

Projecting decisions.

The architectural design practice in the folds
of decision-making processes

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Summary

The decision-making processes of complex urban and architectural transformations – dependent on several implications and actors – have a high degree of uncertainty, in the process itself and in the outcomes. However, this kind of complexity is often accounted as a linear process of subsequent steps and decisions, from the cause to the effect, from the project to its execution. Since projects rarely move forward – undisturbed and without detours – to buildings, how is it possible instead to take account of their diversions, as constituent elements of the decision-making process? In order to witness the *folds* of architectural design, a shift in perspective makes it possible to grasp and to trace it in a pragmatic way, by following the practice.

The opportunity to unfold an architectural design process occurred for me in the involvement – over two years – in the project team of the *Masterplan* of Politecnico di Torino, an ongoing transformation process of its urban campuses, to outline alternative transformation strategies, expansion scenarios and qualification processes. Shifting the attention from the material products of architecture – such as buildings – to the processes of emergence, deviation, negotiation and finalization of projects, this work traces a taxonomy of several actors interacting in a complex process. Since not only drawings, models, and projects, but also note taking of project team's members, reports, meetings, e-mail and whatsapp exchanges, are examined – exploring the pragmatic connections between these practices and their outcomes – this research problematizes an internal and situated perspective, which it would not have been possible to report without having been *in the folds* of the process.

Consequently, the main aim of the research is an investigation – from the inside – on the role of some architectural design practices in relation to the ongoing decision-making processes, by exploring the connections between these practices and their results and effects. The hypothesis is that design documents played a

role in the decisions taken, and allowed, in certain problematic moments, to overcome the conflicts by negotiating different positions and needs.

In deepening these aspects, the thesis follows two different strands of research. On the one hand, by positioning within a disciplinary debate about the definition of architectural design research as a scientific field, through an investigation on practices informed by Science and Technology Studies, Actor Network Theory and ethnographies of architecture. On other hand, with an interdisciplinary interest towards methods of analysis on decision-making processes, with particular reference to the entities involved, their role in the process and their interactions, as in Soft Operational Research and Problem Structuring Methods.

In this, the main research question is addressed through the specification and deepening of several subtasks in which the overall objective is articulated. First of all, the thesis aims at following and narrating the process to capitalize an operative experience – starting from an internal point of view – in *theoretical* and discussable terms, to be reconducted to the above-mentioned intertwining among disciplines. Secondly, a further purpose in pursuing the exploration of the role of architectural design practices is defining a *methodology* to grasp architectural design practice in order to unfold and to trace the entities involved, their role and their interactions and to link them to the effects in the decision-making process. Finally, an ultimate end of this research is to provide an *operative tool* as a necessary condition to fully understand the significance of the research itself.

The research's aims – following the practice – are pursued by defining a mapping methodology of the process as a sequence of actions and effects with recognizable relations. Starting from it and trying to capture events that gain specificity in their own moments of occurrence, it seeks to define if – following and tracing the project operations in a process observed at the scale of daily practice – it is possible to identify some crucial points, operative strategies and tactics as they influence the decision-making level. Furthermore, reflections emerge on the role of architectural design practices in both embodying the entities unfolded in the process, and conducting instrumentally to realizable courses of action, in *projecting decisions* on the basis of spatialization.

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Introduction

Urban and architectural transformations, once finalized, are often accounted as linear processes of subsequent steps and decisions, from the cause to the effect, from the project to its execution. “On the plate we put 200 million [...]”, “Municipality, Region, [...] must be aware that in 6 years everything changes”. These and other slogans that tell, just over two years ago, the transformation of Politecnico di Torino and its urban campuses. A success story, about a lot of money and decisive wins; however, a story that basically recounts of the arrival points, and where stumbling blocks, deviations and specific circumstances of this apparently linear path are not traced. Linearity appears when complexity is flattened in narrating the process, despite the high degree of uncertainty in the process itself and in the outcomes, on one side, and the fact that the decision-making processes of complex urban and architectural transformations are dependent on several implications and actors, on the other. Since projects rarely move undisturbed and without detours towards buildings, this research tries to take into account and to trace precisely these trajectories as constitutive elements, investigating the role of design practice and its products in the process. Working for two years in the project team of the Politecnico di Torino’s *Masterplan* allows me indeed to unfold and recount another story, with an internal and situated perspective. And to report how those 200 million up to before were not necessarily destined for the transformation of the campuses; as no one remembered more than the nearly 80,000 square meters of possible expansion; or really realized that being a community of 40,000 people means representing requests of a “city within the city”.

Shifting the attention from the material products of architecture – such as buildings – to the processes of emergence, deviation, negotiation and finalization of projects, this work traces a taxonomy of several actors interacting in a complex process. Examining not only the traditional designs, models and products of architectural practice, but also the notes of the members of the project team, the reports of the meetings, the exchanges of e-mails and whatsapp, and exploring the

pragmatic connections between these practices and their outcomes, this research aims to unfold and tell an internal and situated perspective, which it would not have been possible to report without having been *in the folds* of the process. Consequently, the main aim of the research is an investigation – from the inside – on the role of some architectural design practices in relation to the ongoing decision-making processes, by exploring the connections between these practices and their results and effects. The hypothesis is that design documents played a role in the decisions taken, and allowed, in certain problematic moments, to overcome the conflicts by negotiating different positions and needs. This means claiming that not – or at least not only – a lot of money, neither a huge availability of square meters are enough to start a transformation; instead there are recurring forms of practice in the projects themselves and in the way of acting and performing through them, that restarted a substantially blocked process and that consequently, if identified, can result likewise effective in future project circumstances. The research therefore aims to identify and understand what these strategies are, and how they perform in *projecting decisions*.

Research aims and contributions

In deepening these aspects, the thesis follows two different strands of research. On the one hand, by positioning within a disciplinary debate about the definition of architectural design research as a scientific field, through an investigation on practices informed by Science and Technology Studies, Actor Network Theory and ethnographies of architecture. On other hand, with an interdisciplinary interest towards methods of analysis on decision-making processes, with particular reference to the entities involved, their role in the process and their interactions, as in Soft Operational Research and Problem Structuring Methods. The first body of literature informed by STS and ANT reveals architectural design as a complex and ongoing practice, understood not as attributed or dependent on an intentional subjectivity – the architect, the client, the users – but co-produced through hybrid actor-networks that relate and evolve in these relations through time. In this sense, the outcomes of architectural design practices don't follow a linear and predictable path; instead, they depend on the above-mentioned complex interactions among entities, that can be investigated in the everyday practices of architects that precisely embed these – usually hidden – interactions. While ethnographies of architectural studios over the last two decades emerge as a research problem, in these studies decisions and effects on a large-scale and multi-sited complexity of projects – as the case of the *Masterplan* in a two-years engagement – are rarely taken into account. Moreover, the internal perspective as an architect, besides being an observer, sets out a shift in positioning from these studies. This kind of complex processes, moreover, in their long-term and urban scale re-shaping, actually call into question the decision-making level – even outside the studio – as the dimension in which effects are reached and can be accounted in the process. Indeed, especially thinking about their performativity – the way they act in the process – projects serve as an agreement – or not – among

parties in the process. The performativity issue opens up then to the decisional dimension of architectural design in urban complex transformation, and to the possibility for the project to reconcile several positions. A PSMs informed approach grasps the complexity of decision-making processes by exploring the mechanisms operating within them, to identify which relationship links the practices through which decisions are addressed to their outcomes. In doing so, PSMs focus on the interactions of people and models in reaching effects, through interventions in which participation and collective interaction among stakeholders is conducted. In particular, strategical approaches in dealing with uncertainties related to the future – as in Strategic Choice Approach interventions – aim at tackling complex urban scale transformations.

These two literatures have not yet come together to trace, account and *unfold* architectural design practices from within the decision-making process, that is the focus of this research. Therefore, the aim of the work is to explore the possible intersection of architectural design practice studies and decision-making methods, in order to grasp and to answer to the complexity of *projecting decisions* in the process of urban transformations. This intersection is intended as a critical positioning in the potential epistemological conflict between the two literatures: the one with an aim to describe and deeply follow the project practice in the process – in STS-inspired ethnographies of architectural practice – as materialized in socio-technical relations; the other with a will to strengthen human action – in PSMs-oriented interventions – in reaching effects in urban transformations.

Framing architectural design practice in a large-scale and multi-sited process – enlarging the spectrum of action of ANT-inspired ethnography of design, outside the studio – means here focusing on and tracing architectural design in terms of projects, as a set of inscriptions that travels in different tables – whose different levels can be witnessed with an internal perspective – and aims to be approved and subsequently executed. Moreover, by focusing on the project and its travel in decision-making process, the project action is therefore conceived to take place in an exchange system, with different levels of formalization, that cannot be reduced to the scale of the singular intervention – as in the practice of PSMs scholars – in order to be understood and grasped. Therefore, in this research architectural design project demonstrates a decisive power by including most of the diversions that await it in the whole decision-making process, in the lapse between the beginning of document production and the completion of the transformation. Moreover, these inclusions can be reconducted to the spatialization of problems and ways of linking the representation of spatial morphology to the issues and uncertainty to be grasped in the process. As a consequence, I would like to address the possibility of focusing on projects' performativity in reaching effects in their travelling through the whole decision-making process. This study aims then at contributing to ANT and ethnography of design with a further level of interest on the effects of architectural design practices traced through the chains of documents – witnessed from within – that cross a large-scale and multi-sited

process; in doing so, further contributions can be reached in PSMs approaches while enlarging the perspective to a socio-technical approach, that even allows to overcome the borders of intervention while aiming at grasping and understanding architectural and urban transformations in the whole unfolding of the process. Finally, a further contribution is in reflecting on the role of visual artefacts in the specific practice of architectural design. Indeed, on the one hand, STS-inspired accounts define those artefacts as intermediaries, constitutive of practices of both support and communication; on other hand, PSMs methodologies highlight the centrality of human agency, with an instrumental view of models as tools for mapping uncertainties about the future and for strategizing. In this research, further reflections emerge on the role of architectural design practices in both embodying the entities unfolded in the process, and conducting instrumentally to realizable courses of action, on the basis of spatialization.

In operative terms, this research – following the practice – traces the materialization of sequential design operations as they perform, describing their implications in the decision-making process. Starting from it and trying to capture events that gain specificity in their own moments of occurrence, it seeks to define if – following and tracing the project operations in a process observed at the scale of daily practice – it is possible to identify some crucial points, operative strategies and tactics as they influence the decision-making level. In this direct observation of the process the effort is then to pay attention to the ordinary and daily practices of architectural design and the related ways in which decisions are taken on real process through the interactions on projects, in their set of relations that would not otherwise be possible to see without a direct involvement in the process. The strategy of this thesis is then to follow architectural design practices and actions as they proceed from being produced and exchanged, through the decision-making process, until they are validated – and are then going to be executed. In this, the main research question is addressed through the specification and deepening of several subtasks in which the overall objective is articulated.

First of all, the thesis aims at following and narrating the process to capitalize an operative experience – starting from an internal point of view – in *theoretical* and discussable terms, to be reconducted to the above-mentioned intertwining among disciplines. This means to understand and explain – moving to a reliable perspective – how relations emerge among entities, in a not at all given way nor linear or clear. This perspective makes it possible to show the relations between documents, actions and decisions, in a process that could have seemed linear thus is actually made up of a series of conflicts, negotiations and deviations of which the internal perspective allows to be accountable. The performativity of architectural design devices and models is then a fundamental aspect of this study, and projects – as documents and inscriptions – result as the main object of observation and analysis. Indeed, the documents produced throughout the process are concrete traces of the actions carried out and their links; moreover, they

embody in their paths and transformations all the interactions among entities, the conflicts and negotiations, and finally the agreements occurred in the process.

Secondly, a further purpose in pursuing the exploration of the role of architectural design practices is defining a *methodology* to grasp architectural design practice in order to unfold and to trace the entities involved, their role and their interactions and to link them to the effects in the decision-making process. This means to identify a tool for description of the process, in order to trace it, make it shareable and return it in as general terms as possible. Thinking about projects and architectural design practices as something able to produce effects and act on reality, the aim is to trace – even graphically – their movements, their dynamics and actions in the system, in order to understand the chain of events that leads, or not, a project have effects in the decision-making process. In terms of methodology, therefore, there is here an interest in a visualizable theory of design, about what projects actually do: by investigating their performativity while circulating in a decision-making process, it means indeed to pragmatically reconstruct their effects. Even if it is impossible to foresee – and consequently to theorize – the outcomes of processes, it is instead likely to define a conceptual scheme that allows to understand the dynamics, giving an account of the different variables that can influence the outcomes, with an aim of *projecting decisions* – bringing forward effects in decision-making process through the projects produced.

Finally, an ultimate end of this research is to provide an *operative tool* as a necessary condition to fully understand the significance of the research itself. A practice-based research as the one carried out in this thesis aims indeed at mapping, analysing, tracing and investigating something to be even repeated in practice, then a creative artefact is among the main intended contributions to enlarge knowledge on the specific competence of designers in the decision-making process. This means not to consider all the points of view and to explicit the complexity of the world, but the ones linked to the production of projects, in a limited perspective that is the basis on which an interactive tool is produced – on the basis of the above-mentioned methodology to investigate the role of architectural design practices in decision-making processes.

Research methodology and case study

The interest of this thesis is therefore to reconstruct a framework of actions that defines the relationship between the design practices undertaken, the spatial dimension of the problem and the decisions taken in the process. To investigate the role of architectural design practices in the decision-making process, this research carries out empirical research inspired by ethnography; actually, it adopts an ethnographic perspective, without exactly conducting an ethnography. The direct participation and observation of the process – paying attention to the ordinary and daily design practices and the related decision-making processes –

aim to highlight architectural design actions in pragmatical terms, tracing how models and projects are produced, negotiated and disseminated. The challenge here is to methodologically establish researcher's position, as part of what is studied, without missing this embodiment in practice – instead emphasizing its specificities. In the research I use a qualitative approach to the collection and analysis of heterogeneous data – drawings, models, projects, notes, reports, even exchanges via e-mail or whatsapp. Starting from the collected data, the analysis does not purpose to conceptualize the architectural practice, but to reconstruct it and to retrace its concrete operations, how they take place and how they become meaningful, producing effects in the process. Moreover, the fact of operating on two levels, on practice and on observation of practice is a crucial point in this work; for this reason objectivity and generalizability cannot lie in the perspective, which is necessarily subjective, but in the method with which I interpret the data and the practice itself. The act of structuring the ways of recording and formalizing the work is then precisely the methodological object of the research, with the expected outcome of an operative tool – as a creative artefact.

I had the opportunity to research and unfold an architectural design process in this way, since I was involved over two years – from September 2016 to November 2018 – in the project team of the *Masterplan* of the Politecnico di Torino urban campuses. Indeed, after being a key player in the transformation processes of some urban sectors, in recent years there was a slowing down and some projects have stalled. To address these difficulties, the University Bodies activated in 2016 the *Masterplan*, to outline alternative transformation strategies, to define expansion scenarios and to direct qualification processes for existing spaces. The selected case is being implemented during the research held in this thesis, then provides an opportunity to follow architectural design practice “in-the-making”. The *Masterplan* case study appears in itself to be of interest and relevance, since it is established as an experimental practice that interacts with the more traditional technical offices of the university to unlock the process of development of Politecnico di Torino's urban campuses. Nevertheless, it provides a specific contribution by exploring from within the travel of design practices as they relate to the decisions taken in the process, with implications in terms of space. In this sense, the model of action aimed in this research can be intended as a model in four dimensions – a space as it changes through time – of the spatialized strategies, in this case, of the *Masterplan* process. Finally, being a repository of several practices, this thesis provides also an account of a complex stratification of decisions and actions, which with different degrees of effectiveness, contribute to the trigger of the transformation. Reconstructing the development of a decision and/or a group of decisions – in which each project is the result of mediation between entities with specific outcomes – also means placing in hierarchy the multiplicity of initiatives that, operating on a conflictual terrain, contribute to the construction of the process. This action therefore allows, in part and ultimately, also to return and reconstruct a result in the action itself that is not simply related to negotiation issues. Indeed, something more and equally important is to be

sought, because it literally builds and shapes in the process; therefore a “positive” content, of architecture and architectural design, can be envisaged as a performative value for the construction of space – and not only in terms of decision-making and negotiations.

Plan for the argument

To meet such aims and objectives and to answer these questions, the thesis is structured in three parts and seven chapters. The first part establishes the theoretical framework for studying and interpreting architectural design practice *in the folds* of decision-making processes. The second part relates the research methodology through mapping the process of the selected case-study, that is here introduced. The third part empirically unfolds the process through selected paths to which the mapping methodology is applied.

Thus, this study poses the problem of *projecting decisions*, that is exploring the role of project – and projects – in the decision-making processes of complex urban transformations. Then, towards tackling the question of the role of architectural design practices in the decision-making process, I turn to two different bodies of literature. In the first part, I start reviewing these literatures by looking at the “running lab” of architectural design, that means accounting pragmatically the whole project process and practice, in order to trace and to follow the actions that finally leads to the project realization. Then, I focus on the decision-making process side of architectural design, by investigating if and how project practice has been explored and deepened in terms of negotiation.

The first one (chapter 1) comes from studies on architectural design, informed by STS and ANT perspectives and by ethnographic approaches on architectural practice. Here I face and contextualize the new wave of interest for studies on practice – in particular in the profession of architecture – with a trend that can be defined as an “ethnographic turn in architecture”. These studies shift the attention from the products of the architecture to the processes of production of projects, and they understand architecture as a collective process of negotiation between human and non-human entities, in a sociotechnical system. In these works, the process is analyzed through observations, with the aim of describing without an aprioristic perspective and of untangling the complexity of reality. This body of literature is relevant for this work, since research is considered in continuous evolution and takes place simultaneously with the process itself, projects are intended as unfolding in the process and can be traced and investigated in a pragmatic way following a daily experienced practice. Nevertheless, a further level of analysis can be added to this literature through this thesis, while focusing on a large-scale and multi-sited process, on the one hand, and looking for the effects of the practices analyzed, on the other.

The second body of literature (chapter 2) derives from decision-making methods, in particular a group of techniques and practices – Problem Structuring Methods – employed for modelling and mapping the structure and nature of a problematic situation to be changed and solved. In defining the role of design practice in the decision-making process as an object of research, the investigation necessarily places itself in an interdisciplinary field, opening to decision-making analysis, and more precisely by investigating methods of structuring complex decision problems, as methods and approaches to manage the uncertainties of the present, in order to achieve effects in the future. Indeed, here the researcher can be involved both as an observer and as a facilitator, with the aim of changing reality and achieving effects, negotiating the conflicting positions of different actors. This body of literature is relevant for the purpose of investigating actions by linking them to their effects, with moreover a central role recognized to models, as tools with performativity in negotiation. Nevertheless, starting from a socio-technical view of processes and overcoming the borders of interventions to deepen the whole unfolding of the process, a further level of analysis can be added to this literature through this thesis, enlarging the perspective of scholars while dealing with architectural and urban transformations.

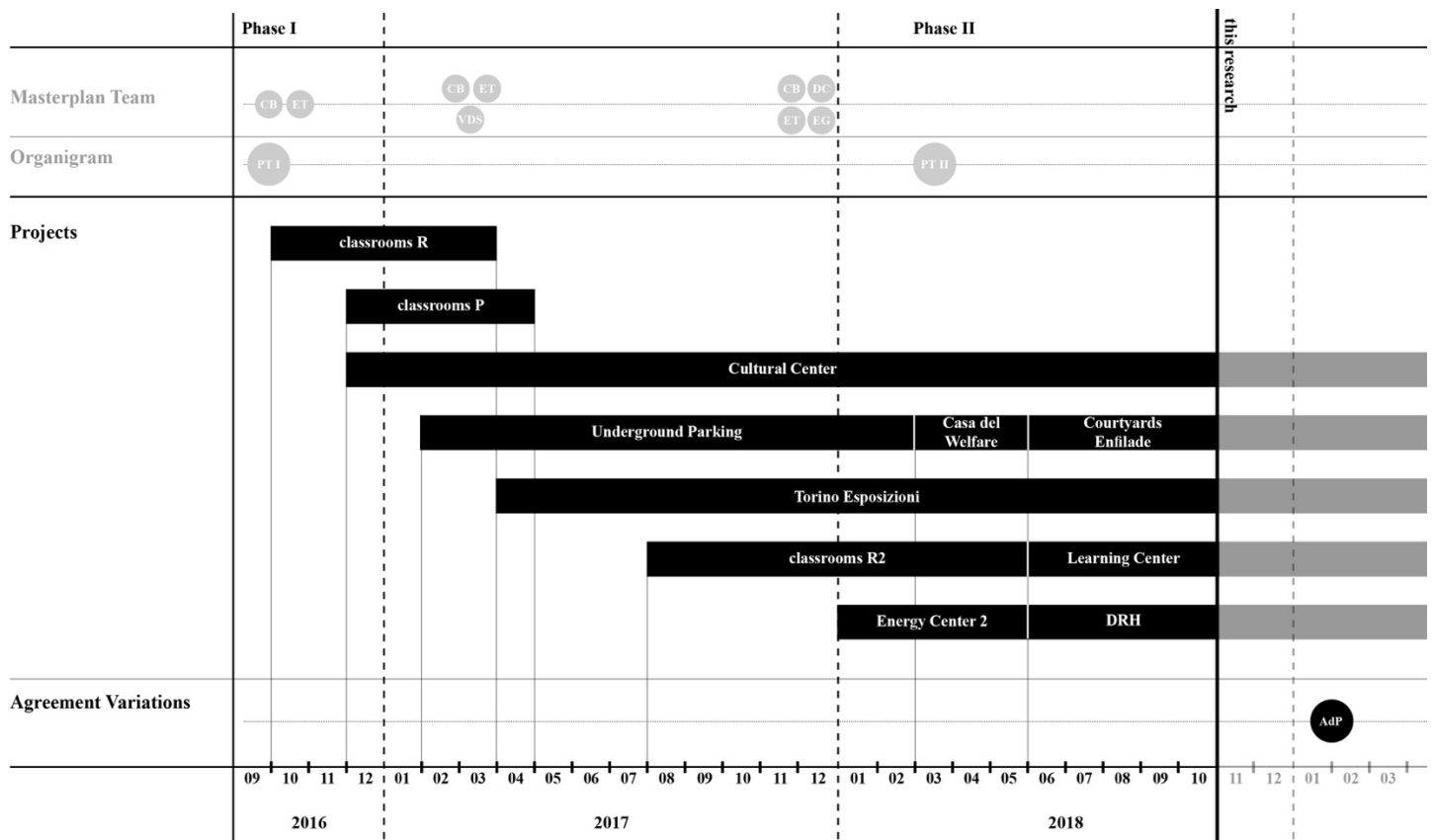
Starting from an operational analysis of the literatures intertwined in this work, the second part clarifies the perspective and specific actions in the research. On the one hand, it is shown the construction of the methodology with which to deal with the case study; on other hand, the case study itself is then introduced in its main characters, substantially highlighting the reasons why it lends itself to this type of investigation, as a multi-sited, complex and ongoing transformation.

The methodology is then described (chapter 3) and clarified in terms of actions carried out to answer the research questions, in an ongoing process in which the researcher is immersed, on the one hand, but whose structure and methods can be analyzed, on the other. Indeed, this research method aims both at analyzing the whole process and at deepening some explorations and paths; in addition, the researcher is alongside an actor and an observer of the process, with the aim of maintaining the designer's perspective and making it stronger and more effective than the goal of producing effects in the world. In summary, the work on the case study starts from a data collection made as an actor-observer, qualitatively, through fieldwork; the data collected are then analyzed with a content analysis, as an analysis specifically designed to extract synthetic data from textual or graphic sources, therefore through mainly documentary sources; finally, a visualization of each of the paths of the process is provided, not only as a translation of the results of the content analysis in a graphic sense, but also as a basis for further considerations through visualization. Moreover, an interactive web visualization of the – previously manually built – maps is proposed, as a tool and creative artefact with a general and replicable use.

The case study is then illustrated in its main features (chapter 4), as a necessary link between the theoretical inputs and the empirical findings. It briefly recounts the main phases and events in the process, in terms of the publicly shared accounts on it – generalist press, deliberations, authorizations, public presentations – considering and maintaining as a time and validity limit that of direct access to the process, therefore that of effective participation to the project team. It summarizes in this sense the main characteristics and key aspects that relates the specific case study to the general aims of the research; moreover, by giving an overview on the process it makes it easier to follow the paths deployed in the subsequent part on empirical findings. The *Masterplan* process has seen the project team engaged on several fronts and actually all the specific projects could potentially be analyzed through the above-mentioned methodology; however, a choice is made to focus on three specific paths, as specific projects' trajectories through which, even taking advantage of some interrelationships, it is possible to draw some stronger conclusions. Moreover, the structure of the subsequent empirical chapters and the framework through which the findings are presented is explained in concluding the chapter.

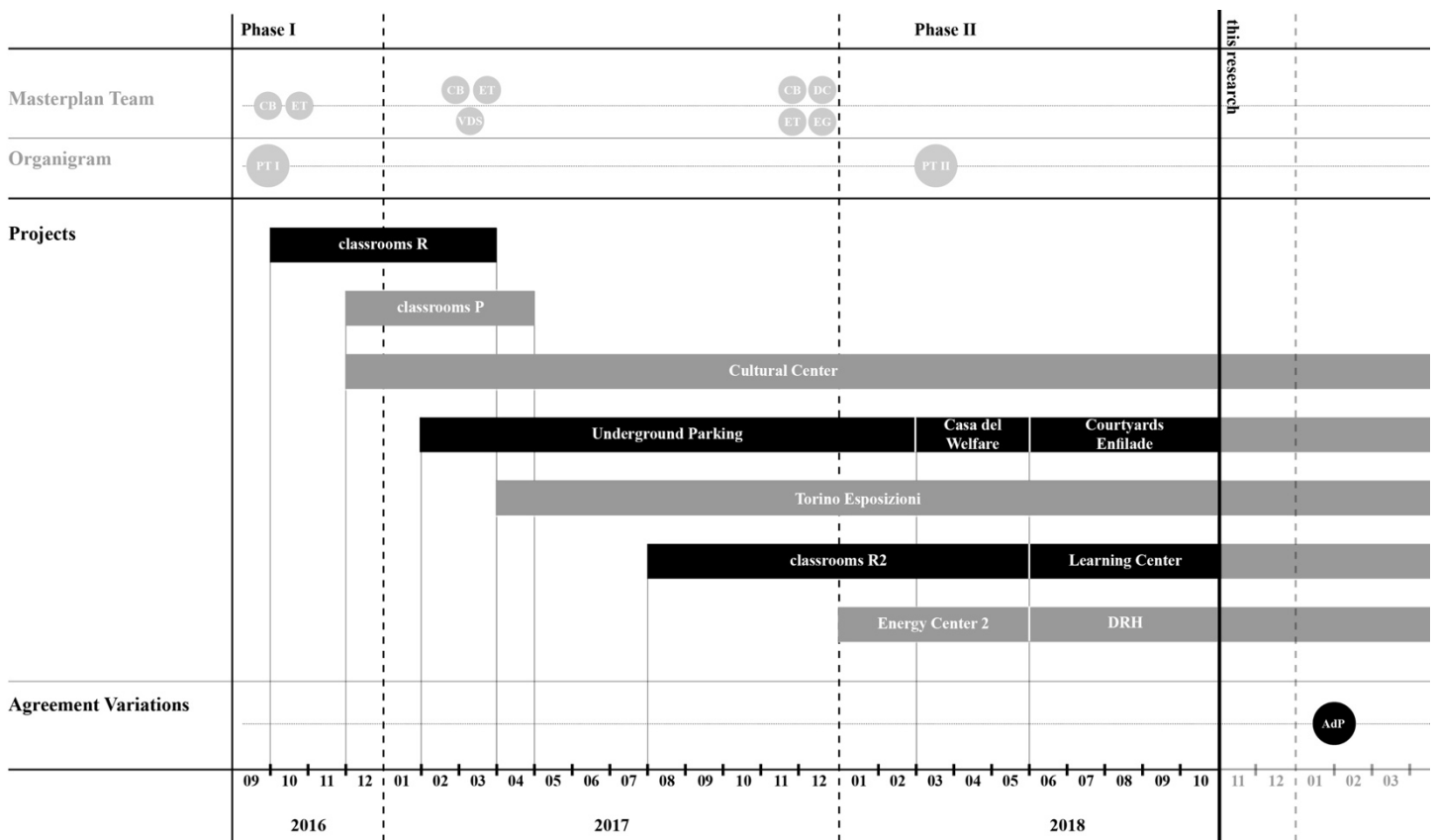
Observing the project as a system in action, the aim of the third part of the research is first of all to trace how the project team performs specific practices to obtain effects. Moreover, mapping, tracing and analyzing the course of action of the project allows to identify recurring circumstances in which this process – in its singularity – reveals some forms of practices, conditions of use, and performativities of the project, as a model of action to be deepened even for future architects' practices.

The selected paths are then unfolded as very different trajectories, which manage to cover the work cases in which the project team found itself acting in the *Masterplan* process. The first path about *classrooms R* (chapter 5) relates to an emergency that arose at the beginning of the work with the Masterplan Team, and which led to an intense and swift negotiation work within the project team and with the Superintendency to restart the project. Through the second path on *open spaces* (chapter 6) it is highlighted how a spatialization and visualization of already existing conditions was able to shift the power structures and the role of Politecnico on the urban scene. Finally, following the third path on a new *Learning Center* (chapter 7) it is interesting to see the entrance into the game of an external actor who finances the project, with concrete and pragmatic repercussions on the project dynamics and practice strategies within the project team. Through the spectrum of paths the aim is to study the circumstances of the ongoing process in an almost micro-physical way: starting from the collected data, the analysis does not aim to conceptualize the architectural practice, but to deconstruct and recompose the concrete operations that produce effects in the process, by mapping and making them shareable – in a specific and structure perspective – through visualization.



059-060

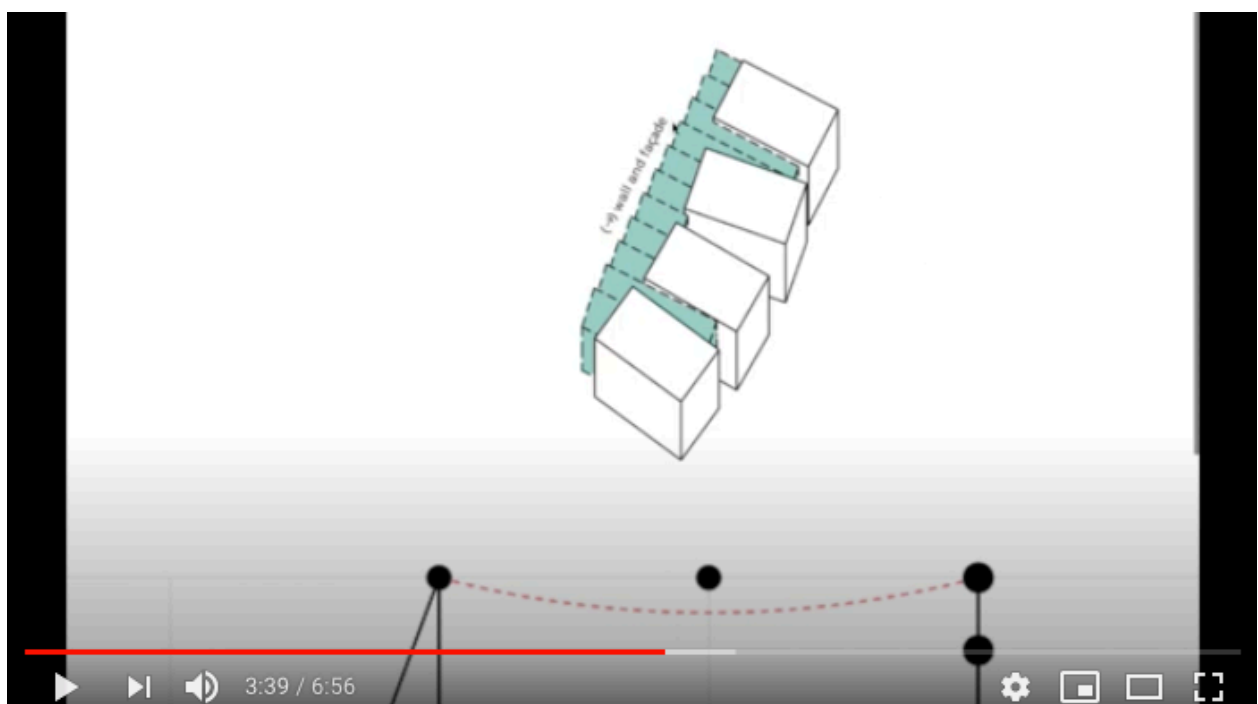
On the top: Masterplan's projects during the period of observation.
On the bottom: selected path to deepen in the empirical chapters.





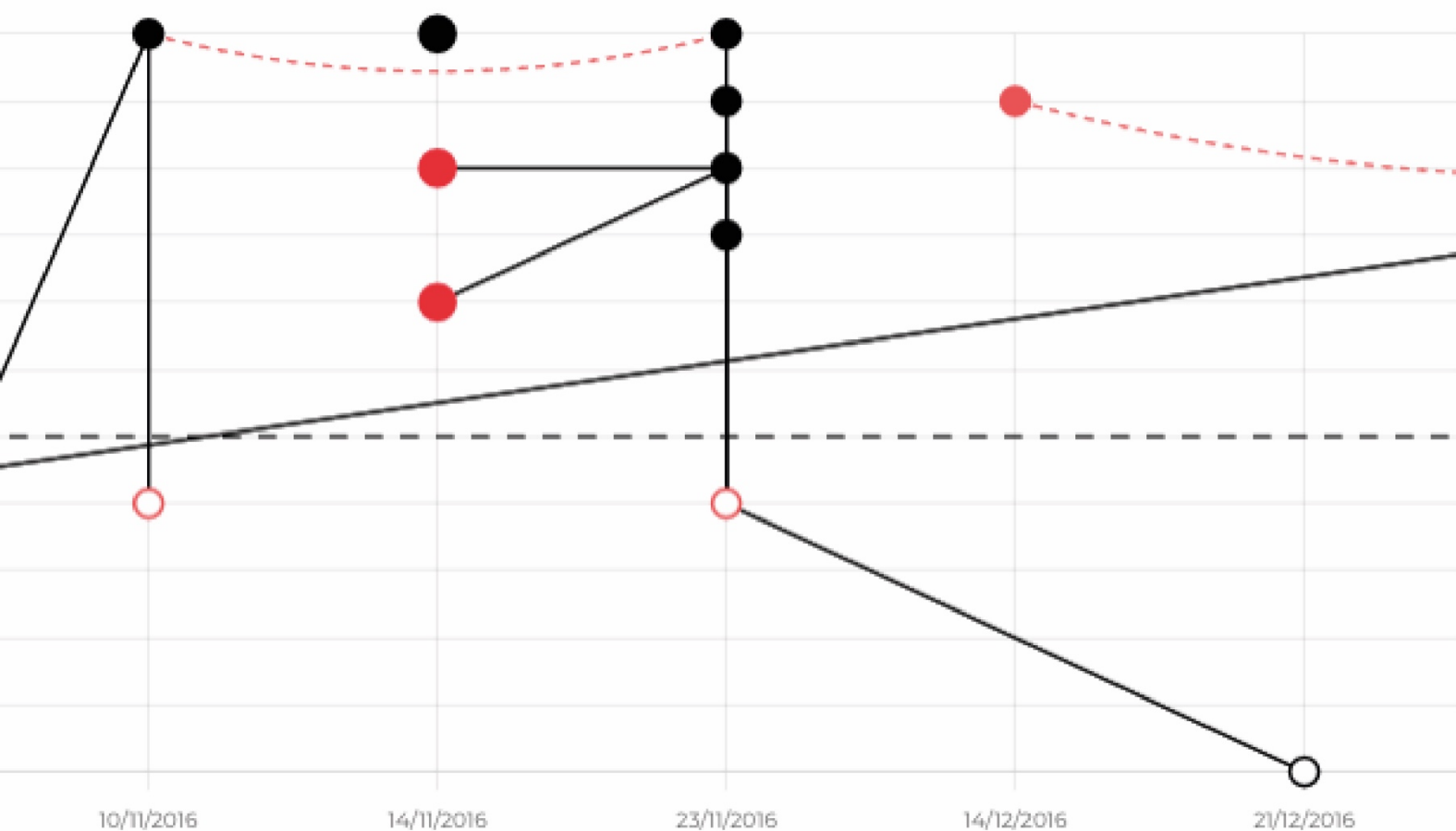
061-062

The classrooms R, before the project (photos of the author, 18th November 2016).



063-064

Screenshots from the video that illustrates the selected episodes.



065-066

Above: the portion of the web map related to the episode 1.

Below: the travel of practices and decisions in episode 1.

B2 (14/11/2016)

outlining different solutions to choose from

↪ C3 (23/11/2016)

outlining different solutions to choose from

↪ INFORMAL AGREEMENT (23/11/2016)

informal meeting with the Superintendent, that agrees on the new project

↪ AUTHORIZATION (21/12/2016)

interruption of the previous tender

C2 (23/11/2016)

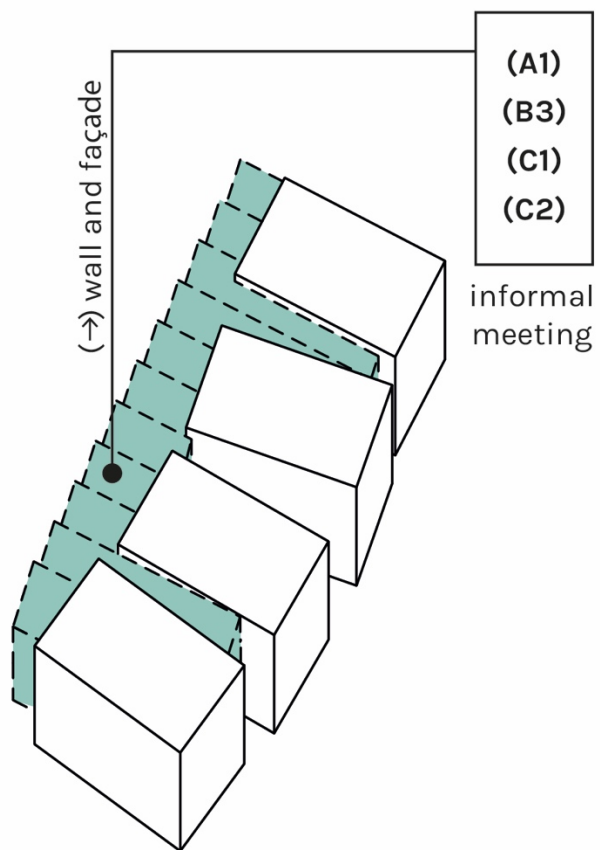
showing and noticing current conditions

↪ INFORMAL AGREEMENT (23/11/2016)

informal meeting with the Superintendent, that agrees on the new project

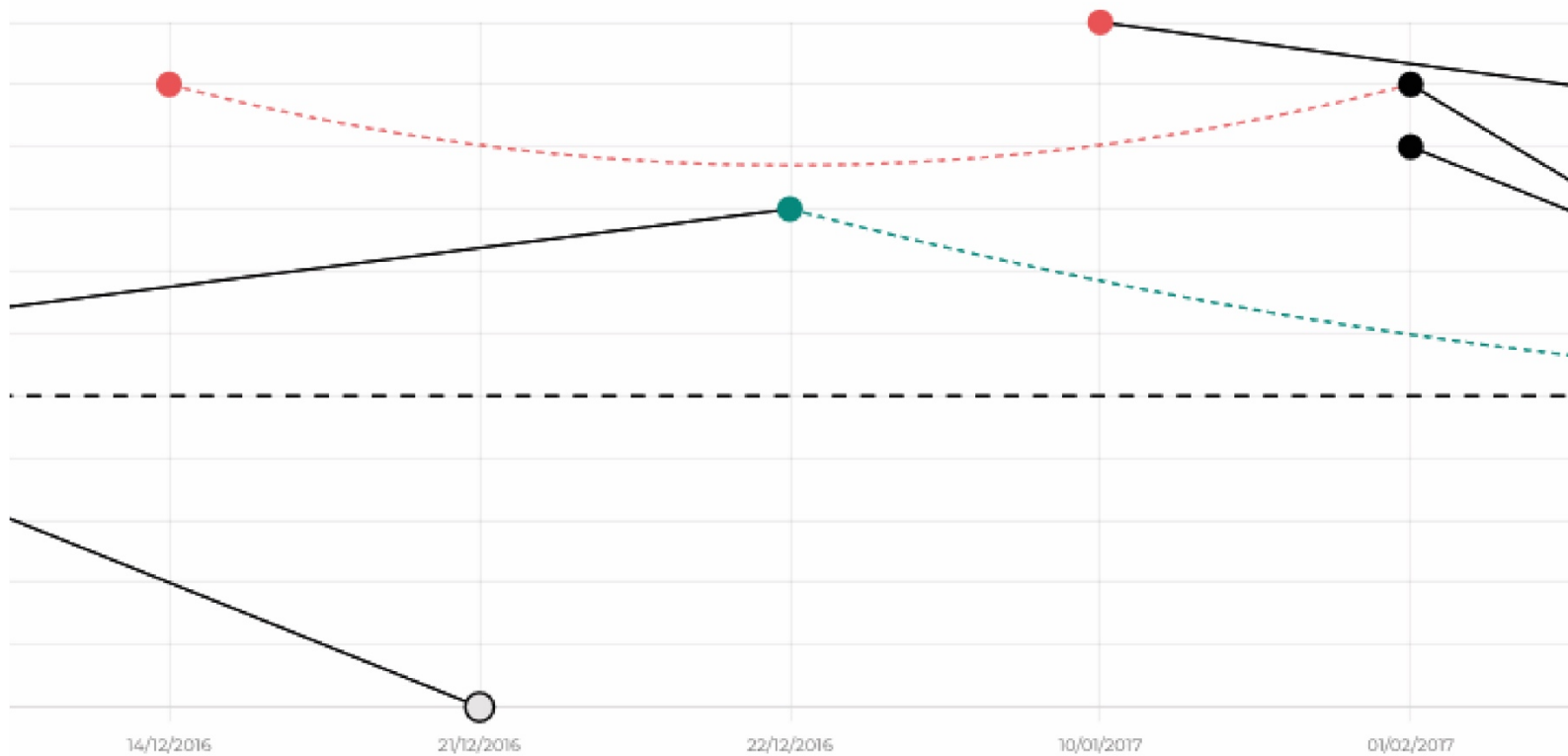
↪ AUTHORIZATION (21/12/2016)

interruption of the previous tender



067-068

Above: the spatialization of the instances taken into account (episode 1).
Below: the portion of the web map related to episode 2.



D1 (14/12/2016)

showing and noticing current conditions

↳ **D1** (01/02/2017)

showing and noticing current conditions

↳ **G1** (02/02/2017)

concretizing the future project with visual artefacts

↳ **I3** (10/02/2017)

bringing and summing up together multiple aspects of the project

↳ **I3** (14/02/2017)

bringing and summing up together multiple aspects of the project

↳ **J1** (20/02/2017)

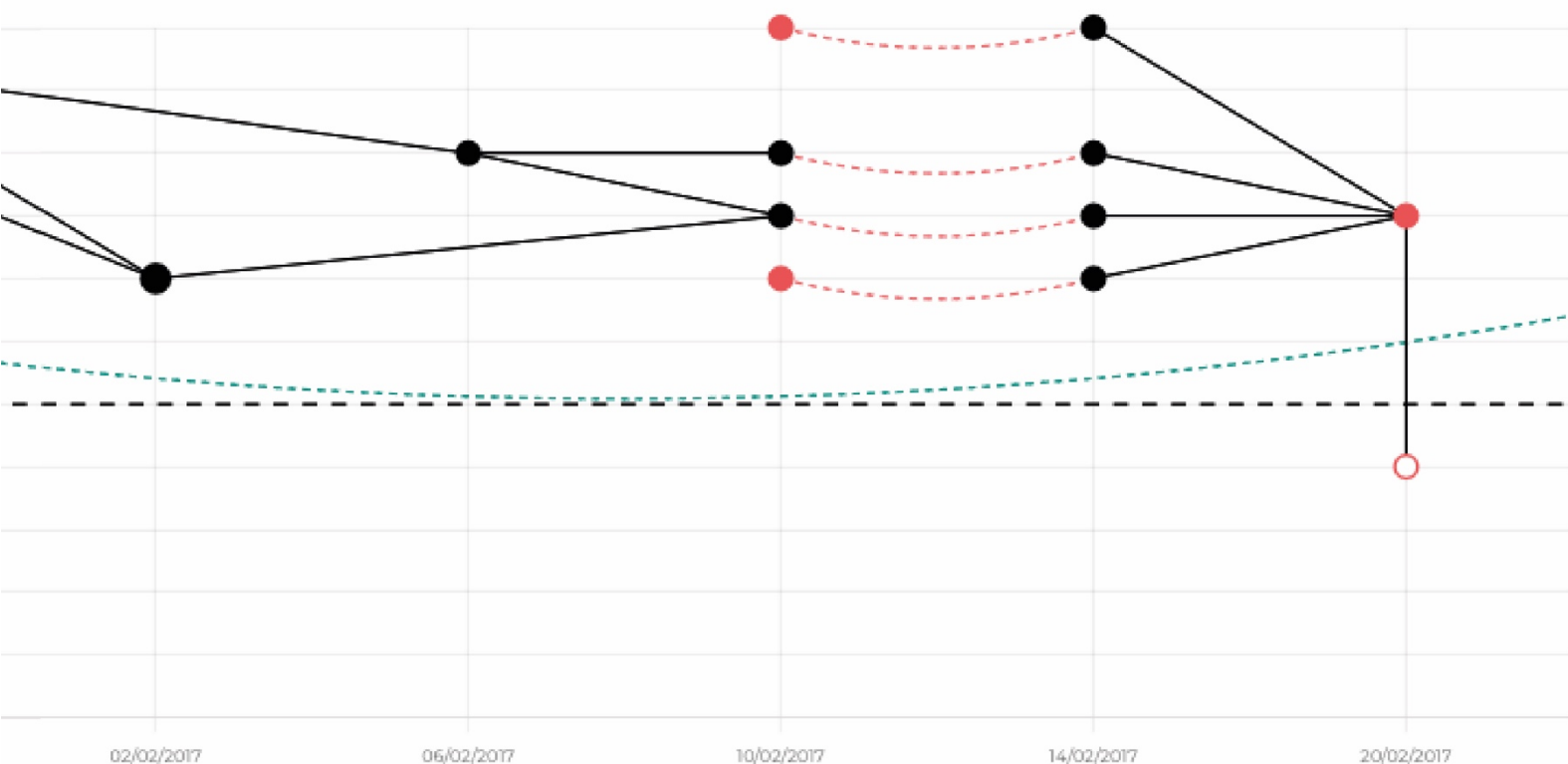
bringing and summing up together multiple aspects of the project

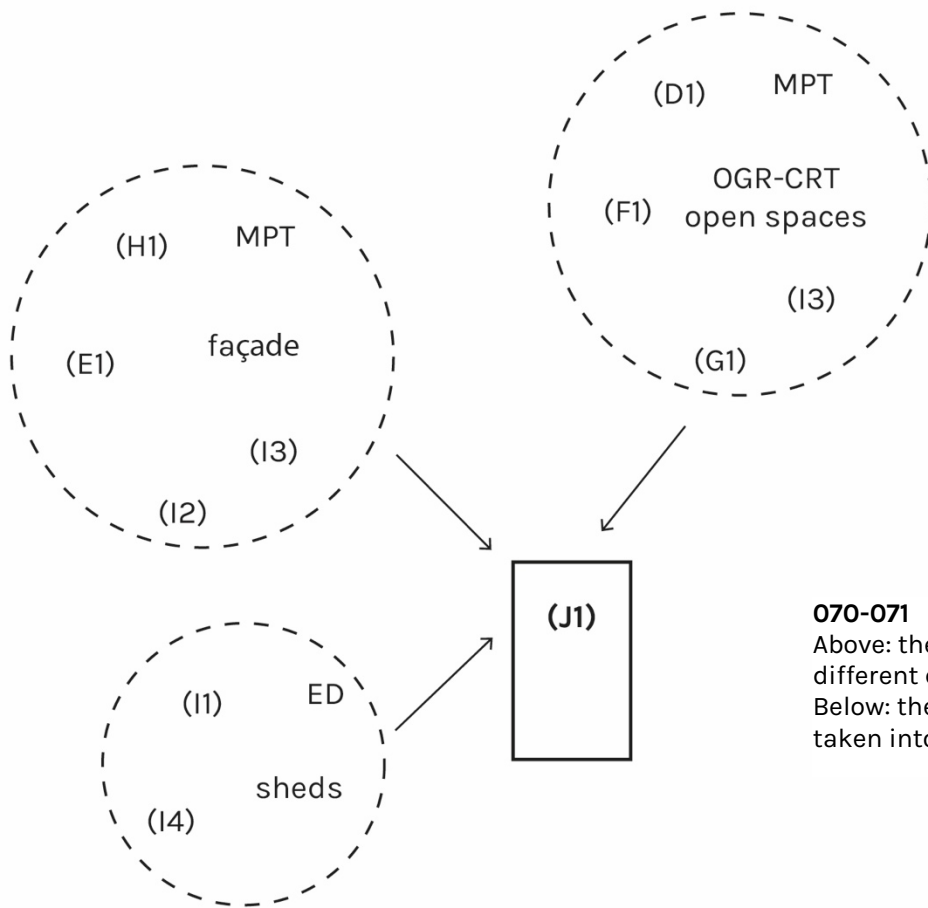
↳ **INFORMAL AGREEMENT** (20/02/2017)

the Superintendent agrees on the project and waits for an official dossier

069

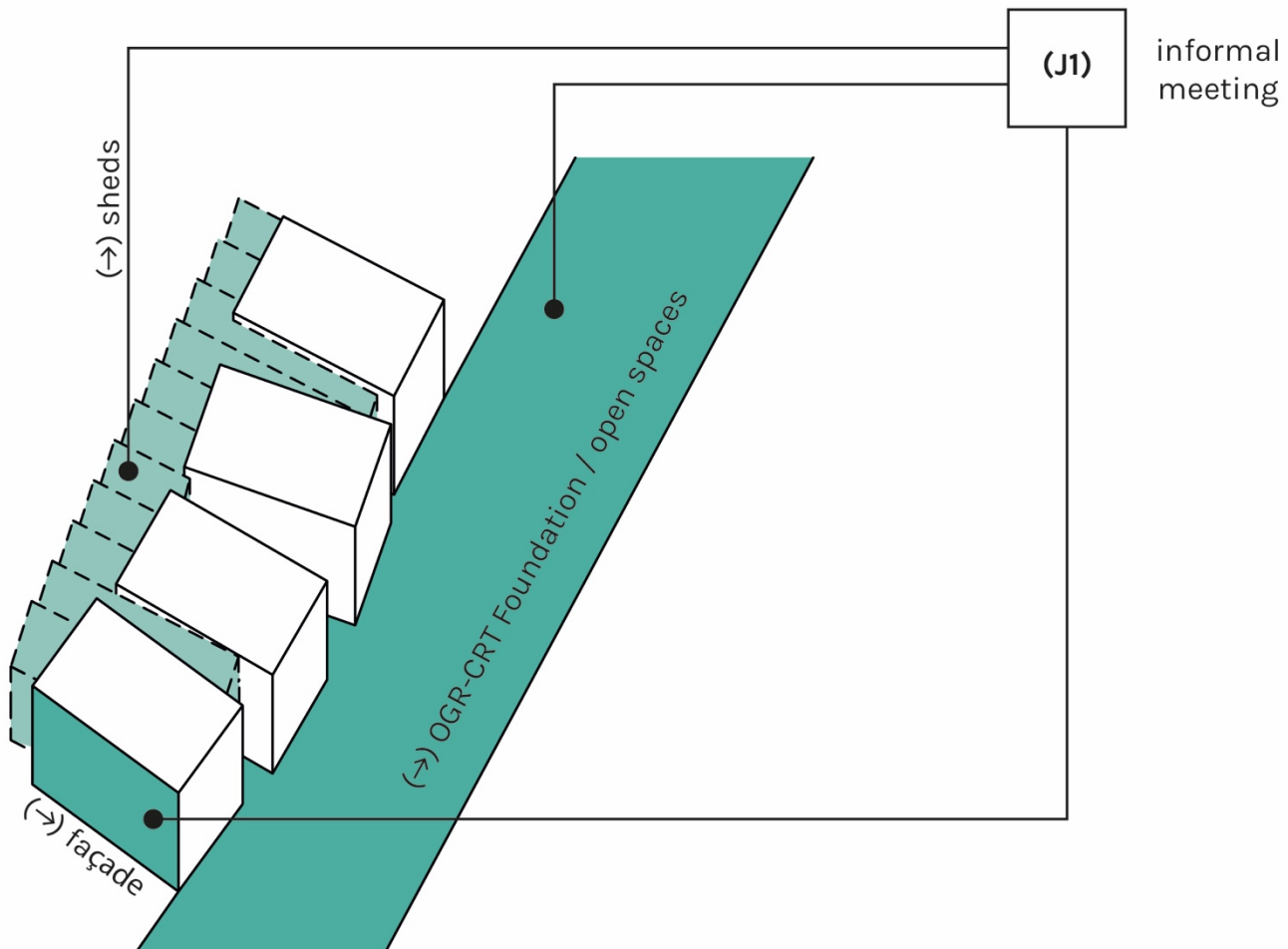
The travel of practices and decisions in episode 2.





070-071

Above: the inclusion and assemblage of different documents in one (episode 2).
Below: the spatialization of the instances taken into account (episode 2).





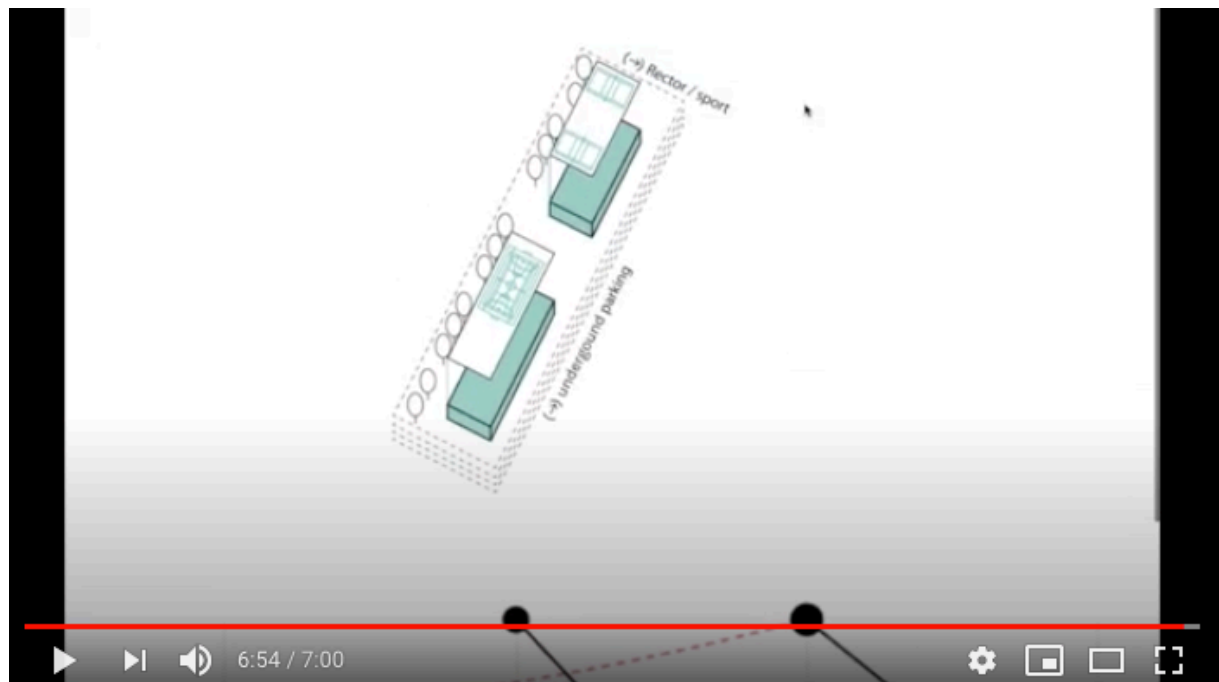
072-073

The classrooms R, during the works (photos of the author, 129th September 2019).



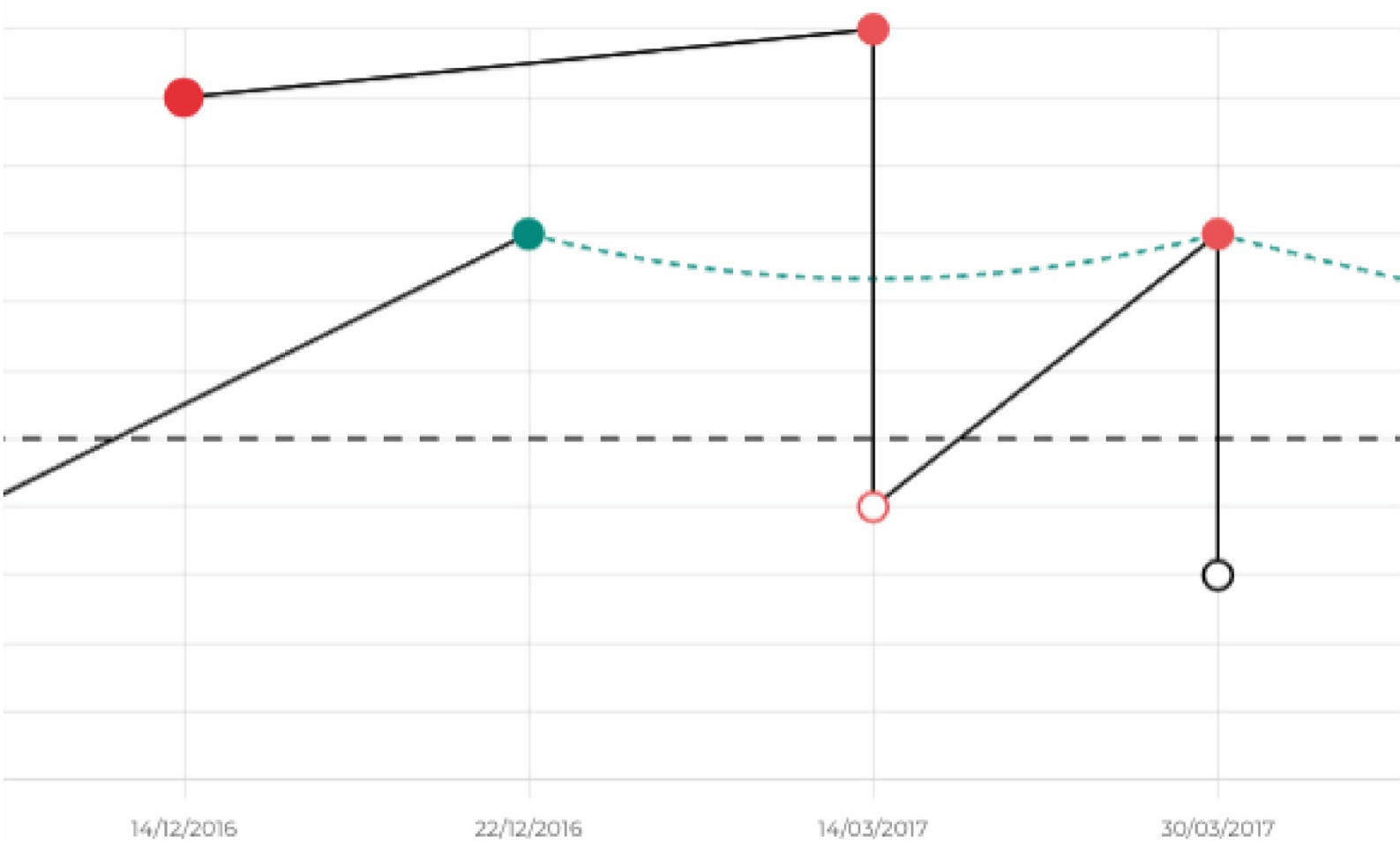
074-075

The area for the planned underground parking and the actual open spaces (photos of the author, 10th April 2017).



076-077

Screenshots from the video that illustrates the selected episodes.



078-079

Above: the portion of the web map related to the episode 1.

Below: the travel of practices and decisions in episode 1.

A1 (14/12/2016)

showing and noticing current conditions

↳ B1 (14/03/2017)

focusing on essential instead of detailed forms

↳ INFORMAL AGREEMENT (14/03/2017)

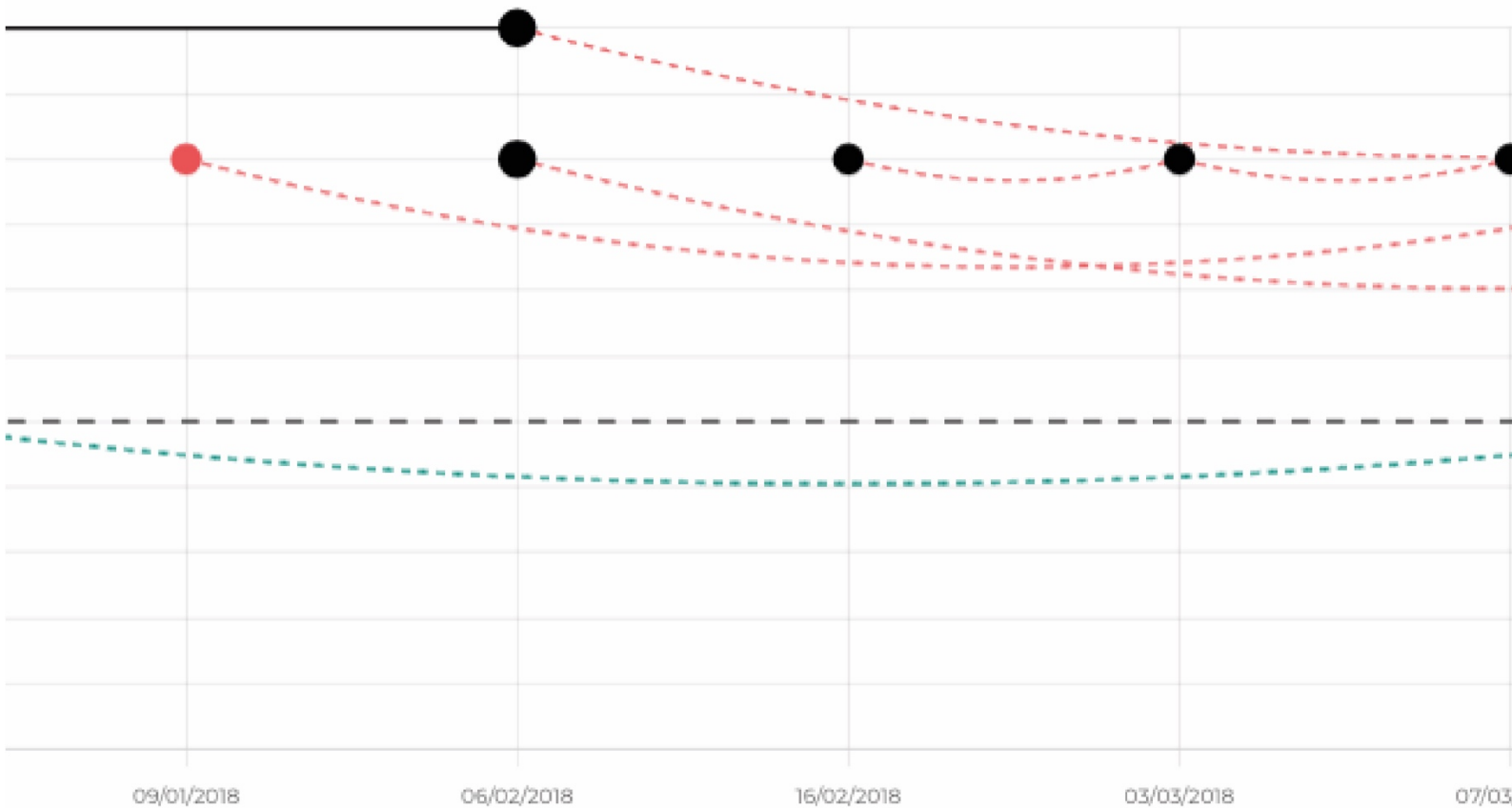
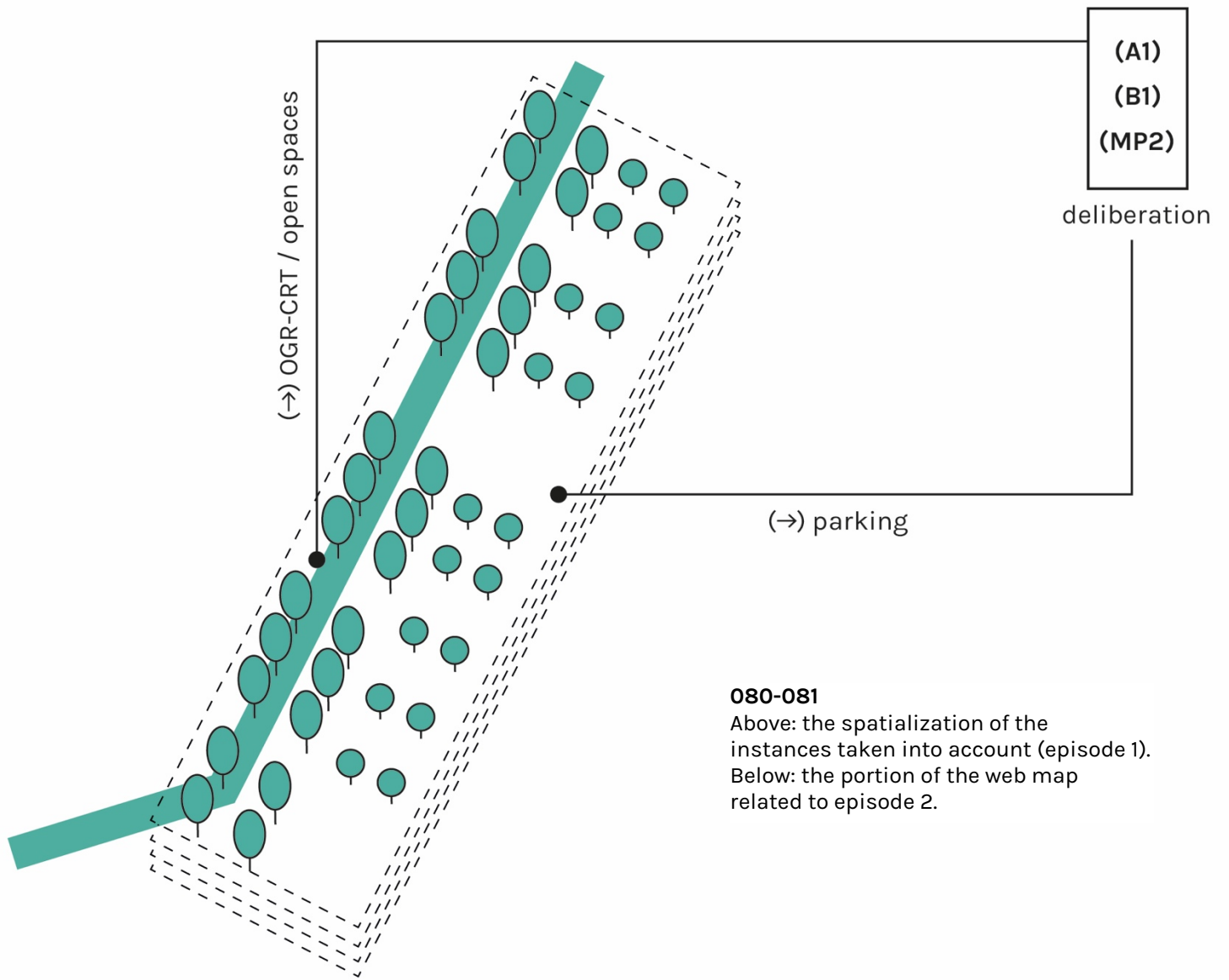
the Vice-Rector asks for the construction of scenarios of expansion with or without the underground parking

↳ MP2 (30/03/2017)

bringing and summing up together multiple aspects of the project

↳ DELIBERATION (30/03/2017)

the Board of Directors asks for a review of the parking project, minimizing the lost in terms of parking lots



II (09/01/2018)

spatializing verbal requirements into visual form

↪ II (12/03/2018)

spatializing verbal requirements into visual form

↪ II (20/03/2018)

spatializing verbal requirements into visual form

↪ M1 (26/03/2018)

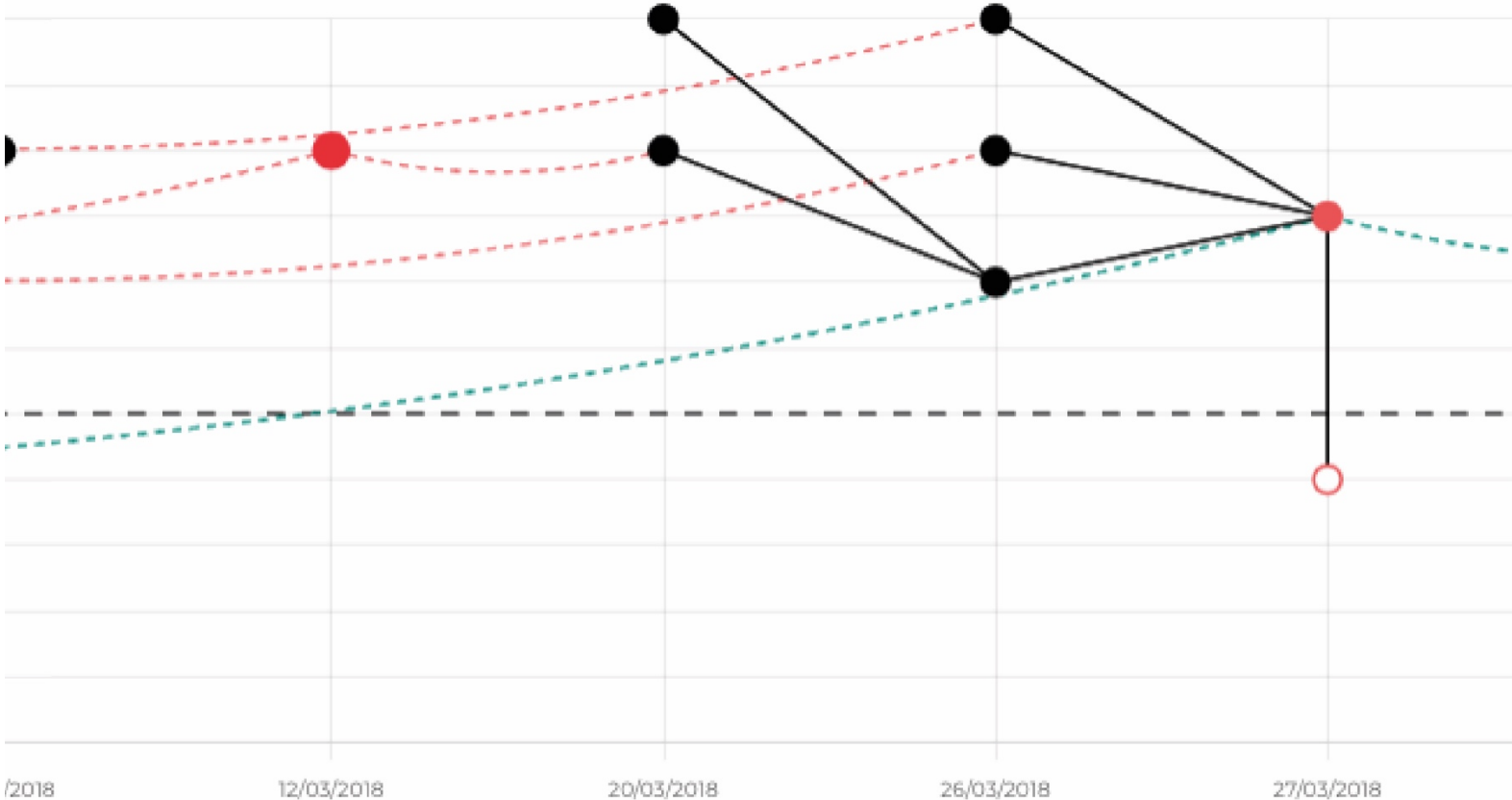
outlining different scenarios to choose from

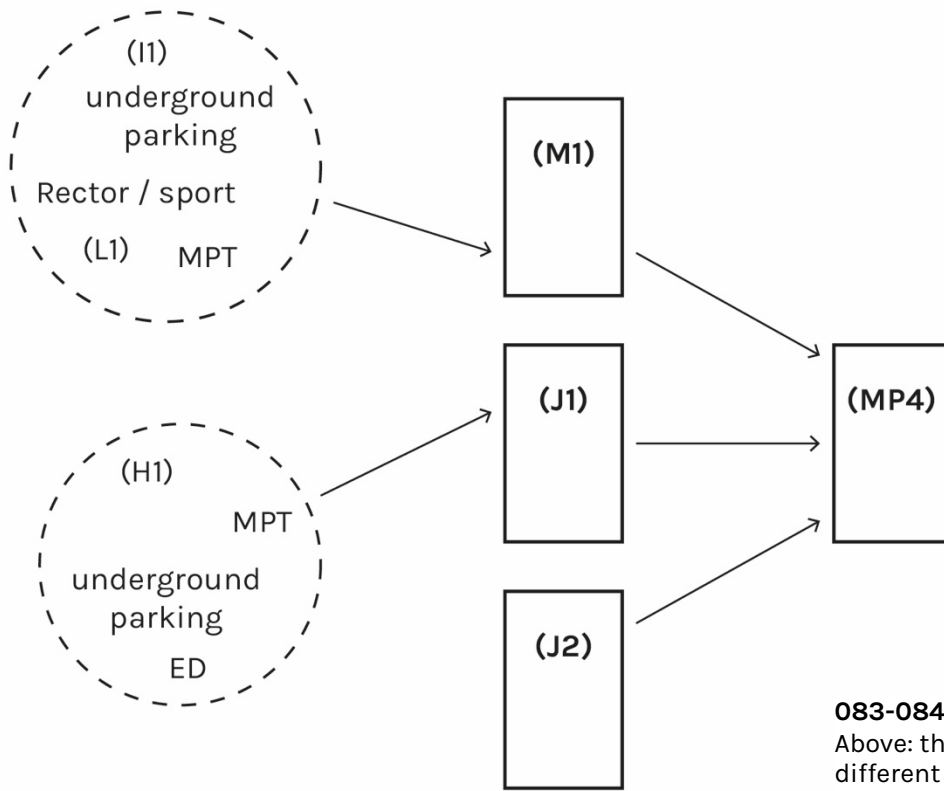
↪ MP4 (27/03/2018)

bringing and summing up together multiple aspects of the project

082

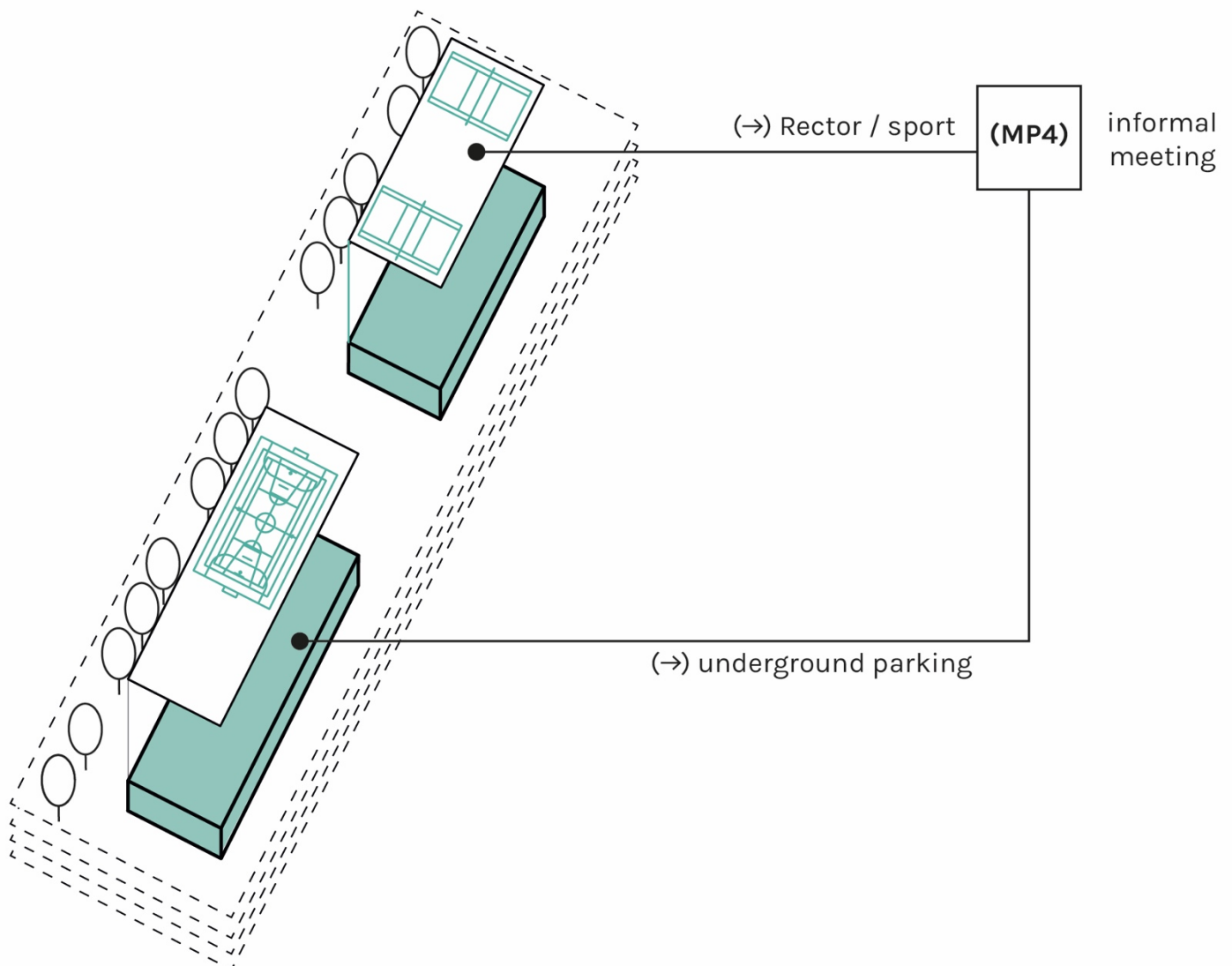
The travel of practices and decisions in episode 2.

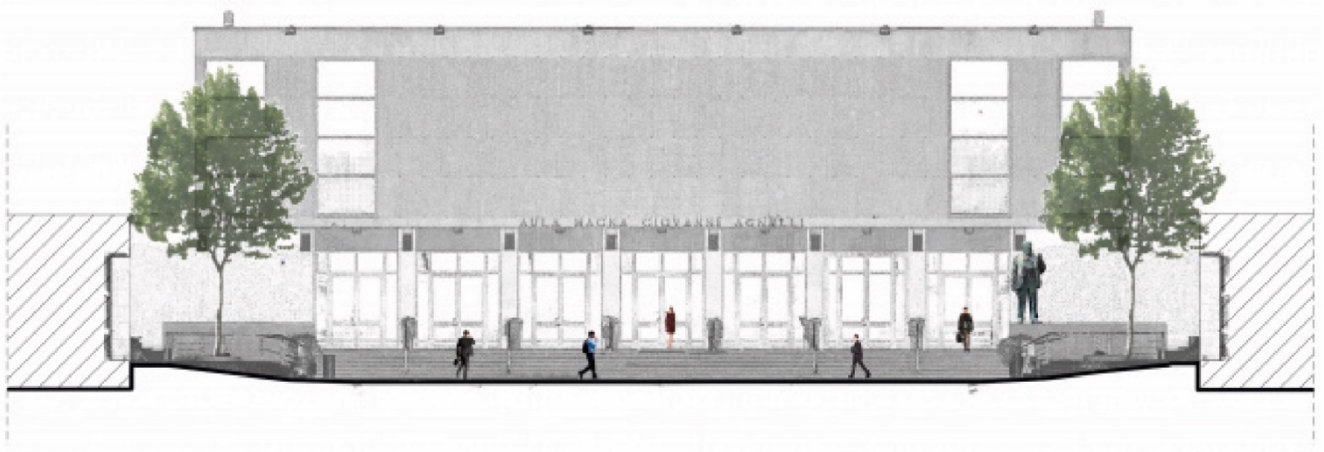




083-084

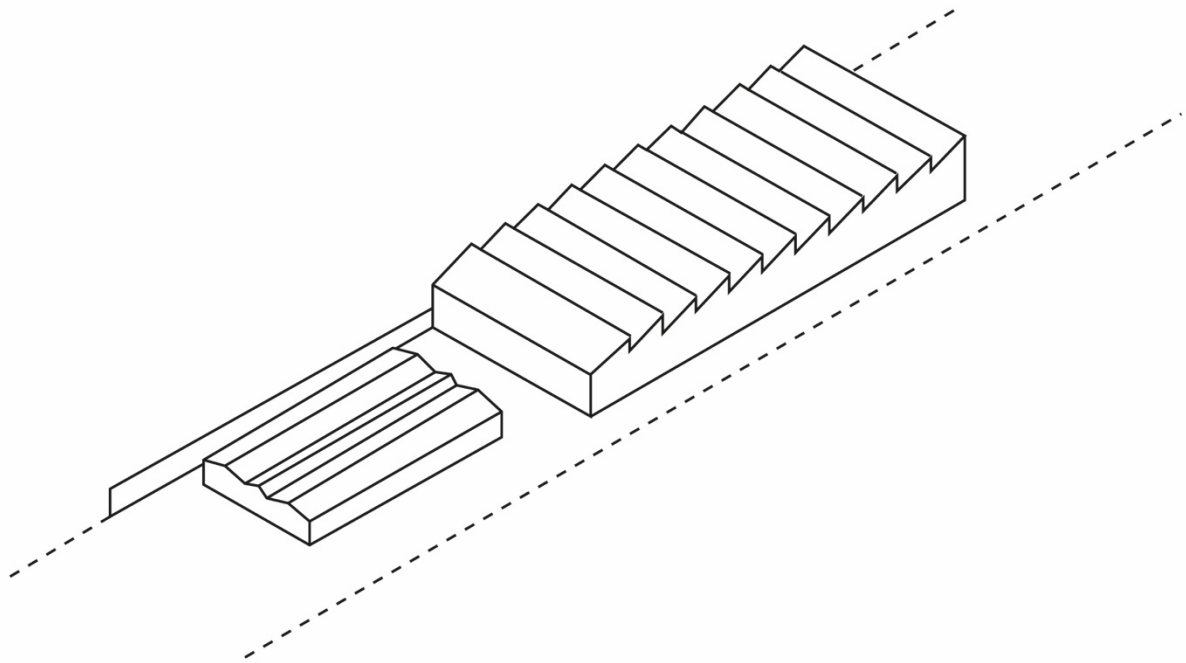
Above: the inclusion and assemblage of different documents in one (episode 2).
Below: the spatialization of the instances taken into account (episode 2).





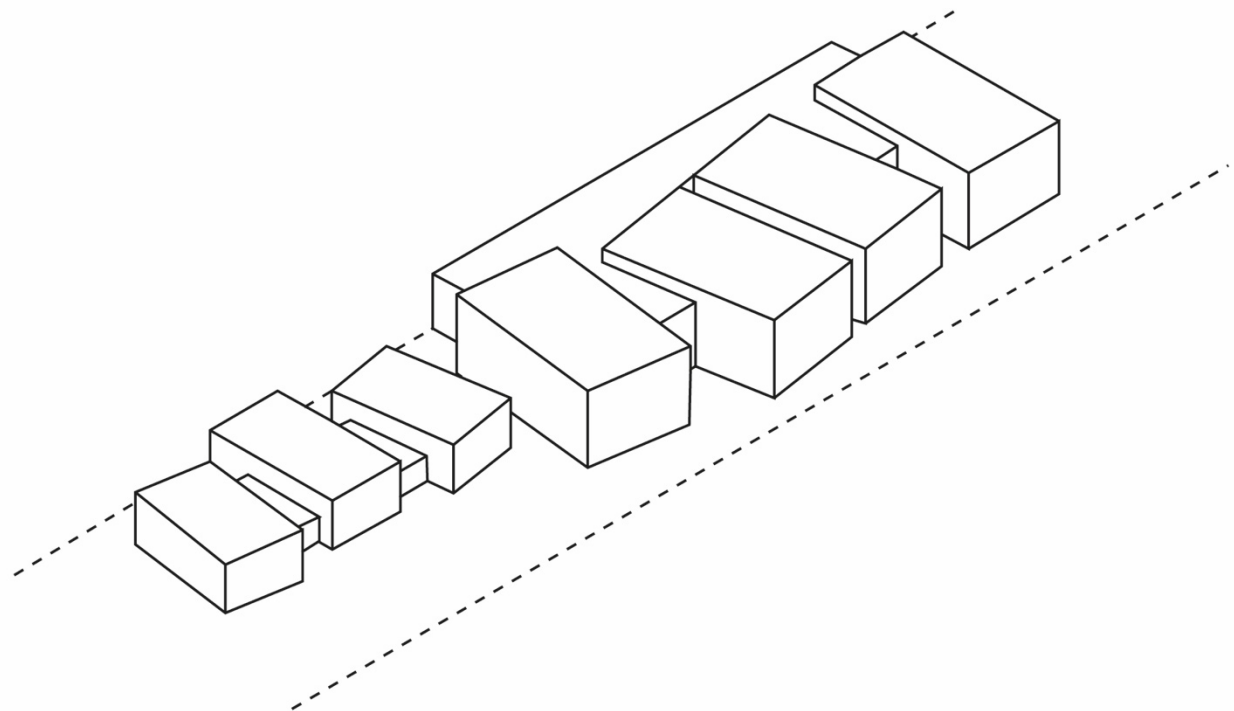
086-087

The project for the requalification of the Aula Magna courtyard of the main campus. Actually, the project has been realized (June 2019).



088

The former prefabricated classrooms (elaboration of the author, on the basis of the building as it was in 2016).



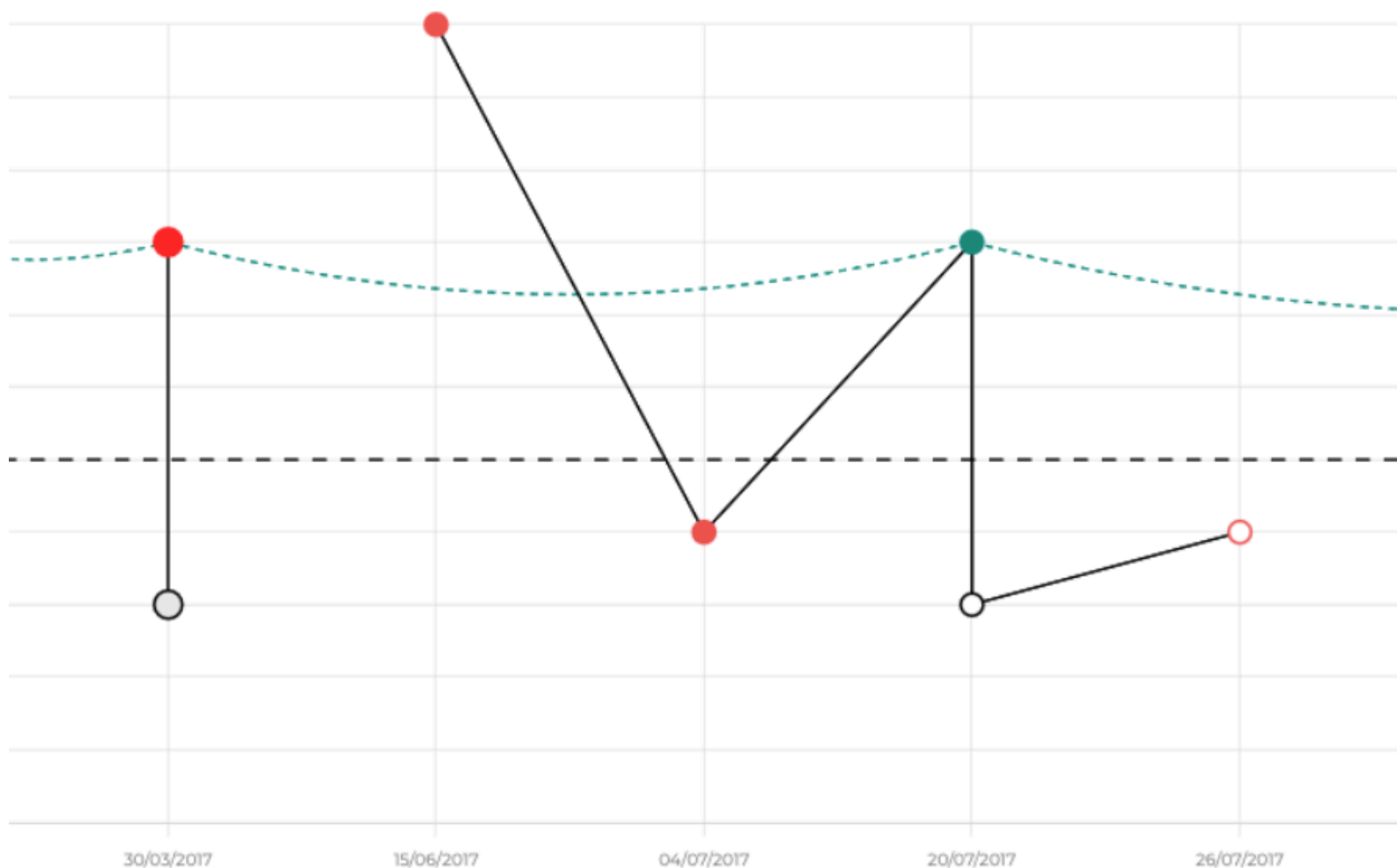
089

The project of a micro-nursery (elaboration of the author, on the basis of the blocked classrooms R project).



090-091

Screenshots from the video that illustrates the selected episodes.



092-093

Above: the portion of the web map that related the episode 1.

Below: the travel of practices and decisions in episode 1.

DELIBERATION (29/06/2016)

Board of Directors deliberation for an updated Masterplan

↳ **MP1** (22/12/2016)

bringing and summing up together multiple aspects of the project

↳ **MP2** (30/03/2017)

bringing and summing up together multiple aspects of the project

↳ **DELIBERATION** (30/03/2017)

the Board of Directors asks for a review of the parking project, minimizing the lost in terms of parking lots

AI (15/06/2017)

recollecting as-yet-unknown information

↳ **INFORMAL AGREEMENT** (04/07/2017)

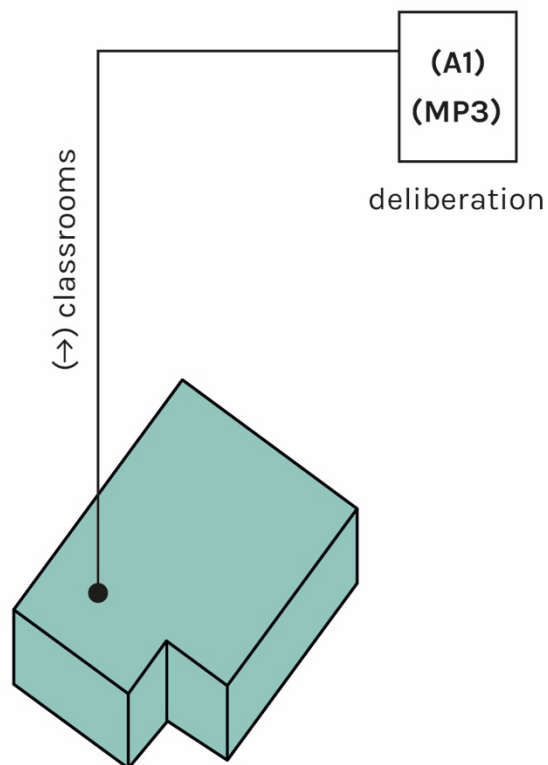
postponment of the Board of Directors due to the wrong costs

↳ **MP3** (20/07/2017)

consulting and relating present and past information

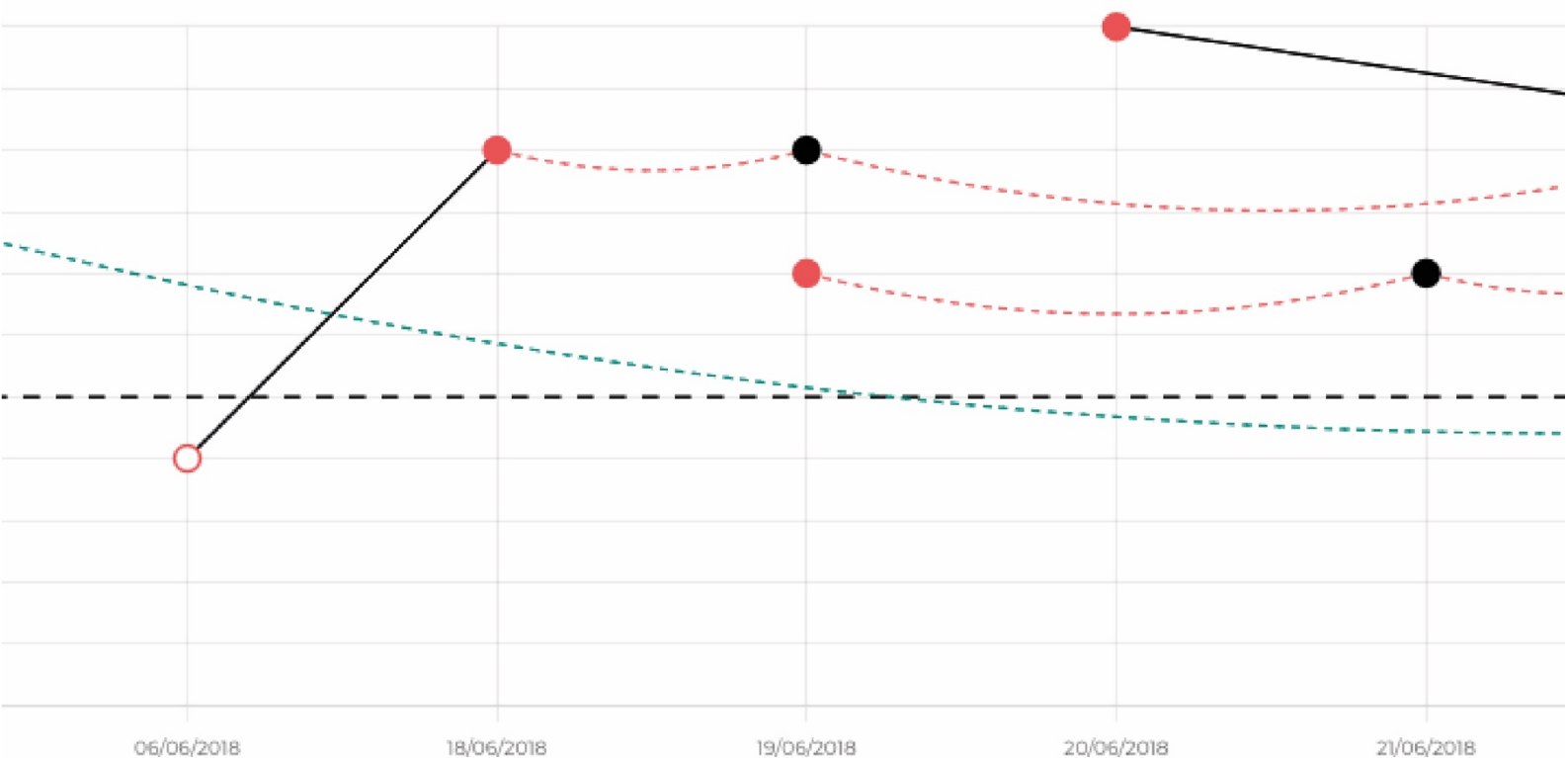
↳ **DELIBERATION** (20/07/2017)

MPT activities: formalization the with the City; updating the parking project; projecting the new classrooms R2; scenarios about the Cultural Centre.



094-095

Above: the spatialization of a decision, related to episode 1.
Below: the portion of the web map related to episode 2.



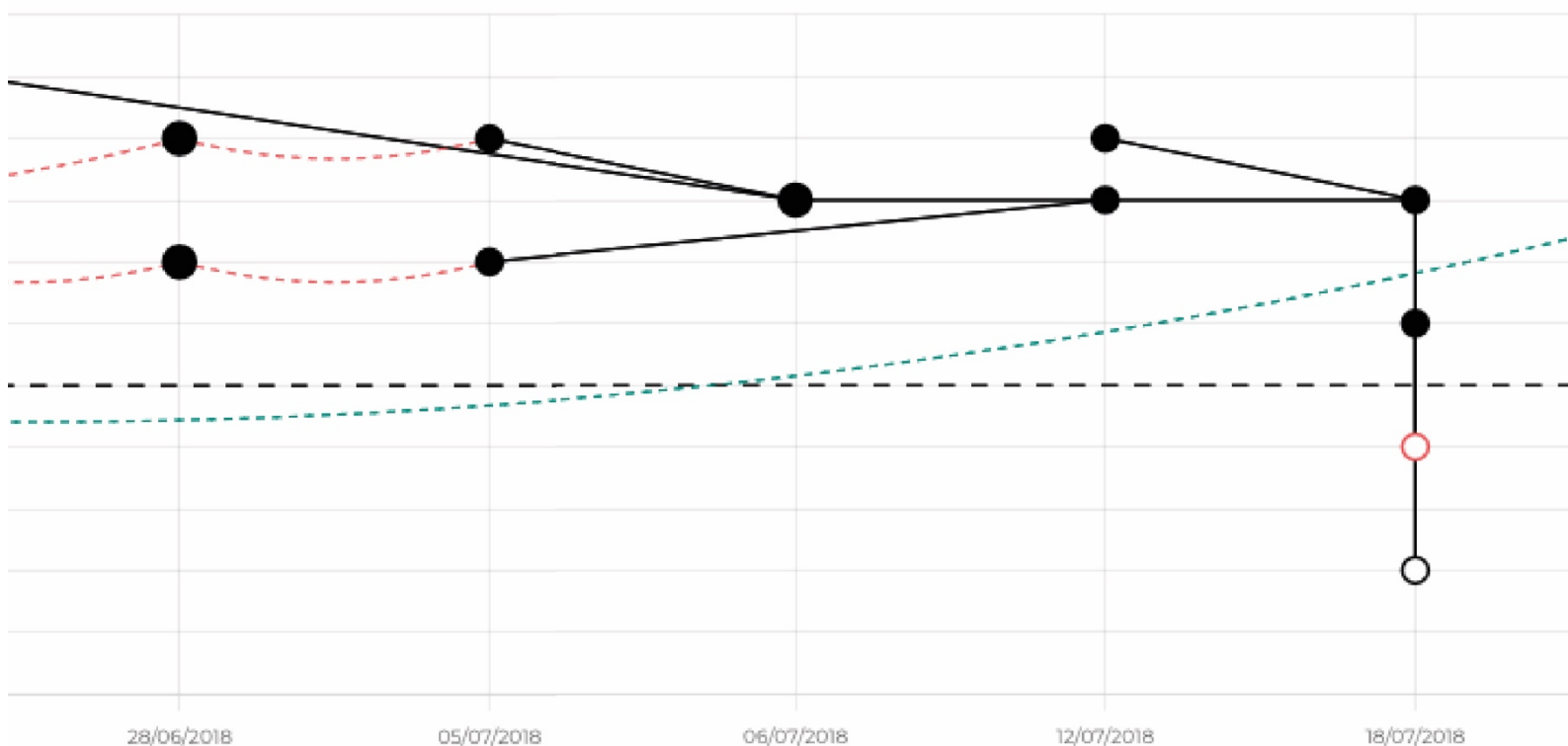
INFORMAL AGREEMENT (06/06/2018)

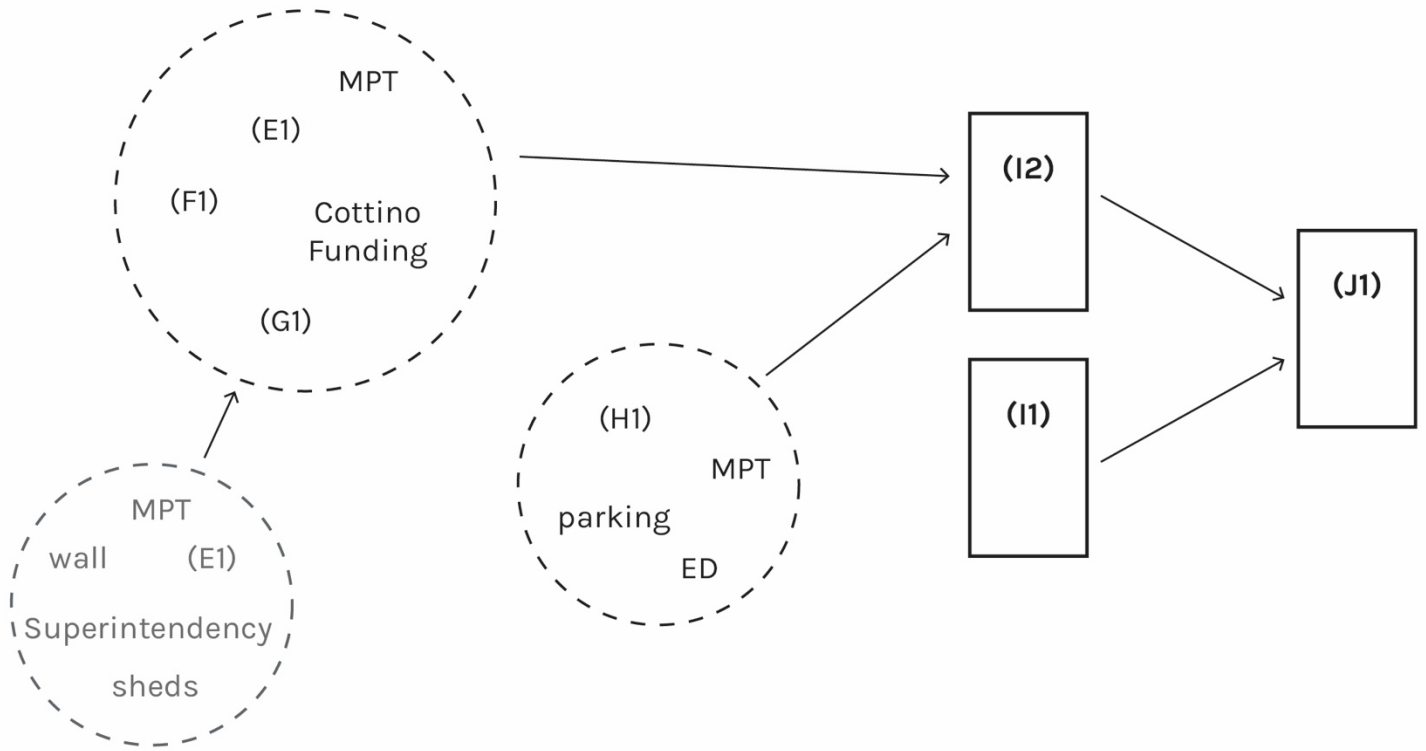
decision of the Rector to consider the classrooms R2 project as the project "of the mandate"

- ↳ **E1** (18/06/2018)
spatializing verbal requirements into visual form
- ↳ **E1** (19/06/2018)
spatializing verbal requirements into visual form
- ↳ **E1** (28/06/2018)
spatializing verbal requirements into visual form
- ↳ **E1** (05/07/2018)
spatializing verbal requirements into visual form
- ↳ **H1** (06/07/2018)
bringing and summing up together multiple aspects of the project
- ↳ **I2** (12/07/2018)
bringing and summing up together multiple aspects of the project
- ↳ **J1** (18/07/2018)
bringing and summing up together multiple aspects of the project
- ↳ **INSTITUTIONAL AGREEMENT** (18/07/2018)
signature of a Memorandum of Understandings between the Cottino Foundation and Politecnico
- ↳ **INFORMAL AGREEMENT** (18/07/2018)
Cottino Foundation agrees on the project of the MPT

096

The travel of practices and decisions in episode 2.

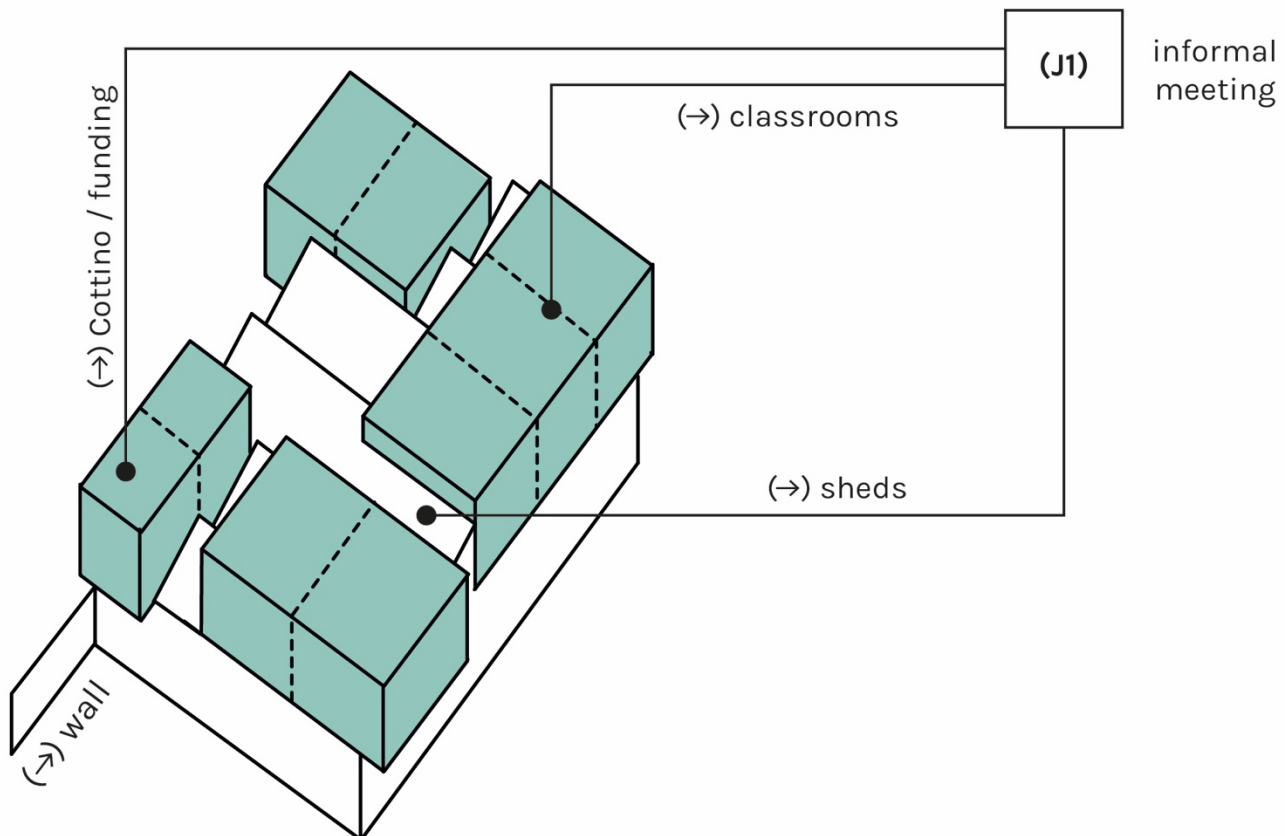




097-098

Above: the inclusion and assemblage of different documents in one.

Below: the spatialization of the instances taken into account in episode 2.

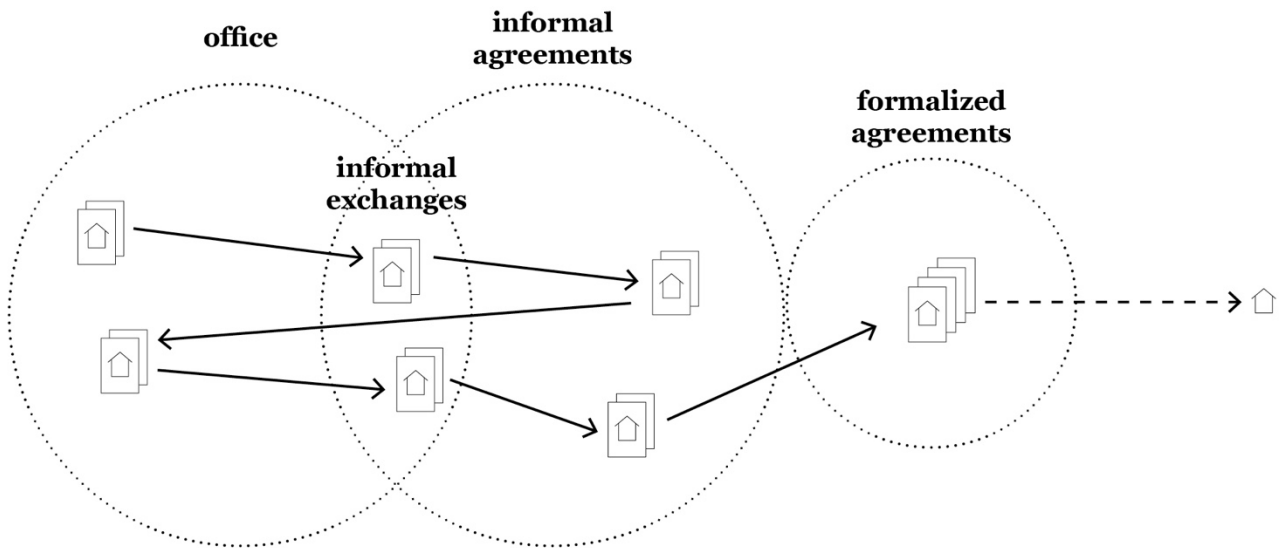




099-100

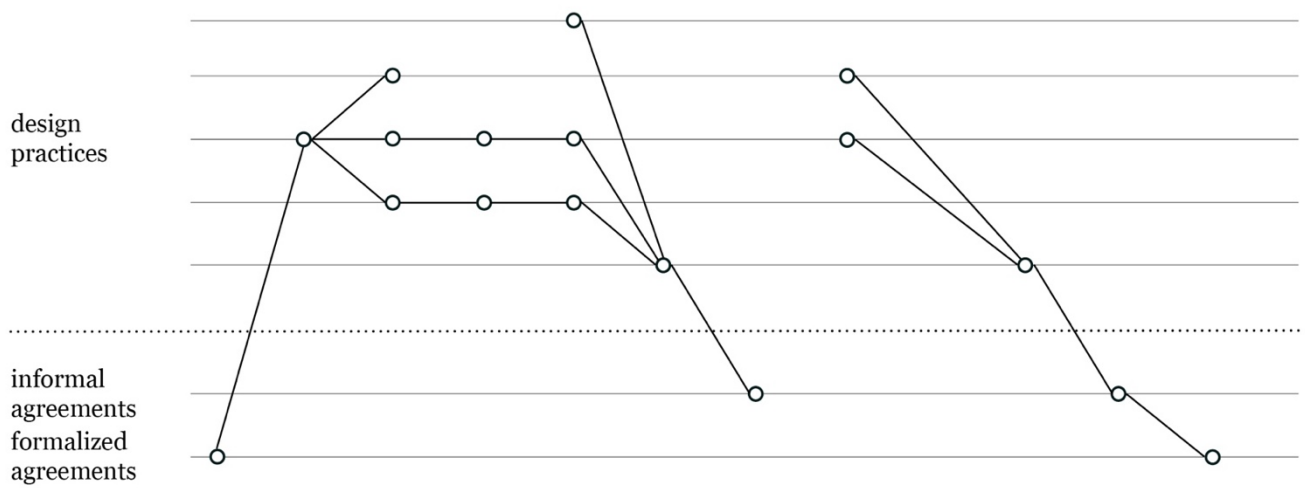
Above: the celebration of Cottino Impact Campus starting.

Below: the actual level of definition on the Learning Center project (Program Agreement).



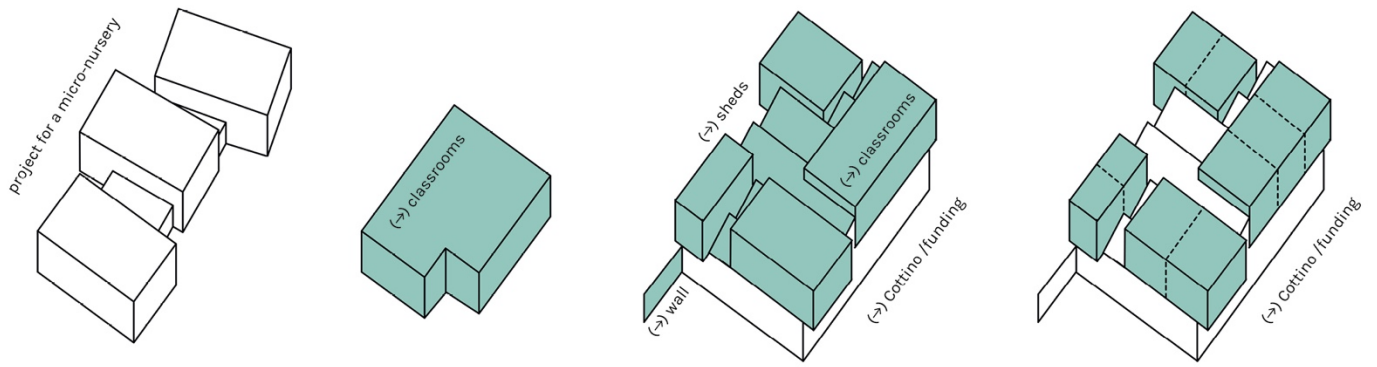
101

The circulation movement of artefacts inside-outside the office.



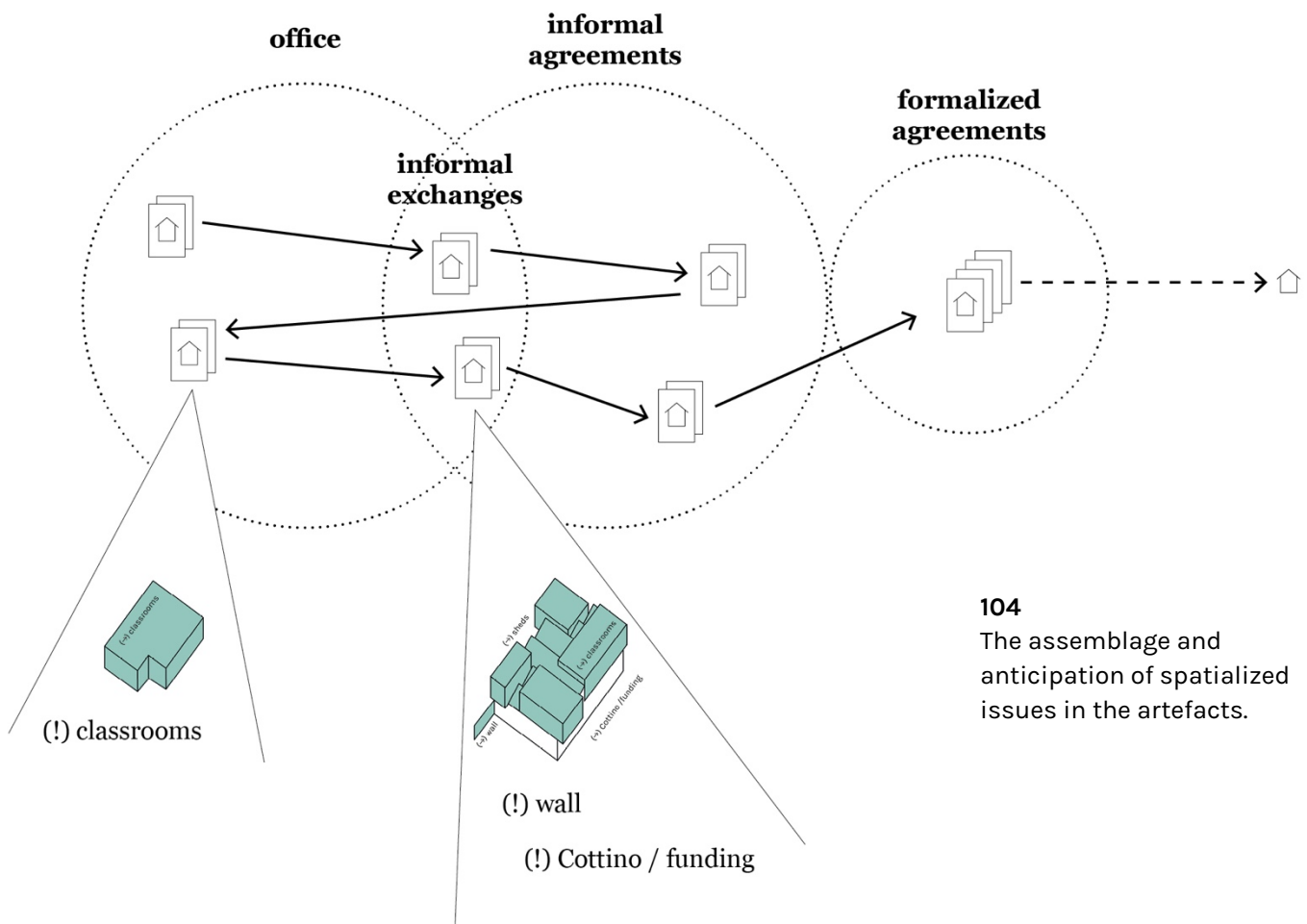
102

The project's back and forth movement to progressively reach a formalization.



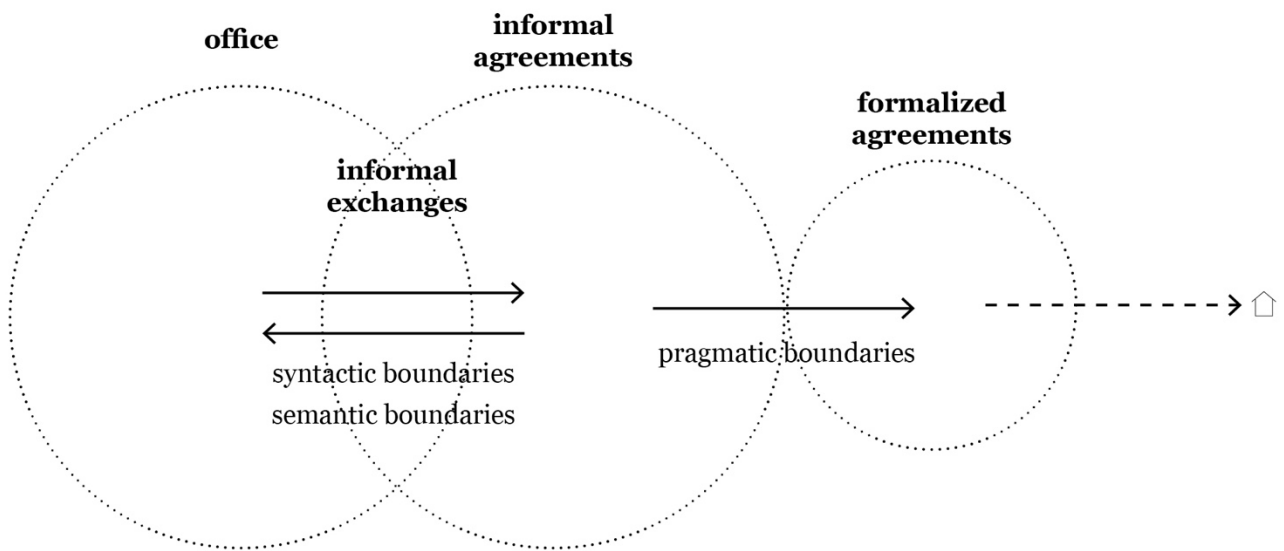
103

The assemblage of issues
spatialized through the
exchanged artefacts.



104

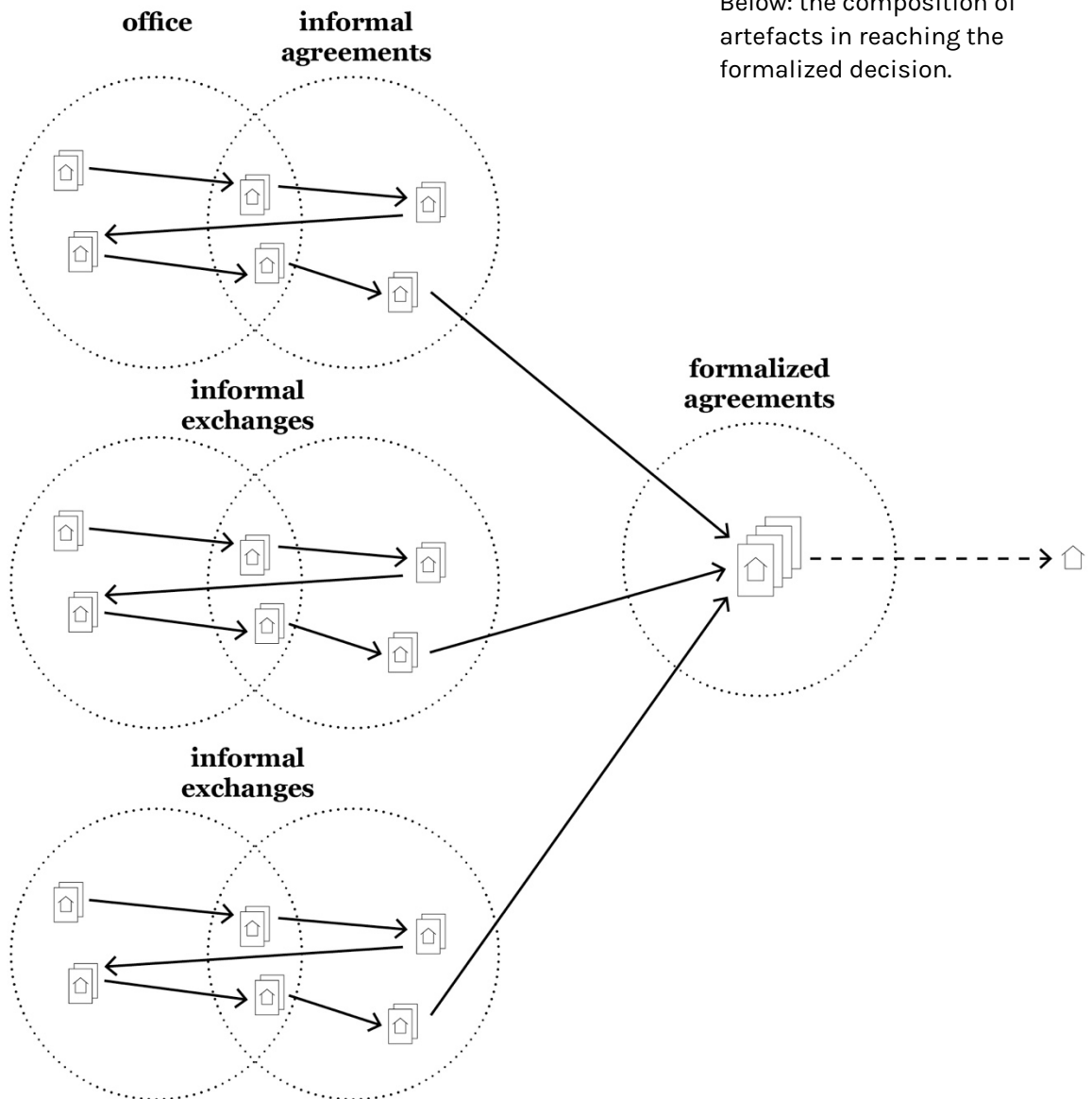
The assemblage and
anticipation of spatialized
issues in the artefacts.



105-106

Above: the traversing of boundaries through artefacts during the process.

Below: the composition of artefacts in reaching the formalized decision.



FIRST PATH:
negotiating under emergency

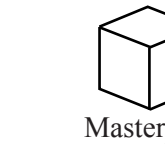
Design Tools and Founding Decisions

- A1 project-related documents (specific)
- MP1 project-related documents (the whole MP)
- decision-related documents
- decision-related documents (informal)
- irruptions (human or non-human)
- nesting of a document
- translation of a document
- translation of the MP documents

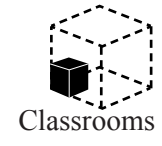
Exchange Arenas and Participants

- plenary
- operative
- - - with stakeholders
- site inspections
- e-mail
- whatsapp

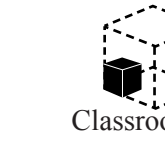
- (MP) Masterplan Team
- (PT) Project Team
- (ED) Edilog Office
- (PS) Projects and Strategy Office
- (R) Rector
- (VR) Vice-Rector (construction)
- (DG) General Director
- (PR) Protector
- (SA) Academic Senatus
- (TC) Teaching Committee
- (RD) Rector Delegate
- (DV) Didactic Vice-Rector
- (BD) Board of Directors
- (SR) Students' Representatives
- (S) Superintendency
- (C) City
- (F) Foundation Cottino



Masterplan



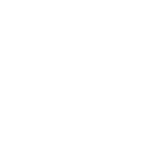
Classrooms R



Classrooms R



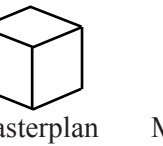
Masterplan



Masterplan



Masterplan



Masterplan

