

# Ultramodern Underground Dallas: Vincent Ponte's Pedestrian-Way as Systematic Solution to the Declining Downtown

Charissa N. Terranova

Volume 37, Number 2, Spring 2009

Downtowns, Past and Present

URI: <https://id.erudit.org/iderudit/029574ar>

DOI: <https://doi.org/10.7202/029574ar>

[See table of contents](#)

Publisher(s)

Urban History Review / Revue d'histoire urbaine

ISSN

0703-0428 (print)

1918-5138 (digital)

[Explore this journal](#)

Cite this article

Terranova, C. N. (2009). Ultramodern Underground Dallas: Vincent Ponte's Pedestrian-Way as Systematic Solution to the Declining Downtown. *Urban History Review / Revue d'histoire urbaine*, 37(2), 18–29. <https://doi.org/10.7202/029574ar>

Article abstract

Mid last century, North American civil servants and urban planners and developers proffered inventive solutions to the problem of the declining downtown core. Robert Moses looked to super-block development and Title 1 of the US Housing Act of 1949 to funnel federal dollars into urban renewal projects in New York City. Because it had been successful in the suburbs, Victor Gruen sought retail development in the form of downtown shopping centres. The Montreal-based planner Vincent Ponte focused his attention on the “multi-level city centre.” Similar to the solutions proffered by Gruen and Moses, Ponte’s multi-level centres were large-scale and multi-use. However, unlike his colleagues’ tabula rasa interventions, Ponte’s multi-level centre was incremental. This essay focuses on Ponte’s little-known 1969 multi-level pedestrian-way plan for downtown Dallas. I argue that Ponte’s project for the centre of Dallas is unique in Ponte’s oeuvre because, departing from his own espousal of super-block development, it was not built in one fell swoop within a super-block. The multi-level megastructural pedestrian-way in Dallas was fluid and incremental in its original planning and subsequent evolution. It is best understood according to Ponte’s instrumentalization of systems theory.

# *Ultramodern Underground Dallas: Vincent Ponte's Pedestrian-Way as Systematic Solution to the Declining Downtown*

Charissa N. Terranova

*Mid last century, North American civil servants and urban planners and developers proffered inventive solutions to the problem of the declining downtown core. Robert Moses looked to super-block development and Title I of the US Housing Act of 1949 to funnel federal dollars into urban renewal projects in New York City. Because it had been successful in the suburbs, Victor Gruen sought retail development in the form of downtown shopping centres. The Montreal-based planner Vincent Ponte focused his attention on the "multi-level city centre." Similar to the solutions proffered by Gruen and Moses, Ponte's multi-level centres were large-scale and multi-use. However, unlike his colleagues' tabula rasa interventions, Ponte's multi-level centre was incremental. This essay focuses on Ponte's little-known 1969 multi-level pedestrian-way plan for downtown Dallas. I argue that Ponte's project for the centre of Dallas is unique in Ponte's oeuvre because, departing from his own espousal of super-block development, it was not built in one fell swoop within a super-block. The multi-level megastructural pedestrian-way in Dallas was fluid and incremental in its original planning and subsequent evolution. It is best understood according to Ponte's instrumentalization of systems theory.*

*Au milieu du siècle dernier, les fonctionnaires ainsi que les urbanistes et promoteurs d'Amérique du Nord ont présenté diverses solutions novatrices en vue de résoudre le déclin du centre-ville. Robert Moses s'est tourné vers l'aménagement de méga-îlots de même que vers le Titre I de la US Housing Act de 1949, afin de canaliser des fonds du gouvernement fédéral dans des projets de rénovation urbaine à New York. Par suite du succès de la formule dans les banlieues, Victor Gruen a visé l'essor du secteur de la vente au détail au moyen de la construction de centres commerciaux au centre-ville. Pour sa part, le planificateur montréalais Vincent Ponte a axé ses efforts sur les centres de ville aux multiples niveaux. Similaires aux solutions offertes par Gruen et Moses, les centres multiniveaux de Ponte étaient d'envergure et à usages multiples. Toutefois, contrairement à l'approche de la table rase de ses confrères, le centre multiniveau de Ponte était de nature incrémentale. Le présent article porte sur un projet peu connu de Ponte, élaboré en 1969,*

*pour une voie piétonne multiniveau destinée au centre-ville de Dallas. Je soutiens que ce projet est unique dans l'œuvre de Ponte en ce qu'il délaisse sa propre notion de méga-îlot et que la structure n'a pas été construite en une seule fois. La voie piétonne à multiple niveaux à Dallas a bénéficié, dès l'origine, d'une conception pour une construction et une évolution par étapes. Le projet s'analyse le mieux selon l'instrumentalisation qu'a fait Ponte de la théorie des systèmes.*

## **Imaging Dallas: The Legacy of Vincent Ponte's Plan for a Grade-Separated Pedestrian Network in Dallas, Texas**

The grade-separated pedestrian network in downtown Dallas is a warren of underground tunnels, bridges, and interstitial walkthroughs covering thirty-six city blocks.<sup>1</sup> A public-private venture and accretive effort with its first component opened in 1965 and last 1986, the downtown pedestrian-way in Dallas is, though consistently efficient in providing walkers quick passage to lunch or between buildings in a temperate climate, unpredictable in aesthetic experience. In wandering through, pedestrians experience a mélange of surfaces, volumes, and lighting. The walk is a contrapuntal affair. The shops and interior architecture along the descent into the system at Pacific Avenue and Ervay Streets are new and well maintained. Starbucks, Pizza Hut, and local Chinese and Indian restaurants line a well-lit dining area with colourful modern furniture. Exit the large, modern, communal dining area and walk down the tunnel toward Thanksgiving Tower, and one passes under harsh fluorescent lighting, before walls of curving grey panels à la the science fiction movie *Logan's Run*, in front of a lone Indian restaurant with a faux red brick facade, through a poorly lit and maintained passage, in front of a lone Mexican restaurant with a faux yellow brick facade, and up an escalator to the entrance of a derelict tower. Continued passage underneath the city requires movement above ground through the ghost-like lobby of this abandoned building. Walking through the lobby of the thirty-story tower designed by Harwood K. Smith & Partners, with Dales Foster located at 1600 Pacific Avenue,<sup>2</sup> is a surreal and haunting experience. The skyscraper was built in 1965, and its original tenants were the National Bank of Commerce, Electro-Science

## *Ultramodern Underground Dallas*

Investors, and American Life Insurance Company. Today, it is empty and unused. Vestiges of the building's function as a banking and retail centre are evident in the desolate storefront spaces in the lobby by which pedestrians pass en route to the next underground segment. Dallas pedestrians emerge up from the tunnel, pass through its dark, deserted, leaf-strewn lobby, and re-enter the underground walkway system by descent on an escalator that works intermittently. The escalator takes pedestrians down, underneath a striking, large, ocular-shaped window that looks onto Pacific Avenue, back into the tunnels for fast movement underneath the Central Business District of downtown Dallas (see figure 1).

The underground walkway system in downtown Dallas is one of a handful of similar systems built not because of inclement weather, as with the Canadian systems in Montreal, Calgary, or Toronto, but in order to buoy development in the city's downtown business core. As with the walkway systems in cities with milder climates, such as Charlotte, Cincinnati, Los Angeles, and Portland, the walkway system in Dallas was built to motivate economic renewal.<sup>3</sup> Though the intention of Dallas planners was economic growth, the system has served only to remove pedestrian life from streets already challenged by ever-decreasing economic liveliness. Like the historic central business districts of many cities across North America, pedestrian life in downtown Dallas has shrunk and been proscribed by the departure of residents for life in the suburbs. As experienced underneath the city while walking through its tunnels, life in downtown Dallas is a midday event. Lunch hour in the underground walkway system bristles with activity—people dining, shopping, and having their shoes shined. The din of activity expires at around 2 p.m., after which passage through the underground walkway is a silent activity. By 5 p.m. the underground walkway system is a ghost town. Planners and pundits who originally envisioned the project in the late 1960s would never have predicted the anemic life of Dallas's pedestrian-way today.

Testament to the original vision of renewal, in June 1968 *Esquire* magazine devoted an issue to urban planning in downtown Dallas. Referring to one of the most sought after planners of the day, the cover read, "Vincent Ponte should have his way with Dallas" (figure 2).<sup>4</sup> Given the saucy tone of the words on the cover, that the urban planner Ponte should "have his way" with the city and that he was a very eligible and dapper forty-seven-year-old bachelor who looked young for his age, it would seem that *Esquire* promised an exposé of one man's torrid affair with a woman named Dallas.<sup>5</sup> The Boston-born Ponte held an impressive, well-nigh noble pedigree. He attended Harvard College and the Harvard Graduate School of Design, where he received a master's in city planning, and had worked in the offices of Webb and Knapp and I. M. Pei from 1959 to 1963.<sup>6</sup> If only Ponte would bestow his expertise on that woman called Dallas. Alas, the magazine's intentions were far more down-to-earth and pragmatic. Dallas was part of an experiment conceived by the renowned designer George Lois and publisher Arnold Gingrich of *Esquire*.<sup>7</sup> It was an "urban project" in

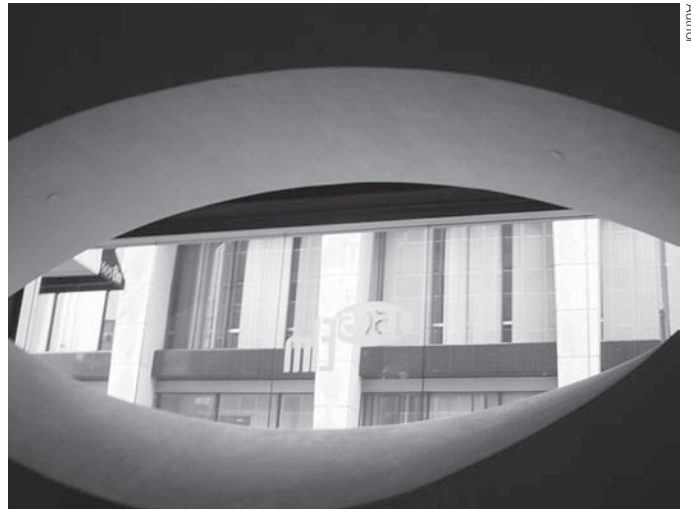


FIGURE 1: A large ocular-shaped window that pedestrians cross while taking the escalator down towards Dallas's underground walkway system.

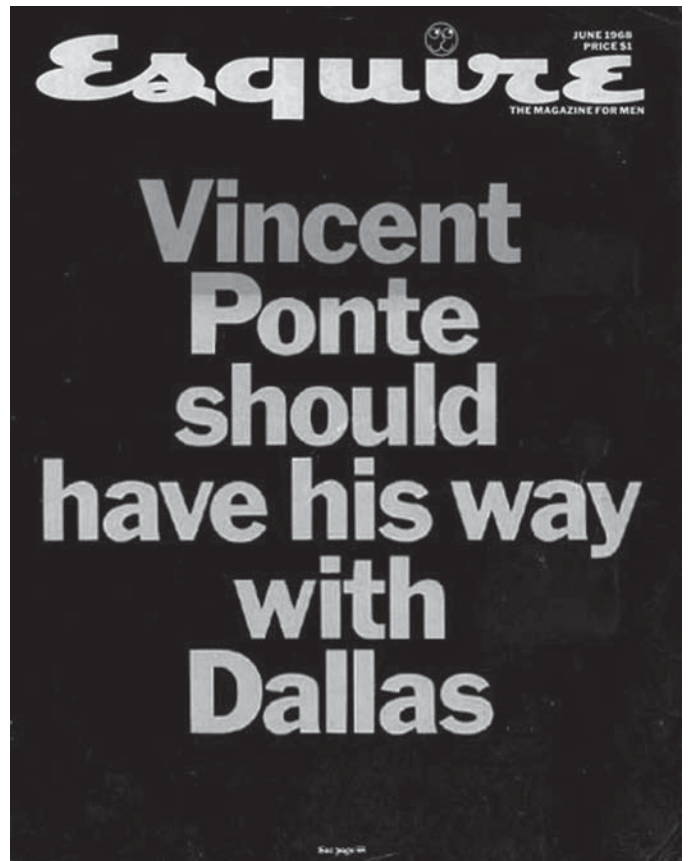


FIGURE 2: The June 1968 cover of *Esquire*.



## Ultramodern Underground Dallas

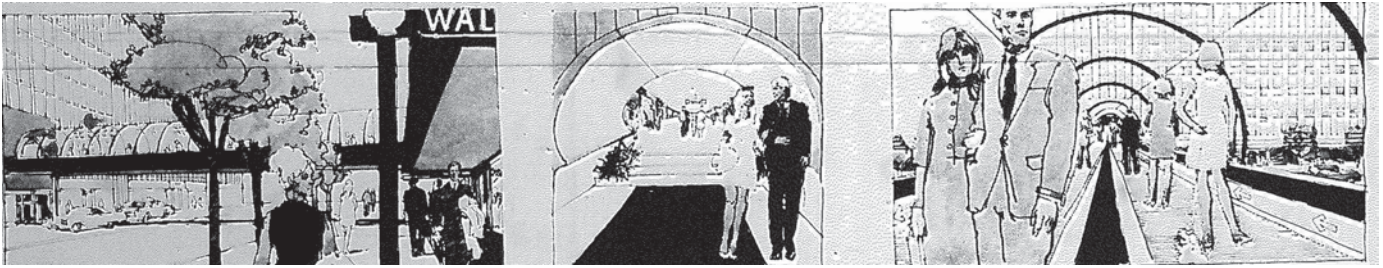


FIGURE 3: Perspective drawings of Vincent Ponte's plan for a pedestrian walkway system for Dallas's central business district. Source: George Lois, Arnold Gingrich, and Vincent Ponte. "Dallas Is in Exile," *Esquire*, June 1968, 68–69.

publishing and journalism: one of six different covers the magazine ran that month, each of which devoted a two-page spread to a given city. With the exception of Los Angeles, Chicago, and Washington, the cities—Omaha, New Orleans, and Dallas, to round out the six—were provincial American urban hubs. In two pages, the magazine promised to analyze the problems of each city. In an article titled "Dallas Is in Exile," the publishers wrote that Dallas's main problem was overcoming the stigma of "being a town where a President of the United States was shot to death."<sup>8</sup> While Dallas shared its urban ignominy with Washington and Buffalo, it was the only city to have "emerged with the killing as part of its permanent image."<sup>9</sup> To ameliorate the city's tarnished reputation, Gingrich propounded urban transformation through entertainment and education, calling for a major-league baseball team cooperatively owned by Dallas and Fort Worth, a city of the arts, and an education centre.<sup>10</sup> The city also needed sleek streamlining and modernization, and for this they called upon the skills and insights of Ponte.

Planner Ponte sought to reconfigure the city's "image," moving it away from the violence of assassination to the sleek futurism of modern functionalism. Much more than its skyline, the image of the city for Ponte was bound up with its workings as a mechanical system, or an "urban organism."<sup>11</sup> Dallas's image was fundamentally connected with the city as a place of action and event, function and performance, and unfortunately as such, its role as the *mise en scène* for the trauma of public murder. Colliding performative event into performative event, offsetting the public execution of a beloved president with pragmatic planning, Ponte counteracted the bad ethos of the Kennedy assassination by transforming the city's function—by focusing his attentions on the central business district, eliminating some of the unneeded parking lots and relocating much of the remaining below ground, adding green space, and developing an efficient above-, at-, and below-grade pedestrian walkway system.<sup>12</sup> In several small plans and perspective drawings, Ponte's plan projected renewal in "an action core of 200–300 acres" (see figure 3).<sup>13</sup> The scale of the commercial nucleus was, and had always been as far as Ponte was concerned, developed around *Homo ambulans*, humans that walk: "In Dallas, as elsewhere, one can walk anywhere within [the core] in fifteen minutes."<sup>14</sup> A year earlier, Ponte had laid out his prescriptions for urban improvement in the "underground city" he was developing at the time in downtown

Montreal. Once again reinforcing the importance of the central business district at a time when businesses and residents were leaving downtown for the promise of a halcyon existence in the suburbs, Ponte told the *New York Times* reporter Glenn Fowler, "Business cannot abandon downtown. Power, money and enterprise are concentrated there. Downtown is where the action is."<sup>15</sup> For Ponte, an underground system downtown—parking garages, tunnels for trucks, and walkways replete with storefronts—would solve the problem of congestion in the main urban centre and thus offer a counterweight to suburban growth.

A passionate supporter of the central business core, Ponte claimed that "dispersal is decay."<sup>16</sup> Speaking of the perils of a decline that was at once cultural and infrastructural, Ponte's warning reflected not so much the fears that were the impetus for "white flight" from downtown inner cities—the age, density, and diversity of many North American downtowns—but how those fears were the very problem of potential urban deterioration, the source of "decay." For Ponte, the exodus from downtown signified the decline not only of a certain notion of civilized living but also, and more powerfully felt, a major source of revenue for cities. Thus, Ponte was no idealist hard bent on saving the core just for the sake of preserving a European-style walking sanctum. Rather, Ponte believed that downtowns functioned financially: they had always been the heart of money making. Underscoring that "Ponte is not just a 'visionary,'" but rather "a superbly effective pragmatist," Peter Blake, editor of *Architectural Forum*, argued that Ponte's convictions were limited to three: "a passionate belief in and love of cities," an understanding that "common sense can be applied to make our cities function again," and a certitude "that the political and economic powers-that-be in our cities can be persuaded to cooperate in their own best self-interest."<sup>17</sup> Ponte's prescription to better downtown was very much rooted in the pragmatics of the market. His marketplace ethos paralleled the ruling guidance of Title 1 of the *US Housing Act* of 1949, in particular its fundamental advocacy of public-private partnerships in the process of slum clearance and urban renewal.<sup>18</sup> Civil servant and urban impresario extraordinaire Robert Moses is famous for his acute understanding of the workings of Title 1. Once legislation passed in 1949, Moses harnessed federal funds to remake New York City, creating a network of highways and bridges interlaced with new

## Ultramodern Underground Dallas

islands of public works, such as public pools and quasi-public housing. Moses avidly located “blighted” space for the creative destruction of old New York, using federal dollars as incentive to private developers, such as the famous projects Moses realized in Manhattan with MetLife, Stuyvesant Town, and Peter Cooper Village, to create a new New York. With regards to Ponte, Blake spoke of “self-interest,” for Ponte’s plans were often built on an economic foundation heavily weighted toward the private realm. Ponte explained,

Our problem, in terms of planning, politics and real estate realities, is to find ways of inserting and grafting new levels of circulation into the old city core without inflicting massive damage on existing investments . . . of achieving these goals as much as possible through private investment without digging too often into the already slender municipal purse.<sup>19</sup>

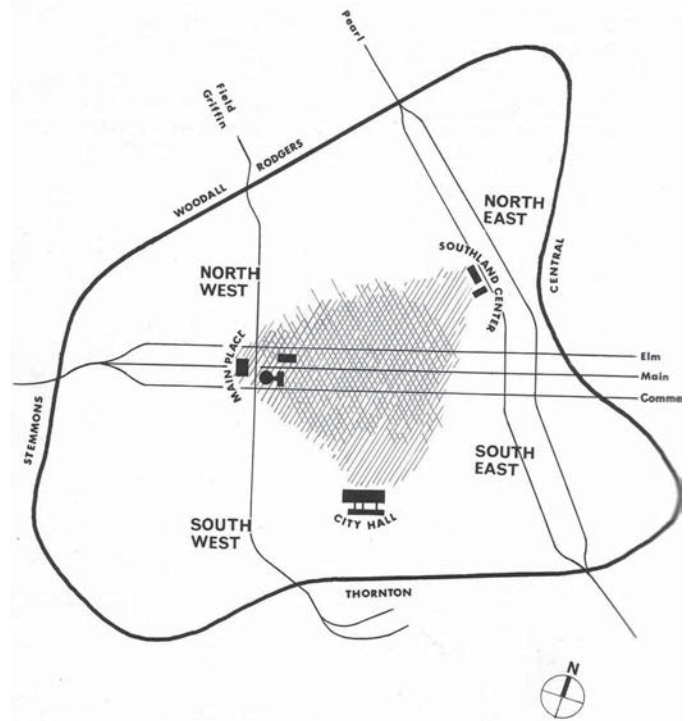
As Ponte intended, the majority of funding for the Dallas pedestrian-way has always been private. Corporations owning buildings above ground are responsible for maintaining the spaces in the pedestrian-way below ground.

A kaleidoscopic concept of function dominated Ponte’s approach to the multi-level city. Economics, the careful and necessary coupling of public and private monies, architecture, and planning were equal parts functional. Financing was as infrastructural as the hardware of construction itself. He saw the confusion of mixed-use causeways, streets where cars, trucks, and people vie for the same space, as a major source of congestion in downtowns. He turned to the modern precepts of zoning that came to fruition in the early twentieth-century planning offices of New York City and the carefully calibrated channelling of urban movement propounded by Le Corbusier’s *Athens Charter*. Ponte called for the separation of traffic conduits, which would require “the use of underground space as well as the separation of various kinds of traffic above the ground.”<sup>20</sup>

Called the “multilevel man” by *Time* magazine, Ponte put his planning advice for Dallas into practice at the end of the decade.<sup>21</sup> On 15 August 1969, urban planner Ponte, with consultation from the traffic engineer Warren Travers, presented a new plan for the central business district of Dallas to Mayor Erik Jonsson. The primary force of the proposed plan for Dallas was traffic management. Properly orchestrating the mobile vectors of the city—cars, trucks, and pedestrians alike—was the key to a better central business district in the city. Ponte and Travers wrote,

Our studies for the future growth of the Central Business District aim at preserving and fostering . . . virtues, tangible and intangible, and lightening and removing the impediments that hamper their full expression. Chief among these impediments, of course, is congestion. The planning principle which underlies the orderly and reasonable reorganization of the city center involves separating cars and pedestrians onto different levels—the so-called multi-level city.<sup>22</sup>

No mere plan for beautification, the proposal called to dig deep into the entrails of the city and create and connect elegant green spaces, vistas, and passageways for trucks, cars, and



### CBD CORE

FIGURE 4: Vincent Ponte and Warren Travers’s proposal for Dallas’s central business district core showing the weaving of thoroughfares, 1969. Source: Vincent Ponte and Warren Travers, Dallas Central Business District: A Report Prepared for the City of Dallas by Ponte-Travers Associates Planning & Traffic Consultants, 15 August 1969, 6, box 11, CBD, Dallas Municipal Archives.

pedestrians. The new thoroughfares would weave together, creating a filtration matrix not unlike the body’s lymphatic system. The plan included long, carefully rendered sectional drawings of the north-south and east-west axes of the walkway that unfold length-wise from the bound plan. They proposed pedestrian-ways that passed rhythmically above and below ground, through already existing and future buildings and plazas on the ground level in order to connect over 100 acres of the core. Although the plan may have seemed totalizing with its goal to encompass and connect three anchors of the city—Main Place, City Hall, and Southland Center (today the Marriot)—the planners articulated its long-term and accretive nature: “Elements of a future pedestrian network can therefore be incorporated piecemeal into new buildings as they go up, and then gradually hooked up together” (figure 4).<sup>23</sup> And, as stated above, funding for the pedestrian-way would come from public and private coffers, with the majority of it funded by the private offices that owned the rights to the space above and below ground. Public funding would be limited to coverage of the development and construction of intersections.

Much of the funding for the realization of Montreal’s “underground city,” Ponte’s most famous and successful multi-level

downtown core project, similarly came from private funding—in this instance, the investment monies of visionary, Moses-esque William Zeckendorf. As Blake explained, “Montreal was the ideal testing ground for Ponte’s conviction that existing political and economic potentates could be talked into restructuring cities.”<sup>24</sup> A project that originated in 1957 with the advent of a plan proposed by the developer Zeckendorf, Ponte’s development underground around Place Ville Marie succeeded because of a well-oiled machine of participants: an “effective” mayor, Jean Drapeau, an inspired entrepreneur, Bill Zeckendorf, and Zeckendorf’s architect I. M. Pei, who “had the sense to give Ponte his chance by making Zeckendorf’s Place Ville Marie not an isolated project, but, rather, the germ of what would become a germinating idea—a spreading urban system.”<sup>25</sup> The Montreal project unfolded under the aegis of the private developer Zeckendorf and in the high modern space of the super-block.<sup>26</sup> With assurance and poise, Ponte wrote in reference to the Montreal project, “As we all know, the best results in downtown renewal are achieved through superblock development.”<sup>27</sup> Though it goes unnamed, the super-block was a principle within a concise list of requisite conditions for fixing the problems of the downtown core. Ponte’s list included

1. Existence of large land areas centrally located and under single ownership
2. Contiguity of several such land areas
3. Cooperation between public and private interests<sup>28</sup>

As with most super-block development, the Montreal project required the existence of one large, contiguous space, which would be carved from the confines of a patchwork of existing buildings and thoroughways. The space that Ponte referred to as “destined to be the new core of Montreal” lay dormant in the form of a vast, open gulch for three decades. In the 1920s, the twenty-two-acre area was owned by the Canadian National Railways (CNR). Sir Henry Thornton, the first president of the railway, proposed a master plan that included several enormous ten-story office buildings that would cover the block. The plan went unrealized, leaving a gaping hole in the centre of Montreal, until the city widened Dorchester Boulevard in 1954 and, following this intervention, Donald Gordon, the recently retired president of the CNR, put forth the plan to build the 1,200-room Queen Elizabeth Hotel fronting the new boulevard. As the hotel was being built, Gordon brought in the private developer Zeckendorf who, in 1957, proposed a new master plan for the three-block area, taking advantage of Gordon’s idea that “properties should be developed as a unit.”<sup>29</sup>

If the above-ground centre of Montreal appeared one and whole in its super-block unity, the below ground was a complex matrix of interlocking passageways for cars, pedestrians, and, very quickly in its early unfolding, by 1966, the Metro system. Underneath the often-intemperate streets of Montreal lie the snaking tunnels of Ponte’s underground urban template, what he referred to as the “megastructure-core.”<sup>30</sup> In 1970, it connected the 200-acre downtown area that centred on Place Ville Marie,

the architectural complex including a plaza and the cruciform skyscraper designed by Cobb and Pei in 1962. In an early incarnation, the project included four subway stations located at below-grade mezzanines connected by miles of “brightly lit pedestrian promenades, lined with 165,000 square feet of lively stores and equally lively restaurants, fronting onto sunken courts below the plaza level.”<sup>31</sup> It was an incomplete and evolving “urban organism,” which was incremental in growth, enormous in scale, and multi-use in function. Ponte had, in effect, created the skeletal armature for a megastructure underneath the city, or, in so many words, a city underneath the city. By 1976, “Montrealers [were] beat[ing] winter in an underground world.”<sup>32</sup> While the project for Place Ville Marie was largely completed in 1976, extensions to the underground city linking shopping promenades and office buildings were constructed in 1984 and 1992.

Dallas was thus not the first city to host a plan for the rationalization of pedestrian and vehicular circulation. Closer to Dallas, the Greater Fort Worth Planning Committee had commissioned mall designer and urban planner Victor Gruen to develop a plan for the central business district in 1956, the same year that Gruen’s first covered mall, Southdale Shopping Center, opened in Minneapolis, and of the enactment of the *National Interstate and Defense Highways Act*.<sup>33</sup> Similar to Ponte’s plans to come in the following decade, Gruen’s plan for Fort Worth channelled circulation into a multi-level rubric, with cars and trucks separated from pedestrians. Gruen, like Ponte, gave primacy in the downtown core to pedestrians, allotting ample space for parking along the edges of the city and developing underground parking and an outer highway loop. Gruen explained, “Large plazas and squares could be provided where space, until then utilized for automotive accessory facilities, became available”<sup>34</sup> (figure 5). Gruen’s plan included a belt highway around the centre, which channelled would-be pedestrians into six large, state-of-the-art parking garages.<sup>35</sup> The parking garages were equipped with electronic systems identifying available spots for entering drivers. As with Ponte’s multi-level centre, Gruen’s goal was to eliminate congestion and create the most fluid movement of people possible.<sup>36</sup> Once their cars were parked, citizen-shopper-drivers became citizen-shopper-pedestrians who were free to roam the newly refurbished downtown plazas and streets of downtown Fort Worth on foot. Gruen’s multi-level plan to revitalize the downtown core was quite a bit more fanciful than Ponte’s. Gruen report on the city for the Fort Worth public included stories about the future of Fort Worth told by two businessmen and a homemaker. Speaking through a business executive’s voice, Gruen described the future of the city. It “had grown at an incredible speed.”<sup>37</sup> Reminding the executive of a world’s fair, towers abounded and the city bustled with merriment and life.<sup>38</sup> Gruen’s “multi levels” included mechanical people movers at and below street grade. In a project for East Island adjacent to Manhattan, Gruen visualized a pedestrian concourse below street level in which people movers were located at single-story height within a double-height subterranean space. One drawing shows a cut-away of people sitting in booths on a raised conveyor belt within a sky-lit space (figure 6).





FIGURE 5: Perspective drawing of Victor Gruen's multi-level plan for downtown Fort Worth, 1956.

Source: Victor Gruen Associates, *A Greater Fort Worth Tomorrow*, Greater Fort Worth Planning Committee, 1956. unpaginated.

In their designs for the Dallas–Fort Worth Metroplex, Ponte and Gruen looked to yet an earlier source for inspiration in the rationalization of circulation within cities: Leonardo da Vinci. Indeed Leonardo's drawings became the seed for the multi-level city, yet it was the man himself, equal parts scientist and artist, engineer and bon vivant, who became a model for the mid-century modern urban planner in North America. Ponte and Gruen both found inspiration in Leonardo's Renaissance drawings of the functional city. Ponte describes the uncomplicated elegance of a sketch made by Leonardo: "It was simply to put pedestrians on a separate level above the traffic, on walkways and plazas running uninterrupted from one end of the town to the other, spanning streets with bridges and tunneling through buildings with arcades"<sup>39</sup> (figure 7). For his book on the survival of city centres, Gruen similarly cites Leonardo's drawings as a muse.

Gruen discovered them on a boat appropriately named the *Leonardo da Vinci*, where "along the walls of the public rooms are exhibited drawings and models of the work of the great man for whom this city afloat was named."<sup>40</sup> Finding an inchoate functionalist in the Renaissance man par excellence, Gruen became mesmerized by Leonardo's proposal for "cities in which human functions are strictly separated from purely utilitarian ones, cities in which the basements are used for cars and carriages, the ground level reserved for walking only."<sup>41</sup>

While Ponte and Gruen were both "downtown men," that is, advocates of the modernization and maintenance of the historic cores of North American cities, Ponte did not see the downtown as an almost interchangeable equal to the suburban node, as did Gruen. Ponte insisted on the life of the centre, regardless of the ever-growing edges. One might say that both men





FIGURE 6: Victor Gruen's proposal for a pedestrian concourse below street level in which people movers are located at single-story height within a skylit double-height subterranean space.

Source: Victor Gruen. *The Heart of Our Cities. The Urban Crisis: Diagnosis and Cure*, New York: Simon & Schuster, 1964, 220.

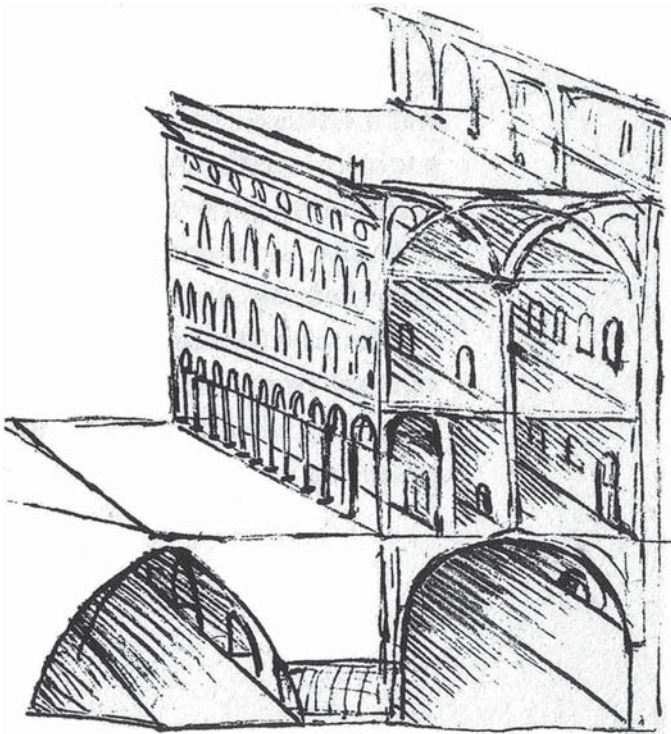


FIGURE 7: Victor Gruen was fascinated by Leonardo da Vinci's proposal for cities in which the basements are used for carriages and the ground level reserved for walking.

Source: Victor Gruen. *The Heart of Our Cities. The Urban Crisis: Diagnosis and Cure*, New York: Simon & Schuster, 1964, 10.

were driven by an *idée fixe*, Ponte's an unswerving focus on the downtown, while for Gruen it was care and dedication to downtown only inasmuch as it was related to suburban-style retail activity. Gruen thought about the city in a calibrated plural form: city nodes. Gruen concentrated the planning and development skills he had cultivated over the prior two decades building suburban shopping centres on the downtown core of Fort Worth. Central to his belief in the suburban shopping centre was the revitalization of the downtown core. The city centre worked in reciprocal relationship with its edges. By expanding into the most outer precincts of suburbs, chain department stores, once solely rooted in the downtown core, would gain financial power in numbers—literally with more stores and more profits. And, more importantly, they would counter the decline of retail in the core by posing healthy competition. As a result, the downtown flagships would learn to modernize and keep up with the desires of the most important and growing demography of contemporary shoppers, namely consumers in the suburbs.<sup>42</sup> The key to the revitalization of Fort Worth's core was, for Gruen, retail. Gruen sought to “remake Fort Worth as a consumer mecca.”<sup>43</sup> Gruen argued that it was retail activity modelled on the goings-on of the dense and urban core prior to white flight. Yet in reality his understanding of shopping was formed by his singular and unmatched success as suburban mall designer and developer. Though it ultimately went unrealized for financial reasons, Gruen's plan for downtown Fort Worth was greeted locally and nationally with great praise. Admiration for the plan made Fort Worth a celebrity city for a brief time. Regional journalists lavished praise on Gruen for his challenging and inventive project for Fort Worth. The same week Gruen presented the plan in Fort Worth, the *New Yorker* ran an adulatory article on Gruen, envisioning similar plans for Manhattan by the architect. Suddenly Fort Worth seemed as important as New York city to the public, so important in fact that it would guide New York's development, rather than vice versa. The chair of the Fort Worth Chamber of Commerce excitedly claimed, “Fort Worth became the most famous city in America.”<sup>44</sup>

### **The Ultramodern Approach: Systems and Megastructures**

Gruen and Ponte were modernists practising after the Second World War and shared a love of the rational city. However, their views on the city centre and, more precisely, centrality, were quite different. Both Gruen and Ponte took heed of the crisis of the urban centres in North American cities, applying much intellectual energy to their preservation. Ponte's success as designer and engineer of multi-level pedestrian-ways in downtown business cores across North America is testament to his singular focus on the historic centre. By contrast, for Gruen the historic business core was one nucleus, perhaps the most densely populated and built up, in a poly-nucleic network. In keeping with his talents as mall designer, developer, and thus midwife of suburbanization and urban decentralization, the central business centre was but one centre among many within the “cellular metropolis of tomorrow.”<sup>45</sup> Though Gruen was a



## *Ultramodern Underground Dallas*

hearty advocate of the historic downtown, the business core would ultimately become one mall among several malls interconnected by highways and separated by green space. Ponte's approach, with a more precise focus on downtown, was oddly enough more architectural in nature than the method of Gruen, the trained architect. As a young man, Ponte tested the waters of architecture. Ultimately he became an urban designer and not an architect because he was not confident about his skills as the latter. In his own words, he did not want "to become a second-rate architect."<sup>46</sup> His talents were better executed in the larger scale of the urban continuum, as he had been a Fulbright Scholar in Rome studying the relationship between baroque planning and infinite calculus.<sup>47</sup> Uniting architectural desires and acumen with large scales, Ponte honed a unique skill in the complexity of designing cities within cities—large-scale and ever-evolving under-, at- and above-ground multi-use pedestrian-ways. In short, he was good at organizing and integrating the spaces of the megastructure. More architectural megastructure than node within an ever-sprawling urban matrix, the Dallas pedestrian-way qualifies is an example of the then-emergent architectural type because of its ad hoc development, its complexity of programming, and, due to the unified if not homogenous quality of land underneath the city, the modular and repetitive nature of its accretive growth. It is no surprise that the pedestrian-way system would have megastructural qualities, for Ponte reached his peak as a designer in the 1960s during the years that the late modern architectural type emerged.

Central to several North American urban renewal projects, such as Boston's Government Center, Albany's Empire State Project, and Vancouver's Law Courts, the high-tech, sometime hulking architectural type in fact emerged from Japan. The Japanese Metabolist architect Fumihiko Maki coined the word *megastructure* in 1964, defining it as a "large frame in which all the functions of a city or part of a city are housed."<sup>48</sup> Just as Gruen and Ponte found inspiration for the ultramodern form of the multi-level business cores in the past, Maki connected the megastructure to the ancient hill towns of Italy. For Maki, places such as the Etruscan city on a hill, Orvieto, where citizens thousands of years ago burrowed tunnels underneath what would over time become the walled centre, seemed an obvious prototype for the functionalism on a gargantuan scale offered by the megastructure. Yet, as with new multi-level city cores, new technology is what made the construction of the megastructure possible. Writing in 1976, the architectural critic Reyner Banham defined the megastructure in terms of its "unlimited extension." For Banham, the megastructure was a "structural network into which smaller structural units can be built—or even 'plugged-in' or 'clipped on' after having been prefabricated elsewhere."<sup>49</sup> The megastructure was an architectural type born of modernism and its megalomaniacal tendencies: the predisposition of its practitioners to functionalism realized on an enormous scale, spatial totality, workings that are visionary and, without a doubt, technologically avant-garde. Because of their modernism, Banham declared the many and varied megastructures dotting the world by 1976 to be "dinosaurs of the modern movement."<sup>50</sup>

Tweaking Banham's definition of the megastructure as a concatenation and interlocking of prefabricated modules, the shape and interconnection of the woven spaces of the Dallas pedestrian-way were ready-made, or "prefabricated," in a slightly unconventional way. They were "prefabricated" inasmuch as they pre-existed in the city, that is, as they were dictated by their context. Rather than extraneous identical forms that builders would click or fasten into a frame, the components of the Dallas pedestrian-way were already extant, formed within the mainframe hardware of the city incrementally and in accretive spatial portions that were sometimes alike or sometimes different from one another. Thus, what is poignantly unique about Ponte's plan for Dallas, unique both to his own oeuvre of urban renewal projects and those of the time, is that it was not a large-scale tabula rasa project. It offers a hybrid typological example: though influenced by the tabula rasa thinking of the super-block in terms of its large scale, it is an enormous megastructural project, which unfolded over a period of almost twenty-five years and, similar to other megastructures, functions as infrastructure channelling pedestrian circulation away from vehicular traffic. Going against Ponte's three-fold prescription for urban betterment via the multi-level centre, it did not depend on the pre-existence of a super-block, even if influenced by the concept in terms of scale. Rather, it was a megastructure that would grow virtually ad hoc through time, yet according to Ponte's overarching plan. Its components were reformed, transformed, and then fused together by the dictates of the Ponte-Travers plan. Central to the function of the megastructure, hive-like, teaming movement would equally characterize the Dallas pedestrian-way. Large in scale and diverse in use, megastructures, like multi-level business cores, are intended to filter manifold vectors: pedestrians and, in the case of the multi-level business core, cars moving through and across a built landscape of varying levels. Mobility over inertia inspired Ponte and Travers, and urban order was dependent on careful direction of traffic: "Orderly growth in modern cities is above all a problem of circulation."<sup>51</sup> The Dallas plan came to fruition as though an open system constantly in flux. It grew according to temporal shifts. As one architect explains, the unique talents of Ponte included facility with time: "Most planners work in two dimensions only. Vince works in four—width, length, height, and, of course, time."<sup>52</sup> Manifesting in a nonlinear temporality, input, output, and feedback worked in concert, with input following the market, the development of real estate above on the ground level, output manifesting in extended walkways at varying grades, and feedback circling back in the form of pedestrian needs, maintenance, and long-term planning. In keeping with a cybernetic paradigm of systems, the influences that shaped the Dallas pedestrian-way may be seen as informational—data in the form of roving humans, urban space, financing, and the materials of construction. Data in this instance materialize as tactile bodies and matter rather than numerical charts, statistics, and binary code.

By the time Ponte presented the plan to Dallas, he was well aware of the influence of systems theory within urban planning.

In February 1968, a year before the plan was presented to Dallas pundits, Ponte was the fourth speaker in a series of public forums on the subject of "The City as a System" that took place over several months and were sponsored by the Boston Architectural Center. Ponte's talk on "The Multi-level City Centre" focused on his abovementioned convictions: a passion for the city, belief in rational urban order, and understanding that a city functions best when private coffers are sufficiently tapped.<sup>53</sup> Using drawings and photographs to reinforce the sound logic of multi-level centres, Ponte reiterated the role Leonardo had played in the cultivation of his thinking. More poignant here is the inclusion of Ponte in the series of workshops, since his views, though highly pragmatic, were overtly rooted in the classical humanism of urban and architectural history. By contrast, the introductory talk given by Donald F. Blumberg, titled "The City as System," was strictly behaviourist in style and methodology. While Blumberg found solutions to urban problems in computer software, Ponte took account of urban problems by way of unique sets of data points emerging from hands-on practice—physical experience, real estate ebbs and flows, the fluctuation of car usage, jobs, and population, and trends in architectural development.

Then the manager of the Operations Research and Management Systems Group of the WOFAC Corporation in New Jersey, Blumberg called for planning to return to a more holistic, or totalizing, vision of the city through linking the urban subsystems of land-use, social-economic, transportation, services, and long-term planning approaches. Blumberg argued that taking account of all of these systems would instil planning with a greater sense of urban dynamism. Though it goes unmentioned, uniting such subsystems would also provide a means for encompassing the ever-sprawling urbanism that had come to characterize the decentralized city. Interspersed with flow-charts and diagrams of statistical data, Blumberg's presentation was premised on what was then a new way of practicing urban planning through the futurology of the computer. For Blumberg, computer-based simulation models could more accurately track and predict the "dynamically changing structure of the city system."<sup>54</sup>

Compared to Blumberg's vision of the "city as a system," Ponte's urban system was far more people-based. It was "systematic" inasmuch as we understand the term as an embodied rather than virtual practice.<sup>55</sup> People would communicate through physical confrontation within the built system designed by Ponte and calibrated by Travers:

So the way to revitalize cities is to make communication and confrontation possible again. To achieve this, one must create new systems of circulation—one must make it possible for people to move, effortlessly, from A to B to C—and, in the course of this, to encounter all the opportunities which made cities worth living in the first place.<sup>56</sup>

In the deployment of a materialist systems theory, Ponte took a stand against the media theorist Marshall McLuhan. Ponte did not so much reject McLuhan's idea that technology has become an extension of the human body. Architecture and

the body for Ponte were, in fact, deeply connected precisely in the manner of a McLuhan-esque technological extension. Architecture, such as the Dallas pedestrian-way, technologizes humans, making life easier and more comfortable and, thus, re-inscribing human perception according to, in this instance, the enclosed and climate-controlled megastructural spaces of Dallas's newly evolving downtown. Ponte deviated from McLuhan's thinking with respect to urban sprawl: Ponte did not agree with the media theorist's prediction of the imminent arrival and ultimate triumph of dispersion. Ponte countered McLuhan. "It will be a long time before we reach McLuhan's urban heaven . . . if it is heaven."<sup>57</sup> He continued in a pragmatic vein, "there are enormous investments, public and private, which are already locked into downtown areas for years to come."<sup>58</sup> On the bodily front, he added, "There is the human factor too. Despite all the advances in transportation and communications, businessmen still want to meet and deal with each other face to face."<sup>59</sup> For Ponte, building and rebuilding a city, at least its core, was a financial and social endeavour that occurred over time. Ponte calibrated his planning methodology with a keen sense of temporality, not only of his incisive understanding of the city as a working, changing, and adapting machine, but also as an investment in the future. He viewed the city in terms of the *longue durée*. Today's present was yesterday's future: the downtown was built to endure and endures with us today.

The ad hoc nature of the "system" proposed by Ponte and Travers for downtown Dallas, that it would grow, change, and accommodate the people who used it, lent the plan longevity and flexibility, an open-endedness that would carry it into the late 1980s. At the inception of the Ponte-Travers plan for Dallas in 1969, the planners predicted that the business core would grow much larger and, as a result, the problem of congestion downtown would grow unabated. In what was ultimately an incorrect prognostication, Ponte and Travers claimed,

Virtually all future commercial development [downtown] is going to take place, as it has in the past, within the narrow confines of the Core. It means by 1980, according to conservative estimates, there will be seven million additional square feet of office space alone and 40,000 more workers coming and going daily in an area that will not become significantly larger than it is right now.

Yet it was a common mistake inasmuch as, during the mid-twentieth century, belief in the future growth of downtown was commonly held. In 1956, employment in the central business district of Dallas stood at 115,000 and was projected to rise to approximately 170,000 by 1980. The actual employment in the central business district in 1980 was 128,000.<sup>60</sup> Regardless of the unforeseen lag in rates of ingress and employment, Ponte and Travers' original 1969 plan was the lodestar for planning pedestrian and vehicular movement in the downtown Dallas over the next thirty years. A publication internally coalesced in 1975 by the Department of Urban Planning in Dallas proffered the further development of the Ponte-Travers pedestrian-way project. In-house planners continued to focus on linking the edges of the business core by "at grade pedestrian areas, sub-surface

pedestrian areas, elevated pedestrian facilities, and vertical movement between levels.”<sup>61</sup> Four years later, Ponte presented the city with *A Report on a Sheltered Pedestrian System in the Business Center* that projected development of the pedestrian-way into 1990 and re-inscribed the growth of the downtown core along a new axis toward the Central Expressway in the northeast quadrant of the city. In 1982, City Manager Charles Anderson invited Ponte back to Dallas to update the 1969 plan for the pedestrian-way. Working in conjunction with the architect Harwood K. Smith, Ponte further propounded growth along the new axis. Ponte and Smith set forth the old and new hubs unfolding in this direction according to dates: Main Place (1968), Thanksgiving Square (1976), Dallas Centre (1979), Tri-Bridge Park (1981), Cadillac Fairview (1983), and Lincoln Plaza (1984).<sup>62</sup> Whereas, in the original 1969 document, Ponte advocated eliminating parking lots and placing most of them below ground level, the 1982 plan found the downtown short 14,000 parking spaces and in dire need of 30,000 more.<sup>63</sup> Ponte also propounded the need for good design in the second plan for the walkway, explaining, “To people passing through, the system should offer visual interest and variety at every step.”<sup>64</sup>

### **Conclusion: “Second-Story City Syndrome” and Aesthetic Judgment**

By the end of the 1980s, support for continued development of the multi-grade pedestrian walkway waned. It was largely seen as a product of modernist megalomania. As part of *Downtown Dallas 2010: Toward a Visual Master Plan to Guide Development* (1989), the Dallas firm Corgan Associates Architects conducted a survey of personal interviews, which found “twenty years of past planning policy has removed people from the sidewalks of Downtown Dallas and encouraged them to walk in the tunnel system below ground to the detriment of street life.”<sup>65</sup> In 1991, the architecture critic of the *Dallas Morning News*, David Dillon, wrote negatively in response to Ponte’s twenty-two-year-old vision of the “city efficient”:

What seemed like progressive planning in the 1960s has become regressive in the 1990s. Instead of the center of civic life, downtown has become a collection of discrete worlds, where each project looks out for itself and nobody looks out for the whole.<sup>66</sup>

In the new millennium, such sentiment has become all but standard. The *vox populi* has declared the pedestrian-way a failure. Mayor of Dallas from 2002 to 2007, Laura Miller was quite vehement about her dislike of the project:

If I could take a cement mixer and pour cement in and clog up the tunnels, I would do it today. It was the worst urban planning decision that Dallas has ever made. They thought it was hip and groovy to create an underground community, but it was a death knell.<sup>67</sup>

In researching this project outside the documents available in the municipal archive, aesthetic judgment has been much easier to come by than hard data. When asked for specific information concerning the ultimate realization of Ponte’s project—what

percentage of his original plan was completed—civil servants responded often with the subjective information of the project’s failure rather than actual data.<sup>68</sup> It is logical that Ponte’s plan is blamed for removing active life from the street level of the business core, for the project overestimated the future congestion of downtown Dallas. It is likely that the core of Dallas neither had nor would have had in the future enough street activity to create congestion at the level Ponte envisioned. Instead of being built for actual necessity, hindsight tells us that the pedestrian-way was an experimental extravagance—an aesthetic project that was functional only inasmuch as it used interstitial and leftover urban space in an inventive and futurist way. While bestowing downtown Dallas with a shiny, modernist image, its ultimate reality is one of segregation, or what Terry Jill Lassar describes in terms of “second-story city syndrome.”<sup>69</sup> From this point of view, Dallas’s pedestrian-way did not truly fail, but in keeping with William H. Whyte’s ideas about calibrated walkway systems, it succeeded all too well. In explaining the conundrum of downtown walkway systems, Whyte told reporters of the *New York Times*, “The problem is not that they won’t work, but that they work too well.”<sup>70</sup> Multi-graded walkway systems are, from this point of view, too functional. In their hyper-functionality, they create an extreme form of stratification in a context better suited for mixture, the integration of people from all different races and classes. Indeed the downtown pedestrian-way in Dallas function superbly well in terms of zoning. It has separated people from cars—and people from people as it has taken on second-story city syndrome. Second-story city syndrome, Lassar argues, furthers the segregation of class and race in the framework of downtowns, relegating poor minorities to street levels where retail has tended to languish and reserving the walkway system for white-collar workers where, as planners once hoped, retail establishments were to thrive. In the instance of Dallas, such segregation is a problem that ultimately pales when compared to the fundamental loss of activity at all levels, for, essentially speaking, downtown Dallas suffers from a lack of critical mass. Channelling people underground in downtown Dallas creates a situation in which the primary activity of streets above ground is automotive. Inasmuch as streets are defined according to people walking along them, the underground walkway system virtually destroys street life at grade level.<sup>71</sup> In short, Dallas does not have the population density downtown to support life above and below ground in its Central Business District.

With regard to “aesthetic judgment,” Dallas’s pedestrian-way is for the most part clean, often exciting because of its peculiar and unforeseen variations, and sometimes beautiful. However, in a sunny and warm climate such as Dallas, where extreme weather comes only in the form of uncomfortable though easily bearable 100-degree heat in the summer, a tunnelling shelter in the downtown business core is not needed. If the original plan for the Dallas pedestrian-way was rational in design, carefully resolved, formally complex, and delightful in its elegant though challenging concept, its ultimate realization falls prey to two of the four design problems enumerated by walkway expert Kent A. Robertson. In a study of the aesthetic impact of the walkway



## Ultramodern Underground Dallas

systems in “five cities with over five hundred skywalk users,” Robertson found that the four areas of major visual impact were “lack of harmonious design with adjoining buildings, inadequacies in system-wide bridge design, negative effects on the design at street level, and blocked vistas.”<sup>72</sup> The pedestrian-way in Dallas suffers from two of these problems. The transition between buildings is, in at least half of the system, awkward if not alarming because of a lack of light. With respect to retail life on the streets of downtown Dallas, the walkway system has had negative effects, luring pedestrians away from above-ground streets to below-ground passages. Robertson’s study showed that, despite the four primary aesthetic drawbacks, 97 per cent of the walkway users he interviewed said “they would like more skywalks in their downtown.”<sup>73</sup> In parallel fashion, the noontime air of the Dallas underground walkway system is convivial and positive. At the same time, any other hour of the day—before and after lunch—the pedestrian entrails beneath the city seem a folly, testimony to another era’s visionary solution to a problem that virtually never was. That Dallas ever truly “needed” a pedestrian-way system is questionable here. If the city’s climate certainly did not call for it, then its economics did. A better solution to the dilemma of economic life downtown would have been incentive to keep and lure back middle class residents. From this perspective, the pedestrian-way system seems but a stopgap measure for a larger, more systematic problem concerning the mixed use of downtown. Pedestrian residents as well as pedestrian workers are needed to make a downtown work: neither one nor the other, but both at once.

### Notes

1. Terry J. Lassar, “The Pros and Cons of Downtown Skywalks,” *Urban Land* 47, no. 12 (1988): 5. The graded walkway system in Dallas has fifteen bridges and twenty-six tunnels.
2. Dallas Public Library, “1600 Pacific,” <http://dallaslibrary.org/CTX/photogallery/downtownliving/1600pacific.htm>.
3. Lassar, “Pros and Cons,” 2. See also Kent A. Robertson, “Pedestrian Walkway Skywalks: The Esthetic Impact of Downtown,” *Landscape* 29, no. 3 (1987): 43–48.
4. George Lois, Arnold Gingrich, and Vincent Ponte, “Dallas Is in Exile,” *Esquire*, June 1968, 68–69. Hereafter cited as “Gingrich and Ponte” because Lois designed the cover alone.
5. Peter Blake introduced readers to Ponte by way of his clothing: “suits made up for him in Italy . . . gloves from Paris . . . shirts are tailored by Medison near the Piazza d’Espagna . . . shoes come from the Paris branch of Lobb’s—which he considers superior to the London headquarters of the firm.” See Peter Blake, “Vincent Ponte: A New Kind of Urban Designer,” *Art in America* 5, no. 5 (1969): 62–67.
6. Vincent Ponte, “The Multi-level City Centre,” *The City as System*, proceedings from the Boston Architectural Center Workshop Series on Environmental Design for Decision-Makers in Government, 1967–1968, Boston, MA, 50.
7. J. Wilonsky, “Forty Years Ago, a Man Had a Plan for Downtown Dallas,” 5 May 2008, *Dallas Observer Blogs*, [http://blogs.dallasobserver.com/unfairpark/2008/05/forty\\_years\\_ago\\_a\\_man\\_had\\_a\\_pl.php](http://blogs.dallasobserver.com/unfairpark/2008/05/forty_years_ago_a_man_had_a_pl.php)
8. Gingrich and Ponte, “Dallas Is in Exile,” 68.
9. Ibid.
10. Ibid., 68.
11. Blake, “Vincent Ponte,” 64.
12. Gingrich and Ponte, “Dallas Is in Exile,” 68–69.
13. Ibid., 69.
14. Ibid.
15. Glenn Fowler, “Planner Assails Business for Fleeing to Suburbs: Says Downtown Congestion Should Be Relieved by Underground Malls,” *New York Times*, 27 June 1967.
16. Fowler quoting Ponte.
17. Blake, “Vincent Ponte,” 63.
18. Hilary Ballon, “Robert Moses and Urban Renewal: The Title 1 Program,” *Robert Moses and the Modern City: The Transformation of New York*, ed. Hilary Ballon and Kenneth T. Jackson (New York: Norton, 2007), 94.
19. Vincent Ponte, “Man, Buildings, New Dimensions for Downtown,” *Skyscraper Management* 52, no. 12 (1967): 15.
20. Fowler quoting Ponte.
21. “Multilevel Man,” *Time*, 19 October 1970.
22. Vincent Ponte and Warren Travers, *Dallas Central Business District: A Report Prepared for the City of Dallas by Ponte-Travers Associates Planning & Traffic Consultants*, 15 August 1969, opening letter, Central Business District, box 11, Dallas Municipal Archives.
23. Ponte and Travers, *Dallas Central Business District*, 15.
24. Blake, “Vincent Ponte,” 63.
25. Ibid.
26. Ballon, “Robert Moses and Urban Renewal,” 104–106.
27. Vincent Ponte, “The Multi-level City Center,” 8.
28. Ibid., 9.
29. Ibid., 11.
30. Ibid., 20.
31. Blake, “Vincent Ponte,” 64.
32. Henry Ginger, “Montrealers Beat Winter in an Underground World,” *New York Times*, 17 December 1976.
33. M. Jeffrey Hardwick, *Mall Maker: Victor Gruen, Architect of an American Dream* (Philadelphia: University of Pennsylvania Press, 2004), 144.
34. Victor Gruen, *The Heart of Our Cities: The Urban Crisis; Diagnosis and Cure* (New York: Simon and Schuster, 1964), 219.
35. Hardwick, *Mall Maker*, 181.
36. Ibid.
37. Ibid., 177.
38. Ibid.
39. Ponte, “Man, Buildings, New Dimensions for Downtown,” 12.
40. Gruen, *The Heart of Our Cities*, 11.
41. Ibid.
42. Hardwick, *Mall Maker*, 162–163.
43. Ibid., 180.
44. Quoted in Hardwick, *Mall Maker*, 172.
45. Gruen, *The Heart of Our Cities*, 272–273.
46. Ponte quoted in obituary posted 13 March 2006, <http://www.02138mag.com/tribe/lives/41.html>.

## *Ultramodern Underground Dallas*

47. "Multilevel Man," 2.
48. Zhong-Jie Lin, "From Megastructure to Megalopolis: Formation and Transformation of Mega-projects in Tokyo Bay," *Journal of Urban Design* 12, no. 1 (2007): 77.
49. Reyner Banham, *Megastructure: Urban Futures of the Recent Past* (New York: Harper & Row, 1976), 2.
50. Banham quoted in Lin, "From Megastructure to Megalopolis," 77.
51. Ponte and Travers, *Dallas Central Business District*, 5.
52. Blake, "Vincent Ponte," 63.
53. Ponte, "The Multi-level City Centre," 49–65.
54. Donald F. Blumberg, "The City as System," *The City as System*, proceedings from the Boston Architectural Center Workshop Series on Environmental Design for Decision-Makers in Government, 1967–1968, Boston, MA, 15.
55. See N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999), 192–221.
56. Blake, "Vincent Ponte," 64.
57. Ponte, "Man, Buildings, New Dimensions," 14.
58. Ibid.
59. Ibid.
60. *Central Business District Past Planning and Current Issues*, January 1987, box 11, Central Business District, Dallas Municipal Archives, 11.
61. *Dallas Central Business District Pedestrian Facilities*, 1975, box 6, Central Business District, Dallas Municipal Archives, 14.
62. Vincent Ponte and Harwood K. Smith, *Dallas Walkways #2*, box 11, Central Business District, Dallas Municipal Archives, 5–6.
63. George Rodrigue, "No Parking," *D Magazine*, January 1982, <http://www.dmagazine.com/>.
64. Ponte and Smith, *Dallas Walkways #2*, 7.
65. Corgan Associates Architects, *Downtown Dallas 2010: Toward a Visual Master Plan to Guide Development, 1989*, box 11, Central Business District, Dallas Municipal Archives, 1.
66. David Dillon, "How Best-Laid Plans of '60s Helped Create Urban Division," *Dallas Morning News*, 8 December 1991.
67. Patrick O'Gilfoil Healy, "Rethinking Skyways and Tunnels," *New York Times*, 3 August 2005.
68. In trying to locate statistics on the exact percentage of Ponte's plan that has been realized and the pedestrianway's total number of feet or mileage, the author made several unsuccessful phone calls and wrote several email messages, to little avail. On 17 October 2008, Assistant Director of Long Range Planning Peer Chacko wrote in an email, "I'm afraid there may not be handy answers to all your questions. The downtown tunnel system dates back to a different planning era and to the best of my knowledge there have been no active planning efforts related to this system within at least the past twenty years. *By and large, it is currently viewed as a detriment to downtown street level retail and pedestrian activity.* The City currently plays a limited role in managing long term leases for small portions of the system that fall within the public right-of-way. The City also plays a role in maintenance of a small portion of the tunnel near Thanksgiving Tower. The rest of the system is in private hands" [author's emphasis].
69. Lassar, "Pros and Cons," 3.
70. Ibid. See also Kent A. Robertson, "Pedestrianization Strategies for Downtown Planners," *Journal of the American Planning Association* 59, no. 3 (1993) 361–371; and William H. Whyte, *City: Rediscovering the Center* (New York: Anchor Books, 1988).
71. For a discussion of the "pedestrian" in planning, see Kent A. Robertson, "The Plight of the Contemporary Pedestrian" in *Pedestrian Malls and Skywalks: Traffic Separation Strategies in American Downtowns* (Brookfield: Avebury, 1994), 2–4.
72. Kent A. Robertson, "Pedestrian Skywalks: The Esthetic Impact on Downtown," *Landscape* 29, no. 3 (1987): 44.
73. Ibid.