2. Summary

Abstract

Housing security is a crucial factor for quality of life. It effects individual decisions in house-hunting, satisfaction with the housing situation, wellbeing of residents, and it determines the image of the neighbourhood. The residential quarter "Wien 21., Gerasdorfer Straße" represents an innovative example of subsidised housing, where "security" has been systematically considered already in the contest for development at the start of the planning phase and in the course of servicing the complex after completion. This analysis shows that a wide range of structural and environmental measures have been applied together with a number of technical security measures. It can be concluded that this way of comprehensive design for security is much more effective than any single measure, as crime can be tackled on unit-level, building-level and neighbourhood-level. A high quality of open spaces and architectural design together with a small-scale segmentation of buildings can foster a positive image of the whole quarter and increase identification of residents with their neighbourhood. Here the preconditions for active neighbourliness, a positive image of the quarter and a high feeling of safety are given. The scheme was found concurrent with the given standards for crime prevention by urban planning and design.

Objectives

The matter of housing security is multifaceted and comprises both objective and subjective sides. In addition to the deflection of offenders it is important for residents to get a feeling of comfort, care freeness, control and to have a good overview of the surroundings in their neighbourhood. On the physical side of prevention, forms of environmental and architectural design can help avoid zones of darkness and fear and support clear demarcation lines between private, (semi-)public spaces and public spaces. Moreover, the fabric of security in a neighbourhood is contingent upon social conditions such as mutual respect, social control and responsibility. This research project aimed to investigate the particular security measures that can be considered already in the planning stage of architectural housing projects. The results will be laid down in a brochure for planners and developers to highlight numerous practical examples for implementation of crime prevention measures in architectural design. This brochure will be edited by wohnfonds_wien.

Methods

The analysis of particular measures applied in this housing project was based, first, on an evaluation of planning applications and jury-reports against the state-of-the-art knowledge in criminology, and second on interviews with experts who were involved in the planning process. Results of recent research projects as well as international norms and standards for crime prevention by urban design and planning (specifically CEN/TR14383-3) were used. In addition specific experiences of local janitors were collected in semi-structured interviews.

Results

The issue of security is important for the quality of housing, but it quickly generates negative feelings with regard to potential threats and danger. A first impulse may evoke thoughts of target hardening by shielding, fencing and surveillance. Therefore it is important to develop a full preventive strategy to preconceive security aspects already in the planning phase of architectural design. According to this strategy crime prevention shall be implicit in environmental, architectural and social qualities of space.

The task for applicants to consider security aspects in their tender for the housing quarter "Wien 21., Gerasdorfer Straße" was threefold: Spatio-structural measures should be combined with technology measures and additional education and training of residents. In an integrated approach the focus of

applicants was directed not only to security technology but also to socio-spatial factors. In this way the efficiency of technology could be enhanced and a sustainable basis for security could be created in the quarter. Consequently, awareness of individual needs and social processes was raised in the design process, whereas these aspects are otherwise often neglected or handed over to social service providers.

All in all, the security concepts in the various submitted planning proposals were generally compliant with the guidelines of crime prevention through urban planning and design. Accordingly, the basic concept comprises, first, the principle of territoriality to appeal to responsibility of residents beyond the private sphere and raise concern for the wider neighbourhood. A second principle is "natural surveillance", or the support of socio-spatial situations to facilitate informal social control among the residents. For this it is important to provide for visibility and a good overview, but also to encourage liveliness in public space through mixed use on the ground level, the design of a system of footpaths and a good integration of the quarter in the urban environment.

The analysis of measures realised in this housing project shows that above all the guidelines for zoning, overview and visibility have been considered in the planning phase particularly with regard to designing open space, underground carparks, entrances and pathways.

Open spaces are subdivided through paths, vegetation and terrain-modelling. The separation into private, semi-public and public spaces designates different access-rights and duties. This clarity produces the feeling of control, fosters spatial adoption and encourages the presence of people in open space. Whereas responsibility by residents inside the quarter is supported, the design indicates to outsiders a strong sense of connectivity of residents with their neighbourhood. Together these factors have a deflecting effect for potential offenders.

The low number of floors, a reasonable number of units per entrance, variation in the architectural design as well as skilful sizing of open space all contribute to good social "proportionality" and help avoid anonymity.

The placing of buildings and playgrounds, house-entrances, community- and service-rooms is mindful of visual axes, transparency and potential eye-contact. Hidden corners and niches are avoided in basement car parks, turnstiles and service rooms. Basement car parks are clearly designed for a good overview and well lit.

However, there is a tension between visibility as a general planning principle and the desire for visual and acoustic privacy. Planning units 1 and 5, where buildings swing around a green centre, are a perfect example for the fact that also community-oriented building typologies can meet the desire for retreat and privacy. This has been achieved through the deliberate design of open space, the possibility for personal adoption of areas in front of houses, and the general appreciation of individuality of residents.

It was found that in particular a high quality of open spaces, with a consistent lighting system and intelligent pathways, contribute to the vitalisation of the surroundings in the quarter. There are many sitting accommodations at crossings, along footpaths and places, which are designed as wide benches and wooden boards, wooden decks and benches with armrests and backrests. This variety may serve different desires for comfort, personal distance and communication. On the other hand, the still poor supply of catering and gastronomy has a cushioning effect on public life in the quarter. The only café in the area had to shut down due low turnovers, and spaces originally dedicated for shops and chain stores are still empty. However, as appropriate structures are provided, there is a potential for future development. Another problem in the near future may be the lack of facilities for youth, as an increase of adolescents can be expected for the coming years from the present demographic structure in the quarter. At the moment there are no playgrounds, no places to linger, nor any skateboard-tracks. However, plans for an adventure park may alleviate the problem. Expert interviews showed very clearly that coordination of and cooperation with institutions beyond the quarter is needed when measures shall be taken to enliven the neighbourhood and shift the emphasis of the planning professions towards social management of the quarter.

The quality of relationships between residents is fundamental for social cohesion and the feeling of familiarity with the neighbourhood. Spatial structures may provide a framework for proximity and identity, but social support is needed as well. Neighbourly relationships develop over time in different shapes. During the first phase of settlement residents require support in order to disperse their doubts and set the grounds for trustful social relations. As social groups develop and people are separated over time, it is important to initiate enduring activities, such as establishing and cultivating community gardens, in order to stabilize social contacts. Moreover it is important for residents to learn to handle social conflicts. Residential conflicts often escalate when rival groups easily find allies in the near neighbourhood. Here janitors take an important role as neutral conflict managers at an early stage of conflicts.

According to the police, mechanical and electronic prevention measures are mainly effective with impulsive offenders who act spontaneously. However, residents often forget to close and lock windows and doors in their absence. Also, intercom systems are only effective if they are carefully used. Hence, clarifying information sessions in the quarter with prevention-officers on the police are welcome as valuable additions to built-in security technologies. Another often underrated element of insecurity are non-transparent fences and high walls, which are often applied as standard means for demarcation lines between private gardens by residents and housing associations alike. Experts in garden landscaping can offer a number of alternatives.

Altogether, this housing project provides perfect spatial, architectural and landscaping conditions for a cosy neighbourhood with reasonable practice of informal social control. Together, the design of open spaces, the particular architectural design of buildings and the small-scale spatial segmentation facilitate social encounters between residents. In conclusion, a high-quality layout of communal areas indoors and outdoors and clear demarcation of public, semi-public and private space contribute to the security in the quarter, as they strengthen subjective feelings of safety, foster mutual social control and finally reduce opportunities for crime.