qualification at the University of Canterbury that the MDRR replaced. Preliminary results suggest that the students' initial nervousness at being faced with the new jargon, theory and practice of planning, gave way to an excitement as hitherto 'taken-for-granted' assumptions were challenged and they developed a greater appreciation of the difficulties faced in building community resilience in contested social arena.

We anticipate that the greater shared understanding and increased interdisciplinary appreciation and networks forged by the MDRR and MPlan students and researchers will significantly aid in shifting the planning profession from 'business-as-usual' thinking to a risk-management approach and community resilience practice that directly contributes to implementing the Sendai Framework.

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Key Words: *Risk, Bridging organisations, Boundary objects, Sendai*

SOLVING ENVIRONMENTAL HEALTH CONFLICTS BY ADAPTIVE AND CO-EVOLUTIONARY PLANNING APPROACHES: LESSONS FROM GHENT (BELGIUM)
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Individual Paper Submission

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While public health and urban planning were closely linked in the past, today both domains are institutionally separate. Although both professions serve the public interest, the respective sources of praxis and theory differ greatly. Despite of its unquestioned achievements in preventing serious environmental conflicts, the institutionalization of environmental health criteria in formal laws and regulations seems to have difficulties in dealing with the rapidly changing spatial conditions of our complex society, the growing awareness of environmental impacts and the increasing empowerment and engagement of citizens. As such, due to institutionalization the relation between planning and urban health issues has turned into a lock-in of two procedurally interrelated, but in fact separate domains of knowledge and action.

The paper aims to move beyond this lock-in and explores ideas for a more context dependent, adaptive and co-evolutionary urban planning perspective regarding environmental health. The absence of a detailed policy framework to reconnect both disciplines led to developing a matrix of planning management approaches, that builds on recent ideas of co-evolutionary and adaptive planning. Central to the matrix is the expansion of the current institutional management approaches to environmental health conflicts with additional approaches that capture the self-organizing capacity and expertise of grassroots initiatives. At the same time the combination of institutional and actor-related approaches allows for adaptive planning solutions. Thereto a flexible attitude of the government is needed to look beyond the strict environmental regulations and rigid procedures.

To verify whether these academic and theoretical insights could help to solve urban environmental health conflicts, a case study was carried out in the city of Ghent (Belgium), on which the conference paper will report. This case study intended to use an action-research approach and to connect to current environmental conflicts in the city. The methods to detect and analyze possible conflicts reflect recent approaches in environmental justice research.

First, a GIS analysis was carried out to compare the distribution of environmental impacts (air pollution and

noise) with the distribution of vulnerability (socio-economic characteristics) and responsibility (e.g. car ownership) indicators, allowing the detection of spatial and social inequalities in exposure. Secondly, based on the analysis, and together with a group of experts, a micro case was selected where inequalities in exposure are most present and citizen protest is growing, i.e. a suburban area in the south of the city which is cut through by two highway viaducts. Next, in the micro case, the environmental inequalities were examined thoroughly, using more detailed sources to get an overview of the context. In a following step a survey among residents was carried out to get insight into subjective aspects, the processes behind the environmental inequalities and the potential for innovative planning approaches. Consequently in a last part all results were combined and the situation was evaluated, to incite a redevelopment track making use of a combination of the four planning management approaches, and supported by bilateral and multilateral consultations with all stakeholders.

The results of the case study indicate that the developed matrix of planning management approaches could help to change the paradigm of tackling urban environmental health conflicts, by providing open and co-evolving planning strategies to practically support a more central place for health in urban planning.

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Key Words: *environmental health, urban planning, adaptive planning, co-evolution*

DOES NATURE NEED TO BE GREEN? EVALUATING THE ROLE OF FAMILIARITY IN LANDSCAPE PREFERENCES.
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Poster

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Landscape preference has become an increasingly important topic with researchers in the fields of planning, conservation, geography, and related disciplines examining place attachment and more generally, the psychological connections that exist between people and place. This study explores the extent to which where one lives may impact their environmental preferences, asking participants to rate desert scenes, mountain scenes, and savanna-like hill scenes, and exploring how a "natural" landscape could be perceived. Studies have consistently found that people have a preference for environments perceived as natural to those perceived as human-made. In such studies, "natural" has related to the presence green elements - foliage, vegetation, and trees – as well as the absence of overt human intervention. This study also sought to explore the issue of associating green with naturalness by exploring the differences in attachment to the landscapes from varying geographic areas of the country – some of which have little to no green in the landscape. While previous studies have found perceived naturalness has been correlated with the presence of green growth, this type of naturally green landscape is not, in fact, present in many geographic regions of the country. Finally, this study looked at the affective appraisal of the various scenes; for examples, whether the scenes were perceived to be relaxing or, conversely, exciting. This study used a survey, which 227 participants completed. The majority (54%) of participants reported having lived in their region of the country for more than ten years. Respondents in all represented regions of the U.S. reported liking the mountain scenes best, but the Southwest group rated the desert scenes higher than the other groups did. Respondents in all regions were mixed in their affective appraisal of the desert and mountain scenes, with some respondents rating them as relaxing and others rating them as exciting. The savanna-like hill scenes were