EXPERTISE

- Urban Design and Master-Planning
- Sustainable Development and Sustainable Mobility
- Urban Regeneration and Urban Renewal
- Resource Efficiency in Architecture and Planning
- Architectural Heritage, Conservation and Retro-Fit
- Environmental Impact Assessment and Strategic Environmental Assessment

EDUCATION

- Dublin Institute of Technology : School of Spatial Planning : 2010 2012 MSc Sustainable Development : First Class Honours Urban Development and Transport Mobility
- HafenCity Universität Hamburg : Built Environment and Metropolitan Development : 2009 2010 MSc Resource Efficiency in Architecture : Selected Course Modules Waste Management / Energy Efficiency / Water Management
- University College Dublin : School of Architecture : 2005
 Architecture Part 3 Course and RIAI Membership
- Technische Universität Berlin : Department of Planning and Architecture : 1989 1995
 Diplom-Ingenieur Architekt (equivalent to MSc Architecture) : Second Class Honours
 Brownfield Development / Urban Infill / Retro-Fit
- Primary + Secondary School Education in Hamburg : Born 1968
- Languages : English fluent : French intermediate : German native

CURRENT PROJECTS

- Seán Harrington Architects and Urban Design Business Development for Sustainable Housing Projects in Berlin
- Dublin 2 Walk Initiative and Dublin City Council
 Analysis of Shared Space Potential for Dublin's Creative Quarter
- Dublin Cycling Campaign
 Strategies for Cycling Policies and Infrastructure
- Irish Transport Research Network
 ITRN Conference 2012
- College Green Regeneration :

EXPERIENCE

RPS Group Dublin : Environmental Impact Assessment Consultant (JUN 2012 – DEC 2012)

- Cullenagh Wind Farm County Laois: coordinated, revised and edited EIS with specific focus on mitigation measures for transport, cultural heritage, landscape and visual quality.
- SEA for Land-use Planning: developed a national policy framework in Strategic Environmental Assessment for county development plans and local area plans.

National Transport Authority Dublin : Urban Design Researcher (NOV 2010 - DEC 2011)

- Dublin City Centre Vision: prepared within the agency's design team evidence based guidelines to produce a sustainable traffic management strategy.
- College Green Dublin: researched the suitability of the Shared Space concept for Dublin through stakeholder consultation and field analysis in Ireland and abroad.

Planungsbüro Rohling Hamburg : Sustainability Consultant (FEB 2010 – AUG 2010)

• Holstentor School Lübeck: optimised as a member of the firm's design team the energy and resource efficiency for the extension and retro-fitting of the premises.

Henry J Lyons Dublin : Project Architect + Urban Designer (FEB 2008 – FEB 2009)

- Ballymun Town Centre Dublin: prepared as part of the office's project team a planning application and in particular the integration of public transport facilities for a large scale urban regeneration scheme for 150.000m² retail, civic and leisure facilities and residential units.
- Mahon Point Cork City: produced as a member of the office's urban design team a feasibility study and masterplan for large scale development of 360 apartments including hotel, conference centre, retail units and crèche.
- Spencer Dock Offices Dublin: prepared as project leader the design and planning application for an exclusive office development in a regeneration area including protected structures.

Scott Tallon Walker Dublin : Project Architect (MAR 2006 – SEP 2007)

- Lansdowne Road Stadium Dublin: designed as a member of the project team access and gate facilities for public and internal circulation including the concourse fit-outs.
- Parknasilla Conference Centre County Kerry: prepared within the firm's project team the design and planning application for conference facilities while refurbishing the remaining structures of historic Derryquinn Castle demesne.

Gerry Cahill Dublin : Conservation Architect + Urban Designer (FEB 2004 – FEB 2006)

- Players Square Mixed-Use Development Dublin: designed office and residential buildings and coordinated as a member of the firm's urban design team masterplan and visual impact assessment for 550 apartments, retail units, a theatre and sports facilities.
- Palmerston Road Residence Dublin: designed as project leader the modernisation and extension of a family home and prepared conservation documents.

Max Dudler + HemprichTophof Berlin : Design + Conservation Architect (AUG 1998 – SEP 2003)

- Federal Department of Transport Berlin: produced as part of the site supervision team construction documents and coordinated conservation and execution of restoration works.
- Ministry Gardens Luxury Apartments Berlin: designed and prepared masterplan and produced planning application within the office's project team for a prestigious residential development.
- Daimler-Benz Offices Berlin: developed as part of the design team a local area plan and feasibility studies, followed by building design and construction preparation.

StudioMORSA New York City : Architect + Interior Designer (MAY 1996 – JUN 1998)

- Pasqua Coffee Shops New York City: produced design, application and construction documents for café and associated retail units.
- Restaurant Rialto and Havana New York City: designed and coordinated the conversion of store premises to restaurant and bar facilities.

EXPERTISE

- Urban Design und Quartiersbildung
- Nachhaltige Stadt- und Verkehrsentwicklung
- Städtebau und Stadtsanierung
- Ressourcen-Effizientes Planen und Bauen
- Denkmalgerechte Modernisierung und Ensembleschutz
- Umweltverträglichkeitsprüfung UVP und Strategische Umweltprüfung SUP

AUSBILDUNG

- Dublin Institute of Technology : School of Spatial Planning : 2010 2012
 Master of Science in Sustainable Development : Abschluss mit Auszeichnung
 Thesis : Schnittstelle zwischen Stadtplatz-Qualität und Mobilität
- HafenCity Universität Hamburg : Baukunst und Metropolen-Entwicklung : 2009 2010
 Master of Science Resource Efficiency in Architecture and Planning: Englisches Curriculum
 Ausgewählte Kursmodule : Energie-Effizienz / Abfallwirtschaft / Wasser-Management
- University College Dublin : School of Architecture : 2005 Kurs zum akkrediditierten Architekten (Part 3) mit abschliessender RIAI Aufnahmeprüfung
- Technische Universität Berlin : Fachbereich Architektur : 1989 1995
 Diplom-Ingenieur Architekt : Schwerpunkte Städtebau, Nachverdichtung und Sanierung
 Diplomarbeit : Regenerierung und Umnutzung von Militär-Brachen in Potsdam
- Grund- und Gymnasiale Schulausbildng in Hamburg : Geboren November 1968
- · Spachkenntnisse : English fliessend : Französisch gut : Deutsch Muttersprache

BERUFLICHE INITIATIVEN

- Seán Harrington Architects and Urban Designers
 Projekt-Aquise für Nachhaltige Wohnungsbauvorhaben in Berlin und Brandenburg
- Dublin 2 Walk Initiative
 Shared Space Untersuchung für das Creative Quarter im Stadtzentrum Dublins
- Dublin Cycling Campaign
 Aktive Mitarbeit zur Verbesserung der Radfahr-Sicherheit und Infrastruktur in Dublin
- Irish Transport Research Network
 Wissenschaftlicher Beitrag zur ITRN Konferenz 2012
- College Green Aufwertung :

BERUFSERFAHRUNG

RPS Group Dublin : Beratung zur Umweltverträglichkeitsprüfung (JUL 2012 – DEZ 2012)

- Windkraftanlage Cullenagh County Laois: Koordination und Revision der Umweltverträglich-keitsprüfung für Ausgleichsmassnahmen in den Bereichen Verkehr, Kultur- und Landschaftserbe.
- Strategische Umweltprüfung für Flächennutzungspläne: Entwicklung eines nationalen Richt-linienwerks für die effiziente Einbeziehung von SUP in die Bauleitplanung.

National Transport Authority Dublin : Stadtplanung + Studien (NOV 2010 – DEZ 2011)

- 2030 Vision für Dublin's Stadtzentrum: Mitarbeit im Planungsteam zur Ausarbeitung eines Massnahmenkatalogs für eine nachhaltige Verkehrsstrategie, sowie Aufwertung öffentlicher Verkehrsflächen.
- College Green Dublin: Machbarkeitsstudie, Bürgerbefragung und Vergleichsstudien zur Verwendung des 'Shared Space' Konzepts an Dublin's zentralem Stadtplatz.

Planungsbüro Rohling Hamburg : Beratung zur Ressourcen-Effizienz (FEB 2010 – AUG 2010)

• Holstentor Schule Lübeck: Mitglied des Design Teams zur Optimierung der Energie- und Ressourcen-Effizienz für den Umbau und die Erweiterung einer Gemeinschaftsschule.

Henry J Lyons Dublin : Architektur + Städtebau (FEB 2008 – FEB 2009)

- Ballymun Town Centre Dublin: Mitglied des Planungsteams f
 ür den Bauantrag einer Stadtviertel-Erneuerung mit U-Bahn-Anbindung und insgesamt 150.000m² BGF f
 ür Verkauf, öffentliche und Freizeit-Einrichtungen, sowie Wohnungen.
- Spencer Dock Offices Dublin: Projektleitung für Entwurf und Bauantrag eines Bürokomplexes unter Einbeziehung denkmalgeschützter Bausubstanz.

Scott Tallon Walker Dublin : Architektur + Denkmalpflege : (MAR 2006 – SEP 2007)

- Lansdowne Road Stadium Dublin: Teilnahme an der Ausführungsplanung einer Sportarena für 50.000 Besucher in den Bereichen ÖPNV-Anschluss, interne Erschliessung, sowie Ausstattung der Gesellschaftsräume.
- Parknasilla Conference Centre County Kerry: Entwurf und Bauantrag eines Konferenz-Zentrums unter Einbindung denkmalgeschützter Schloss- und Gartenanlagen des historischen Derryquinn Castle.

Gerry Cahill Dublin : Architektur + Städtebau + Denkmalpflege (FEB 2004 – FEB 2006)

- Players Square Development Dublin: Projektleitung für Entwurf und Bauantrag von Büro- und Wohngebäuden, sowie Mitglied im Urban Design Team zur Erstellung des Masterplans und Raumgutachtens für 550 Wohneinheiten, Verkaufsflächen, Theater und Sporteinrichtungen.
- Palmerston Road Residence Dublin: Projektleitung für Entwurf, Bauantrag und Ausführungs-planung zur Erweiterung und Umbau eines denkmalgeschützten Wohngebäudes.

Max Dudler / HemprichTophof Berlin : Architektur + Städtebau + Denkmalpflege (AUG 1998 – SEP 2003)

- Bundesverkehrsministerium Berlin: Teilnahme an der künstlerischen Oberleitung für Max Dudler Architekten mit Schwerpunkt auf Koordination zwischen hochwertigem Ausbau und Denkmalpflege.
- Ministergärten Berlin: Mitglied im HemprichTophof Design Team für Wettbewerb, Entwurf und Bauantrag eines Projektes für exklusive und grossräumige Apartments in der Stadtmitte.
- Mercedes-Benz Verwaltung Berlin: Mitentwicklung der Bauleitplanung inklusive Machbarkeits-studien und Bauantrag für Bürogebäude im HemprichTophof Design Team.

StudioMORSA New York City : Architektur + Innenraumgestaltung (MAI 1996 – JUN 1998)

- Pasqua Coffee Shops New York City: Architekt für Entwurf, Bauantrag und Ausführungsplanung von Café-Geschäften in den Lobby- und Plaza-Bereichen bestehender Büro-Hochhäuser.
- Restaurant Rialto and Havana New York City: Designer für Um- und Ausbau von Ladenflächen zu Restaurant und Bar-Einrichtungen.

Portfolio Übersicht :



In the exercise of its statutory powers and on the recommendation of the Academic Council, the Institute has conferred the

MASTER OF SCIENCE

in

SUSTAINABLE DEVELOPMENT

with

FIRST CLASS HONOURS

Thorsten Peters

Mar fheidhmiú ar a cumhachtaí reachtúla agus ar mholadh na Comhairle Acadúla, tá an Institiúid tar éis an chéim seo a bhronnadh ar an duine thuasluaite

I bhfianaise air sin cuireadh séala na hInstitiúde ar an bpár seo In witness whereof the seal of the Institute is impressed upon this parchment

President Uachtarán

Michael 4

Director of Academic Affairs and Registrar Stiúrthóir Gnothaí Acadúla agus Cláraitheoir BARNELL OF THE MARK

15th February 2012

Date of Academic Council / Dáta Comhairle Acadúla

11/4281

DIE TECHNISCHE UNIVERSITÄT BERLIN

VERLEIHT MIT DIESER URKUNDE

Herrn Thorsten P e t e r s geboren am 22. November 1968 in Hamburg

DEN GRAD

DIPLOM-INGENIEUR

STUDIENGANG ARCHITEKTUR

NACHDEM DIE DIPLOMPRÜFUNG

IM ORDNUNGSGEMÄSSEN VERFAHREN Abgelegt wurde

BERLIN-CHARLOTTENBURG, DEN

1. November 1995

FACHBEREICH ARCHITEKTUR

DER PRÄSIDENT VERTRETUNG VIZEPRÄSIDENT

DER DEK

THE TECHNICAL UNIVERSITY OF BERLIN

WITH THIS CERTIFICATE, AWARDS

Mr. Thorsten Peters, born on November 22, 1968, in Hamburg,

THE DEGREE OF A

GRADUATE ENGINEER

COURSE OF STUDIES ARCHITECTURE

AFTER HAVING SUCCESSFULLY PASSED THE DIPLOMA EXAMINATION IN ACCORDANCE WITH THE REGULAR PROCEDURES.

BERLIN-CHARLOTTENBURG, November 1, 1995

THE PRESIDENT PER PROXY

/signature/

VICE-PRESIDENT

DEPARTMENT OF ARCHITECTURE

THE DEAN

/signature/

The Main Examination for University Diploma was passed in accordance with the Examination Rules for the Course of Studies Architecture at the Technical University of Berlin.

I HEREBY CERTIFY THAT THIS IS A TRUE AND COMPLETE TRANSLATION OF THE PRESENTED GERMAN DOCUMENT. THIS TRANSLATION CONTAINS 1 PAGE. Berlin, March 25, 1997 Jochen Wendt Graduate Interpreter/Translator for German, English, Portug Generally Sworn Interpreter for the Courts and Notaries of B	und Notare allgenten Jochen Wendt Diplomsprachmittler Englisch Portugiesisch and Here ertin * avostation (Control of the second Control of the second
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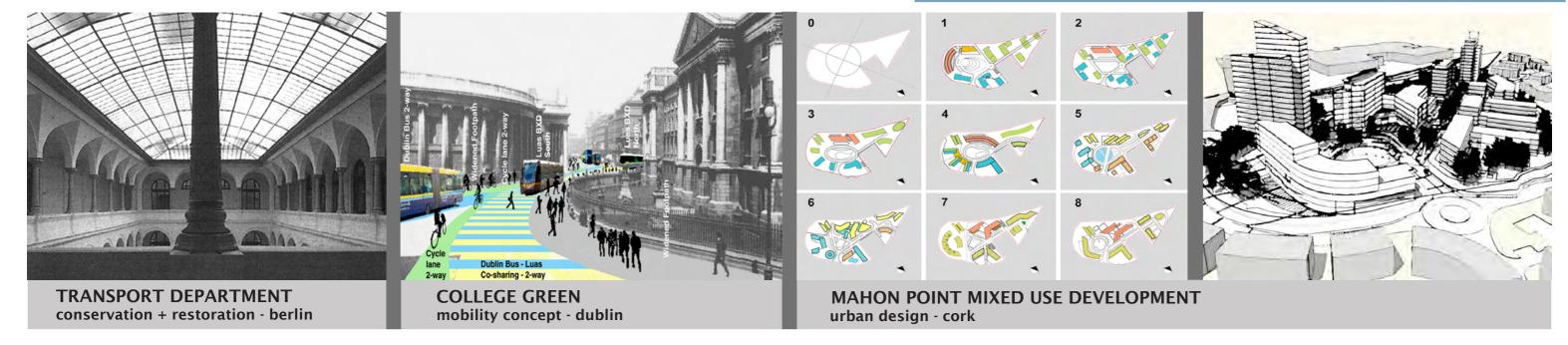


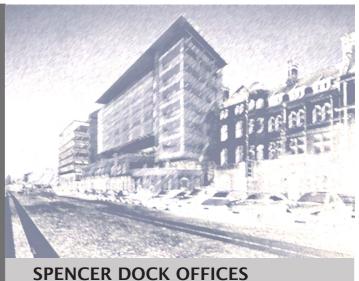
PLAYERS' SQUARE QUARTER DEVELOPMENT urban regeneration - dublin

LONGHUA BUSINESS PARK brownfield development - shanghai



thorsten peters





urban design - dublin



BALLYMUN TOWN CENTRE urban regeneration - dublin

project selection

College Green How could a Shared Space concept improve the quality of Public Open Space?

Thorsten Peters

Diplom Ingenieur Architekt - Architect MRIAI MSc Sustainable Development

Dissertation: Master of Science Sustainable Development Dublin Institute of Technology School of Spatial Planning, Department of Environment and Planning Supervision: Conor Norton, Head of Department

Synopsis February 2012

College Green - Shared Space - Public Open Space

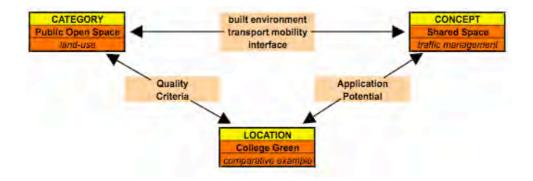
Abstract.

This research explored Dublin's College Green as Public Open Space and the potential to have the Shared Space concept applied to it. College Green's interface between the built environment and transport mobility and its civic, economic and cultural values and limitations were studied in further detail. Public space quality criteria and the significance of link and place specific activities were established in this context. Furthermore, the evolution of Shared Space as a simplified streetscape scheme without modal segregation was researched. Its benefits and deficits were analysed through best practice examples.

A case study approach was applied to obtain results from interviews, various observations, a pilot survey and an extensive literature review. In addition, field visits to successfully regenerated Public Open Space abroad were conducted.

The quality of public space in city centres, in Dublin in particular, is compromised by unsustainable transport mobility. College Green, due to its most central location and road layout, is characterised by dominant link-specific activities, which diminished place-specific activities. Contravening objectives for College Green's functions make it difficult to develop concrete solutions, which could act as a panacea to convert it into sustainable Public Open Space. A Shared Space application would enhance social interaction in College Green while improving transport safety and flow. However, a scheme for this location cannot be applied in isolation, but needs to become an integral part of a wider strategy for sustainable development in the Greater Dublin Area. Moreover, the responsible design team would need to be of a multi-disciplinary nature to include all relevant aspects. A paradigm shift towards a liveable city centre is required to overcome College Green's poor civic performance.

Research of public space quality criteria and shared space applied to the urban environment has the potential to add valuable information to the fields of sustainable urban development and sustainable transport mobility. For best results, it should be pursued, by practitioners and academics, in an Action Research process.



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Appendices will be provided on request, complete or in sections

Abbreviations			
BOI	Bank of Ireland		
DCC	Dublin City Council		
DCT	Dublin Civic Trust		
GDA	Greater Dublin Area		
HGV	Heavy Goods Vehicle		
IEN	Irish Environmental Network		
LRT	Light Rail Transit		
NDA	National Disability Authority		
NTA	National Transport Authority		
TCD	Trinity College Dublin		

1 Introduction

1.1 Context

Objectives – Research Areas – Correlation:

Public Open Space Qualities - an in-depth analysis of the built environment-transport mobility interface, to improve observed spatial qualities in city centres.

Shared Space Qualities - an exploration of the Shared Space concept in its variations and its adaptabilities to Public Open Space with high transport and land-use demand.

College Green Qualities - integrative strategies, which avoid isolated solutions and could be used to generate a sustainable city centre for Dublin.

Framework:

'The Tragedy of the Commons' (Hardin 1968) concluded that there is no technical solution to a continuously growing population using up continuously scarcer resources. Instead it requires an ethical solution through behavioural modification to avoid the deterioration of the shared goods or space.

College Green in the Dublin city centre has been selected as a case study area to determine Public Open Space qualities and Shared Space potential. A unique and prestigious space for the Irish capital,

it is symptomatic for the interface of the built environment and transport mobility in Dublin. This work is not a panacea for College Green's range of contravening aspirations and visions. It is an appraisal of improvement potential for the public realm, where transport mobility and the built environment demand integrated solutions. Best practice examples and continuous research through a blog assist this pursuit:



http://www.collegegreensharedspace.com

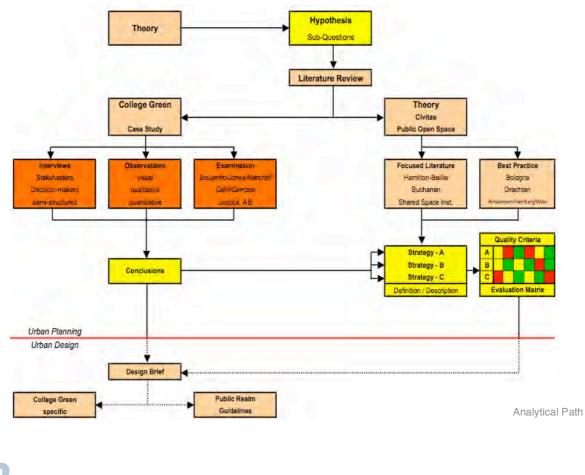
1.2 Theory

Urban space, which is publicly accessible, comprises all areas outside buildings, which are not restricted by private ownership. This space is defined and outlined differently by both, analysts and users. Urban planners refer to Public Open Space as a zoning term, urban sociologists use the term Public Realm while citizens define space for work, travel and recreation in multiple facets. Therefore, objectives for the function, use and design of space in the city are not only hugely complex, but also diverse and partly contravening. Civic measures such as ownership and responsibility for a space are juxtaposed against engineering facts of transport and land-use provision. This displays the interface of the built environment and transport mobility in its complexity as Gehl (2011) defines it simply as *'Life between Buildings'*.

Use of Public Open Space in Ireland has become more dominated by motorised transport, but the physical perimeters of spaces have generally not increased. Segregated, competitive use of limited areas has therefore established highly contested space, where user qualities are in question.

Hypothesis:

The need for a Paradigm Shift towards integrative space sharing, as the traditional road segregation for transport modes in College Green does not serve all users equally and fairly.



Literature Review

2.1 Public Open Space

Literature about the evolution of urban public space has built an understanding of the aspects of public citizenship with its physical and social requirements for the development and maintenance of Public Open Space in the city. Work on urban regeneration concepts was used to gain further knowledge in this field. The choice of concepts and examples varies between

Monuments without Streets and Squares without Streets and Squares Without Streets and Squares

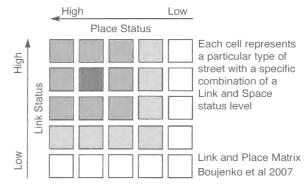
Res Privata

theoretical, strategic approaches and concrete urban design proposals for specific city centre locations. Useful information about the important functional aspects of accessibility, density, diversity and distinctiveness was collected while the duality of built environment as place and transport mobility as link was investigated.

Res Publica

Civitas:

Sennett (1992) explains it as vital combination of the physical, social and sensual elements in the urban environment. Public Open Space should possess a unique character and create a balanced enclosure through emphasis and discontinuity (Sitte 1965).



Regenerative Urban Development:

The public realm requires careful treatment with regard to urban planning, design and architecture, as this is the space of 'life between buildings' (Gehl 2011). The dual function of public spaces to concurrently operate as a link and as a place is the basis of Boujenko, Jones and Marshall's (2007) approach for urban planning and design in order to encourage sustainable transport and socially inclusive spaces.

"Public space can be considered in terms of movement and social space. A crucial difference is that movement space for pedestrians is also social space, but movement space for vehicles often annihilates its potential as social space." (Carmona, Heath, Oc and Tiesdell 2010)

2.2 Sustainable Transport Development

Shared Space documents were reviewed with regard to the concept's suitability to specific spaces, traffic volumes, transport modes and public mentality. The chosen literature provides an overview of the gradation and varying understanding of the Shared Space concept. Best practice examples were used to compare both, potentials and limits and the particular concerns of vulnerable road users were noted. Documents on sustainable and unsustainable transport modes were used in order to understand how and in which arrangements these could share public space. In addition, literature regarding the re-allocation of urban public space to pedestrians, cyclists and public transport was reviewed to find relationships with the Shared Space concept.

Hamilton-Baillie (2006) refers to Shared Space as the default mode before the separation of vehicles and pedestrians became the accepted approach for public spaces. The main principle is integration in contrast to segregation of functions and users within the urban landscape.

Shared Space concepts:



'Woonerfs' refer to pedestrian priority solutions in Dutch towns and residential zones (Hamilton-Baillie 2008).

'Home Zones' represent the British and Irish equivalent to 'Woonerfs' and refer to suburban and residential 'Living Streets' (DFT 2007).

'Living Streets' comprises the campaigning background for pedestrian priority residential zones in the UK (Living Streets 2011).



Haren, Netherlands (Hamilton-Baillie 2008)

'Verkehrsberuhigter Bereich' has been applied to German residential streets, mostly in suburban, but also in central urban areas (Walk21 2007).



12 Key Quality Criteria to evaluate Urban Space (Gehl et al 2006)

Transport Modes:

Dennis and Urry (2009) note that the 'predict and provide' policy changed to a 'predict and prevent' principle in the late 1970s. It coincided with the realisation that urban mobility problems cannot be dealt with as traffic in isolation, but require transport models for demand management. According to Geurs and van Wee (2003), the shift from motorised to non-motorised passenger transport requires a radical change in current mobility patterns and significant technological development.

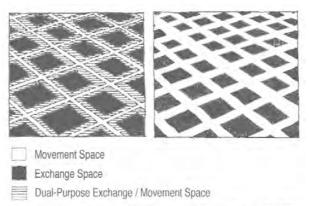
Mees (2009) stresses the need for compact cities. He rates land-use planning for higher urban density as the key to sustainable transport in order to overcome car-dependence and to promote the entirely sustainable modes of walking and cycling. Public transport, he argues, is only beneficial if is attractive to convert motorists and if it is well connected for inter-modal change, as each passenger becomes a pedestrian at either end of the journey. Therefore, public transport should not operate in competition to, but in accord with walking and cycling. Banister (2005) emphasises the need to decouple economic and transport growth to achieve sustainable mobility.

Reclaiming Streets:

Engwicht (1993) considers cities as places where action is most required and useful and refers to cities in the Netherlands, Denmark, Sweden and Germany, where road space has been re-allocated to pedestrian, cycling and public transport use through innovative planning policy. He concludes that suburban sprawl not only diminishes the viability of public transport and generated cardependence, but also changes former exchange space to movement space, which atomises communities. Public spaces for pedestrians and cyclists are eroded with increased travel distances and the focus on destinations rather than instant enjoyment of public space.



Drachten, Netherlands (Shared Space Institute 2009)



Erosion of Dual-Purpose Exchange / Movement Space (Engwicht 1993)

"Today, everyone who values cities is disturbed by automobiles." (Jacobs 1961)

2.3 College Green

Selective College Green related literature provided a clearer understanding of the space's complicated built environment / transport mobility interface. Dominant structures of national cultural value coincide with pressures to perform as a major traffic hub. Visions and proposals for College Green's public space quality and transport were reviewed. These include public transport projects, traffic restric-tions and land-use changes.



Roque Map 1756 vs. Wide Street Commission Map 1802 (McCullough 2007)

Space:

Dublin Civic Trust (2011) rate College Green as the ceremonial heart of Dublin and the stage for great public and national events for centuries. They regard it as the crossroads of the city, a bustling intersection where people socialise. Dublin City Development Plan 2011-2017 does not indicate

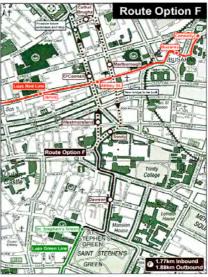
'Public Open Space' land-use zoning for the open area of College Green, but applies a 'Conservation Area' to a wider zone. Dublin City Council's Public Realm Strategy (Draft 2011) equally lacks a direct reference.

Mobility:

College Green was historically serviced through various tramlines in all directions (Brady and Simms 2001). Ireland's planning culture of suburban low-density housing and transport policy of car-dependency have contributed to Dublin's unviable public transport. Meanwhile, weak politicians and strong business opposition have obstructed/delayed LRT through the city centre (McDonald 2000/McDonald and Nix 2005). DTO identified College Green's deficits and liaised with DCC since 2006 to develop alternative strategies. Dublin Bus (2011) is aware of its various service problems in the city centre and is currently revising its routes. However, any reference to the proposed provision of Luas BXD (RPA 2010) is missing.

Prospect:

In 2007, TCD envisaged College Green as a pedestrianised square, serviced by LRT. Dublin Civic Trust and An Taisce emphasise the space's grandiosity for cultural purposes and recommend a general de-cluttering. Howley Harrington Architects (HHA 2004) proposed to create a pedestrian link between Foster Place South and Temple Bar. The conversion of the former Irish Parliament, now owned by BOI, into a building for civic use, is in the public discourse.



Selected Route for Luas BXD (RPA 2010)

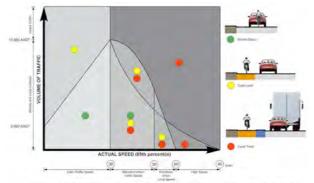


16th Division (McCullough 2007) / Obama (Collins et al 2011)

2.4 Policy

Ireland / EU:

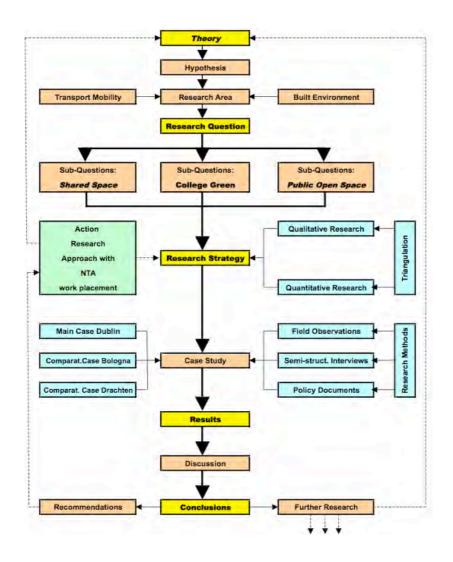
In the wider context of sustainable urban development, EU and Irish policy documents were used to gain knowledge about Public Open Space criteria and the Shared Space concept in government strategies and guidelines. Unsustainable transport patterns in city centres were acknowledged and targeted in various EU and Irish policy, whereas explicit Shared Space reference is only found in the British DfT (2007) document *'Manual for Streets'*. All relevant reviewed documents are listed in *Appendices* of the complete document.



National Cycle Manual: Cycling / Lanes / Tracks (NTA 2011)

Significant are the Irish documents 'A Platform for Change' (DTO 2001), 'Traffic Management Guidelines' ("The way in which streets are managed and used promotes or discourages a sense of community and makes them an attractive or unattractive place to live", DoT 2003) and 'A Sustainable Transport Future' (DoT 2009). The EU document 'Reclaiming City Streets for People: Chaos or Quality of Life' (EC 2004) states the relatively smooth adaptation of traffic flow and subsequent improvement of spatial qualities a key finding after urban centres were restricted or calmed from through-traffic.





3.1 Research Strategy

Case Study:

A case study approach was selected as the most suitable, feasible and ethical research strategy in order to generate clear, precise and relevant conclusions and recommendations. The case study approach was also considered the most efficient strategy to research the complexity of the Public Open Space College Green as potentially a Shared Space. It is acknowledged and deemed appropriate that the applied research strategy rather provides process-related information and tendencies instead of firm solutions and end results. Moreover, conclusions and recommendations deriving from this research, cannot be easily transposed elsewhere, because College Green is not a typical, but a very unique and specific Public Open Space with complex link and place functions.

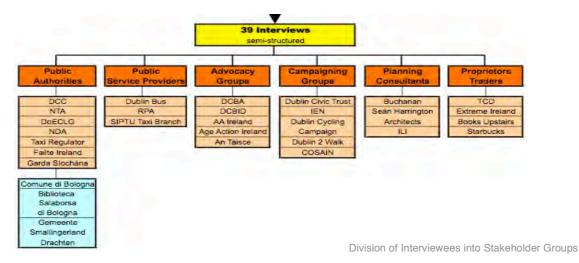
Action Research:

Due to professional expertise and academic interest, elements of *Action Research* strategy are applied. This approach is based on a continuous, proactive feedback loop between practitioners and academics in the field of urban development and transport mobility.

3.2 Research Methods

Qualitative and Quantitative Research:

Research data was obtained through semi-structured interviews, field observations and document reviews. Field visits were made to relevant public space examples in Ireland, Italy and Netherlands to obtain comparative information. College Green was assessed through traffic counts, walking audits, noise tests and film sequences. The emphasis was set on gathering qualitative data while quantitative data was collected for methodological triangulation to achieve a higher validity for the obtained results.



3.3 Triangulation

Methodological Triangulation, a multi-method approach, allows cross-referencing results and uses different perspectives on the same phenomenon. The combination of various results from interviews, observation and documents generates higher data validity and identifies convergences or divergences.

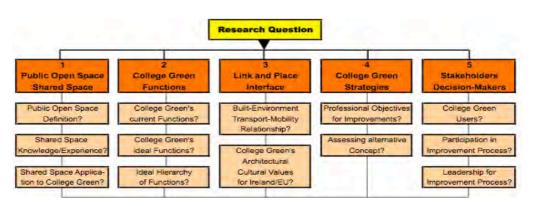
....Results Discussion

4.1 Interviews / Observations / Documents

Semi-structured Interviews were conducted with selected representatives of stakeholders and decision-makers for the planning, design and operation of Public Open Space and College Green. These interviews generated primarily qualitative information with contextual, quantitative outputs;

Field Observations were made in a case study structure in College Green through frequent visits to observe details and separate relevant aspects. During these visits, traffic counts and walking time audits were conducted while observational notes, photos and films were taken. Additional field observations for comparative case study research were made during visits to Adamstown (County Dublin) and Bray (County Wicklow), to *Bologna* (Italy), to *Drachten* and *Amsterdam* (Netherlands);

Documents from official sources were studied to obtain comparative information about the research subject. Drawings, plans and text documents about Dublin's urban development and College Green in particular were analysed. Also, relevant documents about *Bologna's Piazza Maggiore* and *Drachten's Laweiplein* were studied. Furthermore, EU and Irish reports, strategies and policies for both, urban development and transport mobility were used to collect additional information from authoritative sources (Full extent of collected data in Appendices).



Interview Structure

4.2 Understanding Public Open Space

Public Open Space, Public Realm and Public Space are interchangeable terms in the field of urban planning while 'Life between Buildings' rather refers to the urban design approach of the built environment. Public Open Space needs to be assessed with regard to its social, economic and civic function as well as its level of stationary and transit use. **Density, Diversity, Distinctiveness** and **Accessibility** are general quality criteria for a public space assessment. More refined evaluations are undertaken, based on location-specific criteria regarding *Protection, Comfort* and *Enjoyment* or through a *Link and Place* classification and *Street Performance Indicators*.

Public Realm:

The vast majority of interviewees and all sourced literature agree that large traffic volumes and congestion cause: Loss of urban living space / Visual intrusion / Safety hazards for vulnerable street users / Severance and social seclusion / Loss of economic viability and competitiveness / Air and noise pollution / Waste of energy resources. The researched improvement schemes for the urban public realm address these problems to various extents in their programmes.

Function – Use – Design:

The role of the public realm requires further assessment with regard to its social, economic and cultural purpose. Urban development should be distinguished between public space parameters: function / use / design. Function determines use, which in turn determines design – a causal relationship, which most interviewees were less distinctive about. While spatial functions are determined within the urban planning phase, use and physical layout and materials are decided on in the urban design phase of an urban development project.

4.3 Understanding Shared Space



Laweiplein, Drachten Piazza Maggiore, Bologna

Neuer Wall, Hamburg

De Dam, Amsterdam

Planning consultants and transport experts argue that the Shared Space concept is a simplified streetscape scheme, based on self-control and communication, which generates benefits to achieve sustainable urban development. At the same time, they raise concerns as to whether every society is suited to this concept. The '*Naked Street*' approach in particular is criticised by various experts and interviewees, for being too extreme and for excluding vulnerable user groups. The application of Shared Space creates a dynamic environment, which is difficult to predict and has been modelled more pessimistically than its actual reality with minimal accidents and maximum flow.

Potentials / Limitations:

The concept of sharing public space in cities between different transport modes and activities appears to contradict modern conventions of efficient mobility, where spatial separation is required to allow fast, but also safe transport for all modes. Hamilton-Baillie (2006) argues that the principles of Shared Space resemble the default mode of public space use, before separation of vehicles and pedestrians became accepted and established through traffic regulations. Shared Space creates a culture of selfcontrol and communication instead of rules and restrictions, states the Shared Space Institute (2009). Shares Space returns city roads to urban streets. Responsible behaviour, caused by natural alertness, generates higher safety and quality standards in Public Open Space. Drachten Town Council claim that Shared Space could be applied successfully anywhere, regardless of the cultural, geographical background, because the concept is based on common sense rather than regulation.

It remains to be seen, if certain busier streets with strong link functionality will operate better as 'Skinny Streets' with minimal lane width than as 'Naked Streets'. Equally, it is unclear, if 'Home Zones' provide the adequate setting to test and apply Shared Space suitability?

Best Practice Examples:

Shared Spaced examples for public spaces other than 'Home Zones' are still considerably rare in Ireland/UK. Local authorities in countries such as Netherlands, Denmark, Sweden and Germany have proven more confident and courageous in applying the Shared Space concept to urban, more trafficked situations. Consideration for it is growing (NDA 2010), albeit facing opposition from representatives for vulnerable user groups (Walk21 2007). Bologna's traffic measures of 'slow mobility' are tailored towards its sensitive and restricted urban fabric, whereas Drachten Town Council implement radical solutions into their 'recyclable environment'. Two depicted examples illustrate successful Shared Space application to central urban squares, which are characterised by various transport modes.

4.4 **Understanding College Green**

Type of Public Open Space:

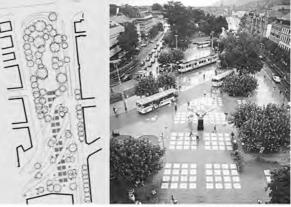
College Green is rated, by the vast majority of interviewees, as a unique and culturally significant Public Open Space of outstanding value to Dublin and Ireland. Craig (2006) regards College Green as the "most memorable architectural experience" in Dublin and Ireland and Casey (2005) describes it as a "grand and exhilarating public space, framed by the two



Diversity

Density

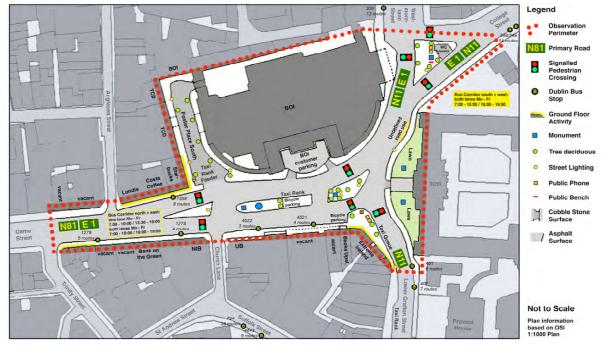
major classical façades" of TCD and BOI. McCullough (2007) emphasises the drastic impact the Wide Street Commission had on defining College Green spatially and functionally, while DCT (2010) consider it Dublin's heart and stage, which requires due attention to function as the city centre's "Living Room". More critical is McDonald (2000), who describes College Green as physically and socially isolated by inept political decisions for the city centre's public transport. Wickham (2006) criticises Dublin for its lack of civitas and a defined city centre.



Bismarckplatz, Heidelberg (Gehl et al 2003)

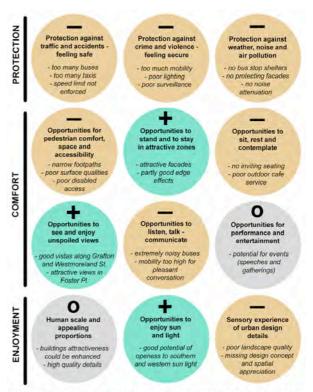


Luisenplatz, Karlsruhe (Gehl et al 2003)



The character of College Green as Public Open Space cannot be assessed in geographic isolation, but should be explored within the wider perspective of the GDA, which determines its importance and significance. College Green clearly demonstrates traffic patterns that are generated in the GDA, due to suburban sprawl, car-dependency and consequently, inefficient public transport. College Green is unique and significant for its very central location and its position at a junction between the main east-west and north-south city routes. These two characteristics were identified by most interviewees and determine its current identity as a thoroughfare and transport hub with amorphous perimeters, additionally blurred by incongruous landscaping and traffic volume. The structures and boundaries, which define College Green spatially, have not changed significantly since the Wide Street Commission's drastic interventions. It is the function and use in terms of traffic mode, volume and speed that has dramatically changed through both, private cars and public transport.

Observation Plan



College Green Public Space Quality Criteria (based on Gehl et al 2006)

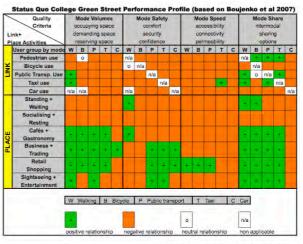
Link and Place:

According to historic images, College Green has always witnessed a combination of stationary and transit use, a trade off between place and link functionality. Adopting Carmona's et al (2010) and Boujenko's et al (2007) theory, if physical parameters have only changed marginally while traffic volume has increased significantly, conditions are not sustainable with regard to a balanced built environment-transport mobility interface. Local trade interviewees in particular point out, that College Green is not built for the amount of traffic it currently accommodates and that tourism and business suffer from a link-oversupply and a place-undersupply.

DCC and NTA interviewees explain College Green's thoroughfare character mainly as a bottleneck configuration between TCD and Temple Bar, which cannot be improved easily because of the existing street grid and Liffey bridges. College Green's link and place imbalance has been partly rectified by recent DCC traffic management measures, such as the HGV ban within the canal cordon (DCC 2007), the 30km/h speed limit for parts of the city centre (DCC 2011) and by the College Green bus corridor (DCC 2011), which works in tandem with the 'Inner Orbital Route', advised by DCC (2011).

Strategies:

Observations and interview statements demonstrate that College Green fulfils social, economic and civic functions, all in a competitive manner, but none of them to its full potential. The imbalance towards transit use at the cost of stationary use makes College Green very link dominated with poor place quality. Interviewees and researched documents jointly agree that the current situation is neither desirable nor feasible. A modified public place performance matrix, based on a 'Link and Place Street Performance' analysis, forecasts relationships between modes and activities for three scenarios:

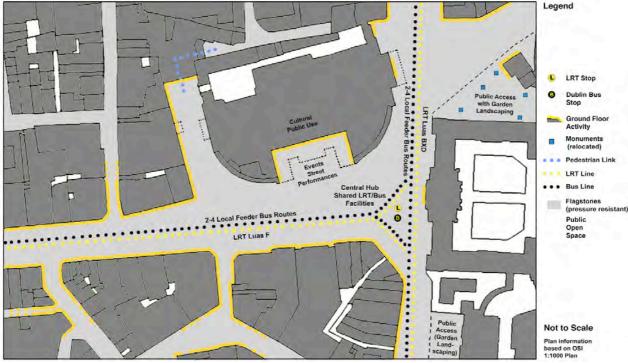




Strategy A - Pedestrianisation for a Ceremonial Centre

Strategy B - Shared Space as 'Naked Street' with limited car access

Strategy C - Conventional modal segregation with 'Skinny Street' application



Sketch Outline

Strategy B appears to produce the majority of positive relationships while combining maximum link with maximum place activities. Strategy A creates the ideal pedestrian environment, but significant deficits for other modes, whereas Strategy C performs poorly with regard to mode volumes, safety and potential flow. It therefore appears reasonable to consider a Shared Space concept for College Green in order to reconcile aspired functions and desired activities. All three strategies foresee a high quality public use for the BOI building, a solution, suggested by the majority of interviewees.

Stakeholders and Decision-Makers:

Whose interests are to be pursued determines which further steps could be taken to improve the quality of Public Open Space in College Green. The majority of interviewees regard DCC as responsible to initiate and steer processes for sustainable urban development in College Green. Views on the extent of public participation vary greatly with campaigning groups and proprietors obviously demanding more involvement than public authorities and service providers. Numerous voices wish TCD to play an active role. Laudable is DCC's initiative for a Public Realm Team of urban and transport planners to develop a programme, which would regenerate public space qualities for all user groups. Some interviewees raise reasonable concerns as to how democratic consent could be reached over such a contested location and if too many voices might dilute any momentum for improvements. IEN in particular, express the view that College Green should not become a Shared Space experiment for Dublin.

5

Conclusions

5.1 Public Open Space Quality

Objectives:

Public Open Space as public realm determines urban life between buildings and it must fulfil certain functions in order to be used equitably by all citizens. As the understanding and appreciation of Public Open Space varies within stakeholder groups, specific quality criteria need to be defined and agreed. Density, diversity, distinctiveness and accessibility are basic requirements for wellfunctioning public space in the urban environment. These criteria have to be assessed against location specific parameters to generate a vibrant, safe, comfortable, appealing, inclusive, permeable and well-connected community around the selected space.

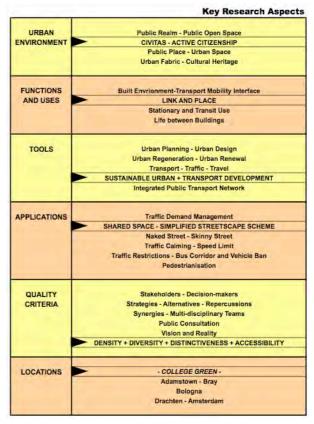


Communicating Rules, Leidsestraat, Amsterdam

Equally important in any public space assessment process is the definition of its function, use and design, ideally in this particular order. If the aspired function of a street or square remains vague, then use is often ambiguous and design poor due to compromised ideas and non-reconciled interests. With regard to conclusions drawn from case study comparison, it needs to be questioned, how easily a concept, which works in one location under certain circumstances, can be transposed into another context and scale. Solutions, which might be suitable for such a unique location as College Green, cannot be simply adopted into policy, nor can they be transposed to other locations without consideration and modifications. A city's most apparent attraction derives from its Public Open Space, the realm which citizens and visitors alike, experience daily and directly. If public space qualities are diminished because the civitas, the active citizenship for respectful and responsible conduct of urban life, is compromised, the city loses its social and economic hospitality. This aspect of urban economic competitiveness is crucial for any city's future - no less so for Dublin.

Reconciling Competing Interests:

Many urban streets have become car-dominated roads, which impede other transport modes and social activities. All interviewees agree that College Green has been greatly affected by this tendency. Physically and functionally, Public Open Space is characterised by the interface of the built environment and transport mobility. Stationary use is undermined by transit use, which compromises sojourn qualities for the benefit of traffic flow. This imbalance between link and place specific activities needs to be rectified through sustainable urban and transport development in order to regenerate in particular city centres. Conventional transport planning strategies for fast and safe traffic need to be revised to reconcile the interests of mobility and the built environment. The objectives for a specific public space have to be established through public consultation, multi-disciplinary panels should be in continuous dialogue with all stakeholders while 'Action Research' results should contribute towards valuable ideas. Improvement schemes, such as the Shared Space concept, would have to include the 'Universal Design' requirements to allow equal



access for all user groups without discrimination. Furthermore, initiatives to reclaim streets for social and cultural purposes should be supported if they prove beneficial to the community. The promotion of local businesses to generate active edges with ground floor activity could add significant potential to traffic dominated Public Open Space.

5.2 Defining College Green

Link and Place Characteristics:

College Green is historically a *'Ceremonial Place'* of cultural and architectural significance, which the Wide Street Commission converted into the distribution node of the city centre's main access streets. The structural curvatures of TCD and BOI contribute to the situation and make College Green appear less like a square with defined edges, such as other Georgian squares, but more like a passage, tailored for smooth traffic flow. Currently, College Green is characterised by massive transport mobility from all modes, which it cannot accommodate because it was not designed to do so. High volumes of pedestrians are corralled into narrow footpaths while buses block each other's way. This entirely negates the essence of safe and efficient public transport. Furthermore, traffic management measures of a speed limit and bus corridor are neither obeyed by the users nor enforced by the authorities. It is envisaged that the proposed LRT would alleviate College Green's problem. The recently deferred Metro and DART Interconnector would contribute to a solution and would improve the location's public space qualities.

Nonetheless, College Green's essential dilemma is not its transport provision; it is its lack of definition in Dublin's city centre. Which function, use and design do we envisage for College Green? How are stationary and transit use reconciled in College Green? What do we want College Green to be: cultural heart or transport hub; road, street or square; rather a link or a place? How much change in regulations, behaviour and physical layout are we willing and able to accept? Are we ready for a *'Paradigm Shift'*, which would deliver its most significant impact here - a place where so many aspirations, ideas and expectations culminate in one space of physical and historical importance to Dublin? Aspirations to turn College Green into a grand square of civic value with qualities for stationary activities remain futile if we continue to use it as a major transport thoroughfare, due to lack

of suitable alternatives. Strategies to transform College Green into a high quality public space will not be successful, if targeted in isolation, without a sustainable transport strategy, which would expand beyond the city centre, targeting the Greater Dublin Area. Stakeholders and decision makers therefore need to work in accord on a City Centre master plan.

Suitability for Shared Space:

College Green's historic function as a city commons depended highly on a community, which agreed to respect and follow a set of self-policing rules rather than imposed legislation. The idea of self-imposed control, based on the commons principle rather than regulations, relates directly to the Shared Space concept for transport mobility and the built environment. Shared Space is based on responsible self-control rather than rules, on common sense and communication rather than over-regulation. It deregulates traffic in a simplified streetscape scheme with integrated transport modes used for the benefit of all users and quality of life in attractive streets. As noted earlier, current regulations for traffic demand management in College Green, such as the imposed bus corridor and speed limit are neither obeyed nor enforced and thus appear unsuccessful. Are less regulations and restrictions therefore an option for improving this Public Open Space? Could a Shared Space application trigger the required *'Paradigm Shift'* for more social interaction, communication and responsible street-conduct and therefore improved public spaces?

However, the mere application of Shared Space design elements to College Green without a comprehensive planning framework for the city centre would cause ambiguities at the fringes between conventional mode segregation and a simplified modal integration through a *'Naked Street'* layout. The success of selected scenario (Strategy B) also relies on: the integration of the proposed LRT lines Luas BXD and F; significantly reduced bus volumes and routes



Road Warning Signs in Dublin: Self-evident / Paradox

passing through and terminating in College Green; a speed limit of ideally 20-25km/h and potentially an underground metro stop to complete the public transport network at this most central location. Moreover, limiting Shared Space application to peripheral residential areas for *'Home Zones'*, such as Adamstown ignores the concept's potential to improve safety, comfort and efficiency in urban public space with higher traffic volumes.

5.3 Sustainable Development

Exploring the Shared Space concept lies within the disciplines of Sustainable Urban Development and Sustainable Transport Development. It is the subject of both, the built environment and transport mobility in cities.

The interface of stationary use and transient use in the urban environment needs the attention it lately planning authorities. receives in Urban regeneration and the revitalisation of deficient city centres have become integral elements of development plans for compact, sustainable cities. The need for a functioning city with respect and responsibility for all user groups has focused attention on more unconventional traffic management concepts, which have more inclusive objectives beyond flow and safety. Shared Space is based on the theory of communication and social interaction in Public Open Space for a sustainable urban environment: safe, comfortable, inviting, accessible, diverse and inclusive for all



Less Regulations - More Self-Control?

users groups. Considering Shared Space for spaces such as College Green is an incentive for the different planning disciplines to liaise and develop inter-disciplinary teams for integrated strategies. This approach would facilitate a thorough assessment of location specific circumstances and avoid implementing Shared Space in an experimental, inconsiderate manner. DCC's and NTA's initiatives to create multi-disciplinary teams such as the 'Public Realm' team are laudable and recommended to planning authorities at all levels.

I would participate with enthusiasm in such productive processes to help improve the quality of city life and add value to Sustainable Urban Development. Could responsible self-control essentially replace over-regulation in the urban environment?

5.4 **Recommendations**

Policy Framework:

Policy for Sustainable Urban and Transport Development currently only vaguely indicates the potential of Shared Space application. Most reviewed policy documents have not adopted the concept into their remit and relevant information remains dispersed as the development of this field appears to be in the initial stages. Shared Space as a feasible option to improve Public Open Space would need to be further integrated into strategies for the urban environment. Meanwhile, Shared Space research should be continued in order to produce more expertise on the concept's benefits and limits and to collect valuable information from experience with best-practice examples.

College Green

College Green, although exposing serious transport problems, does not need a transport solution in isolation, but a programme, which includes social, civic and economic objectives, for Dublin's city centre and the GDA. Stakeholders, such as local traders, but TCD and BOI in particular, should be asked to participate in the dialogue for a strategy and to develop due ownership of College Green. The reconciliation between College Green's cultural, civic function on the one hand and its transport function on the other must become the core of such strategy. Furthermore, given that 50% of accidents in Dublin's City Centre involve pedestrians (RSA 2009), a reduction of these figures should be a key target.

Recommended is a phased improvement scheme, which would integrate the two proposed LRT lines (RPA 2010) and significantly reduce bus numbers and lines through College Green by route optimisation for the city centre. In addition, it should be assessed if future LRT infrastructure could be used for urban freight delivery, as managed in Dresden (DVB 2010). An audit of all existing features and infrastructure within College Green should be conducted to de-clutter the space and replace the incoherent layout with a suitable landscape design, which incorporates high quality detailing, appropriate materials, good lighting and noise attenuation. The speed limit and bus corridor should remain, but require proper enforcement to be effective. Furthermore, weekend pedestrianisation, as is common practice for public space abroad, could be introduced to generate public interest and ownership of civic activities in College Green. Spending time in College Green and passing through should become equally enjoyable while respecting the location's cultural and civic values.





Foster Place South vs. St Michel, Paris (sketch by Jacobs 1993)

A separate suitable approach would be the regeneration of Foster Place South, which indicates features and proportions for a high quality Public Open Space and could become the nucleus of a wider scheme within College Green. The following juxtapositions of College Green's environs with streets of perceived high standards in Cøbenhavn and Paris illustrate the potential to transform College Green into high quality Public Open Space, which resembles more Dublin's *'Living Room'* than its *'Corridor'*. Moreover, improvement schemes should consider removing the railing in front of the TCD and BOI buildings. They are not original and their removal would maximise available space and improve the overall spatial quality with direct façade accessibility.





Lower Grafton Street vs.

s. Strøget, Cøbenhavn (sketch by Jacobs 1993)

Finally, the government's intention to invest in a redesigned exhibition of the 'Book of Kells' in TCD, is promoted as a boost for Dublin's tourist industry (DoT 2011). These plans offer a unique opportunity to also take a regeneration of College Green into consideration and a programme and budget should be associated with this initiative.

Further Research:

A diversified survey about the 'Heart of Dublin' should be conducted. Results would provide valuable insight into how College Green is perceived by its citizens; where its physical boundaries are; how it performs, socially, culturally and as link and place. Additional noise emission tests would be useful for the implementation of LRT and modified bus traffic while social activities should be enhanced. The assessment needs to become an integral element for a Shared Space strategy. These tests would tie in with experiments on the type and duration of place-specific activities.

"A city is composed of different kinds of men; similar people cannot bring a city into existence." (Aristoteles, quoted by Sennett 1996)