

Breaking the Rules: Towards an Experimental Design Pedagogy

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## BREAKING THE RULES: TOWARDS AN EXPERIMENTAL DESIGN PEDAGOGY

Camilla Forina<sup>1</sup>, [Sofia Leoni](#)<sup>2</sup>, Tommaso Listo<sup>2</sup>, Valeria Federighi<sup>3</sup>, Edoardo Bruno<sup>2</sup>

<sup>1</sup>*Politecnico DI Torino, Tsinghua University, Italy*

<sup>2</sup>*Politecnico DI Torino, Italy*

<sup>3</sup>*China Room, Politecnico DI Torino, Italy*

**Keywords:** Design Strategy, Game of strategy, Design Practice, Design Theory, Design Pedagogy

**Abstract** The *Great Game* is a laboratorial course that problematizes the traditional *design studio* approach, seeking for reframed modes of knowledge transmission through interactions among a multiplicity of actors and establishing situatedness as design principle. The didactic experiment of the *Great Game* tries to answer two questions. The first asks whether it is possible to teach an effective way of designing without applying the binary logic of what one (the teacher, a theoretical authority, an ideology) decides wrong (students' knowledge up to that point, a certain way of doing architecture, intentions), and what is decided to be right (new and updated skills, another way of designing, ethically acceptable goals). The second asks whether it is in the form and organization of the *design studio* that we should intervene (and modify) if we want to produce a change in terms of approaches to design. Logic and structure of the *Great Game* are presented, as well as (graphical) reports on the experiences of two iterations of the course: on these contents is built a correspondence between the pedagogical objectives and the effectiveness of design in intercepting the multiplicity of instances that emerge in any specific place and situation. We conclude by showing how through playful experimentation of architectural education, the *Great Game* tries to incentivize a form of knowledge that derives from nonlinear actions of mutual interlocutions and reciprocal positioning, or rather, the product of multiple instances, detournements, and even errors.

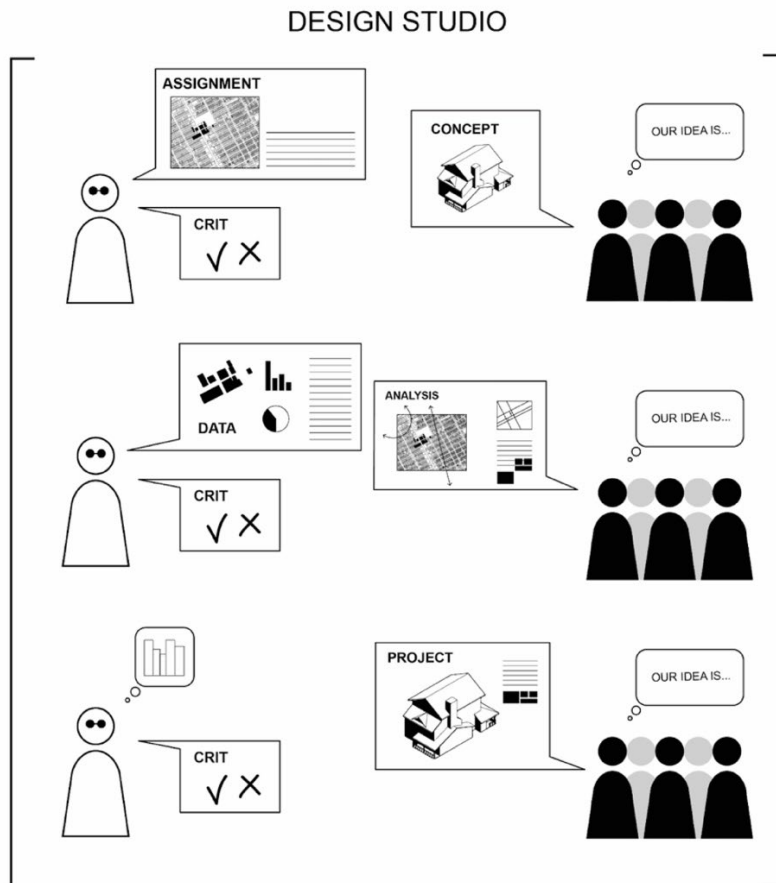
In the world of architectural education, *design studios* are historically the institutional sites for the transmission of knowledge and the training of future architects. Configuring themselves as both a physical place and pedagogical models, they are the places where architectural design is simulated under controlled conditions, recalling what happens in the field of scientific experimentation within the laboratory. Such a simulation implies a series of simplifications assumed to be internal to the didactic object, with the precise intention to mitigate the complexity of the external world to a minimum denominator. The predominant result is hence a detachment of design teaching from the very dynamics of professional practice in favour of the transmission of values based on creativity and ideas as absolute truths anchored in certain authorship (Kuhn 2001, Till 2005, Rodriguez 2018).

Nevertheless, acknowledging the complexities that today's challenges dictate (Deamer 2020) - namely a sustainable, accountable, multidisciplinary, participatory, and representative approach to decision-making - we believe that it is (also) in *design studios* that we should look, and it is (also) here that we should try to (re)act to redefine disciplinary positions. Based on these assumptions, in October 2020, the *Great Game* took its first steps (Federighi, Bruno 2022).

Set up as a sort of role-playing game for architects, *Great Game* is a laboratory course held during the third year of a Bachelor programme in Architecture, that tries to problematize the more traditional approach of *design studios*. The *Great Game* thus tries to build a simulation that allows you to transmit, develop and train a set of skills and sensibilities in addition to that of the traditional *design studio*. This construction has been carried out through a different organisation of the students' works review and discussion, according to rules, constraints, and environmental conditions attempting to define a sort of "retrospective thickness", which belongs to the client's mandate and the project site. Dropped into such thickness, students find themselves interacting within a complex and contradictory environment in the role of architects whose clients have a general perspective, rather than a clear idea. In facing the specific request of the mandate, they are thus confronted with different actors and interests to which responding while setting their broader strategy. In its course, the game unfolds in an overlapping of moves, emerging situations, and unexpected irruptions, as opposed to the relative linearity of *design studios*; the result of this setting produced a second type of thickness, which could be called thickness-in-action. The initial intentions of the groups of students are repeatedly deviated as the result of a plurality of actors who have different and changing interests, and not, for example, in the search for any kind of combination

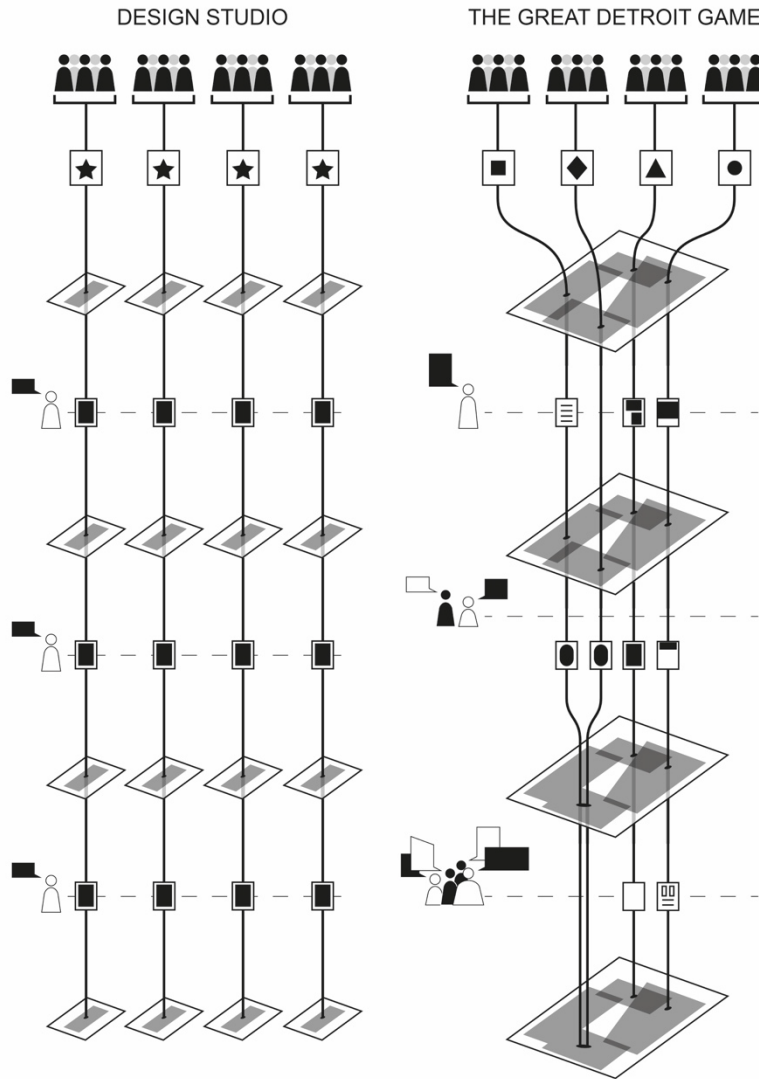
between form and function. This also requires that students are aware of their relative position and situatedness (Haraway 1988), and that they organise their actions through a prefiguration of their possible effects.

Wondering how we might effectively contrive a pedagogy of architectural design that ensures responsibility, inclusivity, and participation, the *Great Game* thus seeks to recognize complexity as a category that can be taught to act and navigate with. In this sense, the *Great Game* is an everchanging experiment that continues to investigate new forms of architectural teaching through intellectual and technical tools which hold a large potential in the renewal of the discipline.



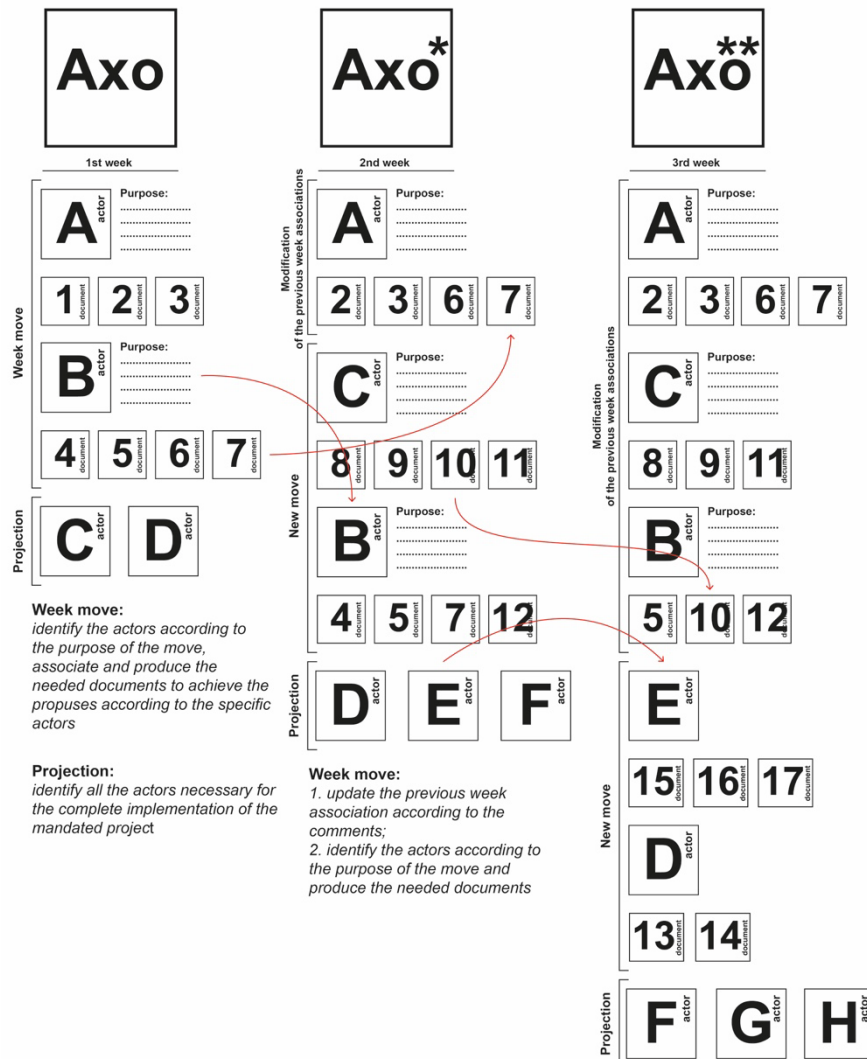
**Fig 1.** The first simplification commonly adopted within design studios consists of the exclusion and reduction of the multiple external realities by adopting the perspective of an absolute subject conveyed through a series of separations in which the didactic object is broken and served into pieces to be manipulated by the will of that same subject:

- the project assignment is clear and straightforward;
  - the project location is problematized in a biunivocal way: there is a problem, summarised by sets of data, that the project must solve; or rather analysis and then synthesis;
  - teaching staff holds the monopoly of the “crit”;
  - freedom is granted to students to express their idea, that is assumed as an absolute entity itself, apart from its conformity with the critical ideal of the teacher;
  - the transmission of knowledge is organised in progressive order: first a skill, then the next one which presupposes the first and so on; or rather first knowledge as a finished product, then its application.
- Diagram by the Authors.



**Fig 2.** *Great Game* intervenes critically on the conventional workflow of the *design studio* hinged on a dominant authorship model, multiplying both amount/types of interlocutors and documents while trying at the same time to keep the positioning action that constitutes this intervention evident and participatory. The course starts from the assumption that transmission of knowledge does not begin when the critical line is drawn between what one (the teacher, a theoretical authority, an ideology) decides wrong (students' knowledge up to that point, a certain way of doing architecture, intentions) and what is decided to be right (new and updated skills, another way of designing, ethically acceptable goals) but, rather, it consists from beginning to end in the interaction allowing for acts of discernment and reconstitution.

Diagram by the Authors.



**Fig 3.** Each week the students foresee the most suitable strategy for the implementation on the project through objectives embedded into a set of interlocutions with possible actors, such confronts are mediated by documents specifically produced for the intent. Students successively modify the associations in the name of the feedbacks received and project their possible future directions. Diagram by the Authors.







































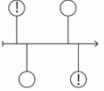

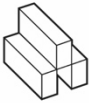














Actors					
 <b>EXTERNAL INVESTOR</b> documents	 <b>PROJECT MANAGER</b> actors <small>A person responsible for planning, organizing, and directing the completion of the projects while ensuring that the projects are done on budget, and within scope.</small> <small>GROUP J</small>	 <b>URBAN ACTION CORPS</b> actors <small>The Urban Action Corps is a federal agency that provides financial assistance to low-income families and communities to help them improve their living conditions.</small> <small>GROUP I</small>	 <b>LARGE INVESTMENT FUND</b> actors <small>A fund is a pool of money that is used to invest in various assets. The fund manager is responsible for managing the fund's investments.</small> <small>GROUP K</small>	 <b>DFF DETROIT FIRE DEPARTMENT</b> actors <small>This is a public agency tasked with enforcing the building code with respect to safety issues.</small> <small>GROUP L</small>	 <b>BUILDING CONSULTANT</b> actors <small>Engineers that work closely with the architect, contractor, and construction team to ensure that the building project meets all the necessary requirements and codes.</small> <small>GROUP F</small>
 <b>DETROIT DEMOLITION DEPARTMENT</b> actors <small>This is a public agency tasked with demolishing and removing old buildings and structures. It is responsible for ensuring that the demolition process is safe and follows all the necessary regulations.</small> <small>GROUP M</small>	 <b>INVEST-DETROIT</b> actors <small>The Invest-Detroit is a public agency that provides financial assistance to businesses and entrepreneurs to help them grow and create jobs in the city.</small> <small>GROUP N</small>	 <b>DETROIT PLANNING &amp; DEVELOPING DEPARTMENT</b> actors <small>The Detroit Planning &amp; Developing Department is responsible for creating and implementing the city's long-term vision and strategic plan.</small> <small>GROUP O</small>	 <b>DEVELOPER</b> actors <small>A developer is a person or organization that is responsible for the development and construction of a building or project.</small> <small>GROUP D</small>	 <b>POTENTIAL BUYER</b> actors <small>A potential buyer is a person or organization that is interested in purchasing a building or project.</small> <small>GROUP E</small>	 <b>Deliverance Temple</b> actors <small>Deliverance Temple is a religious organization that provides spiritual guidance and support to its members.</small> <small>GROUP G</small>
 <b>MOTOR COMPANY</b> actors <small>A motor company is a business that manufactures and sells motor vehicles.</small> <small>GROUP P</small>	 <b>LAND BANK AUTHORITY</b> actors <small>This is a public agency that is responsible for managing and selling vacant and abandoned land.</small> <small>GROUP Q</small>	 <b>MICHIGAN DEPARTMENT OF EDUCATION</b> actors <small>The Michigan Department of Education is responsible for overseeing and improving the state's public education system.</small> <small>GROUP R</small>	 <b>DETROIT Department of Transportation</b> actors <small>The Detroit Department of Transportation is responsible for managing and improving the city's public transportation system.</small> <small>GROUP S</small>	 <b>CONTRACTOR</b> actors <small>Anyone who directly employs or engages construction workers or manages construction work.</small> <small>GROUP T</small>	 <b>Potential restaurant and shop owners</b> actors <small>This is a public agency that provides support and resources to potential restaurant and shop owners.</small> <small>GROUP U</small>
 <b>CLIENT</b> actors <small>A client is a person or organization that is the primary customer of a service or product.</small> <small>GROUP V</small>	 <b>DETROIT HOUSING &amp; REVITALIZATION DEPARTMENT</b> actors <small>This is a public agency that is responsible for managing and improving the city's housing and revitalization programs.</small> <small>GROUP W</small>	 <b>DETROIT CITY OFFICE</b> actors <small>This is a public agency that is responsible for managing the city's day-to-day operations.</small> <small>GROUP X</small>	 <b>SMART CITY CONSULTANCY</b> actors <small>A smart city consultancy is a business that provides expertise and services to help cities become more efficient and sustainable.</small> <small>GROUP Y</small>	 <b>INVESTOR</b> actors <small>An investor is a person or organization that provides capital to a business or project.</small> <small>GROUP Z</small>	 <b>NORTH CORKTOWN NEIGHBORHOOD ASSOCIATION</b> actors <small>This is a community organization that represents and advocates for the interests of the North Corktown neighborhood.</small> <small>GROUP AA</small>
 <b>Department of Public Works</b> actors <small>Provide environmental and infrastructure services designed to ensure the cleanliness and safe and efficient mobility of the residents, visitors, and customers of the city. The primary responsibilities include: street cleaning, maintenance, and engineering design of streets and alleys.</small> <small>GROUP BB</small>	 <b>LOCAL BUSINESS</b> actors <small>This is a private business that provides goods and services to the local community.</small> <small>GROUP CC</small>	 <b>DETROIT EDUCATION BUREAU/ SCHOOL</b> actors <small>Related institutions which is looking for project financing opportunities. Act as a bridge around development of the project.</small> <small>GROUP DD</small>	 <b>MANTZ WOODLANDS</b> actors <small>This is a private group which is buying and selling property through Mantz Woodlands. It is a real estate company.</small> <small>GROUP EE</small>	 <b>HDC DETROIT HISTORICAL DEPARTMENT COMMISSION</b> actors <small>This is a public agency tasked with the preservation of historic buildings and sites in Detroit.</small> <small>GROUP FF</small>	 <b>JOURNALIST</b> documents <small>A journalist is a person who reports news and information to the public through the media.</small> <small>GROUP GG</small>

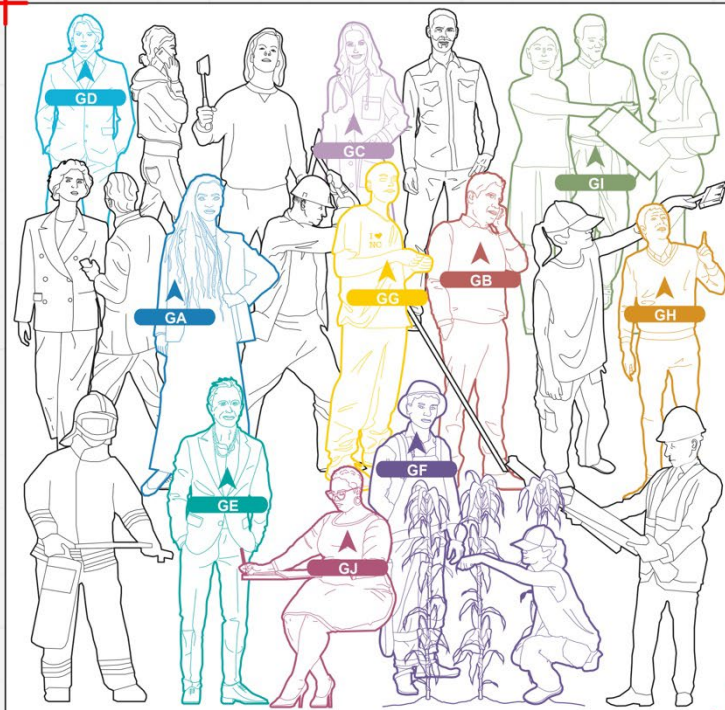
Fig 4. Some of the actors the students interacted with throughout the weeks. Image by the Authors based on students' drawings.

Documents				
 STRUCTURAL MODEL	 MATERIAL CERTIFICATION	 AXONOMETRIC VIEW	 BUILDING SCALE PLAN	 RENDERING
 CITY SCALE SECTION	 BUDGET	 FORM	 TIMELINE	 NEIGHBORHOOD SCALE PLAN
 CONCEPT	 FEASIBILITY STUDIES	 PROMOTIONAL VIDEO	 TECHNICAL REPORT	 PHOTOS
 MAQUETTE	 BUILDING SCALE SECTION	 SKETCHES	 HISTORICAL EVOLUTION	 FUNCTIONAL DIAGRAM
 CONTRACT	 MOODBOARD	 REFERENCES	 BROCHURE	 WEBSITE

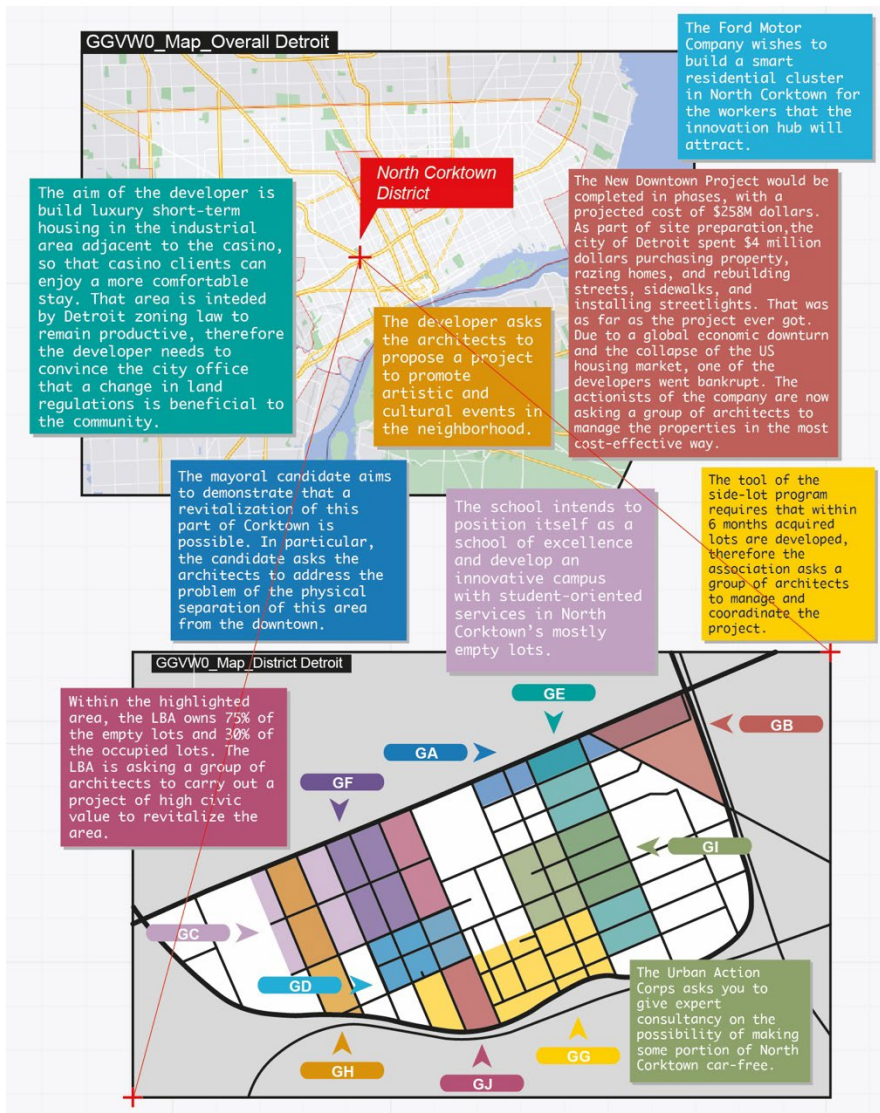
**Fig 5.** The nature of the documents is up to the groups' own choice: technical analyses, budgets, zoning change forms, technical plans, renderings, city-wide sections, but also websites, promotional videos, and marketing brochures.

Image by the Authors based on students' drawings.





- GA** **The Mayoral Candidate** is trying to gain legitimation in view of the upcoming city election
- GB** **New Corktown Development** started a big development project in the early '2000s in concert with the City of Detroit
- GC** **The School of Dentistry** is located in Northern Eastern area in North Corktown
- GD** **The Train Depot Department** at Ford Motor Company is managing the transformation of the former train station into Corktown Innovation Hub
- GE** **Bendrock Detroit** is a big developer who owns the Casino
- GF** **Michigan Urban Farming initiative** is a local farming cooperative made of residents who wish to be private farmers
- GG** **North Corktown Neighborhood Association** is a citizen association which is helping residents and owners, through the 'side-lot program' tool, to gain control on the transformations that are being carried out in the area
- GH** **Ventury Partners** is a private developer that is interested in managing cultural spaces and events
- GI** **Urban Action Corps** is a private developer that is interested in managing cultural spaces and events
- GJ** **Land Bank Authority** is a public agency which is also supported by private financing, and which owns 25% of the city's residential stock (88.000 units at all)

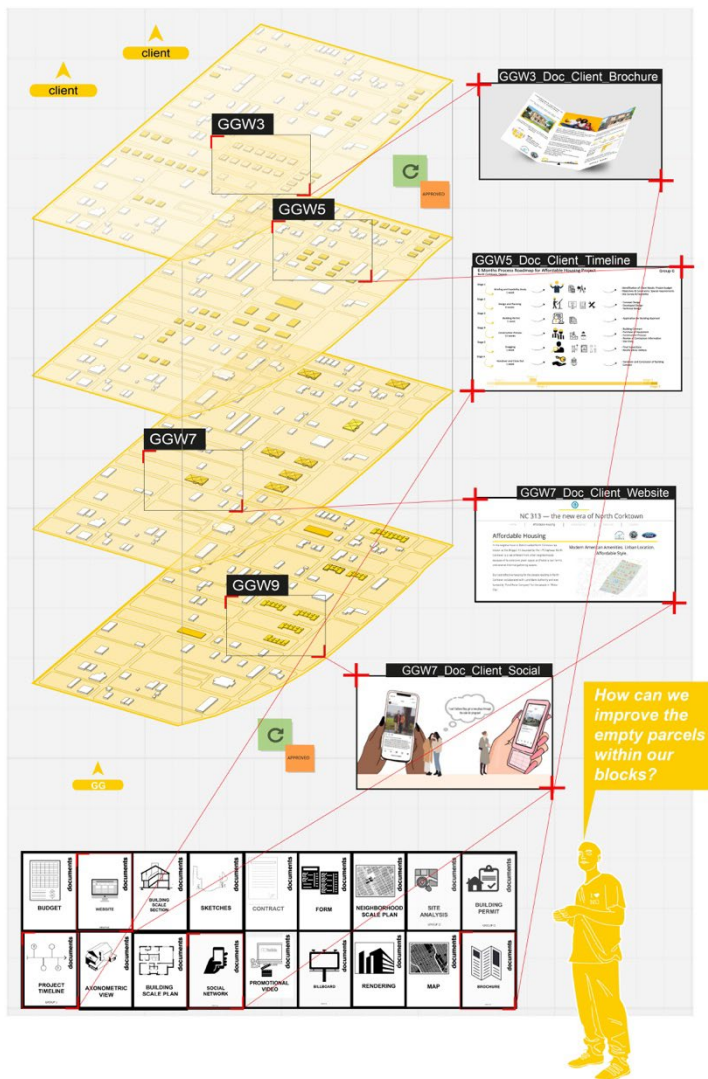


**Fig 6.** Each group of students has a different client, whose mandates are offered through varied profiles: clients have a story, their intentions are not always clear, they don't know exactly what they want, they can change their mind during the time.

Image by the Authors.

**Fig 7.** In the first two years of the course the Detroit neighborhood of North Corktown works as "board of the game"; it is offered to students as animated by opposing interests and controversies, an entanglement in which it is not possible to make easy distinctions between analysis and synthesis, a place of the Latourian matters of concern and not of matters of fact (Latour 2004).

Image by the Authors based on studio drawings by the students.



**Fig 8.** The project consists of specific documents produced to negotiate with a specific interlocutor, in this image a summarization of the exchanges occurred with the client during the weeks by one group of students.

Image by the Authors based on students' drawings.

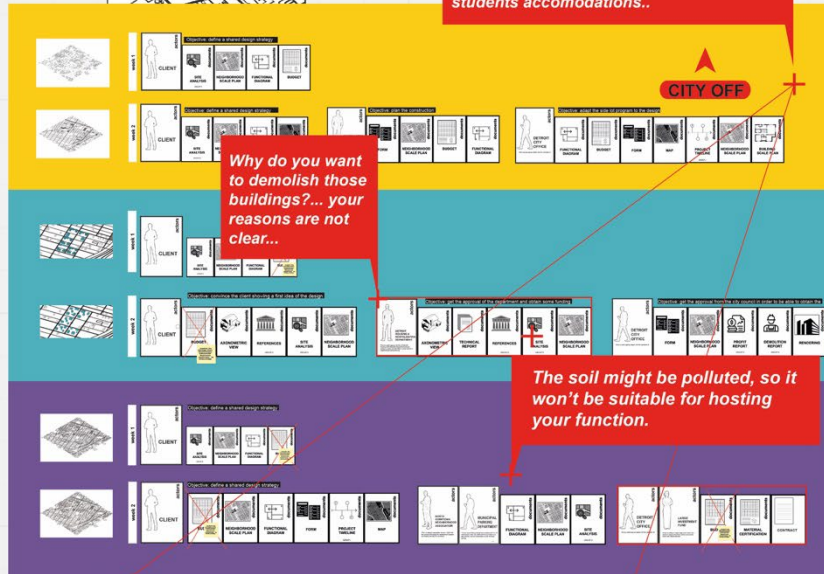
**Fig 9.** During the course students interact not only with the client, but also with other actors who they wish to associate with to carry out their design strategy. Actors, in turn, support, negotiate or oppose the proposals from their own perspective, whether it is a bureaucratic perspective (as the Detroit City Office represented in this case), or a private one (a citizens' association or an investor).

Image by the Authors based on students' drawings.

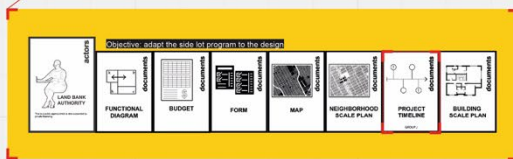
W2



According to a Special Law, 15% of plot prizes should be reserved for low income. You could perhaps consider to add some students accomodations..



W3



GGW6\_Doc\_Cityoff\_Render



W3

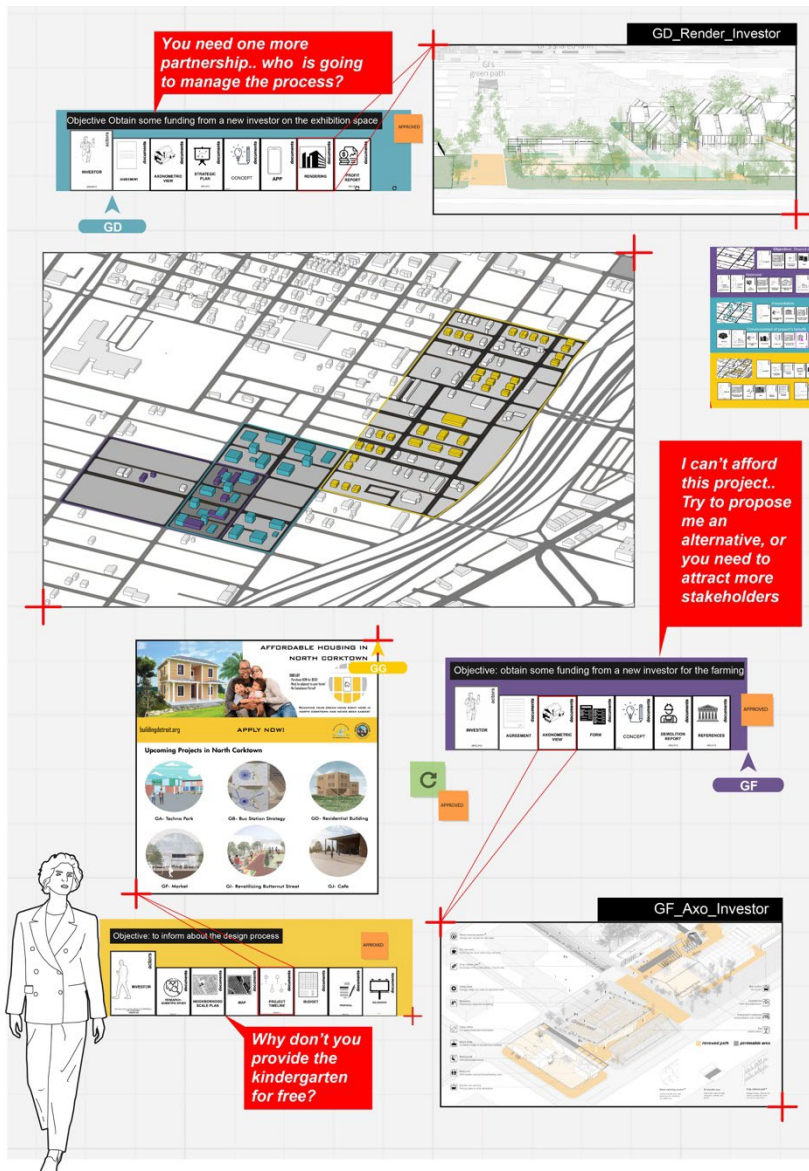


GGW6\_Doc\_Cityoff\_timeline



W3





**Fig 10.** Students received feedback throughout the semester by teachers playing different roles as needed and by a series of guests who interpreted specific actors such as public agencies, citizens associations, developers, and so forth; in this case, the Developer.

Image by the Authors based on students' drawings.

**Fig 11.** The interlocutors the students interact with can contradict themselves, it is up to the students to navigate them, using the project as a political tool to associate those actors they deem necessary; in this case the Neighbourhood Association.

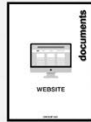
Image by the Authors based on students' drawings.

GGW7\_Doc\_NCNA\_Site

A Co-living Farm&Travel Resort inside Tree Farm



Shared books, movies, table games:  
- scan QR code / use face identification to register the user

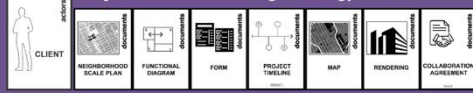


GG

Soil is not polluted! Why you're planning to spend so much money on land reclaim?

NCNA

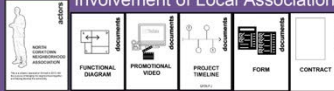
Objective: Shared design strategy definition



Approval



Involvement of Local Association



Presentation

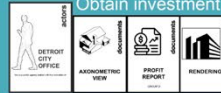


This proposal is way not affordable for low income!

Convincement of project's benefit



Obtain investment



You can't demolish those buildings! However, temporary functions are needed

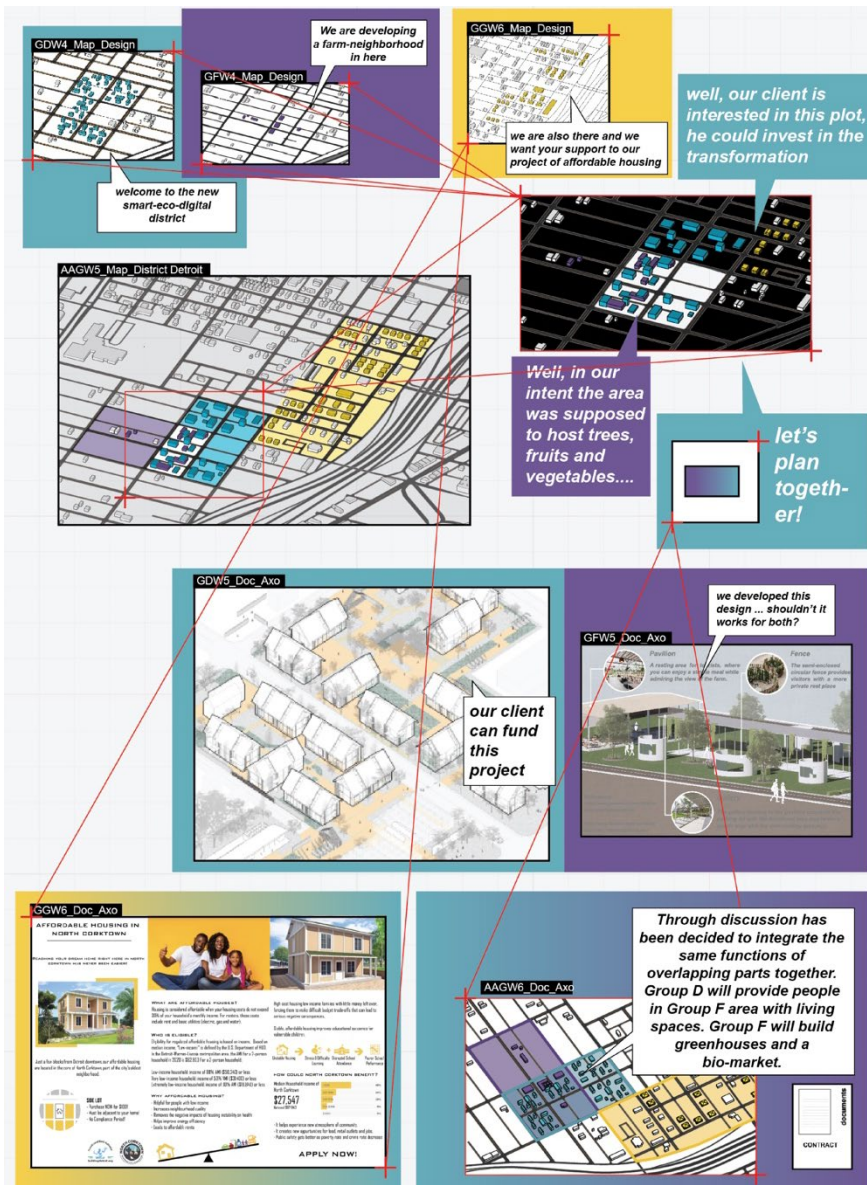
GGW6\_Doc\_NCNA\_Render



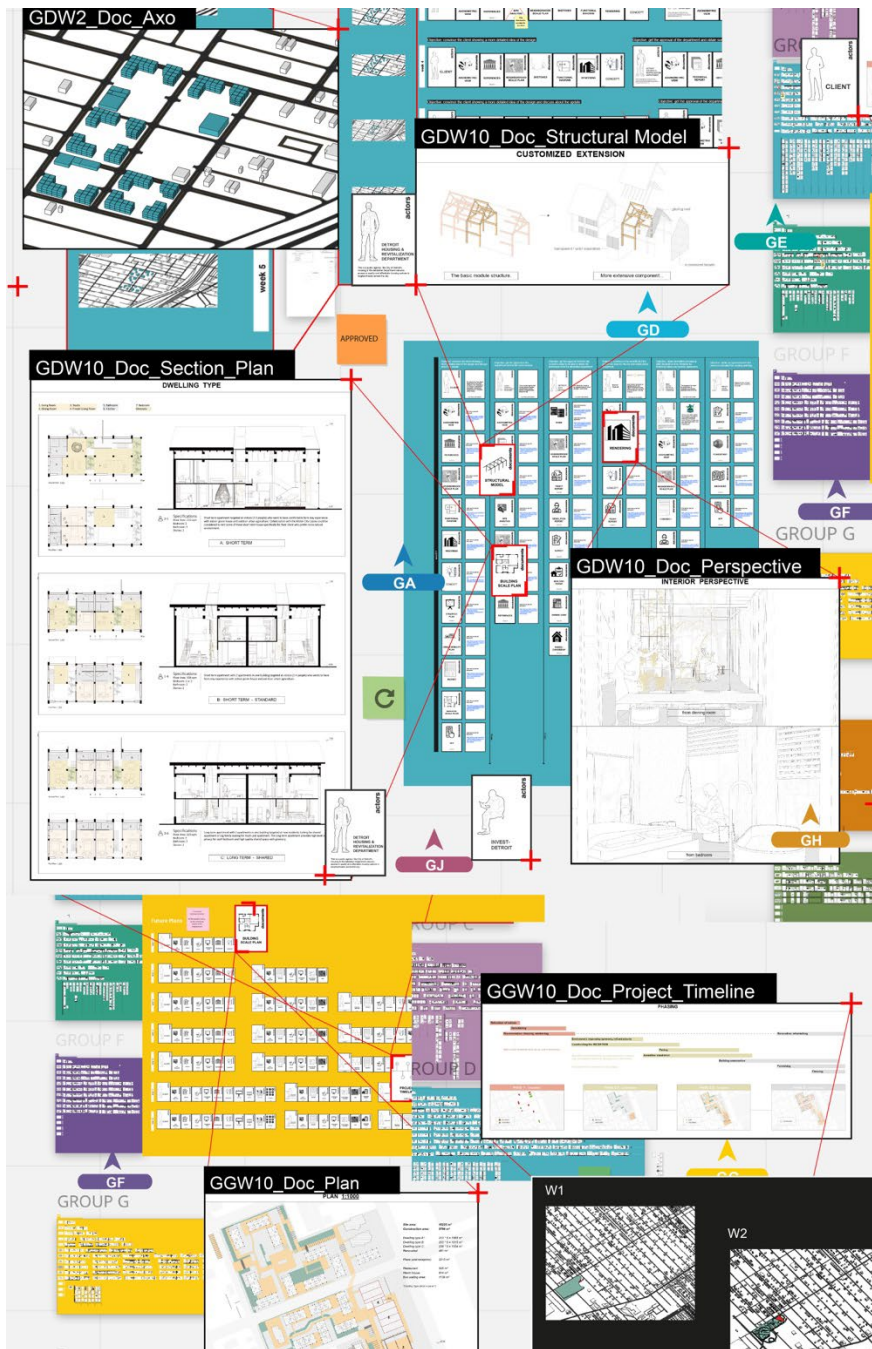
GD

GF

GG

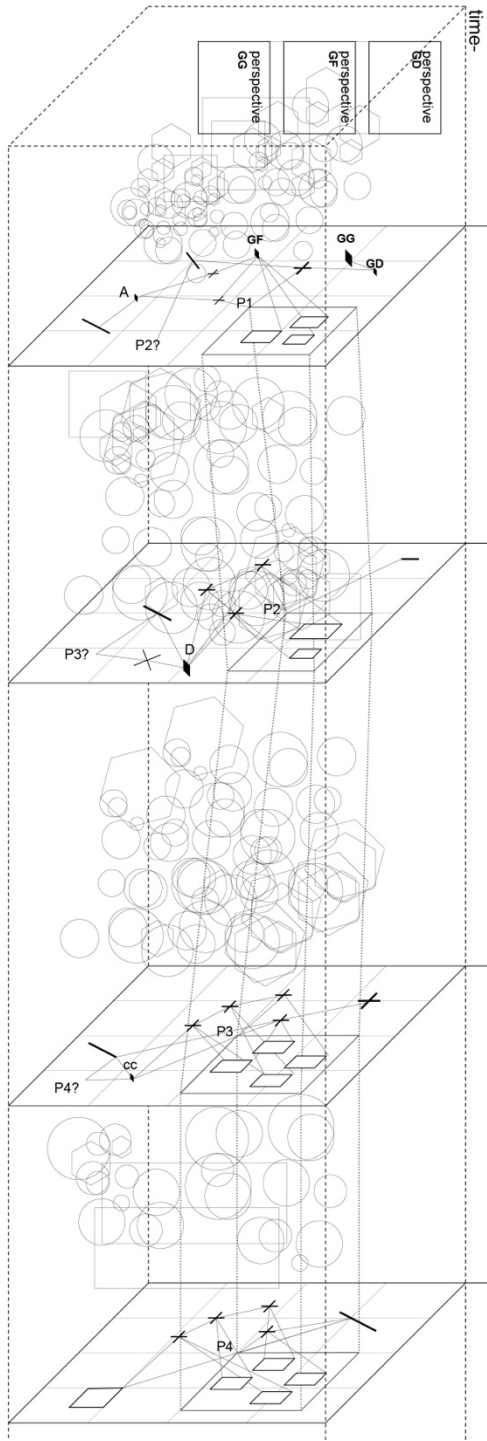


**Fig 12.** Students do not work in an absolute time and space, but rather at the same time and in the same space where other students work. To foster conditions for interaction, different groups' project areas intentionally overlap, to the effect that the groups step on each other's toes at different times during the course, having to consider each other's perspectives and negotiate a shared strategy on where/when/what/how to carry out their project. In this sense, the groups of students are encouraged to confront each other, rather than act as single units that work independently from the actions of the rest of the class. Image by the Authors based on students' drawings.

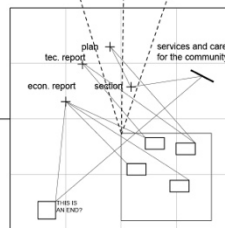
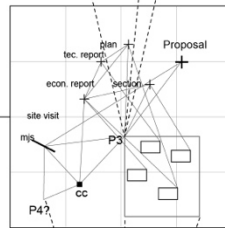
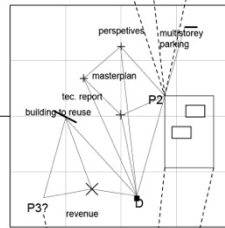
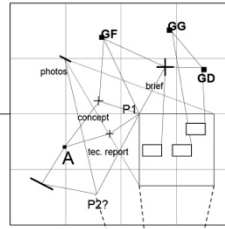


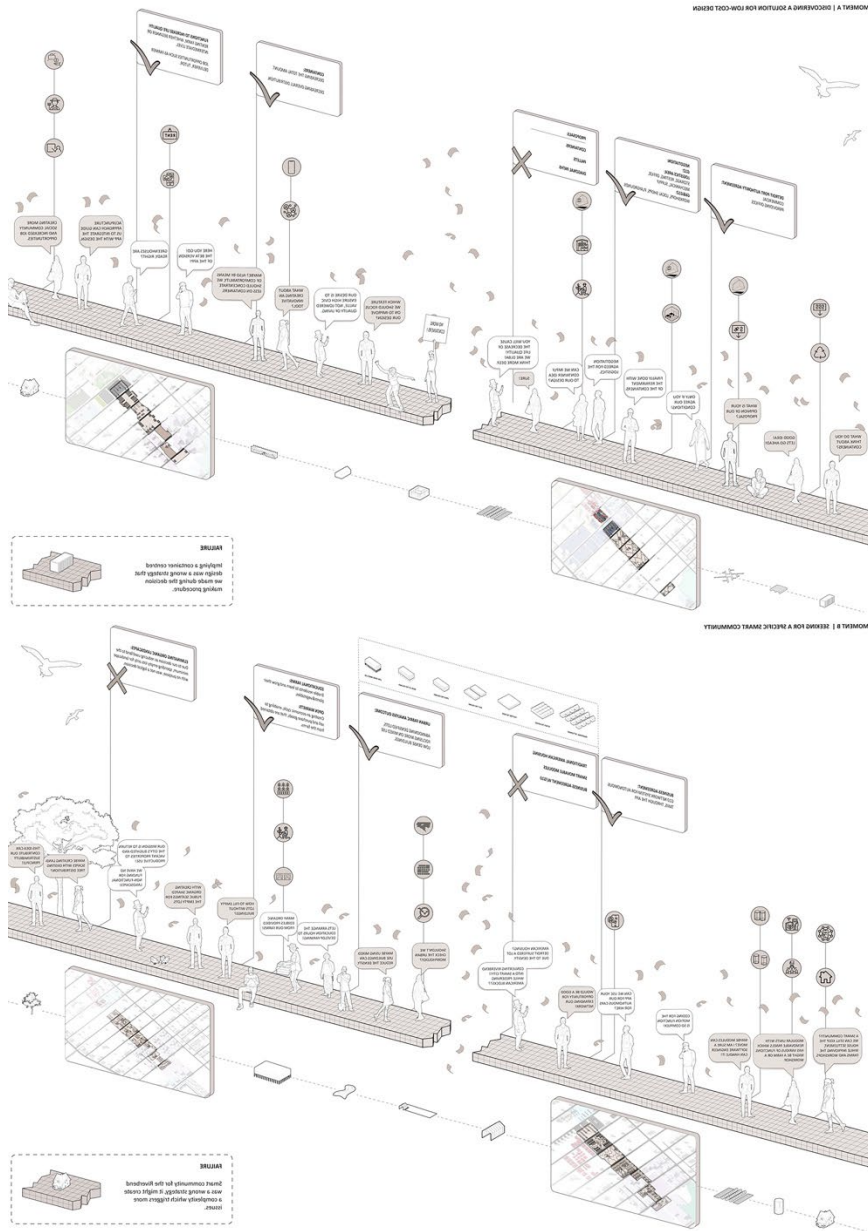
**Fig 13.** Week after week exchanges and detournements are layered into the game board, producing a thick entanglement of actors, documents, and design proposals. Diagram by the Authors.





documents



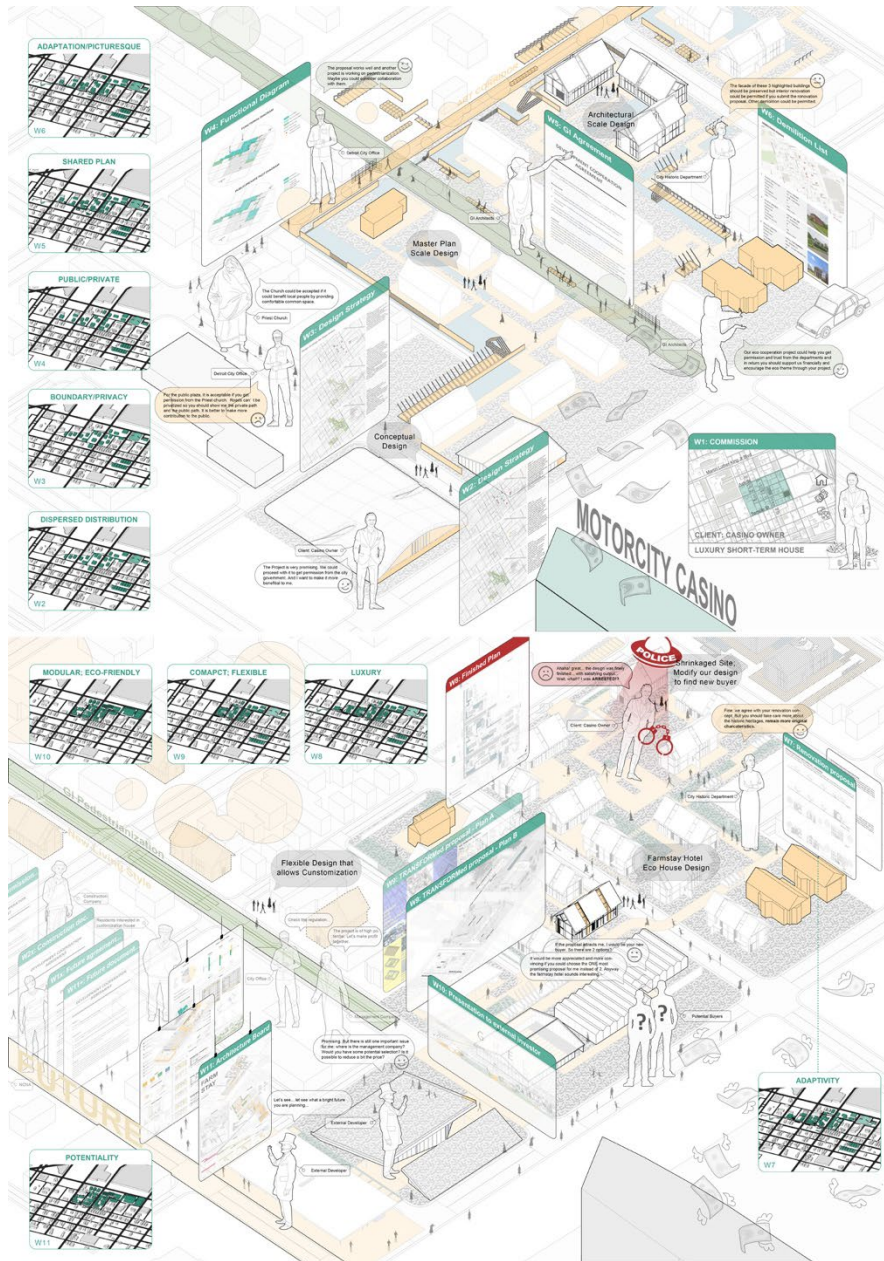


**Fig 14.** In the conclusion of the course, it is possible to retrospectively enact the succession of each interaction and its spatial repercussions.

Image by the Authors based on students' drawings.

**Fig 15.** Example of students' reflection on two moments of the course that have been particularly significant in the development of their strategy.

Image by Alp Arda, Kubra Tezcan.



**Fig 16.** Example of retrospective strategy realized by a group of students.  
Image by Giordana Parisi, Yu Ziyue, Zhong Jihao, Phan Tran Khue Tu, Zhang Xian.

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