character: no  
repetitive character: no  
individuals: Iwona Dudek (UPR2002 MAP )  
sources: -  
inputs: -; publications: -; compositions: -  
expertise: -  
output: -  
instrument (IDs): 103  
software (IDs): 1  
operating system (IDs): 38  
start date: -  
end date: -  
duration unit: -  
duration value: -

J4



#### research design

Analyse the conservation documentation and all the documentation provided by I. Guérin. If necessary, continue the search for new documents that could shed light on the missing elements of knowledge. All changes reported in the documents should be identified and dated one by one. Clearly indicating the type, role and importance of the changes made to each of the five elements identified. A list of contextual information and sources consulted should be drawn up and kept up to date. The objective is the better understanding of the evolution of the fort Saint-Nicolas in Marseille without any prior consideration of the practical application or use of this knowledge.

activity group: data analysis  
research methods : non-experimental methods  
research type : fundamental research  
research approach : qualitative approach  
corpus extent : single case study  
research paradigms : descriptive study  
iterative character: no  
repetitive character: no  
individuals: Iwona Dudek (UPR2002 MAP )  
sources: -  
inputs: -; publications: -; compositions: -  
expertise: -  
output: -  
instruments: -  
software: -  
operating system: -  
start date: -  
end date: -  
duration unit: -  
duration value: -

G4



#### analysis and interpretation

analysis of the documentation: - identification of the transformations (types) and their dating - assessment of the accuracy of the dating (time point, closed or open interval, etc.), - identification of the changes introduced into the object as a result of a given transformation - the state of the object, the nature of the transformation - changes in function, form and structure, - identification and dating of relevant elements of the context (general and direct).

activity group: data analysis  
input type : quantitative data, qualitative data, information, knowledge  
iterative character: no  
repetitive character: no  
individuals: Iwona Dudek (UPR2002 MAP )  
sources: -  
inputs: -; publications: -; compositions: -  
expertise: -  
output: -  
instruments: -  
software: -  
operating system: -  
start date: -  
end date: -  
duration unit: -  
duration value: -

L4



#### state of the art

In cases, where the information found in reports was not sufficiently precise or clear, additional primary and secondary sources available on the internet were also consulted: historical cartography (Gallica-BnF, geoportal IGN), historical photographs (Remonter le temps - IGN), historical background studies and archaeological documentation (Atlas archéologique - INRAP) ...  
activity group: data collection and acquisition  
exploration mode : human Internet exploration  
iterative character: no  
repetitive character: no  
individuals: Iwona Dudek (UMR 3495 CNRS/MC MAP )  
sources: -  
inputs: -; publications: -; compositions: -  
expertise: -  
output: -  
instrument (IDs): 103  
software (IDs): 167, 164  
operating system (IDs): 38  
start date: -  
end date: -  
duration unit: -  
duration value: -

M4



#### structured text

saving the information in the corresponding diachronic table(s) - modifying existing data  
activity group: data analysis  
language : second language  
iterative character: no  
repetitive character: no  
individuals: Iwona Dudek (UPR2002 MAP )  
sources: -  
inputs: -; publications: -; compositions: -  
expertise: -  
output: -  
instrument (IDs): 103  
software (IDs): 1  
operating system (IDs): 38  
start date: -  
end date: -  
duration unit: -  
duration value: -

#### Milestone

The sequence of activities repeated for each identified transformation, first for [Guérin 2015] then [Guérin 2022].

M3



#### referencing

referencing the information gathered in the diachronic table  
activity group: data analysis  
automation degree : manual process  
iterative character: no  
repetitive character: no  
individuals: Iwona Dudek (UPR2002 MAP )  
sources: -  
inputs: -; publications: -; compositions: -  
expertise: -  
output: -  
instrument (IDs): 103  
software (IDs): 1  
operating system (IDs): 38  
start date: -  
end date: -  
duration unit: -  
duration value: -

M5



#### **text composition**

text formatting - size and colour of fonts depending on the subject of the description content (form, function, structure, state, ...)  
activity group: finalisation  
iterative character: no  
repetitive character: no  
individuals: Iwona Dudek (UPR2002 MAP )  
sources: -  
inputs: -; publications: -; compositions: -  
expertise: -  
output: -  
instrument (IDs): 103  
software (IDs): 1  
operating system (IDs): 38  
start date: -  
end date: -  
duration unit: -  
duration value: -

N4



#### **verification**

verification and correlation of the information contained in the various tables - in the following order: reduit (réduit), the first ring of fortifications (première enceinte), the second circuit of fortifications (enceinte extérieure), the lower fort (bas fort), outworks and glacis (les ouvrages et glacis extérieurs).  
activity group: data analysis  
verification means : logical  
evidence types : logical deduction, testimonial evidence  
iterative character: no  
repetitive character: no  
individuals: Iwona Dudek (UPR2002 MAP )  
sources: -  
inputs: -; publications: -; compositions: -  
expertise: -  
output: -  
instruments: -  
software: -  
operating system: -  
start date: -  
end date: -  
duration unit: -  
duration value: -

O4



#### **structured text**

completion of the information contained in the various tables  
activity group: data analysis  
language : second language  
iterative character: no  
repetitive character: no  
individuals: Iwona Dudek (UPR2002 MAP )  
sources: -  
inputs: -; publications: -; compositions: -  
expertise: -  
output: -  
instrument (IDs): 103  
software (IDs): 1  
operating system (IDs): 38  
start date: -  
end date: -  
duration unit: -  
duration value: -

P4



#### **text composition**

improving the readability and clarity of the text in the table (e.g. different background colours for different types of transformations)  
activity group: finalisation  
iterative character: no  
repetitive character: no  
individuals: Iwona Dudek (UPR2002 MAP )  
sources: -  
inputs: -; publications: -; compositions: -  
expertise: -  
output: -  
instrument (IDs): 103  
software (IDs): 1  
operating system (IDs): 38  
start date: -  
end date: -  
duration unit: -  
duration value: -

**Q4**

**verification**

re-verification of the consistency of the information contained in the separate tables - especially the dating  
 activity group: data analysis  
 verification means : logical  
 evidence types : logical deduction, testimonial evidence  
 iterative character: yes  
 repetitive character: yes  
 individuals: Iwona Dudek (UPR2002 MAP )  
 sources: -  
 inputs: -; publications: -; compositions: -  
 expertise: -  
 output: -  
 instruments: -  
 software: -  
 operating system: -  
 start date: -  
 end date: -  
 duration unit: -  
 duration value: -

**Output**

259 - diachronic tables (Fort Saint-Nicolas, Marseille) - the fort subdivided into 5 components

**R4**

**structured text**

Insertion of the description of source documents and contextual elements (local and global context) in the database 'chronograph\_sandbox' using the 'Chronographs' interface (yca version).  
 activity group: data analysis  
 language : second language  
 iterative character: yes  
 repetitive character: yes  
 individuals: Iwona Dudek (UPR2002 MAP )  
 sources: -  
 inputs: -; publications: -; compositions: -  
 expertise: -  
 output: -  
 instrument (IDs): 70, 103  
 software (IDs): 167, 1  
 operating system (IDs): 38  
 start date: 2024-10-02  
 end date: 2024-10-02  
 duration unit: -  
 duration value: -

**Milestone**

The activity was repeated for each source referenced and context elements for each of the five elements of fort identified.

**T4**

**verification**

After each transformation-stage couple had been fed in, the diagrams (diachrogram, variogram) were checked for their correctness - both because of implementation bugs and to ensure that the understanding of the evolution had been correctly reflected.  
 activity group: data analysis  
 verification means : logical  
 evidence types : logical deduction  
 iterative character: no  
 repetitive character: no  
 individuals: Iwona Dudek (UPR2002 MAP )  
 sources: -  
 inputs: -; publications: -; compositions: -  
 expertise: -  
 output: -  
 instrument (IDs): 103  
 software (IDs): 167  
 operating system (IDs): 38  
 start date: 2024-10-03  
 end date: 2024-10-09  
 duration unit: -  
 duration value: -

**U4**



#### **structured text**

If any errors in the diagrammatic representations were found during the verification, the corrections were made manually in the database using the PhpMyAdmin interface.  
 activity group: data analysis  
 language : second language  
 iterative character: no  
 repetitive character: no  
 individuals: Iwona Dudek (UPR2002 MAP )  
 sources: -  
 inputs: -; publications: -; compositions: -  
 expertise: -  
 output: -  
 instrument (IDs): 103  
 software (IDs): 176, 167  
 operating system (IDs): 38  
 start date: 2024-10-03  
 end date: 2024-10-10  
 duration unit: -  
 duration value: -

**F3**



#### **addition of elements**

Drawing diagrams illustrating the theoretical decomposition of a fort into its constituent elements on a base of: - the schemas of the Entrecasteaux fort [I. Guérin 2015] - the plan of the fort [Plan de la Citadelle de St. Nicolas pour servir à son Projet, 1701 BnF].  
 activity group: finalisation  
 iterative character: no  
 repetitive character: no  
 individuals: Iwona Dudek (UPR2002 MAP )  
 sources: -  
 inputs: -; publications: -; compositions: -  
 expertise: -  
 output: -  
 instrument (IDs): 103  
 software (IDs): 47, 19  
 operating system (IDs): 38  
 start date: -  
 end date: -  
 duration unit: -  
 duration value: -

**Output**

265 - diagrams showing the breakdown of Fort Saint-Nicolas into separately analysed components

**R2**



#### **recording and documenting**

noting information about problems with the interface  
 activity group: data analysis  
 language : second language, mother tongue  
 automation degree : manual process  
 iterative character: no  
 repetitive character: no  
 individuals: Iwona Dudek (UPR2002 MAP )  
 sources: -  
 inputs: -; publications: -; compositions: -  
 expertise: -  
 output: -  
 instruments: -  
 software: -  
 operating system: -  
 start date: -  
 end date: -  
 duration unit: -  
 duration value: -