From HUBs to MUDs

The featured projects indicate that hubs are diversifying into what could be called a hybrid urban typology, quite different from their monofunctional predecessors. In the light of the current restructuring of the city into more multifaceted urban spaces, these constellations hold promising opportunities. By merging formerly separated typologies for consumption, business, housing and culture around public spaces, they emancipate themselves from their original transport function. They transcend the qualities of traditional infrastructural hubs as spaces of transit and exchange to form self-sustaining entities, cities within the city. As comprehensive mixed-use developments (MUDs) which integrate diverse social groups – not only the business elite and tourists, but also inhabitants and suburban day trippers – they become intersection points between the global and local, allowing an ‘intense urbanity’ to evolve.

MUDs represent important urban development opportunities in prominent locations like France’s Euralille, Berlin’s Potsdamer Platz, New York’s Times Square and Oslo’s Christiania-Bjørvika, all of which have been upgraded and extended into lively urban quarters. In these projects, the implications of MUDs for the development of both the scope and image of the urban space are made manifest. As urban destinations, they seem to mirror all facets of everyday urban life. The combination of housing and local and international commerce allows a certain interface between high-and city centres and lower density areas.

As soon as business and commerce leave the confines of the traditional office block or shopping mall to encompass entire districts or neighbourhoods, the urban design strategies increase in complexity. The socio-economic aspects of MUDs imply multiple actors beyond the individual property owners or corporations in question, and their scale and prominent location demand elaborate private and public strategies. They therefore become strategic planning tools for governments in the framework of public-private partnerships. While the objective of private investors and developers is maximization of profit, the public’s aim is to stimulate local development as well as to satisfy the citizen’s growing demand for social responsibility and social experiences. It is therefore in both their interests to create an attractive urban ambiance. This common goal is what binds the corporations and the city together. Through the merging of commerce with social experiences, underused or blighted areas can be revitalized and acquire a new image.

With their high density, their 24-hour rhythm of human activity, their function as urban meeting place and the friction between different social networks, hubs have always been dynamic and versatile spaces. Dynamic places require an equally dynamic urban design strategies and tools. In order to become lively and viable urban places, hubs need to be able to respond to and integrate the ever-changing set of demands from private and public stakeholders, while at the same time generating urban quality. How these developments might be shaped and steered for the sustainable development of the urban environment, can be illuminated by some of KCAP’s projects.

KCAP’s dynamic urban design strategies and tools

KCAP conceptualizes the creation of comprehensive urban environments as social hubs by incorporating their inherent qualities from the very beginning of the design and planning process. They have developed dynamic strategies and design rules for identifying four major urban elements: a permeable network of public spaces, a meaningful morphology, a modular programme and phased development. The deployment and impact of these urban rules and tools are the master plans for Groningen CS, Stadtraum HB Zurich and Bishopsgate Goods Yard.

Permeable public spaces

In all three projects, the public space constitutes the most essential design element. In each case, it is defined as a series of squares integrated into a network of streets that is based on the extension of existing roads through the site. These ‘connective tissues’ increase the number of potential destinations within walking and cycling distance. They also allow the continuation of axial views through the new area. This high degree of physical and visual permeability at the strategic level is mainly ensured through the provision of main thoroughfares which enable city-wide connections and serve as backbones for the areas, such as the diagonal at Stadtraum HB or Braithwaite Viaduct at Bishopsgate.

These civic spaces, which are open and accessible to all, provide the setting for high-quality buildings, offering places not only to consume, but more particularly to sit and relax. They also connect the city centres with revitalization areas such as southern Groningen, Zurich Aussersihli and East London, repairing the existing urban fabric fragmented by previously autonomous infrastructural hubs. The role of the MUD as a social condenser is especially important at Goods Yard which simultaneously faces London’s wealthy City and one of its poorest boroughs.

Meaningful morphology

Those more or less stable street grids serve to direct any future development and, in conjunction with height and density regulations, are the starting point for defining plots and envelopes within which to build. Architectural quality within the envelopes is ensured by an established set of criteria and rules based on several parameters such as sight lines, shadow impact, programmatic needs, appearance, circulation and so on. With the help of such rule sets, the height, form and position of the building volumes, which are dynamically interrelated, can be regulated. They allow for a wide variety of options since the building volumes inside the envelopes are not predetermined, but flexibly shaped in accordance with the programme and other emerging needs.

All three KCAP projects are based on similar rule sets which entail two main aspects: a ‘block rule’ that regulates the boundary of the building in relation to the surrounding urban structures, and a ‘tower rule’ that allows maximum
calls for a highly modular configuration and distribution of programme, which can be regulated by rule sets. As far as urban quality is concerned, the rule sets must be able to respond optimally to market demands in all cases, for certain sensitive or critical types of use minimum and maximum quantities are defined. A good example of this is the housing typology in the Bishopsgate project, where 11% of the total area was allocated to residential use, 6% to cultural and educational institutions, and 14% to commercial spaces. This mix was defined in order to maintain a balance between large and small scale, programmatic differentiation of complementary uses, the selection of individual architectural expressions and the overall quality of the urban environment.

The strength of the rule sets is undoubtedly their ability to be used as a regulatory platform, allowing for flexibility in the design of the urban environment. The rule sets can be adapted to different contexts and scenarios, and their integration into the urban landscape can be achieved through a process of consultation and negotiation with all stakeholders. This process can be facilitated through participatory design methods, which encourage collaboration between different groups and stakeholders. This approach can help to ensure that the rule sets are tailored to the specific needs and characteristics of the urban context, while also taking into account the values and aspirations of the local community.

Responsive MUDs as urban catalysts

The rule sets are most freely applied in Groningen CS. The objective of the rule sets is to promote a diverse mix of functions – residential, office, retail, leisure, cultural, etc. – in order to develop a vibrant public realm and to generate a strong sense of identity and place. The rule sets allow for a high degree of flexibility and creativity, allowing designers to respond to changing conditions and to develop creative solutions to design challenges.

The rule sets are essentially a set of guidelines that can be applied to different contexts and scenarios, and their implementation can be tailored to the specific needs and characteristics of the urban context. The rule sets can be adapted to different scales, from small-scale interventions to large-scale developments, and can be applied to different types of urban environments, from historic districts to new urban areas. This flexibility allows for a high degree of creativity and innovation in the design of the urban environment, and can lead to the development of unique and innovative urban designs.

The rule sets are an integral part of the design process and should be integrated into all stages of the design and development process. They should be used as a tool to guide the design process, to ensure that the design is responsive to the needs and aspirations of the local community, and to develop a strong sense of identity and place. The rule sets should be used to support the development of a diverse mix of functions, to promote a high degree of flexibility and creativity, and to ensure that the design is adaptable to changing conditions.