Reflection
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Project Description
During the research and masterplan phase my group and I reached to the conclusion that most social and ethnic problems found in the project area stem from a lack of local working class employment. As a consequence, the masterplan proposes a restructuring of existing industrial areas including their edge condition with the urban fabric. The intervention allows for restoration of the economic base of the project area.
The proposed approach suits for application in a wider context. The conditions we found in the project area are characteristic for wider areas of Chicago and the Midwest region and their struggle with industrial decline. The developed theories and tools were tested on a specific location in the masterplan.
The building follows the intention of the masterplan on a smaller scale. It is one of three buildings suggested in the masterplan as a seed for an industrial cluster in the emerging field of advanced manufacturing. The building hosts a number of functions that are crucial for business development, thereby functioning as an incubator for local industrial development. The chosen open and accessible typology stands in contrast with most comparable buildings that are hidden and secluded. By deploying an open and accessible typology, the building aims at a wider social impact on a local and urban scale, not limiting itself to a mere business venture.

Problem Statement
Industrial production faces what some call Industrial Revolution 2.0, manufacturing is replaced by advanced manufacturing. The economic, technological and social impact of this process will heavily influence society. If they take initiative, cities as Chicago should be able to benefit from this development, to restore their economic base and to rejuvenate their problem areas.

Research Question
What is the best program, typology and design for a business incubator that contributes to both, business- and neighborhood (re-) development?

Process
The design process started with an analysis of the processes the building had to facilitate. The requirements of every stakeholder and associated part of the program were studied in depth, in particular, as well as their interconnectivity with each other. Subsequently, the requirements of the individual bits had to be balanced, as not only synergies, but also conflicts were found. A similar process was necessary in order to reconcile process/program requirements, typology and neighborhood/urban ambitions of the building. The most important aspects during the design process were functional flexibility and openness/representation of advanced manufacturing as an industry and as an institution embodied in the proposed cluster.

The Relationship between Research and Design
The initial analysis of stakeholders and associated program requirements proved to be more difficult than expected. Manufacturing as a sector is rather secluded, information about involved parties and business ventures is not readily available. However, the outcomes of the analysis were substantial, in my opinion true and valid, and in the end the backbone of the design.
During the design process, the amount of the gathered information was both, a benefit and a drawback. In combination with thoughts about typology and ambitions regarding the impact of the design on its surroundings, the amount of information led to many conflicts and contradictions. I struggled to combine all the different elements into a reasonable entity, but eventually succeeded. Every bit of information contributed to the result, regardless if it was used/satisfied or not. The struggle towards the outcome was probably
rather caused by lack of experience on my behalf than by flaws in the approach of a research driven design. Further practice will help to navigate through this process faster and more goal oriented.

The relationship between the methodical line of approach of the graduation lab and the method chosen by the student in this framework

What I appreciate about the chair of complex projects is the importance they attribute to research during the design process and their design approach that goes through all levels, from the urban to the detail scale. The most enjoyable experience during the past year was to see how interventions on an urban and building scale together can be used as a problem solving tool for a city, neighborhood or a local area. This became most evident during the time we worked on the masterplan, the ideas developed during this phase are at the core of all work I carried out later. During the time I worked on my building I sometimes lost sight at these ideas, but recollecting them proved to be a strong problem solving tool at every scale.

However, the approach is not without drawbacks. Sometimes the need for clarity at a larger scale could not be satisfied, resulting in work on smaller scales staying vague and dependent on decisions not yet taken/ being accepted as final. This sometimes impeded the overall progress. The second aspect is that thinking on different scales and a wide range of topics at times contradicted the precisely determined products that eventually were expected. Several times during the year other things than architectural drawings would have been a more reasonable final product. When working with a methodology that encourages wide thinking, either should a wider range of final products be accepted, or by other means be ensured that students do no divagate too much.