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UROP Final Report  
Analysis of Dutch Complex Housing Using Space Syntax

The need for urban housing that is both dense and affordable is now more crucial than ever. A positive response to this issue is complex housing in the Netherlands, as termed by Julia Robinson. (Robinson 2011) This is a positive response because of the combination of all mixed income levels, giving the structure diverse clientele and unit types. Communities are created within the space, providing the residents with far more than a living space, extending into public spaces useable by the community as a whole. The research I have conducted over the semester, under the direction of Professor Robinson, compares nine different housing complexes in the Netherlands.

My contribution to the overall research was using gamma analysis to diagram the space connections of the buildings. The difference in linear patterns show the variety of movements, controls in a space, and activity within that space. Diagramming the different housing projects provides a way to better understand the differences between these Dutch housing communities, as well as a comparison tool for other housing projects that may not have had as positive outcomes. My contribution will be utilized in Robinson's exhibit planned for 2015 as well her planned book manuscript.

The research conducted over the semester proved many valuable connections between the nine buildings as well as large space differences that show successful implementation of community housing can take many forms. One key factor noticeable was the size of the buildings as well as the amount of connections within them. For example, one building in particular, Carnesselande, has a long, extending path with few connections leading from it, whereas De Muzen, another building under study, is relatively flat in regards to connections, with many spaces coming from a single connection spot. This can help show how far apart spaces are as well as the amount of options a user has in regards to places

they can go within the building. Each diagram of the buildings' connections show the unique characteristics that make these buildings different from one another.

Over the course of the semester, the research followed closely the proposed schedule from the beginning of the process. There was, however, more time than expected spent on the compilation of diagrams and information. I was also hoping to finish all of the diagrams for Professor Robinson, but because of the amount of time, that did not happen as well. After developing a system as to how I wanted to develop the diagrams, it was fairly easy to complete them. If I had more time, the diagrams would have been easy to complete.

As for the knowledge I have received from this project, it learned more than I expected I would have. Working with the plans of the buildings, analyzing already-completed diagrams, and developing my own really developed my understanding of space connections. Emerging patterns showed the similarities and differences between the spaces, all of which were successful. As an Architecture major with the plan of being licensed and designing for a career, understanding these large concepts will help me with my profession and development of plans.

The UROP experience offered here at the University of Minnesota is definitely worth participating in. Being able to complete research that I am passionate about while being paid for it is really a great opportunity. The interaction and mentoring I received from Professor Robinson was incomparable as well. The UROP gave me a very unique and special opportunity that I do not think I could have gotten elsewhere.