## Between Destruction and Reconstruction: The Development of Vinh City's Built Environment in the Second Half of the 20th Century

Tim Kaiser

#### 1. Introduction

The impact of war is not only felt in the natural environment, but does also affect the human made environment. This impact is made dramatically visible in the built environment of urban areas that are affected by large scale destruction. In the 20<sup>th</sup> century, aerial bombing of urban areas has resulted in such large scale destruction. During World War II, aerial bombing and the destructions it caused to the urban built environment rose to unprecedented levels. The countries most effected during WWII were Japan and Germany. During the 1960s and 1970s, the cities of the Democratic Republic of Vietnam (DRV) were subject to the most intensive bombing campaigns of urban areas the world had experienced until then.

The 20<sup>th</sup> century also saw the development and large scale application of modern urban planning. Such modern urban planning aimed at employing scientific methods and knowledge to design an urban environment that would contribute to the implementation of visions of social change. New ideals of the urban environment that promised the creation of more just and equal societies were developed. While some of these approaches aimed at incremental development, others saw the (re-) design of complete cities as the solution to problems inherited from the past.<sup>2</sup>

In this paper, I trace the history of the built environment of Vinh City in North-Central Vietnam's Nghệ An province through a period that was

<sup>1</sup> Davis, Donald/Weinstein, David (2002): Bones, Bombs and Break Points: The Geography of Economic Activity. In: American Economic Review 92. 1269–1289. Brakman, S./Garretsen, H./Schramm, M. (2004): The Strategic Bombing of German cities during World War II and its Impact on City Growth. In: Journal of Economic Geography 4, 2. 201–218.

<sup>2</sup> Hall, Peter (2002): Cities of Tomorrow. An Intellectual History of Urban Planning and Design in the Twentieth Century. Oxford.

marked by the two above mentioned aspects: destruction by aerial bombing and reconstruction through modern urban planning. Since the 1940s, the built environment of Vinh was repeatedly destroyed by wars. In the 1960s and 1970s, the city was totally devastated twice by bombing by the United States (US). Both times, its reconstruction was to be achieved through centralized planning that aimed at the creation of a *socialist* urban environment. However, the modes and results of reconstruction differed markedly. While the first reconstruction attempt produced little results and was short-lived because of the second destruction by bombing, the second attempt was carried out with assistance of the German Democratic Republic (GDR) and its impacts remain visible in Vinh's contemporary urban environment. The history of Vinh's urban environment in the 20th century presented here is thus a distinctly international history, as it concentrates on foreign impacts and influences of destruction and creation.

The history of Vinh provides an example of how a North Vietnamese city was impacted by war, and especially by bomb war, during the 1960s and 1970s. As Diefendorf has shown, a study of the impact of war on the urban environment cannot be reduced to an evaluation of the amount of explosives dropped on a city and the immediate destruction caused by bombing.<sup>3</sup> To grasp the full picture, such a study has to include both the pre-war history of a city, as well as its reconstruction and post-war development. This also makes necessary to look at decisions and plans for urban development and reconstruction prior to the end of the war. This complexity creates difficulties in isolating the impact of destruction by bombing on the urban environment from that of other processes. However, as the history of Vinh shows, urban development, destruction, and reconstruction are intertwined processes and neither can be analysed in isolation.

### 2. The Impact of Bomb War on Cities

The impact of war, and specifically bomb war, on cities and their development has received growing scholarly attention. Several studies have focused on the impact of bombing, regarded as a specific form of "shocks"<sup>4</sup>,

<sup>3</sup> Diefendorf, Jeffry M. (1993): In the Wake of War. The Reconstruction of German Cities after World War II. New York.

<sup>4</sup> Davis/Weinstein (2002), 1271.

on the distribution and growth of urban centres. In one of these studies, Davis and Weinstein have investigated the impact of Allied bombing of Japanese cities during World War II, "one of the most powerful shocks to relative city sized that the world has ever experienced."5 The scale of Allied bombing on the targeted Japanese cities was devastating. In total, 2.2 million buildings were destroyed, nearly half of all structures in the targeted cities. 300,000 inhabitants were killed and 40 percent of the population lost their homes.<sup>6</sup> The impact of bombing varied between the Japanese cities. About 80 percent of the 300 cities in Davis' and Weinstein's sample remained "virtually untouched by the bombings", including large cities like Kyoto.<sup>7</sup> There was also great variation in the impact of bombing on those cities that were actually bombed.<sup>8</sup> Regarding the mid- to long-term effects of bombing on these cities relative size, in general the US bombing had no impact on the relative population numbers of a typical Japanese city in 1960. Despite the devastation caused by the bombing, the typical city had recovered its relative size within 15 years after the end of the war. By 1965, 20 years after the war, the Japanese cities had completely recovered from the bombing-shocks and returned to their pre-war trajectories.<sup>9</sup> Davis and Weinstein concluded that "even the spectacular destruction inflicted on Japanese cities by the US strategic bombing of Japanese cities in WWII had virtually no long-run impact on the relative size of Japanese cities. Within the space of just 20 year, they recovered from the devastation to return to their former place in the constellation of cities."10

Brakman et al.<sup>11</sup> have followed a similar approach as Davis and Weinstein in their study of the impact of strategic bombing during World War II on German cities' growth and development. Similarly to destruction in Japan, an average of 40 percent of the dwellings of the larger German cities were destroyed during WWII, estimated deaths due to air raids reach 410,000, and the homes of seven million urban dwellers were destroyed.<sup>12</sup> In the Federal Republic of Germany (FRG), bombing had a temporary im-

<sup>5</sup> Davis/Weinstein (2002), 1271.

<sup>6</sup> Davis/Weinstein (2002), 1277.

<sup>7</sup> Davis/Weinstein (2002), 1278.

<sup>8</sup> Davis/Weinstein (2002), 1278–79.

<sup>9</sup> Davis/Weinstein (2002), 1280-82.

<sup>10</sup> Davis/Weinstein (2002), 1283.

<sup>11</sup> Brakman, S./Garretsen, H./Schramm, M. (2004).

<sup>12</sup> Brakman, S./Garretsen, H./Schramm, M. (2004), 205.

pact on city size. Its cities showed a tendency to revert to their pre-war relative city size, but until 1963 this reversion remained incomplete. This recovery is less pronounced than the Japanese cities that had recovered completely by 1960. In contrast to the development in the FRG, bombing had both a short- and long-term effect in the GDR, where cities had not recovered from the destruction by bombing by 1964. 13

These studies were able to show that even the heaviest destructions inflicted by aerial bombing on urban centres have had little impact on the mid- to long-term population growth and distribution of cities and towns. Doing so, they have mainly focused on quantitative data to examine the impact of bombing on urban centres. They also recognize the role reconstruction policies play for the post-war recovery and development of cities. In Japan, reconstruction subsidies had a positive impact on the recovery of cities. This impact, however, remained relatively small, accounting for less than one percentage of the cumulative 1947-1960 growth of the four cities that were most heavily destroyed.<sup>14</sup> One reason for this small contribution of reconstruction funds to urban recovery was the focus of reconstruction policies on rural areas. 15 As the study by Brakman et al takes into account the post-war development of cities in both the FRG and the GDR, it is able to identify the impact of very different policies for urban reconstruction on the post-war urban development in both countries. The FRG built many more new houses between 1950 and 1961 than the GDR (3.1 million in comparison to 0.5 million, or nearly three times as many per capita). The FRG focused on the rebuilding of its large cities and those that had large post-war populations but where not necessarily the most destroyed ones. The GDR, in contrast, focused on the development of new industrial centres. 16 The permanency of the bombing shock on the GDR's cities also resulted from that country becoming a centrally planned economy, as market mechanisms that furthered the recovery in the FRG were "no longer or at least less relevant for East German city growth."17

These studies on the impact of bombing on urban centres have provided valuable findings on general urbanization trends and the impact of bomb-

<sup>13</sup> Brakman, S./Garretsen, H./Schramm, M. (2004), 207–210.

<sup>14</sup> Davis/Weinstein (2002), 1281.

<sup>15</sup> Davis/Weinstein (2002), 1277-1281.

<sup>16</sup> Brakman, S./Garretsen, H./Schramm, M. (2004), 212–213.

<sup>17</sup> Brakman, S./Garretsen, H./Schramm, M. (2004), 215.

ing on these. Thus, we do know that destruction, as temporary shocks, has often little impact on the long-term quantitative growth of cities, and that reconstruction policies play a role in their recovery. However, the impact of bombing does not translate only to quantitative data and studies of the impact of war and bombing on the urban environment remain scarce. Diefendorf's study on destruction and reconstruction of cities in the FRG after World War II has provided a very detailed examination of reconstruction policies and how they impacted the urban built environment. <sup>18</sup> Glaeser and Shapiro's work on the impact of warfare and terrorism on urban areas takes a more detailed view at selected cities, chiefly New York City after the attacks of 9/11, than the previously mentioned studies. <sup>19</sup> This view is able to identify the importance of individual urban centres' particular settings, modes and intensities of destruction, as well as postwar reconstruction policies for a detailed understanding of the impact of war on an individual city.

In the following, such a detailed approach is employed to show how the specifics of destruction and reconstruction of Vinh in North-Central Vietnam have impacted the urban built environment of that city, focusing on the period between the 1940s and the 1980s. This timespan covers a period that was marked by repeated destructions and attempts at reconstruction of Vinh according to the model of a socialist city, one of the ideals modern urban planning has produced in the 20th century. The study is based on archival research in Vietnam (at the National Archives Centre 3, Hanoi and the Archives of the People's Committee of Nghê An Province, Vinh) and Germany (at the Federal Archives, Berlin) carried out in 2010-2012.<sup>20</sup> The following sections first present the general picture of the impact of the American War on cities in Vietnam, afterwards, the paper turns to the reconstruction efforts that aimed at creating a socialist urban environment in Vinh. Finally, the paper argues that because of the very diverse war-time experience of Vietnamese cities, a comparative approach is necessary for a complete understanding of the impact of the war on Vietnam's urban centres.

<sup>18</sup> Diefendorf (1993).

<sup>19</sup> Glaeser, Edward/Shapiro, Jesse (2001): Cities and Warfare. The Impact of Terrorism on Urban Form. Discussion Paper Number 1942. Cambridge.

<sup>20</sup> Archival sources are cited here as they appear in the original. Therefore, where the original document is written without diacritics, these are also lacking in the citation provided here.

#### 3. The Bomb War in North Vietnam.

The US dropped about 2,000,000 tons of all kind of air ordnance during WWII, and about 1,000,000 tons during the Korean War. Yet, in Indochina, they had dropped a total of about 6,300,000 by the year 1971 alone. <sup>21</sup> Already by 1969, the amount of explosives dropped in Indochina had reached an average of "70 tons of bombs for every square mile of Vietnam and about 500 pounds of explosives for every man, woman and child in the country." <sup>22</sup> In total, during the 10 years of air war (1964-1973) US forces dropped a total of 7,662,000 tons of ordnance in Southeast Asia. <sup>23</sup> However, bombing was very unequally distributed, with the largest amount dropped over the Republic of Vietnam (RoV) in the South, and a much smaller percentage dropped on the DRV in the North, where the city of Vinh was located. <sup>24</sup>

In the whole period of US involvement in Vietnam, only 22 percent of air war sorties were flown over the DRV while 45 percent took place over the RoV.<sup>25</sup> During 1968 and 1969, nearly 1,000,000 tons of ordnance was dropped in the RoV annually, five times the maximum annual amount dropped on the DRV until then. Bombing in the DRV and the RoV did not only differ regarding the amount of explosives dropped, but also in the strategies, tactics, and targets. In contrast to the bombing of the DRV, which will be described in more detail below, bombing in the RoV did not focus on industrial targets or urban areas,<sup>26</sup> but was concentrated on "interdiction, harassment, and sometimes reprisal" with "area saturation bombing" common in sparsely populated rural areas used by the NLF/NVA,<sup>27</sup> as well as close air support during ground battles.<sup>28</sup> Consequently, the impact of the war on cities was different in the RoV. While in the DRV,

<sup>21</sup> Littauer, Raphael/Uphoff, Norman Thomas (eds.) (1972): The Air War in Indochina. Boston. 9.

<sup>22</sup> Thayer, Thomas C. (1985): War without Fronts. The American Experience in Vietnam. Boulder. 79.

<sup>23</sup> Clodfelter, Micheal (1995): Vietnam in Military Statistics. A History of the Indochina Wars, 1772–1991. Jefferson. 21.

<sup>24</sup> Littauer/Uphoff (1972), 168.

<sup>25</sup> Thayer (1985), 81.

<sup>26</sup> However, "During the fighting which followed the Tet offensive of 1968, tactical air strikes extended even into the cities themselves".Littauer/Uphoff (1972), 11.

<sup>27</sup> Littauer/Uphoff (1972), 10.

<sup>28</sup> Thayer (1985), 83-86.

cities were evacuated during the times of most intense bombing, the urban population in the RoV rose, partly because people fled from the war in the countryside. As a result, the urban population of the South increased two-to threefold. By 1968, it was estimated, 6,800,000 out of the 17,200,000 South Vietnamese lived in urban centres, amounting to 40 percent of the total population.<sup>29</sup> By the end of the war, nearly 43 percent of the RoV population was living in urban areas. Large numbers of the urban population were refugees from the countryside (between 1965 and 1975 perhaps as many as 10 million people were displaced, representing about 47 percent of the population of the RoV). In an extreme case, the population of Đà Ne p (the RoV's second largest city) rose by 21.1 percent (58,300) in only one year (1967-1968) as a result of the Tet offensive. In addition to many war-displaced refugees, urban growths was to a large extend due to regular rural-urban migration.<sup>30</sup>

# 4. Bombing of the DRV: The Rolling Thunder, 1965-68, and Linebacker, 1972, Campaigns

From early 1964 on, the US government had sped up planning for air operations against the DRV.<sup>31</sup> In August that year the two first air strikes on the DRV were carried out as a reprisal for the "Tonkin incident".<sup>32</sup> Yet, as retaliatory strikes did not deter the DRV from its goal to achieve unification of Vietnam by military means, planning by the US turned to a sustained, gradually increasing air war campaign against the DRV.<sup>33</sup> This campaign, named *Rolling Thunder*, began in early 1965 and lasted until November 1968. It was thus the "longest sustained strategic air bombardment in history".<sup>34</sup> The campaign aimed at a number of goals:

"In keeping with the thinking that Hanoi was not only providing men and logistic support for the NLF but was also effectively directing their operations, it was assumed that this air attack would help to win the war in the South. The

<sup>29</sup> Littauer/Uphoff (1972), 63.

<sup>30</sup> Thrift, Nigel/Forbes, Dean (1986): The Price of War. Urbanization in Vietnam 1954–85. London. 123.

<sup>31</sup> Clodfelter, Mark (1989): The limits of air power. The American Bombing of North Vietnam. New York. 45.

<sup>32</sup> Littauer/Uphoff (1972), 36–37.

<sup>33</sup> Clodfelter (1989), 53-57.

<sup>34</sup> Clodfelter (1989), 218.

direct aims were to pressure Hanoi into withdrawing its support of the NLF, to cripple the strategic industries within North Vietnam (of which there were few), and to interrupt the lines of communication along which supplies were moving south. Another aim was to strengthen the morale of pro-government forces in South Vietnam by demonstrating the depths of the US commitment to the struggle."<sup>35</sup>

These goals translated into different targets: military targets; the transportation system; petroleum, oil, and lubricant (POL) storage facilities; power plants; production facilities.<sup>36</sup> The Rolling Thunder campaign was severely constricted by political considerations, including fear of drawing the People's Republic of China (PRC) into the war and escalating the conflict to a global scale. Initially, a 30 mile radius around Hanoi and a 10 mile radius around Haiphong were specifically excluded from bombing. Targets were selected in Washington and had to be approved by the Office of the Secretary of Defence, the Department of State, and the White House. Washington also insisted that the numbers of civilian casualties be kept as low as possible. These considerations prevented actions that might have been undertaken if only military considerations were followed, for example the bombing of dikes, air strikes close to the Chinese border, or the mining of Haiphong harbour.<sup>37</sup>

In total, 643,000 tons of bombs were dropped on the DRV during Rolling Thunder, it was estimated that the campaign destroyed 77 percent of the DRV's ammunition depots, 65 percent of its POL storage, 59 percent of its power plants, 55 percent of the major bridges, 39 percent of the railroad shops, 12,521 vessels, 9,821 motor vehicles, as well as 1,966 railroad cars and engines.<sup>38</sup> Even though the major urban centres Hanoi and Haiphong were initially excluded from bombing and later on only relatively few targets were attacked in these areas, other cities suffered large scale destruction: "Reports indicate that the cities of Dong Hoi, Ninh Binh, Phu Ly, Bac Giang, Yen Bai, and Son La were virtually levelled. Serious damage was sustained in the larger cities such as Nam Dinh, Thai Nguyen, Viet Tri and Vinh." Despite the intention to limit civilian casualties, 80 percent of the 36,000 casualties of 1965-66 alone were civilians.<sup>40</sup> In total,

<sup>35</sup> Littauer/Uphoff (1972), 12.

<sup>36</sup> Littauer/Uphoff (1972), 39-43.

<sup>37</sup> Littauer/Uphoff (1972), 37-40. Clodfelter (1989), 43-44.

<sup>38</sup> Clodfelter (1989), 221-222.

<sup>39</sup> Littauer/Uphoff (1972), 47.

<sup>40</sup> Littauer/Uphoff (1972), 48.

"about 52,000 North Vietnamese civilians were slain by Rolling Thunder." <sup>41</sup>

Despite this massive destruction and the human and economic costs it inflicted, it was judged that this had had no impact on the DRV's resolve and capabilities to continue the war, since "the damage [...] was more than offset by military and economic aid from China and the USSR, [...] even a small portion of the transportation and trail system to the South was sufficient to maintain an adequate flow of men and material, and [...] the North Vietnamese possessed a more than adequate supply of manpower for repair, reconstruction and work on the [Ho Chi Minh, added by author] Trail". Furthermore, the population of the DRV was quick to rebuild the damage caused by bombing in its urban centres. By 1971, many houses had been rebuilt by private initiative. 43

In October 1968, US President Johnson ordered the end of Rolling Thunder to turn to negotiations with the DRV government. 44 Yet, after the Rolling Thunder campaign officially ended in November that year, the US continued bombing of the DRV on a smaller scale, "mostly near the Demilitarized Zone and at the entrances to the Ho Chi Minh trail."45 This limited air campaign continued until April 1972. Negotiations between the US and the DRV, however, came to a stop in late 1971. By then, the US's goals under the new President Nixon were much more limited than in the 1960s under Johnson and now focused on a peace with honour that would entail a withdrawal of American troops from Vietnam without immediate victory of the DRV and the National Liberation Front (NLF).46 Accordingly, Nixon's' "Vietnamization" policy had included the withdrawal of personnel and equipment necessary for air war. However, the DRV's offensive beginning on March 30th 1972 prompted a return of large numbers of aircraft and personnel that contributed to the failure of the offensive. In addition to attacking DRV/NLF forces in the South, air strikes, were also

<sup>41</sup> Clodfelter (1995), 222.

<sup>42</sup> Littauer/Uphoff (1972), 46–48.

<sup>43</sup> Smith, John T. (1998): The Linebacker Raids. The Bombing of North Vietnam, 1972. London. 156.

<sup>44</sup> Clodfelter (1989), 147.

<sup>45</sup> Littauer/Uphoff (1972), 42–43.

<sup>46</sup> Clodfelter (1989), 147–149.

<sup>47</sup> Between 1968 and 1972, "Vietnamization" of the war led to an increase of sorties flown by the South Vietnamese Air Force from 4 percent to 13 percent. Thayer (1985), 80.

again carried out over the DRV and the Haiphong harbour was mined on May  $8^{\text{th}}$ .

In retaliation for the North Vietnamese offensive, Linebacker I (May – October 1972) subjected the DRV to "extremely heavy bombing in an attempt to change the North's policy towards South Vietnam."49 Nixon publicly described the goals of the new campaign as "(a) to reduce the supplies being imported into North Vietnam; (b) to destroy the existing military supplies in North Vietnam: and (c) to stop or interdict the flow of troops and material from the North to the battlefields in the South."50 In general, the Linebacker I campaign was very similar to the Rolling Thunder campaign in terms of overall strategy and targets attacked.<sup>51</sup> As a consequence of the campaign's goals, attacks focused on the transport system<sup>52</sup> and military targets. Similar to the earlier campaign, bombing was initially prohibited within a 30 mile strip next to the Chinese border as well as within a 10 mile radius around both Hanoi and Haiphong. However, political control was much lessened. Washington was much less involved in the selection of targets; responsibility and decision making power of local commanders was much greater than during Rolling Thunder.<sup>53</sup>

The Linebacker I campaign led to bombing even more intense than Rolling Thunder. In the seven month April to October 1972, 155,548 tons of bombs were dropped on the DRV. This was one-fourth of the amount dropped during the more than three years of Rolling Thunder. Additionally, new weapon systems made bombing more effective and damaging and the turn to conventional warfare by the DRV made it more vulnerable to air attacks. <sup>54</sup> In addition to Haiphong harbour other northern harbours were mined, therefore "between May and December no merchant ships were able to use any North Vietnamese port." The Linebacker I attacks destroyed most of the electric power capacities, so that in Hanoi only military facilities could receive power. Between 20 and 40 percent of the city's

<sup>48</sup> Smith (1998).

<sup>49</sup> Smith (1998), 7.

<sup>50</sup> Smith (1998), 60.

<sup>51</sup> Clodfelter (1989), 148. The same targets were attacked because "by 1971 most of the damage had been repaired and industry was working again with the help of aid from the Soviet Union and China." Smith (1998), 47.

<sup>52</sup> Smith (1998), 77.

<sup>53</sup> Clodfelter (1989), 163-164.

<sup>54</sup> Clodfelter (1989), 166-173.

<sup>55</sup> Smith (1998), 76.

inhabitants were evacuated.<sup>56</sup> The damage caused by bombing as well as the failed 1972 offensive and the unfavourable conditions in the ground war in the RoV compelled the DRV leadership to return to negotiations. The DRV and the US agreed on a settlement in October 1972 and Nixon stopped the Linebacker I campaign on the 23<sup>rd</sup> of that month. However, the RoV government did not agree to the agreement's terms. The DRV, in turn, did not agree to changes demanded by the RoV.<sup>57</sup> Convinced of the Linebacker campaign's contribution to force the DRV to compromise, the US again turned to bombing to force the North Vietnamese to a settlement. The new bombing campaign was named Linebacker II.

"The December 1972 Linebacker campaign, however, differed from its namesake in *how* it was to attain 'peace with honour.' Nixon had intended Linebacker I to accomplish his objective by wrecking North Vietnam's warmaking capacity; he intended Linebacker II to destroy the North's will to fight while demonstrating to [RoV president] Thieu that America would remain committed to Southern independence." <sup>58</sup>

Between the 18th and the 29th December, 36,452 tons of ordnance was dropped on the DRV in the Linebacker II campaign.<sup>59</sup> It was thus the "most concentrated bombing campaign inflicted on any country up until that time."<sup>60</sup> Targets included air defence installations and oil storage facilities, as well as the electricity and transport networks. Destruction was so heavy that for example in Haiphong, no targets remained to be attacked on the December 27th. Because of the location of many targets in the urban centres of Hanoi and Haiphong, 1,318 civilians were killed in Hanoi and 305 in Haiphong despite evacuations. In contrast to earlier bombing, the psychological impact on the urban populations was intense.<sup>61</sup>

On December 26th, the heaviest Linebacker II attack was carried out. On the morning of the next day, the DRV leadership agreed to resume talks with the US in January 1973. Nixon, in turn, ordered a stop to all bombing north of the 20th parallel on the 29th. In late January 1973, the DRV and the US signed the Paris Peace Accords. According to Clodfelter, the Linebacker II campaign had contributed to the settlement, but other

<sup>56</sup> Clodfelter (1989), 167.

<sup>57</sup> Clodfelter (1989), 170-176.

<sup>58</sup> Clodfelter (1989), 176. See also Smith (1998), 118.

<sup>59</sup> Clodfelter (1989), 224.

<sup>60</sup> Smith (1998), 7.

<sup>61</sup> Clodfelter (1989), 189-195.

factors also impacted the decision by both the DRV and the RoV to agree to its provisions.<sup>62</sup>

### 5. Mid- to Long-Term Effects of Bombing in Vietnam

The bombing campaigns over the DRV resulted in the heaviest bombing the world had seen until then. In this light, surprisingly few studies of the mid- to long-term effects of the war in general and bombing in particular on Vietnam's urban centres have so far been carried out. The study by Miguel and Roland<sup>63</sup> on the long-term impact of bombing in Vietnam focusses on a wide set of variables: physical capital, human capital, population, poverty rates, and consumption. It found that for urban districts in North Vietnam, the effect of bombing on poverty (measured in 1999) was negative, possibly because of government policies assisting heavily bombed areas.<sup>64</sup> They further found that by 2002 "living standards in the provinces that bore the brunt of the US assault are largely indistinguishable from other areas."65 Regarding physical infrastructure, they found a positive relationship between bombing intensity and 1999 access to electricity, which they also explain by post-war policy choices.<sup>66</sup> Bombing intensity is also not related to post-war district population densities, revealing that bombing had, if any, only a very short-term impact on district population densities. The study's interpretation is that most displaced households simply returned to their home areas once the conflict had ended. This was possible because of the "elaborate responses" to intense bombing, "including hiding for extended periods in [...] bomb shelters and in underground tunnels."67

In sum, the study by Miguel and Roland found no robust long-run impacts of US bombing on local poverty rates, consumption levels, or population density in Vietnam over 25 years after the end of the American War.<sup>68</sup> Opening their study with the assumption that institutions that influ-

<sup>62</sup> Clodfelter (1989), 188–201.

<sup>63</sup> Miguel, Edward/Roland, Gérard (2011): The Long-Run Impact of Bombing Vietnam. In: Journal of Development Economics 96, 1. 1–15.

<sup>64</sup> Miguel/Roland (2011), 9.

<sup>65</sup> Miguel/Roland (2011), 10.

<sup>66</sup> Miguel/Roland (2011), 10.

<sup>67</sup> Miguel/Roland (2011), 12.

<sup>68</sup> Miguel/Roland (2011), 14.

ence the long-term impact of bombing are very country specific, they consequently attribute the absence of long-term impact of bombing on interregional economic divergence partly to "ingenious strategies employed by the North Vietnamese to limit the damage to physical infrastructure [...] especially in urban areas;" and to the "major Vietnamese government reconstruction effort after the war."<sup>69</sup>

Thrift and Forbes have studied the patterns of Vietnamese urbanization between 1954 and 1985. They found that "between 1954 and 1976, allowing for the very unusual circumstances pertaining during the period of the Second Indochina War, overall percentage urban population growth was very slow. However, [...] this slow percentage rate of growth conceals a quite significant absolute increase. In absolute terms, the urban population all but doubled."<sup>70</sup> They attribute this development to the "particular historical combination of the state, the economy and civil society in the Democratic Republic", as well as the "particular form and style of management of the North Vietnamese urban system". 71 Looking at this period in more detail, they found that heavy bombing during the war led to a decline of the urban population between 1965 and 1973. This was due to direct and indirect effects of bombing. The major direct effect was the destruction caused by bombing. Targets included the major cities Hanoi and Haiphong as well as the main industrial centres of the DRV. Of the 28 bombed provincial capitals, 12 "were razed to the ground." As an indirect effect, over 500,000 people were evacuated from urban areas and industries were dispersed to the countryside. Despite the devastation caused by bombing in urban centres, the urban system quickly re-adjusted once bombing stopped. The overall urban population of the DRV in 1974 was larger than that in 1965.<sup>72</sup> Because bombing had destroyed living space (one source claims that almost one quarter of all living space in Hanoi was destroyed), the return of evacuees caused severe overcrowding. The housing shortage continued well into the 1980s.<sup>73</sup>

Miguel and Roland's argument for the importance of country specific institutions for an understanding of long-term war impact can be extended to argue that regarding the long-term impact of bombing on individual

<sup>69</sup> Miguel/Roland (2011), 10-11.

<sup>70</sup> Thrift/Forbes (1986), 88.

<sup>71</sup> Thrift/Forbes (1986), 87.

<sup>72</sup> Thrift/Forbes (1986), 96–97.

<sup>73</sup> Thrift/Forbes (1986), 148-151.

cities, institutions and policies impacting post-war urban development are not only country-specific, but city-specific. Similarly, their argument for "the accumulation of evidence across many settings" to "create a convincing picture of war's long-run economic effects" can be modified to propose that to paint a detailed picture of the impact of war on the urban environment of a particular city, a localized investigation of the destruction caused by bombing as well as of the policies and processes of post-war urban development is necessary. Taking up these arguments, the following section provides the case study of Vinh City as a detailed example of the impacts of destruction and reconstruction on the built environment of a Vietnamese city.

## 6. The Urban Environment of Vinh City between Destruction and Reconstruction<sup>74</sup>

Today, Vinh is the capital of Nghệ An province covering an area of 105km² and with a population of 480,000 in 2013. It is also the economic, administrative, and cultural centre of North-Central Vietnam. The city's rise to this position began with the construction of a new site for imperial examinations in the area of today's city and the relocation of the provincial administrative centre to Vinh in 1803 and 1804, respectively. As the provincial centre of administration and examinations, Vinh came to form an administrative unit combining different functions and the place through which the surrounding region was integrated into wider networks of power, trade, and information. As the seat of the provincial mandarin, the city linked the region to a centralized system of rule. Regarding trade net-

<sup>74</sup> This section is based on chapter 3 of my dissertation Kaiser, Tim (2016): Transnational Impact on Urban Change. Modern Projects in Vinh, Vietnam. University of Passau. Passau.

<sup>75</sup> Quyết định 270/QĐ-TTg của Thủ Tướng Chính Phủ về việc phê duyệt nhiêm vụ điều chính quy hoạch chung thành phố Vinh, tỉnh Nghệ An đến năm 203, tầm nhìn 2050. 31.03.2013. Cục Thống kê Nghệ An (2011): Niên giám thống kê Nghệ An 2010. Statistical Yearbook 2010. Vinh. 29.

<sup>76</sup> Nguyễn Quang Hồng (2003): Thành Phố Vinh. Quá Trình Hình Thành Và Phát Triển (1804–1945). [Vinh City: The Process of Establishment and Development]. Vinh. 22–24. Chu Trọng Huyến (1998): Lịch Sử Thành Phố Vinh. Tập 1. [History of Vinh City, Part 1.] Vinh. 21–22.

<sup>77</sup> Nguyễn Quang Hồng (2003), 24–27, 68–71. Chu Trọng Huyến (1998), 23.

works, Vinh becoming the provincial centre elevated the status of its existing market to that of the main trading place in the region. Additionally, members of the administration and the military located in the citadel provided new and growing markets for surrounding villages. With little production taking place in Vinh itself, its economic role was mainly that of a regional trading place. Through its strategic location at the intersection of the Mandarin Road and a road linking land-locked Laos and the Mekong with the North Vietnamese coast, Vinh connected its surroundings also to inter-regional and international trade. Increased integration into wider networks of information and technology expressed itself for example in the design of Vinh's citadel that combined a Vauban-style design with traditional local elements and materials. The only available population number for pre-colonial Vinh is provided by Del Testa who puts it at "perhaps 3,000 inhabitants."

The French military forces captured Vinh's citadel on 20 July 1885 and established a residency in Vinh in the same year.<sup>82</sup> After the first years of colonial rule saw little change in Vinh, from around 1900 on Vinh and the nearby located centres of Truong Thi and Ben Thuy became a major focus of investments by the colonial state and private enterprises.<sup>83</sup> Of particular importance was Vinh's location along new railroad lines that strengthened the city's role as a transport hub, as well as the location of railroad indus-

<sup>78</sup> Del Testa, David W. (2007): Vinh, the Seed that would Grow Red. Colonial Prelude, Revolutionary City. In: Historical Reflections 33, 2). 305–325. 313.

<sup>79</sup> Nguyễn Quang Hồng (2003), 52. Chu Trong Huyến (1998), 35.

<sup>80</sup> Nguyễn Quang Hòng (2003), 28–29. Mantienne, Frédéric (2003): The Transfer of Western Military Technology to Vietnam in the Late Eighteenth and Early Nineteenth Centuries. The Case of the Nguyên. In: Journal of Southeast Asian Studies 34, 3. 519–534.

<sup>81</sup> Del Testa (2007), 313.

<sup>82</sup> Del Testa (2007), 314. Nguyễn Quang Hồng (2003), 61. Chu Trọng Huyến (1998), 39–40.

<sup>83</sup> Del Testa (2007), 315. Del Testa, David W. (1999): Imperial Corridor. Association, Transportation and Power in French Colonial Indochina 1. In: Science Technology & Society 4, 2. 319–354. Nguyễn Quang Hồng (2003), 82–87, 101–102. Nguyễn Quốc Hồng/Nguyễn Văn Huệ/Bùi Văn Quế (2004): Lịch Sử Phong Trào Công Nhân Và Công Đoàn Thành Phố Vinh (1929–2002). [History of Workers' and Trade Unions' Movement in Vinh City (1929–2002)]. Vinh. 18.

tries in Truong Thi.<sup>84</sup> Public investments up to the First World War mainly consisted of infrastructure projects such as streets connecting the three areas, other works focused on the citadel area where most French residents lived.<sup>85</sup>

As the importance of industries and trade located in Trường Thi and Bến Thủy grew relative to the administrative function of Vinh, both were elevated to the rank of separate urban centres in 1916 (Bến Thủy) and 1917 (Trường Thi). <sup>86</sup> In 1927, the three centres were merged into the urban centre Vinh-Bến Thủy with a population of about 20,000. <sup>87</sup> Thus, an administrative unit had been formed that incorporated the administrative, educational, and trade centre in Vinh, the harbour and industries in Bến Thủy, and the railroad atelier in Trường Thi. Yet, the economic development that had led to growth in Vinh in the early 20th century was short-lived. Due to the Great Depression and the unstable political situation created by the anti-colonial movement that was particularly strong in Vinh and its surrounding area, nearly no new investments were carried out by the French in Vinh during the 1930s. <sup>88</sup>

During WWII, when the French colonial regime initially cooperated with the Japanese and was disposed by it during the last months of the war, most of Vinh's industries were relocated or abandoned. When the Việt Minh took power in Vinh in August 1945, only the railway atelier in Trường Thi and the depot by the train station were operational, all private factories had been closed.<sup>89</sup> Throughout 1946, tensions between the returning French and the newly established DRV mounted and open hostilities broke out in the last month of that year.<sup>90</sup> Hồ Chí Minh had called for

<sup>84</sup> Del Testa (1999), 319–354. Wright, Gwendolyn (1991): The Politics of Design in French Colonial Urbanism. Chicago, 181–182. Nguyễn Quang Hồng (2003), 95, 102.

<sup>85</sup> Del Testa (2007), 315. Nguyễn Quang Hồng (2003), 91, 104–105.

<sup>86</sup> Nguyễn Quang Hồng (2003), 107–109.87 Nguyễn Quang Hồng (2003), 152.

<sup>88</sup> Nguyễn Quang Hồng (2003), 196, 201.

<sup>89</sup> Hoàng Ngọc Anh/Hà Văn Tải/Nguyễn Bá Dũng/Nguyễn Quang Vinh (2003): Lịch Sử Thành Phố Vinh. Tập II (1945–1975). [History of Vinh City, Part II (1945– 1975)]. Vinh. 9.

<sup>90</sup> Duiker, William J. (2000): Ho Chi Minh: A Life. New York. 346–398. Nguyễn Quang Vinh/Dương Thanh Bình (2007): Lịch sử Phường Cửa Nam – Thành phố Vinh. [History of Cua Nam Ward – Vinh City]. Vinh. 56–57. Hoàng Ngọc Anh (et al.) (2003), 39–48.

a scorched earth policy in case war with France broke out; it was carried out in Vinh over a five-month period starting in early 1947. The city's population and facilities were dispersed throughout the countryside. In total 20,000 tons of materials were dismantled; what could not be transported was destroyed, including the citadel, 1,335 houses, 300 train coaches, and twelve locomotives. <sup>91</sup> In addition to destruction carried out by the Việt Minh in 1947, the French bombarded and destroyed remaining infrastructure such as bridges during the war. Thus, when the war ended and the Việt Minh returned to power in Vinh in 1954, the city had been nearly totally destroyed. <sup>92</sup>

The early history of Vinh in the independent DRV shows little marks of large scale development projects or the formulation of comprehensive policies for social reorganisation of the city through urban planning or design until the early 1960s. In general, policies focused on the transformation of the economy and the establishment of a functioning state. Collectivisation of agriculture in the countryside was mirrored by expropriation of entrepreneurs and the establishment of collective ownership and state management of their enterprises in the late 1950s. <sup>93</sup> By 1960, 40 factories and enterprises had been established by central and local agencies in Vinh, the industrial workforce had grown to 10,000 workers. <sup>94</sup> The creation of an electricity network, including a new power plant, was assisted by the

<sup>91</sup> Hoàng Ngọc Anh (et al.) (2003), 48–55. Bùi Thiết (1984), Vinh – Bến Thủy. Hà Nôi. 52.

<sup>92</sup> Hoàng Ngọc Anh (et al.) (2003), 103.

<sup>93</sup> Hoàng Ngọc Anh (et al.) (2003), 120–122. Nguyễn Quang Hồng/Hoàng Kim Oanh (2005): Lịch Sử Mặt Trận Tổ Quốc Việt Nam Thành Phố Vinh (1930–2005). [History of the Vietnamese Fatherland Front of Vinh City (1930–2005)]. Vinh. 159. Chuong trinh va noi dung cong tac thang 09 nam 1961. Uy ban hanh chinh (UBHC) Nghe An, UBHC Thi xa Vinh. 08.09.1961. Archive Ủy ban nhân dân (UBND) Nghe An, P01 ML02 HS 38, paginated 117–120. Bao-Cao thinh hinh thuc hien ke hoach nam 1960 va 3 nam. Uy ban hanh chanh Nghê-an, Uy ban hanh chang Thi-xa Vinh. 09.03.1961. Archive UBND Nghe An, P01 ML02 HS 38, paginated 110–116.

<sup>94</sup> Hoàng Ngọc Anh (et al.) (2003), 125. Nguyễn Quốc Hồng (et al.) (2004), 127. Liên hiệp các tổ chức hữu nghị/Hội hữu nghị Việt – Đức tinh Nghệ An/Ủy Ban Nhân Dân Thành Phố Vinh (eds.) (2011): Những dấu ấn lịch sử về tình hữu nghị Việt – Đức thời kỳ đầu xây dựng lại thành phố Vinh 1973–1980. [Some historical imprints of the Vietnamese-German friendship in the early period of rebuilding Vinh City 1973–1980]. Vinh. Liên hiệp các tổ chức hữu nghị; Hội hữu nghị Việt – Đức tỉnh Nghệ An; Ủy Ban Nhân Dân Thành Phố Vinh. Vinh. 12–13.

USSR with experts and 400,000 Roubles.<sup>95</sup> The state also invested in the social infrastructure focusing on re-establishing Vinh as an educational centre, including a university and two colleges, as well as a primary school in each of the 5 urban areas (khu phố) and secondary schools. Additionally, hospitals (one built with assistance of the People's Republic of Poland), cinemas, a theatre, a library, and a museum commemorating the Nghệ Tĩnh Soviets were constructed.<sup>96</sup> Up until the 1960s, Vinh's inhabitants largely constructed their own housing, using mainly wood and bamboo. Such buildings were repeatedly destroyed by fires, storms and floods.<sup>97</sup> As a result of the separation of the country into two zones and the subsequent creation of two states (the DRV in the North and the RoV in the South) Vinh became the most important centre of industry and transportation as well as of education and other administrative functions in the south of the DRV.

The early 1960s saw the first important decisions for planning and development of Vinh in the DRV. A resolution of the Vietnamese Workers' Party's (VWP) Politburo called for Vinh to become a "Socialist City, to serve well industrial development, for production and material as well as cultural life of the urban working population." While this quote puts emphasis on the socioeconomic role the city was to play, the call for a *socialist city* also implied the creation of a socialist urban environment. As part of implementation of this goal, a first public housing program was to replace dwellings that were destroyed by a fire in August 1961.

<sup>95</sup> Bùi Thiết (1984), 152-157.

<sup>96</sup> Liên hiệp các tổ chức hữu nghị (et al.) (2011), 13. Hoàng Ngọc Anh (et al.) (2003), 129–133. Letter sent by the Administrative Committee of Nghe An Province to the Prime Minister, the State Planning Committee, the Ministry of Health, and the Ministry of Finance: Trích yếu yêu câu xây dựng Bênh viên Vinh. 28.11.1961. Archiv UBND Nghe An, P01 ML02 HS 484, paginated 19–21. Letter of the State Planning Committee sent to the Ministry of Finance, the Administrative Committee of Nghe An Province, the Planning Committee of Nghe An Province, the Office of the Prime Minister: Trich-yêu Câp vôn xây dựng bênh viên tam thơi. 27.04.1962. Archiv UBND Nghe An, P01 ML02 HS 484, paginated 38.

<sup>97</sup> Hoàng Ngọc Anh (et al.) (2003), 105–109. Ban thuyet minh nhiem vu xay dung nha cua trong nam 1963. UBHC Nghe An. n.d. Archive UBND Nghe An, P01 ML02 HS 484, paginated 57–58.

<sup>98</sup> Nghi quyet cua bo chinh tri ve quy hoach cây dưng thành phô Vinh. Dang Lao dong Viet Nam Ban chap hanh trung uong. 28.12.1961. Archiv UBND Nghe An, P01 ML02 HS 484, paginated 1–4.

<sup>99</sup> Hoàng Ngọc Anh (et al.) (2003), 110, 145.

and 1962, a small number of simple three-storey apartment buildings were constructed close to the city centre. <sup>100</sup> Designs, plans, and funds were supplied by central agencies, while construction materials were sourced locally. <sup>101</sup>

In 1963, Vinh's status was elevated from town to city, after it had been designated to become one of five industrial centres of the DRV in 1961. 102 By 1964, the city covered an area of 26km² and its population had grown to 72,000. 103 At the same time, authorities aimed at creating a socialist urban environment in Vinh. However, this general goal was not translated into concrete plans for the city's development before the Rolling Thunder bombing campaign started and Vinh became one of its targets. On 5 August 1964, the US bombed Vinh for the first time. In May and June 1965, most inhabitants as well as goods, machines and institutions were evacuated. 104 As Vinh and nearby harbours were important nodes in the transport of supplies and troops to the war in South Vietnam, US bombing especially targeted transport infrastructure. 105 While a number of workshops as well as the power plant remained in Vinh, intensified bombing in 1968 prompted the evacuation of nearly all remaining facilities and inhabitants 106

<sup>100</sup> Ban thuyet minh nhiem vu xay dung nha cua trong nam 1963. UBHC Nghe An. n.d. Ban bao cao ve tinh hinh va xac đinh muc đo hoan thanh nhien vu cau c.t 62 thi xa Vinh. Bo Kien truc, Cong ty kien truc Vinh Công trương 62 Thi xa Vinh. 16.12.1961. Archive UBND Nghe An, P01 ML02 HS 484, paginated 17–18.

<sup>101</sup> Bien ban cuoc hop ban don gia cong truong thi xa Vinh. Bo kien truc, Cong ty Kien truc Vinh. 27.10.1961. Archive UBND Nghe An, P01 ML02 HS 484, paginated 8–9. Letter of the State Planning Committee to the Administrative Committee of Nghe An Province: Duyêt khai toan kinh fi xây dung khu nhà o Thị xã Vinh. 20.09.1961. Archive UBND Nghe An, P01 ML02 HS 484, paginated 5.

<sup>102</sup> Hoàng Ngọc Anh (et al.) (2003), 138, 144–146. Quyết định 148-CP về việc thành lập thành phố Vinh trực thuộc tỉnh Nghệ An. Hội Đồng Chính phủ. 10.10.1963.

<sup>103</sup> Nguyễn Quốc Hồng (et al.) (2004), 147.

<sup>104</sup> Hoàng Ngọc Anh (et al.) (2003), 167-175.

Bùi Thiết (1984), 143. For targets in and around Vinh see for example Southeast Asia Team Project CHECO (28.03.1966): Rolling Thunder: March – June 1965. Department of the Air Force, Headquarters Pacific Air Forces, Tactical Evaluation Center. Project Contemporary Historical Examination of Current Operations Report. Christiansburg. Overton, James B. (n.d.): Rolling Thunder: January 1967 – November 1968. Department of the Air Force, Headquarters Pacific Air Forces, Directorate, Tactical Evaluation CHECO Division. Project Contemporary Historical Examination of Current Operations Report. Christiansburg.

<sup>106</sup> Hoàng Ngọc Anh (et al.) (2003), 187.

As shown above, even prior to the destructions caused by Rolling Thunder, the DRV aimed at creating a *socialist* urban environment in Vinh. While initially what *socialist* meant in this context remained obscure, subsequent planning for the city picked up the most characteristic features of the ideal socialist city and put them into concrete projects. These features of the *Socialist City* had been developed initially in the Soviet Union and became influential in the DRV from the mid-1950s on, mainly through Soviet advisors and Vietnamese planners and architects trained in the USSR or other socialist countries. <sup>107</sup> In the following, the main elements of socialist urban planning will be introduced briefly.

Many of the differences to cities in capitalist countries result from the state-monopoly of the means of production and central planning. "The nationalization of all resources, and the substitution of centralized planning for the market to develop and allocate them, has obvious consequences for the city."108 Standardized state-owned apartments were seen as the ideal housing form, although due to economic difficulties privately and cooperatively owned housing was accepted. Still, land for the construction of these was allocated by the state, as were state-owned apartments. Standardisation and norms were supposed to attain equality of living conditions. As the market was abolished, ideal allocation and distribution were to be achieved by centralized planning. In contrast to a capitalist city, in which land use and allocation is largely determined by the market, the socialized ownership of all means of production and the pre-dominant role of the state in the economy of socialist states ideally allowed for "active planning, that is the active projection of economic activities (allocation of resources, distribution of income) as opposed to the passive forecasting of spontaneous development. [...] this is the universal characteristic of socialist planning."109 Socialist theory of urban transformation regarded the plan as the means to achieve politically defined ideals of a Socialist City. The planner's job was to organize the built environment in such a way as to balance different types of land use by scientific means. The city was to be planned as one, creating no distinction or division between different ar-

<sup>107</sup> Đặng Thái Hoàng (1999): Kiến trúc Hà Nội. Thế kỷ XIX – Thế kỷ XX. Architecture of Hà Nội, 19th to 20th century. Hanoi. Logan, William Stewart (2000): Hanoi, Biography of a City. Sydney.

<sup>108</sup> Bater, James H. (1980): The Soviet City. Ideal and Reality. London. 3-4.

<sup>109</sup> Fisher, Jack C. (1962): Planning the City of Socialist Man. In: Journal of the American Institute of Planners 28, 4. 251–265. 251–252.

eas of the city in terms of access to services or the quality of residential areas.

Among those elements that form part of the ideally planned socialist urban environment, the *city centre* took a special place, because it was functionally different from residential and productive areas. <sup>110</sup> Contrary to centres of capitalist cities, where commerce and finance dominate, the socialist centre was to be the "political-cultural-administrative centre" of the city, the region or the nation corresponding to the respective city's position in the urban hierarchy. <sup>111</sup> The centre therefore served as the place for important public buildings and monuments; main roads and squares were to provide avenues and place for the staging of large scale demonstrations and parades. <sup>112</sup>

The socialist housing complex has been described as the most indicative element of socialist urban planning. As a residential complex complete with infrastructure the socialist housing complex was intended as a unit that structured the living environment in cities. The complex' size was calculated based on reasonable walking distances, the number of its inhabitants was calculated on the capacity of a primary school, usually numbering between 3,000 to 4,000, sometimes rising to 7,000. He housing complex served as the lowest unit for provisions with public goods and collective consumption; the next higher order of residential planning and administration was the mikrorayon, consisting of several housing complexes and providing housing for about 8,000-12,000 inhabitants. These were to include relatively large areas of open and green space, institutions for child care, education, and health as well as shops and other services catering to daily needs. The next higher unit was the residential complex of 30,000-50,000 inhabitants, followed by the urban district of

<sup>110</sup> Bater (1980), 27-30.

<sup>111</sup> Fisher (1962), 255.

<sup>112</sup> Bater (1980), 27-30.

<sup>113</sup> Smith, David M. (1996): The Socialist City. In: Andrusz, Gregory D. (ed.): Cities after Socialism. Urban and Regional Change and Conflict in Post-Socialist Societies. Oxford. 70–99. 76. French, R. A. (1995): Plans, Pragmatism and People. The Legacy of Soviet Planning for Today's Cities. London. 81.

<sup>114</sup> Richter, P. (2006): Der Plattenbau als Krisengebiet: Die architektonische und politische Transformation industriell errichteter Wohngebäude aus der DDR am Beispiel der Stadt Leinefelde. Hamburg. Online available at http://ediss.sub.uni-hamburg.de/volltexte/2006/3041/pdf/Text.pdf [accessed 02.05.2013]. 34.

<sup>115</sup> Bater (1980), 102.

100,000-300,000 inhabitants and the urban zone of about 1 Mio inhabitants. This hierarchy was supposed to provide each urban resident with equal access to public services.

As part of planning for the creation of socialist urban environments in the DRV's cities in general, planning for Vinh started in the second half of the 1960s. Guidelines issued by the National Reconstruction Committee in July 1968 formulated strategies for new and re-constructed cities throughout the DRV. These posited industrialisation and production as a city's most important functions, but also lay out orientations for the design of the urban environment. Important elements of an ideal Socialist City are exemplified in these guidelines: centralized and hierarchical planning, the city as a centre of socialized production and egalitarian consumption, the city centre as a symbol of a new society and its achievements, the importance of the Central Place, housing complexes as structuring urban units, standardized housing conditions. The general concept for the urban design was the compact city, in which the widespread construction of multistorey buildings would make economic use of space and resources, as well as provide an urban appearance. Housing complexes were supposed to hierarchically structure the urban area. A target of 6m<sup>2</sup> living space per person was supposed to be achieved 15 years after the end of the war. The city centre was regarded as expressing the cultural and political function of the city, incorporating local natural conditions, as well as symbols of revolution, history, and technological progress, to be achieved by the construction of impressive high-rise buildings and monuments. While difficult economic conditions after the war were acknowledged, the guidelines emphasised the communicative effect of the city centre; therefore the construction of several permanent high-rise buildings in the city centre was projected for the immediate time after the war. The city centre was also intended to be highlighted by the envisioned Central Place surrounded by administrative and cultural buildings. In addition to ideological symbolism, reconstruction priority was mostly placed on the restoration of prewar buildings and structures. Reconstruction would thus focus on industries and public buildings; self-supplied temporary shelter was regarded as sufficient for the urban population. 117

<sup>116</sup> Smith (1996), 75.

<sup>117</sup> Circular of the State General Reconstruction Committee sent to Administrative Committees of provinces and centrally administered cities, Administrative Committees of Autonomous Regions, Ministries, General Offices: Trích thông tu

By 1968, with the bomb war still ongoing, these countrywide guidelines had been incorporated into a draft plan for the reconstruction of Vinh by the Institute for Urban Planning of the Ministry of Architecture (MoA).<sup>118</sup> This plan set out most important aspects for the creation of a socialist urban environment in Vinh, although following plans would make slight changes in the urban design and adjust technical aspects, for example on the water supply and sewerage systems, or increase the percentage of five-storey houses to be built.<sup>119</sup>

The 1968 plan stipulated the reduction of countrywide standards for housing space and the built environment (including space used for housing, public buildings, greenery and public space) per person in Vinh's specific conditions. Housing was to be provided mainly in three to five-storey buildings (65 percent) and two-storey buildings. The city's population was planned to be 50,000 five years after the war, rising to 100,000 inhabitants 15 years after the war. For the first two years, its population would be restricted to 20,000 persons essential for reconstruction and the functioning of factories and public institutions. As Vinh's future was seen as that of an industrial city, all destroyed factories were to return and expand in Vinh. 120

The urban layout of Vinh would adhere to the principle of a compact city, moving agriculture out of the city centre. The plan divided the city into four zones: administrative buildings would be clustered in Trường Thi and along Nguyễn Thái Học road; the area of Quang Trung Street and the

huong dan cong tac nghien cuu va lap van kien Phuong huong nhiem vu quy hoach kien thiet do thi va lap van kien *Phuong Huong nhiem vu quy hoach kien thiet đo thi 15 nam sau chien thang va 5 nam đau.* 01.07.1968. Archiv UBND Nghe An, P01 ML03 HS 48, paginated 9–22.

<sup>118</sup> Thanh pho Vinh, Thuyet minh tom tat quy hoach 15 nam, 5 nam va 2 nam sau khi hoa binh lap lai, Danh sách cán bộ nghiên cứu và thiết kê. Vien qui hoach thanh pho. 01.02.1968. Archiv UBND Nghe An, P01 ML03 HS 48, paginated 8.

<sup>119</sup> Dư thảo Thuyet minh tom tat quy hoach xay dung thanh pho Vinh sau khi hoa binh lap lai. Bộ Kiến trúc, Viện quy hoach thành phố. 1968. Archiv UBND Nghe An, P01 ML03 HS 50, paginated 67–82. Du thao, Bao Cao du kien quy hoach xay dung lai thanh pho Vinh sau khi hoa binh lap lai. Đảng bộ Nghệ An. 1970. Archive UBND Nghe An, P01 ML03 HS 50, paginated 51–62. Dư thảo, Nhiem vu va Phuong huong xay dung thanh pho Vinh sau ngay chien thang giac Mỹ xam luoc (1970). Bo kien truc. 1970. Archive UBND Nghe An, P01 ML03 HS 50, paginated 41–43.

<sup>120</sup> Dư thảo Thuyet minh tom tat quy hoach xay dung thanh pho Vinh. Bộ Kiến trúc, Viện quy hoạch thành phố. 1968.

market would serve as the seat for state owned enterprises and banks. The industrial area would be split in two zones: one close to the harbour in Bến Thủy would consist of heavy and sea-related industries; the North-Western Industrial Zone to the north of the former citadel would mainly cater to transport-related businesses. Each of these functional zones would be accompanied by a designated housing area and zoning was intended to result in a clear separation of working and housing areas. At the same time spatial segregation according to employing enterprise or institution would take place. To create an "urban face", construction of multi-storey housing was to take place first along the major roads, such as the road leading from the train station to the city centre. <sup>121</sup>

In the initial years, only housing groups would be constructed, these would later be upgraded to form housing complexes. A mixture of collective housing and family based apartments was planned for these complexes. The number of apartments, schools, nurseries, hospitals, etc. to be built was calculated from standardised figures for the provision of housing space and public services per person. The number of persons, in turn, was derived from the planned number of employees of the factories, enterprises, and institutions to be located in Vinh, plus "dependents." 122

In addition to industrial, administrative, economic and residential areas, symbols representative of socialist victory would be part of the urban landscape. At the central square a Victory Monument would be erected; a Monument to the Martyrs was planned to be placed at the southern entry to the city centre. Vinh's revolutionary history would be represented by a monument to the Nghệ Tĩnh Soviets in Bến Thủy. Other historical sites would be reconstructed buildings previously destroyed during US bombardments or museums telling of the history and revolutionary past of Vinh and Nghệ An.<sup>123</sup>

By 1969 the Institute for Urban Planning of the MoA had prepared detailed projects (for electricity, roads, water, wastewater etc.) for the reconstruction of the city. The provincial Party and state authorities pressed for buildings such as an international guesthouse, the Nghệ Tĩnh Soviet Mu-

<sup>121</sup> Dư thảo Thuyet minh tom tat quy hoach xay dung thanh pho Vinh. Bộ Kiến trúc, Viện quy hoạch thành phố. 1968.

<sup>122</sup> Dư thảo Thuyet minh tom tat quy hoach xay dung thanh pho Vinh. Bộ Kiến trúc, Viện quy hoạch thành phố. 1968.

<sup>123</sup> Dư thảo Thuyet minh tom tat quy hoach xay dung thanh pho Vinh. Bộ Kiến trúc, Viện quy hoạch thành phố. 1968.

seum, a cinema and stadium, as well as the road, electricity and water networks, to be finished in late 1969 to serve the 1970 New Year festivities. The Department of Architecture was to prevent the private construction of wooden housing that did not conform to design. 124 The system of housing complexes was further elaborated in a 1970 draft plan by the MoA's Institute for Urban Planning. The timeframe for reconstruction in this draft was 15 years (1970-1985). By that time Vinh's population would rise to 150,000, these inhabitants would live in six to eight housing areas. Each housing area would consist of three to five sub-areas with 4,000 to 6,000 inhabitants and a size of 16 to 42ha each. Thus, all housing in Vinh would be located in an urban environment structured by housing complexes spatially separated according to their occupation and employer. 125

As the above cited documents show, detailed preparations for the reconstruction of Vinh had begun during the Rolling Thunder campaign of the 1960s. Actual reconstruction of Vinh started after the US stopped bombing the DRV as part of their negotiations strategy in late 1968. Leterprises began to return to Vinh in the following year. However, as by then no final reconstruction plan had been approved, reconstruction proceeded in piecemeal fashion. Efforts focused on the return of enterprises and public institutions (such as schools or the provincial hospital) to their former location in the city where they were housed in temporary wooden buildings. Reconstruction of enterprises focused especially on the production of construction materials. Efforts were undertaken to increase the local production of bricks, as construction continued to rely on traditional techniques. Another priority was the reconstruction of enterprises supplying foodstuff to returning residents. Additionally, roads were repaired, focusing on National Highway 1 and regional roads. 128

<sup>124</sup> Bien ban hoi nghi duyet thiet ke so bo cac cong trinh thi chinh cua thanh pho Vinh xd trong hai nam. Uy ban hanh chinh Nghe An. 22.09.1969. Archive UB-ND Nghe An, P01 ML03 HS 51, paginated 3–5.

<sup>125</sup> Du Thao, nhiem vu thiet ke va cơ sơ kinh te ky thuat của quy hoach thanh pho Vinh-Cua Hoi. Uy ban hanh chinh Nghe-an, Ban kien thiet cơ ban Tinh. 1970. Archive UBND Nghe An, P01 ML03 HS 51, paginated 17–68.

<sup>126</sup> Turley, William S. (1993): Reinventing Vietnamese Socialism. Boulder. 94.

<sup>127</sup> Nguyễn Quốc Hồng (et al.) (2004), 181–182. Hoàng Ngọc Anh (et al.) (2003), 198.

<sup>128</sup> Du kien ke hoach xay dung thanh pho Vinh nam 1974–1975. Bo Xay dung, Vien thiet ke Quy hoach thanh pho và Nong thon. August 1973. Archiv UBND Nghe An, P01 ML03 HS 50, paginated 104–110. Tinh hinh thuc hien ke hoach xay

In general, reconstruction was much slower than envisioned. Among the most important shortcomings was a shortage in experienced and skilled cadres; those present lacked the capacity to comply with too complicated administrative procedures. Planning, implementation, and administration took place uncoordinated, resulting in time-lags and the waste of funds despite a sufficient number of workers. Although a draft plan had warned that it was based on experiences from the peace period of the 1950s and 1960s, and not on actually available economic data, overly optimistic estimates about the DRV's economic situation resulted in a lack of construction material. Such difficulties seem to have resulted as much from unrealistic and overly ambitious planning as from actual shortcomings in the implementation of plans. It became increasingly clear that many of the structures-to-be-built were poorly designed and not adapted to local conditions. 130

While these problems affected the whole province of Nghệ An, the situation in Vinh was particularly serious.<sup>131</sup> By 1971 Vinh's population had already grown to nearly 54,000 registered inhabitants (despite plans to

dung co ban quy I nam 1970 va ke hoach quy II nam 1970. Uy ban hanh chinh Nghe An. 23.03.1970. Archive UBND Nghe An, P01 ML03 HS 19, paginated 32–42.

<sup>129</sup> Dư Thao, nhiem vu thiet ke va cơ sơ kinh te ky thuat cua quy hoach thanh pho Vinh-Cua Hoi. Uy ban hanh chinh Nghe-an, Ban kien thiet cơ ban Tinh. 1970. Tinh hinh thuc hien xay dung co ban 9 tháng, nhiệm vụ quý 4/1971 và chuẩn bị cho quý 1 năm 1972. UBHC Nghe An. 23.10.1971. Archive UBND Nghe An, P01 ML03 HS 18, paginated 186–201. Thuyet Minh tinh hinh thuc hien vốn đâu tư xdcb 9 tháng đầu năm 1971. UBHC Nghệ An, Ty Kiến trúc. 17.10.1971. Archiv UBND Nghe An, P01 ML03 HS 22, paginated 75–76.

<sup>130</sup> Letter of the Planning Committee of Nghe An Province to the Department of Architecture of Nghe An Province, the Department of Finance, the Bank for Reconstruction, the Committee for Reonstuction: Trich yeu: v/v duyêt nhiêm xu xây dung dương Quang Trung Trung Thanh Vinh. 12.08.1970. Archive UBND Nghe An, P01 ML03 HS 50, pagination unkown. Thuyet Minh tình hình thuc hien von dau tu xay dung co ban 6 thang đâu nam 1971 toan Ngành. UBHC tinh Nghe An, Ty Kien truc. 23.07.1971. Archive UBND Nghe An, P01 ML03 HS 33, 296, paginated 17–20. Báo cáo, Sô kết, Tình hình xây dựng cơ bản 6 tháng đầu năm 1971, biện pháp thực hiện 6 tháng cuối năm và chuẩn bị cho vài năm tới. UBHC Nghe An. 24.06.1971. Archive UBND Nghe An, P01 ML03 HS 18, paginated 152–185.

<sup>131</sup> Dự thảo, Phuong an khoi phục thanh pho (nội thành), từ năm 1971 đến năm 1973. Uy ban hanh chinh thanh pho Vinh. 21.09.1971. Archive UBND Nghe An, P01 ML03 HS 52, paginated 30–43.

limit its population to 20,000 in the first two years of reconstruction and to 50,000 in the first five years), of which more than half were engaged in agriculture. This diluted the envisioned clear separation of urban from rural areas.<sup>132</sup> Clearly, construction and administration could not keep up with the influx of people. Little had by then been achieved regarding the supply with state-owned housing. People constructed their own wooden housing, most enterprises and offices also erected wooden buildings, leading to the danger of destruction by fires. Because these buildings were usually only one storey high, space for the construction of housing in the city was soon in short supply. At the same time, agricultural land in the city's surroundings was reserved for the much needed production of food. While the lack of state-supplied housing could be alleviated by private efforts, shortages in the supply with food, services, and consumer goods could only to some part be lessened by the market.<sup>133</sup>

In light of these shortcomings, the urban environment that emerged in Vinh between 1968 and 1972 bore little resemblance to the plans formulated for the city's reconstruction. As offices, public services, as well as factories and enterprises returned to the city, its population grew much faster than had been imagined. All of the principles of the plan had been compromised. Construction of housing took place individually; separation of housing and work place as well as between rural and urban areas was not enforced. The city's authorities did neither have the capacity nor authority to steer urban growth. At the same time, centralized authority at the provincial level was not able to effectively coordinate the efforts of different actors for reconstruction of the city. While planning had failed as an instrument projecting urban development, the structures of government and administration struggled with even reacting to unplanned urban growth. Hence, a first attempt at creating a socialist urban environment in Vinh had failed.

As described above the US resumed to bombing the DRV in April 1972, 134 and Vinh again was one of the most affected urban centres during the Linebacker campaigns. Already in late 1971 preparations had begun

<sup>132</sup> Even worse, it was estimated that because of returning administrative offices, the number of inhabitants would rise to 80,000 by the end of 1973. Planning had estimated this number to be reached about five years later.

<sup>133</sup> Dự thảo, Phuong an khoi phục thanh pho (nội thành), từ năm 1971 đến năm 1973. Uy ban hanh chinh thanh pho Vinh. 21.09.1971.

<sup>134</sup> Turley (1993), 141.

for renewed defence of Vinh against air strikes; from early 1972 on enterprises and offices were again evacuated to the countryside. Only about 3,000 people remained in Vinh to ensure air-defence and the protection of remaining facilities, as well as to carry out repairs on the vital transport network. Bombing of Vinh resumed in the early hours of 10 April 1972 with an air strike bombing an area of 6km² and during 1972, the city was repeatedly bombed while the harbour in Bến Thủy and the Lam River were mined. As during the 1960s, bombing mainly targeted transport infrastructure. When bombing stopped as the Paris Peace Agreement took effect in January 1973, nearly all efforts for reconstruction carried out in 1968-1972 had literally been reduced to nothing.

In late December 1972, planning for the reconstruction of Vinh had begun anew with a meeting of municipal and provincial leaders. Reconstruction was planned to again follow the same plans and directions as during the period of reconstruction 1968 to 1972. Compared to earlier plans, the population would increase to around 60,000 people during the first three years (formerly 50,000 after five years). During the first years, 66 percent of housing would be in temporary one-storey houses, the rest in blocks of four to five-stories. Por the second time, reconstruction of Vinh would follow the ideal of the Socialist City. But contrary to the years around 1970, the second attempt of creating a socialist urban environment was carried out with assistance of the German Democratic Republic.

After the Paris Peace Agreement of January 1973 reconstruction of the DRV and its urban centres came into focus of international cooperation. In March that year, a delegation of high ranking GDR officials travelled to Hanoi to assure the DRV leadership of their government's willingness to

<sup>135</sup> Nguyễn Quốc Hồng (et al.) (2004), 187.

<sup>136</sup> Hoàng Ngọc Anh (et al.) (2003), 206-212. Smith (1998).

<sup>137</sup> Nguyễn Quang Vinh/Dương Thanh Bình (2007), 89. Schwenkel, Christina (2014): Traveling Architecture. In: International Journal for History, Culture and Modernity 2 2. 155–174. 162.

<sup>138</sup> Thong bao cua Uy ban hanh chinh Nghe An v/v duyệt quy hoạch xây dựng thành phố Vinh. 29.01.1973. Archive UBND Nghe An, P01 ML03 HS 50, paginated 99–103.

<sup>139</sup> Du kien ke hoach xay dung thanh pho Vinh nam 1974–1975. Bo Xay dung, Vien thiet ke Quy hoach thanh pho và Nong thon. August 1973.

assist in the reconstruction of the country. 140 During the delegation's visit DRV Prime Minister Pham Văn Đồng revealed a plan to assign each of the DRV's large cities to one socialist country for help in its reconstruction and requested the GDR's help in the reconstruction of Vinh. 141 In May, a formal request was made by the VWP and the Government of the DRV in a letter to Willi Stoph, expressing "deep trust that [...] our people will continue to receive valuable assistance from the brotherly German Democratic Republic." 142 On the same day, similar letters were delivered to the ambassadors of other socialist countries requesting help in the reconstruction of one city or province each. 143 On 20 June 1973, Willi Stoph informed Pham Văn Đồng of the decision of the SED Central Committee and the GDR government to aid and assist in the planning and reconstruction of Vinh. 144

This decision was soon followed by the first visit of a GDR delegation to Vinh consisting of high ranking representatives of GDR planning and

<sup>140</sup> Beschluß des Präsidiums des Ministerrates der DDR über die Reise einer Parteiund Regierungsdelegation der DDR in die DRV vom 7. März 1973. 07.03.1973. Bundesarchiv Berlin, BArch DC 20/4418, not paginated.

<sup>141</sup> Stenographische Niederschrift der offiziellen Gespräche zwischen den Parteiund Regierungsdelegationen der Deutschen Demokratischen Republik und der Demokratischen Republik Vietnam unter Leitung der Genossen Willi Stoph und Pham Van Dong im Präsidentenpalast zu Hanoi (1. Tag, 16.3.1973). Bericht über den Besuch einer Partei- und Regierungsdelegation der DDR unter Leitung des Mitglieds des Politbüros des ZK der SED und Vorsitzenden des Ministerrates der DDR, Genossen Willi Stoph, in der Demokratischen Republik Vietnam vom 14.3. bis 19.3.1973. 16.03.1973. Bundesarchiv Berlin, BArch DC 20/4419, not paginated

<sup>142</sup> Letter number 14/Ng-CP of the Office of the Government of the DRV to Chairman of the Council of Ministers of the GDR, Willi Stoph. 19.05.1973. National Archives Centre III, Phong Phu Thu Tuong, HS 11167.

<sup>143</sup> Telegramm des Botschafters der DDR in der DRV: Information über Bitte der DRV um Wiederaufbau seiner Städte. 19.05.1973. Bundesarchiv Berlin, BArch DC 20-I/4/2875, not paginated.

<sup>144</sup> Brief des Vorsitzenden des Ministerrats der Deutschen Demokratischen Republik an Ministerpräsidenten der DRV Pham Van Dong. 20.06.1973. National Archives Centre III, Phu Thu tuong, HS 5590, not paginated. While the reasons to partner Vinh with the GDR are not entirely clear, Vinh's role as the most important industrial centre in the southern DRV before its destruction on one hand as well as the reconstruction experiences and the economic strength of the GDR on the other seem to have played a role in the decision. Kaiser (2016): 71–72.

construction institutions.<sup>145</sup> A bilateral agreement was signed by Phạm Văn Đồng and Willi Stoph on 22 October 1973, stipulating that the GDR would assist in

- preparing the General Development Plan as well as in planning housing areas, including individual buildings by sending GDR experts to Vinh.
- equipping a planning office and construction enterprises,
- · training of cadres,
- and rationalizing production of building materials, by providing experts, machinery, and equipment.<sup>146</sup>

After a second GDR delegation's visit in November/December 1973, planning for reconstruction was revised. The city's population was estimated to reach 80,000 in 1975, calculated from the workforce necessary for the operation of the city and its industries, plus the number of dependents. However, in contrast to previous plans, permanent housing would only be supplied by the state to those who had to be relocated from designated construction sites, amounting to 12,000 people who would be housed in five-storey communal housing blocks (60 percent) and family-apartment buildings (40 percent).<sup>147</sup> The city's population was planned to rise to 120,000-150,000 during the first 20 years of reconstruction, at which point the housing stock would mainly (85 percent) consist of four to five-storey buildings, with a much lower percentage of one and two-storey buildings (10 percent) and high-rises above five stories (5 percent).<sup>148</sup>

For the year 1974, reconstruction was supposed to focus on housing, public services, and transport infrastructure, with the Quang Trung Hous-

<sup>145</sup> Báo-cáo cua Bo Xay Dung ve ket qua lam viec voi doan chuyen vien cong hoa Dan chu Đức ve xay dung sang giup ta quy hoach va xay dung thanh pho Vinh. 18.07.1973. Archive UBND Nghe An, P01 ML03 HS 51, paginated 128–132.

<sup>146</sup> Hiệp định giữa Chính phủ nước Cộng hòa Dân chủ Đức và Chính phủ nước Việt nam Dân chủ Cộng hòa về việc Cộng hòa Dân chủ Đức giúp thiết kế và xây dựng thành phố Vinh. 22.10.1973. Archive UBND Nghe An, P01 ML03 HS 51, paginated 133–135.

<sup>147</sup> Ke hoach xay dung thanh pho Vinh 1974–1975. Uy ban hanh chinh Nghe An. 17.01.1974. Archive UBND Nghe An, P01 ML03 HS 50, paginated 114–130.

<sup>148</sup> Tò trình ve phuong huong nhiem vu lam qui hoach va ke hoach xay dung nam 1974 cua thanh pho Vinh (Nghe An). Uy ban Hanh chinh tinh Nghe An. February 1974. National Archives Centre III, Phong Phu Thu Tuong, HS 5590, paginated 30–34.

ing Complex designated as the most important construction project. 149 During 1974 to 1975, 40,000m² of housing were to be constructed in the Quang Trung Housing Complex, with 10,000m² in 1974. 150 The types of buildings were chosen from Vietnamese catalogues, allowing for detailed planning of the required materials and funds. The GDR delegation had proposed to start construction in Quang Trung with Vietnamese building designs to ensure an early start of construction and to raise the confidence of the Vietnamese partners, and the delegation itself had participated in choosing the building types. Public buildings to be built in the first two years were to provide services and entertainment; plans for the construction of the city centre were abandoned. 151

Construction activities began in 1974 based on preliminary guidelines. Planners were particularly concerned with balancing the immediate needs of post-war reconstruction and the long-term goals of creating a socialist urban environment. The GDR experts therefore refused to participate in the construction of provisional projects, emphasising the need for early implementation of long-term goals. On the other hand, German planners tried not to restrict future developments by hasty decisions that would have long-term negative effects. The way pursued to achieve such a balance was seen in "complex planning" that allowed for the start of important projects, such as the Quang Trung Housing Complex, before the overall General Development Plan was completed.<sup>152</sup>

Building on the above cited plans, mutual planning by Vietnamese and Germans began in February 1974 after the first members of the German expert group had arrived in Vinh. Vietnamese-German cooperation in the

<sup>149</sup> Tô trình ve phuong huong nhiem vu lam qui hoach va ke hoach xay dung nam 1974 cua thanh pho Vinh (Nghe An). Uy ban Hanh chinh tinh Nghe An. February 1974. Ke hoach xay dung thanh pho Vinh 1974–1975. Uy ban hanh chinh Nghe An. 17.01.1974.

<sup>150</sup> Ke hoach xay dung duong pho Quang Trung nam 1974. Uy ban Hanh chinh tinh Nghe An. February 1974. National Archives Centre III, Phong Phu Thu Tuong, HS 5590, paginated 37–42.

<sup>151</sup> Ke hoach xay dung thanh pho Vinh 1974–1975. Uy ban hanh chinh Nghe An. 17.01.1974.

Mönnig, Hans-Ulrich (1987): Industrialisierung ländlicher Gebiete und Erfüllung von Grundbedürfnissen in Entwicklungsländern. In: Wissenschaftliche Zeitschrift der Hochschule für Architektur und Bauwesen Weimar 33, 3. 126–131. Bericht des Verwaltungskomitees Nghe An über die Generalbebauungsplanung der Stadt Vinh und über die Vorbereitung einiger ausgewählter Vorhaben. 30.05.1975. Bundesarchiv Berlin, BArch DH 1/228287, not paginated. P. 6.

planning of Vinh focused on two projects: the General Development Plan and the Quang Trung Housing Complex.

In May 1975, the Administrative Committee of Nghệ An presented the result of cooperation on the *General Development Plan* to the Ministry of Construction (MoC) for approval. It is the most comprehensive summary of the project to create a socialist urban environment in Vinh. <sup>153</sup>

In the plan, the central area was described as the "highlight of urban design." It was to be located along the southern west-east axis, forming a series of three functionally differentiated zones. The first (arriving from the west) would serve as a service and trade centre, including the market that would be reconstructed at its former location. The second zone would be located in the area of the Trần Phú, Trung Tâm (today Trường Thi Street) and Phan Bôi Châu (today Lê Duẩn Street) streets intersection. As the city centre, this area would incorporate political, administrative, and cultural institutions for leading and planning of society. In a third zone, stretching along Phan Bôi Châu street south towards the banks of Lam River, educational institutions would be located. In combination with the street layout, these three zones would form three axes that were intended to structure the city. The first, stretching along Phan Đình Phùng and Trần Phú streets from west to east, would highlight entry to the city close to the citadel by a group of high-rise buildings; its northern side would be lined by representative housing buildings. The second axis would connect the "places of the heroic fight against the US-aggressors" in the Bến Thủy-Quyết Mountain area with the Central Square The southern entry to the city would be marked by Quyết Mountain and a recreational park in Bến Thủy; the street leading into the city would create vistas over the city centre and Quang Trung Street towards high-rise buildings marking the northern city entry. The third axis would follow Trung Tâm Street and connect the city to Cửa Lò and Cửa Hội. In the city centre, a central park would be located to the west of Trung Tâm Street. The layout of this axis would allow views towards the Trường Sơn mountain range bordering on Laos. All three axes would converge on a central monumental square, with the Square of Victors at its centre. Designs for the Square of Victors proposed a monumental Hồ Chí Minh statue to be placed in its centre. The city silhouette would be highlighted by high-rise buildings marking the entries to the city, while

<sup>153</sup> Bericht des Verwaltungskomitees Nghe An über die Generalbebauungsplanung der Stadt Vinh und über die Vorbereitung einiger ausgewählter Vorhaben. 30.05.1975.

an even higher group of buildings would mark the city centre. In addition to industrial and residential areas as well as the above described three central zones, three large recreational parks where planned: one in the former citadel, a central park, and a park in the Bến Thủy area.<sup>154</sup>

The creation of this urban environment was envisioned to take about 20 years. While the first phase of reconstruction had lasted for two years (1974 to 1975), the second phase would last for a five year period from 1976 to 1980. More detailed planning for this period was part of the General Development Plan of 1975 and was carried out in cooperation with the GDR group. This early phase was seen as particularly important, as it would crucially influence later development of the city. Thus, it focused on projects and measures that would ensure later implementation of the General Development Plan. Steering construction activities was regarded as the most important measure, the whole city area had by then been put to use by returning inhabitants, enterprises, and institutions. The plan differentiated between areas in which construction would be forbidden, those which had to be cleared for construction activities, and areas for provisory bamboo buildings. Industries were to be located in the designated industrial areas. Focus during the years 1975-1980 would be on the construction of housing, with the Quang Trung Housing Complex regarded as a model and experimental project. 155

The focus on housing construction during the first phase and the post-ponement of the city centre to a later period reflect GDR construction policies that focused on housing construction on urban fringes. This strategy proved controversial. As described above, former plans had called for construction activities to focus on the city centre, while housing would be left to private initiative. However, even after the decision to focus on housing was jointly made by Vietnamese and German planners in Vinh, this focus was repeatedly criticized. Lê Duẩn, General Secretary of the Central Committee of the Communist Party of Vietnam (CPV), proved to be the highest ranking critic of the focus on housing. Visiting Vinh in April 1979, he underlined the role of Vinh as the country's third most important city. Ac-

<sup>154</sup> Bericht des Verwaltungskomitees Nghe An über die Generalbebauungsplanung der Stadt Vinh und über die Vorbereitung einiger ausgewählter Vorhaben. 30.05.1975.

<sup>155</sup> Bericht des Verwaltungskomitees Nghe An über die Generalbebauungsplanung der Stadt Vinh und über die Vorbereitung einiger ausgewählter Vorhaben. 30.05.1975.

cording to him, the city centre would have to clearly reflect Vinh's political and economic importance symbolized by public buildings, on the expense of housing construction. Differing views on the strategy for Vinh's reconstruction also surfaced when Deputy Chairman of the State Planning Committee Pham Hào called for a reduction of housing construction during talks in Berlin, without the agreement of authorities in Vinh or Hanoi.

The General Development Plan expresses the planning and design ideals serving as guidelines for the reconstruction of Vinh as a Socialist City. However, it was not approved by the DRV or later the Socialist Republic of Vietnam (SRV) government because it provided only outlines and no detailed planning of infrastructure. <sup>158</sup> Furthermore, work on the General Development Plan was complicated by a central decision to unite Nghệ An Province with its southern neighbour Hà Tĩnh, forming Nghệ Tĩnh Province in 1976. Thereby Vinh became the centre of a much larger area, and planning would now have to incorporate the southern bank of the Lam River, the former provincial border. <sup>159</sup> In 1977, a revised General Development Plan was presented to the MoC and submitted to the Council of Ministers for approval. <sup>160</sup> It complemented the 1975-plan with planning

<sup>156</sup> Aktenvermerk über ein freundschaftliches Gespräch mit der Leitung der Provinz und dem Provinzbauamt anläßlich des Besuches des stellv. Leiters des Arbeitsstabes Vietnam beim Ministerium für Bauwesen der DDR, Genosse Gradl. Angelegt vom Leiter der Arbeitsgruppe der DDR-Spezialistengruppe in Vinh, Brambach. 06.07.1979. Bundesarchiv Berlin, BArch DH 1/28517, not paginated.

<sup>157</sup> Information des Wirtschaftsrates der Botschaft Hanoi über den Arbeitsbesuch des Botschafters, Genossen Doering, in Vinh – vom 28.12. bis 30.12.1976. 03.01.1977. Bundesarchiv Berlin, BArch DH 1/26638, not paginated.

<sup>158</sup> Information des Wirtschaftsrates. 03.01.1977.

<sup>159</sup> Jahresabschlußbericht 1975 der Arbeitsgruppe der DDR-Spezialisten Vinh/DRV. 27.02.1976. Bundesarchiv Berlin, BArch DH 1/28672, not paginated. Mönnig, Hans-Ulrich (1989): Industrialization of Rural Areas. A Concept for the Infrastructural Development and Satisfaction of Basis Needs in the Developing Countries. In: Schriften der Hochschule für Architektur und Bauwesen Weimar 75. 3–29.

Brief des Stellvertreters des Ministers für Bauwesen an den Stellvertreter des Vorsitzenden des Ministerrates Genossen, Dr. Weiss: Zusammengefasste Einschätzung zur Mitwirkung bei der Projektierung und beim Aufbau der Stadt Vinh und zum Plattenwerk Dao tu. 12.08.1977. Bundesarchiv Berlin, BArch DH 1/26638, not paginated. Jahresabschlußbericht 1976 der Arbeitsgruppe der DDR-Spezialisten Vinh/SRV. 10.02.1977. Bundesarchiv Berlin, BArch DH 1/26638, not paginated.

for a larger area south of the Lam River and detailed infrastructure projects, leaving intact the above described general orientation for the urban environment. However, by 1979 the Council of Ministers had still not occupied itself with the General Development Plan, prompting the then head of the GDR expert group in Vinh to complain: "obviously the partner, especially the Ministry of Construction, still underestimates the importance of a General Development Plan for the overall development of a city". How in the early 1990s, long after Vietnamese-German cooperation in Vinh had ended and after the Vietnamese government abandoned the goal to create *socialist* urban environments.

The second major project that was mutually planned and designed, the *Quang Trung Housing Complex*, was to provide an example of socialist housing, planning and construction techniques, as well as the institutions and structures necessary for its administration. Its basic design was presented to the Vietnamese MoC in May 1974. <sup>163</sup> After a number of changes requested by the Ministry were incorporated in the plan, it stipulated that the Quang Trung Housing Complex would provide housing for 15,600 inhabitants in 2,480 apartments with a total floor space of 65,800m² (ca. four m² per person). <sup>164</sup> 30 percent of the inhabitants would occupy collective accommodation, while the remaining 70 percent would be provided

<sup>161</sup> Brief des Volkskomitees der Provinz Nghe An an das Politbüro des ZK der KPV und an Ministerpräsidenten der SRV: Kurzfasssung der Entwicklungstendenzen und Aufgaben bei der Planung und beim Aufbau der Stadt Vinh. 08.11.1977. Bundesarchiv Berlin, BArch DH 1/28287, not paginated.

<sup>162</sup> Jahresabschlußbericht 1978 der DDR Spezialistengruppe Vinh/SRV und Information über die Erfüllung des Regierungsabkommens zur Unterstützung bei der Projektierung und dem Aufbau der Stadt Vinh /SRV. February 1979. Bundesarchiv Berlin, BArch DH 1/29712, not paginated.P. 3.

Zusammenfassende Information des Leiters der Arbeitsgruppe der DDR-Spezialisten Vinh/DRV über den Stand der Tätigkeit der DDR-Arbeitsgruppe in Vinh. 25.05.1974. Bundesarchiv Berlin, BArch DH 1/28668, not paginated.

<sup>164</sup> Letter of the Ministry of Construction sent to the Chairman of the Administrative Committee of Nghe An Province: v/v qui hoach đường phố Quang Trung và đơn vị nhà ở. Bo Xay dung. 28.06.1974. Archive UBND Nghe An, P01 ML03 HS 50, paginated 163–164. Quyết định về đồ án thiết kế qui hoạch chi tiết khu phố Quang Trung tành phố Vinh. Bo Xay dung. 13.11.1974. Archiv UBND Nghe An, P01 ML03 HS 50, paginated 161–162.

with family apartments. <sup>165</sup> In contrast, previous planning by provincial authorities had envisaged a much larger percentage of the population to be housed in collective housing blocks (60 percent). <sup>166</sup> The layout and the facilities of the Quang Trung Housing Complex followed the typical ideals of a socialist housing complex. According to its plan, it was divided into five groups (A-E), each inhabited by 2,180 to 4,410 people in six to nine blocks. Public buildings would include crèches, kindergartens, schools, a hotel, and a cinema, as well as a neighbourhood centre including facilities for shopping, services, cultural activities, as well as communications. <sup>167</sup> The German expert group estimated the housing complex on both sides of Quang Trung Street to be completed by 1976 or 1977. <sup>168</sup>

Intended as a prototype that would fully express the advantages of a housing complex in bringing about a socialist lifestyle, its function as a model for the development of Vinh went beyond its physical structures and layout. The housing complex was to provide an example for Vietnamese authorities on how to design, create, and manage an urban environment that supplied the city's inhabitants with housing and public facilities in one all-encompassing project. Its buildings were intended to serve as model designs suitable to the conditions of their time but adaptable to future developments. <sup>169</sup> Furthermore, Quang Trung would serve as a testing field for management instruments such as the allocation of apartments, collection of rents, legal status of apartments and buildings, as well as the administration of the complex. Mutual planning and construction activities were seen as providing a practical training ground for Vietnamese cadres and workers, who would later on apply the experiences of Quang Trung in other housing complexes. As such, Quang Trung was supposed to be the

<sup>165</sup> Quyết định về đồ án thiết kế qui hoạch chi tiết khu phố Quang Trung tành phố Vinh. Bo Xay dung. 13.11.1974.

<sup>166</sup> Ke hoach xay dung thanh pho Vinh 1974–1975. Uy ban hanh chinh Nghe An. 17.01.1974.

<sup>167</sup> Liên hiệp các tổ chức hữu nghị et al. (2011). Erläuterungsbericht Entwurf Wohngebietszentrum Quang Trung in der Stadt Vinh. 19.09.1977. Bundesarchiv Berlin, BArch DH 1/28294, not paginated.

<sup>168</sup> Zusammenfassende Information des Leiters der Arbeitsgruppe der DDR-Spezialisten Vinh/DRV. 25.05.1974.

<sup>169</sup> Jahresabschlußbericht 1978 der DDR Spezialistengruppe Vinh/SRV. February 1979.

first step in a large scale housing program. The General Development Plan envisioned the construction of 6 additional housing complexes. 170

Contrary to Vietnamese expectations, GDR experts did not immediately assist in the design of completely new housing blocks. To ensure that construction of Quang Trung would soon begin and the targeted 10,000m² of housing space would be completed in 1974 the GDR expert group convinced their Vietnamese colleagues to construct the first four housing blocks according to existing Vietnamese designs. The jointly developed building concept was planned to be applied beginning with the fifth housing block and was continuously modified according to experiences gathered during application. It design provided those living in family apartments with electricity, private sanitary and cooking facilities, as well as running water piped into the apartments by a centralized water supply. Balconies provided private open space, while the first floor, half underground, provided storage space. The Quang Trung series allowed for considerable diversity in the combination of different building sections, and was recommended by the MoC for further use in Vietnam.

<sup>170</sup> Bericht des Verwaltungskomitees Nghe An über die Generalbebauungsplanung der Stadt Vinh und über die Vorbereitung einiger ausgewählter Vorhaben. 30.05.1975.

 <sup>171</sup> Information des Stellvertreters des Leiters der Arbeitsgruppe Vinh über Tätigkeit und Ergebnisse der Arbeitsgruppe in Vinh in der Zeit vom 15.2. bis 31.3.1974.
25.03.1974. Bundesarchiv Berlin, BArch DH 1/28668, not paginated.

<sup>172</sup> Berichterstattung des Leiters der Arbeitsgruppe über die Tätigkeit der Gruppe im Zeitraum vom 1.8. bis 2.9.1974. 04.09.1974. Bundesarchiv Berlin, BArch DH 1/28668, not paginated. Schwenkel (2014).

<sup>173</sup> For floor plans see appendix 2 in Purtak, Udo (1982): Voraussetzungen und Entwicklung des Wohnungsbaus unter humiden tropischen Bedingungen dargestellt am Beispiel des Aufbaus der Stadt Vinh in der Sozialistischen Republik Vietnam. Dissertation zur Erlangung des akademischen Grades Doktor eines Wissenschaftszweiges (Dr.-Ing.). Technische Universität Dresden, Dresden. Fakultät für Bau-, Wasser- und Forstwesen des Wissenschaftlichen Rates.

<sup>174</sup> Appendix 2 in Purtak (1982). Jahresabschlußbericht 1975 der Arbeitsgruppe der DDR-Spezialisten Vinh/DRV. 27.02.1976.

<sup>175</sup> Information des Leiters der Arbeitsgruppe der DDR-Spezialisten Vinh/SRV zum Stand der Realisierung des "Abkommens zwischen der Regierung der DDR und der Regierung der SRV über die Hilfe und Unterstützung bei der Projektierung und dem Wiederaufbau der Stadt Vinh" zum 30.9.1977. 03.10.1977. Bundesarchiv Berlin, BArch DH 1/27193, not paginated.

On 1 May 1974, the ground-breaking ceremony of the Quang Trung Housing Complex took place at block A1.<sup>176</sup> Over the following years, shortages in materials and workers, often due to the ongoing war, as well as poor coordination between different agencies continuously delayed construction in Vinh, especially of housing in the Quang Trung Complex. The end of the war in 1975 diverted even more resources as the focus of reconstruction shifted to the south.<sup>177</sup> This situation was compounded by tensions between the SRV on one side and the PRC and Democratic Kampuchea on the other that escalated into open conflict in the late 1970s.<sup>178</sup> China's closing of the border and war increased the overreliance on Vietnam's underdeveloped ports, further prolonging shipping of essential goods to Vietnam.<sup>179</sup> Projects carried out with assistance of the PRC were abandoned or continued relying on other resources. Most importantly, mobilisation diverted workers and resources from the reconstruction of Vinh to the armed forces.<sup>180</sup>

Furthermore, according to a report by the expert group leader from February 1976, housing construction had never been a priority for Vietnamese decision makers. 181 From mid-1976 on, SRV officials called for cooperation to shift to public buildings on the expense of housing construction. The GDR continued to insist on focusing on the construction of

<sup>176 3.</sup> Information über die T\u00e4tigkeit und Ergebnisse der AG Vinh f\u00fcr den Zeitraum vom 5.4.-5.5. 09.05.1974. Bundesarchiv Berlin, BArch DH 1/28668, not paginated.

<sup>177</sup> Kaiser (2016), 100-120.

<sup>178</sup> Westad, Odd-Arne/Quinn-Judge, Sophie (eds.) (2006): The Third Indochina War: Conflict between China, Vietnam and Cambodia, 1972–1979. London.

<sup>179</sup> Einschätzung des Zentrums für Information und Dokumentation der Außenwirtschaft zu den Importbeziehungen der sozialistischen Länder zur sozialistischen Republik Vietnam. 1979. Bundesarchiv Berlin, BARCH SAPMO DY 30 17828. Nr. 15/79, Reihe C.

<sup>180</sup> Jahresabschlußbericht 1978 der DDR Spezialistengruppe Vinh/SRV. February 1979. Pp. 2, 18. Brief des Leiters der Arbeitsgruppe der DDR-Spezialisten Vinh/SRV an den Leiter des Arbeitsstabes Vietnam: 1. Besuch der Partei- und Staatsdelegation, 2. Kongreß über Stadtplanung und Wohnungsbau, 3. Wohngebiet Quang Trung, 2. Ziele für das Planjahr 1978 im Wohnungsb., 5. Film – Filipov, 6. Weihnachten und Jahreswechsel in der AG. (05.01.1978): Bundesarchiv Berlin, DH 1/28514.

<sup>181</sup> Brief des Leiters der Arbeitsgruppe der DDR-Spezialisten Vinh/Vietnam an den Leiter des Arbeitsstabes Vietnam des Ministeriums für Bauwesen: Fertigstellung bzw. Übergabe nutzungsfähiger Wohnungen im Wohngebiet Quang Trung. 16.02.1976. Bundesarchiv Berlin, BArch DH 1/28510, not paginated.

Quang Trung to create a completed and functioning example of a socialist housing complex as an expression of GDR solidarity. Still, by late 1976 GDR experts concluded that the Quang Trung Housing Complex would not be completed in the agreement's timeframe. 182

By the end of the original cooperation period in 1978, all housing blocks in groups A and B (planned for 4,490 inhabitants), as well as two blocks in group C had been completed. Structural works of three additional group C blocks were completed, as were foundations of one block in group D. Only one kindergarten in group A had been completed, structural works of one nursery were nearly finished. Works on the school had not yet begun. <sup>183</sup> In total, far less than 50 percent of the housing complex had been completed during the original agreement's duration. These delays (as well as delays at other joint projects) prompted the SRV and the GDR to extend the agreement for two further years until 1980. <sup>184</sup> However, during 1979 and 1980, the number of workers at the housing complex continued to drop, while construction material shortages became even more severe. Problems of poor construction quality and lacking maintenance persisted until the end of cooperation. Additionally, electricity shortages heavily impacted housing conditions and water supply. <sup>185</sup>

Over the seven years of 1974 to 1980, 21 blocks providing 35,533 m<sup>2</sup> of housing in 1,712 units were completed in the eastern part of Quang Trung,

<sup>182</sup> Briefe des Stellvertreters des Ministers für Bauwesen an den Stellvertreter des Vorsitzenden des Ministerrats der DDR, und den Stellvertreter des Vorsitzenden der Staatlichen Plankommission: Vorbereitung der VIII. Tagung des Wirtschaftsausschusses DDR/SRV. 18.11.1976. Bundesarchiv Berlin. BArch DH 1/26638, not paginated. Information des Wirtschaftsrates. 03.01.1977.

<sup>183</sup> Jahresabschlußbericht 1978 der DDR Spezialistengruppe Vinh/SRV. February 1979.

<sup>184</sup> Biên bản về sự sửa đôi hiệp định ngày 22-10-1973 giữa chính phủ nước Cộng Hòa Dân Chủ Đức và chính phủ nước Cộng Hòa Xã Hội Chủ Nghĩa Việt Nam về việc nước Cộng Hòa Dân Chủ Đức giúp đỡ trong việc thiết kế và xây dựng thành phố Vinh. 04.07.1978. National Archives Centre III, Phong Phu Thu Tuong, HS 11167, paginated 13–14.

Jahresabschlußbericht 1980 der DDR-Spezialistengruppe Vinh/SR Vietnam und Information über die Erfüllung des Regierungsabkommens zur Hilfe und Unterstützung bei der Projektierung und dem Aufbau der Stadt Vinh/ SR Vietnam. 31.12.1980. Bundesarchiv Berlin, BArch DH 1/29712, not paginated. Bericht der Arbeitsgruppe der DDR - Spezialisten Vinh/SR Vietnam: Stand der Realisierung des Abkommens und der Protokolle zur Unterstützung bei der Projektierung und beim Aufbau der Stadt Vinh durch die DDR per 15.01.1979. 25.01.1979. Bundesarchiv Berlin, BArch DH 1/28668, not paginated.

intended for 8,360 inhabitants (including 1,650 in dormitories). Two kindergartens, two nurseries, one school, and one element of the centre were completed. However, mainly due to power and water shortages the housing complex did not become completely operational and could not fully demonstrate the advantages of a socialist housing complex. 186

While in many cases completed buildings were of relatively low quality, they were regarded as an improvement to the overall situation in the SRV. Nevertheless, GDR experts were highly critical of the results in Quang Trung, attributing shortcomings mainly to poor oversight and management. While the quality of work by Vietnamese construction workers improved over the years, diligence and precision remained below the Germans' expectations. Initially, concrete produced in Vinh was of poor quality, affecting the buildings' quality. Many installations and appliances did not fit or were not working well. In addition, once the blocks were handed over to be inhabited, their state deteriorated quickly as repairs and maintenance works were not carried out. 188

Yet, in light of the described difficulties, the results of cooperation were regarded as important achievements by both the Vietnamese and the Germans. Also compared to assistance by other socialist countries in the reconstruction of Vietnam's cities, GDR efforts were regarded as exemplary

<sup>186</sup> Jahresabschlußbericht 1978 der DDR Spezialistengruppe Vinh/SRV. February 1979. P. 6. Kaiser (2016), 114–120. Kaiser, Tim (2012): International Influences and Local Adaptation in Urban Development. A Research Note from Vinh City, Central Vietnam. In: Pacific News 37. 18–22. 20.

<sup>187</sup> Abschlussbericht anläßlich der Leitungssitzung der SED Grundorganisation AG Vinh, Notizen zu Problemen des komplexen Wohnungsbaues Wohngebiet Quang Trung – Vinh. 30.08.1978. Bundesarchiv Berlin, BArch DH 1/28668. Not paginated.

<sup>188</sup> Brief des Leiters der Arbeitsgruppe der DDR-Spezialisten Vinh/Vietnam. 16.02.1976. Jahresabschlußbericht 1978 der DDR Spezialistengruppe Vinh/SRV. February 1979. Abschlußbericht des kommissarischen Leiters der Abteilung Projektierung und komplexer Wohnungsbau und Bauleiter Quang Trung. 20.03.1979. Bundesarchiv Berlin, BArch DH 1/28668. Not paginated. Jahresabschlußbericht 1976 der Arbeitsgruppe der DDR-Spezialisten Vinh/SRV. 10.02.1977.

<sup>189</sup> Báo Cáo Tông kết 7 năm thực hiện Hiệp định về việc nước Cộng hòa Dân chủ Đức gíup đỡ quy hoạch thiết kế và xây dựng lại thành phố Vinh 1974–1980. UB-ND Nghệ Tĩnh. 26.05.1981. Archive UBND Nghe An, 1981, Tập lưu công văn, not paginated. Jahresabschlussbericht 1980 des Leiters des Arbeitsstabes Vietnam über die Tätigkeit und die Arbeitsergebnisse des Arbeitsstabes Vietnam. February 1981. Bundesarchiv Berlin, BArch DH 1/28517. Not paginated. Jahresab-

by both the GDR and the SRV.<sup>190</sup> Yet it was not so much the creation of a *socialist* urban environment that was held in highest esteem, but the creation of modern and effective construction industries<sup>191</sup> which were re-

schlußbericht 1980 der DDR-Spezialistengruppe Vinh/SR Vietnam. 31.12.1980. Protokoll über die Erfüllung des zwischen der Regierung der DDR und der Regierung der SRV abgeschlossenen Abkommens über die Unterstützung bei der Projektierung und beim Aufbau der Stadt Vinh durch die DDR vom 22.10.1973. 05.12.1980. Bundesarchiv Berlin, BArch DH 1/29710, not paginated.

190 Jahresabschlußbericht 1979 der DDR-Spezialistengruppe Vinh/SRV und Information über die Erfüllung des Regierungsabkommens zur Unterstützung bei der Projektierung und dem Aufbau der Stadt Vinh/SRV. February 1980. Bundesarchiv Berlin, BArch DH 1/29712, not paginated. Bericht des Arbeitsstabes Vietnam beim Ministerium für Bauwesen: Jahresabschlussbericht 1976 über die Tätigkeit und die Arbeitsergebnisse des Arbeitsstabes Vietnam, March 1977. Bundesarchiv Berlin, BArch DH 1/26638, nicht paginiert. According to a GDR MoC report, only the USSR had assisted on a comparable scale in the development of Hanoi. Cuba had contributed to reconstruction by planning and supplying material for a number of projects. Czechoslovakia, Romania, Bulgaria, Poland, and North Korea had assisted in planning and designing, but not provided material aid for respective projects. (Übersicht über die Realisierung des Abkommens zur Unterstützung der SRV bei der Projektierung und beim Aufbau der Stadt Vinh. December 1977. Bundesarchiv Berlin, BArch DH 1/26638). The expert group judged in 1979 that due to GDR assistance Nghê Tĩnh's construction industry was most advanced compared to other provinces of the SRV. (Jahresabschlußbericht 1978 der DDR Spezialistengruppe Vinh/SRV. February 1979. Acknowledging the comprehensive aid program and its progress, Minister of Construction Đỗ Mười relocated a national conference on housing and urban planning from Hanoi to Vinh and promoted application of Quang Trung housing designs in other provinces.(Jahresabschlußbericht 1977 des Leiters der Arbeitsgruppe der DDR-Spezialisten Vinh/SRV und Information über die Erfüllung des Regierungsabkommens über die Unterstützung bei der Projektierung und dem Aufbau der Stadt Vinh durch die DDR. January 1978 Bundesarchiv Berlin, BArch DH 1/28672)

191 A further part of cooperation, the creation and upgrading of construction material industries in Vinh and Nghe An province, in general fared better than the housing complex, although these projects were plagued by many of the same problems. By the end of 1980, the following industrial projects had been completed, but productivity and production quality varied considerably: cement factory with a capacity of 12,000 t per year; sand and gravel extraction; quarry Rú Muou; marble quarry Quỳ Hop; brick factories with capacities of 30,000 bricks and 2,000 tiles per year; stoneware production facilities; carpentry workshop; vehicle, machinery, and equipment repair workshops; transport enterprise to serve construction industries; warehouse enterprise for construction material, machinery and equipment; equipment of construction enterprises; air separation unit for the pro-

garded as providing an important basis for future development of Vinh and Nghệ Tĩnh Province. <sup>192</sup> In addition to physical projects, provincial authorities highly valued the experience of cadres, planners, and workers to work with GDR experts. This was seen as having considerably improved their abilities and working styles, preparing them for future challenges. <sup>193</sup>

While Quang Trung exemplified the best available housing for some, this modern built environment proved ill adapted to the lifestyle of others. For many who returned to Vinh after years of war it was the first instance of living in a concrete home, let alone in an apartment in a multi-storey building. This resulted in improper behaviour in the eyes of planners and authorities. The additions and modifications of the apartments, buildings, and layout of the housing complex, like extensions to balconies or vegetable gardens in open areas, are indicative of the shortcomings that were overcome by private initiative. <sup>194</sup> The assumptions underlying the planning of the housing complex had not been realized, such as water and electricity provision or equal access to apartments. Especially the last point led to misuse of power in the allocation, administration, and use of

duction of oxygen; ice production facility with a capacity of 3,650 t per year. Jahresabschlußbericht 1980 der DDR-Spezialistengruppe Vinh/SR Vietnam. 31.12.1980. Jahresabschlussbericht 1980 des Leiters des Arbeitsstabes Vietnam. February 1981. Báo Cáo Tông kết 7 năm. UBND Nghệ Tĩnh. 26.05.1981.

<sup>192</sup> Báo Cáo Tông kết 7 năm. UBND Nghệ Tĩnh. 26.05.1981. Bericht des stellvertretenden Ministers für Bauwesen Werner Kohl über die vom 1. bis 9.12.1980 geführten Abschlußberatungen in der SR Vietnam zum Auslaufen des Abkommens über die Unterstützung der SR Vietnam bei der Projektierung und beim Aufbau der Stadt Vinh durch die DDR vom 22.10.1973. 10.12.1980. Bundesarchiv Berlin, BArch DH 1/29710, not paginated.

<sup>193</sup> Báo Cáo Tông kết 7 năm. UBND Nghê Tĩnh. 26.05.1981.

<sup>194</sup> Schwenkel, Christina (2012): Civilizing the City. Socialist Ruins and Urban Renewal in Central Vietnam. In: Positions: East Asia Cultures Critique 20, 2. 37–470. Schwenkel, Christina (2013): POST/SOCIALIST AFFECT. Ruination and Reconstruction of the Nation in Urban Vietnam. In: Cultural Anthropology 28, 2. 252–277. 264. Schwenkel (2014), 168–170. Vandenpoel, Erik (2011): Khu tap the Housing. Hanoi and Vinh. Thesis voorgedragen tot het behalen van de graad van Master in de ingenieurswetenschappen: architectuur. Katholieke Universiteit Leuven, Leuven. Letter of the People's Committee of Nghe Tinh Province to the People's Committee of Vinh City: Đình chí xây dựng bể nước trong nhà cao tầng Quang Trung. 13.11.1985. Archive UBND Nghe An, 1985, Tập lưu công văn, June–December, not paginated.

apartments.<sup>195</sup> Furthermore, contrary to its intended function as a model housing complex Quang Trung remained the only of its kind in Vinh. The SRV shifted its housing policies in the 1980s, giving up the ideal of providing equal living conditions through state supplied housing to all its citizens (see below).

Today, the general spatial zoning of the draft development plan prepared with participation of experts from the GDR is upheld. The city can roughly be divided into an economic (along and around Quang Trung Street), an administrative (in the Trường Thi area) and an educational centre (around the university in Bến Thủy). Industries are clustered in the north-west and close to Bến Thủy harbour. However, the envisaged separation of residential and recreational areas from work places has not been achieved. <sup>196</sup> Additionally, the basic spatial division into three centres is as much reflective of the above described pre-colonial and colonial urban development as of the planning of a socialist urban environment

## 7. Reminders of the Past: Remains of the Socialist City in the Contemporary Urban Environment

The ambitions to create a socialist urban environment resulted from the political orientations of the 1950s to 1970s. However, these orientations have shifted in Vietnam from the 1980s on towards the promotion of a "market economy with socialist characteristics." <sup>197</sup> In the official vision promoted today for Vinh's development, the most prominent reminder of the Socialist City, the Quang Trung Housing Complex, is now rather re-

<sup>195</sup> See for example Letter of the People's Committee of Nghe Tinh Province to the People's Committee of Vinh City: Trích yếu Giải quyết trường hợp đổi căn hộ 312 nhà C2 Quang Trung. 21.04.1986. Archive UBND Nghe An, 1986, Tập lưu công văn, 1.–6., not paginated. Letter of the People's Committee of Nghe Tinh Province to the Commander of the Provincial Military Headquarters: v/v xử lý vụ tranh chấp nhà ở tại căn hộ 222 C8 Khu Quang Trung. 28.08.1985. Archive UBND Nghe An, 1985, Tập lưu công văn, June–December, not paginated.

<sup>196</sup> Mönnig (1989).

<sup>197</sup> Masina, Pietro P. (2006): Vietnam's Development Strategies. London: Routledge. 39. Elliott, David W. P. (2012): Changing worlds. Vietnam's Transition from the Cold War to Globalization. New York. 204, 228.

garded as a problem inhibiting the creation of a "Modern and Civilised City." <sup>198</sup>

The goal of equal housing conditions provided by the state had been given up in Vinh by the late 1980s, planning did not refer to a Socialist City anymore and the socialist housing complex had lost its role as a physical planning unit as well as politically and socially desirable living environment. 199 As mentioned above, the eastern part of Quang Trung remained the only such complex in Vinh. Housing supplied by the state accounted for only 10 to 20 percent of the city's housing stock in 1991, of which 75 percent were in one-storey buildings. 200 From 1988 on, housing owned by state agencies and companies in Vinh was sold to inhabitants. 201

<sup>198</sup> Another reminder of GDR assistance in Vinh, the Thälmann Club, is now renamed the Vietnamese – German Cultural House.

<sup>199</sup> Report of the People's Committee of Nghe Tinh Province to the Prime Minister, the Ministry of Construction, the State Planning Committee, the Ministry of Finance: Xin phe duyet quy hoach phat trien thanh pho Vinh (1992–2010). 09.01.1993. Archive UBND Nghe An, 1993, Tập lưu Thông báo, Báo cáo, Tò trình, not paginated. Lương Bá Quảng (n.d.): Thành phố Vinh. Xu hướng tổ chức và mở rộng không gian qua các thời kì.

<sup>200</sup> Tò trình tốm tắt quy hoạch xây dựng thành phố Vinh. UBND Nghe An. 13.06.1991. Archive UBND Nghe An, 1991, Tập lưu Chi Thị, Thông báo, Sao Lục, 57.VP.UB, not paginated.

<sup>201</sup> See for example Letter of the People's Committee of Nghe An Province to the Deputy Chairman of the People's Committee of Vinh City. 26.08.1993. Archive UBND Nghe An, 1993, Tâp lưu Công văn, 8-12., not paginated. Letter of the People's Committee of Nghe Tinh Province to the Electricity Company I: V/v hóa giá nhà ở. 16.10.1990. Archive UBND Nghe An, 1990, Tập lưu công văn 6.-12., not paginated. Letter of the People's Committee of Nghe Tinh Province to the Factory for Construction Mechanics: V/v hóa giá nhà ở. 15.10.1990. Archive UBND Nghe An, 1990, Tập lưu công văn 6.-12., not paginated. Letter of the People's Committee of Nghe Tinh Province to the Department of Finance: V/v hóa giá nhà ở. 15.09.1990. Archive UBND Nghe An, 1990, Tập lưu công văn 6.-12., not paginated. Letter of the People's Committee of Nghe Tinh Province to the Scientific technological Committee, the Department of Finance, the People's Committee of Vinh City, the Department of Construction, the Institute for General Planning, Control and Design, the People's Committee of Hung Binh Ward: V/v hóa giá nhà ở: V/v hóa giá nhà ở. 12.07.1990. Archive UBND Nghe An, 1990, Tập lưu công văn 6.-12., not paginated. The earliest document referring to this process permits the sale of apartments in Quang Trung blocks: Letter of the People's Committee of Nghe Tinh Province to the Departments ò Construction and Finance, to the People's Committee ò Vinh City, and the Committee for General Construction: v/v hóa giá nhà ở tập thể. 30.04.1988. Archiv UBND Nghe An, 1988, Tập lưu công văn, 1.–7., not paginated.

The power of a "market economy with socialist characteristics" is represented in the "modern and civilized" urban environment by high-rise buildings combining retail, housing, and office space as well as hotel rooms, constructed by state-owned enterprises and private investors. <sup>202</sup> These buildings and New Urban Areas on the outskirts are depicted by advertisement and brochures as "new residential communities that show the middle classes enjoying prosperous, orderly, and moral lives. [...] images depict a disciplined, largely unpeopled world free from the disorder of haphazard construction, informal markets, and swarming motorbikes, with expensive new cars, law-abiding pedestrians, and well-cared-for homes." <sup>203</sup>

In addition to leaving new housing development to the market, Vinh's authorities have followed the policy to sell state owned housing to residents. Due to its complete destruction during the American War, Vinh's housing stock consists of a considerable number of collective housing areas<sup>204</sup> constructed in the 1970s. When residents bought housing units in these areas from the late 1980s on, they often acquired only the housing structures, not land use rights. This created legal uncertainties preventing many from carrying out costly repairs and investments. As a step towards the development of a civilised and modern city, demolishing these housing areas until 2015 became official policy in September 2007.<sup>205</sup>

Another form of housing that is regarded as being in the way of modern and civilised development is the Quang Trung Housing Complex. As described above, the Quang Trung Housing Complex did not become fully functional during the period of assistance by the GDR and long thereafter.

<sup>202</sup> Thu Huyền (18.03.2011): Dấu ấn của thành phố năng động. Nghệ An Online. Online available at http://baonghean.vn/news\_detail.asp? newsid=72528&CatID=3, last accessed 20.05.2011. Thanh Loan (23.11.2010): Tòa tháp đôi dầu khí. Điểm nhấn kiến trúc thành phố quê hương Bác. Trang thông tin điện tử thành phố Vinh. Online available at http://www.vinhcity.gov.vn/?url=detail&id=30383&language=1, last accessed 03.12.2010.

<sup>203</sup> Schwenkel (2012), 460.

<sup>204</sup> These were usually one-storey buildings of very poor standard intended only for much shorter use. Kaiser (2016), 159ff.

<sup>205</sup> Quyết định V/v phê duyệt Chương trình phát triển nhà ở trên địa bàn tỉnh Nghệ An đến năm 2010, định hướng đến năm 2020. 110/2007/QĐ-UBND. Uỷ Ban Nhân Dân Tỉnh Nghệ An. 21.09.2007. Nghị quyết về đế án giải quyết nhà ở tập thể cũ trên địa bàn thành phố Vinh. 189/2007/NQ-HĐND. Hội Đồng Nhân Dân tỉnh Nghệ An. 25.07.2007.

In 1984, open air wells had to be constructed as provisory water supply.<sup>206</sup> Already by 1986, only five years after cooperation ended, the deteriorating quality of many buildings created unsafe living conditions for residents.<sup>207</sup> However, due to a lack of funds resulting from economic difficulties and low rents, maintenance continued to be kept to a minimum over the next decades and repairs were carried out in piecemeal fashion.<sup>208</sup> A central water supply and a wastewater system became finally operational due to official development assistance from the Federal German Republic in the 1990s.<sup>209</sup> However, unsafe conditions persist, during Vinh's frequent storms and heavy rain many of Quang Trung's inhabitants have to be evacuated.<sup>210</sup>

From 1988 on, several attempts were undertaken to sell a number of Quang Trung's apartments to inhabitants.<sup>211</sup> From 1992 provincial authori-

<sup>206</sup> Letter of the People's Committee of Nghe Tinh Province to the Department of Construction, the People's Committee of Vinh City, the Department of Finance, and the Bank for Investment and Construction: v/v xây dụng giếng nước tai khu Q. Trung. 13.08.1984. Archive UBND Nghe An, 1984, Tập lưu công văn, July to December, not paginated.

<sup>207</sup> Thông báo của UBND Nghệ Tĩnh về cuộc họp bàn về công tác sửa chũa khu nhà cao tầng Quang trung Thành phố Vinh. 22.03.1986. Archive UBND Nghe An, 1986, Tập lưu Thông báo, Báo cáo, Trình tò, not paginated.

<sup>208</sup> Letter of the People's Committee of Nghe An Province to the Ministry of Construction, the Ministry of Planning and Investment: V/v xin lập dự án ĐT sửa chữa thi điểm chống sụp đổ nhà Quang Trung. 16.10.1997. Archiv UBND Nghe An, 1997, Tập lưu Công văn 10–11, not paginated. Letter of the People's Committee of Nghe An Province to the Department of Construction, the Department of Planning and Investment, the Department for Finance and Pricing, the People's Committee of Vinh City, the People's Committee of Quang Tung Ward: V/v tổ chức kiểm tra về quản lý, sử dụng khu nhà cao tầng Quang Trung-Vinh. 29.06.1996. Archiv UBND Nghe An, 1996, Tập lưu Công văn 6–8, not paginated.

<sup>209</sup> Liên hiệp các tổ chức hữu nghị et al. (2011): 120-125.

<sup>210</sup> Thân Cương (02.08.2011): "Sống trong sợ hãi" tại chung cư xuống cấp. In: *Nguoiduatin.vn.* Online available at http://www.nguoiduatin.vn/song-trong-so-hai-tai-chung-cu-xuong-cap-a9544.html, last accessed 06.08.2013. Lê Thanh (24.08.2012): Đẩy nhanh tiến độ xóa nhà ở tập thể cũ. In: *Nghệ An Online*. Online available at http://baonghean.vn/news\_detail.asp? newsid=87750&CatID=109, last accessed 07.08.2013.

<sup>211</sup> Letter of the People's Committee of Nghe Tinh Province to the Departments ò Construction and Finance, to the People's Committee ò Vinh City, and the Committee for General Construction: v/v hóa giá nhà ở tập thể. 30.04.1988. Kaiser (2016), 138ff.

ties unsuccessfully tried to sell all of Quang Trung's apartments. Finally, in 2001 the MoC proposed a plan to rehabilitate the housing complex according to market mechanisms as a national example for the conversion of housing estates. Inhabitants would be given first-buyer priority, but market value-prices and the absence of special consideration other than law-required compensation would put the new apartments out of reach of many. The project would involve demolition of a number of Quang Trung's buildings and the relocation of inhabitants to resettlement apartments in the northern part of the city. In 2002, the provincial People's Committee agreed to a proposition by the TECCO construction company from Hồ Chí Minh City to plan the redevelopment of the first block to be demolished (C1) as a complex including housing, office, and retail space. Schwenkel calls the construction of this project, including two high-rise towers, "the most striking visual changes to the cityscape" until then.

However, as with previous attempts at repair or rehabilitation of the housing complex, the 2001 MoC plan was not implemented. Instead, it was decided that the whole complex would be redeveloped according to guidelines set out in 34/2007/NQ-CP, including the demolition of all buildings. This resolution prescribes the improvement and reconstruction of housing complexes as integrated projects including housing as well as technical and social infrastructure. Again, the goal is to contribute to

<sup>212</sup> Shannon, Kelly/Loeckx, André (2004): Rising from the Ashes. Vinh. In: Localising Agenda 21: Action Planning for Sustainable Urban Development und United Nations Human Settlements Programme. (ed.): Urban Trialogues. Visions, Projects, Co-productions. Nairobi. 122–155. 145.

<sup>213</sup> Notification of the People's Committee of Nghe An Province: Ý kiến kết luận của Chủ tịch UBND tỉnh tại buổi làm việc với Sở Xây dựng. 09.11.2001. Archive UBND Nghe An, 2001, Tập lưu Thông báo, báo cáo 8–12, not paginated. Letter of the People's Committee of Nghe An Province to the People's Committee of Vinh City, and the Department of Construction: Về việc giải quyết tình trạng xuống câp Khu chung cư Quang Trung. 22.10.2001. Archiv UBND Nghe An, 2001, Tập lưu Công văn 9–10, not paginated.

<sup>214</sup> Letter of the People's Committee fo Nghe An Province to the Tecco Construction Company: V/v đầu tư của công ty Cổ phần xây dựng và ứng dụng công nghệ mới (TECCO). 22.07.2002. Archive UBND Nghe An, 2002, Tập lưu Công văn 7–8, not paginated.

<sup>215</sup> Schwenkel (2012), 457.

<sup>216</sup> Nghị quyết về để án giải quyết nhà ở tập thể cũ trên địa bàn thành phố Vinh. 189/2007/NQ-HĐND. Hội Đồng Nhân Dân tỉnh Nghệ An. 25.07.2007.

the development of a civilised and modern city.<sup>217</sup> Meanwhile, the three zones of Quang Trung have been assigned to three developers for this project. However, in addition to the buildings constructed by TECCO that replaced the C1 block so far only one new apartment block has been constructed on the former site of a sports field in the north-western corner of the housing complex.<sup>218</sup> Thus, the Quang Trung Housing Complex remains as a reminder destruction and reconstruction of Vinh's built environment during the American War.

## 8. Conclusion

The study of the long-term impacts of bombing on the urban environment in Vinh cannot be reduced to an investigation of only statistical data such as population numbers or economic growth. Picking up on the ways of investigation laid out by the above cited works of Diefendorf as well as Glaeser and Shapiro, this study on the destruction and reconstruction of Vinh has shown that much of the long-term impact of the war results can only be understood when taking into account developments and decisions that were made even before the air-war over North Vietnam began. The destruction caused by this air war, however, created the conditions under which large scale implementation of decisions to rebuild the urban environment according to the ideal of the Socialist City could be attempted. The implementation of plans for reconstruction was also heavily impacted by the ongoing war, even though the urban environment of Vinh itself did not become the target of destruction anymore. The ongoing war diverted resources and the overall destruction caused by it did not allow reconstruction policies to focus on Vinh even after the war ended. While this case study has focused on the impact of the war on the built urban environment of one particular city, it has shown that a look at wider contexts, such as the national political and economic situation and international relations, is necessary for a detailed understanding of the long-term impacts of destruction caused by the bomb war in Vinh.

This multi-level complexity is also reflected in the importance of global- and national-level political developments that led to a re-evaluation of

<sup>217</sup> Nghị Quyết Về một số giải pháp để thực hiện việc cải tạo, xây dựng lại các chung cư cũ bị hư hỏng, xuống cấp. 34/2007/NQ-CP. Chính phủ. 03.07.2007.

<sup>218</sup> Kaiser (2016), 140.

the strategy to create a socialist urban environment. As the move from a socialist development path to a *market economy with socialist orientation* was reflected in the embrace of the ideal of a *modern and civilized* urban environment, the Quang Trung Housing Complex was turned from the optimistic nucleus of an envisioned socialist urban environment into an impediment to the newly embraced vision of a modern and civilized city. Thereby, one of the core elements of the project to create a socialist urban environment has become an obstacle to urban development in light of a changing political, economic, and ideological context.

While general aspects of urban development in the DRV during the war are reflected in Vinh's war-and post-war experience, such as evacuation of the population, a quick return to pre-war population size and subsequent urban growth, other aspects are very particular to the city. For example, bombing and destruction were much heavier than in other cities because of Vinh's strategic role as a hub for war-time transportation routes that reflects its location at the intersection of historic transport routes. During the separation of the country into the DRV and the RoV, Vinh was the most important city in the southern DRV, an importance that was reflected in the decision to assign its reconstruction to the GDR. When the war ended, this importance diminished and so did the attention and resources Vinh's reconstruction received from central authorities of the SRV. Another particularity is the extent of support provided by the GDR to Vinh's reconstruction that was in no terms representative of support provided by socialist countries to the reconstruction of the DRV's cities in general. Furthermore, as was also indicated above and is well presented by Thrift and Forbes, the experiences of cities in the North and the South of Vietnam differed markedly both during and after the war. To account for a full picture of the impact of war and urban planning on the built environment of Vietnam's city, a comparative research agenda that is able to incorporate both general trends as well as the particularities of individual city's histories is necessary.

The introduction raised the question of how to isolate the impact of bomb war on the urban environment. I have addressed this issue by focusing on projects and developments that have their origins in decisions and actions taken in direct response to the destruction caused by aerial bombing of Vinh in the 1960s and 70s, and which changed the urban environment of Vinh in the immediate aftermath of the war. However, as the title of this paper indicates, and as was mentioned in the introduction, the history of Vinh in the second half of the 20th century presented here was

marked by intertwined processes of development, destruction, and reconstruction, and to strictly isolate the impact of one single aspect would arbitrarily reduce the complexity of the interplay of these processes.

## 9. References

- Bater, James H. (1980): The Soviet City. Ideal and Reality. London.
- Brakman, S./Garretsen, H./Schramm, M. (2004): The Strategic Bombing of German cities during World War II and its Impact on City Growth. In: Journal of Economic Geography 4, 2. 201–218.
- Bùi Thiết (1984), Vinh Bến Thủy. Hà Nội.
- Clodfelter, Mark (1989): The limits of air power. The American Bombing of North Vietnam. New York.
- Clodfelter, Micheal (1995): Vietnam in Military Statistics. A History of the Indochina Wars, 1772-1991. Jefferson.
- Cục Thống kê Nghệ An (2011): Niên giám thống kê Nghệ An 2010. Statistical Yearbook 2010. Vinh.
- Đặng Thái Hoàng (1999): Kiến trúc Hà Nội. Thế kỷ XIX Thế kỷ XX. Architecture of Hà Nội, 19th to 20th century. Hanoi.
- Davis, Donald/Weinstein, David (2002): Bones, Bombs and Break Points: The Geography of Economic Activity. In: American Economic Review 92. 1269–1289.
- Del Testa (2007), 315. Del Testa, David W. (1999): Imperial Corridor. Association, Transportation and Power in French Colonial Indochina 1. In: Science Technology & Society 4, 2. 319–354.
- Del Testa, David W. (2007): Vinh, the Seed that would Grow Red. Colonial Prelude, Revolutionary City. In: Historical Reflections 33, 2). 305-325.
- Diefendorf, Jeffry M. (1993): In the Wake of War. The Reconstruction of German Cities after World War II. New York.
- Duiker, William J. (2000): Ho Chi Minh: A Life. New York. 346-398.
- Elliott, David W. P. (2012): Changing worlds. Vietnam's Transition from the Cold War to Globalization. New York.
- Fisher, Jack C. (1962): Planning the City of Socialist Man. In: Journal of the American Institute of Planners 28, 4. 251-265.
- French, R. A. (1995): Plans, Pragmatism and People. The Legacy of Soviet Planning for Today's Cities. London.
- Glaeser, Edward/Shapiro, Jesse (2001): Cities and Warfare. The Impact of Terrorism on Urban Form. Discussion Paper Number 1942. Cambridge.
- Hall, Peter (2002): Cities of Tomorrow. An Intellectual History of Urban Planning and Design in the Twentieth Century. Oxford.

- Hoàng Ngọc Anh/Hà Văn Tải/Nguyễn Bá Dũng/Nguyễn Quang Vinh (2003): Lịch Sử Thành Phố Vinh. Tập II (1945-1975). [History of Vinh City, Part II (1945-1975)]. Vinh.
- Kaiser, Tim (2012): International Influences and Local Adaptation in Urban Development. A Research Note from Vinh City, Central Vietnam. In: Pacific News 37. 18–22.
- Kaiser, Tim (2016): Transnational Impact on Urban Change. Modern Projects in Vinh, Vietnam. University of Passau. Passau.
- Littauer, Raphael/Uphoff, Norman Thomas (eds.) (1972): The Air War in Indochina. Boston.
- Logan, William Stewart (2000): Hanoi, Biography of a City. Sydney.
- Mantienne, Frédéric (2003): The Transfer of Western Military Technology to Vietnam in the Late Eighteenth and Early Nineteenth Centuries. The Case of the Nguyên. In: Journal of Southeast Asian Studies 34, 3. 519–534.
- Masina, Pietro P. (2006): Vietnam's Development Strategies. London: Routledge.
- Miguel, Edward/Roland, Gérard (2011): The Long-Run Impact of Bombing Vietnam. In: Journal of Development Economics 96, 1. 1–15.
- Mönnig, Hans-Ulrich (1987): Industrialisierung ländlicher Gebiete und Erfüllung von Grundbedürfnissen in Entwicklungsländern. In: Wissenschaftliche Zeitschrift der Hochschule für Architektur und Bauwesen Weimar 33, 3. 126–131.
- Nguyễn Quang Hồng (2003): Thành Phố Vinh. Quá Trình Hình Thành Và Phát Triển (1804-1945). [Vinh City: The Process of Establishment and Development]. Vinh. 22-24. Chu Trọng Huyến (1998): Lịch Sử Thành Phố Vinh. Tập 1. [History of Vinh City, Part 1.] Vinh.
- Nguyễn Quang Hồng/Hoàng Kim Oanh (2005): Lịch Sử Mặt Trận Tổ Quốc Việt Nam Thành Phố Vinh (1930-2005). [History of the Vietnamese Fatherland Front of Vinh City (1930-2005)]. Vinh.
- Nguyễn Quang Vinh/Dương Thanh Bình (2007): Lịch sử Phường Cửa Nam Thành phố Vinh. [History of Cua Nam Ward Vinh City]. Vinh.
- Nguyễn Quốc Hồng/Nguyễn Văn Huệ/Bùi Văn Quế (2004): Lịch Sử Phong Trào Công Nhân Và Công Đoàn Thành Phố Vinh (1929-2002). [History of Workers' and Trade Unions' Movement in Vinh City (1929-2002)]. Vinh.
- Purtak, Udo (1982): Voraussetzungen und Entwicklung des Wohnungsbaus unter humiden tropischen Bedingungen dargestellt am Beispiel des Aufbaus der Stadt Vinh in der Sozialistischen Republik Vietnam. Dissertation zur Erlangung des akademischen Grades Doktor eines Wissenschaftszweiges (Dr.-Ing.). Technische Universität Dresden, Dresden. Fakultät für Bau-, Wasser- und Forstwesen des Wissenschaftlichen Rates.
- Richter, P. (2006): Der Plattenbau als Krisengebiet: Die architektonische und politische Transformation industriell errichteter Wohngebäude aus der DDR am Beispiel der Stadt Leinefelde. Hamburg. Online available at http://ediss.sub.uni-hamburg.de/volltexte/2006/3041/pdf/Text.pdf [accessed 02.05.2013].
- Schwenkel, Christina (2012): Civilizing the City. Socialist Ruins and Urban Renewal in Central Vietnam. In: Positions: East Asia Cultures Critique 20, 2. 37-470.

- Schwenkel, Christina (2013): POST/SOCIALIST AFFECT. Ruination and Reconstruction of the Nation in Urban Vietnam. In: Cultural Anthropology 28, 2. 252–277.
- Schwenkel, Christina (2014): Traveling Architecture. In: International Journal for History, Culture and Modernity 2 2. 155–174.
- Shannon, Kelly/Loeckx, André (2004): Rising from the Ashes. Vinh. In: Localising Agenda 21: Action Planning for Sustainable Urban Development und United Nations Human Settlements Programme. (ed.): Urban Trialogues. Visions, Projects, Co-productions. Nairobi. 122–155.
- Smith, David M. (1996): The Socialist City. In: Andrusz, Gregory D. (ed.): Cities after Socialism. Urban and Regional Change and Conflict in Post-Socialist Societies. Oxford. 70–99.
- Smith, John T. (1998): The Linebacker Raids. The Bombing of North Vietnam, 1972.
- Thayer, Thomas C. (1985): War without Fronts. The American Experience in Vietnam. Boulder.
- Thrift, Nigel/Forbes, Dean (1986): The Price of War. Urbanization in Vietnam 1954-85. London.
- Turley, William S. (1993): Reinventing Vietnamese Socialism. Boulder.
- Vandenpoel, Erik (2011): Khu tap the Housing. Hanoi and Vinh. Thesis voorgedragen tot het behalen van de graad van Master in de ingenieurswetenschappen: architectuur. Katholieke Universiteit Leuven, Leuven.
- Westad, Odd-Arne/Quinn-Judge, Sophie (eds.) (2006): The Third Indochina War: Conflict between China, Vietnam and Cambodia, 1972-1979. London.
- Wright, Gwendolyn (1991): The Politics of Design in French Colonial Urbanism. Chicago.