

Access *and* Mobility in Milton Keynes: An Inclusive Design History where Urban Planning Ideals *and* Design Intent Meet Disability Politics

How to cite this article: Luck, R. (2022). Access and Mobility in Milton Keynes: An Inclusive Design History where Urban Planning Ideals and Design Intent Meet Disability Politics. *Diseña*, (21), Article.6. <https://doi.org/10.7764/disena.21.Article.6>

DISEÑA	21
AUGUST	2022
ISSN	0718-8447 (print)
	2452-4298 (electronic)
COPYRIGHT: CC BY-SA 4.0 CL	

Original Research Article

Reception

April 06 2022

Acceptance

August 10 2022

🗑 Traducción al español aquí

Rachael Luck

The Open University



This paper offers the first inclusive design history of Milton Keynes, examining how the accessibility of Milton Keynes was conceived at the time it was planned and designed. Prompted by the recollection at interview that people with disabilities were encouraged to live in Milton Keynes because it was accessible, the foundations of this claim are explored through walkabouts, oral histories and documentary evidence. The study reveals 'ease of movement and access' as one of Milton Keynes' planning goals and The Open University as the location for foundational arguments that shaped the social construction of disability. It is remarkable that the social model of disability and the injustice of inaccessibility surfaced in a city that was designed to enable mobility and access, although Milton Keynes in the 1970^s is remembered as a place that attracted designers, academics, and activists interested in a more equitable future.

Keywords

Design intent

Accessibility

Disability politics

Urbanism

Design futures

Rachael Luck—Ph.D. and M.Sc. in Construction Management, University of Reading, M.Sc. in Applied Informatics, University of Reading, Chartered Architect, Dipl., and BA in Architecture, University of Kingston. She is Associate Dean for Research in the STEM Faculty of The Open University, a member of the Editorial Board for *Design Studies* and the AHRC Peer Review College. She applies ethnographic approaches to examine how people participate in the design of spaces, places, and things. Some of her latest publications include 'Inclusive Design and Making in Practice: Bringing Bodily Experience into Closer Contact with Making' (*Design Studies*, Vol. 54); 'Participatory Design in Architectural Practice: Changing Practices in Future Making in Uncertain Times' (*Design Studies*, Vol. 58); and 'Design Research, Architectural Research, Architectural Design Research: An Argument on Disciplinarity and Identity' (*Design Studies*, Vol. 65).

Access and Mobility in Milton Keynes: An Inclusive Design History where Urban Planning Ideals and Design Intent Meet Disability Politics

Rachael Luck

The Open University
The Design Group
School of Engineering & Innovation
Milton Keynes, United Kingdom
rachael.luck@open.ac.uk

The everyday world that we all inhabit can be viewed as disabling and oppressive by anyone who finds it inaccessible. Accessibility is a problem that has its foundations in design at all scales, including city-scale planning and urbanism. Milton Keynes (MK), as this research examines, was an experiment in new town planning in the UK in the 1970s, and continues to be an important international reference in urban design for its mobility and access, as these parameters were envisioned in a way that was not possible in historically grown cities. While mobility and access debates predominately focus on modes of transport, this research surfaces a less examined history of the accessibility of MK that is attentive to people as well as the motorcar.

The way that spaces and places are designed, their spatial configuration, as well as the choice of materials and design details, do have an impact on accessibility for people (Boys, 2014; Imrie, 2012). The design movements of inclusive design and universal design acknowledge this and advocate for the design of things (spaces, places, products, and services) with respect to differing human capabilities (Coleman et al., 2003; Luck, 2018; Mace et al., 1996). The specialist design movements of inclusive and universal design need not exist if 'normative' design did not exclude and marginalize some people (Hamraie, 2012). Indeed, as Heylighen and Bianchin (2013) note, inclusive design still does not feature prominently in what is conventionally understood as 'good' design. Given the social injustice of inaccessibility, inclusive design activists continue to campaign that it should (Hamraie, 2012). Design, evidently, does have politics (Fry, 2011) and the politics of disability and accessibility are entangled in design. A notable milestone in disability politics was the formulation of the social model of disability, which argues that people with impairments are oppressed by barriers in society, including environments that disable people (Shakespeare, 2010). One of the places where the politics of disability were debated was at The Open University, in Milton Keynes.

Informed by these arguments, this paper contributes to the special issue's debates on design, oppression and liberation by examining how the poli-

tics of disability and accessibility became entangled in the design and conceptualization of a new city, Milton Keynes in the 1970s. This exploration was inspired by a conversation with one of its original inhabitants, a retired fireman living in one of the first housing estates, who happens to move around MK in a wheelchair. He distinctly remembers being encouraged to move from London to the new city because of its ease of access. It was his recollection, when interviewed, that “people with disabilities were encouraged to move to MK” which prompted this study, to retrace how the accessibility of MK was conceived at the time it was planned and designed. Motivated by his conviction this research questions: Was MK planned and designed intentionally for accessibility, with people with disabilities in mind? What interest was there in disability and accessibility in MK at the time? How have different understandings of mobility, accessibility and disability shaped the city of MK? In design research terms this is an examination of the design intent for MK — revisiting the city’s goals more than 50 years after it was designed and inhabited.

RESEARCH DESIGN

The collection of data for this research was enabled through conversations at events held at MK Gallery, in contact with the Centre for Integrated Living in MK and a local branch of the charity Remap. The interviews, conversations whilst on walkabouts in the city and in people’s homes were recorded and transcribed and from thematic content analyses, select extracts are reported in this argument.

It was opportune to live in the city at the time of MK’s 50th anniversary, when MK Gallery organized a series of events on architecture and urbanism. The planning, design and realization of MK are within living memory. At these events I was introduced to one of the original architects of Milton Keynes Development Corporation (MKDC) and other members of the Fred Roach Foundation (named after the former Head of MKDC). Formative conversations led to interviews, the collection of oral histories and walkabouts in the city, recovering first-hand accounts of the rationale and circumstances that shaped the design of MK in the 1970s.

At the time of MK 50th anniversary, whilst working on inclusive design research at the Open University (OU), I met local residents who are active in the Centre for Integrated Living (CIL) and discussed the accessibility of MK whilst exploring the city center on foot. With the charity Remap I visited people with disabilities in their homes on MK housing estates, observing domestic life with a wheelchair within housing designed by MKDC. Whilst reading OU course materials I discovered that Vic Finkelstein, a prominent disability activist, was once an academic at OU. MK seemed to attract people with an interest in accessibility (disability politics), the design of the public realm, and urbanism (new town planning, housing, and design of the urban block).

These events, which all have a connection with MK, prompted this exploration of the accessibility of the city, drawing attention to an under-examined part of MK's design history. The research interweaves first-hand accounts of the reasoning behind MK's design, with references to published materials from other MKDC architects and planners. MK's history is highly documented, with open access to original plans, MKDC meeting minutes, and MK's living archive. While there are many planning studies of the city, the design of MK, its architecture and spatial analysis are less examined, with some notable exceptions (Hillier et al., 1992; Walker, 1982).

This research offers the first inclusive design history of MK, retracing how accessibility and mobility for people in the city were conceived more than 50 years ago. The argument presented is a development in new direction of previous presentations that have explored MK's spatial concepts.¹ Presented is an account of the planning and architectural design intent for Milton Keynes, and the goals and ideals for a new city, with the aim to investigate how design for ease of access for people with disabilities was construed at that time. The argument unfolds, retracing how MK was positioned as a post-industrial city with planning goals that were different from other new towns, including the aspiration to attract a university to the city.

1 Including a presentation at the Design History Society Conference, entitled 'How we Live and How we might Live: Design and the Spirit of Critical Utopianism'. Preliminary design and disability politics debates were raised in the 'Diverse City and Universal Design: The Everyday Experience of Being Disabled in/by the City' Common Ground presentation to the AHRC Commons. Accounts of lived experiences in MK were presented at CMKO Innovation Corridor at MK50 City Fest, Academy of Urbanism.

2 From its conception, Milton Keynes (MK) has always been referred to as a city, even though it was initially classed as a New Town and has only recently, in 2022, been designated official city status.

MILTON KEYNES: A NEW POST-INDUSTRIAL FORM OF URBANISM

It is the stuff of legend rather than historical truth that the second half of the Sixties was more radical than the previous years of the decade, particularly from the so-called 'Summer of Love' in 1967 and its lingering warm afterglow into the following decade (...) we can nonetheless acknowledge that the planning of the British new towns in the later 1960s reflected something of the zeitgeist of that decade, namely the love of the new (...) with a renewed impulse to modernise the built environment (...) The Plan for Milton Keynes was born into this atmosphere (Clapson, 2014, p. 3).

Milton Keynes (MK) is a new town/city² that was conceived and planned in the 1960s and designed and built in the 1970s in the UK. It was part of the second wave of the New Towns program of post-war planned development. A series of development corporations were formed with government-designated areas of land for major developments on discontinuous growth corridors (Hall, 2014). MK is located 87 kilometers from London and is adjacent to the M1 motorway that connects the cities of London, Birmingham, and Leeds. "The aim should be to develop centres alternative to London (...) for low-income Londoners driven out by bulldozers" (Bendixon & Platt, 1992, p. 26) to relocate populations from poor quality or bombed-out housing following the Second World War.

The planning of Milton Keynes was conscious of the social fabric it was creating. The first stage was “to generate a set of social objectives that would guide the hands of the physical designers” (Bendixon & Platt, 1992, p. 46). The planning goals were established at numerous meetings and two international seminars. The Master Planner for MKDC, Llewelyn-Davies recounts, “We hope in three months from now that we shall have a picture of the society for which we might be providing in Milton Keynes. He described the seminar as ‘the start of a dynamic process of goal formation’” (Bendixon & Platt, 1992, p. 46).

A change in the nature of cities was foreseen by Melvin Webber, who

suggested that whereas the earlier new towns — symbolised by coal — were products of the ‘middle industrial era’ Milton Keynes would be part of ‘a post-industrial era’ (symbolised by the transistor radio) ‘in which the nature of the city is radically changing’. The ‘knowledge industries of education, research and development, decision-making, information handling and systems analysis’ were becoming the fastest growing parts of the economy. ‘Milton Keynes will be, in a sense, a spearhead of this changing phase of urban civilisation’. (Bendixon & Platt, 1992, p. 47)

MILTON KEYNES PLANNING GOALS

The planning principles for MK were developed at international seminars. Melvin Webber, the predominant thinker in planning, transportation, and cities of the future in the 1960s from the University of California, Berkeley was appointed as a consultant to develop the initial concept for MK. Melvin Webber was described by the Chief Architect of MK as the father of Milton Keynes (Walker, 1982, p. 8).

The spatial layout of MK was influenced by Webber’s thinking on cities of the future and his theories of ‘non-place’ (Webber, 1964) and ‘communities without propinquity’, where good communications meant that communities could be established irrespective of whether they were in close proximity (Webber, 1963). Reflecting Webber’s planning vision, the Chief Architect remarks:

The scale of society has changed (...) we organise our social lives through the telephone, post box, private cars and public transport. Our lives are more influenced by tv, radio and newspapers than by meetings in the streets or chats over the garden fence. (Walker, 1982, p. 8)

However, the one-kilometer square ‘lazy grid’ of MK does overlay a neighborhood scale, where MK is composed of clusters of settlements, each with a local center.

The master plan for MK, often referred to as the Green Book, was written by the planning firm Llewelyn-Davies, Weeks, Forestier-Walker and Bor (1970). As one MKDC architect remembers, it was distinctive, “the green book

uses (...) evocative language with few pictures which is a very simple language not to constrain us". This was in keeping with Webber's non-constraining approach to bounded rationality and other planning problems (Rittel & Webber, 1973). The master plan defined six guiding principles or goals: (1) Opportunity and freedom of choice; (2) *Easy movement and access and good communications*; (3) Balance and variety; (4) An attractive city; (5) Public awareness and participation; and (6) Efficient and imaginative use of resources (Llewelyn-Davies et al., 1970/2014, p. 50).

In an interview, one of the original MKDC architects recollects:

The principles, we had them pinned up on the wall (...) rather than wander off into designing fanciful megacities that were very fashionable at the time, we saw it that you would lay it out simply, leave out the things that you don't find convenient any longer about cities and one of those was density.

When asked what 'easy movement and access' meant, the architect's response was:

Unimpeded pedestrian access, wouldn't need to walk around things, unimpeded by other modes of transport, or have rights of way and to be covered, and that was a tall order. Another principle was *so they would be disabled-friendly or wheelchair friendly*.

The layout of MK, with major roads on a grid, underpasses, minor roads through grid squares and a red route cycleway across the city, meant that the infrastructure for different modes of mobility, pedestrians and automobiles were separated.

He acknowledged that:

Now, in the building regulations, there are *minimum gradients for wheelchair access*. There were no rules and regulations about pavements, no one said how wide they should be, we had to invent those rules ourselves (...) the underpass gradients, we were looking for standards wherever but we couldn't always find them (...) as far as footpaths are concerned (...) the ministry never collected any statistics on pavements, use densities, not there at all.

Although the architects were considering different people's use of footpaths and ramps there were no standards for the width, or the gradients. MKDC architects were considering the design issues of accessibility in the 1970s, at a time when there was no design guidance to make buildings, spaces and places more accessible. The terms being used were 'access' and 'mobility' not 'accessibility'. The architects saw a need for these design considerations and, in the absence of other design guidance, developed their own standards, which became part of the design process and the design rationale for MK infrastructure.

The architect continues " *Young mothers with two children and an older person have very similar requirements in infrastructure terms* and if you get it

right for them you get it right for everyone.” This way of conceptualizing the requirements of different people chimes with the universal design rationale — that there is a better design solution that will suit a variety of people.

Another of the original architects, who wrote a critical reflection on MK, recalls designing a city for a diverse range of inhabitants:

The wide range of local building densities from multi-storey offices through to very low densities around golf courses, lakes and allotments had both an aesthetic and a social intent: it was part of a strong rejection of the notorious uniformity of two-storey houses in earlier new towns; and part of a strategy to attract *not just the newly forming households of skilled workers but a more diverse range of age groups, social classes and ethnicities* [emphasis added]. This was an attempt to engineer a way round another perceived failing of earlier new towns. (Edwards, 2001, p. 92)

Milton Keynes was intended to be fifty percent social housing and fifty percent privately owned, unlike some other 1960s New Towns, which were one hundred percent social housing (Bendixon & Platt, 1992, p. 118). This desire to attract diverse groups of people to MK does seem to resonate with the claim that people with disabilities were encouraged to move to MK. Indeed, there were official dispersal policies at Greater London Council (GLC) to spread people, with schemes to attract people from London to New Towns: the New and Expanded Town Scheme (NETS) and the Direct Nomination Scheme (DNS). Most of the Londoners who moved to Milton Keynes came from North London and the outer boroughs where housing needs were most acute. Certainly, MKDC had arrangements with London boroughs to move people to the new city (Clapson, 2004, p. 94).

Derek Walker, the Chief architect of MKDC, remembers:

Walking distances became an obsession. A series of sensitive responses to the *needs of the old and infirm* [emphasis added], optimum distances for *access to public transport, the needs of wheelchair and ambulance, and the pedestrians of service vehicles* [emphasis added] were studied, offering a stratification which left the pedestrian in firm control of the ground. (Walker, 1982, p. 58)

While no one would currently use the term ‘infirm’, the statement makes direct reference to wheelchairs and the walking distances of pedestrians, from which we can infer that the design of MK was considering the accessibility for people with different capabilities — ease of movement for people within Central MK (CMK) and not just access for motorcars traversing the city.

MK was conceived as a city and was designed at that scale. The object that was being designed was the infrastructure for the city. When interviewed, the architect recounts:

You want me to design the roads, the footpaths, nobody designs those sort of things (...) we were inventing a whole structural system that would be called the infrastructure, the basis of what you will perceive when you come to MK.

It is the infrastructure of MK, which includes the urban design of roads, footpaths, ramps and gradients of the interstitial public circulation space in Central MK, which influenced the accessibility and mobility of the city.

THE OPEN UNIVERSITY IN MK

The Chairman of MKDC, Jock Campbell, knew that MK needed a university to be a credible city. He realized that the new post-industrial economy that Melvin Webber described was not going to be met by the skills of people leaving London. There was “a conflict between the skills of the Londoners the city was due to house and Professor Webber’s view of a science and knowledge-based economy” (Bendixon & Platt, 1992, p. 48).

The Open University’s campus is in Milton Keynes. The OU was encouraged to locate in MK, “The Open University came to be in Milton Keynes (...) [as] a result of some deft political manoeuvring by Llewelyn-Davies [master planner for MKDC] and the Chairman of MKDC” (Clapson, 2013, p. 77). Indeed, one of the founders of The Open University, the sociologist Michael Young, was already debating Non-Plan planning ideas with Sir Peter Hall and Paul Barker, then Editor of *New Society* (Banham et al., 1969). The planning concept of ‘community without propinquity’ promoted by Melvin Webber (1963), where community exists without proximity, also applies to the educational model of the OU.

The OU was the first university in the UK to offer distance education and with an open access policy was “a more democratic access-orientated Open University” (Clapson, 2013, p. 77). The disruptive model for higher education proposed by the OU was attractive to many radical thinkers. In design, John Chris Jones and Nigel Cross were working on *Design Methods: Seeds of Human Futures* (Jones, 1970) and *Man-made Futures* (Cross, 1975; Cross et al., 1974). The module ‘The Future of Cities’ outlined two styles of visioning. The first uses intuition to forecast life and technology at some point in the future. The second is concerned not with what might be but with *what should be*, with a political or ethical orientation (Blowers et al., 1974) — both futures, as we will see, are relevant to MK. Stuart Hall was attracted to the OU developing theory in the field of cultural studies on race, and Vic Finkelstein, jointly with others at The Open University, created the first academic course to promote and develop disability politics (Finkelstein, 1998). Mike Oliver joined the course team and adopted a structural approach to understanding disability and went on to coin the term ‘social model of disability’ in 1983 (Shakespeare, 2010).

Developments in the Politics of Disability and Disability Studies

Vic Finkelstein was a well-known activist in the field of disabilities studies. Finkelstein played a major part in the Union of the Physically Impaired Against Segregation (UPIAS) draft of the Fundamental Principles of Disability:

In our view it is society which disables physically impaired people. Disability is something imposed on top of our impairments, by the way we are unnecessarily isolated and excluded from full participation in society. Disabled people are therefore an oppressed group in society. (Union of the Physically Impaired Against Segregation & The Disability Alliance, 1976)

This was one of the earliest formulations of what would come to be known as the social model of disability: the big idea on which the modern disability movement was founded.

Moving from South Africa in 1968, Vic Finkelstein, a wheelchair user after contracting polio, applied social justice insights from the apartheid era in order to develop an understanding of the social construction of disability (Finkelstein, 2001).

Disabled people have always struggled against the way they have been prevented from taking part in the normal activities of their communities. More recently, however, these struggles have taken a step forward. Disabled people have begun to organize for their emancipation and joined the growing number of groups struggling against social discrimination. (Finkelstein, 1981)

Finkelstein was the course chair for 'The Handicapped Person in the Community', the first course in disability studies (Sutherland, 2011). It is one of Finkelstein's course texts, 'To Deny or Not to Deny Disability' (Finkelstein, 1981) that most clearly illustrates the social construction of disability, where people are disabled by the environment. Finkelstein's text presents what we would now characterize as a design fiction — a futures scenario, of what should not be — presenting an upside-down world where the able-bodied are disabled.

Let us see if we can turn the world upside down and *show that disability is a socially caused problem* [emphasis added]. An upside-down world where the 'able' become the 'disabled' and the 'disabled' become the 'able-bodied' and where we show that far from adjusting and accepting disability perhaps, just perhaps, it is healthier to dent and struggle to eliminate disability (...) Let us suppose that those who believe in segregation could really have their way. We imagined a thousand or more disabled people, all *wheelchair-users, collected together and settled in their own village* [emphasis added] where

they had full management and democratic rights. We will suppose that able-bodied people do not often visit the village and that the wheelchair-users control all aspects of their lives (...) when all the adjustments had been made (...) a few able bodied came to settle in this village. Naturally, one of the first things they noticed was the heights of the doors and the ceilings. They noticed this directly, by knocking their heads on the door lintels. (Finkelstein, 1981, p. 35)

The image Finkelstein constructs is of a settlement inhabited by wheelchair users. He turned the tables on disability by presenting a fictional situation, imagining a village for people in wheelchairs, where, when able-bodied people visited, they knocked their heads on doors and lintels. The door height was too low for people not sitting in a wheelchair. In this fiction, able-bodied people were disabled. The image constructed is of a village in chaos, not functioning according to ableist constructions (Campbell, 2009, p. 3) where people normalize some human characteristics and 'other' disabled people with different capabilities. In Finkelstein's example, it is the 'able-bodied disabled' who are marginalized. The fable is profound, illustrating disability as a construction in society. This argument was taken forward by the disability rights movement to demonstrate how people become disabled by structural barriers in society, including the physical accessibility of the built environment (Shakespeare, 2010).

Coffee Hall: A Settlement Accessible to Wheelchair Users

There is a settlement in MK, Coffee Hall, that bears some resemblance to Finkelstein's village of wheelchair users. While visiting people living in Coffee Hall, to see how a wheelchair foot might be adapted (Luck, 2018), a Remap colleague commented that many people with wheelchairs live on this estate. Although this research does not claim that Finkelstein was aware of a local community of wheelchair users in MK, or know whether Finkelstein visited or lived in Coffee Hall when he worked at the OU, what is of note is that standard housing designed by MKDC could accommodate people in wheelchairs. Coffee Hall was one of the first MKDC housing estates to be built. All "living rooms in MKDC houses met Parker Morris requirements that the space should accommodate three easy chairs, a settee, a television set and some space for a few other items of furniture" (Clapson, 2004, p. 112). The configuration and spatial layout of the houses was accessible for people using a wheelchair. Indeed, there were two people with wheelchairs living in the house visited.

Over time many people using wheelchairs have been housed in Coffee Hall, as MKDC knew these houses could be easily adapted for people to stay in their homes. The MKDC architects designing housing were "under pressure to

build to the higher space standards urged in *Homes for Today and Tomorrow – The 1961 Parker Morris Report*” (Bendixson & Plate, 1992, p. 118). Indeed, “architects, seemingly ground between the upper and nether milestones of Parker Morris space standards and financial yardsticks, were forced to simplify their designs and push up densities” (Bendixson & Plate, 1992, p. 118). Corners were cut to keep up housing output. “In some cases footpaths, fencing, gates and landscaping have been sacrificed for the sake of the actual building’ Campbell told the Minister [government minister for housing]” (Bendixson & Plate, 1992, p. 119). With hindsight, what at the time was seen as problematic has resulted in some MK housing stock that is suitable accommodation for a wider range of the population, including people with greater spatial needs. Indeed, the Chief architect aimed at higher living standards, commenting, “the city is being built for economic and social needs which, in the perspective of the history of city building are new and we expect a standard of performance from our houses and city that was, until recently, only available to a minority” (Walker, 1982, p. 17). The architectural design intent for MK, including MKDC housing, was for high-performance standards for everyone.

REFLECTION

The materials presented in this paper offer an inclusive design history of MK, which retraces how the accessibility and mobility for MK were conceived more than 50 years ago. The account connects the city center and campus and examines the expectation that the city would be accessible, voiced by a local resident, as well as descriptions of the planning and design rationale for MK and finds a local connection with developments in the theory of disability and the field of disability studies.

The logic of MK’s infrastructure was fundamental to its ease of access, separating different modes of mobility with cars and public transport on grid roads, bikes on red ways, away from pedestrians in the city center. Ease of access for traffic, as we see in MK, was interconnected with the accessibility of public places for people, including those with a disability, in the city center.

With reference to the MK master plan it is known that ease of movement and access was one of the principle planning goals. Access as a concept, however, does not apply solely to people with disabilities. Indeed, the universal design movement considers that improvements made for people with disabilities will also benefit other members of society (Mace et al., 1996). It is a universal design perspective that an MKDC architect articulates when describing how different groups of people were considered in the design of CMK infrastructure, and how this led to a city center that has pedestrian access unimpeded by cars.

In the design of the public realm MKDC architects considered different inhabitants’ capabilities, anticipating the accessibility needs of people in wheelchairs as well as people with pushchairs. MK’s infrastructure was designed

from its inception for level and ramped access throughout the city center. MKDC architects developed their own design standards, generating guidance for the gradients of ramps and the width of walkways. The architects had identified a more general need for design guidance and accessibility standards that at the time were not part of the Building Regulations. While the goal of ‘ease of access and movement’, similar to other aspects of MK’s Plan was not over-defined, the architects’ considerations reflect that the design intent for MK did consider accessibility for mobility-impaired people, as well as movement scenarios for other inhabitants.

MKDC’s architects’ aspiration to raise the housing design standards for everyone resulted in adaptable and accessible housing stock on some estates, creating settlements where people in wheelchairs were more easily housed. Given these design characteristics, as part of the New Towns relocation program, MK was an attractive location for people with disabilities to live.

There are lessons to learn from MK to design more accessible towns and cities. For large-scale developments, MK illustrates the importance of holistic, whole-city consideration of access and mobility from the outset of any development. The infrastructure that underpins MK’s ease of movement could not be retrofitted. The time and attention given to the detailed design of MK has also resulted in a more accessible city center, with features such as shallow pavement gradients, considered walking distances from parking and stone planters that were designed to also be used as seating. The quality of the design of CMK is evident in this attention to detail and contributes to MK’s design legacy with a more accessible public realm than many cities. There are economic advantages from this attention to detail. MKDC architects’ commitment to high design standards proved to be an investment in accessibility for the longer term. There is economic value, as well as social quality of life impacts when ‘good’ design includes accessibility at its core.

It was remarkable to discover that OU academics developing foundational arguments in disability politics used the design of the environment to illustrate the social construction of disability — presenting an ableist design future. The happenstance that the Coffee Hall settlement in MK does house more people using wheelchairs than other areas of MK is testament to the spatial design standards that preceded the accessibility design guidance in Part M of the building regulations and lifetime homes design standards. Designing to high standards for a better way of living, as the architects’ accounts reveal, was part of MK’s vision and spirit of optimism.

MK’s vision to be a different new town/city attracted the attention of many leading planners and architects, including some who discussed non-plan organizational ideas with Michael Young at The Open University. The OU, with its groundbreaking educational model, attracted academics including Vic Finkelstein, who intended to turn the world upside down, so that the everyday environ-

ments we all inhabit would not disable people. Entangled in the history of MK are Finkelstein's disability politic ideals, to liberate the oppressed, as well as formative 'inclusive' design actions and practices to make the public realm in the city center accessible for everyone.

CONCLUSION

MK has an under-acknowledged design legacy, with a more accessible central urban district than many cities. This paper offers the first inclusive design history of MK that has focused attention on how people with disabilities were considered in the planning and design of the city in the 1970s. MKDC architects anticipated the need for the city to be accessible for people with a wider range of capabilities and were forerunners, acknowledging the need to develop design standards to make access and mobility easier for everyone.

Given the gravitational pull of MK, as a new town experiment and The Open University with its different educational offering, MK attracted radical thinkers and educators who wanted to develop new academic courses, as well as leading planners and architects who wanted to explore new urban ideas. The social model of disability questioned the design of environments, as did MK in its conception and realization as a distinctive New Town. There were many luminaries in architecture, urbanism, design, and disability studies who passed through MK in the 1970s and left their mark. **D**

Acknowledgments

This paper would not have been possible without the generosity of many people who gave their time and informed consent to participate in this research and shared their recollections of MK's formative years. The research was approved by the OU Human Research Ethics Committee, as part of the ERC-funded project 'Universalism, universal design and equitable access to the designed environment'. It is as a mark of respect to Ken Baker (1942-2021) that I write this paper, with memories talking and walking as Ken explained the design rationale of MK, revealing details of CMK's infrastructure and the circumstances in the 1970s that led to the selection of particular materials. Ken never stopped designing and imagining additions to MK, as he lived with deteriorating mobility.

REFERENCES

- BANHAM, R., BARKER, P., HALL, P., & PRICE, C. (1969). Non-plan: An Experiment in Freedom. *New Society*, 13(338), 435-443.
- BENDIXON, T., & PLATT, J. (1992). *Milton Keynes: Image and Reality*. Granta.
- BLOWERS, A., HAMNETT, C., & SARRE, P. (Eds.). (1974). *The Future of Cities*. The Open University Press.
- BOYS, J. (2014). *Doing Disability Differently: An Alternative Handbook on Architecture, Disability and Designing for Everyday Life*. Routledge.
- CAMPBELL, F. K. (2009). *Contours of Ableism: The Production of Disability and Aabledness*. Palgrave.
- CLAPSON, M. (2004). *A Social History of Milton Keynes: Middle England/Edge City*. Cass.

- CLAPSON, M. (2013). *Anglo-American Crossroads: Urban Planning and Research in Britain, 1940-2010*. Bloomsbury.
- CLAPSON, M. (2014). The Wider Context. In H. Meller (Ed.), *The Plan for Milton Keynes* (pp. 1–26). Routledge.
- COLEMAN, R., LEBBON, C., CLARKSON, J., & KEATES, S. (2003). From Margins to Mainstream. In J. Clarkson, S. Keates, R. Coleman, & C. Lebbon (Eds.), *Inclusive Design: Design for the Whole Population* (pp. 1–25). Springer. https://doi.org/10.1007/978-1-4471-0001-0_1
- CROSS, N. (1975). *Design and Technology: Man-made Futures Unit 9*. The Open University Press.
- CROSS, N., ELLIOTT, D., & ROY, R. (1974). *Man-made Futures: Readings in Society, Technology and Design*. The Open University Press.
- EDWARDS, M. (2001). City Design: What Went Wrong at Milton Keynes? *Journal of Urban Design*, 6(1), 87–96. <https://doi.org/10.1080/13574800120032905>
- FINKELSTEIN, V. (1981). To Deny or Not to Deny Disability—What is Disability? In A. Brechin, P. Liddiard, & J. Swain (Eds.), *Handicap in a Social World* (pp. 34–37). The Open University Press.
- FINKELSTEIN, V. (1998). Emancipatory Disability Studies. In T. Shakespeare (Ed.), *The Disability Reader: Social Science Perspectives* (pp. 28–51). Cassell.
- FINKELSTEIN, V. (2001). *A Personal Journey into Disability Politics*. <https://www.independentliving.org/docs3/finkelstein01a.pdf>
- FRY, T. (2011). *Design as Politics*. Berg.
- HALL, P. (2014). “And One Fine Morning –”: Reflections on a Double Centenary. *The Town Planning Review*, 85(5), 557–562. <https://doi.org/10.3828/tpr.2014.34>
- HAMRAIE, A. (2012). Universal Design Research as a New Materialist Practice. *Disability Studies Quarterly*, 32(4), Article 4. <https://doi.org/10.18061/dsq.v32i4.3246>
- HEYLIGHEN, A., & BIANCHIN, M. (2013). How Does Inclusive Design Relate to Good Design? Designing as a Deliberative Enterprise. *Design Studies*, 34(1), 93–110. <https://doi.org/10.1016/j.destud.2012.05.002>
- HILLIER, B., PENN, A., & DALTON, N. (1992). Milton Keynes: Look Back to London. *Architects Journal*, 195(3), 42–46.
- IMRIE, R. (2012). Universal Design and Equitable Access to the Built Environment. *Disability and Rehabilitation*, 34(10), 873–882. <https://doi.org/10.3109/09638288.2011.624250>
- JONES, J. C. (1970). *Design Methods: Seeds of Human Futures* (2nd Ed.). Wiley.
- LLEWELYN-DAVIES, R., WEEKS, J., FORESTIER-WALKER, R., & BOR, W. (2014). *The Plan for Milton Keynes*. Routledge.
- LUCK, R. (2018). Inclusive Design and Making in Practice: Bringing Bodily Experience into Closer Contact with Making. *Design Studies*, 54, 96–119. <https://doi.org/10.1016/j.destud.2017.11.003>
- MACE, R. L., HARDIE, G. J., & PLACE, J. P. (1996). *Accessible Environments: Toward Universal Design*. North Carolina State University.
- RITTEL, H., & WEBBER, M. (1973). Planning Problems are Wicked Problems. *Policy Sciences*, 4, 155–169.
- SHAKESPEARE, T. (2010). The Social Model of Disability. In L. J. Davis (Ed.), *The Disability Studies Reader* (pp. 266–273). Routledge.
- SUTHERLAND, A. (2011, December 16). Vic Finkelstein: Academic and Disability Activist, Obituary. *The Independent*. www.independent.co.uk/news/obituaries/vic-finkelstein-academic-anddisability-activist-6277679.html

- UNION OF THE PHYSICALLY IMPAIRED AGAINST SEGREGATION, & THE
DISABILITY ALLIANCE. (1976). *The Fundamental Principles of Disability*. [https://
disabledpeoplesarchive.com/wp-content/uploads/sites/39/2021/01/001-Fundamen
talPrinciplesOfDisability-UPIAS-DA-22Nov1975.pdf](https://disabledpeoplesarchive.com/wp-content/uploads/sites/39/2021/01/001-FundamentalPrinciplesOfDisability-UPIAS-DA-22Nov1975.pdf)
- WALKER, D. (1982). *The Architecture and Planning of Milton Keynes*. The Architectural
Press.
- WEBBER, M. M. (1963). Order in Diversity: Community without Propinquity. In L. Wirigo
(Ed.), *Cities and Space*. Johns Hopkins University Press.
- WEBBER, M. M. (1964). The Urban Place and the Nonplace Urban Realm. In M. M.
Webber (Ed.), *Explorations into Urban Structure* (pp. 79-153). University of
Pennsylvania Press. <https://doi.org/10.9783/9781512808063-005>