Post-war new-town 'models': a European comparison

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Revised manuscript received 3 June 2005

Abstract. *Stevenage, Tapiola (Hagalund) and Vällingby were the first exponents of the new town concept in Britain, Finland and Sweden respectively, attracting attention not only within their home countries but also widely in Europe. In all three places, general plans were finalized around 1950, testing the latest ideas – such as neighbourhood units, the Radburn concept and community centres. The towns were to be organized in cohesive neighbour-hood areas, each with its own identity and its own community centre. The three towns differ in their morphological character. In Tapiola the scale is modest but the variation all the greater. In Stevenage the single-family house predominates, while in Tapiola there is a mixture of house types. Vällingby is dominated by blocks of flats, though there are also row houses and detached houses. In all three towns resources and interest were invested in achieving a modern main centre, which included cultural and social activities as well as commercial ones. Each town epitomized a new, brighter future, perhaps reflecting an optimism that was stronger in Scandinavia and Britain than elsewhere. The firm faith that characterized the drive to build the three new towns may seem slightly naive from today's point of view. Yet it is clear that we can learn a lot from the enthusiasm and fighting spirit of the 1950s, the social commitment, and the desire to create good housing, preferably with ample outdoor environments, affordable to broad groups of citizens.*

Key Words: new towns, garden cities, town planning, Vällingby, Stevenage, Tapiola/Hagalund, Patrick Abercrombie

The dream of creating the ideal town – at once rational, hygienic and with an attractive design – goes back a long way. One can perhaps discern three generations of ideal and model towns in the last 150 years. The first would be the industrialists' ideal communities from the latter part of the nineteenth century – of which Saltaire, Port Sunlight and Bournville are the best known but far from being the only ones. The second is the so-called garden cities of the early twentieth century – chiefly Letchworth and Welwyn Garden City – both created under the auspices of the prophet of the garden city movement, Ebenezer Howard. With the third generation, the post-war new towns, grandchildren of the industrialists' model communities, the new town left the experimental stage behind and began mass production.

The twentieth century, especially its second half, was characterized by a rapidly increasing need for housing, occasioned by such factors as the reconstruction of war-damaged cities, the need for large-scale slum clearance and the rapid growth of suburbs. It is against this background that the new towns and their flying start should be viewed (Hall, 1988).

Stevenage (Osborn and Whittick, 1977), Tapiola/Hagalund (Tuomi, 1992) and Vällingby (Sidenbladh, 1981) were the first exponents of the new town concept in Britain,

  ISSN 1027-4278

Finland and Sweden respectively, attracting attention not only within their home countries but also widely in and even outside Europe (Pass, 1973; Popenoe, 1977). They were intended as – and also became – full-scale experiments which went on to serve as models (Whitehand, 1989). Attention will be confined here to some aspects of the early development of these three towns; what they had in common, and how they differed. Ideas about urban planning rarely stop at national boundaries, instead spreading to other countries. Comparative studies are therefore highly warranted. Of course one can ask whether it is meaningful, or even possible, to undertake this type of comparison in view of the great differences in the planning traditions, political culture, administrative systems and, not least, terminology of the three countries. A miniature comparative study will nevertheless be attempted here, based on the conviction that comparisons between towns in different countries are a neglected but urgent research task which can give interesting insights, despite the risk of misunderstandings (Hall, 1991, 1997, 1999, 2002).

Origins

The planning discussions concerning these towns, which were in the front line when the post-war democratic housing environments were to be created, started in earnest around the middle of the 1940s (Osborn and Whittick, 1977; Stadskollegiets utlåtanden och memorial, 1945, App. 9). The construction work began in Stevenage in 1949, in Vällingby in 1951 and in Tapiola in 1953. The three communities are thus close to each other in time. Tapiola was brought into existence by a semi-public association (Finnish *Asuntosäätiö*) in Espoo, a neighbouring municipality of Helsinki; Stevenage by a development corporation appointed and financed by the national government; and Vällingby by the municipality of Stockholm, basically without any involvement from the state. When the construction work started, Stevenage was envisaged as having 60 000 inhabitants, Tapiola 12 000 and Vällingby at least 20 000. In the case of Stevenage, the epithet 'new town' was applied (not 'garden city'). Referring to Tapiola, however, people spoke about 'garden city', 'garden suburb' or 'city in the woods', although eventually with a critical undertone. Concerning Vällingby, the terms 'satellite city' and 'ABC community' were used (A, B and C are the first letters of the Swedish words meaning work, dwelling and centre). The term satellite city was widely used at this time as a designation of new towns in metropolitan areas. At this particular time garden city was not the prestige term it had been and would later become once again. Now it was efficiency that counted. In the following discussion the term 'town' is used as a rather loose designation for all three communities.

One characteristic the three urban projects had in common was that they had energetic advocates, although they acted from different positions. Stevenage was one of the new towns proposed in Sir Patrick Abercrombie's epoch-making *Greater London plan* (Abercrombie, 1945; Hall, 1988). Tapiola was the brainchild of Heikki von Hertzen, a kind of Finnish Ebenezer Howard, committed and forceful, and head of the non-profit corporation which was to build Tapiola. Under his auspices a book called *Homes or barracks for our children* was published in 1946, condemning high-rise blocks (von Hertzen, 1973). A preliminary scheme for the future Tapiola was launched as early as 1945, designed by the architect Professor Otto-I. Meurman, who was to become the main planner of Tapiola. In the case of Vällingby a leading role – both as ideologist and planner – was played by the architect Sven Markelius in his capacity as head of the municipal town planning office, though unyielding backing from a couple of leading politicians was also a *sine qua non* (Rudberg, 1989). A number of architects and planners were involved in the design of the buildings in the three towns-to-be. In this context it can be emphasized that in Sweden and Finland, and thus in Vällingby and Tapiola, architects were responsible for virtually all physical planning, while in

England there was and is a special profession of planners. In England the architects' contribution is often confined to designing the buildings (Cherry, 1988).

Stevenage was founded as a large-scale extension of an older town, whose inhabitants had fought bitterly against incorporation in a new town. However, to the new inhabitants, who were re-housed from inferior areas in London, Stevenage clearly appeared to be an earthly paradise. Some of the surrounding area had been used for agricultural purposes. In contrast, Tapiola was constructed in a 'wild' woodland - Tapiola means the place of the god of the woods - and Vällingby to a large extent on old farmland. All three towns had problems, but of different kinds, acquiring the envisaged development land. Stockholm owned the land where Vällingby was to be built, but the area was still in a neighbouring municipality (Spånga), where the demand that it be incorporated in the capital encountered strong resistance. As for Tapiola, the housing company had great difficulty acquiring the land at a price it found reasonable. In Stevenage too there was stout resistance from the local community, which saw its small-scale traditional environment threatened by the plans for what was intended to become a completely new and much larger town.

In all three places, general plans were finalized around 1950, testing the latest ideas - such as neighbourhood units, the Radburn concept and community centres (Cullingworth, 1979; Corden, 1972). Settlement in the towns was to be organized in cohesive neighbourhood areas, each with its own identity and, in theory anyhow, its own community centre. In Tapiola these districts were referred to as the Eastern, Western, Southern and Northern units; in greater Vällingby they were named Råcksta and Grimsta (Vällingby can refer both to the actual satellite town as a whole and to the centre and the principal residential unit), Hässelby Gård and Hässelby Strand; and in Stevenage, they took the names Pin Green, Broadwater, Bedwell, Chells and Shephall. In all three towns these principal neighbourhood units were in turn divided, fully in keeping with the rulebook, into secondary residential units, that is, into smaller residential areas of varying size and design. These secondary units were often given local service and shopping facilities: they were especially noticeable in the case of Stevenage because of its greater scale. Pedestrian paths - in some cases at different levels - and culs-de-sac are other features the three towns had in common and which were in principle novelties. The different neighbourhood units were to share a larger centre which was dimensioned to be able to compete on a metropolitan level in terms of the range of goods and services on offer. 'Community' was a term frequently used in the 1940s and early 1950s to express social ambitions in planning, especially the aim of creating places for spontaneous encounters, and similar ideas seem to have inspired the three towns. As in most places, however, the idealism tended to flag rather soon, but there remained the insight that well-functioning housing environments require buildings catering to public and commercial demands.

Morphological composition

The three towns differ in their morphological character. With the exception of a group of high-rise buildings, Stevenage is dominated by relatively uniform single-family houses, mostly two-storey, arranged in six neighbourhoods (Osborn and and Whittick, 1977). These are in turn divided into smaller residential areas, each with a basically uniform design - at least compared with the residential areas in Tapiola. The rows of houses often lie parallel in pairs, with green spaces between them. Through limited shifts in orientation and the location of the rows, the formal gridiron impression has been softened (Figure 1). The houses have simple, matter-of-fact façades of brick, timber or concrete, often with rather unimaginatively applied rows of windows. The housing areas often get their visual character from the contrast between the light, seemingly more or less washed-out brick-colours, the white strips around the doors, corners and windows, and the lush

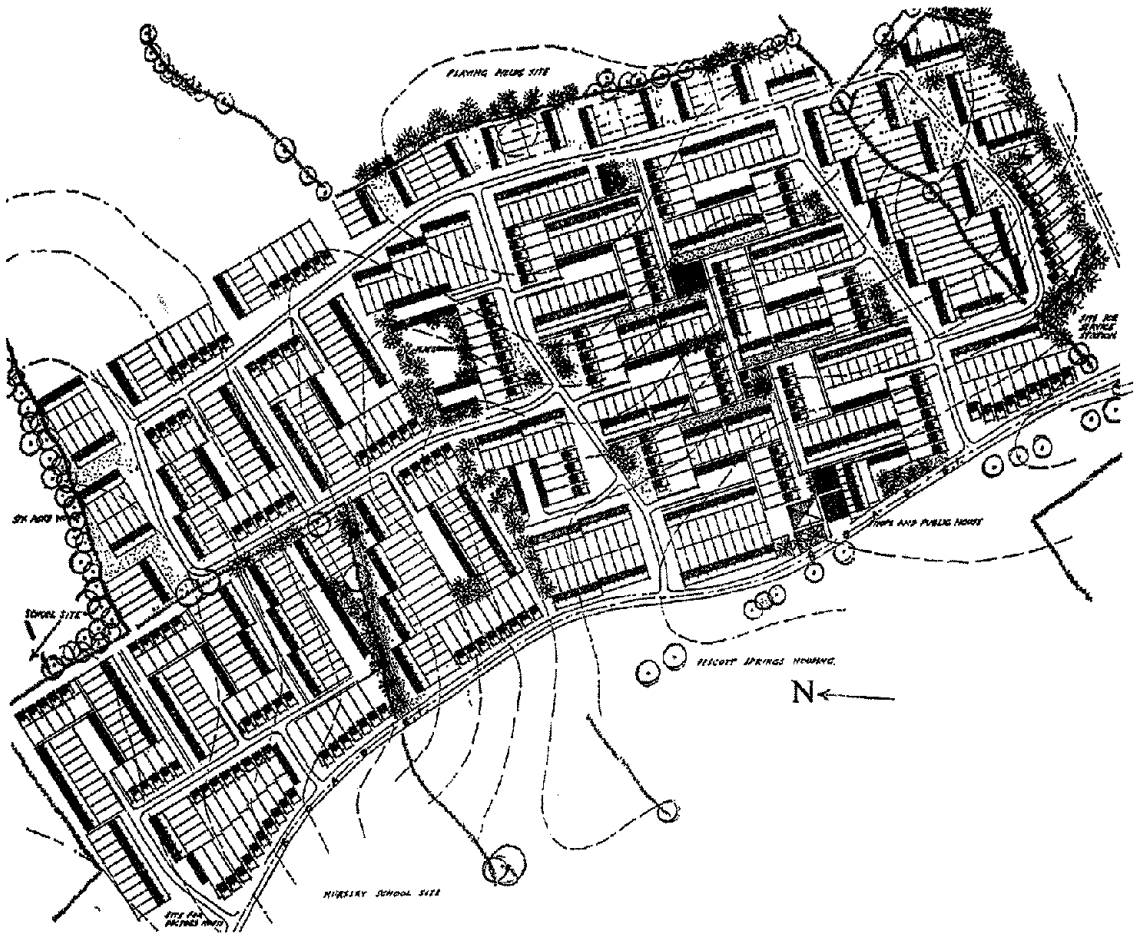

Figure 1. The Elm Green residential area in the Chells neighbourhood of Stevenage. Reproduced from Osborn and Whittick (1977).

green lawns, some of which served as village greens.

In Tapiola the scale is smaller but the variation greater. The first expansion phase concerned the so-called Eastern residential area, most closely comparable to one of Stevenage's secondary units (Tuomi, 2003). The street network follows gentle curves. A great deal of the existing vegetation was retained to frame and separate groups of buildings. Particular effort was made to use the trees for design purposes. Low multi-family houses – often only four storeys high – are mixed with row houses and detached houses, with the upper storeys sometimes retracted, sometimes protruding. The design of the houses is carefully considered throughout, showing a rich variety within the framework of a modernistic idiom (Figure 2). The desired variation was achieved by having, among other things, nine architects each design one part of the Eastern unit. The architectural design of the Western residential unit is akin to that of the Eastern unit, but in the Southern and Northern units gridiron solutions and more compact arrangements replaced the terrain-adapted grids that were so heavily criticized in the 1960s. It is clear, however, that what gave Tapiola its special image was primarily the initial phase, the Eastern unit.

In Vällingby the topographical conditions scarcely existed for a forest town of the Tapiola type, nor is it likely to have been desired (Sax, 1989; Pass, 1973). However, differences in level were exploited to create a varied environment consisting of high tower blocks and low three-storey buildings arranged around open courtyards and in rows. There are groups of row houses but they are relatively

Figure 2. Building types within the Eastern unit of Tapiola. Photograph by T. Kanerva, Espoo City Museum. Reproduced with permission.

few and in peripheral locations and, as regards the design, several row houses could just as well be in Tapiola, and vice versa. The street grid in the centre is mostly rectangular, while in the outer areas it has a more informal character (Figure 3).

In Stevenage the single-family house predominates, while in Tapiola it is a mixture of house types. Vällingby is dominated by blocks of flats, though there are some row houses. This reflects a general difference between housing in Britain and the Nordic countries, particularly Sweden. In Vällingby the distance to the centre was allowed to determine the height of the buildings – the farther away from the centre, the lower the houses.

In all three towns resources and interest were invested in achieving a modern main centre with cultural and administrative activities as well as commercial ones. The centre was given a particularly striking design in Tapiola as if the desire was to create a modern counterpart of the magnificent square in central Helsinki, Senatstorget (Nikula, 2003). The design was the work of the architect Aarne Ervi, who won a competition for the centre (Figure 4). A large open square, rather desolate, was to lead to a tower-like building. On the other side of the tower, the central basin with its water mirror, constitutes the terminal point of the axial composition (Nikula, 2003).

The distinctive feature of Tapiola's silhouette is the tower building which rises 13 storeys with a low base section mostly containing shops. The tower houses offices, administrative premises and, at the top, a rest-

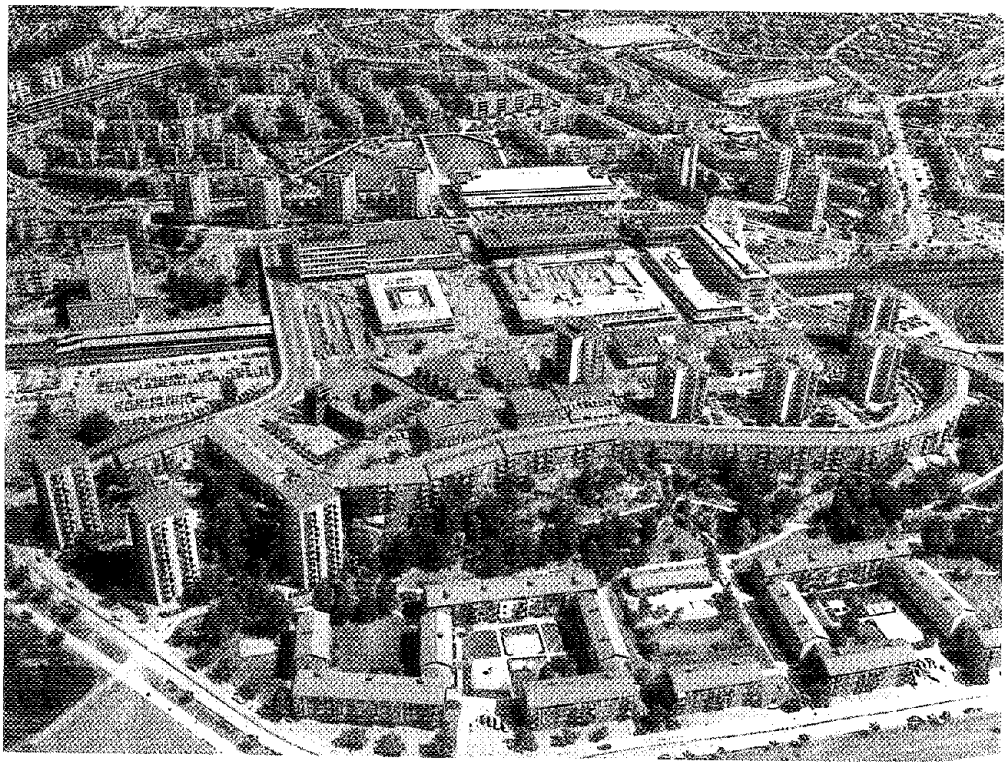

Figure 3. The centre of Vällingby, surrounded by point blocks and, farther out, three-storey buildings. On the periphery are single-family houses. Photograph by S. Gustavsson. Reproduced from Hall (1991). Copyright: University of Stockholm.

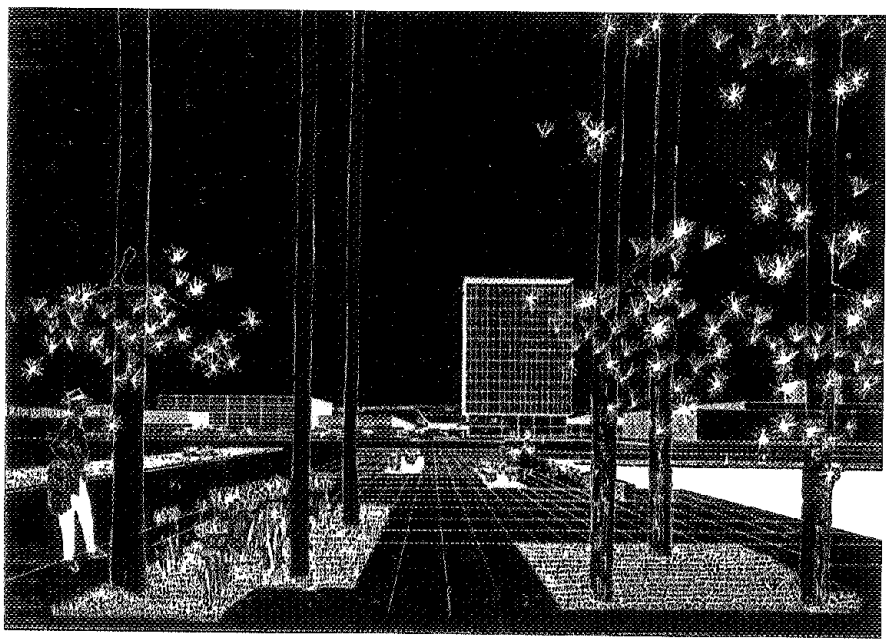

Figure 4. Proposal by Aarne Ervi: winning competition entry for Tapiola city centre. Reproduced with the permission of Espoo City Museum.

Figure 5. The central square, Stevenage. This picture has been shown as a slide several times at lectures and mistakenly been thought by members of the audience to be a Stockholm suburb. Photograph by the author, 1977.

aurant. A tower building to mark the centre of an urban district was nothing new – in Stockholm a number of suburban centres built around 1950 were given a single high-rise building as a visual marker of the centre – a parallel, if you like, to the tower of the medieval town hall. In Vällingby it was not just one high-rise building but clusters of tall point blocks of varying design that were grouped around the central area and thus gave a completely different visual impression. They mark the outer boundary rather than the location of the centre, forming a kind of large-scale wall. Arguably the square in Tapiola has lost much of its original purist monumentality by having been partly enclosed in more recent buildings.

As in Tapiola, in Stevenage (Figure 5) and Vällingby (Figure 6), ambitious squares were created with large areas free of traffic: in Stevenage 'the clock tower' is a focus and in Vällingby the 'rings' – low sunken basins of ornamental paving – give local identity. Stevenage's centre consists of a corridor-like pedestrian street and a rudimentary square. The street is surrounded by ground floors with protruding roofs to give protection against sun and rain. Perhaps the centre of Stevenage could be described as an urban structure transitional between a street-based solution and a more square-like space-design.

The three town centres are surrounded mainly by shops but also by other facilities appropriate to a well-ordered community, such as cinemas, places for various cultural purposes, schools, libraries and churches. Vällingby and Tapiola in particular have architecturally distinguished churches. The architects Backström and Reinius were responsible for the overall design of Vällingby: buildings were grouped in an informal and lively way, with different parts of buildings being in different colours. This was an architectural concept that attracted attention in England, where it went under the name of the New Empiricism. The spatial formation of the square in Stevenage is, however, rather unimaginative (Svedberg, 1988).

All three towns can be viewed as a result of prevailing political and housing fashions. The end of the war brought opportunities but also, as many people saw it, a moral imperative to create a new and better world, with healthier, brighter, cleaner and more functional housing

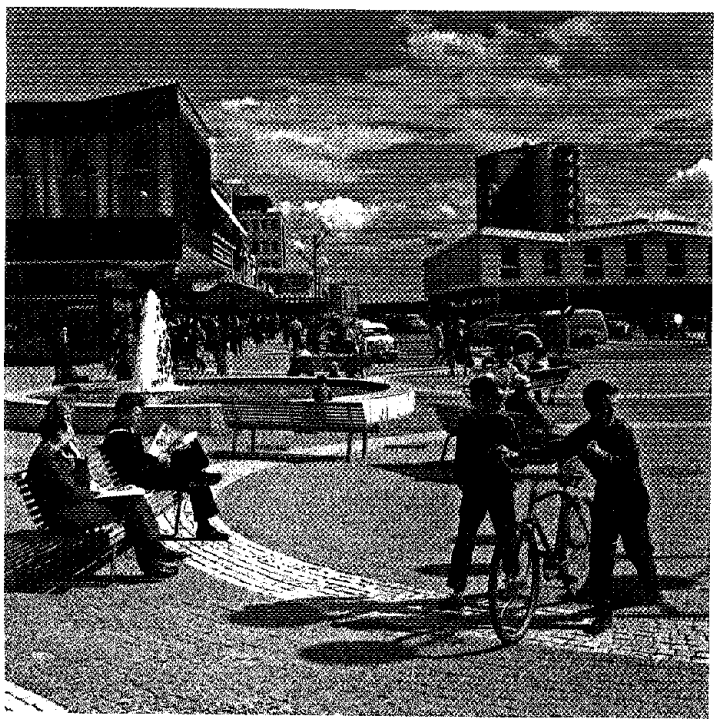

Figure 6. The central square, Vällingby. Photograph by L. af Petersens, Stockholm City Museum. Reproduced with permission.

environments. It made little difference for Sweden that the country had not been involved in the Second World War. The interest in creating new and better housing environments was no doubt as strong in Sweden as in England. Sweden still had a very poor standard of housing in the mid-twentieth century, and large-scale efforts were necessary regardless of what happened in England and elsewhere. Financing methods varied, but somehow resources for investing in the future were found.

In Tapiola no major workplaces were planned during the first phase of expansion. This was heavily criticized (Sax, 1998). In Stockholm, however, there was a powerful desire that the new suburbs, led by Vällingby, would become complete communities and acquire a broad range of employment so that commuting to the city centre would be limited. Reality, however, failed to conform to the model. Attempts to attract business to the areas allocated for workplaces were, with some exceptions, unsuccessful, and when at length companies began to move to Vällingby, the new employees were to a large extent living elsewhere in Greater Stockholm. Vällingby had become a BC town. This development was scarcely unnatural given that a high-capacity metro line was built from central Stockholm to Vällingby. This investment can be questioned if the main goal, or even a major goal, was to discourage commuting and create a living town, which was not depopulated by many of the working inhabitants in the daytime. But the metro was necessary if the town was to function, especially in view of the extended shape of the satellite city. This conflict of goals seems to have been played down in the debate at the time. In England several of the new towns attracted workplaces on a scale that, if anything, exceeded the forecasts. In those cases it would certainly be justified to speak of ABC towns.

Tapiola as it appears today reflects changes in architectural ideals during the greater part of the post-war era, whereas Vällingby and

Stevenage – despite important later additions – preserved more of their uniform 1950s and early 1960s character, at least until fairly recent times. Tapiola has continued to attract attention, partly in the form of harsh domestic criticism, for lack of urban character – while Vällingby, and probably also Stevenage, have seen their best days as a model. A fundamental consideration for understanding Tapiola's attraction is the skilful use of nature, as in the spring the houses are often veiled behind bright curtains of trees, and on sunny winter days these sparkle in a coat of rime frost. Here one can perhaps speak of urban planning with Nordic overtones. The way was paved for a renaissance of garden city design, which favoured Tapiola more than Vällingby and Stevenage.

Changing form

All three towns have now reached the age of 50 and are thus entering middle age. Are they ageing in beauty, or are they declining? Ageing housing environments always live dangerously. Perhaps one can speak of a 50-year crisis as a general phenomenon of urban development. In many early post-war cities original freshness is long a thing of the past, and shrinking populations have led to poorer service in a vicious downward spiral. This decline has happened to a greater or lesser degree in all three towns, despite repeated investments in new housing areas, improved communication, greater numbers of parking places and expanded town centres.

Towards the end of the twentieth century plans began to appear for a heavy-handed modernization of Vällingby, while simultaneously there was a growing realization of the significance of the satellite town as a monument of the era that can be described as the rise and decline of the Swedish welfare state. In 1987, however, Vällingby was declared by the National Heritage Board to be of national historic interest, an official confirmation that the satellite town is now a part of the Swedish cultural heritage. However, this by no means gives complete, or even particularly good, protection. Sites of this size must be able to function and carry their costs even in another time than the one that created them. For a number of years, various renewal projects have been discussed, in several cases involving the glazing of spaces. Long discussions have taken place with the property owner, Svenska Bostäder, the municipality of Stockholm, the residents and the cultural heritage authorities (Millroth, 2004).

The project includes a number of measures to make Vällingby bigger and more attractive as the centre of the north-west region of Stockholm, with an image of modernity and progress. Some buildings will be more or less restored, others heavily rebuilt. A particularly spectacular feature is a 'floating glass roof' over a part of the central shopping mall. Linking indoors and outdoors seems to be a special concern – in other parts of the world the traditional, enclosed shopping centre has likewise been questioned.

The goal now is to create not only an ABC-town but an ABCD-town where D stands for design – 'architecture, art and trade-marks'. Design is definitely 'in' – so that in this respect too, the creators of the new Vällingby are up-to-date. Work began in 2003. It will change the centre of Vällingby radically. Whether this will be for the better or worse remains to be seen. However, there is no consensus on the proposal and it has been described in the City Council as 'the twentieth century's largest high-risk project'. Densification proposals in areas close to the centre, hitherto viewed as permanent green areas, are included in all these plans. These proposals have met with bitter opposition from the residents in the area.

Tapiola has likewise been recognized as an architectural landmark. Considerable investments seem to be planned here too, but not affecting the actual centre, or at least not in the same radical way as in Vällingby. In 2003 a report was presented, entitled *Tomorrow's Hagalund*, which broadly outlined what the committee itself described as 'an updating of

the Hagalund vision'. It is obvious that greater intrinsic value is ascribed to the tradition and the glorious past in Tapiola than in Vällingby (Espoo stadsplaneringscentralen, 2003).

In Stevenage too, great enterprises are planned. Stevenage Borough Council is promoting a proposal to increase the population from currently 80 000 to 125 000 inhabitants by adding three new neighbourhoods with 15 000 inhabitant in each. The goal is 'to secure a role for the future of Stevenage as the major growth point for Hertfordshire'. These are large-scale infrastructure plans on a regional level for which detailed physical planning has not yet begun in earnest. One purpose of these plans is said to be to further the New Town mission (Stevenage Borough Council, 2005).

Reflections

Despite everything, the heritage of the pioneer years is still a living consideration in all three towns, albeit in slightly different ways. In all three towns the past is invoked when it comes to shaping the future. Significantly, the architects behind Tapiola and Vällingby have been the subject of considerable interest from researchers, whereas their colleagues responsible for Stevenage – apart from Abercrombie – have scarcely figured at all in scholarly literature. The demand for architectural excellence, which has set its stamp on much of what has been built in post-war Finland, was thus obviously more important for Tapiola than for Stevenage and Vällingby but there was not the same ambition in Tapiola that a large proportion of the people who lived there should also work there. This is surely one of the most important differences between Stevenage and Vällingby on the one hand and Tapiola on the other. In Stevenage and Vällingby the aim was to create new towns, while in Tapiola the goal rather was to create an alternative to the town. In addition, Tapiola was initially more small-scale than the other two projects, besides which it lacked the high-capacity rail-bound transport connections that Stevenage and Vällingby enjoy. A planned line that would have given Tapiola contact with the centre was never implemented.

An important difference between Tapiola on the one hand and Vällingby and Stevenage on the other is that Tapiola totally lacked competition within Finland concerning size and attention while Vällingby and Stevenage soon became one of several noted satellites in their respective countries. In what way did these pioneer towns inspire each other during the planning phase and the first development stage? It is obvious that Abercrombie's plans for London and the concept of new towns were extremely important for the planning of Vällingby, even though it was the concept of new town rather than any single city that inspired the Swedish planners. The site of what would be Stevenage was, however, visited in the late 1940s by a group of Swedish experts led by Sven Markelius, and there seems to have been a hope that the two towns in the making would be twinned. In this connection it could be mentioned that the municipal town planning committee in Stockholm as early as 1945 published a book called *Nutida engelsk samhällsplanering* (*Contemporary English Community Planning*) as a programmme for Vällingby and other projects.

It is also probable that English planners and architects were inspired by Stockholm to a considerable extent, not least by the architectural design of Vällingby and other suburbs, which is a little difficult to understand. Vällingby became a *tour de force* for architects making their grand tour (Pass, 1973; Popenoe, 1977). At planning history conferences the present author has several times been approached by retired planners telling him, apparently not just out of politeness, how important Vällingby had been for them. Finnish architects and housing experts visited Sweden as well, but seemingly they were, initially at any rate, more interested in the pre-Vällingby projects, such as Friluftsstaden in Malmö, which are large housing areas rather than new towns.

Figure 7. Heikki von Hertzen showing Tapiola to the President of Iceland from the top of the central tower. In the 1950s the new towns were showcases, demonstrating that a new and better time had arrived. Reproduced with the permission of Espoo City Museum.

Clearly, the three towns differ in several ways, for example, in terms of administrative organization and house types. What they had in common – at least initially – is a strong optimism, a conviction that it should be possible to create towns that are more healthy, and better from every point of view, and they did not doubt that they had the knowledge necessary to make them a reality. People would move to the new towns, away from the inner-city slums to new, healthy homes. The British minister responsible for the new towns, Lewis Silkin, stated that Stevenage would, in a short time, become world-famous, and Heikki von Hertzen said much the same thing about Tapiola (Figure 7). People in Sweden no doubt thought along similar lines about Vällingby. However, as we have seen, all three projects also met harsh criticism. Stevenage, for instance, was referred to in the debate as Silkingrad after the responsible left-wing minister just mentioned. Another important goal was to achieve greater equality in housing.

It is significant that, in 1953, when the decision-makers in Helsinki were going to change the name of the future urban district from the Swedish Hagalund to a Finnish name, one of the possibilities considered was Aurinkola, that is Sun Town. Stevenage, Tapiola and Vällingby were viewed as sun towns for a new and brighter future – an optimism that was presumably stronger in Scandinavia and Britain than elsewhere. The firm faith that characterized the drive to build the three new towns may seem slightly unrealistic from today's point of view. Yet it is clear that we can learn a lot from the enthusiasm and fighting spirit of the 1950s, the social commitment, and the desire to create good housing, preferably with ample outdoor environments, affordable to broad groups of citizens. Children were very much in focus (Figure 8). Healthy, probably obedient, neatly dressed children can be seen on virtually every picture in the programmes published in the pioneer age, as in later scholarly studies. It was ultimately a matter of creating the right

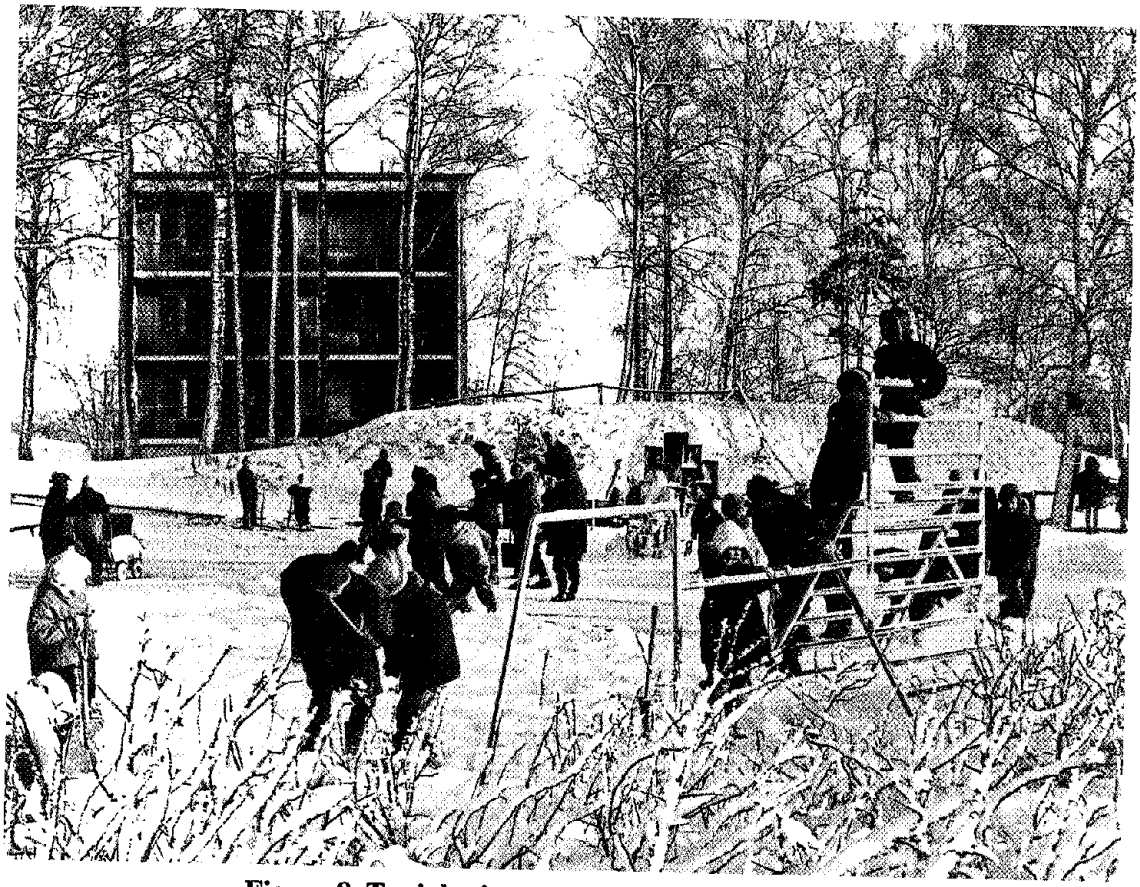

Figure 8. Tapiola: images of children at play occur frequently in the planning documents of the late 1940s. Reproduced with the permission of Espoo City Museum.

conditions for harmonious families. That was how the message about the new town was to be interpreted.

But development, by definition, rarely stands still. What is most modern quickly becomes outmoded. As already hinted, the three towns were soon overtaken by even newer and fresher ventures. But the triad of Stevenage, Vällingby and Tapiola should nevertheless occupy a prominent place in the history of European planning and urban construction.

A more detailed study, including more contemporary examples, could pay attention to topics such as the background and location of these towns, the decision-making process, the street, plot and building layouts, the building types, and the overall architectural design. A broader and deeper analysis including more examples will probably show further parallels as well as significant differences, and form a good basis for comparative discussions. It goes without saying that the fates of the three towns, and particularly their significance in their respective countries, should be followed right up to the present day.

Acknowledgement

This article is based on a paper read at the Tenth International Planning History Conference held in Letchworth Garden City and London, United Kingdom, 10-13 July 2002. The author would like to thank Professor Riitta Nikula and Timo Tuomi for providing information, Lotta von Liewen Wistrand for her invaluable assistance, and Professor J.W.R. Whitehand and Dr Sonja Vidén for comments on a draft of the article.

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International urban form study

In 2002 Seoul Development Institute commissioned from ISUF an investigation that would enable Seoul's development pattern and density to be compared with those of other world cities of equivalent size. The research, undertaken in conjunction with Seoul Development Institute, has now been published in an interim format. Entitled *International urban form study: development pattern and density of selected world cities* (ISBN 89-8052-393-9-93540), the volume is edited by Kwang-Joong Kim. It provides, in some 1000 pages, studies of Seoul (by Kwang-Joong Kim), Tokyo (by Shigeru Satoh), London (by Peter Larkham), Paris (by Catherine Maumi), New York (by Paul Hess) and Los Angeles (by Chanam Lee). There is an introduction by Kwang-Joong Kim and Paul Hess, and a conclusion by Kwang-Joong Kim. The project advisers were Anne Vernez Moudon and Jeremy Whitehand.

The volume is published by the Seoul Development Institute, 391 Seocho-dong, Seocho-gu, Seoul 137-071, Korea. E-mail: ibaek@sdi.re.kr