

# Self-help Architecture in the Global Cold War: East German Panel Technology for the ANC, 1982–1992\*

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## ABSTRACTS

In 1982, in a period of growing violence in apartheid South Africa, the Tanzanian authorities handed over a remote and undeveloped plot of land to the African National Congress (ANC). Here, the ANC established the Dakawa Development Centre, a residential and educational centre for South African refugees. ANC architects and managers emphasized self-help and the ambition to build the place with their own workforce, yet they also sought foreign donations and construction expertise – and managed to gather architects and other specialists from both East and West. Among these was a group from socialist East Germany that introduced a lightweight, self-help, panel-housing construction system (wall panel column system, WPC). While scholarship on East-South Cold War architectural cooperation has often focused on landmark buildings and other prestigious projects in the urban centres of developing countries, WPC was the opposite, a simple building technology setting functionality and costs above everything else and intended for rural or peri-urban sites. The relative simplicity of WPC thus allows a shifting of the research focus from architectural results to cooperation practices. This article argues that rather than a mere East German technology export, the design and implementation of WPC in Dakawa was a mutual learning process specific to the late Cold War cooperation between a socialist state and a liberation movement. Based on archival materials from South Africa and Germany, the article investigates the drivers and results of this particular mode of cooperation.

1982, in einer Zeit zunehmender Gewalt im Südafrika der Apartheid, übergaben die tansanischen Behörden dem Afrikanischen Nationalkongress (ANC) ein abgelegenes und unbebautes Grundstück. Hier errichtete der ANC das Dakawa Development Centre, ein Wohn- und Bildungszentrum für südafrikanische Flüchtlinge. Die ANC-Architekten und -Manager setzten

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auf Selbsthilfe und den Ehrgeiz, das Zentrum mit ihren eigenen Arbeitskräften zu errichten, bemühten sich aber auch um ausländische Spenden und Bauexpertise – und es gelang ihnen, Architekt:innen und andere Fachleute aus Ost und West zusammenzubringen. Darunter war auch eine Gruppe aus dem sozialistischen Ostdeutschland, die ein leichtes Plattenbausystem zur Selbsthilfe einführte (Wall Panel Column System, WPC). Während sich die Forschung über die architektonische Zusammenarbeit zwischen Ost und Süd im Kalten Krieg häufig auf Wahrzeichen und andere prestigeträchtige Projekte in den städtischen Zentren der Entwicklungsländer konzentrierte, war WPC das Gegenteil: eine einfache Bautechnologie, bei der Funktionalität und Kosten im Vordergrund standen und die für ländliche Standorte oder die urbane Peripherie gedacht war. Die relative Einfachheit von WPC ermöglicht somit eine Verlagerung des Forschungsschwerpunkts von den architektonischen Ergebnissen auf die Praxis der Zusammenarbeit. In diesem Artikel wird die These vertreten, dass es sich bei der Entwicklung und Einführung von WPC in Dakawa nicht um einen bloßen ostdeutschen Technologieexport handelte, sondern um einen gegenseitigen Lernprozess, der für die Zusammenarbeit zwischen einem sozialistischen Staat und einer Befreiungsbewegung im späten Kalten Krieg typisch war. Auf der Grundlage von Archivmaterial aus Südafrika und Deutschland untersucht der Artikel die Triebkräfte und Ergebnisse dieser besonderen Form der Zusammenarbeit.

## 1. Introduction

In the early 1980s, the African National Congress (ANC) began with the planning of Dakawa, a camp for refugees fleeing from the regime in South Africa. At this point, the idea of one day returning to a post-apartheid South Africa was still a distant vision for many of the ANC's members. Therefore, despite its intended temporary nature, the 1984 Dakawa Development Plan envisaged town-like infrastructures. Ten villages were supposed to be spread around a common centre that provided healthcare, education, and vocational training; agriculture and small industries were to make the camp self-reliant. Realizing these plans required tremendous outside assistance. This included architects from Bauakademie, socialist East Germany's Academy of Building, which introduced a prefab panel factory producing panel buildings (the wall panel column system, WPC) in Dakawa.

East German propaganda presented their contribution as a generous technology transfer in the interest of the anti-imperial struggle. In practice, East German and ANC architects developed a specific mode of cooperation that was rather characterized by mutual learning than as a unidirectional transfer. Unlike the ANC's projects with Western companies, which tended to traditional client-contractor relationships, the prefab factory was designed and implemented by East German and ANC specialists together. This argument developed here thus connects to recent scholarship that challenges the idea of simple architectural "exports" from East to South and instead points at the multiplicity of circulations and translations.<sup>1</sup>

1 C. Schwenkel, *Building Socialism – The Afterlife of East German Architecture in Urban Vietnam*, Durham 2020;

On the subject of East German architectural projects in the Global South, the work of Andreas Butter is fundamental, with various publications and projects approaching the topic from a general perspective and with a broad temporal coverage.<sup>2</sup> Hitherto research often focused on rather prestigious projects in urban centres. Examples include the planetarium in Tripolis (Libya)<sup>3</sup> the reconstruction of Hamhung (North Korea)<sup>4</sup> or Vinh (Vietnam).<sup>5</sup> Projects in the peripheries, such as Dakawa, found less scholarly attention. What remains furthermore under-researched are the actual practices of architectural cooperation on the ground – albeit with notable exceptions, such as a study about the work in Abuja (Nigeria) of Heinz Schwarzbach, who contributed to the construction of the new capital alongside other international architects<sup>6</sup> and a case study on the life and work of Ute and Peter Baumbach in Ethiopia.<sup>7</sup>

Dakawa seems a promising case study to further extend research into peripheral projects as well as practices of cooperation. Narrowly delineated in terms of space (2,800 hectares) and time (1982–1992) and hosting a variety of groups from East, West, South, and the UN, Dakawa allows to examine the cooperation practices of East German and ANC architects around WPC and juxtapose them with other actors there. This article argues that ANC and East German architects developed a genuine, collaborative mode of working and identifies three drivers: (1) the dominance of self-help ideals among the ANC leadership in Dakawa, (2) technological backwardness on the East German side, and (3) the official framing of Dakawa as a solidarity project.

First, from the beginning of the camp, the ANC leadership emphasized ideas of self-help and self-reliance in the construction process – concepts that became dominant in development aid discourses from the 1960s and 1970s. For liberation movements and the governments of newly independent nation-states in the Global South, self-help was

Ł. Stanek, *Architecture in Global Socialism – Eastern Europe, West Africa, and the Middle East in the Cold War*, Oxford 2020.

- 2 This includes a research project by A. Butter, C. Bernhardt and M. Motylińska, which resulted in an online database of East German architecture projects abroad (IRS, Architekturprojekte der DDR im Ausland, Bauten, Akteure und kulturelle Transferprozesse [IRS, GDR Architectural Projects Abroad, Buildings Actors and Cultural Transfer Processes], 2018, <https://leibniz-irs.de/forschung/projekte/projekt/architekturprojekte-der-ddr-im-ausland-bauten-akteure-und-kulturelle-transferprozesse> (accessed 15 March 2022), along with several articles and chapters (A. Butter, *Showcase and Window to the World: East German Architecture Abroad 1949–1990*, in: *Planning Perspectives* 33 [2018] 2, pp. 249–269; A. Butter, *Solidarität in Stein und Stahl? Der Architekturexport der DDR als Hebel einer 'antikolonialistischen' Außenpolitik* [Solidarity in Stone and Steel? The Export of Architecture from the GDR as a Lever for an "Anti-colonial" Foreign Policy], in: H. P. Brogatio and M. Röschner [eds.], *Koloniale Spuren in den Archiven der Leibniz-Gemeinschaft* [Colonial Traces in the Archives of the Leibniz Association], Halle (Saale) 2020, pp. 128–143), as well as a recent book (A. Butter and T. Flierl [eds.], *Architekturexport DDR – Zwischen Sansibar und Halensee* [Architectural Export GDR – Between Zanzibar and Halensee], Berlin 2023).
- 3 T. Scheffler, *Das Planetarium in Tripolis* [The Planetarium in Tripolis], in: Butter and Flierl (eds.), *Architekturexport DDR*, pp. 152–177.
- 4 Y.-S. Hong, *Cold War Germany, the Third World, and the Global Humanitarian Regime*, Cambridge 2015.
- 5 C. Schwenkel, *Den Globalen Sozialismus aufbauen* [Building Global Socialism], in: Butter and Flierl (eds.), *Architekturexport DDR*, pp. 76–93.
- 6 A.-K. Fenk, R. Lee, and M. Motylińska, *Unlikely Collaborations? Planning Experts from Both Sides of the Iron Curtain and the Making of Abuja*, in: *Comparativ* 30 (2020) 1/2, pp. 38–59.
- 7 M. Motylińska and P. Phan, "Not the Usual Way?" On the Involvement of an East German Couple with the Planning of the Ethiopian Capital, in: *Architecture Beyond Europe* 16 (2019).

supposedly based on solidarity and equality among all involved parties and promised to overcome colonial power relations and their subaltern patterns of investment and repression.<sup>8</sup> In Dakawa, the ANC's vision to "build the camp with our own hands"<sup>9</sup> while being faced with labour shortages resonated with WPC as a technology that – in theory – was less labour intensive than traditional construction methods. Moreover, the idea of self-help implied that the ANC could manage the factory on its own, which was to be achieved through its involvement in its construction as well as through extensive training of its construction workers, both on the spot and in Germany.

Second, the collaborative work approach of GDR and ANC architects was driven by conditions of shortage and technological backwardness during the crisis of socialist economies in the 1980s. East Germany's structural hostility to innovation and reform was further reinforced by the mounting debt problems of the Global South, which had a direct impact on its national economy.<sup>10</sup> This economic situation also showed in the "East-South" architectural projects of the 1980s. The last decade of state socialism was a period in which the architectural industries in the socialist bloc were often unable to compete on a global level. In earlier decades, "big", showpiece architectural projects of political importance were often used as instruments to gain legitimacy. In the 1980s, the number of projects abroad decreased and in the remaining projects the balance between solidarity and economic interests shifted towards the latter.<sup>11</sup> Moreover, knowledge flows often reversed; rather than putting expertise from the socialist bloc to work in the Global South, architects from socialist countries now went to the Middle East, the Gulf, and North Africa to become acquainted and work with new technologies, like computer-aided design (CAD).<sup>12</sup> This translated to Dakawa insofar as Bauakademie placed considerable economic expectations on the WPC project, while technologically, the system was neither innovative nor suitable for the conditions in Tanzania. As a result, WPC was far from being the East German out-of-the-box solution presented, yet the amount of ANC expertise invested in the project – on roofs and windows to ventilation – was tremendous.

Third, for the government in East Berlin, which was recognized only by socialist states in the early years, forging relations with liberation movements in the Global South became an instrument to gain legitimacy. Support for liberation movements eventually turned into "a hallmark of GDR foreign policy"<sup>13</sup> and remained an important foreign policy pillar even after the international isolation was lifted in the early 1970s. At the same time, Ulrich van der Heyden and Anja Schade argue that this was not just a matter of political

8 H. Büschel, *Hilfe zur Selbsthilfe*, Frankfurt am Main 2014.

9 ANC Archive, BM/28/201/3, ANC Dakawa Technical Department, Planning and Construction Process Briefing, 12.04.1985.

10 A. Steiner, *Von Plan zu Plan - Eine Wirtschaftsgeschichte der DDR*, München 2004; M. Trecker, *Red Money for the Global South: East-South Economic Relations in the Cold War*, Abingdon 2020.

11 Butter, *Solidarität in Stein und Stahl*, pp. 128–43.

12 Stanek, *Architecture in Global Socialism*, p. 298.

13 U. van der Heyden and A. Schade, *GDR Solidarity with the ANC of South Africa*, in: L. Dallywater, C. Saunders, and H. A. Fonseca (eds.), *Southern African Liberation Movements and the Global Cold War 'East'*, München 2019.

strategy, not just a “prescribed solidarity”, but actually based on a genuine commitment among both the elites and the population at large. Many ANC members, meanwhile, understood socialism as an alternative social model for a future post-apartheid South Africa, even though this perception declined over the years, as scarcities and economic problems in socialist East Germany became increasingly visible.<sup>14</sup> On the one hand, East German solidarity narratives about Dakawa were a matter of propaganda, further underlined through the involvement of the Socialist Party’s youth movement Free German Youth (*Freie Deutsche Jugend*, FDJ). On the other hand, ANC documents show that the cooperation with Bauakademie indeed differed from that of the ANC’s projects with Western architecture firms. Referred to by the ANC as “friends” and “comrades”, the East German team lived in the camp side-by-side with the residents and were integrated into the ANC work processes.

These three drivers – the ANC’s self-help ideals, East German technological backwardness, and notions of solidarity – were key forces behind the unusually collaborative approach of the East Germans and the ANC in Dakawa. The result of this cooperation could be considered a failure when looked at from a purely material perspective. On another level, however, one might argue that it resonated with the ANC’s educational ambitions for Dakawa. When WPC is understood as more than just steel frames and concrete, when architecture is seen as an ongoing process that includes both material matter and human mattering,<sup>15</sup> then WPC becomes one of many modules that, taken together, turned Dakawa into a “radical education and living experiment”, in the phrasing of the Bauhaus Lab 2022.<sup>16</sup>

This paper is divided into four main sections before a conclusion. First, the idea of the Dakawa Development Centre is explained; then, the story of the technology and its implementation is told. Next, the ANC vision for development is considered, and finally, issues around this experience of East-South collaboration are considered. Unless otherwise indicated, the narrative and insights are based on original research drawing on ANC and various German archival sources.

## 2. The Dakawa Development Centre

In 1984, the Dakawa Development Plan was published by a Norwegian consultancy (NORPLAN) as the central planning document for the future development of Dakawa.

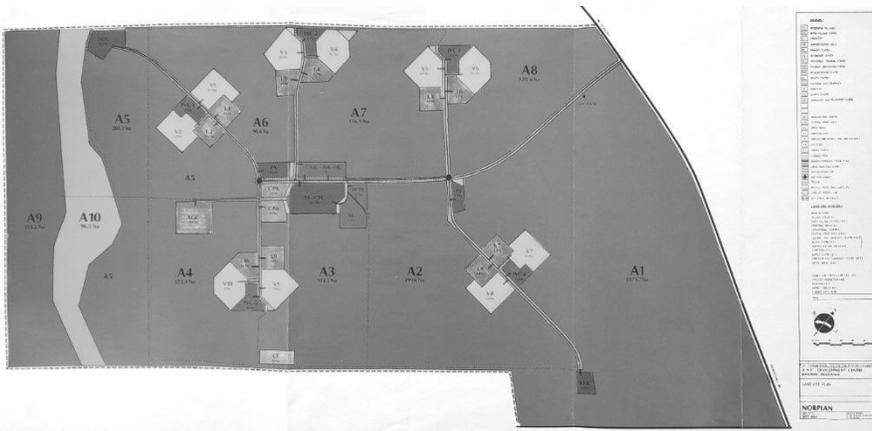
14 Ibid.

15 See, e.g., J. Jacobs and P. Merriman, *Practising Architectures*, in: *Social & Cultural Geography* 12 (2011) 3, pp. 211–222.

16 The Bauhaus Lab 2022 examined the ANC camps in Dakawa and Mazimbu from the broader perspective of the ANC’s anti-apartheid struggle, resulting in an exhibition in Dessau (August 2022–January 2023) that understood these sites as “microcosms of a future South Africa”. Although not formally affiliated with the Bauhaus Lab 2022, the author was invited to contribute to the exhibition opening with a presentation of his research on the WPC technology and its implementation in Dakawa. Unless otherwise indicated, this paper is based on original research.

The plan envisaged a decentralized settlement approach. Ten small villages were to be quickly created and consolidated as functioning units. The villages would be built in pairs, with basic infrastructure and facilities provided (Figure 1). This rather ambitious plan, which foresaw more than 5,000 residents, was never fully implemented: by 1990, Dakawa had 1,200 residents, and many of the “disaster houses” that were only to have solved immediate shelter problems during the early stages remained, never removed. Instead of ten villages, the revised 1990 Development Plan was limited to four villages.<sup>17</sup>

Figure 1. 1984 NORPLAN ground plan for Dakawa: ten villages were planned, to be built as five pairs and clustered around “Inter-Village Centres” with small industries.<sup>18</sup>



Upon the suggestion of Spencer Hodgson, the ANC’s chief architect in Dakawa, the camp was officially named the “Dakawa Development Centre” – a name that expresses the specific function of Dakawa, which was closely related to Mazimbu, another ANC facility located around 50 kilometres away. Dakawa was to serve as an extension of Mazimbu and its Solomon Mahlangu Freedom College (SOMAFCO), an educational institution (vocational and academic) founded by the ANC in 1977.

Dakawa was supposed to complement certain functions that SOMAFCO needed, most notably the reception of newly arriving young ANC members, whose personal, educational, and security backgrounds were checked before being sent there. However, there was not only a formal distribution of functions between Mazimbu and Dakawa, but the residents and management of Dakawa repeatedly described it as a “dumping ground” where people who were “problematic” in Mazimbu and elsewhere were moved to.<sup>19</sup> From the

17 ANC Archive, DDC/17/6/13, ANC Dakawa Zonal Youth Section, Report for the Third Dakawa Seminar, 1989; S. Morrow, B. Maaba, and L. Pulumani, *Education in Exile: SOMAFCO, the ANC School in Tanzania, 1978 to 1992*, Pretoria 2004, p. 145.

18 Source: ANC Archive, BM/28/201.

19 Morrow, Maaba, and Pulumani, *Education in Exile*, p. 149.

beginning, Dakawa was faced with heavy consumption of alcohol and marihuana, including the leadership, and often saw violent incidents. The living conditions in Dakawa were relatively poor, and the balance between authoritarian leadership and democracy in the camp remained a constant struggle and often led to discontent among the residents.<sup>20</sup> In 1989, the Dakawa Zonal Youth Section, which took a relatively critical stance toward the Dakawa leadership, expressed its disappointment with the overall situation in the camp. Repeating the Dakawa-as-a-dumping-place argument, they judged the entire project a failure, pointing to the lack of sufficient welfare, among other perceived failings. The *umphando* system meant that Dakawa residents were supplied with basic necessities regardless of their labour situation, while workers received only small compensation for their work – too little even to cover basic necessities, according to the Youth Section. These problems were compounded by blending the roles of students and workers, with students commonly reluctant to contribute to labour needs that were not directly related to their education.<sup>21</sup>

This rather dire situation affected the construction activities in Dakawa. An internal report claimed that heavy drinking, stealing, staying away from work, and disappearing to nearby villages had significantly affected work progress. Water shortages inhibited construction efforts, and the Construction Department warned in 1988 that the motivation of many construction workers had further decreased due to problems with salary payments. Against this background, the Youth Section concluded in 1989 that almost nothing had been achieved in terms of housing.<sup>22</sup>

Analysing the planning and construction at Dakawa, chief architect Hodgson found them to be complicated, far more so than they had been during the early phases of SOMAFCO at Mazimbu. For Hodgson, these problems began with the lack of infrastructure and nearby towns, limited access in the rainy season, and problems with water and electricity supply. Poor soil conditions and the unavailability of crushed stone as a construction material further hampered progress. Moreover, he raised concerns that the planning and construction leadership was still based at Mazimbu and grappling with completing work on SOMAFCO, hindering progress in Dakawa. For Hodgson, one of the biggest challenges was the lack of skilled manpower, “coupled with the decision that we build Dakawa primarily with our own hands”<sup>23</sup> – a decision that met with many obstacles in practice (see below).

20 Ibid, p. 143f.

21 ANC Archive, DDC/17/6/13, ANC Dakawa Zonal Youth Section, Report for the Third Dakawa Seminar, 1989.

22 Ibid; ANC Archive, DDC/13/12/31, ANC Dakawa, Report on the present Dakawa situation, n.d.; ANC Archive, DDC/13/7/1, ANC Dakawa Construction Department, Construction Report, 29 August 1986; ANC Archive DDC/13/7/3, ANC Dakawa Construction Department, Report to the Directorate, 26 February 1988.

23 ANC Archive, BM/28/201/3, ANC Dakawa Technical Department, Planning and Construction Process Briefing, 12 April 1985.

### 3. The WPC Technology

Based on its special relationship with the ANC, it is no surprise that East Germany already had links to SOMAFCO and Mazimbu before Dakawa was planned. The FDJ (Socialist Party youth movement) had been sending volunteer teachers to SOMAFCO since 1981, and Mazimbu (and later also Dakawa) had been directed by the ANC's Oswald Dennis, an engineer who graduated in the German Democratic Republic (GDR). The original East German contribution to Dakawa dated back to 1982, the year of the camp's foundation, when the GDR's Ministry of Foreign Affairs negotiated with the International Labour Organisation (ILO) in Geneva about a potential contribution of prefabricated buildings for a vocational training project in Dakawa later known as the Vocational Training Centre (VTC).

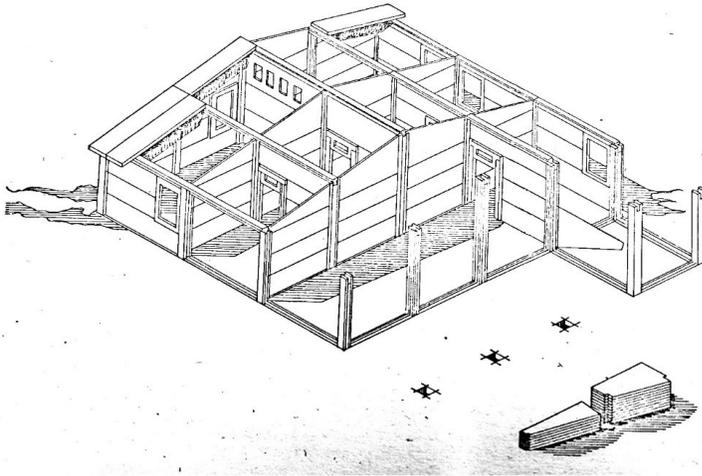
Diverging financial expectations hampered the envisaged ILO-GDR cooperation. The ILO and the Ministry of Foreign Affairs continued negotiating in the following years but could not reach agreement. In 1985, the ANC took matters into its own hands and approached the GDR's Solidarity Committee, with whom they had a long-standing relationship. Circumventing the ILO and the ministry, the ANC requested the Solidarity Committee to fund the Vocational Training Centre using East German funds-in-trust at the United Nations Development Programme (UNDP), either directly or by pushing the ministry to do this. Interestingly, the Head of the Solidarity Committee was unaware of the ongoing negotiations between the ILO and the ministry and only learned about them through the ANC. Eventually, however, these plans failed to materialize. The Solidarity Committee rejected direct funding for the Vocational Training Centre as it exceeded its financial capacities, and the Ministry of Foreign Affairs did not come to an agreement with ILO.<sup>24</sup>

Still, the failed talks marked a turning point, as they raised the attention of the Solidarity Committee for the first time. The ANC and the committee soon started another cooperation project, this time without the ILO but part-financed by the United Nations Centre for Human Settlements (UN HABITAT) and with Bauakademie as an architectural partner – hence, the introduction of the WPC factory into Dakawa. The factory was supposed to produce lightweight panels and columns that could be assembled to different building types modularly (Figure 2).

While the Solidarity Committee coordinated the overall project, Bauakademie was in charge of the development and practical implementation of the WPC factory. UN HABITAT part-financed the East German contribution, most notably the staff costs of Mr. Wurbs, a Bauakademie architect who repeatedly spent periods in Dakawa where he cooperated closely with Hodgson. Wurbs was in charge of installing the WPC factory and supervising the ANC construction workers who were supposed to work on and in the

factory. The Solidarity Committee financed the factory as a gift for the ANC. It reportedly raised 1.1 million GDR marks for Dakawa through popular fundraising.

Figure 2. The WPC system.<sup>25</sup>



The, FDJ, meanwhile, was involved through a friendship brigade. This brigade comprised electricians, metalworkers, and other professionals who supported Wurbs and the Academy of Building in setting up and running the WPC factory and beyond. In addition to these institutions, a dozen other East German organisations were involved, including construction companies, the Institute for Tropical Building of Weimar University (Hochschule für Architektur und Bauwesen, HAB), and also the Writer's Association (Schriftstellerverband), which considered granting stipends to East German authors for stays in Dakawa.<sup>26</sup>

While notions of solidarity were important for organisations like the Writer's Association and FDJ, Bauakademie also had a clear business interest in the project. With the WPC factory in Dakawa, they believed they had an effective opportunity to advertise this construction method and attempted to use it as a reference project when promoting the method to potential customers.

Indeed, the ANC showed a general interest in purchasing additional factories for other camps, yet this never materialized. Bauakademie also targeted other governments – such

25 Source: Scientific Collections at the Leibniz Institute for Research on Society and Space (IRS Archive), A2\_2\_71.

26 ANC Archive, DDC/13/12/9, ANC Dakawa, Report of the Meeting between ANC and FDJ held in Dakawa, 03 June 1986; German Federal Archive (BArch), DZ8/34, Bericht über die Durchführung der Solidaritätsaktion (...) [Report on the Implementation of the Solidarity Action (...)], 24 May 1988; BArch, B513/52, UNCHS Project Document, 1986; BArch, DZ8/347, Leskien an Kerndl, 28 December 1987.

as Iraq, where they saw tremendous potential after the devastation of the Gulf War.<sup>27</sup> Beyond WPC, the Academy of Building was convinced that Dakawa bolstered the East German reputation in the HABITAT administration. In the GDR's final years, the commercial exploitation of HABITAT became a strategic priority for Bauakademie. Reportedly, it already received offers for further cooperation as a direct result of this project.<sup>28</sup>

When Wurbs arrived in Dakawa in 1987, there were several practical challenges, resulting in a six-month delay of the entire project.<sup>29</sup> The misrouting of one of the containers with the WPC equipment was presented to HABITAT as the primary reason for the delay.<sup>30</sup> Additional reasons were discussed in a letter from Wurbs to his supervisor Gottfried Wagner in May 1987. In the letter, Wurbs complained that the FDJ brigade is “so far 90% busy with its own problems (building its shelters)”; he continued with the complaint that “Spencer’s office is completely understaffed”, causing him to be “doing all the pre-construction work on my own at the moment”.<sup>31</sup> The panel production could have reached 80 or 90 per cent of the factory’s capacity, a report claimed, yet in practice, only attained 20 to 50 per cent. A high workload, an overly narrow schedule, the poor quality of equipment delivered, and wrongly delivered tools all impeded the implementation and could only be remedied through improvisation and the personal commitment of Wurbs and his colleagues.<sup>32</sup>

In May 1988, when Wurbs had already left, a team from Weimar University visited Dakawa (the University had been involved in Dakawa earlier through a student competition). They remarked that it was challenging for the ANC to run the factory without support and proposed sending one of their architects there. This plan did not materialize, but all parties were aware of the challenges in Dakawa. Acknowledging the lack of East German expertise, Oswald Dennis even managed to secure funding from a Danish NGO for another six-month stay of Wurbs – another plan that failed to materialize.<sup>33</sup> Later, in September, the East German side discussed sending Wurbs to Dakawa again at their own expense – this time formally not as a Bauakademie representative but on

27 Scientific Collections at the Leibniz Institute for Research on Society and Space (IRS Archive), A1\_109\_12, Bauakademie, Konzeption zur Sicherung der Erfüllung der Außenwirtschaftsaufgaben [Bauakademie, a Concept to Ensure the Fulfilment of Foreign Trade Tasks], 15 October 1987.

28 IRS Archive, A1\_109\_11, Bauakademie (BA), Exportrapport, 06 November 1986; IRS Archive, A2\_2\_30\_15, BA, Bericht über die Experten- und Konsultativberatung der Gruppe der osteuropäischen sozialistischen Staaten (...) [BA, Report on the Expert and Consultative Consultation of the Group of Eastern European Socialist States (...)], 04 May 1988.

29 BArch, DZ8/347, Wurbs (BA) an Reichardt (SK), 22 June 1987.

30 BArch, DZ8/347, United Nations Development Programme, UNDP Project Performance Evaluation Report, 29 September 1987.

31 “FDJ-Brigade ist bisher zu 90% mit ihren eigenen Problemen beschäftigt (Aufbau ihrer Unterkünfte) [...] Spencers Büro ist völlig unterbesetzt. Alle bauvorbereitenden Arbeiten führe ich im Augenblick alleine aus.” IRS Archive, A2\_2\_89, Wurbs (Bauakademie) an Wagner (Bauakademie), 26 May 1987 (own translation). This observation was confirmed by an interview with Wurbs (and presented at the Bauhaus Lab exhibition; see above, note 16).

32 BArch, DZ8/347, Wagner (BA) an Reichardt (SK), 1987; BArch, DZ8/346, BA, Kinderzentrum Dakawa Dokumentation, 1988; BArch, DZ8/347, SK, Bericht über die Durchführung der Solidaritätsaktion der DDR (...), 24 May 1988.

33 IRS Archive, A2\_2\_14, Schunke (MFAA) an Reichardt (SK), 17 May 1989.

the ticket of the FDJ brigade, as they had already done once before. At this time, two months before the fall of the Berlin Wall, the WPC factory was defunct and out of use. The FDJ, Solidarity Committee, and Ministry of Construction agreed on a plan for the re-establishment of the factory, highlighting the reputational damage that would otherwise be caused.<sup>34</sup>

Half a year later, following the political changes in East Germany, the Solidarity Committee's executive board dissolved itself. Shortly afterwards, a legal successor was founded, which, under a new name, has engaged in development aid to this day. The new institution also took over the responsibility for the friendship brigade in Dakawa. Similarly, Bauakademie was formally dissolved prior to the German reunification.

With these fundamental political changes, Dakawa became less of a priority for all three institutions (the FDJ, Solidarity Committee, and Ministry of Construction). However, this did not mean the end of WPC. The ANC's Construction Department reported the resumption of the production of WPC prefab panels in January 1990, and by April, their WPC team consisted of eight ANC workers.<sup>35</sup> Moreover, two (out of 12) members of the friendship brigade were still present in Dakawa in the summer of 1990, now officially on behalf of the Solidarity Committee's successor organisation. While the new institution had funds to cover their stay until the end of the year, financial insecurity dominated their work, which was further aggravated by the reported theft of USD 1,700 from the brigade's cash reserves. With the changing political situation in South Africa, the ANC reorganised its construction activities in Dakawa in favour of a new Maintenance Department in 1991, which also took over the production of the prefab panels.<sup>36</sup> Before Dakawa's closure in 1992, the ANC sold most movable parts in Dakawa to cover its expenses.<sup>37</sup> It remains unclear whether the WPC factory was among these sales.

Spencer Hodgson and his team at the Dakawa Construction Department had envisaged using the system for all buildings in one area of the camp. They constructed a creche, a related kitchen/administration building, and a tuck shop with the WPC technology. At some point, when it was apparent that WPC was relatively costly compared to traditional construction methods and that the quality of the produced panels remained below expectations, Oswald Dennis suggested using the WPC system only for the farm

34 ANC Archive, DDC/44/148/3, Schunke (MfAA) an Morodi (ANC), 17 July 1989; BArch, DZ8/347, several documents, 1988.

35 ANC Archive, TM/42/33/2, ANC Dakawa Personnel Department, ANC Development Centre, 24 April 1990; ANC Archive, DDC/13/7/15, ANC Dakawa Construction Department, Report to the Administration, 2 February 1990.

36 ANC Archive, DDC/13/12/5, ANC Dakawa Vocational Training Centre, Monthly Report to the Administration, 19 June 1990; BArch B513/4, Informationen zur Finanzlage in den Entwicklungsländern [Information on the Financial Situation in Developing Countries], 1990; BArch B513/4, Rodewald, Gerbatsch (FDJ) an Zentralrat FDJ, 14 January 1990.

37 S. Morrow, Dakawa Development Centre: An African National Congress Settlement in Tanzania, 1982–1992, in: African Affairs 97 (1998), pp. 497–521.

buildings and fences in Dakawa, which might explain the continued use of the factory until at least 1991.<sup>38</sup>

#### 4. The ANC's Self-help Vision for Dakawa

Sean Morrow describes the philosophy of the ANC as “Education with Production” and “Ending the Divorce between Manual and Mental Labour”.<sup>39</sup> In this conception, Dakawa was a place where ANC members could receive vocational training and implement their new knowledge through the development of their settlement, whether in the construction of housing, agriculture, or other small industries. For the regional treasurer, housing was the most critical issue where self-help could help improve the own living conditions:

*[T]he alternative of prolonging the existing conditions of people living in tents cannot be allowed. We must promote self-help. The community must be mobilized and organized to provide their own accommodation. [...] This will engender a sense of achievement and personal satisfaction and contribute to a more homogenous and involved community.*<sup>40</sup>

The slow construction speed of the ANC's own workforce has been recognized not only by the ANC, but also by its donors. A 1988 report of Hodgson's department gave the following warning:

*[N]ow one of the donors has said “enough is enough”. We want to see our materials being used. We know you people need housing, it is either you give some of the houses on contract or you don't get any money for the next year [...]. The question we must ask ourselves is, what is going to happen to the comrades if we have to give most of our work out on contract? Are we going to sit and wait for other people to do the building for us or are we seriously going to change the situation in the interest of the revolution?*<sup>41</sup>

In the context of labour shortages and the ANC's self-help ambition, prefab construction technologies were a promising solution. Two different prefab systems were used in Dakawa: WPC and a similar Swedish system. At first glance, WPC seemed to meet Hodgson's requirements; it did not necessarily require heavy machinery, and the heaviest panel module to be produced weighed only 150 kilogrammes. Bauakademie's intention with the buildings was to consider sun and wind conditions for natural cooling. Moreover, the WPC system was designed to be as standardized as possible, with the smallest possible amount of different panel modules to be produced (see Figure 3). This reduced

38 ANC Archive, TM/42/37, Evaluation of the ANC School Centre SOMAFCO at Mazimbu and the ANC Development Centre at Dakawa, Tanzania, 1989.

39 Morrow, Dakawa Development Centre, p. 507.

40 ANC Archive, BM/28/201/8, Regional Treasurer, Preparatory Meeting for the Dakawa Donors Conference, 12 April 1985.

41 ANC Archive, DDC/13/7/7, ANC Dakawa Construction Department, Report to the Administration, 27 April 1988.

construction efforts and the need for different types of equipment, and it also simplified the preparation of technical drawings.

According to Bauakademie calculations, building with WPC was also cheaper than using the traditional methods of the region<sup>42</sup> – a claim that other experts in Dakawa challenged (see below). In addition to the provision and installation of one WPC factory in Dakawa with a maximum annual output of buildings covering 5,000 m<sup>2</sup>, the GDR's contribution included initial support for running the factory and the training of ANC staff to empower them to take over. For this purpose, 12 ANC members received two months of training at a panel factory in Bautzen, East Germany.<sup>43</sup>

In practice, the idea of WPC as a self-help instrument met with several obstacles. Hodgson's department repeatedly pointed to the shortage of manpower as a key problem for the construction of housing; there were sometimes only three workers assigned to WPC, compared to the dozen who had been trained in Bautzen.<sup>44</sup> In 1989, in light of these difficulties, Oswald Dennis warned that the ANC was "failing to meet even the minimum commitment to our friends [from the GDR]".<sup>45</sup> Also, windows, roofs, and other elements were not included in the WPC system and had to be designed and constructed separately, which corrupted the envisaged efficiency benefits of the technology. A Danish engineer who consulted Dennis came to the conclusion that "looked upon from a distance, the [WPC] buildings appear as logical, simple and handsome structures with the characteristics of the slender columns creating the life of light and shade in the facades", but that "Looked upon nearby, the system has got certain limits".<sup>46</sup>

The Danish engineer went on to describe several technical insufficiencies and recommended a clarification of the functions for which WPC should be used (mostly simple constructions) and which not (e.g. dwellings).<sup>47</sup> The Academy of Building and the GDR foreign trade company Limex acknowledged some of these constraints – for example, that the WPC system was less suitable for the conditions of developing countries than envisaged, and that even though the weight of the panels was limited, in practice, they were still too heavy for manual construction. Bauakademie architects also eventually concluded that the panel production was too complicated, making it difficult to run the factory without their presence.<sup>48</sup>

42 BArch, DZ8/346, Kinderzentrum Dakawa Dokumentation, 1988; BArch, DZ8/347, Bericht über die Durchführung der Solidaritätsaktion der DDR (...), 24 May 1988.

43 BArch, DZ8/347, UNDP Project Performance Evaluation Report, 29 September 1987.

44 ANC Archive, DDC/13/12/31, Report on the Present Dakawa Situation, n.d.

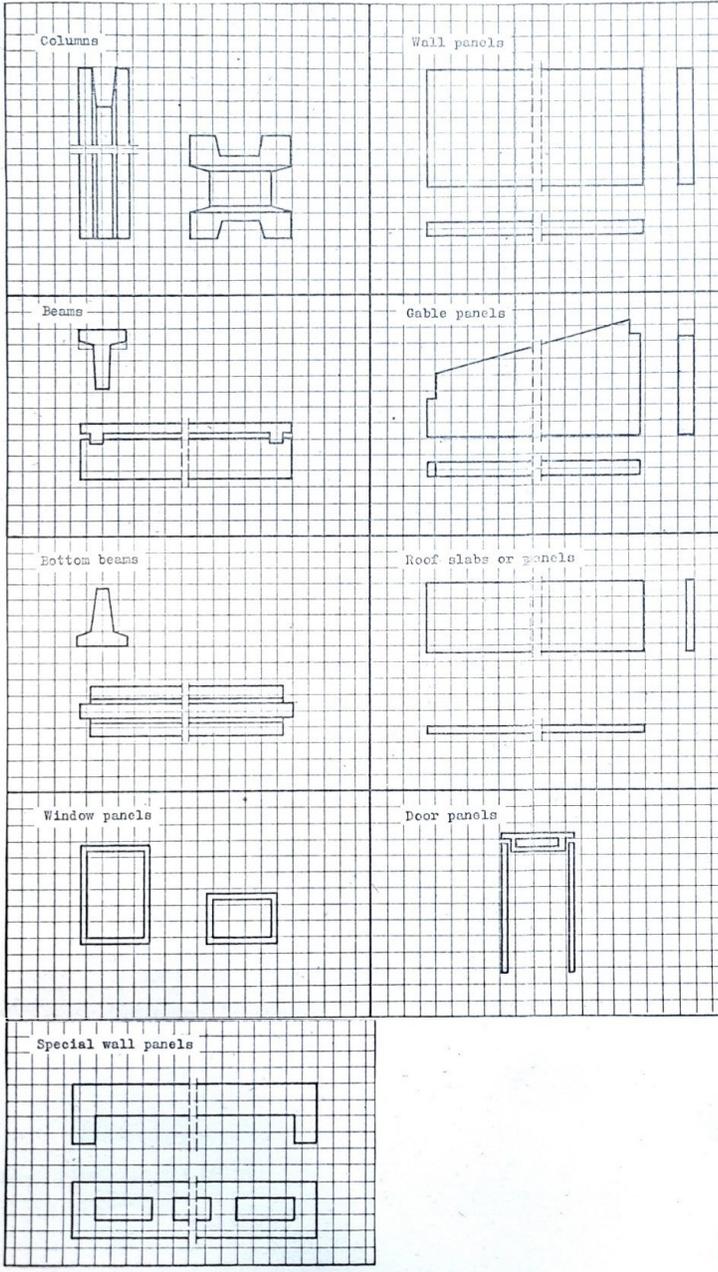
45 ANC Archive, DDC/17/6, Construction Report for the 3rd Dakawa Seminar, 1989.

46 ANC Archive, TM/41/29, A Technical and Qualitative Report of the Building Activities and Infrastructure Present and Past to Be Found at Dakawa and Mazimbu, 1988.

47 Ibid.

48 BArch, B513/52, Dakawa Projektbeschreibung, 02 May 1990; BArch, DZ8/347, Bericht zur Reise, 30 May 1988; BArch, DZ8/347, Bericht über die Durchführung der Solidaritätsaktion der DDR, 24 May 1988.

Figure 3: Overview of different panels produced by the WPC factory.<sup>49</sup>



A Swedish company has provided the other “tilt-up” prefab system used in Dakawa. For Bauakademie, the Swedish presence was challenging; the Germans perceived the Swedes as a direct competition, sometimes exaggerating this contest.<sup>50</sup> According to the East German interpretation, WPC eventually won this competition. The Swedish model, they claimed, was only applicable to residential buildings and required more materials, the walls were not suitable for the climate conditions in Dakawa, and the floor plans were inflexible. Moreover, unlike WPC, the Swedish system required hydraulic equipment to assemble the buildings.

After Wurbs had left Dakawa, Bauakademie raised concerns that the Swedish competitor might exploit the vacuum created by his departure. ANC documents show that this fear was unjustified. ANC construction workers considered the Swedish system a “failure” early on due to its technical insufficiencies; its continued usage can only be explained by poor communication between the management and the workforce.<sup>51</sup> The tilt-up system was unsuitable for the labour and construction conditions of a place like Dakawa, it had a high risk of accidents, even fatal ones, and a report thus recommended abandoning the Swedish system.<sup>52</sup> Tensions within the East German team emerged, however, when some FDJ members “switched sides” and supported the ANC by handling the Swedish prefabs while allegedly neglecting their commitments to the WPC system.<sup>53</sup>

Despite these challenges, the WPC and the tilt-up system were both most important construction methods for Hodgson and Dennis. Other relevant construction systems included “disaster houses” imported from Zimbabwe and other (Danish, British, etc.) construction methods. While the ANC acknowledged certain advantages of WPC – including that it came closest to the idea of self-help – both WPC and the Swedish tilt-up system turned out to be more expensive than the commonplace local way of building with cement blocks – which, in fact, remained the ANC’s preferred construction method. This method

*[...] has for quite some years proved to be appropriate to the builder as well as to the user of the building, [...] can always be altered and improved during the stage of planning, and to a certain extent also at a much later stage. The system is well-known to craftsmen and workers available, [...] and] at present, there is no reason to believe that any other system for persistent minor structures should be faster or cheaper for building in Tanzania.*<sup>54</sup>

Whether in relation to East Germany or Sweden – or to the Norwegians or various UN bodies in Dakawa – the ANC’s approach can be characterized by a sense of agency, a motif that has been observed by various Cold War and architectural history scholars

50 BArch, DZ8/347, Dakawa by R. Mfenyana, 1987.

51 ANC Archive, DDC/17/6/13, ANC Dakawa Zonal Youth Section, Report for the Third Dakawa Seminar, 1989.

52 ANC Archive, TM/41/29, A technical and qualitative report, 1988.

53 IRS Archive, A2\_2\_14, Aktennotiz über ein Gespräch mit dem FDJ-Zentralrat (...) [Memorandum of a conversation with the FDJ Central Council (...)], 6 February 1989.

54 ANC Archive, TM/41/29, A technical and qualitative report, 1988.

in recent years.<sup>55</sup> In preparation of a 1985 donor's conference for Dakawa, the ANC's Project Department recommended that "we should not limit ourselves to a few friends, governments and non-governmental organizations", and pointed also at Western European governments.<sup>56</sup> In addition, the ANC relied on significant UN funding, leading to a mosaic of different donors, which became increasingly difficult to handle for the management.<sup>57</sup>

The ANC's growing focus on Western assistance contradicted the GDR position that the ANC should limit its cooperation with the West. The ANC, on the other hand, used the GDR's fear of Western influence in Dakawa to mobilize GDR support. In 1985, before the East German commitment to Dakawa was agreed, the ANC explicitly highlighted in talks with the Solidarity Committee that socialist countries were absent at their construction sites and that the sites were dominated by capitalist countries – only to be followed by a concrete request for GDR support. At the same time, the ANC promised the Solidarity Committee to limit cooperation with capitalist companies, yet refused to be drawn into any confrontation in this regard – finally, Western companies remained dominant in Dakawa until the end.<sup>58</sup> Another case in point is tensions around the Vocational Training Centre (VTC) in which some of the FDJ friendship brigade members also served. In 1989, the head of the brigade even complained in a letter to Berlin that the director of the VTC would prefer aid from capitalist states and was even trying to push the brigade out of the camp.<sup>59</sup>

## 5. Collaborative Implementation

East German propaganda presented WPC as a showcase of GDR solidarity, as the selfless sharing of construction expertise with developing countries. In fact, however, the Academy's ambitions of exporting building projects and services to the Global South were limited by their ability to translate their expertise to the conditions of the Global South and lack of knowledge about the specific conditions for building in developing countries.<sup>60</sup> This was a major disadvantage, especially compared to Western multinational construction companies with branch offices across the world. In the 1980s, the

55 E.g. Stanek, *Architecture in Global Socialism*.

56 ANC Archive, BM/28/201/6, Preparatory Meeting for the Dakawa Donors Conference, 12 April 1985.

57 ANC Archive, NY/35/166/9, UNDP Project Document, 1991.

58 BArch, DZ8/318, Bericht über die Verhandlungen des ANC, FINNSOLIDARITY und Solidaritätskomitee der DDR [Report on the Negotiations of the ANC, FINNSOLIDARITY and Solidarity Committee of the DD], 04 April 1985.

59 E. Burton, *Solidarität und Ihre Grenzen. Die "Brigaden der Freundschaft" der DDR* [Solidarity and Your Limits. The "Friendship Brigades" of the GDR], in: F. Bösch, C. Moine, and S. Senger (eds.), *Internationale Solidarität. Globales Engagement in der Bundesrepublik und der DDR*, Göttingen 2018, pp. 152–185.

60 Challenges with translating the own expertise became apparent in a seminar series for architecture and urban planning professionals from the Global South, organised by the same team at Bauakademie (cf. J. Marcks, *The Local People Do not Favour Residingi Apartments* – Bauakademie's UN HABITAT Seminars on Housing for the Global South, in: *Střed | Centre 02* [2022], pp. 91–111).

Academy of Building launched several capacity-building initiatives, yet this did not lead to growing export figures.<sup>61</sup>

The relative lack of knowledge has historical roots typical of most socialist states and further to the GDR's international isolation until the early 1970s. Western competitors could build upon networks and expertise from the colonial era, which socialist states were unable to do (although they sometimes used the shared experience of having been colonized or the argument of colonial "innocence" when negotiating with their counterparts from the Global South).<sup>62</sup> This unpreparedness may at least partially explain the significant adjustments that East German and ANC architects made to WPC before implementing it in Dakawa. Internal reports later acknowledged that WPC had first and foremost been developed for the conditions in East Germany.<sup>63</sup>

In fact, the ANC considered prefab and low-cost technologies already before WPC; at some point, Hodgson's Construction Department developed sketches for its own low-cost housing scheme, which seems like a blueprint for WPC.<sup>64</sup> In 1986, when the WPC project was still in its planning phase, Hodgson travelled to East Germany several times, where he also met with Wurbs and his supervisor Gottfried Wagner. At these meetings, they discussed how the WPC system must be adjusted for the conditions in Dakawa; amongst other things, Hodgson pointed to the impact of whirlwinds in Dakawa, and suggested adjusting the footing to provide additional protection against termites as well as other construction-related issues.<sup>65</sup>

As well as these personal meetings, the three had an extensive mail exchange. In these exchanges, Hodgson proposed significant alterations and often included technical drawings with his letters. These included, for example, discussions on doors and roofs and also how to adjust the standardized measurements of the WPC system to fit the ANC's Mazimbu standard.<sup>66</sup> In some cases, this collaborative process improved the system, while in other cases, the outcome was more of a bad compromise – like with the roofing, where the attempt was to combine the Mazimbu standard trusses (designed for a spacing of 120 cm) with the WPC system's fixed distance of 180 cm between the columns. As a consultant of Oswald Dennis remarked, pointing at the incompatibility of both approaches, "this has got out of hand".<sup>67</sup> Eventually, these observations contradict the idea of WPC as an out-of-the-box solution.

61 The capacity-building programme Grundlagen der Exportprojektierung ran from 1984 to 1988 with around 500,000 marks invested annually (see e.g. BArch, DH2/10901, Grundlagen der Exportprojektierung, 1984). For export figures, see Bauakademie annual reports (Geschäftsberichte 1980–1989, BArch, DH2/20717 to DH2/20726).

62 Stanek, *Architecture in Global Socialism*, pp. 82ff.

63 BArch, B513/52, Solidaritätsdienst International, ANC-Entwicklungszentrum Dakawa, 2 May 1990.

64 ANC Archive, TM/41/24, Low-Cost Housing Project Proposals, n.d.

65 BArch, DZ8/346, Beratungen Im Solidaritätskomitee Mit Dem ANC-Vertreter Mr. Spencer Hodgson [Solidarity Committee Deliberations With ANC Representative Mr Spencer Hodgson], 24 July 1986; BArch, DZ8/346, Beratung Mit Dem ANC-Vertreter Mr. Spencer Hodgson In Dresden, 25 July 1986; IRS Archive, A2\_2\_89, Protokoll Planung und Projektierung Gesellschaftlicher Einrichtungen in: WPC-Bauweise (...) [Protocol Planning and Project Planning of Social Facilities in WPC Construction], 11 September 1986.

66 IRS Archive, A2\_2\_89, Hodgson (ANC) an Wurbs (BA), 26 May 1986.

67 ANC Archive, TM/41/29, A technical and qualitative report, 1988.

The specificity of their cooperation is further underlined by the fact that Wurbs and the FDJ members resided directly in Dakawa. At the time of their arrival, some Dakawa residents lived in tents and most of them in 67 disaster houses. Five of these houses were occupied by the East Germans, one by a Tanzanian government representative, and the rest by ANC members.<sup>68</sup> Interestingly, the Scandinavians are not mentioned, which leads to the assumption that they were housed in Mazimbu or elsewhere. This being housed in Dakawa alongside the ANC became a recurring theme in FDJ propaganda, which would emphasize that they were in this together with their ANC counterparts and would not dare to demand special treatment.<sup>69</sup> In fact, while emphasizing solidarity, FDJ considered postponing their mission due to the living conditions – especially since they initially considered sending married couples with children, a plan that the ANC did not approve.<sup>70</sup>

Tensions also emerged when an East German author and metalworker who spent some time in Dakawa with the FDJ complained about poor leadership and racism among the brigade. He also pointed to the scarcity of housing and to the fact that a certain number of the new houses were occupied by the FDJ brigade while many ANC members continued to live in tents – in this particular FDJ group, he continued, the idea of solidarity “has long turned into a farce”.<sup>71</sup> Further tensions emerged between the Academy of Building specialists and the FDJ brigade, as the former accused the latter of being indifferent towards the project and focusing only on vocational education instead of WPC.<sup>72</sup>

## 6. Conclusion

In Dakawa, East Germany’s Bauakademie, Solidarity Committee, and FDJ introduced a lightweight panel construction system intended for cheap, self-building projects as a solidarity aid for the ANC. While WPC took a prominent role in the construction activities in Dakawa, the system had certain technological insufficiencies. Moreover, its self-help-focused implementation was hampered by the situation in Dakawa as a place with poor living conditions and continuous tensions, a place that some ANC members themselves described as a “dumping ground”.

Notwithstanding the solidarity motif, both the ANC and the East Germans pursued their own genuine interests. East German propaganda presented this contribution as a generous gift of a socialist state sharing the achievements of its housing industry with the people in developing countries, while in practice also seeking new business opportunities. At the same time, the ANC balanced the contributions from East and West and tried to leverage East German support by playing them off against Western competitors.

68 ANC Archive, DDC/13/12/31, Report on the present Dakawa situation, n.d.

69 BArch, DZ8/347, A GDR Precasting Plant for a Camp in Dakawa, n.d.

70 ANC Archive, DDC/13/12/9, Report of the Meeting between ANC and FDJ held in Dakawa, 3 June 1986.

71 J. Leskien, Schreiben über das nahe Fremde [Writing About the Near Stranger], Hamburg 1994.

72 IRS Archive, A2\_2\_14, Aktennotiz über ein Gespräch mit dem FDJ-Zentralrat (...), 6 February 1989.

However, the East Germans and the ANC did develop a form of cooperation that differed from the ANC's collaboration with Western architects and engineers. Most importantly, the East German contribution was relatively close to the ANC's ideals of self-help and self-reliance. This included not only the WPC product features but also the method of implementation. Rather than a client-contractor relationship or an export, the design process and the set-up of the WPC factory and its running can be considered a mutual learning process and a form of co-production. While the East Germans were formally still representatives of a foreign institution that delivered a service according to an agreement, in practice, they were integrated into the ANC's work structures. They became "comrades" and "friends" and cooperated with the people in the Construction Department as if they were a part of it, not a contractor. This form of collaboration resonates with narratives of solidarity and can be partially interpreted as a joint effort of the ANC and GDR architects to make up for the technological insufficiencies of the WPC technology and its problematic applicability to the rural Tanzanian context.

The material results of this cooperation remained limited, even though one could speak of another form of agency and appropriation when Oswald Dennis decided to continue using WPC – for farm fences. At the same time, the immaterial value of this cooperation, though difficult to measure, should not be underestimated. WPC and its specific, collaborative style of implementation were about more than just panel houses in rural Tanzania. Through this project, a dozen young ANC members who would otherwise have had little chance of going abroad received the opportunity to embark on a trip to Bautzen. On both sides, the project involved young people who still had long career journeys ahead in architecture, engineering and elsewhere, after 1989 or 1992, respectively, beyond the Dakawa context. However flawed Dakawa and WPC both were, they nevertheless connected people in the fight for a better South Africa.