Urban Shrinkage as a Problem of Post-Socialist Transformation. The Case of Eastern Germany

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Abstract: *This article follows the shrinkage phenomenon in the case of the Eastern German cities, as a post socialist transformation that has occurred mostly during the 1990s. Furthermore, the case of East Germany is particular since different shrinkage processes already occurred here in GDR times. The shrinkage after 1990 linked to those already existing, shrinking cities; shrinking cities are, thus, not a new city type in East Germany, but instead, accompany its development.*

Keywords: urban shrinkage; population decline; vacant houses; Eastern German cities.
Cuvinte-cheie: restrângere urbană; depopulare; locuinţe vacante; oraşe din Germania de Est.

Introduction

At the turn of the millennium, urban shrinkage came onto the public and political agenda in Germany. A significant contribution to this came from the report of a government commission that dealt with the phenomenon of vacant housing in East Germany. Its main finding, vacancies of more than a million apartments and the conclusions made from this about the necessity to regulate the housing market (Kommission, 2000) became the starting point for a vibrant public and political debate. Following this, academic research projects, exhibitions and conferences devoted themselves to this topic and provided publicity for it far beyond the academic world. For instance, the European-American joint project "Shrinking Cities" should be mentioned here, which contributed to the popularisation of the term "shrinkage" through numerous events (Oswalt, 2004, 2005). However, German urban development policies are still far from having probate answers to the question of shrinkage – particularly as a long-term and irreversible process. Although West German cities are also affected, shrinkage is mainly perceived by the public as being limited to East Germany. This might be due to the fact that shrinkage in East Germany shows specifics that make it unique – not only in a German, but also in a European context. This already commences with the starting conditions since, with respect to the GDR, German reunification affected – something that is often forgotten or undervalued – a country that, as a whole, although spatially differentiated, had been shrinking for decades. The post socialist transformation

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in East Germany was oriented towards growth by the political elite, under the aegis of a "catch-up modernisation". With this, one tried actively to steer away from the shrinkage process. This orientation was also followed in housing policies and was supposed to be achieved, in particular, through new developments, alongside the modernisation of old housing. The thesis followed here is that it was this that created the striking phenomenon of shrinkage in eastern Germany: the exorbitant and continuing housing vacancies. In the following text, the question should first be investigated as to how the economic, institutional and legal framework conditions of German reunification and the post-socialist transformation in East Germany created shrinkage and vacancies. Following this, it will be asked to what extent path dependencies were simultaneously created through this, which also determine the handling of this type of shrinkage. The approach taken here distances itself from types of explanations that solely make the "condemnations in the past" (that is, in the GDR) responsible for this, as the report of the government commission does, in a pronounced fashion: "The urban inheritance from the GDR in its new cities, but also in numerous large housing developments in other cities, results today in an excess of housing and a further high need for adaptation to future needs in order to avoid a real collapse of the cost-effectiveness in the affected housing estates" (Kommission, 2000, 17). Of course, the completely opposite course will not be taken here, but instead, the questions should also be investigated as to the form and the extent (that) urban shrinkage took in the GDR.

If one wants to understand the current urban redevelopment debate, a reconstruction of the specific starting conditions is vital, as well as the framework conditions, as created by the German reunification and the related EU integration of East Germany. A contribution to this should be made through this article. For this, the developments of cities in the GDR will be outlined firstly, after which the framework conditions of the post-socialist transformation in East Germany and its consequences for urban development will be dealt with. This will also look at how the phenomenon of shrinkage has developed over time. In conclusion, an outlook will be given over the further shrinkage processes and their implications for urban restructuring.

Urban Shrinkage in the GDR

The GDR was already a "country of shrinking cities" (Benke, 2005, 61). Although about a third of about 200 towns and cities in the GDR with more than 10,000 inhabitants grew by more than 10% between 1950 and 1989, about a similar number of towns and cities of this size lost about 10% of their population. Among these there were 40 cities that lost more than 20% of their population (ibid., 62). The shrinking cities of the GDR do not, however, show a particular exception, but instead fit in with European trends[1]. Overall, a spatial pattern can be observed for the GDR: redistribution from the rural areas to the cities, whereby the migration occurred from villages to small towns and from small towns to large towns and cities (Hannemann, 2003, 211). At the same time, a regional pattern could also be observed: the migration from the old industrial centres in the south to the new industrial cities in the north and east. Thus, a specific type of shrinking city already evolved in the GDR times, which had not only experienced its industrialisation but also its urbanisation before the Second World War. These cities experienced a double neglect in GDR times: on the one hand of their industrial structures, in which little investment occurred in favour of the new industrial locations, and on the other hand,

of their built structures, which were mainly abandoned to decay. Since the 1950s, the urban development policies of the GDR were oriented almost entirely towards the building of large prefabricated housing estates in an industrial building style, as well as administrative centres. The built structures inherited from the capitalism were regarded as relicts in the 1950s and 1960s that had to be overcome. The city of the 20th century did not fit into the urban model of the post-war modern age that the GDR followed: the functionally structured city[2]. Apart from this model, the official vision of the cities was characterised by a belief in growth: urban growth centres – in particular the new socialist cities, such as Hoyerswerda or Eisenhüttenstadt – were supposed to epitomise progress and growth and bear witness to the superiority of socialism. Celina Kress talks here of the establishment of "heroic spatial images of unrealistic visions of growth of the 1960s and 70s" (Kress, 2008, 265). We are dealing with a paradox here: shrinking cities despite the paradigm of growth. This led to growth oriented planning, even in cities with sinking population numbers and negative prognoses. This was based on the forward projection of the existing demographic structures (in particular the numbers and sizes of households). The cities in the GDR had an interest in this as the allocation of resources was linked to growing population numbers. The concentration of resources and investments in the development of the GDR in the north and east of the republic to create a heavy industry basis for the country resulted in the shrinkage of older cities in the south – this can be seen from the population numbers (Table 1). Different phases and causes of shrinkage can be determined. In the 1950s the cities lost out to emigration to the West, in the 1960s and 1970s, interregional migration is evident from which – as already stated – mainly the cities in the north and east profited. In the 1980s, only a few cities profited from in-migration, some shrank, even those that had been growing beforehand. The birth rate fell in the 1980s – the so-called "Honecker hump" – but, up to 1988, did not lead, overall, to a negative population balance. Since cities tend to show a lower birth rate than rural regions this could be one of the reasons for the shrinkage in the 1980s. A small proportion of shrinkage was due to emigration to the West, which was less strictly dealt with in the 1980s than in the previous decades. From 1984, almost 20,000 people emigrated to West Germany (Table 2).

In the GDR there was also already a phenomenon that played a central role in the current shrinkage debate: housing vacancies. This was not a consequence of a lack of demand in the GDR, but rather the poor state of the housing, which then became uninhabitable. The occurrence of these vacancies can be traced back to the 1970s and to the lack of upkeep and modernisation of (old) housing. The vacancy rate constituted 3.6% of the housing stock according to a study in the GDR under commission of the party leaders (which was then kept secret) (Figure 1). About 200,000 apartments were empty because they were derelict, cordoned off by the police, no longer rentable or (a small proportion) were being renovated (Buck, 2004, 344). At the same time, 189,000 households had to do without their own apartment (ibid., 346). Up until the end of the 1980s this number continued to increase, so that in 1989 there were over 770,000 registered (state recognised) housing applications of which about half were from single people without their own apartment (Ostwald, 1990, 106). The number of empty apartments continued to rise, thus at the beginning of the 1990s the Association of Housing Economy of the BRD (GdW) estimated that between 300,000 and 500,000 apartments were vacant in the new German states (Buck,

2004, 345). Hannsjörg Buck estimated the number of vacant apartments to be about 450,000 in 1990 (ibid., 348), the Lehmann-Grube-Commission assumed 420,000 empty apartments in 1990 (Kommission, 2000, 10). The variations in the estimations reflect the lack of reliable data. In addition, the resulting vacancies due to the enormous emigration in 1989 and 1990 must be taken into account: in these two years over 600,000 people left East Germany (Table 2). If one relates the estimated vacancy figures to the number of apartments available (6,468,000 in 1990) then the vacancy rate is about 7%. In cities with an extensive number of old apartments this could be more[3].

To summarise, it can be noted that, contrary to the hearty promises for growth and wealth made together with the build-up of socialism, many towns and cities suffered from shrinkage, neglect and decay. The decay of the old building stock was already pre-programmed with the task of the reconstruction plans and the beginning of the construction of large new housing areas in the 1960s. Thus, the inner-cities lost their attractiveness and also their population. This type of shrinkage occurred slowly and efforts were made to hush it up through socialist growth propaganda. Its extent and consequences first became obvious after the changes. In addition to this came the large scale redistribution of the population through intra-regional migration in the 1960s and 70s. The shrinkage of the cities in the GDR had other causes and other consequences from the shrinkage in cities in eastern Germany after reunification: lack of housing went hand in hand with vacant housing, infrastructure was more over-used than underused and perforation was not a problem. The topic could not be openly discussed in the GDR: regional redistribution was politically desired. The out-migration to the West was a real *taboo* topic, so only the decrease in the birth rate was on the political agenda, for which, in the 1970s, appropriate measures were taken (credit for young families and preferential housing), in order to increase the birth rate again.

Table 1. *Population development of selected cities of East Germany – 1950 to 2007 (raw data)*

Municipality	1950	1981	1989	1999	2007	1950-1989	1981-1989	1989-1999	1999-2007
Rostock	133,109	236,011	252,956	203,279	200,413	90.0	7.2	-19.6	-1.4
Greifswald	44,468	61,388	68,270	55,222	53,845	53.5	11.2	-19.1	-2.5
Stralsund	58,303	74,421	74.556	61,341	58,027	27.9	0.2	-17.7	-5.4
Wismar	47,786	57,718	57,173	47,405	45,012	19.6	-0.9	-17.1	-5.0
Schwerin	93,576	122,264	129,492	102,878	95,855	38.4	5.9	-20.6	-6.8
Neubrandenburg	22,412	79,813	90,953	74,527	66,735	305.8	14.0	-18.1	-10.5
Eisenhüttenstadt[4]	15,157	47,842	52,393	48,884	33,091	245.7	9.5	-6.7	-32.3
Eberswalde	30,895	53,183	54,332	45,484	41,396	75.9	2.2	-16.3	-9.0
Frankfurt / Oder	52,822	81,009	87,126	73,832	61,969	64.9	7.6	-15.3	-16.1
Potsdam	118,180	132,543	141,430	128,983	150,833	19.7	6.7	-8.8	16.9
Brandenburg	82,215	94,680	93,441	79,958	72,954	13.7	-1.3	-14.4	-8.8
Hoyerswerda	7,365	71,124	67,881	52,249	40,294	821.7	-4.6	-23.0	-22.9
Cottbus	60,874	116,092	128,943	110,894	102,811	111.8	11.1	-14.0	-7.3
Stendal	40,618	45,013	50,717	41,054	36,306	24.9	12.7	-19.1	-11.6
Magdeburg	260,305	287,362	288,355	235,073	230,140	10.8	0.3	-18.5	-2.1
Erfurt	188,650	212,012	217,035	201,267	202,929	15.0	2.4	-7.3	0.8

Municipality	1950	1981	1989	1999	2007	1950-1989	1981-1989	1989-1999	1999-2007
Gotha	57,414	57,573	56,715	48,814	46,247	-1.2	-1.5	-13.9	-5.3
Weimar	64,452	63,725	61,583	62,452	64,720	-4.5	-3.4	1.4	3.6
Eisenach	51,777	50,674	47,027	44,499	43,308	-9.2	-7.2	-5.4	-2.7
Gera	98,576	126,792	132,257	114,718	101,618	34.2	4.3	-13.3	-11.4
Jena	80,309	104,946	105,824	99,779	102,752	31.8	0.8	-5.7	3.0
Suhl	24,020	49,848	56,125	49,206	41,015	133.7	12.6	-12.3	-16.6
Halle-Neustadt[5]	19,208	91,809	90,956	-	-	373.5	-0.9		
Halle / Saale[6]	289,119	232,622	230,728	254,360	234,295	-20.2	-0.8	10.2	-7.9
Merseburg	38,441	50,932	44,367	37,923	34,039	15.4	-12.9	-14.5	-10.2
Dessau	91,973	103,194	101,262	85,000	89,934	10.1	-1.9	-16.1	5.8
Wittenberg	49,852	53,874	51,754	49,765	45,618	3.8	-3.9	-3.8	-8.3
Altenburg	49,413	55,827	51,426	42,005	36,700	4.1	-7.9	-18.3	-12.6
Leipzig	617,574	559,574	530,010	489,532	510,512	-14.2	-5.3	-7.6	4.3
Freiberg	44,491	51,377	49,840	46,027	42,364	12.0	-3.0	-7.7	-8.0
Chemnitz	293,373	318,578	301,918	263,222	244,951	2.9	-5.2	-12.8	-6.9
Plauen	84,438	78,800	73,971	71,955	67,613	-12.4	-6.1	-2.7	-6.0
Zwickau	138,844	121,283	118,914	104,146	95,841	-14.4	-2.0	-12.4	-8.0
Riesa	36,150	51,857	47,326	39,909	35,508	30.9	-8.7	-15.7	-11.0
Bautzen	41,592	49,341	50,627	44,033	41,364	21.7	2.6	-13.0	-6.1
Dresden	494,187	521,060	501,417	476,688	507,513	1.5	-3.8	-4.9	6.5
Görlitz	100,147	80,831	74,766	62,871	56,724	-25.3	-7.5	-15.9	-9.8
East Berlin[7]	1,189,074	1,162,305	1,279,212	1,269,291	-	7.58	10.06	-0.8	

Sources: Kress, 2008; Deutscher Städtetag, 2000, 2008.

Shrinkage as a problem of post-socialist transformation

Urban Shrinkage

With the post-socialist transformation process shrinkage became a principle development mode in the East German cities in the first decade after German reunification and – through various component processes, which will be mentioned later – accelerated considerably. Here, a reversal can be observed in the former growing socialist cities in the north and east: they showed the highest loss of inhabitants in the 1990s with 20%. However, the cities in the south of eastern Germany, which already showed shrinkage in GDR times, continued to lose inhabitants, although not to the same extent (Table 1). During the subsequent period, the development differentiated itself further: some towns and cities, mainly cities with universities and further education colleges, as well as central functions were able to stabilise or increase their population in the first decade of the 2000s. However, most of them continue to remain on the shrinkage path, although the shrinkage tends to have lessened, in comparison to that of the 1990s.

The following component processes can be differentiated, with respect to the reasons for shrinkage: 1. out-migration, 2. the change in birth rate, 3. de-industrialisation and 4. suburbanisation, which were also

related internally. Then, in the last few months of 1989 and up to reunification in 1990 a wave of emigration of about half a million people from East Germany occurred due to the unprepared opening of the borders and the immigration policies of the GDR (Table 2). Thereafter, the economic and monetary union in the summer of 1990 meant a transition-free and immediate integration, not only into the West German economy, but also simultaneously into the EU domestic market and the global market, as well as an upgrading shock. The East German economy with its mainly old-industrial structure was not up to this. This resulted in a unique historic deindustrialisation of East Germany, which – depending on the region, economic structure and sector – consisted of between 80% and 90% of the previous stock (Busch et al., 2008). In the meantime, the term "structural crash" has become adopted in order to differentiate this development adequately from others. For Christine Hannemann the term deindustrialisation is too weak to portray the processes in East Germany, rather the economic structural change led to an "erosion of the economic basis". Deindustrialisation, the dismantling of institutions, the restructuring of agriculture as well as demilitarisation meant, taken together, a de-economising of most East German regions (Hannemann, 2003, 213). As a result of this process East Germany has the lowest concentration of industrial employment out of all west European and most of the east European countries, without this being a sign of a developed service sector society (Häußermann, 2008, 344).

This process also forms the background for the continuing weakness of the East German job market with permanently high, when perhaps regionally differentiated, unemployment levels of 20-30%. The job deficit has, thus, long been taken up by social and employment political instruments, such as the early retirement regulation, work procurement measures, further education and re-training. This deficit continues to be the main reason for the continuing out-migration of mainly young and well-trained people from East Germany (Dienel, 2005). The out-migration has become a permanent accompaniment to the transformation process (Table 2). With respect to this, Herfert differentiates between a first and second wave of out-migration (Herfert, 2006, 8): the first occurred at the beginning of the 1990s and the second started in 1997 and achieved its maximum at around 2000, and has then decreased somewhat. Out-migration, however, continues to be one of the reasons for the population decrease, which may increase in the future, due to the missing births (Dienel, 2005).

The reason for the birth hump can be traced back to the transformation: as a reaction to the uncertainty of almost all living conditions and the transfer of the West German institutions the birth rate in East Germany sank to a historic low of 0.87 births per woman (Birg, 2005). Although the number of births has recovered since the middle of the 1990s, and meanwhile almost reached the West German level, it is still far from achieving the replacement level. For East Germany, this development means that long-term shrinkage processes are pre-programmed, and East Germany is even committed to them. Some sociologists speak of a demographic revolution in this respect (Zapf and Mau, 1991). The intra-regional migration of the population (suburbanisation) has contributed to a great extent to the shrinkage of the cities; this will be dealt with in the next section. The interaction of these sub-processes led to an enormous strengthening of the shrinkage tendencies after German reunification. Franz thinks that a "conflict situation composed of a shocking type of deindustrialisation, newly possible suburbanisation and strongly decreasing birth rates led to a fast loss of

inhabitants in cities" (Franz, 2008, 280). However, in the 1990s the phenomenon of shrinkage was barely discussed, in contrast the individual processes stood alone in the centre of the different discussions, such as deindustrialisation and the job market, suburbanisation and development of inner-cities, etc. The discourse at that time did not tend to work with the term shrinkage, although there had already been a discussion about this in the German parliament in the second half of the 1980s (Häußermann and Siebel, 1988). Instead the regional disparities due to deindustrialisation and out-migration were exposed. An exception was formed by an earlier prognosis of the BfLR, which expected a differentiation in urban development between East and West Germany and "shrinking urban regions" in the eastern part from a report from 1993 (Glock, 2004, 41)[8]. First subsequently, with the report of the government commission, these different discussion threads were brought together and adopted the term shrinkage, which found a resonance beyond the expert public (Kaufmann, 2005). The governmental commission put it mainly in a context of free and unwanted development: "free processes of shrinkage and of decline destroy the required balance between population, housing structures, transport systems, as well as all elements of private and public infrastructure" (Kommission, 2000, 5). They demanded firstly a "clean-up" of the housing market, which meant the demolition of housing. Thus, they led a turn away from the housing and building policies up to that time. Other political fields, such as economic and employment policies were, however, not touched by this.

Table 2: *Spatial population movements in the GDR and in East Germany 1980-1998*

Year	Movement from…		
	East to West	**West to East**	**Balance**
1980	12,806	363	-12,443
1981	15,494	422	-15,072
1982	9,678	119	-9,559
1983	10,564	117	-10,447
1984	36,049	332	-35,717
1985	25,593	311	-25,282
1986	25,377	261	-25,116
1987	19,670	377	-19,293
1988	40,454	419	-40,035
1989	255,756	1,129	-254,627
1990	395,343	36,217	-359,126
1991	249,743	80,267	-169,476
1992	199,170	111,345	-87,825
1993	172,386	119,100	-53,286
1994	163,034	135,774	-27,260
1995	168,336	143,063	-25,273
1996	166,007	151,973	-14,034
1997	167,789	157,348	-10,441
1998	182,478	151,750	-30,728

Year	Movement from…		
	East to West	West to East	Balance
1999	195,530	151,750	-43,587
2000	214,456	153,179	-61,277
2001	230,227	138,615	-91,612
2002	216,165	139,142	-76,753
2003	195,216	137,517	-57,699
2004	185,878	133,349	-52,529
2005	175,088	127,996	-47,092
2006	173,602	122,918	-50,684
2007	138,100	83,300	-54,800
2008	136,500	85,500	-51,000
2009	120,000	88,000	-32,000

Sources: Statistical Department of the GDR, 1990, Statistical Federal Department, 2008, Press Release no. 375 (October 2009).

Federal Urban Policy

Housing policy and urban development policy had followed several, not necessarily related goals, directly after reunification. Generally, this political field was oriented towards the socio-political goals, formulated in the constitution, of the alignment of the living conditions in the new German states. For this, the housing policy was decidedly oriented towards the fast removal of the lack of housing through renovation, modernisation and housing construction. This was served by the regulations assigned as part of the transfer of institutions to the east, and by the establishment of the housing and urban development grants. In addition, the reassignment of nationalised ownership (determined in the unification treaty) should take place in the housing sector also, and a similar ownership structure should be created as in the western German states (Leonhardt, 1996, 243).

Additionally, it was more or less explicitly expected from the outset that the housing preferences in eastern Germany would quickly adjust to those in western Germany, and one, thus, assumed a rush for private (detached) homes. Thus support was mainly given for the building of houses on greenfield land. Finally, it should be noted that the first survey of the housing stock was carried out relatively quickly (1992) (Expertenkommission Wohnungspolitik, 1995), in order to gain a basis for further planning and the design of instruments; however, no conclusions were made from the serious population decline for the housing and building policies. The birth decline and out-migration were seen as short-term occurrences, which would be displaced through growth in the medium-term (Henckel and Grabow, 1993)[9]. Many East German cities banked on growth and made this the basis for their planning in the medium- and long-term. One braced oneself heroically against shrinkage with growth expectations, growth prognoses and the relevant programmes, policies and planning instruments. With this, not only economic problems should be solved, but also out-migration should be curbed. The shrinkage problems connected to the transformation did not fit in with the

picture of a successful reunification of the two parts of Germany.

The cities also had an incentive to project their population through the way in which taxes and transfers were allocated. Since most of the East German municipalities have serious financial problems, they are dependent on support from the federal government and the states, in a particular way. This support is directed at the population size, thus municipalities are interested in having the highest possible population. Experts assume that many population prognoses followed political targets, due to this problem context. Thus, in the land use plans, large residential areas were designated, in order to cover the requirement for detached family housing. That the accelerated loss of population due to the drop in births and out-migration could soon have a serious influence on the demand for housing did not occur to anyone, at the beginning and in the middle of the 1990s.

Institution Transfer and Restitution of Real Estates

A further central element of the housing policy, at the beginning of the 1990s was the (re) privatisation – "restitution" – of housing, according to the model of the unification treaty "return rather than compensation". The Law on Assets from 1990 provided the legal framework for this according to which old owners could apply for the reassignment of their property. The restitution process portrayed a complicated process, within a short time, ca. 2.2 million applications were made for reassignment that piled up in the "Departments for Regulation of Questions of Open Ownership", which were created for this purpose. It took years to work through this mountain of applications, and most of the reassignment applications were (positively) settled. During this time land parcels and houses could be neither sold nor could the building substance be altered. The restitution led to a profound change in the ownership structure in the new German states and to an immense transfer of assets from east to west. This did not only result in many conflicts and legal battles (Reimann, 1997), but it also delayed investment measures, in particular in old building stock. This provided a serious barrier for the renovation process in the eastern German inner-cities, in the first half of the 1990s. An importance result of the restitution was also the commercialisation of land ownership, particularly in the cities, which led to a dominance of "exploitation owners" (ibid.). In order to speed up investments – not only in the housing sector – the Investment Priority Law was also passed. This meant that (in well founded cases) permission was given to sell or renovate properties, even if demands for reassignment existed.

Another serious change in the arrangement of institutions and ownership structure affected the municipal and cooperative housing companies. Their constitutions were first adapted to fit the German law and the companies themselves were then adjusted to market-based criteria. At the same time, under the reunification treaty, the building costs for the prefabricated housing blocks from GDR time were transferred to these companies as old debts. To cushion this measure it was determined that this should not exceed 150 DM per square metre. Since the heavy burden due to the old debts formed a barrier to investment, and made the necessary renovation of the apartments difficult, or prevented it, a so-called "Old Debt Assistance Law" was passed, which became law in 1993. Through this law, the East German housing companies were exonerated of about half of their debts from GDR times. This partial exoneration of old debts through this law was bound to the obligation to privatise at least 15 percent of the housing stock, preferably to tenants or members of the cooperative. Also in this

way the planned change of the East German ownership structure should be achieved. However, these privatisation requirements were often very difficult to fulfil in the majority of the housing companies, and thus other types of privatisation were allowed through a resolution of the German parliament in 1995 (http://www.stadtumbau-ost.info). These old debts and the Old Debt Assistance Law form an important steering instrument of the Federal government in relation to urban development and housing policy in the new German states, and obtained a central importance in the process of urban redevelopment.

The transfer of urban grants to East Germany served to fulfil the goal of renovating old building stock, in particular in the inner-cities. As a result, sometimes very large renovation areas were demarcated in many cities in East Germany and millions of DM were invested in residential properties and the residential area through public grants. Here the experiences made in West Germany cities were often made use of in the renovation process (Echter and Mittag, 1999) and relevant concepts taken for use in the East (Bernt, 2003). Due to the numerous possibilities for tax depreciation, many of the new owners were not interested in (further) public grants, so that renovation mainly took place with no consideration of the surroundings. It took consideration of neither the urban targets, nor of the local characteristics. One can say that in East Germany specific structures were introduced that should later prove to be mortgages for urban redevelopment.

Housing Subventions

The subsidisation of private homes served to support housing ownership, as well as the creation of private housing. For this, firstly the first home buyer allowance was transferred to the eastern Germany, which took some time to have an effect due to the low incomes and the running time. In contrast, tax depreciation worked much faster, which could be made use of in the investments in housing construction and renovation in the new German states, until 1998. In this, up to 50% of investment costs in new constructions could be depreciated from income tax by the investor. This political tax instrument resulted in a real building boom on greenfield sites. Between 1991 and 1999, about 776,000 residential units were completed, of which about 700,000 were new buildings (Kommission, 2000, 30). It was estimated that, in this way alone, about 27 billion DM of income tax flowed into housing construction (and renovation) (Kommission, 2000, 30)[10]. However, this was not very important in increasing the housing ownership quota in East Germany, since it was mainly the West Germans with a high income who made use of this tax regulation, or were able to due to their wealth. They often invested in investment funds set up by banks or invested directly with the builders. This had several side-effects: thus, investments were made mainly independently of the characteristics of the location; urban instruments (such as the officially demarcated regeneration areas) only played a minor role, and new buildings were primarily built on the outskirts of the cities. These new buildings, thus, correspond only in part to the usual western image of living in one's own home, and thus the intentions of the legislator: they consist mainly of apartment houses in residential complexes (Nuissl and Rink, 2005). At least one goal was achieved much faster than expected through this: the eradication of the lack of housing. This occurred in an incredibly short time (within the second half of the 1990s) in a considerable over-supply of mainly renovated, to a lesser extent also newly built, apartments (Figure 1). The high basis of non-renovated, partly uninhabitable housing could be reduced,

but this still remains part of the stock of vacant housing. Thus, the prognoses of the development of the housing supply in East Germany was quickly outdated since it assumed that the process of catching up would take a long time and be very expensive[11].

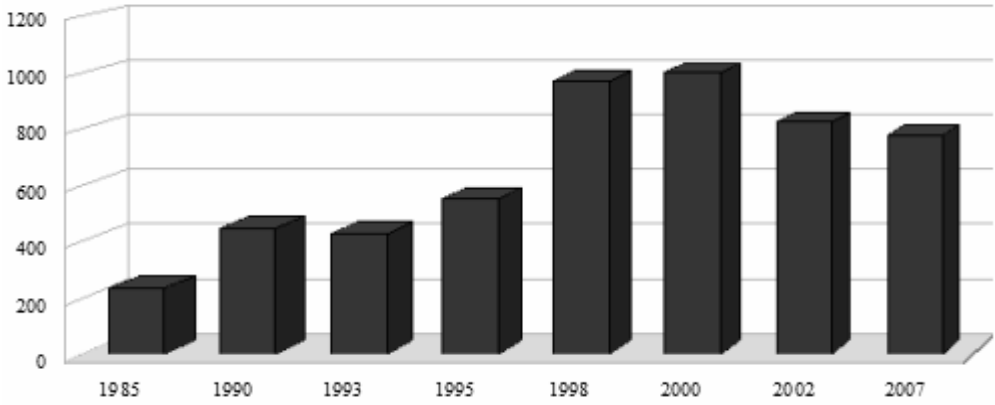

Figure 1: *Development of vacant housing in East Germany (1985–2007). Vacant housing units from 10,000. Sources:Buck, 2004; Kommission, 2000; http://www.stadtumbau-ost.info.*

Housing vacancy was a continuous accompaniment to the transformation process and can be seen as a central problem in East German towns and cities, and also their most obvious characteristic (Figure 1). The first recording of the housing stock was made in 1992 by the Federal Ministry for Building. After a survey of house owners in the new federal states, about 800,000 to 1,000,000 vacant apartments were estimated at that time, this was about 7% of the total stock (Leonhardt, 1996, 205; Expertenkommission Wohnungspolitik, 1995, 9). A survey as part of the micro-census resulted in lower numbers: according to the random housing survey carried out on the 30th September 1993, about 430,000 apartments were empty in eastern Germany, mainly due to construction deficits, but also due to commencing renovation. The housing and building census on the 30th September 1995 resulted in a vacancy rate of 456,000 apartments in the new federal states, including East Berlin (Buck, 2004, 347). Apart from the construction deficits, the reasons were due to renovation in about a third of the properties. The source areas for the migration to the west and the ensuing wave of suburbanisation were mainly the inner-city old building areas, with their poor living conditions. Vacancy was already a well-known problem here and achieved values of 30-40% directly before or in the renovation phase of the mid 1990s. In the second half of the 1990s the number of vacant apartments doubled, the micro-census revealed almost one million for 1998. This resulted in the appointment of the governmental commission and in a public debate on this topic.

Which effects did these measures and strategies show in their combined effects? The restitution portrayed – as already mentioned – the main barrier to investment (Reimann, 1997, 111). The renovation and modernisation process in the inner-cities was initially slowed down and investments often re-directed to greenfield sites, which contributed, in a large way, to suburbanisation. Growth outside the cities occurred at the expense of the inner-city residential

areas (Couch et al., 2005). The restitution hardly yielded any owner and rental structures interested in urban redevelopment, since those wanting to make use of tax depreciation were mainly interested in renting their own stock. However, the municipal and cooperative housing companies were particularly burdened by the Old Debt Assistance Law. With the Urban Restructuring East-programme they got the possibility to reduce their old debts, since the federal government decided to reduce these debts in return to demolished houses or flats. This formed the basis to create a fiscal motivation for demolition of housing by these companies. A result of both processes – quasi as an unintended side-effect – was that a structure was established in which only some of the owners (and, thus, only a part of the housing stock) is accessible for measures of market adjustment as part of urban restructuring, whilst others profit from this. Thus, urban restructuring in the form of demolition is pre-structured fiscally, institutionally and also spatially.

Conclusions

First, we are dealing with reverse development: on the one hand, economic framework conditions have been formed in the post-socialist transformation process in East Germany that cause economic shrinkage, structural collapse, "de-economising" (Hannemann, 2003), as well as population shrinkage. On the other hand, fiscal incentives were created that resulted in a building boom and created a considerable over-supply of housing. The post-socialist transformation created these specific problems under the aegis of modernisation to catch up with western Germany and expectations of growth, which form the background for current urban redevelopment. During the transformation, it was only partially possible to solve urban problems left by the GDR. One gains the impression that this was not the main goal of urban and housing policy in the transformation, but rather that certain interest groups should be served. Taken together, these specifics make the case of East Germany unique, it is not a "laboratory situation" that allows conclusions to be drawn for shrinking western industrial regions or eastern European transformation societies. Urban shrinkage has achieved a particular manifestation in East Germany and is only partially comparable to eastern European transformation countries, due to its specific context, and also to the way it has occurred: these countries experienced neither drastic de-industrialisation nor emigration to the same extent and also no comparable drop in birth rates. They do not have to deal with the "luxury of vacant housing", but still have a lack of housing. Finally, the financial resources are not available to them to deal with the consequences of shrinkage. The mixture of restitution and old debt assistance is also a particular German method in housing and building policy.

Furthermore, the case of East Germany is particular, since different shrinkage processes already occurred here in GDR times. The shrinkage after 1990 linked to those already existing shrinking cities; they are, thus, not a new city type in East Germany, but instead, accompany its development. This type will probably experience a further occurrence and differentiation in the future, particularly as shrinkage has become the dominant development mode in East German towns and cities. In the last few years, regional differences have increased in East Germany, due to the occurrence of a gap between shrinking and stabilising or growing cities. Herfert has diagnosed a polarisation between desurbanisation and reurbanisation for this (Herfert, 2006). However, even for stabilising cities, a recuperation or winning back of earlier functions appears to be

illusory: they will not get back the place which they left after the Second World War (Henckel and Grabow, 1993). One of the reasons for this is that, in most cities and regions the structural weaknesses will also remain, in the long term. Thus, the most important reason for out-migration remains. The drop in the birth rate at the beginning of the 1990s will also lead to a continuing negative population development in the coming years. Various scenarios predict that, in the middle of the 2010s, the number of households and thus the demand for apartments will (continue) to sink. According to all prognoses, we are standing just in front of a second wave of vacancies. The vacancy numbers of ca. 1,000,000 apartments, diagnosed at the beginning of the 2000s, will probably become a permanent condition and urban shrinkage, a long-term topic of urban development in East Germany.

Notes

1. Thus, shrinkage processes can be shown in a number of European cities with over 200,000 inhabitants since the 1960s (Turok and Mykhnenko, 2007). The towns and cities portrayed here, which had at least 50,000 inhabitants at some time during the course of the GDR, are only represented to a small extent in this investigation.
2. Not until the 1970s was the Gründerzeit regarded more differentially and its restoration moved into the area of the state building policies. Although the GDR restored and modernised several Gründerzeit areas exemplarily (for instance, the Nikolai quarter in Berlin or the western inner-city in Leipzig), it was no longer able to carry this out on a large scale.
3. Thus, one estimates that, for example, in Leipzig – a city with a large stock of old housing – about 25,000 apartments were empty in 1989/90, that was about10 % of the stock at that time. These apartments were deemed to be uninhabitable; at the same time there were about 27,000 unfinished housing applications in Leipzig. Quantitatively at this time there was already an (estimated) over-supply: 253,000 apartments existed for 235,000 households (Stadt Leipzig, 1993, 24; Steinführer, 2004, 165 et seq.).
4. Eisenhüttenstadt: Data first from 1955; in 1953 about 2,400 people lived in the town (source: Wikipedia).
5. Halle-Neustadt founded in 1967, 1990 reunified with the city of Halle/ Saale.
6. Halle/ Saale 1999 and 2007 with Halle-Neustadt.
7. Data for East Berlin 2007 are difficult to determine on the basis of this data since different districts were merged or newly unified: e.g. for 1999 Kreuzberg and Friedrichshain (100,345 inhab.) are shown separately, but in 2007 they are shown together as Friedrichshain-Kreuzberg (267,919 inhab.).
8. "Shrinkage" was only diagnosed in a few cases for East German cities at this, for instance, for Leipzig (see. Döhler and Rink, 1996, 264 et seq.).
9. In one of the first studies about urban development after German reunification, a team from the German Institute for Urbanism (DIFU) assumed that the East German cities would, on the whole, find their place again in the city hierarchy where they dropped out – not only in size, but also according to their importance (Henckel and Grabow 1993, 543).
10. That is, however, much less than the expert commission on housing policy predicted to be necessary at the beginning of the 1990s. It was assumed that a yearly volume of about 50 billion DM would be necessary for the renovation of the existing housing and the building of new housing over about 20 years (Expertenkommission Wohnungspolitik, 1995, 10).
11. For instance, the report from 1994 from the expert commission for housing policy appointed by the federal government is to be mentioned here: "It will not take years, but decades, until a similarly differentiated supply of good quality housing is achieved as in western Germany" (Expertenkommission, 1995, 9).

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Primit la redacţie: iunie, 2011