BIO*POLIS* -

Patrick Geddes, Edinburgh,

and the City of Life

Volker Werner Maria Welter

Volume 2

Doctor of Philosophy

The University of Edinburgh

1997

LIST OF ILLUSTRATIONS

Figure 1.1
Patrick Geddes the town planner, c. 1915 in India.

Figure 1.2
The balance sheet of Geddes's classification of statistics.

Figure 1.3
Victor Branford - a sketch by Lewis Mumford.

Figure 2.1
The Notation of Life.

Figure 2.2
A sketch by Geddes of the Act-Deed and Town-City formulas.

Figure 2.3
The Platonic result of the Cloister.

Figure 2.4
The simplified graphic version of the Town-City formula.

Figure 2.5
The Act-Deed formula inscribed in a Swastika, an ancient Celtic symbol for life.

Figure 2.6
The Notation of Life as the union of *vita activa* and *vita contemplativa*.

Figure 2.7
Sheet with notes by Geddes from 1907 regarding the City of Destruction.

Figure 2.8
Notes by Geddes regarding the geographical, historical and spiritual aspects of a City and City Design.

Figure 3.1
The Valley Section and a bird's eye view (by Philip Mairet) of a typical valley region.

Figure 3.2
Diagram of the valley region showing the complex hierarchy between settlement types, smaller valleys and the City.

Figure 3.3
The Valley in the Town - the valley section and its manifestation in the Town.

Figure 3.4
Edinburgh and its Region.

Figure 3.5
Edinburgh and its Region as a typical "European Valley Region".

Figure 3.6
Comparison of the urban-geographical structure of Athens and Edinburgh.

Figure 3.7
The Region of Edinburgh seen from the South.

Figure 3.8
Bird's eye view and plan of Roseburn Cliff Garden Suburb in the West of Edinburgh.

Figure 3.9
Workmen's housing for Cox Gelatine Works in Edinburgh, 1893.

Figure 3.10
Plan for New Leven in Fife north of Edinburgh by Patrick Geddes and Frank C. Mears, (before 1915).

Figure 3.11
Valley Regions in East Scotland.

Figure 3.12
Tower of Progress at the centre of the World City of Hendrik C. Andersen and Ernest M. Hébrard.

Figure 3.13
Diagram of the Outlook Tower in Edinburgh.

Figure 3.14
Sketch by Patrick Geddes of the Outlook Tower in Edinburgh, showing the connection between individual life and mankind.

Figure 3.15
Sketch by Patrick Geddes of the Outlook Tower in Edinburgh, showing the connection between an individual city, mankind and life.

Figure 4.1
Arbor Saeculorum - the Tree of Eternity.

Figure 4.2
The stream of History, which became graphically summarised in the Tree of Eternity.

Figure 4.3
'People in Town - Chiefs in School', the social types and their relation to the Town-City formula.

Figure 4.4
Temporal and Spiritual Power in cities and societies, and their places of action.

Figure 4.5
Salisbury, its original layout as medieval garden city and its later appearance as an industrial city.

Figure 4.6
Plan of the Cities and Town Planning Exhibition in Ghent, 1913, indicating the ideal and three alternative routes through the exhibition.

Figure 4.7
People, Chiefs, Intellectuals and Emotionals in the region.

Figure 5.1
The Survey, table showing the topics and themes a survey should cover.

Figure 5.2
The Precinct of Westminster Abbey.

Figure 5.3
Balrampur, Street of Squares, an example of conservative surgery applied to a city quarter.

Figure 5.4
Balrampur, the Tehri Bazar before and after Geddes's intervention.

Figure 5.5
Two schemes for the University Halls of Residence at Cheyne Walk in Chelsea from 1908.

Figure 5.6
View of Crosby Hall after completion of the rebuilding, seen from the Garden.

Figure 5.7
Cities and Town Planning Exhibition, plan of the show in Chelsea.

Figure 5.8
Cities and Town Planning Exhibition, plan of the show in Edinburgh.

Figure 5.9
Cities and Town Planning Exhibition, preliminary plan of the show in Ghent.

Figure 5.10
Civic Museum and Outlook Tower for an American City (New York) by Frank C. Mears, 1923, for Patrick Geddes.

Figure 5.11
Organicism and Town Planning, sketch by Patrick Geddes.

Figure 6.1
Aerial View of the International Exhibition of Industry, Science and Art, Edinburgh 1886.

Figure 6.2
Plan of the Old Edinburgh Street at the International Exhibition of Industry, Science and Art, Edinburgh 1886.

Figure 6.3
View of the Old Edinburgh Street, the copy of the Netherbow Port at the far end of the street.

Figure 6.4
View of the copy of the Mercat Cross in the Old Edinburgh Street.

Figure 6.5
The Edinburgh room at the Edinburgh Outlook Tower.

Figure 6.6
Ancient cultivation terraces at the slopes of Arthur's Seat, Edinburgh.

Figure 6.7
Section through Grassmarket and Castle Hill, Edinburgh, showing use of the ancient cultivation terraces as foundations for city walls.

Figure 6.8
Bird's eye view of the garden and open space Johnston Terrace, Edinburgh, by George Shaw Aitken.

Figure 6.9
Edinburgh at the time of the early Normans.

Figure 6.10
Longitudinal section through the Royal Mile.

Figure 6.11
The ideal plan of Scottish medieval New Towns conceived as Garden Cities.

Figure 6.12
The medieval urban structure of Edinburgh as the constant pattern in the city's history from the middle ages to the forthcoming eugenic and educational age.

Figure 6.13
Reconstruction of a medieval Edinburgh Town house for the People with gables and arcades, drawing by Frank C. Mears.

Figure 6.14
Bird's eye view showing the monasteries of the friars founded on the southern side of the Royal Mile, drawing by Frank C. Mears.

Figure 6.15
Plan of Edinburgh showing the sites of the monasteries and their continuous use through history for cultural and educational institutions, plan by Frank C. Mears.

Figure 6.16
The monofunctional character of the Edinburgh New Towns.

Figure 6.17
Longitudinal section of the Royal Mile showing types of buildings for social types.

Figure 6.18
Sketch plan by Patrick Geddes of the area around Ramsay Gardens, indicating the cultural and educational institutions comprising the new Cloister for Edinburgh.

Figure 6.19
Lady Stair's House - two postcard views of the building before and after the renovation of the building as a city museum by George Shaw Aitken.

Figure 6.20
Plan of the properties on both sides of Ramsay Lane, indicating the progress made in establishing the new Cloister for Edinburgh.

Figure 6.21
Photograph of the northern wing of Ramsay Garden under construction.

Figure 6.22
Perspective view of the development of the upper part of the Royal Mile.

Figure 6.23
Perspective views of the University Quadrangle seen from New College.

Figure 6.24
The University Quadrangle, view into the south-eastern corner.

Figure 6.25
An early sketch of the new Cloister around Ramsay Lane, probably by Patrick Geddes.

Figure 6.26
Page from a prospectus advertising William Gordon Burn Murdoch's design for a Scottish procession.

Figure 6.27
Title page of Victor Branford's book on St Columba showing the design by Percy Pourtsmouth for a statue of the saint.

Figure 7.1
Artist colony *Mathildenhöhe*, Darmstadt, by Joseph Maria Olbrich, 1899-1901.

Figure 7.2
Temple of Creation - Ernst Ludwig House, *Mathildenhöhe*, Darmstadt, by Joseph Maria Olbrich, 1899-1901.

Figure 7.3
Holy Mountain in the Cathedral of Saint-André, Bourdeaux, by Brongniart, 1794.

Figure 7.4
Temple for Nietzsche - Monument for Nietzsche by Fritz Schumacher, 1898-1900.

Figure 7.5
Temple of the Holy Grail - Illustration to Richard Wagner's opera Parsifal by Franz Stassen, 1914.

Figure 7.6
Temple of Death - Crematorium in Dresden-Tolkwitz by Fritz Schumacher, 1908.

Figure 7.7
Temple of the Earth by Fidus (Hugo Höppner), 1895 (perspective) and 1901 (plan).

Figure 7.8
Temple of the Arts - exhibition building for the Secession Vienna by Joseph Maria Olbrich, 1898.

Figure 7.9
Temple of Death - Project for a Cemetery Church by Otto Schönthal, 1901.

Figure 7.10
Palace of Occult Sciences - Project by Alois Bastl, 1902.

Figure 7.11
Temple of Thought - Model by François Garas, before 1907.

Figure 7.12
Temple of Thought - Entrance, Model by François Garas, before 1907.

Figure 7.13
Temple of Thought - Plan and section by François Garas, before 1907.

Figure 7.14
The Rock and Castle of Seclusion by Richard Dadd, 1861.

Figure 7.15
Design for a Monument by Hermann Obrist, c. 1898-1900.

Figure 7.16
Crystal Castle by Wenzel Hablik, 1903.

Figure 7.17
Temple of the City - Display Temple as a Monument of a City by Wenzel Hablik, 1914.

Figure 7.18
Temple of the Art and Culture - First design for the Whitechapel Art Gallery, London, by C. Harrison Townsend, 1895.

Figure 7.19
Temple of the Art and Culture - Horniman Museum, London, by C. Harrison Townsend, 1896-1901.

Figure 7.20
Temple of Arts and Crafts - Plan for a Art Institute by Charles Robert Ashbee, before 1917.

Figure 7.21
Sacred Way dedicated to the City of London - sketch by William Richard Lethaby, c. 1891.

Figure 7.22
The Arts (serving the City) - Mural by Maurice Greiffenhagen, 1916, on display in the Municipal Hall at the Arts and Crafts Exhibition in London, 1916.

Figure 7.23
Temple of Life and Death - The Hall of Heroes by Henry Wilson at the Arts and Crafts Exhibition in London, 1916.

Figure 8.1
Temple of Geography - The Monster Globe by James Wyld, 1851.

Figure 8.2
Terrestrial and Celestial Maps in the Centre of Pemberton's *Happy Colony*, 1854.

Figure 8.3
Temple of Geography - The Great Globe by Elisée Reclus, building designed by Louis Bonnier, 1897-1898.

Figure 8.4
View of the International Exhibition at Paris, 1900, showing Galeron's celestial globe.

Figure 8.5
Temple of Geography - First design by Paul Louis Albert Galeron for Geddes's National Institute of Geography, 1901.

Figure 8.6
Temple of Geography - National Institute of Geography according to designs by Patrick Geddes, drawing by Paul Louis Albert Galeron, before 1902.

Figure 8.7
Ground plan and view of the main facade of Tycho Brahe's Uraniborg on the island of Hveen.

Figure 8.8
Temple of Geography - The Nature Palace in Pittencrieff Park in Dunfermline by Patrick Geddes and George Shaw Aitken, 1904.

Figure 8.9
Genealogical Tree by Patrick Geddes, 1886.

Figure 8.10
Phases of human life compared to Greek gods and to the Phases of plant life.

Figure 8.11
Temple of Life - Sketch by Patrick Geddes for a lecture to the Fabian Society, 1908.

Figure 8.12
Temple of Life - Plan of the Temple for the Greek Gods according to ideas of Patrick Geddes.

Figure 8.13
Temple of Life - The Greek gods and goddesses representing phases of human life.

Figure 8.14
Temple of Death- sketch by Patrick Geddes for a *Campo Santo*.

Figure 8.15
Temple of Death- sketch by Patrick Geddes for a *Campo Santo* with crematorium.

Figure 8.16
Garden for the Nine Greek Muses - sketch by Patrick Geddes.

Figure 8.17
Garden for the Nine Greek Muses - sketch by Patrick Geddes, for an unidentified location.

Figure 8.18
Garden for the Nine Greek Muses and the Four Social Types - reconstruction drawing based on Geddes's description of the replanning of the palace garden in Pinjaur, 1922.

Figure 8.19
Ground plan of the Bahai temple, 1922, by Frank C. Mears and Patrick Geddes.

Figure 8.20
Interior view of the Bahai temple, 1922, by Frank C. Mears and Patrick Geddes.

Figure 8.21
Page from a letter by Frank C. Mears showing an initial sketch for the Bahai temple.

Figure 8.22
Hall of Vision - "Sun-Burst on the Valley-Section' ".

Figure 8.23
Hall of Vision - "The Life-Mother with Pan, Ancient and Modern [Darwin]" by Philip Mairet.

Figure 8.24
Hall of Vision - The City Acropolis in four Sacred Cities: Jerusalem, Rome, Athens, and Westminster.

Figure 8.25
Hall of Vision - "The Classico-Christian Ideal" with the paths towards the big city and the True City

Figure 8.26
The Hexagon Crystal of Life, sketch by Patrick Geddes.

Figure 8.27
The City Cross - The Hexagon Crystal of City Life, sketch by Patrick Geddes.

Figure 8.28
Hall of Vision - The Hexagon Crystal of Life as "The Scholar's Ideal of Life's Six-Fold Drama".

Figure 8.29
The hexagon as a symbol for the City as Organic Unity as illustrated on the plan for Indore by Patrick Geddes.

Figure 8.30
Hexagon Square at the centre of Geddes's master plan for Tel Aviv.

Figure 8.31
Dizengoff Square in Tel Aviv, design by Genia Averbouch, 1935.

Figure 8.32
Celebrating the City - Sketch for the closing scene of the Masque of Learning showing the unison between *Alma Mater* and *Mater Civitatis*.

Figure 8.33
Perspective view of the new civic centre in Pittencrieff Park at Dunfermline, by Patrick Geddes and George Shaw Aitken, 1904.

Figure 8.34
Pittencrieff Park Dunfermline, plan by Patrick Geddes, 1904.

Figure 8.35
Interior view of the Great Hall of the Hebrew University, Jerusalem, by Patrick Geddes, Frank C. Mears and Benjamin Chaikin, c. 1919-1920.

Figure 8.36
Distant view of the Hebrew University at Jerusalem, c. 1919-1920, perspective by Frank C. Mears and Benjamin Chaikin for Patrick Geddes.

Figure 8.37
Perspective view of the steps leading up to the Great Hall of the Hebrew University, Jerusalem, by Patrick Geddes, Frank C. Mears and Benjamin Chaikin, drawing by S. Carus-Wilson, 1928.

Figure 9.1
The Temple of the Greek Gods set above the Ideal City.

Figure 9.2
Sketch map of Ancient Athens - showing the Acropolis and the distribution of other temples, public buildings and spaces in Athens.

Figure 9.3
The University of Central India as the City Crown of Indore.

Figure 9.4
The Hebrew University on Mount Scopus as City Crown of Jerusalem.

Figure 9.5
Map showing the physical separation of the headquarters of the Royal Geographical Society, the Royal Economic Society, and the Royal Anthropological Society in London.

Figure 9.6
Map of Conjeeveram, India, with a proposal by Geddes for an extension to the north east of Ward No. 2.

Figure 9.7
Amphitheatre at Epidaurus next to the Temple of Asclepius, and Stadium (Gymnasium) at Epidaurus, next to the Temple of Asclepius.

Figure 9.8
The Acropolis of Pergamon, site plan from 1885, and perspective reconstruction.

Figure 9.9
Zeus (Pergamon) Altar at Pergamon.

Figure 9.10
The "true" plan of the City of Edinburgh - plan showing the cultural Acropolis of Edinburgh.

Figure 9.11
The City Crown of Edinburgh - Ramsay Garden as seen from the south.

Figure 9.12
Sketch of Holyrood Hall, a Cloister at the eastern end of the Royal Mile, complementary to Ramsay Garden.

Figure 9.13
The proposed sculpture gallery between Ramsay Garden and the Scottish National Gallery, siteplan by George Shaw Aitken for Patrick Geddes.

Figure 9.14
The proposed sculpture gallery between Ramsay Garden and the Scottish National Gallery, bird's eye view by George Shaw Aitken for Patrick Geddes.

Figure 9.15
'A Scheme to Complete The National Monument on the Calton Hill' in Edinburgh, by Ramsay Traquair and Frank C. Mears from 1912.

Figure 9.16
The proposed National Library of Scotland, a merger of existing libraries, as a component of Edinburgh's cultural Acropolis.

Figure 9.17
Perspective drawing of the 'Scottish National Memorial to Scots who Fell in the Great War' by Frank C. Mears, 1919.

THE TOWN PLANNER.

PROFESSOR PATRICK GEDDES,

The little lecturer who has so much to say for himself and whose hirsuteness gives him a remarkable likeness to 1. Carlyle, 2. G. B. S., and 3. Robinson Crusoe

Figure 1.1
Patrick Geddes the town planner, c. 1915 in India.
(SUA, T-GED 1/6/1)

Figure 1.2
The balance sheet of Geddes's classification of statistics.
(Geddes, *Classification of Statistics*)

Figure 1.3
Victor Branford - a sketch by Lewis Mumford.
(Mumford, *Sketches from Life*, p. 261)
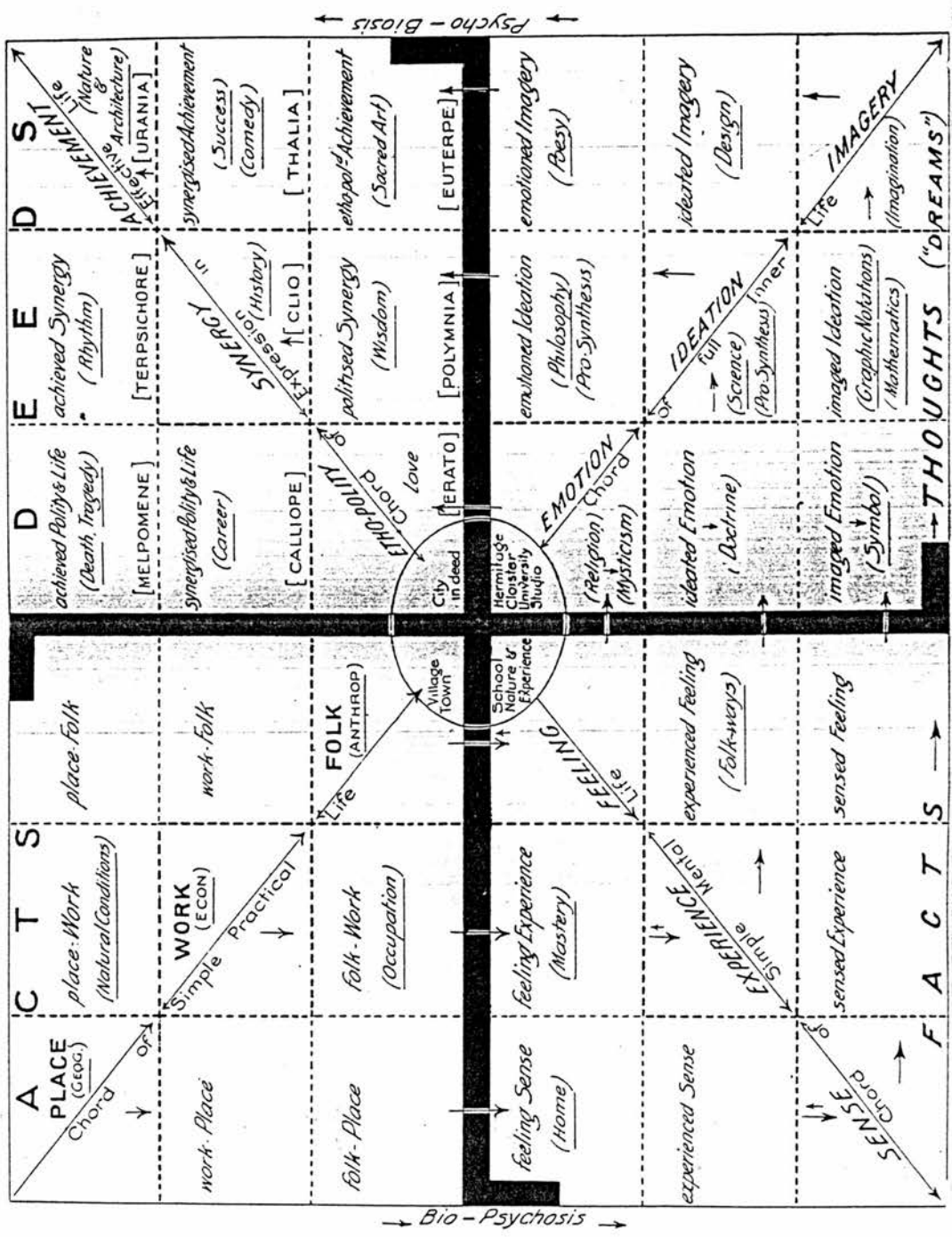
Figure 2.1
The Notation of Life.
(Defries, *The Interpreter*, pp. 128-129)
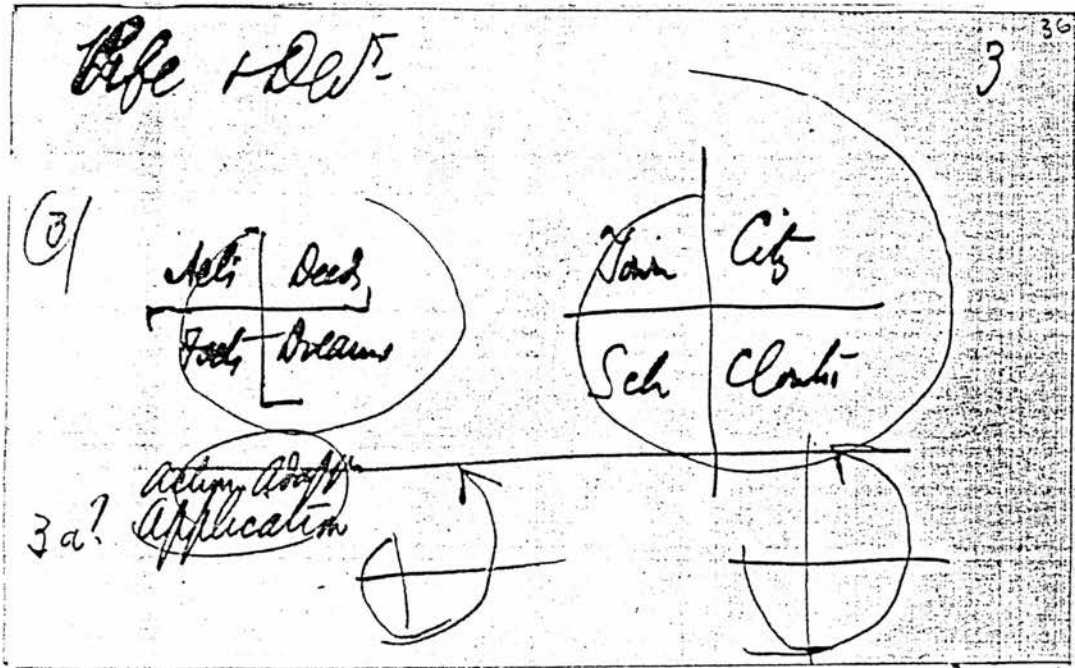
Figure 2.2
A sketch by Geddes of the Act-Deed and Town-City formulas indicating the spiral
movement of both formulas.
(SUA, T-GED 8/3/1)
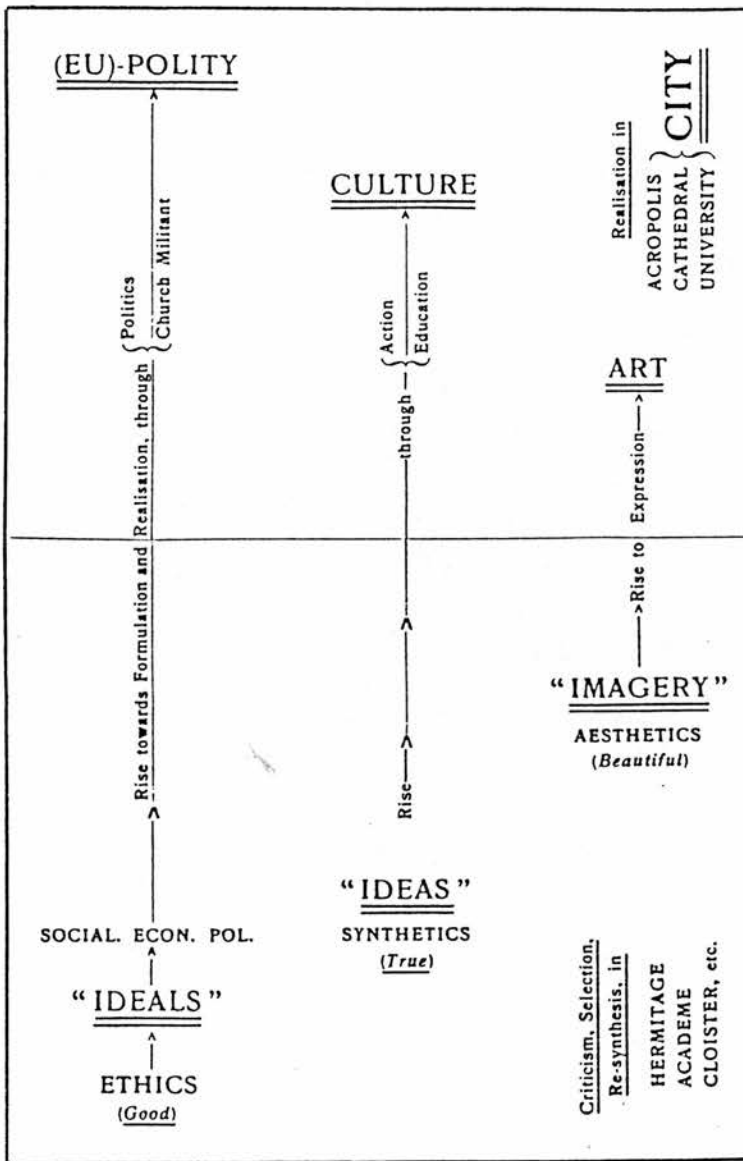
Figure 2.3
The Platonic result of the Cloister.
(Geddes, *Civics II*, in Meller, *The Ideal City*, p. 152)

TOWN	CITY
SCHOOL	CLOISTER
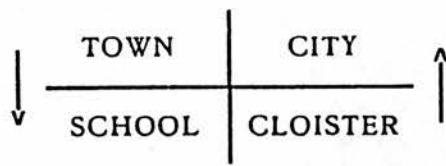
Figure 2.4
The simplified graphic version of the Town-City formula.
(Geddes, *Civics II*, in Meller, *The Ideal City*, p. 156)

401
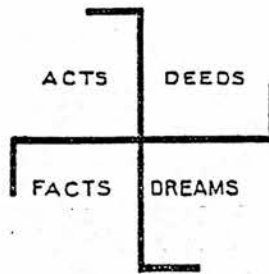
Figure 2.5
The Act-Deed formula inscribed in a Swastika, an ancient Celtic symbol for life.
(Defries, *The Interpreter*, p. 124)

SIMPLE PRACTICAL LIFE 1   4 **FULL EFFECTIVE LIFE**

SIMPLE MENTAL LIFE 2   3 **FULL INNER LIFE**
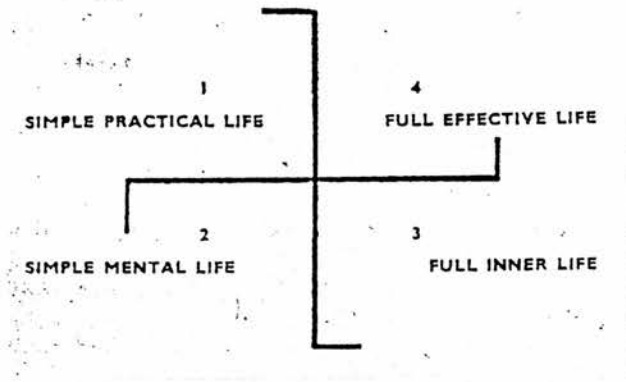
Figure 2.6
The Notation of Life as the union of *vita activa* and *vita contemplativa*.
(Geddes, *Cities in Evolution, 1949*, p. 195)
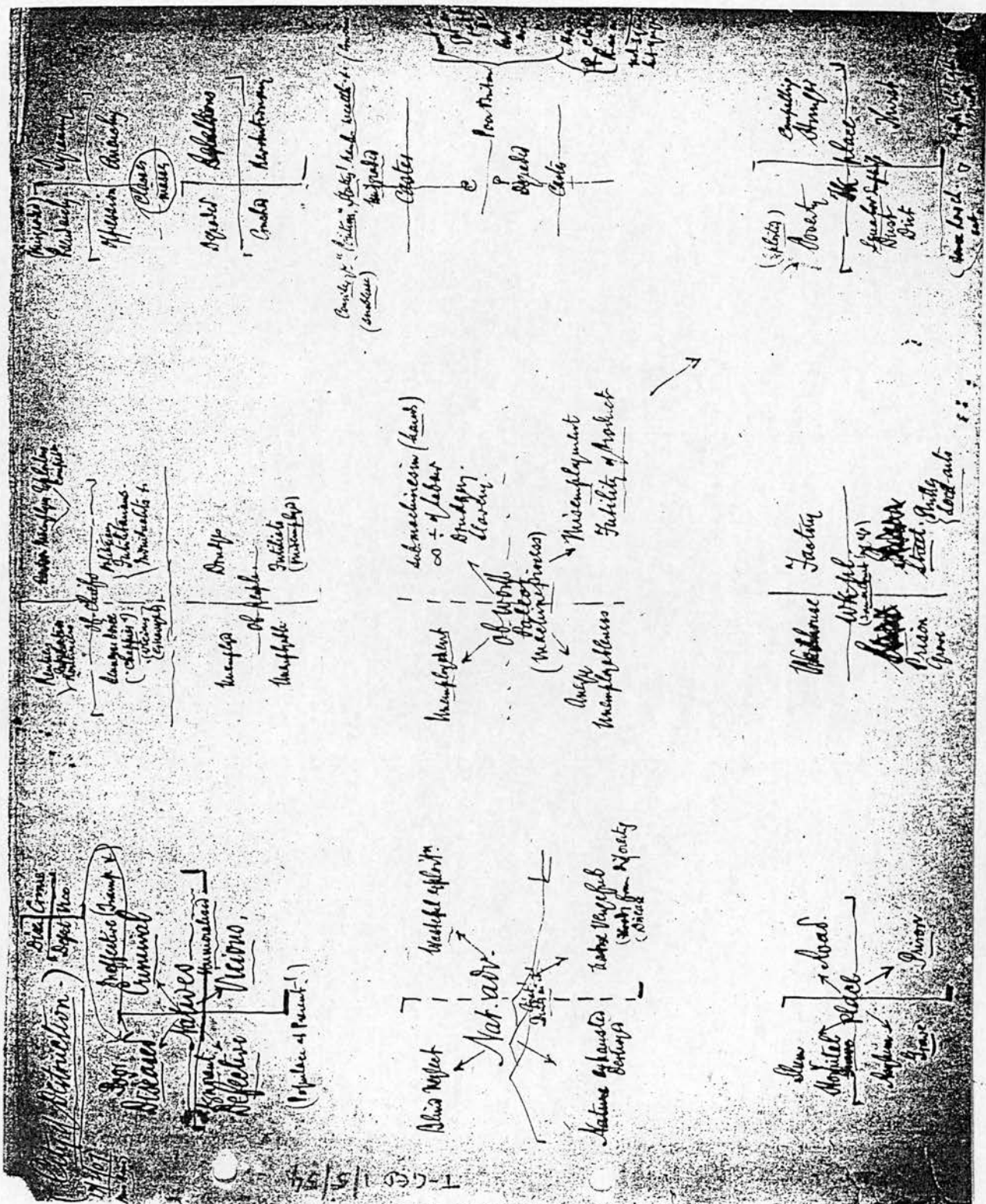
Figure 2.7
Sheet with notes by Geddes from 1907 regarding the City of Destruction.
(SUA, T-GED 1/5/54)
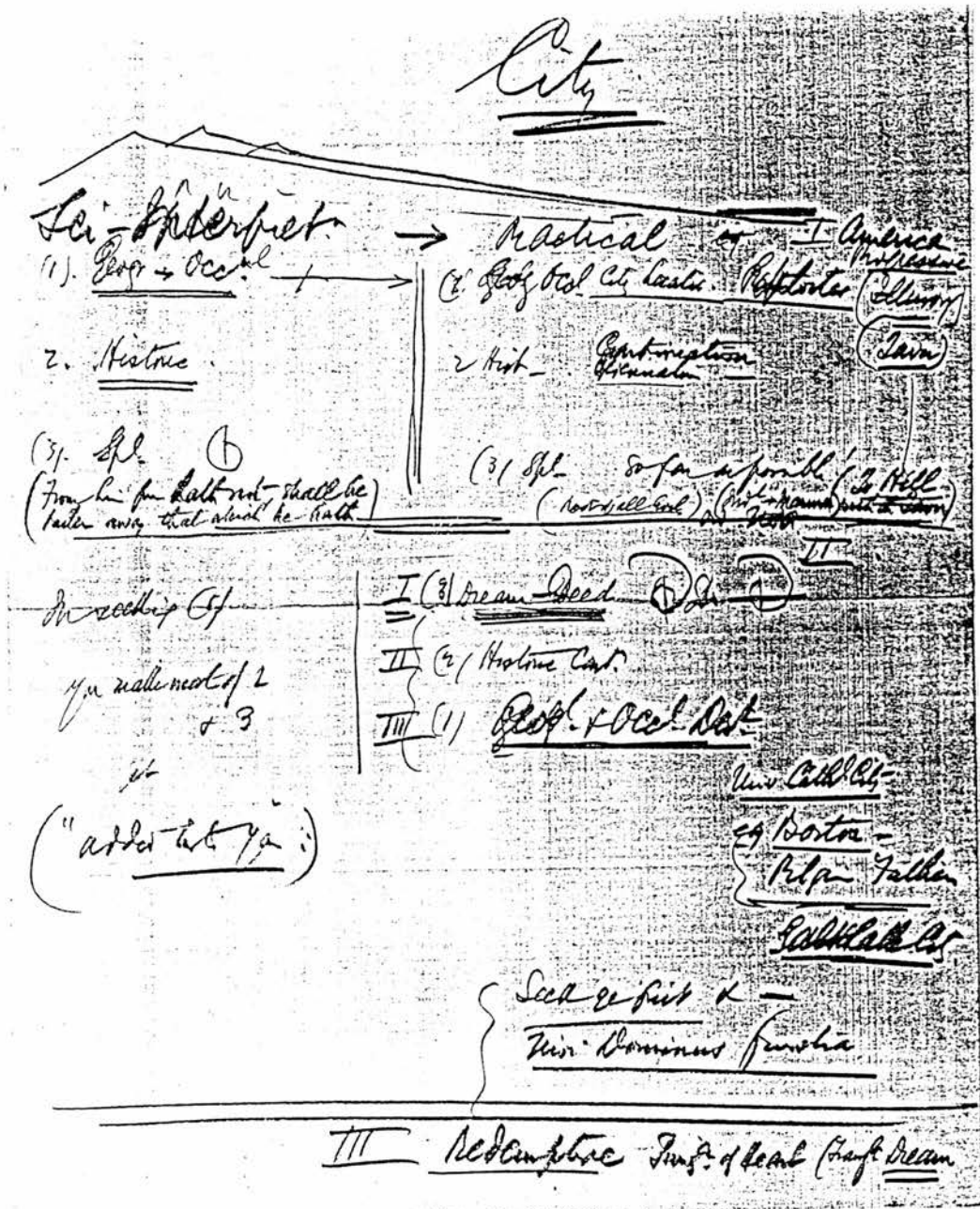
Figure 2.8
Notes by Geddes regarding the geographical, historical and spiritual aspects of a City
and City Design.
(SUA, T-GED 11/1/58)
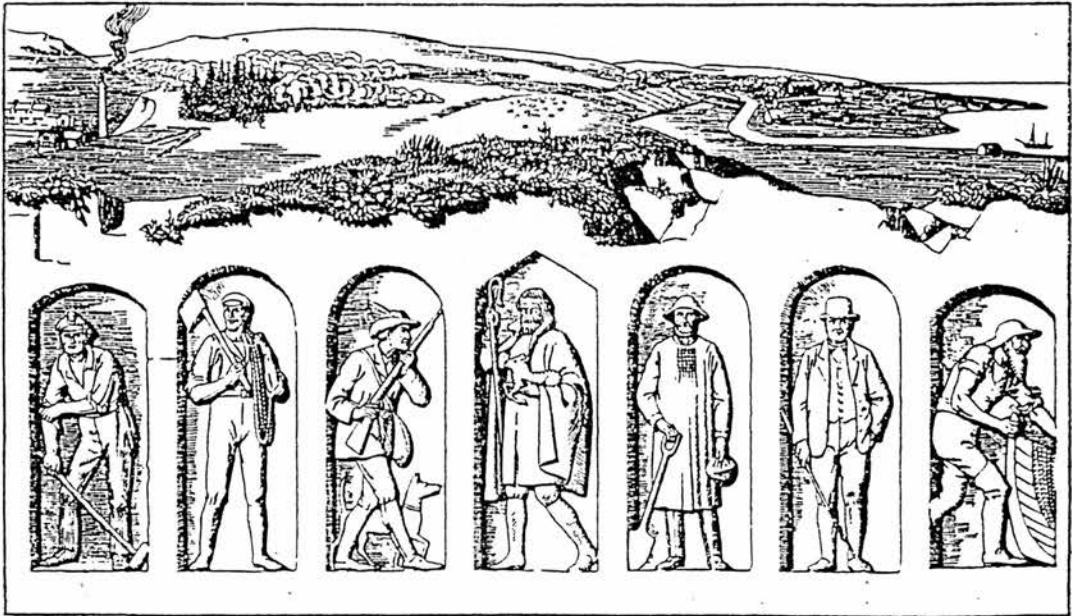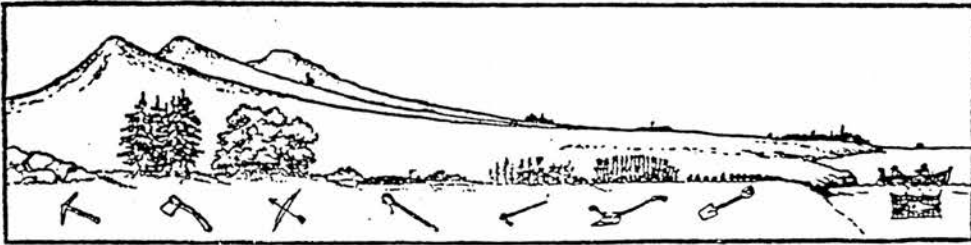
Figure 3.1
The Valley Section and a bird's eye view (by Philip Mairet) of a typical valley region.
(Branford, Geddes, *Coming Polity, 1917*, pp. 84-85)
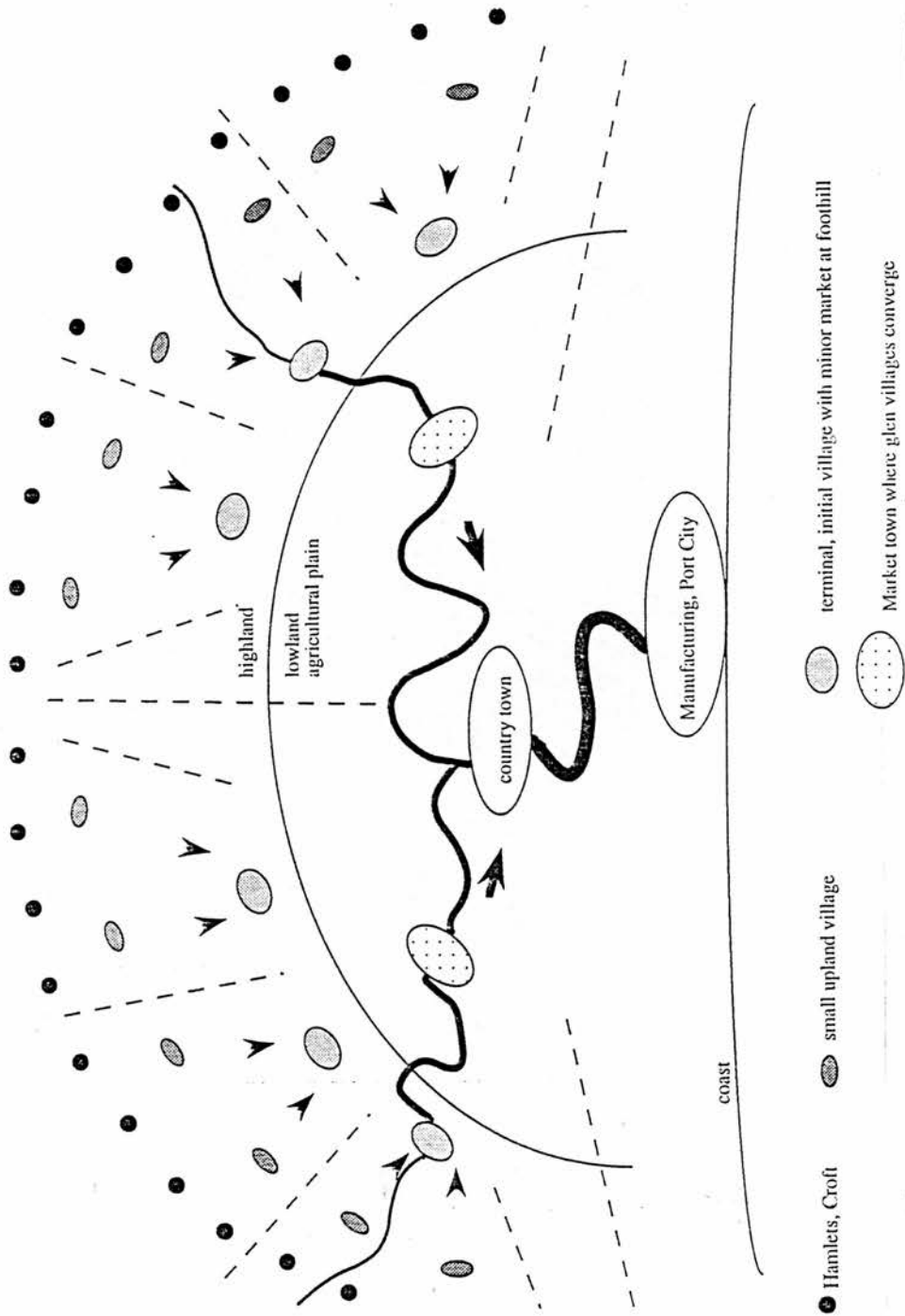
Figure 3.2
Diagram of the valley region showing the complex hierarchy between settlement types, smaller valleys and the City.
(Drawing by Volker Welter)
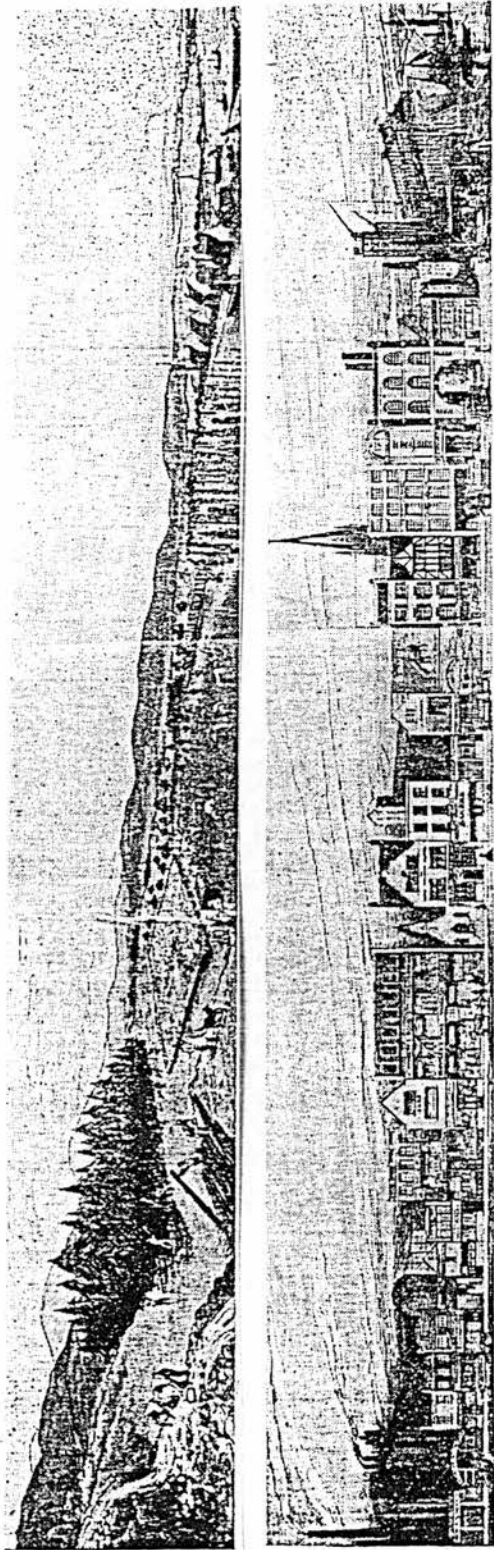
Figure 3.3
The Valley in the Town - the valley section and its manifestation in the Town.
(Geddes, *Valley in Town*, p. 398)

Figure 3.4
Edinburgh and its Region.
(Drawing by Volker Welter)
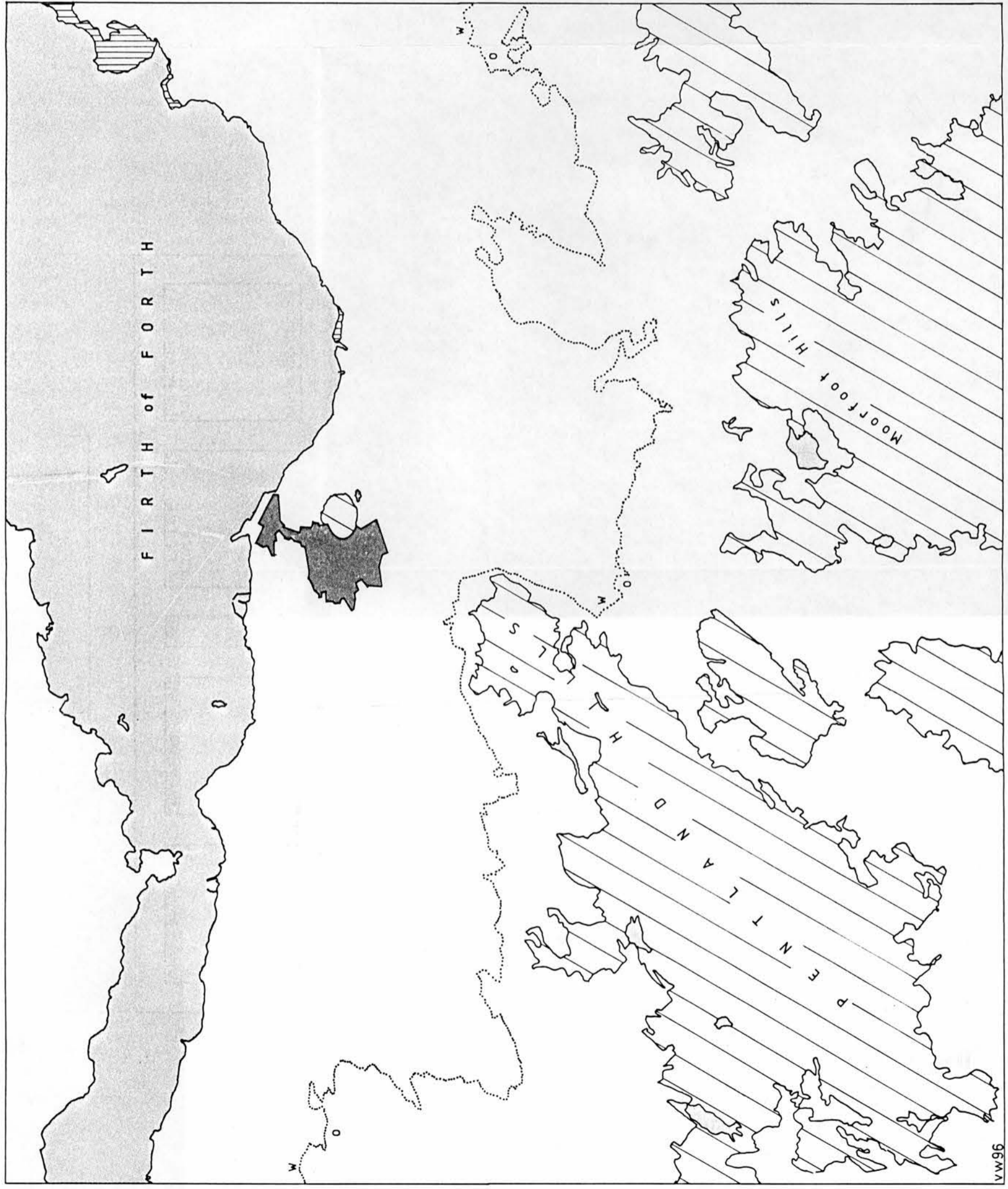
river, sea, lakes

littoral region

Edinburgh and Leith

temperate region
wheat cultivation
oat cultivation

hill (sub-alpine) region (simplified)

EDINBURGH AND ITS REGION

[after Botanical Survey of Scotland,
Edinburgh sheet
in Scottish Geographical Magazine
18 (1902), after p. 440]

edinburgh, august 1996
volker m. welter (copyright)

FIRTH of FORTH

Moorfoot Hills

PENTLAND HILLS

vw96
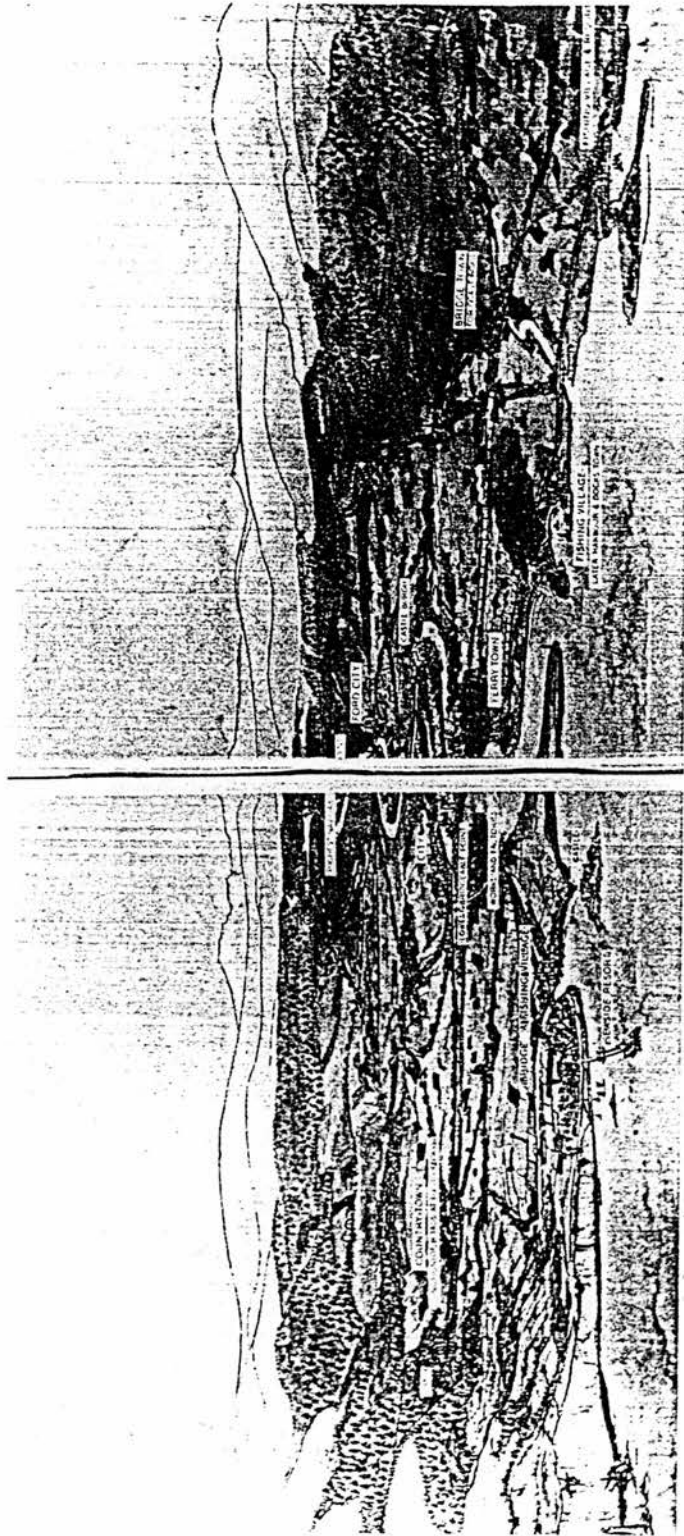
Figure 3.5
Edinburgh and its Region as a typical "European Valley Region".
(Geddes, *Cities in Evolution, 1949*, pp. 164-165)
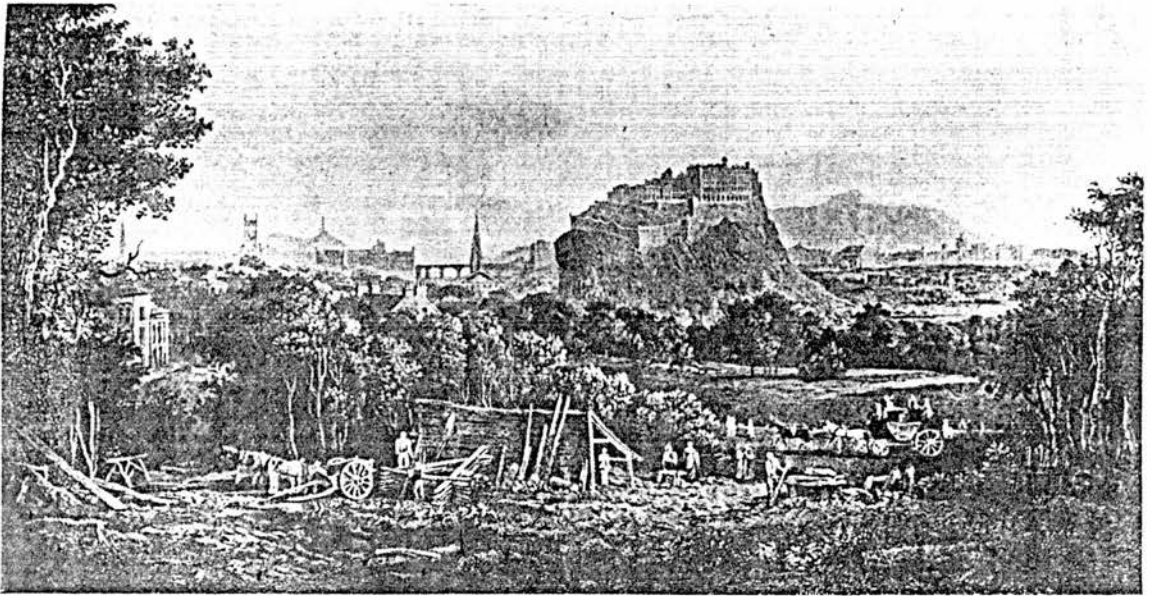
Figure 3.6
Comparison of the urban-geographical structure of Athens and Edinburgh. The view
of Edinburgh after 'Edinburgh from the West' (1821) by Alexander Nasmyth.
(Geddes, *Civic Survey Edinburgh*, pp. 544-545)
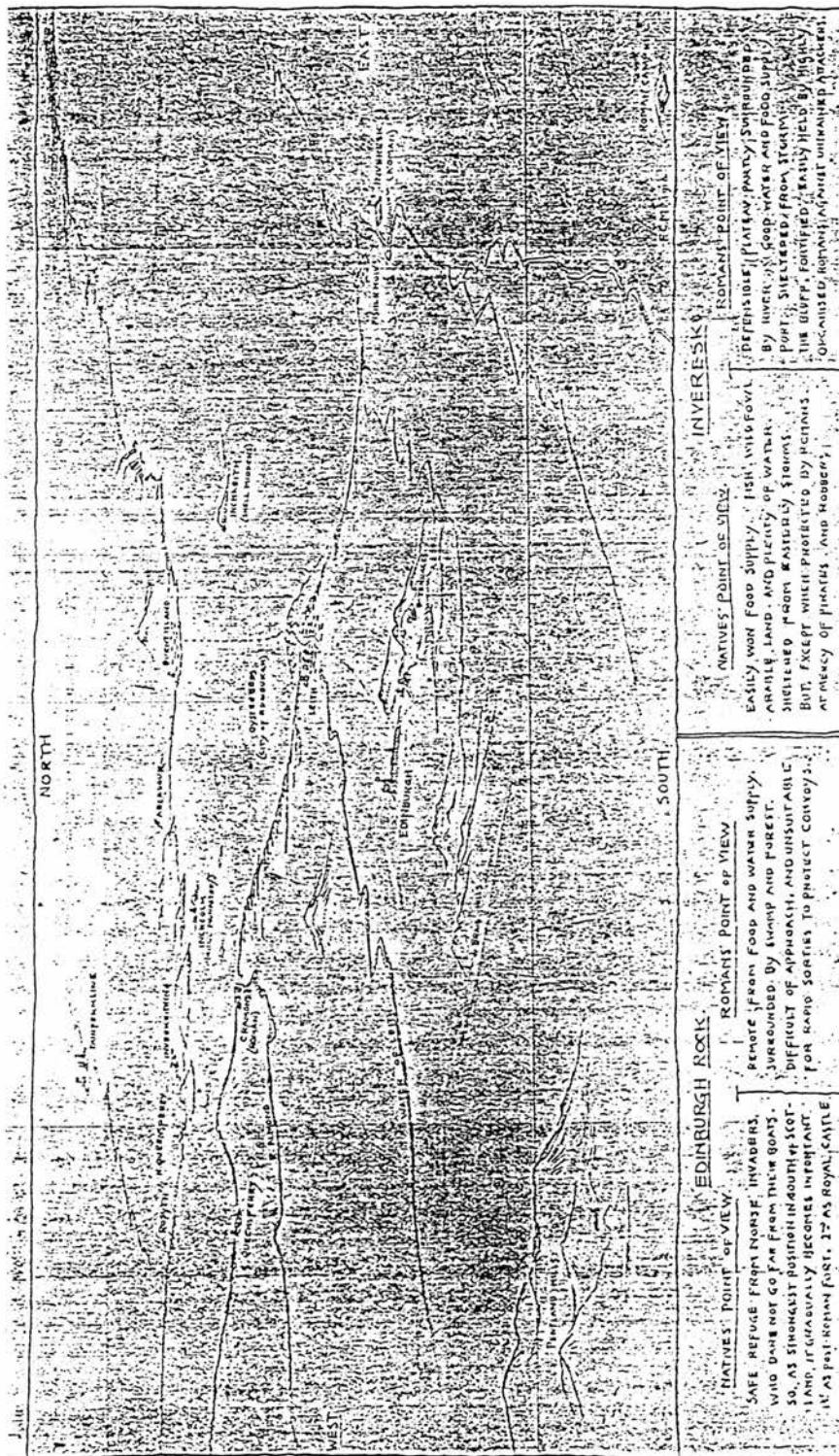
Figure 3.7
The Region of Edinburgh seen from the South.
(Geddes, *Civic Survey Edinburgh*, p. 546)

A Garden Village near Murrayfield, Edinburgh
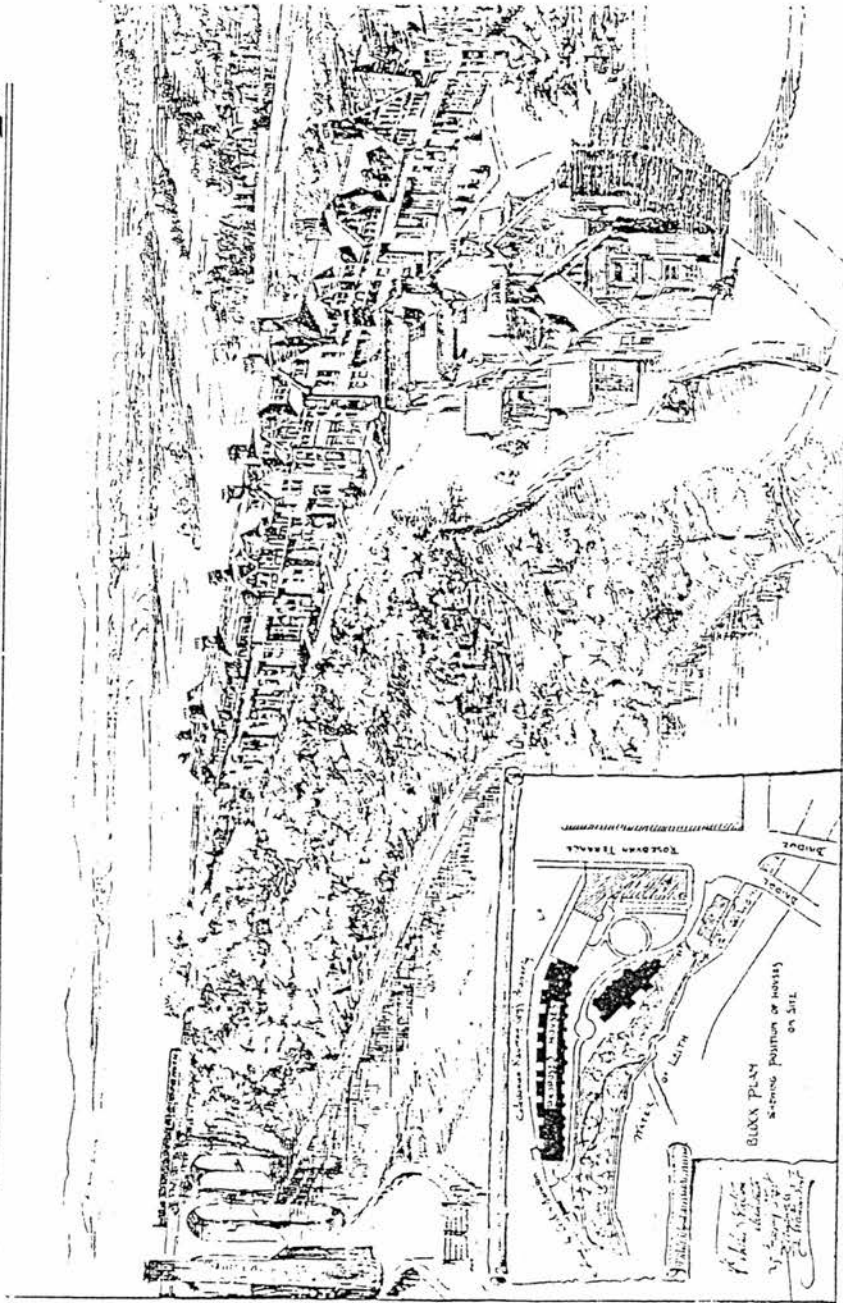
Figure 3.8
Bird's eye view and plan of Roseburn Cliff Garden Suburb in the West of Edinburgh.
(*A Garden Village near Murrayfield, Roseburn Cliff, Roseburn, Edinburgh* (c. 1892)
[SUA, T-GED 7/5/17])

413

Figure 3.9
Workmen's housing for Cox Gelatine Works in Edinburgh, 1893, demolished.
(Geddes, *Cities in Evolution*, p. 153)
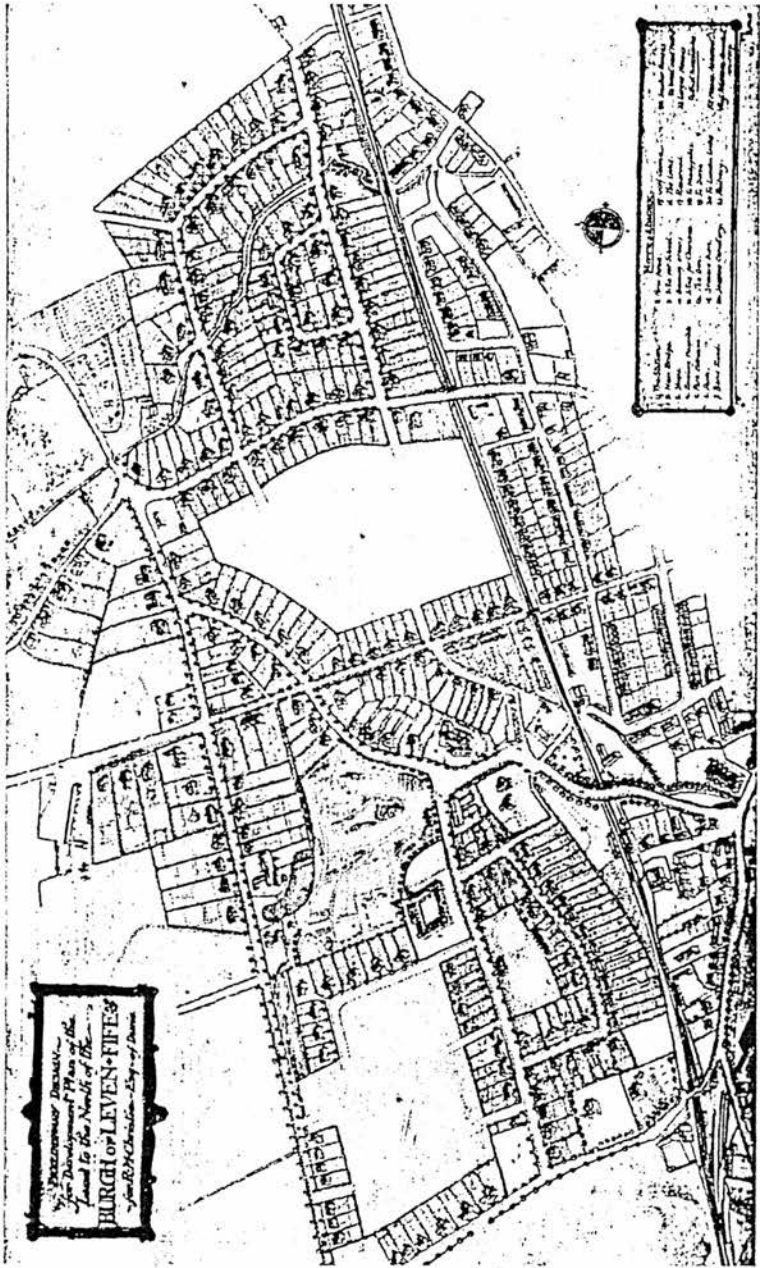
Figure 3.10
Plan for New Leven in Fife north of Edinburgh by Patrick Geddes and Frank C.
Mears, (before 1915).
(Geddes, *Cities in Evolution*, p. 390)
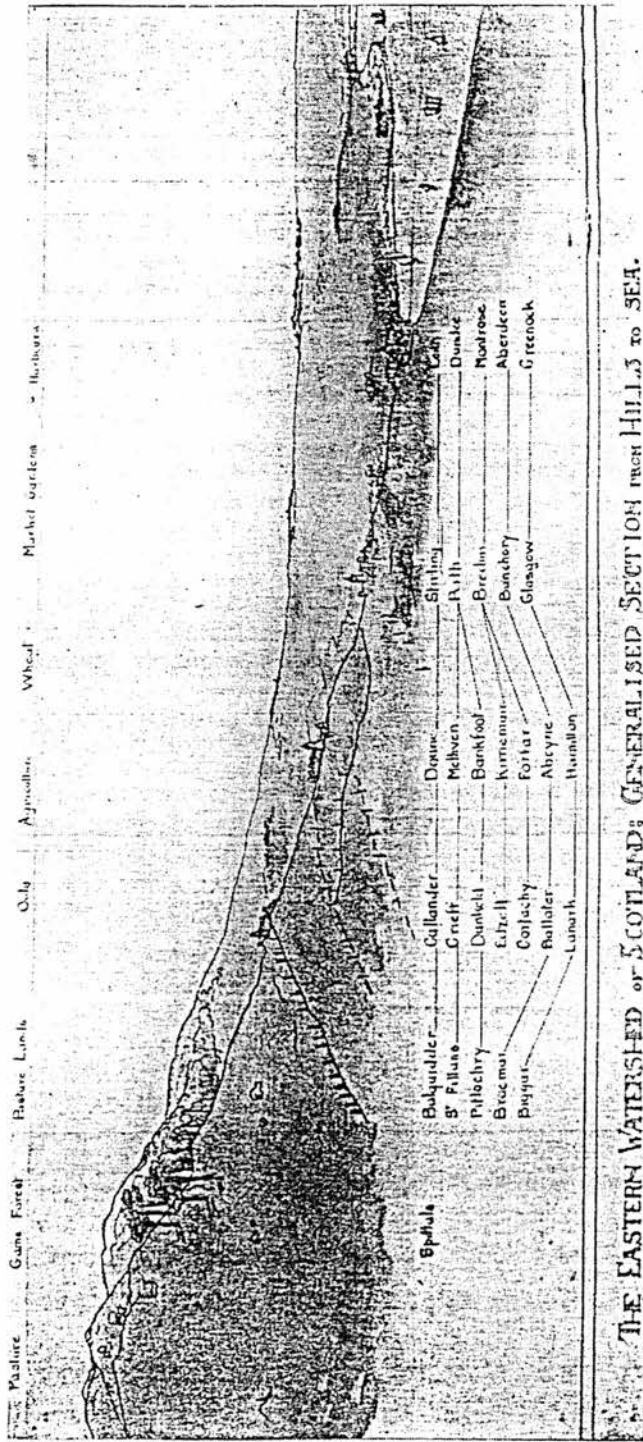
Figure 3.11
Valley Regions in East Scotland.
(Geddes, *Valley in Town*, p. 400)

WORLD - CONSCIENCE

AN INTERNATIONAL SOCIETY FOR THE

CREATION OF WORLD PEACE

BY THE ESTABLISHMENT OF

A WORLD

CENTRE CITY OF COMMUNICATION

CONCIEVED BY

HENDRIK CHRISTIAN ANDERSEN
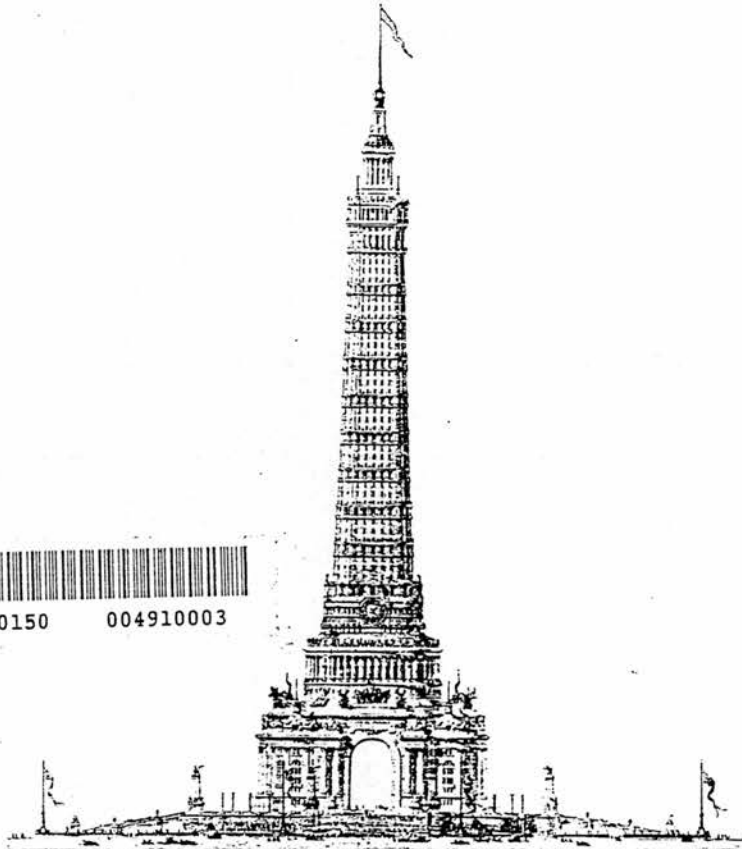
ANDERSEN   HEBRARD

TOWER OF PROGRESS

A WORLD VOICE

HENDRIK CHRISTIAN ANDERSEN
VILLA HELENE
VIA P. STANISLAO MANCINI, 20
ROMA (110)
ITALY

Figure 3.12
Tower of Progress at the centre of the World City of Hendrik C. Andersen and Ernest
M. Hébrard.
(Hendrik C. Andersen, Ernest M. Hébrard, *World-Conscience* (Paris: Andersen, n. d.
[c. 1913])

CAMERA.

PROSPECT.

EDINBURGH.

SCOTLAND.

LANGUAGE.

EUROPE.

WORLD.
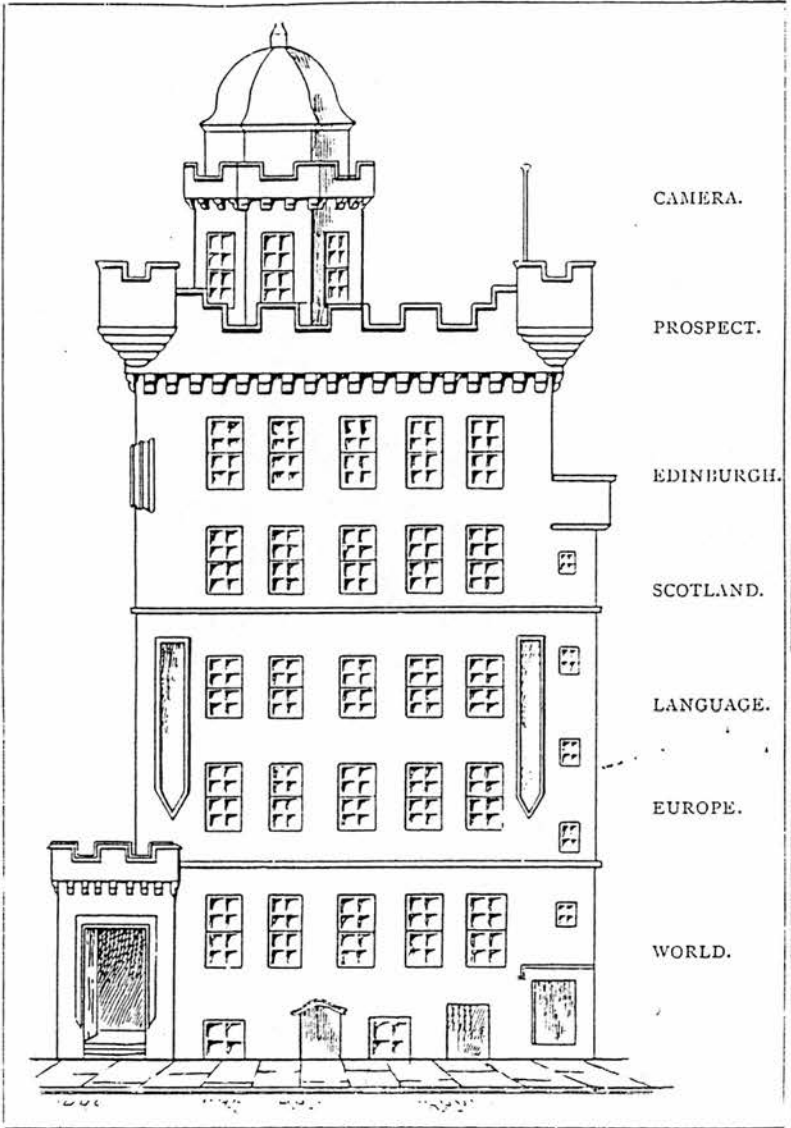
Figure 3.13
Diagram of the Outlook Tower in Edinburgh.
(Geddes, *Cities in Evolution*, p. 324)
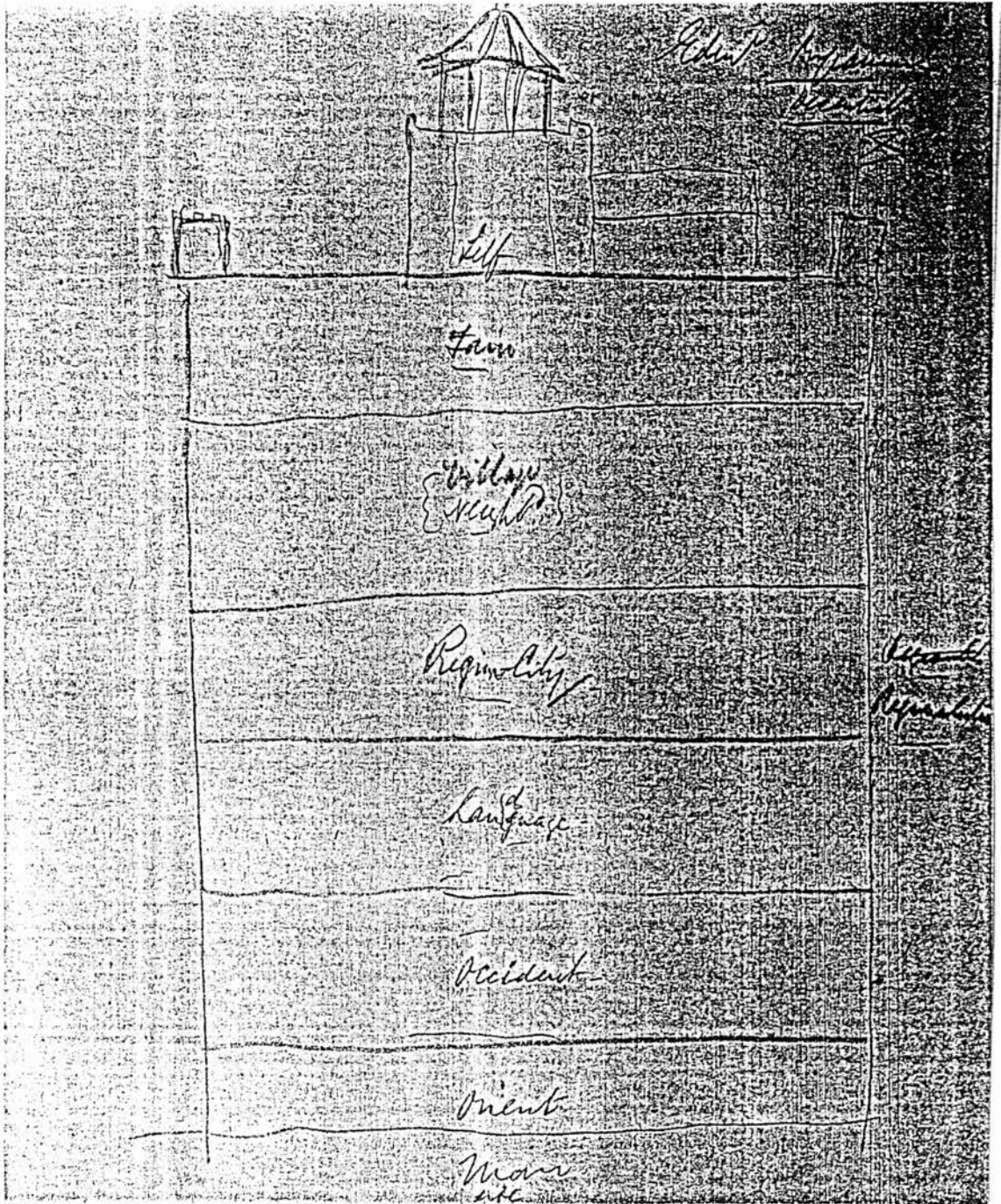
Figure 3.14
Sketch by Patrick Geddes for the Outlook Tower in Edinburgh, showing the connection between individual life and mankind.
(SUA, T-GED 3/4/15)
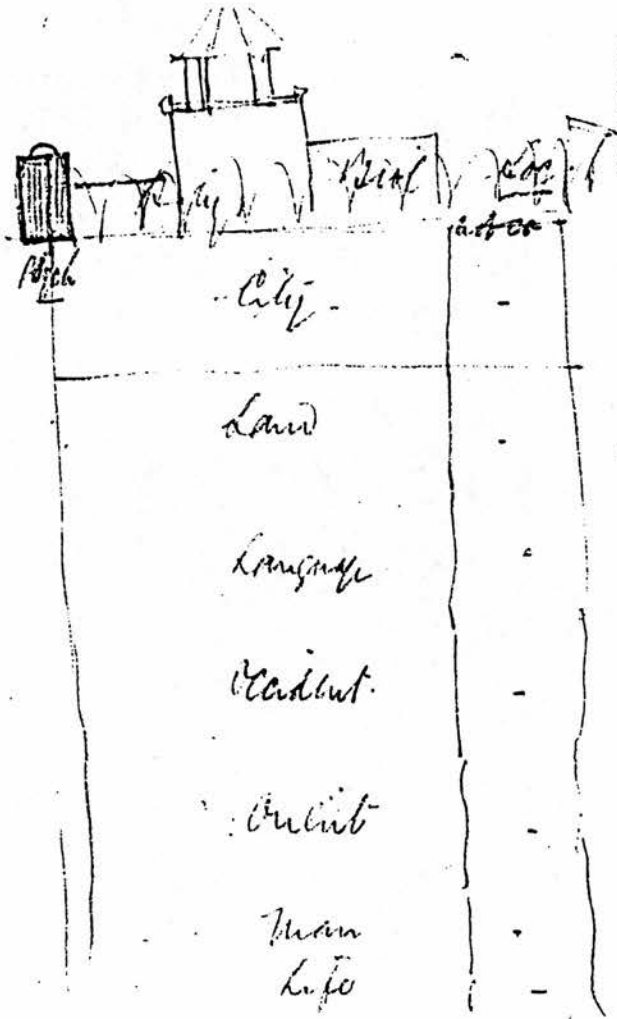
Figure 3.15
Sketch by Patrick Geddes for the Outlook Tower in Edinburgh, showing the connection between an individual city, mankind and life.
(SUA, T-GED 3/4/14)

ARBOR SAECULORUM

Figure 4.1
Arbor Saeculorum - the Tree of Eternity.
(*The Evergreen*, Spring, 1895, p. [143])
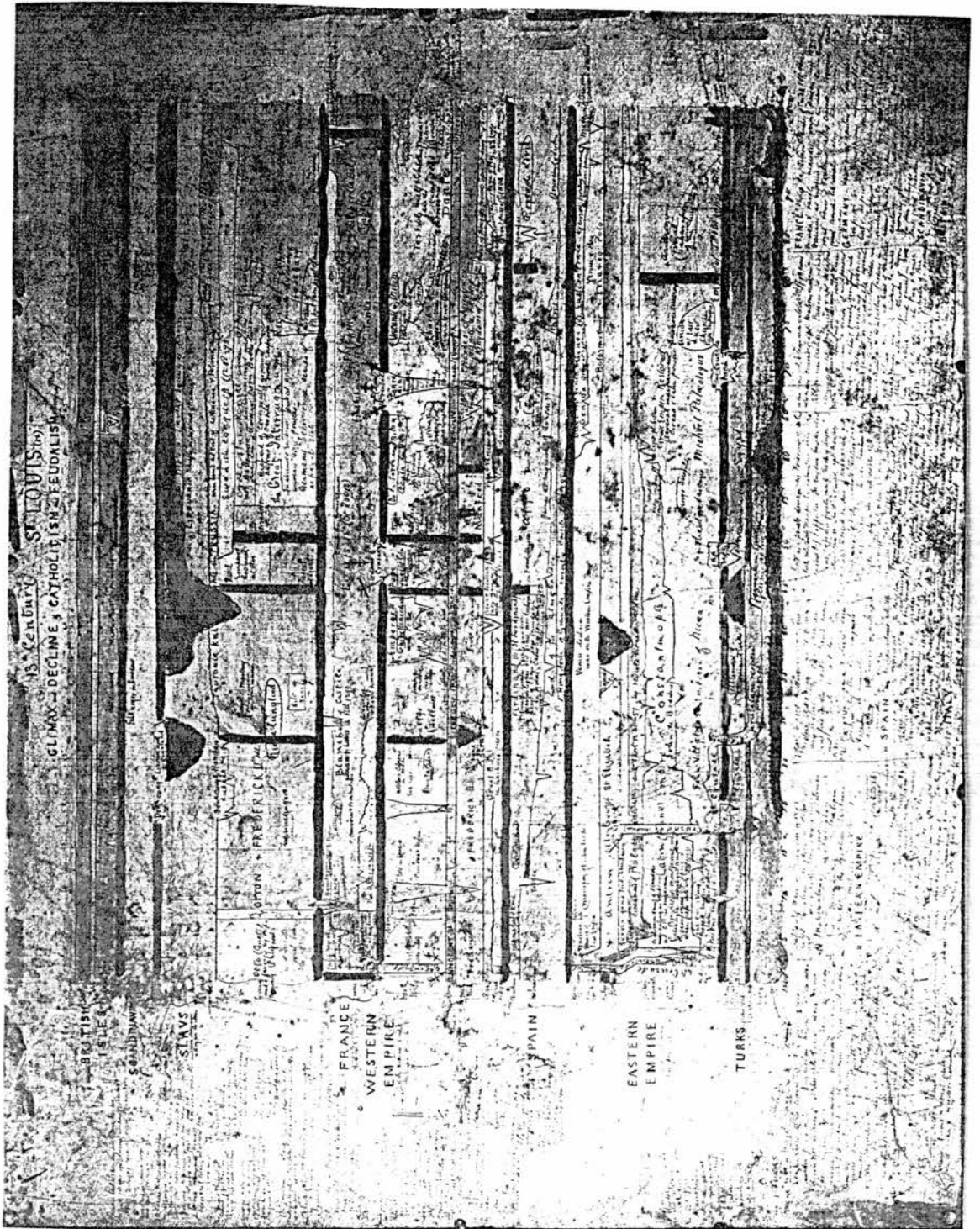
Figure 4.2
The stream of History, which became graphically summarised in the Tree of Eternity.
(SUA, T-GED 25/4/719)
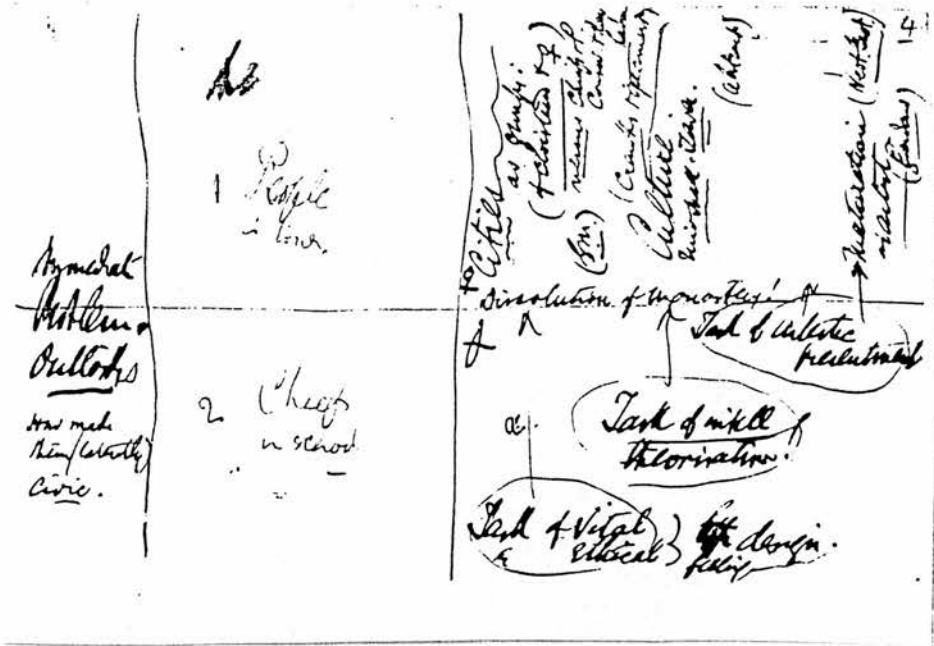
Figure 4.3
'People in Town - Chiefs in School', the social types and their relation to the Town-City formula.
(SUA, T-GED 3/7/36)
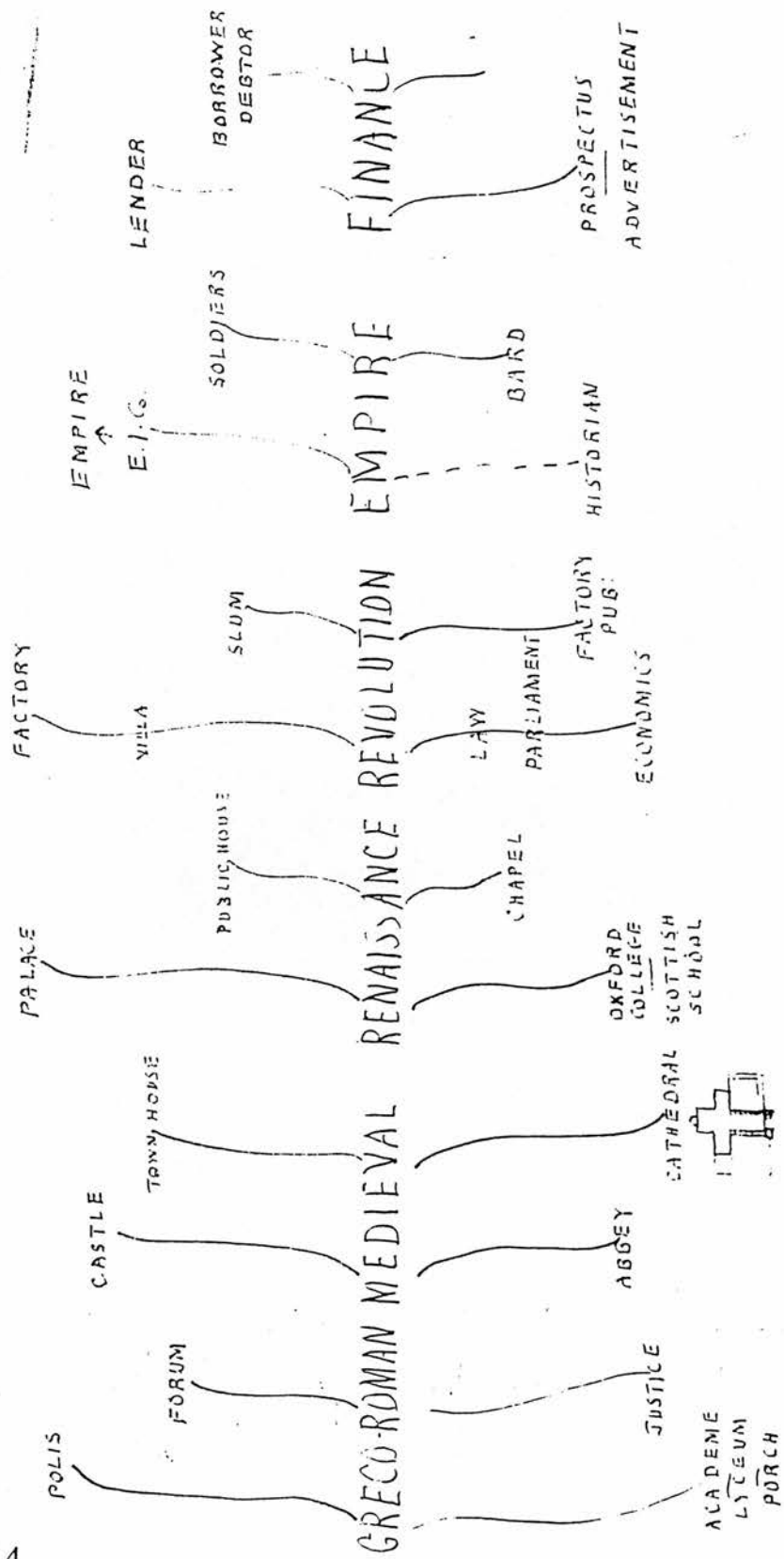
Figure 4.4
Temporal and Spiritual Power in cities and societies, and their places of action.
(SUA, T-GED 4/1/31)
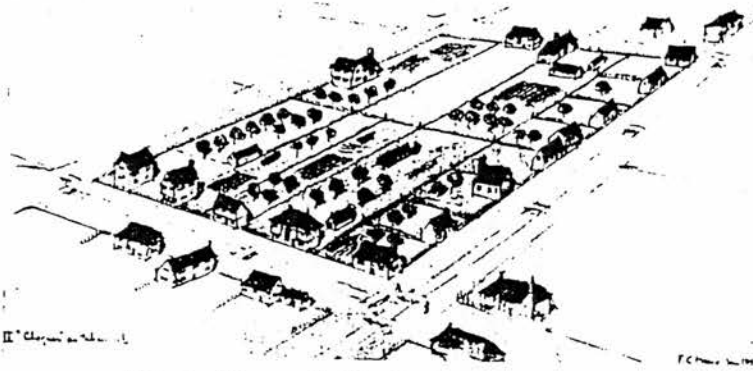
FIG. 2.—Diagram of original lay-out of city blocks.

FIG. 3.—Illustration of modern haphazard building over gardens.

Figure 4.5
Salisbury, its original layout as medieval garden city and its later appearance as an industrial city.
(Geddes, *Cities in Evolution*, p. 6-7)

425

Figure 4.6
Plan of the Cities and Town Planning Exhibition in Ghent, 1913, indicating the ideal
and three alternative routes through the exhibition.
(Drawing by Volker Welter, based on Geddes, *Cities in Evolution*, p. 271)

EXHIBITION TOURS.

—— ideal tour of geography, history, survey, and spiritual and civic developments

– – – tour of race, population, eugenics, and child-welfare

— — tour of classic cities, great capitals, and world cities

· · · · · tour of city fathers, practical men and women

LIST OF GALLERIES

1 evolution and geographical control
2 middle ages
3 wars of the renaissance
4 industrial age
5 garden city housing / modern cities
6 individual studies: Edinburgh, Saffron-Walden, Ghent
7 temple of thought
8 current ideas
9 past races
10 demography
11 well being of children
12 civic centre
13 classical cities
14 renaissance cities
15 great capitals and central improvements
16 the international (world) city
17 civics in action
18 municipal services
19 Ghent
20 library

CITIES AND TOWN PLANNING
EXHIBITION GHENT 1913

PLAN (not to scale)

[after P. Geddes, Cities in Evolution (London, 1915), p. 271]

edinburgh, june 1996
volker.m.welter (copyright)

Plan labels

1 Evolution et contrôle Geographique
2 Moyen-âge
3 Guerres de la Renaissance
4 Age industriel
5
6 Edimbourg — Walden — Etude individuelle — Gand des villes
7 Atelier — Temple de la pensée
8 Idées courantes
9 Races (passé)
10 Démographie
11 Bien-être de l'enfance
12 Civicentre
13 Cités classiques
14
15
16
17 Application Civics in Action
18 Gares
19 Ghent
20 Bibliothèque

Cités jardins habitations
Plans de villes modernes
Renaissance
Grandes Capitales et Améliorations centrales
Villes Internationale
Bureau
Services municipaux
Magasin

Exposition comparée des Villes

Organisée à l'Exposition Universelle de Gand 1913

Plan

Dresse par l'Architecte Soussigne
Bruxelles Le 28 Mars 1913
[illegible signature]

THE ASSOCIATION OF THE VALLEY·PLAN WITH THE VALLEY SECTION
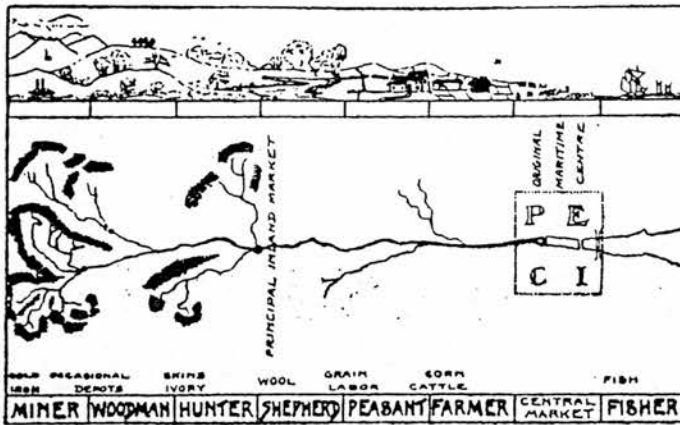
RURAL·OCCUPATION & MARKET·TOWN·

Figure 4.7
People, Chiefs, Intellectuals and Emotionals in the region. 'PCEI' is a symbol for the Tree of Eternity, indicating that the tree stands vertical in each settlement in the region-city.
(Branford, Geddes, *Coming Polity, 1917*, p. 296)

SITUATION, TOPOGRAPHY AND NATURAL ADVANTAGES :—
  (a) Geology, Climate, Water Supply, etc.
  (b) Soils, with Vegetation, Animal Life, etc.
  (c) River or Sea Fisheries.
  (d) Access to Nature (Sea Coast, etc., etc.).

MEANS OF COMMUNICATION, LAND AND WATER :—
  (a) Natural and Historic.
  (b) Present State.
  (c) Anticipated Developments.

INDUSTRIES, MANUFACTURES AND COMMERCE :—
  (a) Native Industries.
  (b) Manufactures.
  (c) Commerce, etc.
  (d) Anticipated Developments.

POPULATION :—
  (a) Movement.
  (b) Occupations.
  (c) Health.
  (d) Density.
  (e) Distribution of Well-Being (Family Conditions, etc.)
  (f) Education and Culture Agencies.
  (g) Anticipated Requirements.

TOWN CONDITIONS :—
  (a) HISTORICAL : Phase by Phase, from Origins onwards. Material Survivals and
       Associations, etc.
  (b) RECENT : Particularly since 1832 Survey, thus indicating areas, lines of growth
       and expansion, and local changes under modern conditions, e.g., of streets,
       open spaces, amenity, etc.
  (c) Local Government Areas. (Municipal, Parochial, etc.)
  (d) PRESENT : Existing Town Plans, in general and detail.
       Streets and Boulevards.
       Open Spaces, Parks, etc.
       Internal Communications, etc.
       Water, Drainage, Lighting, Electricity, etc.
       Housing and Sanitation (of localities in detail).
       Existing activities towards Civic Betterment, both Municipal and Private.

TOWN-PLANNING ; SUGGESTIONS AND DESIGNS :—
  (A) Examples from other Towns and Cities, British and Foreign.
  (B) Contributions and Suggestions towards Town-Planning Scheme, as regards:—
    (a) Areas.
    (b) Possibilities of Town Expansion (Suburbs, etc.)
    (c) Possibilities of City Improvement and Development.
    (d) Suggested Treatments of these in detail (alternatives when possible).

Figure 5.1
The Survey, table showing the topics and themes a survey should cover.
(Sociological Society, Cities Committee, *Memorandum on the Need of City Survey preparatory to Town-Planning* (n.pl., n.pub, n.d.[1911]), p. 6)
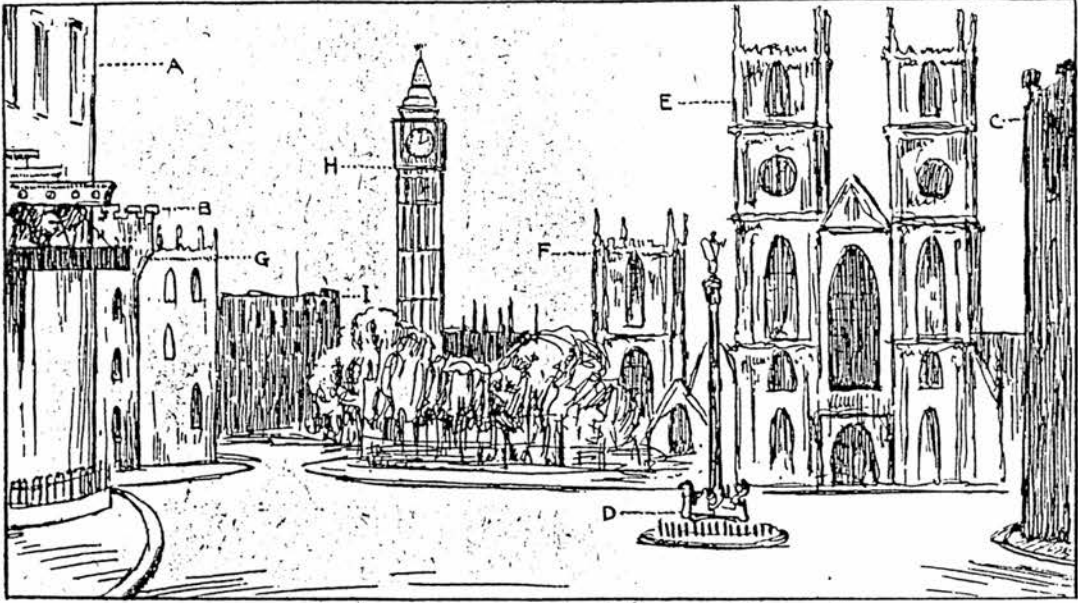
428

FIG. 5.—PRECINCTS OF THE ABBEY; APPROACH FROM VICTORIA STREET.

A. National Liberal Club. B. Corner of Westminster Hospital. C. Church House and Dean's Yard. D. Westminster School Column. E. The Abbey, West Front. F. St. Margaret's Tower. G. Corner of Middlesex Guildhall. H. Clock Tower. I. Office Buildings.

Figure 5.2
The Precinct of Westminster Abbey.
(Geddes, Branford, *Social Inheritance, 1917*, p. 265)

429

II. BALRAMPUR PALACE AND NEIGHBOURHOOD,
SHOWING IMPROVEMENTS
AS DESCRIBED IN REPORT.
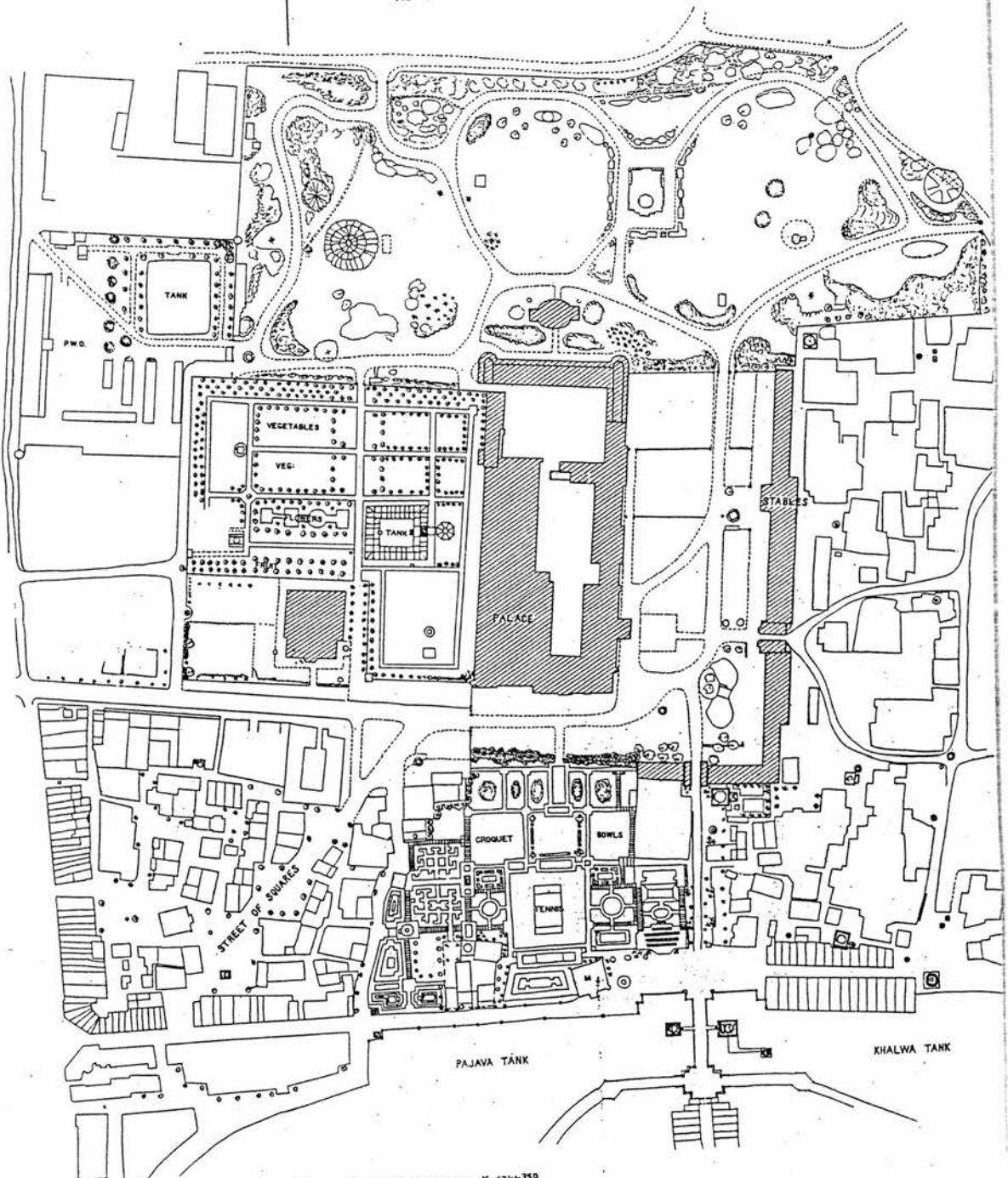
Figure 5.3
Balrampur, Street of Squares, an example of conservative surgery applied to a city quarter.
(Geddes, *Balrampur report*, plate II)
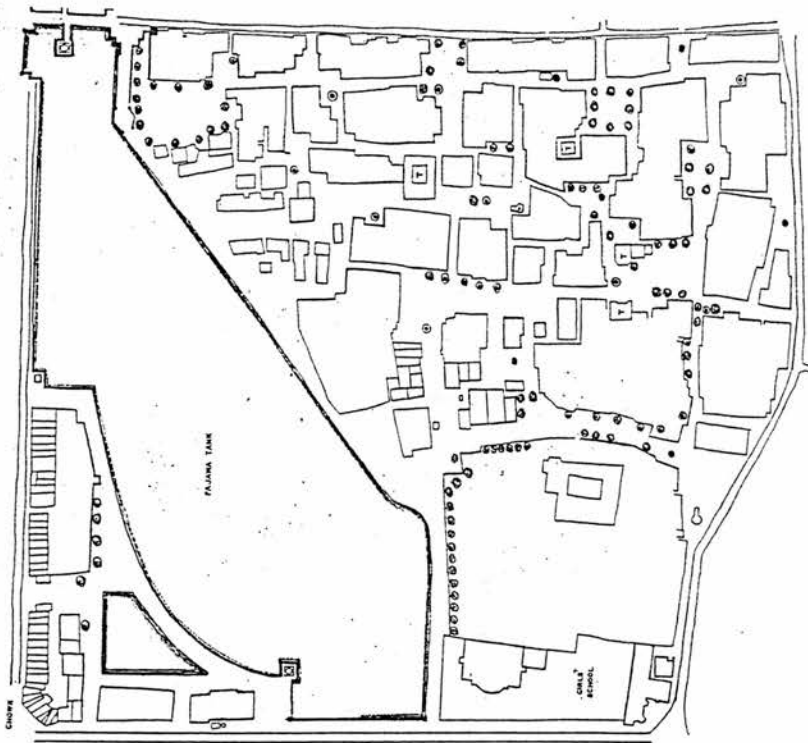
Figure 5.4
Balrampur, the Tehri Bazar before and after Geddes's intervention.
(Geddes, *Balrampur report*, plates IV a +b)
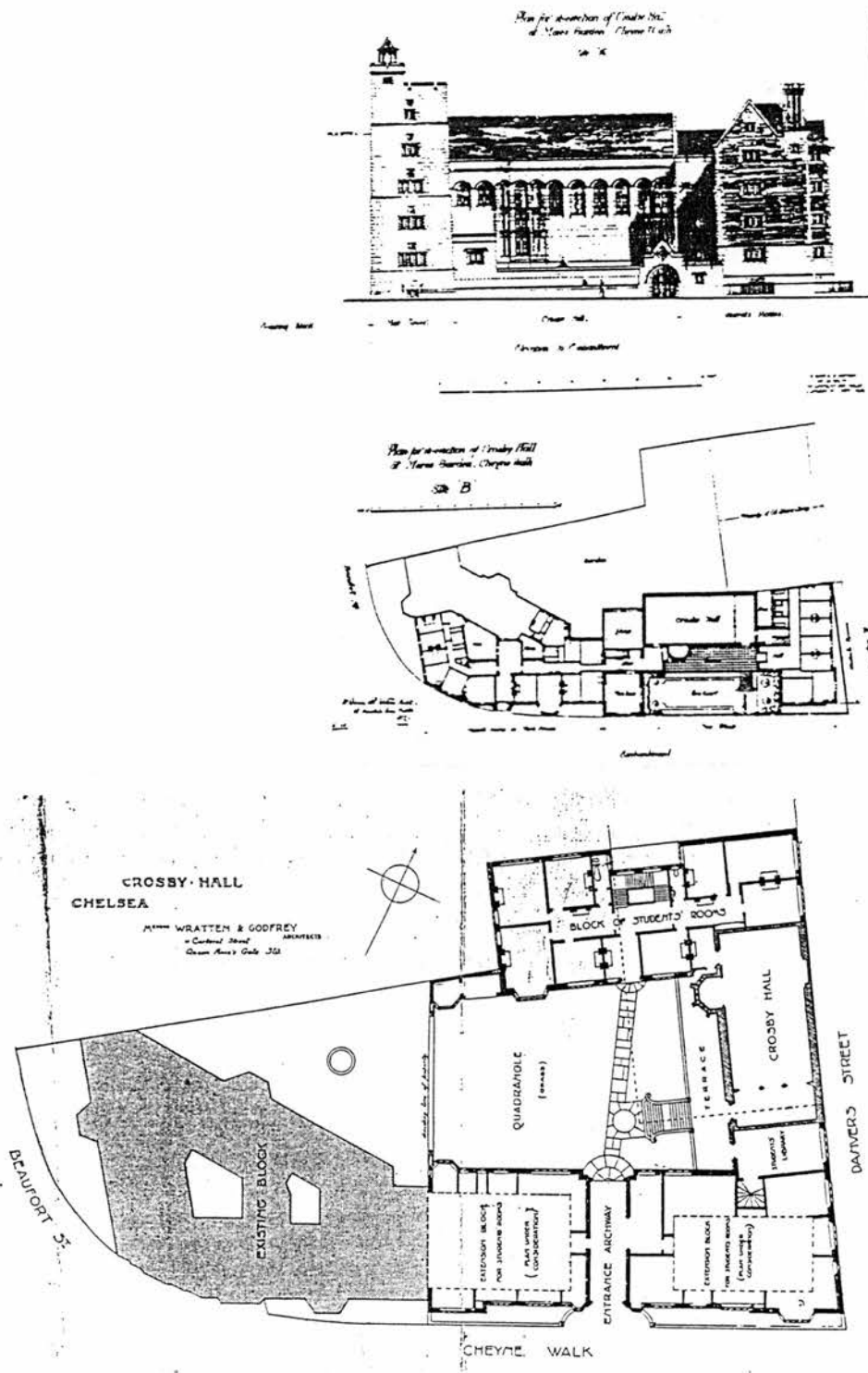
431

Figure 5.5
Two schemes for the University Halls of Residence at Cheyne Walk in Chelsea from
1908. The architects Dunn and Watson placed Crosby Hall parallel to Cheyne Walk
with the More Tower to the left. Wratten and Godfrey moved the hall into its final
position in Danvers Street, but the buildings adjacent to Crosby Hall were not built.
(Top: Saint, *Ashbee, Geddes, Lethaby*, Fig. 5; Bottom: SUA, T-GED 12/1/53)

432
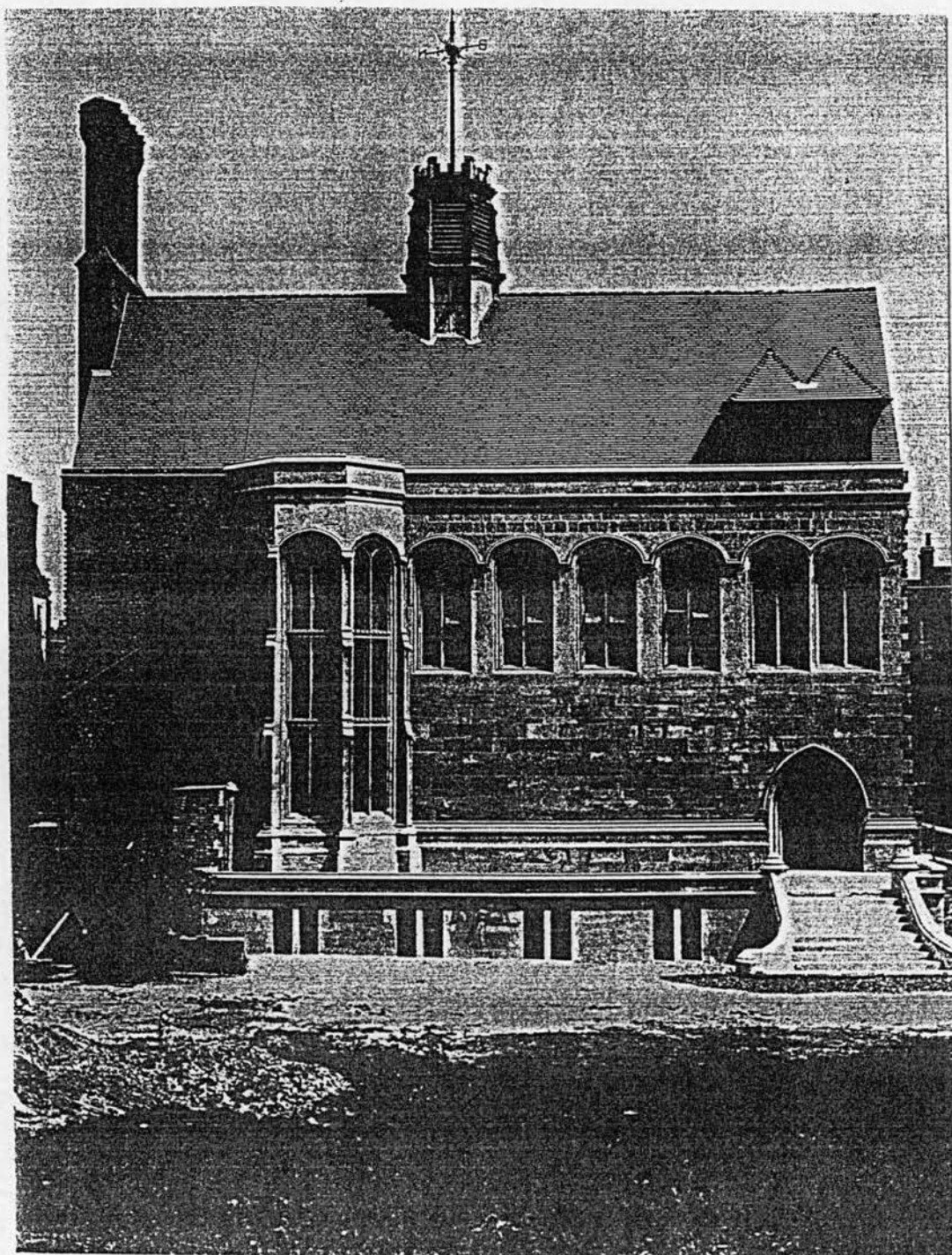
Figure 5.6
View of Crosby Hall after completion of the rebuilding, seen from the Garden.
(SUA, T-GED 25/4/50)
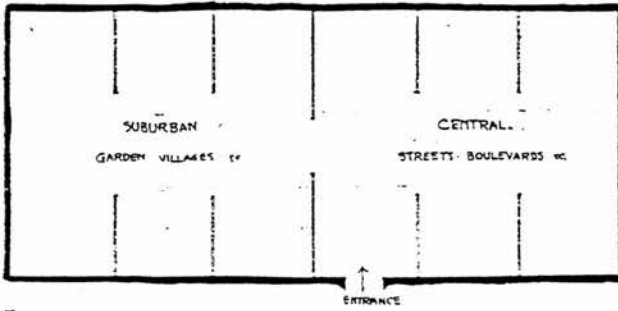
I. SELECTION OF TYPICAL TOWN-PLANNING SCHEMES.
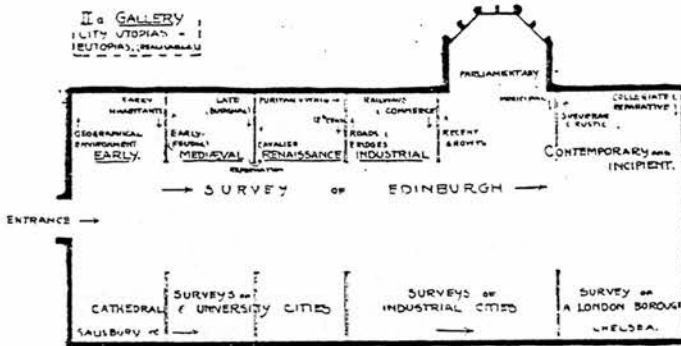
II. EXAMPLES OF CITY SURVEYS,
PRELIMINARY TO REPORTS ON TOWN-PLANNING & CITY DEVELOPMENT.
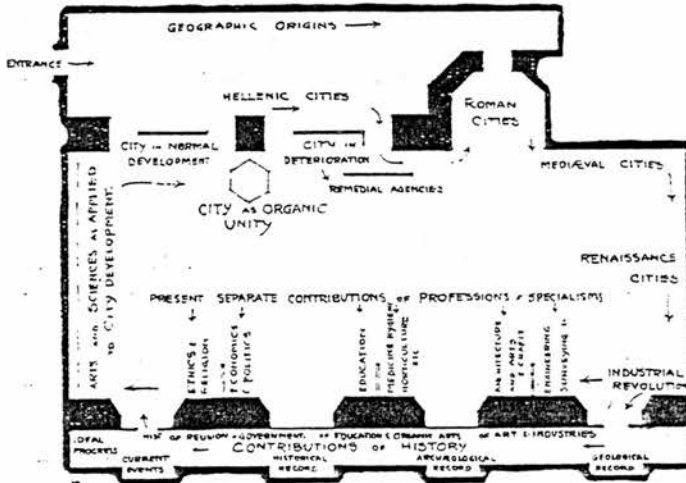
III. INTRODUCTION TO THE STUDY OF CITIES. 1. ORIGIN AND GROWTH. 2. DECAY. 3. REVIVANCE.

Figure 5.7
Cities and Town Planning Exhibition, plan of the show in Chelsea.
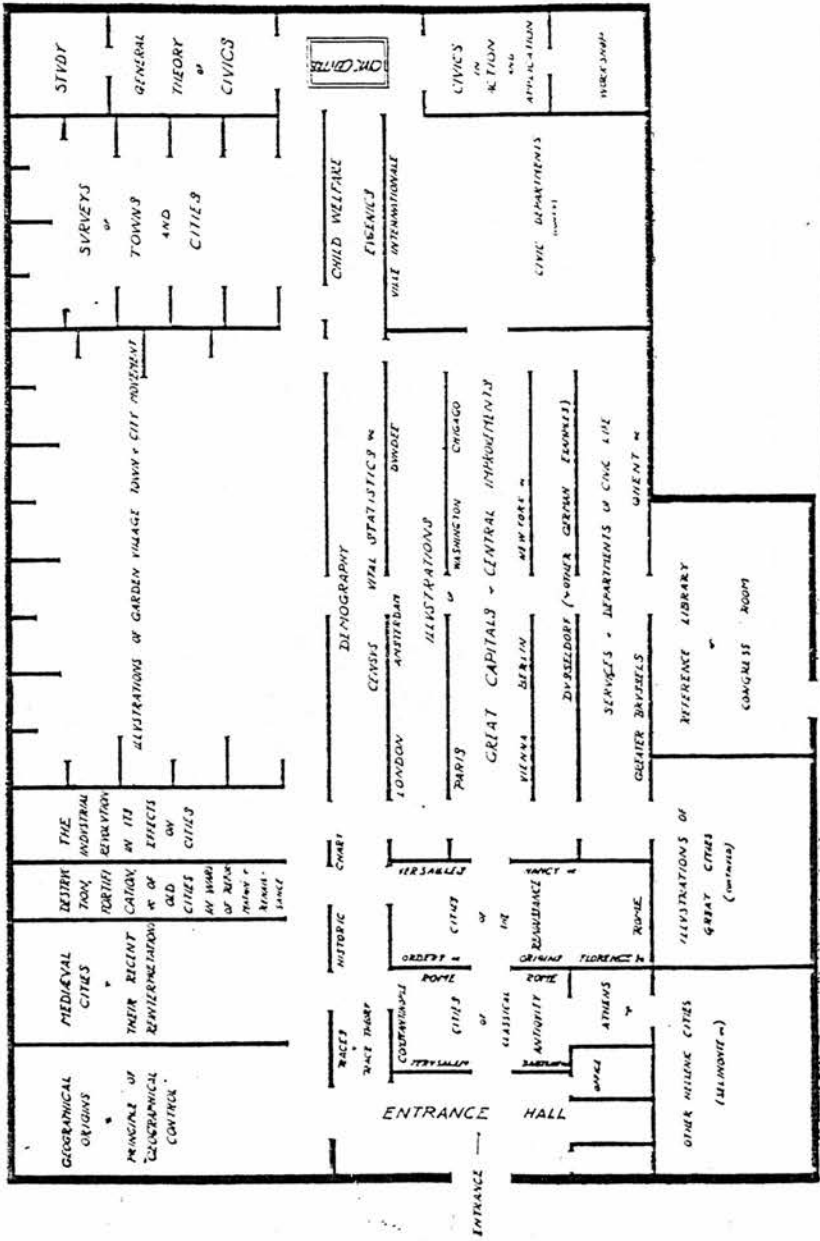(Geddes, Mears, *Exhibition Edinburgh*, appendix)
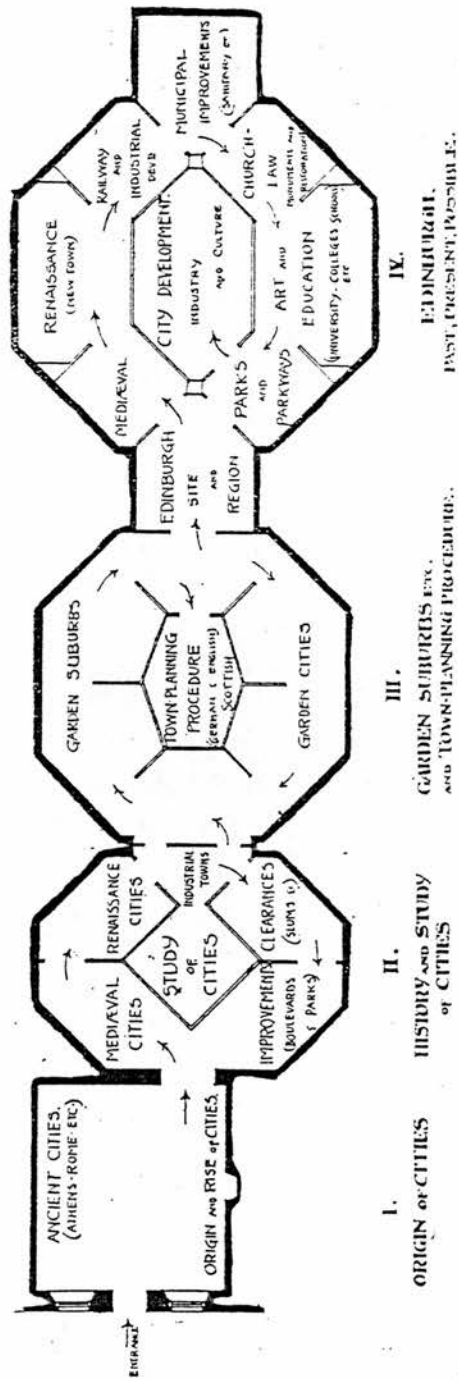
Figure 5.8
Cities and Town Planning Exhibition, plan of the show in Edinburgh.
(Geddes, Mears, *Exhibition Edinburgh*, appendix)

435

Figure 5.9
Cities and Town Planning Exhibition, preliminary plan of the show in Ghent.
(Geddes, *Two Steps in Civics*, p. 7)
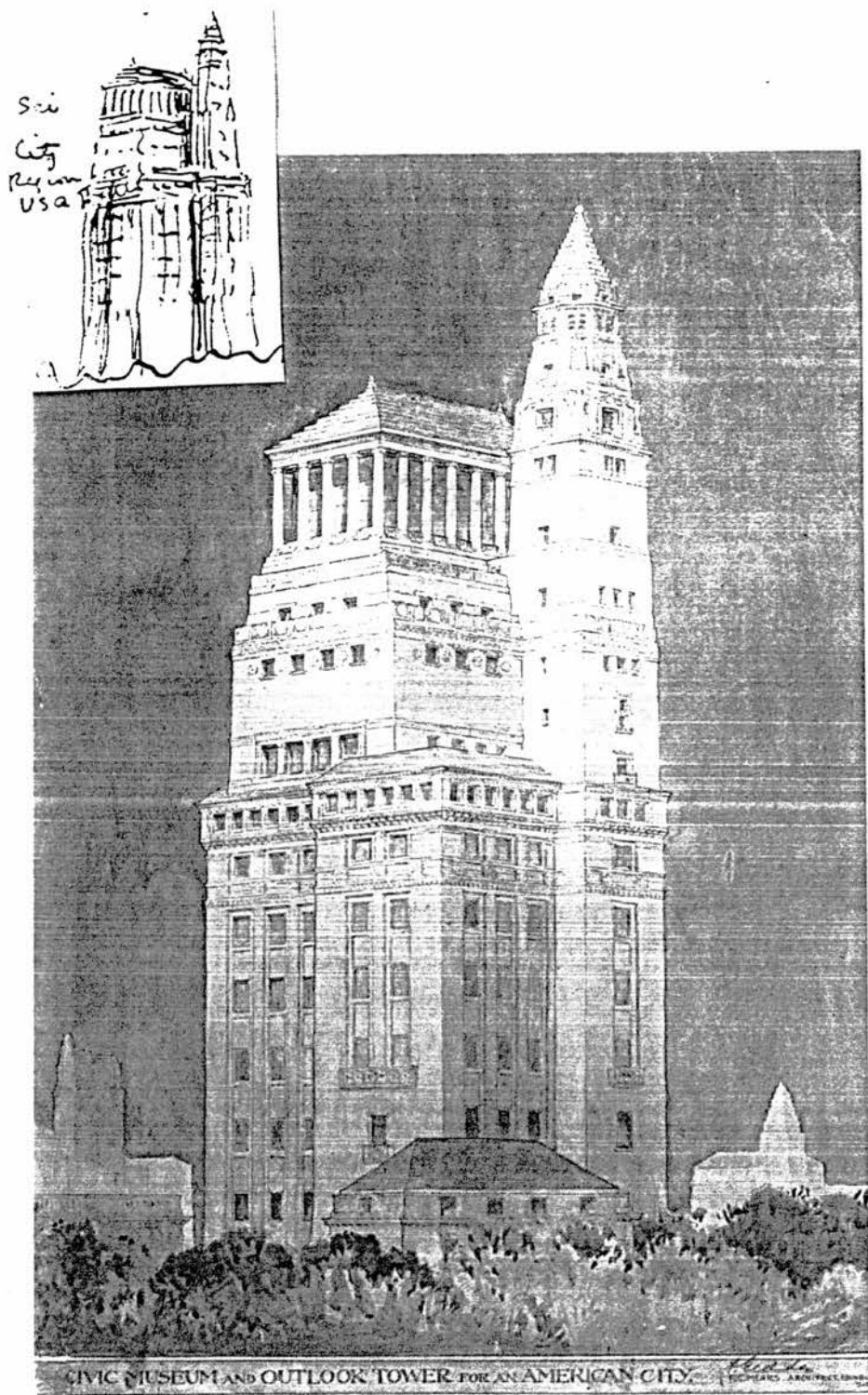
Figure 5.10
Civic Museum and Outlook Tower for an American City (New York)
Perspective drawing by Frank C. Mears, 1923, for Patrick Geddes.
The thumbnail sketch from a letter by Mears explains the division of floors between museum and Outlook Tower.
(Drawing: SUA, T-GED 25/2/72; sketch: NLS, MS 10573, f. 144)
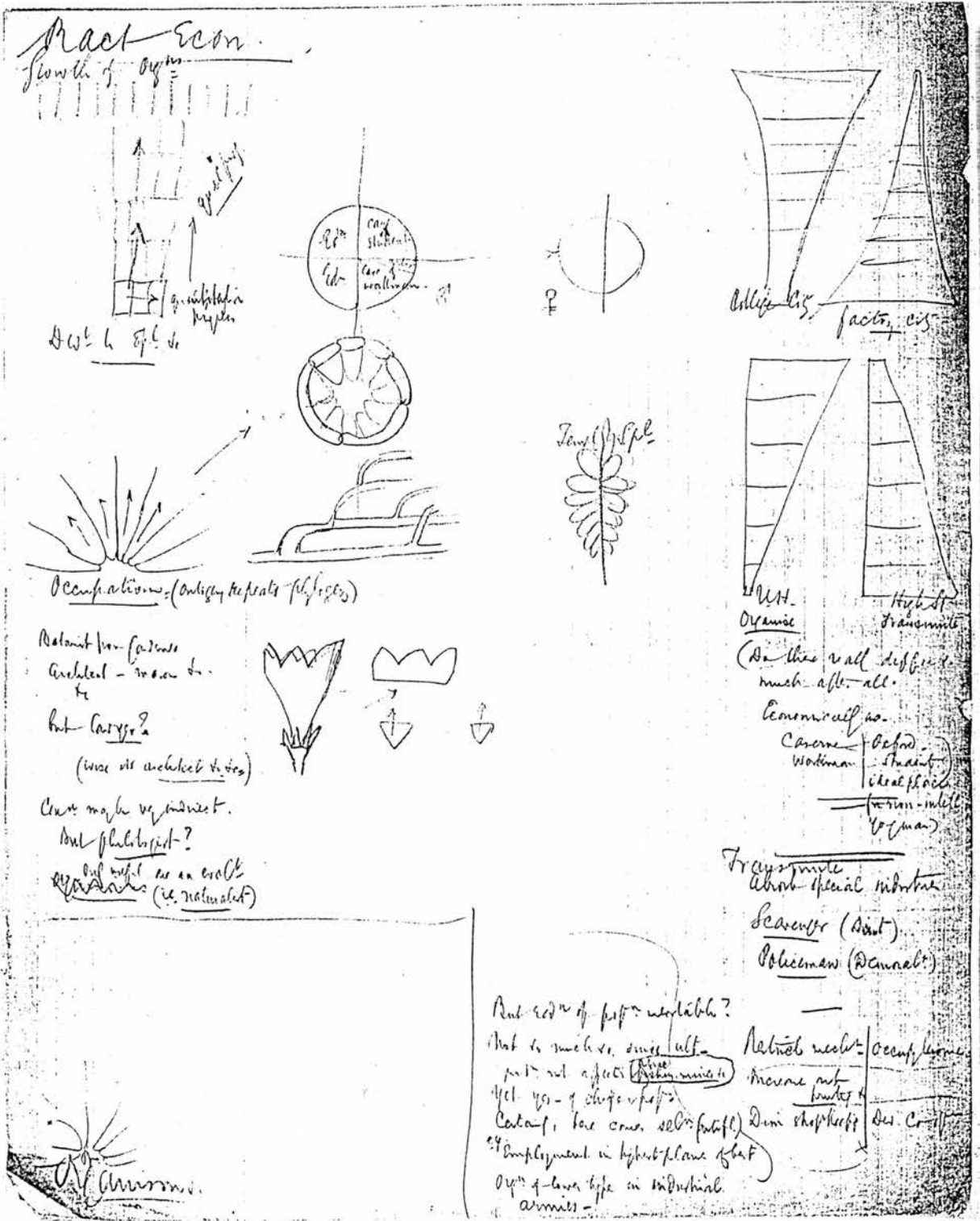
Figure 5.11
Organicism and Town Planning. Sketch by Patrick Geddes.
Left: 'ontogeny repeats phylogeny' - Ernst Haeckel's law of recapitulation.
Centre: Tree of Eternity.
Right: diagrams of various cities.
(SUA, T-GED 12/1/358)
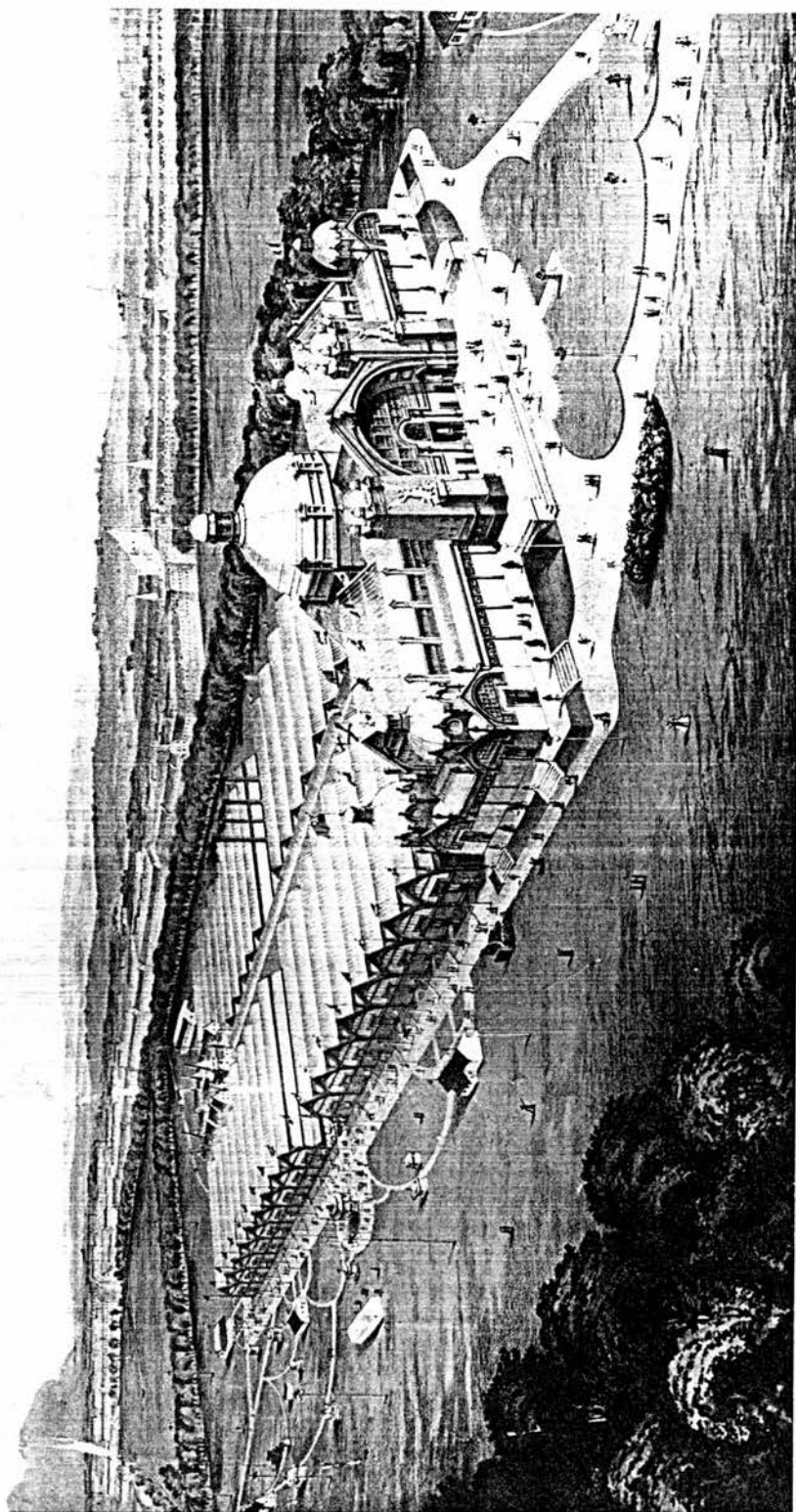
Figure 6.1
Aerial View of the International Exhibition of Industry, Science and Art, Edinburgh
1886. The Old Edinburgh Street is at the far end of the Building.
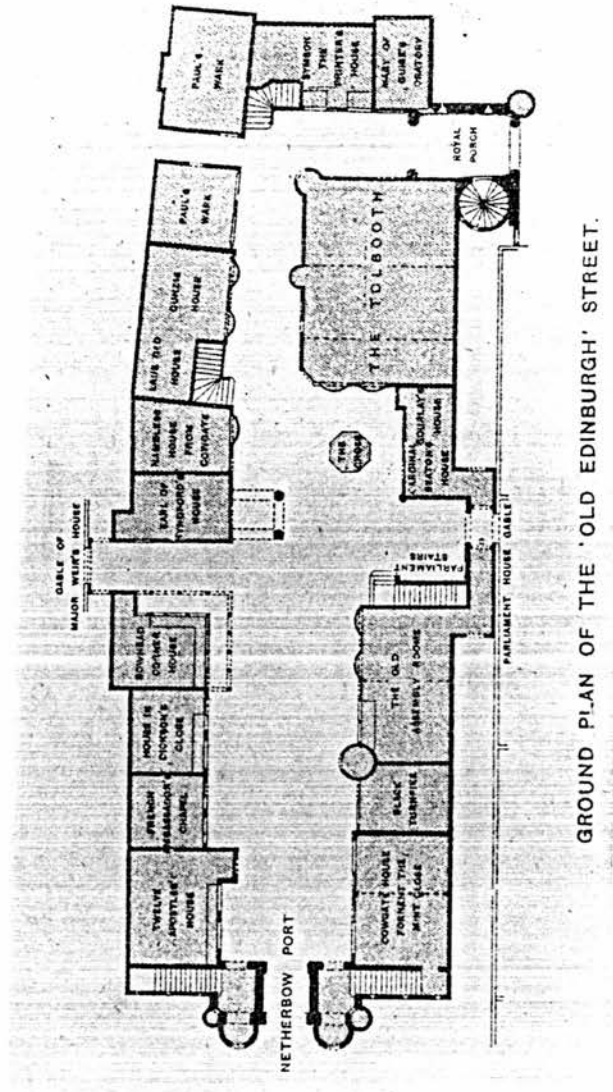(Royal Commission of Ancient and Historic Monuments of Scotland)

Figure 6.2
Plan of the Old Edinburgh Street at the International Exhibition of Industry, Science and Art, Edinburgh 1886.
(Dunlop, Dunlop, *Book of Old Edinburgh*, opposite title page)

440

Figure 6.3
View of the Old Edinburgh Street, the copy of the Netherbow Port at the far end of the street.
(Royal Commission of Ancient and Historic Monuments of Scotland)
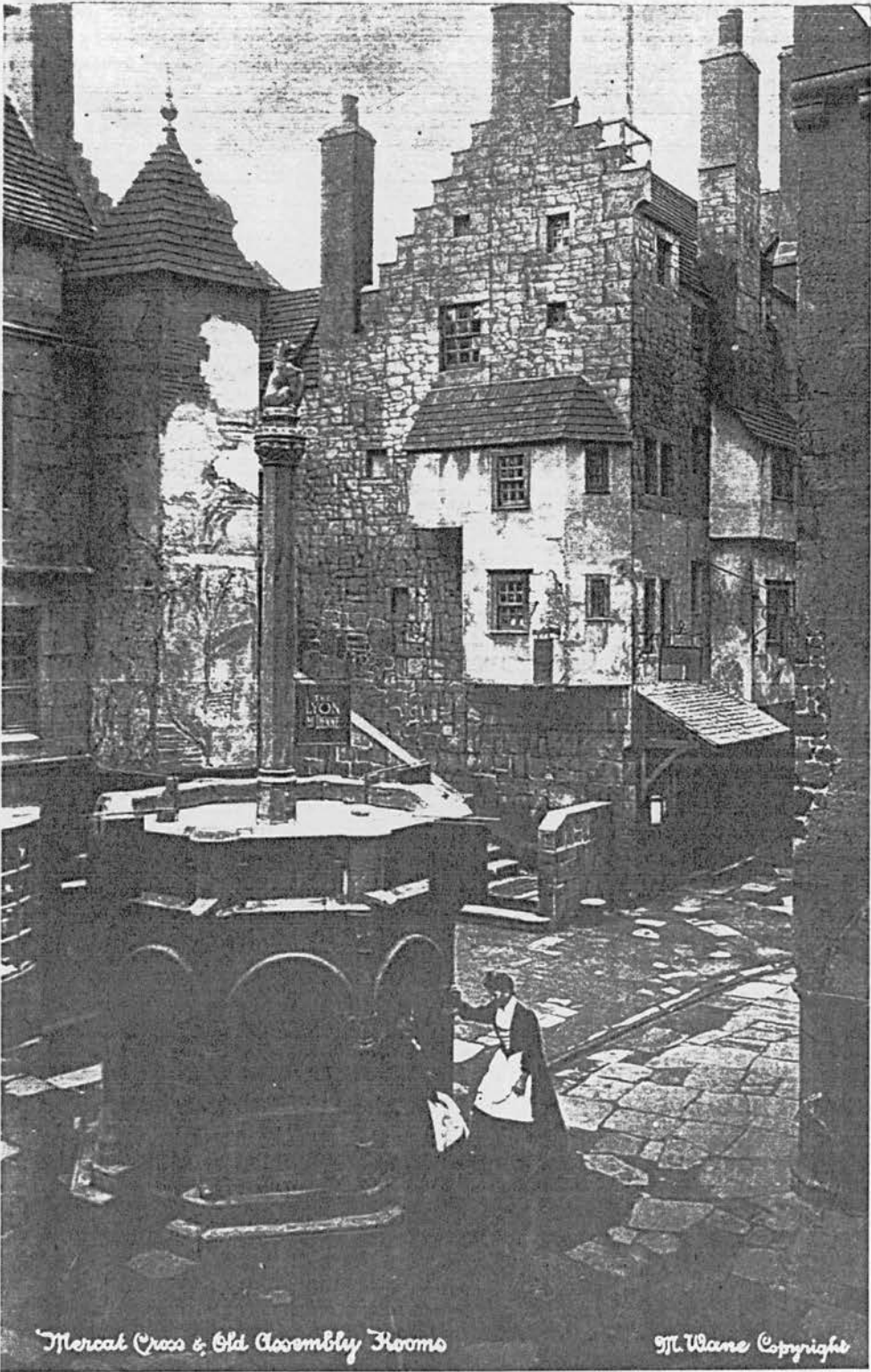
Figure 6.4
View of the copy of the Mercat Cross in the Old Edinburgh Street.
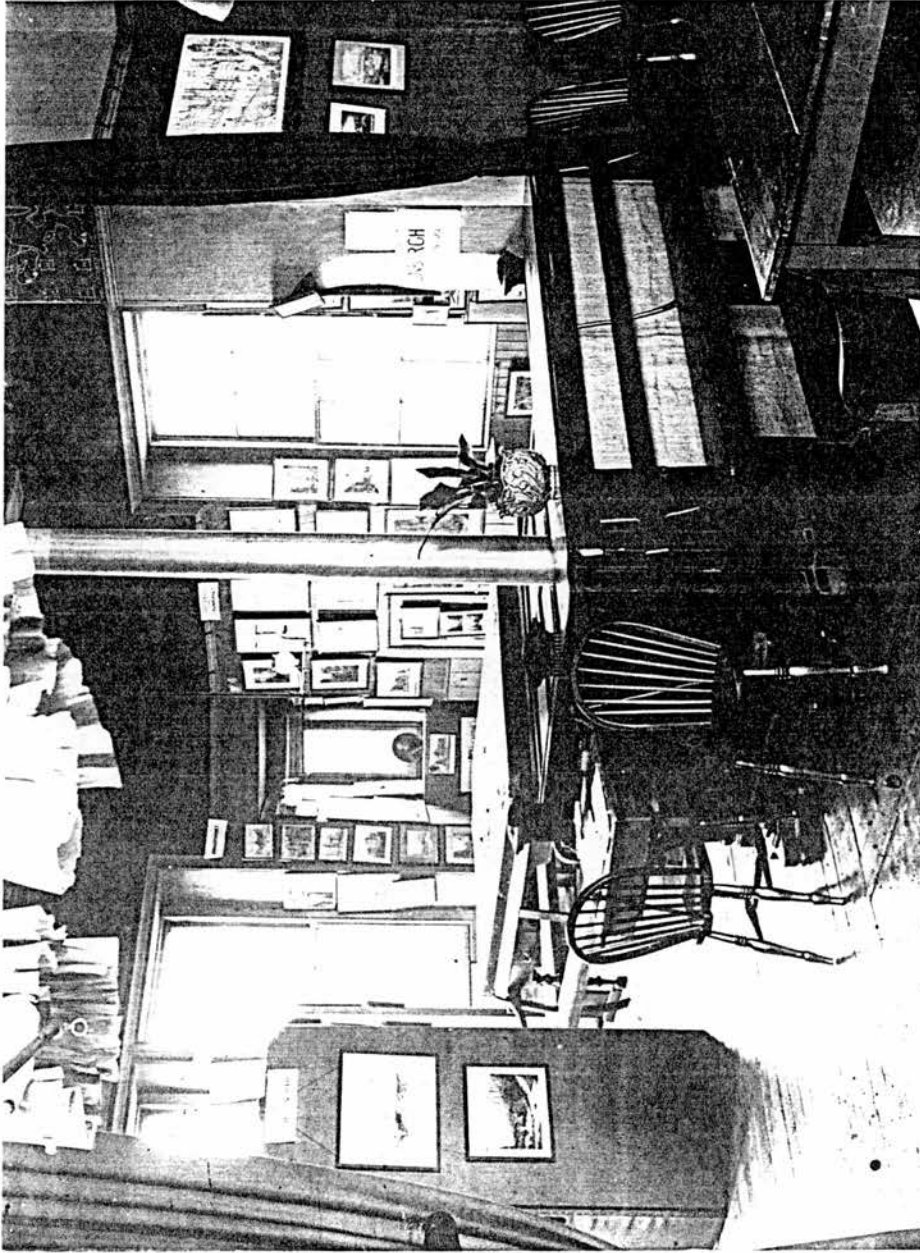(Royal Commission of Ancient and Historic Monuments of Scotland)

Figure 6.5
The Edinburgh room at the Edinburgh Outlook Tower.
(Patrick Geddes Centre for Planning Studies, Edinburgh University)

Figure 6.6
Ancient cultivation terraces at the slopes of Arthur's Seat, Edinburgh.
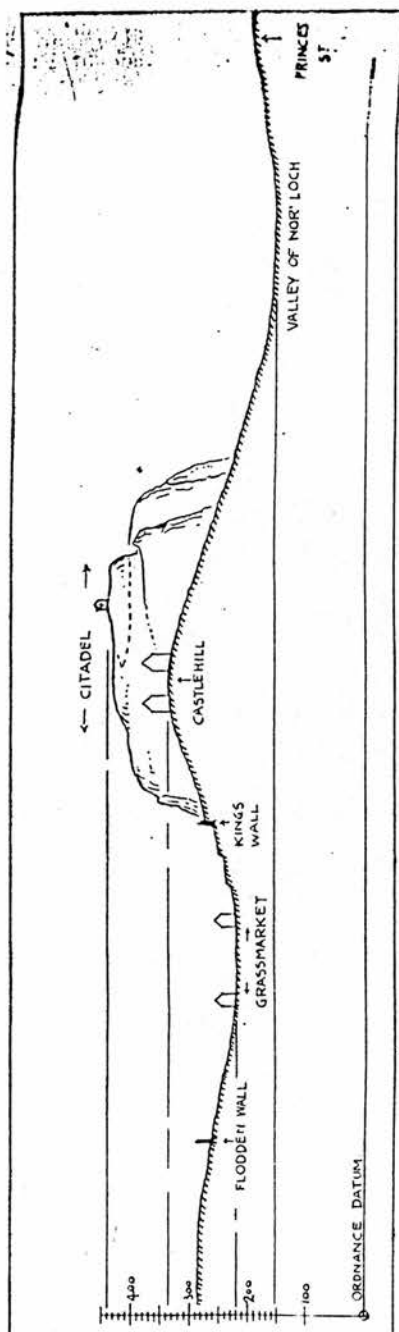(Patrick Geddes Centre for Planning Studies, Edinburgh University)

FIG. 4.—Cross section through Grassmarket and Castlehill looking west. The "King's Wall" represents a shrinkage of the town for military reasons. Had this wall followed the original burgh boundary it would have been overlooked from the high ground to the south. Even the Flodden Wall of later times suffered in part from this disadvantage.

Figure 6.7
Section through Grassmarket and Castle Hill, Edinburgh, showing use of the ancient cultivation terraces as foundations for city walls.
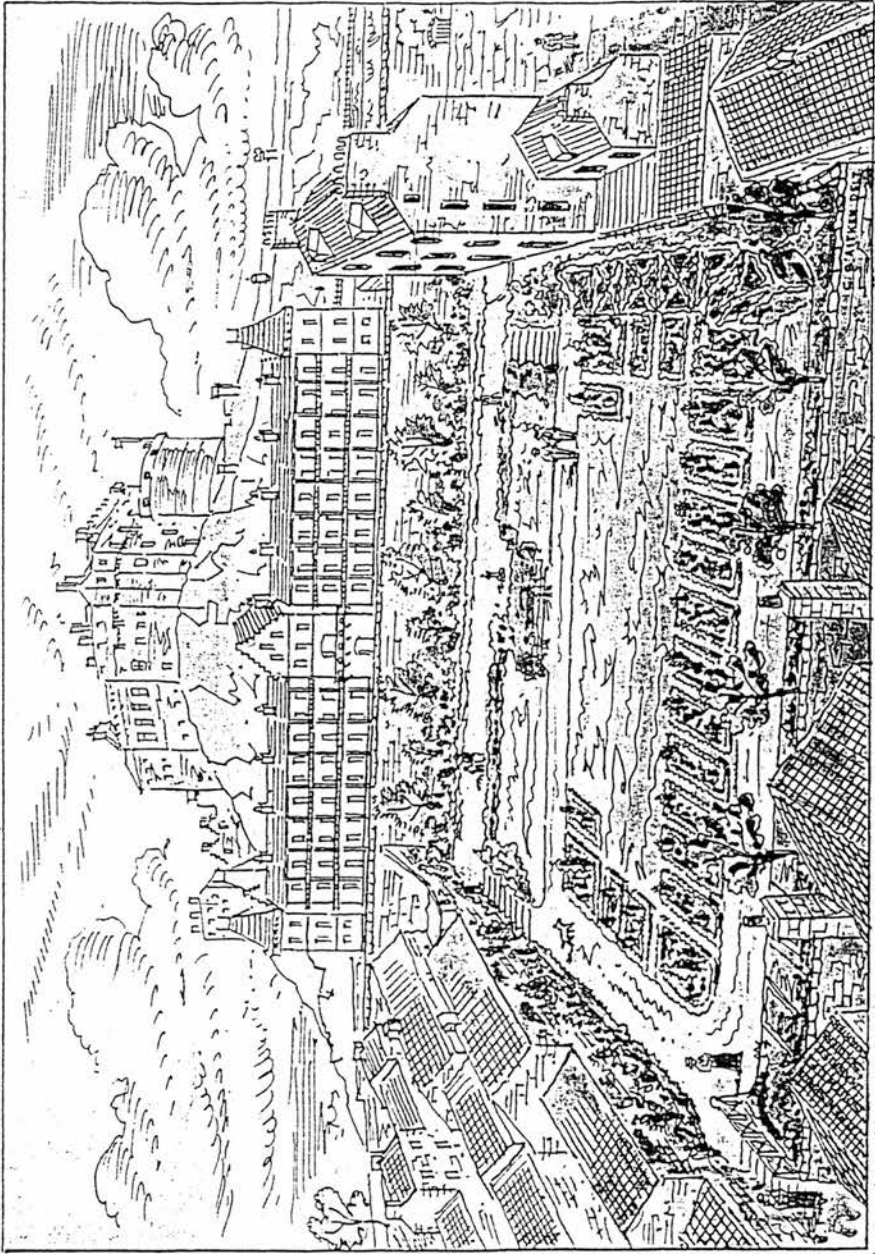(Mears, *Primitive Edinburgh*, p. 304)

445

Figure 6.8
Bird's eye view of the garden and open space Johnston Terrace, Edinburgh, by
George Shaw Aitken. The garden reintroduced the ancient cultivation terraces to their
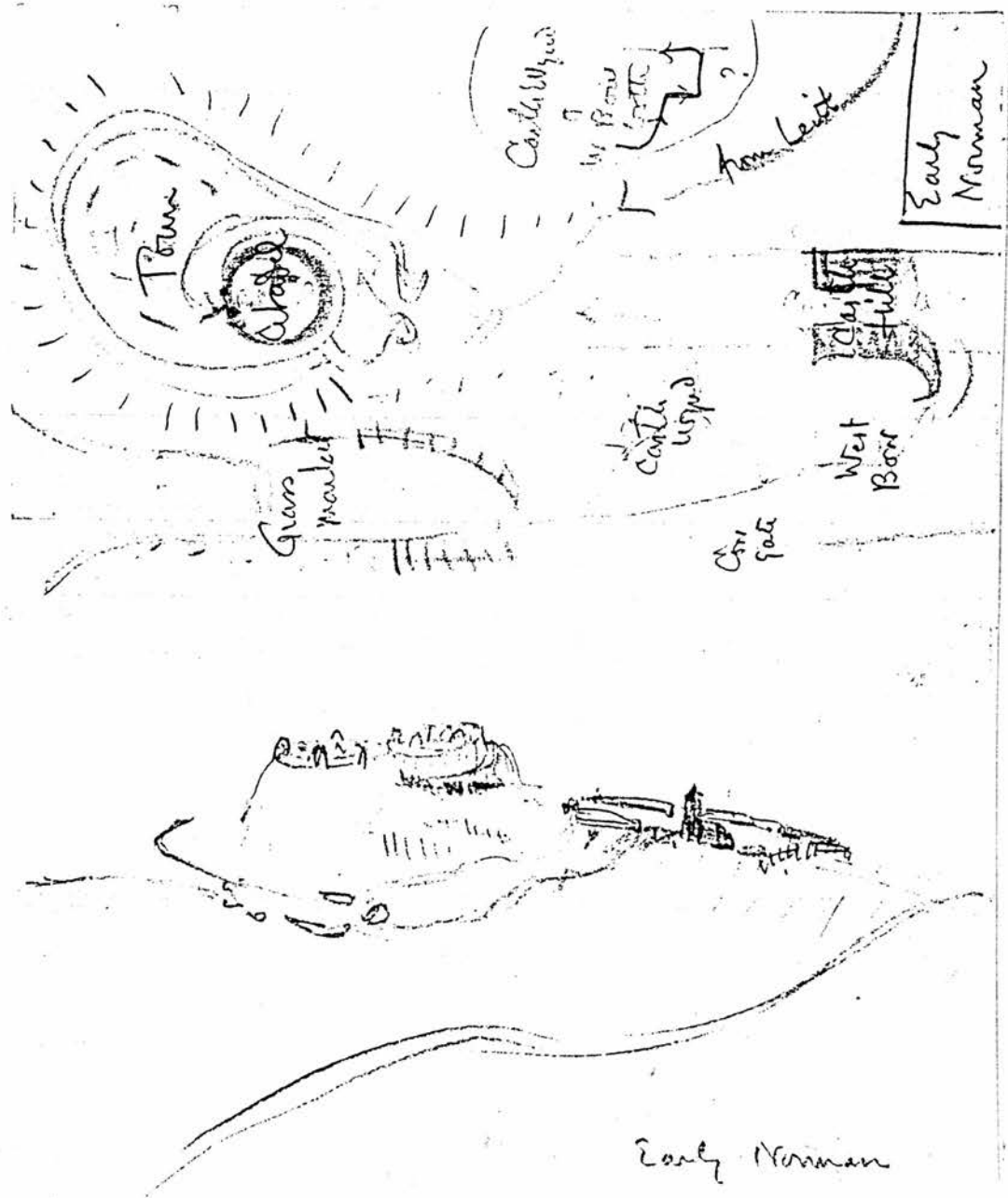original purpose of gardening.
(SUA, T-GED 7/5/3/20)

Figure 6.9
Edinburgh at the time of the early Normans, probably by Frank C. Mears. The sketch
shows the spatial division of the city in functional centres like castle, town and
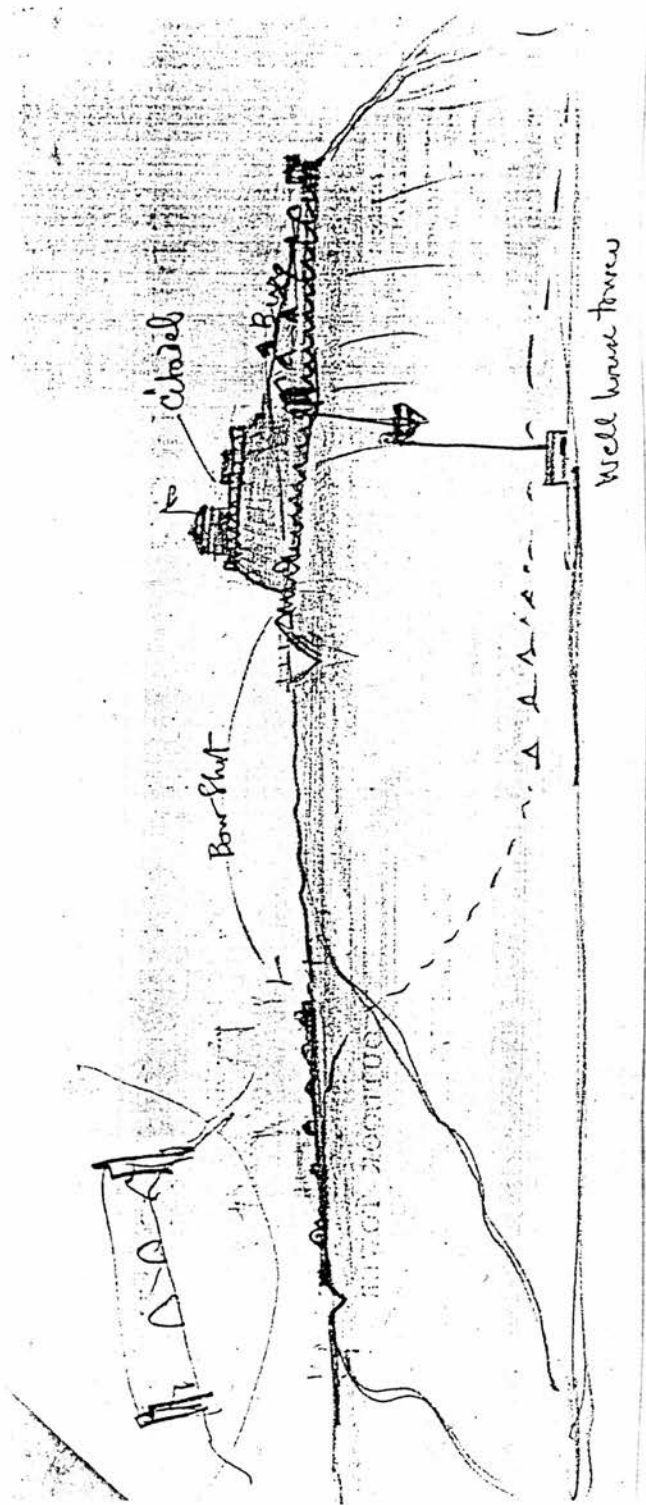suburbs.
(SUA, T-GED 13/1/6)

447

Figure 6.10
Longitudinal section through the Royal Mile, probably by Frank C. Mears. On the right hand side the castle with a small burgh, to the left in bow shot distance the Lawnmarket.
(SUA, T-GED 13/1/6)
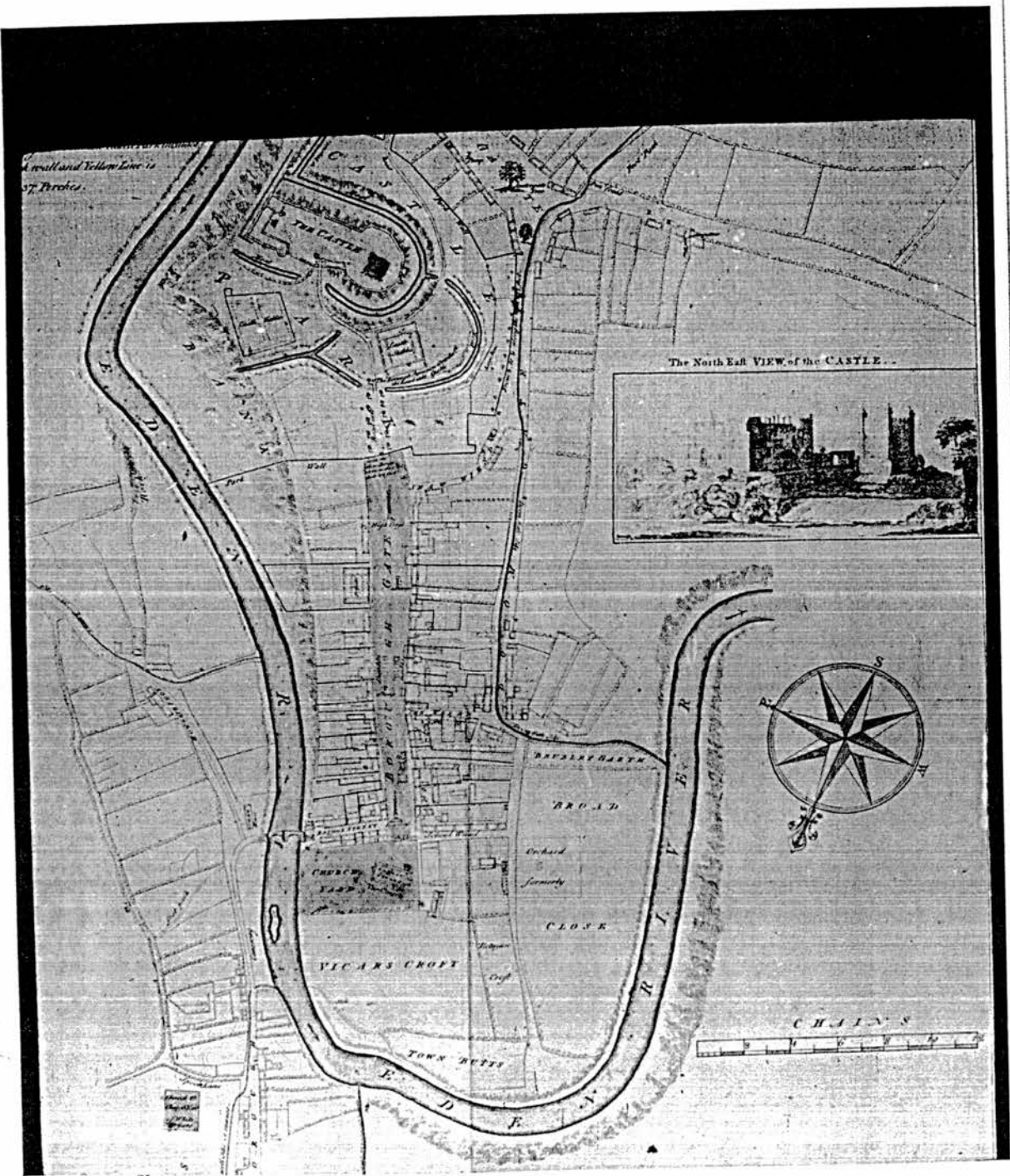
448

The North East VIEW of the CASTLE.

Figure 6.11
The ideal plan of Scottish medieval New Towns conceived as Garden Cities. The
town plan shows the city of Appleby. The plan with a high street between a Castle
(top) and an Abbey (bottom) is very similar to that of Edinburgh's Old Town.
(Royal Commission of Ancient and Historic Monuments of Scotland)
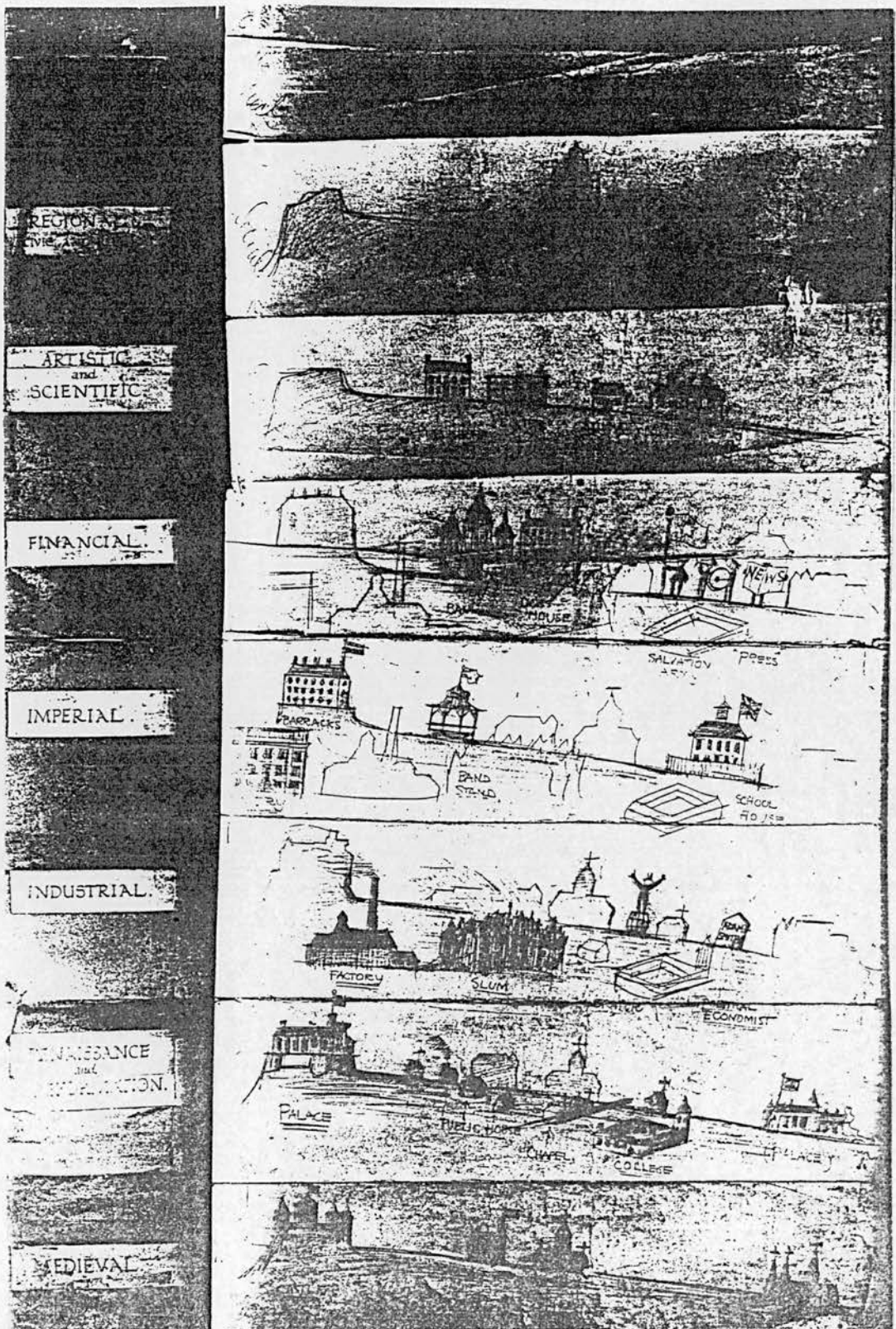
Figure 6.12
The medieval urban structure of Edinburgh as the constant pattern in the city's history
from the middle ages to the forthcoming eugenic and educational age.
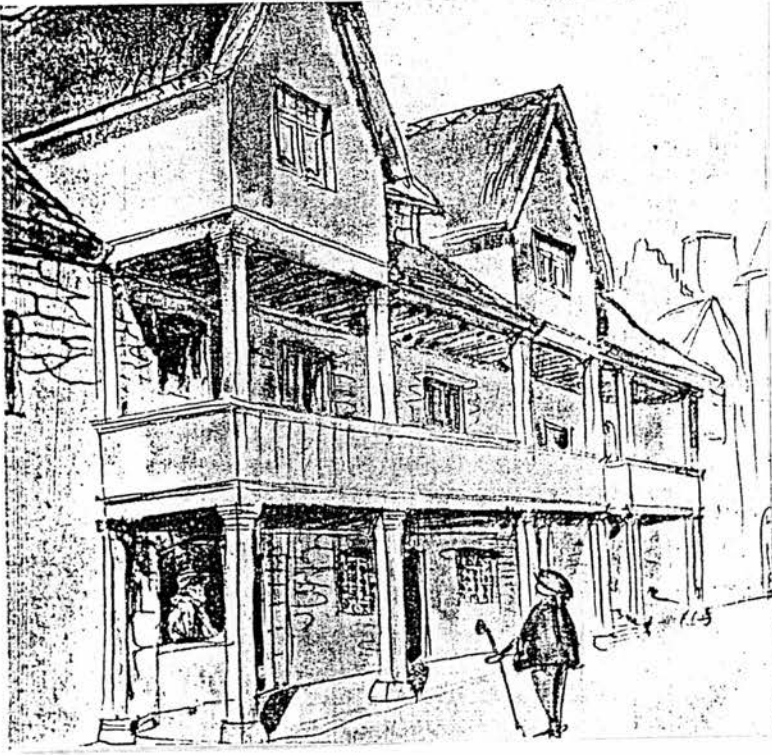(SUA, T-GED 25/4/724)

450

Figure 6.13
Reconstruction of a medieval Edinburgh Town house for the People with gables and arcades, drawing by Frank C. Mears.
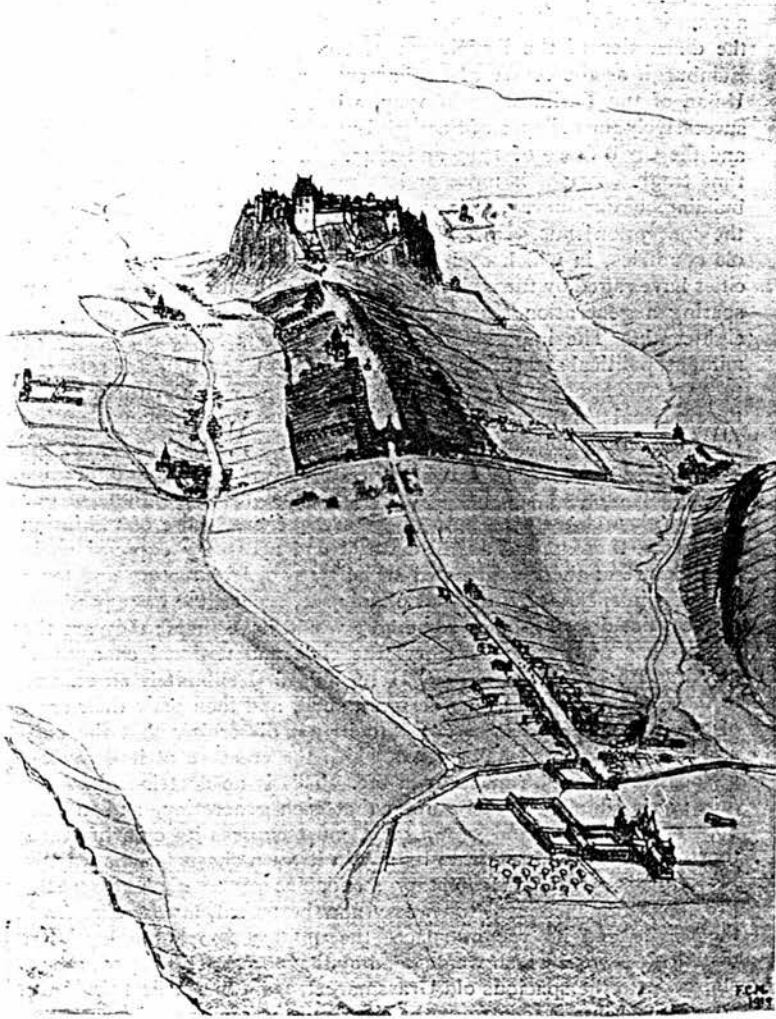(Geddes, *Cities in Evolution*, p. 9)

Figure 6.14
Bird's eye view showing the monasteries of the friars founded on the southern side of the Royal Mile, drawing by Frank C. Mears.
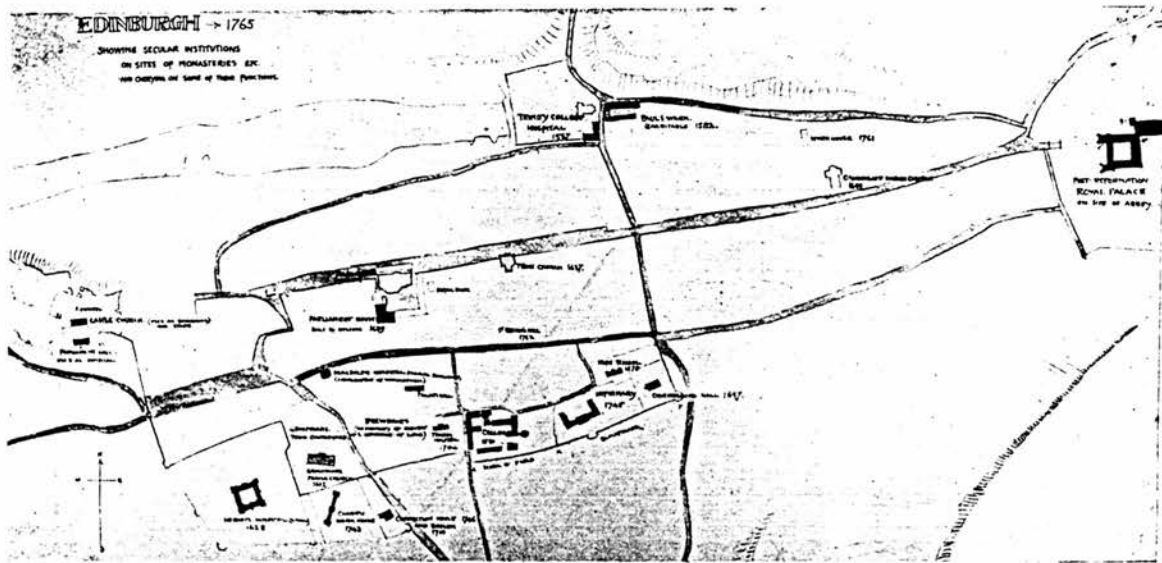(Geddes, *Civic Survey Edinburgh*, p. 552)

FIG. 11.—MODERN CULTURE-INSTITUTIONS, &C., ARISING ON SITES OF ECCLESIASTICAL FOUNDATIONS.

Figure 6.15
Plan of Edinburgh showing the sites of the monasteries and their continuous use
through history for cultural and educational institutions, plan by Frank C. Mears.
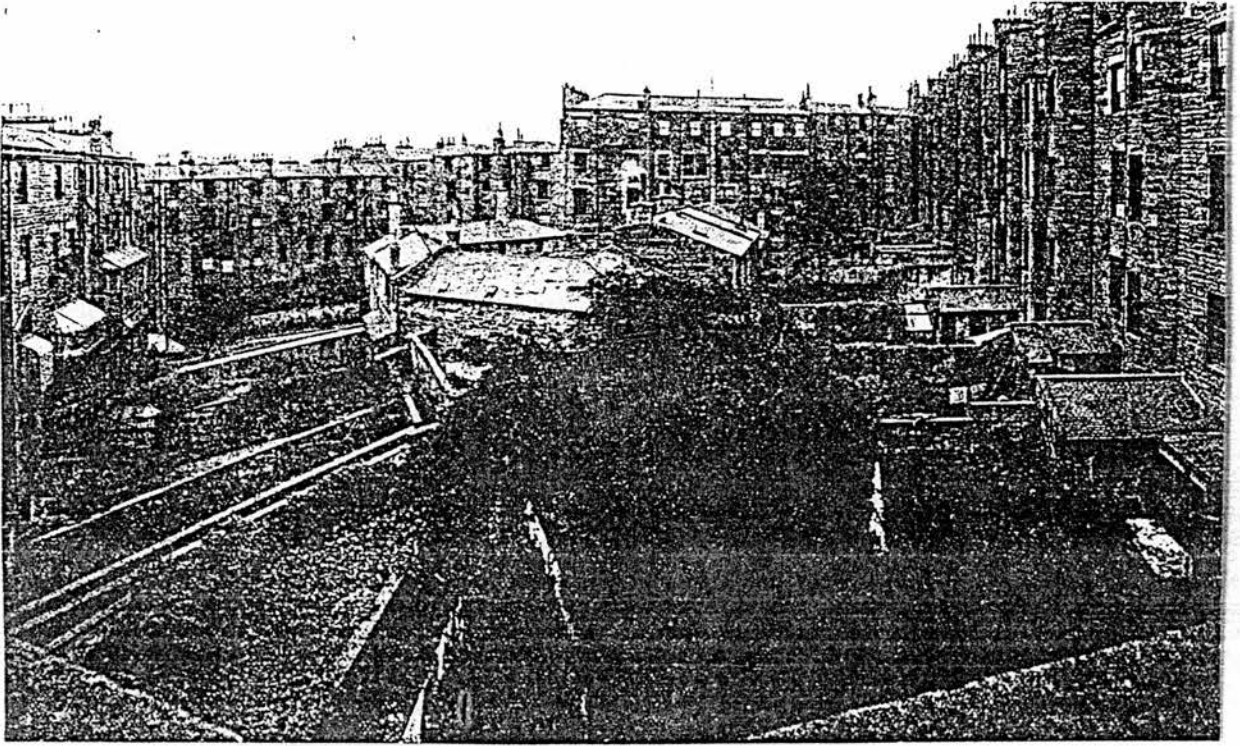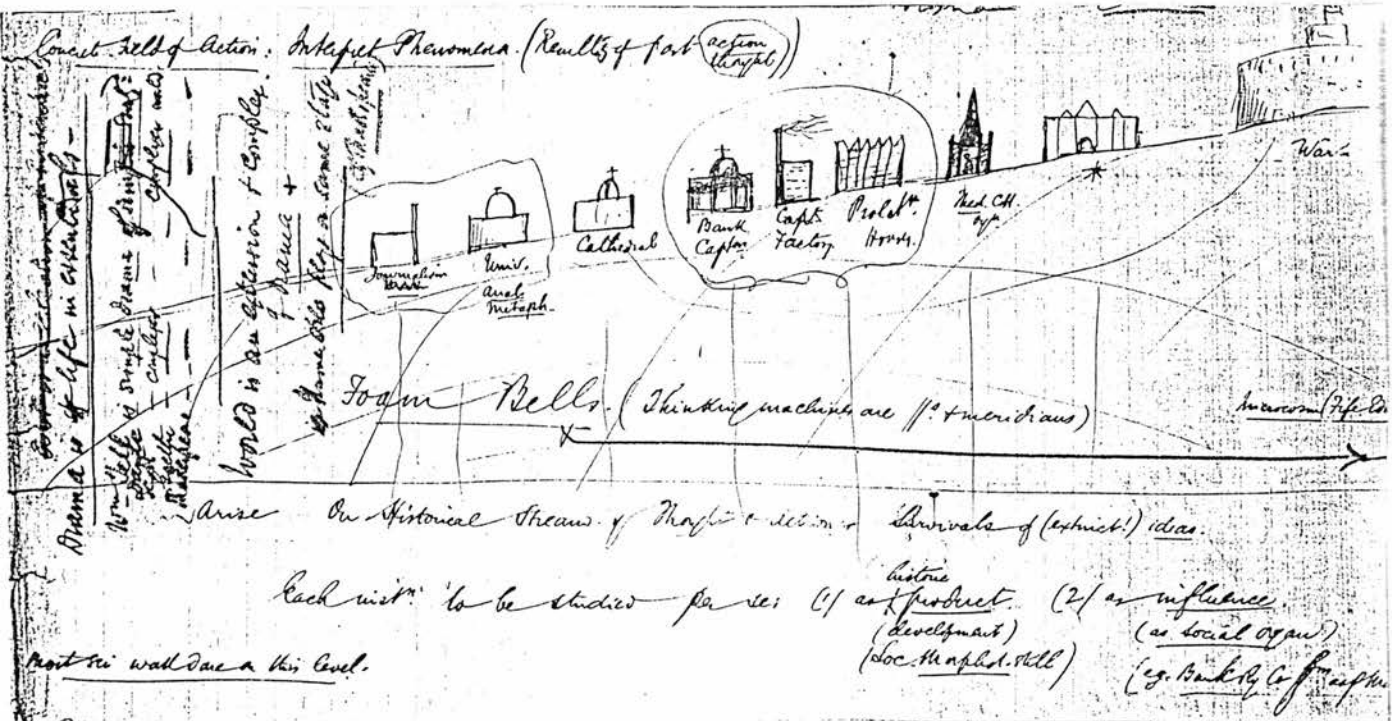(Geddes, *Civic Survey Edinburgh*, p. 554)

453

Figure 6.16
The monofunctional character of the Edinburgh New Towns, here Moray Place,
which led to the break down of the intended beauty of the schemes due to erection of
workshops and similar in the back gardens.
(Geddes, *City in Evolution*, p. 123)

Figure 6.17
Longitudinal section of the Royal Mile showing types of buildings for social types.
The building to the right marked with a * indicates the future Cloister Ramsay
Gardens, sketch by Patrick Geddes.
(SUA, T-GED 12/1/358)
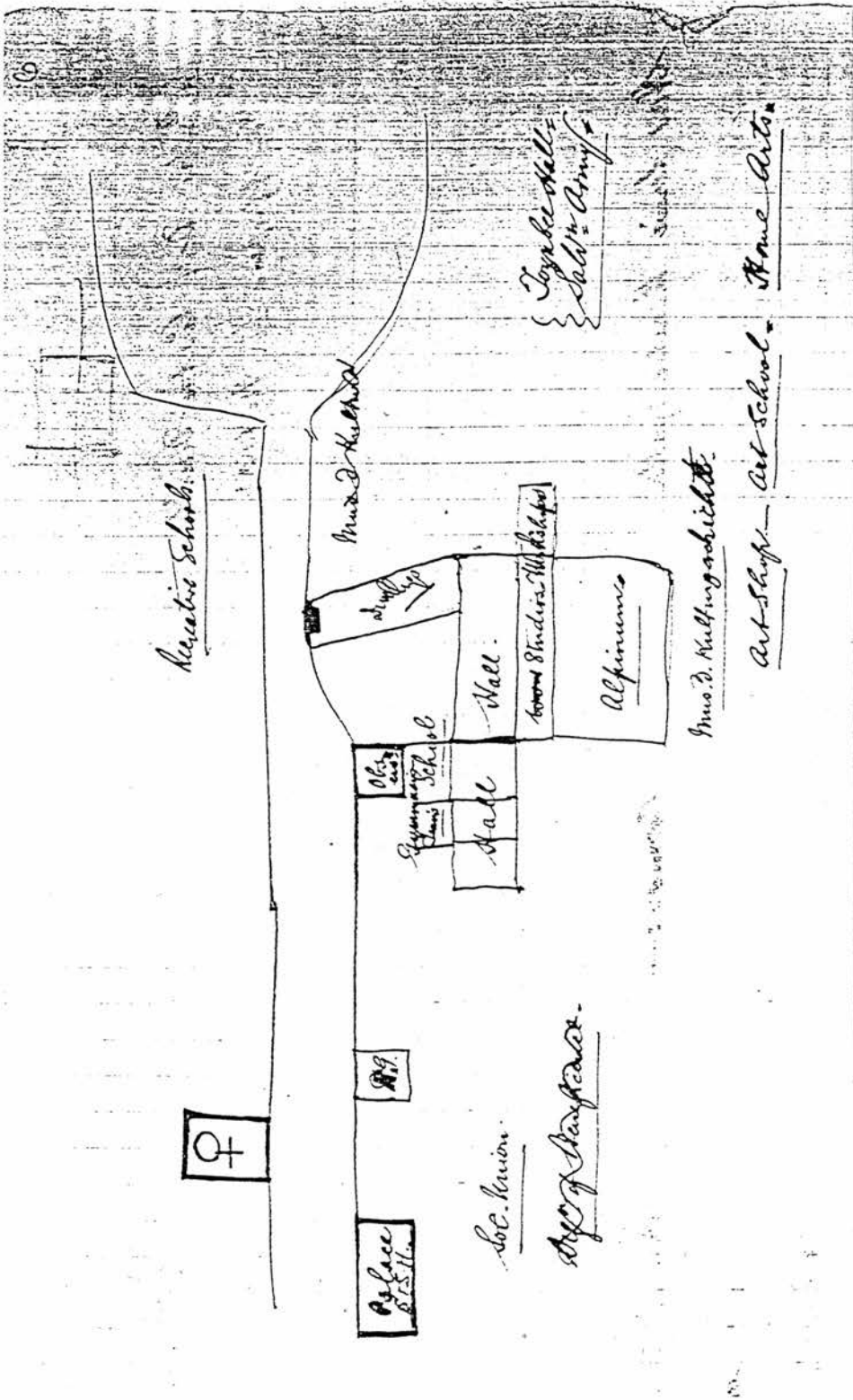
Figure 6.18
Sketch plan by Patrick Geddes of the area around Ramsay Gardens, indicating the cultural and educational institutions comprising the new Cloister for Edinburgh. (SUA, T-GED 12/1/358)
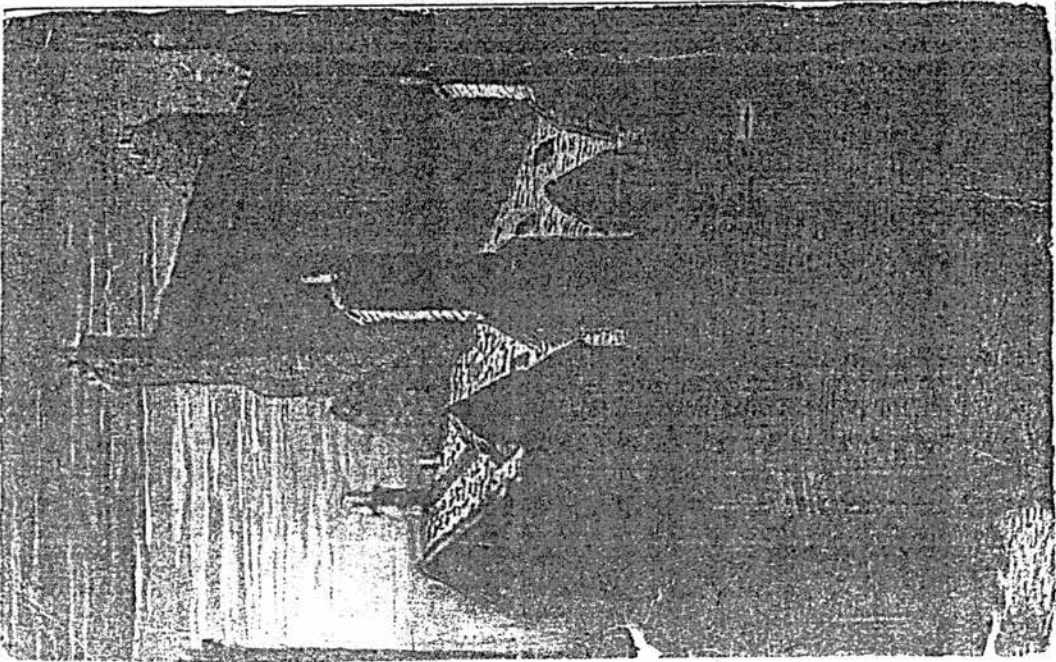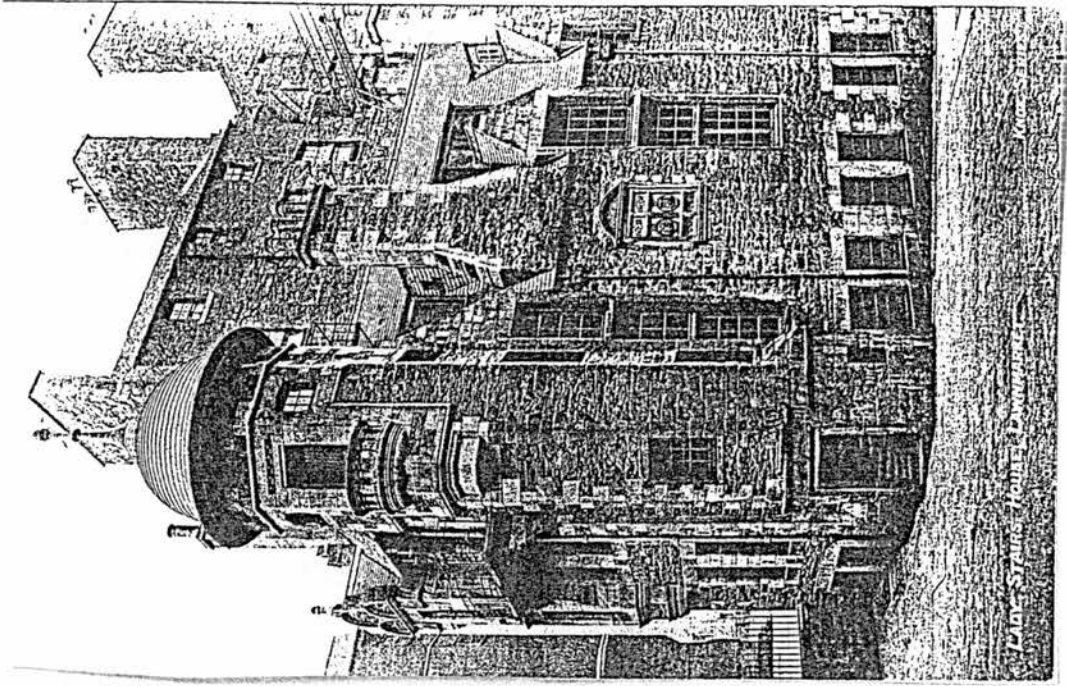
Figure 6.19
Lady Stair's House - two postcard views of the building before and after the
renovation of the building as a city museum by George Shaw Aitken.
(Royal Commission of Ancient and Historic Monuments of Scotland)
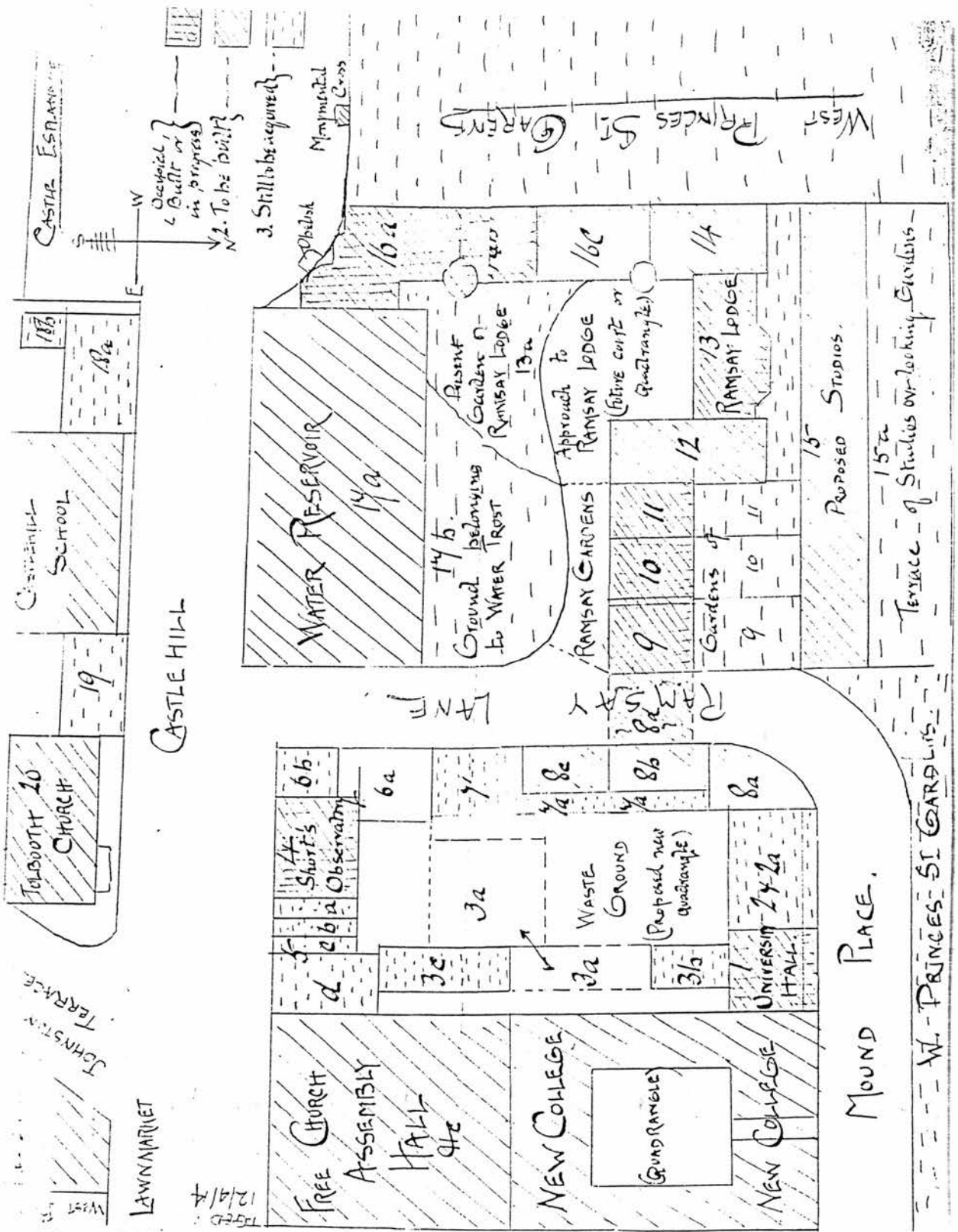
Figure 6.20
Plan of the properties on both sides of Ramsay Lane, indicating the progress made in establishing the new Cloister for Edinburgh.
(SUA, T-GED 12/4/14)
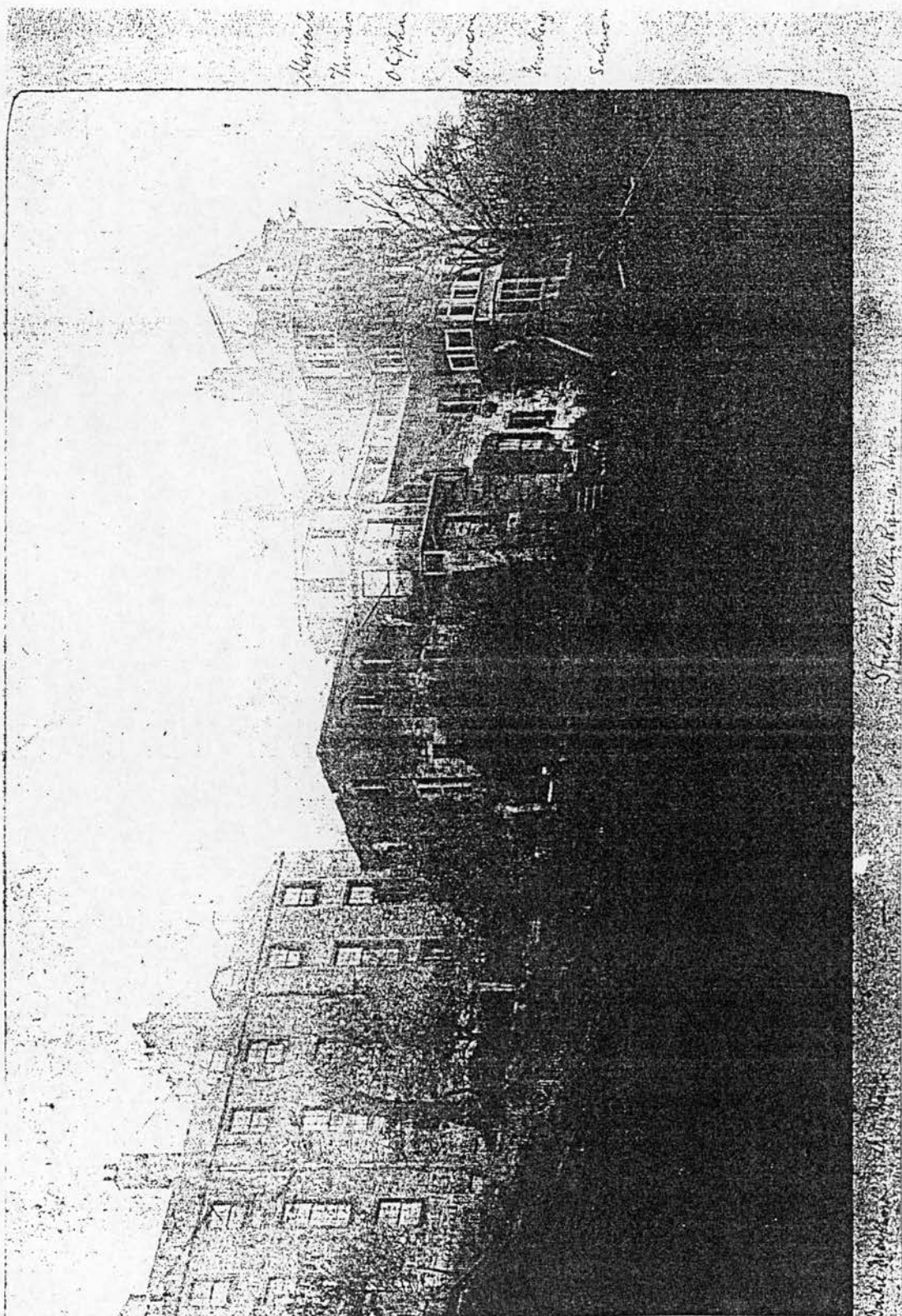
Figure 6.21
Photograph of the northern wing of Ramsay Garden under construction. To the left
the three existing houses still with their original facade. In the centre Ramsay Lodge,
already including the additional floor. The inscription around the photograph indicates
the prospective tenants/owners of the various houses and flats.
(SUA, T-GED 25/4/555)
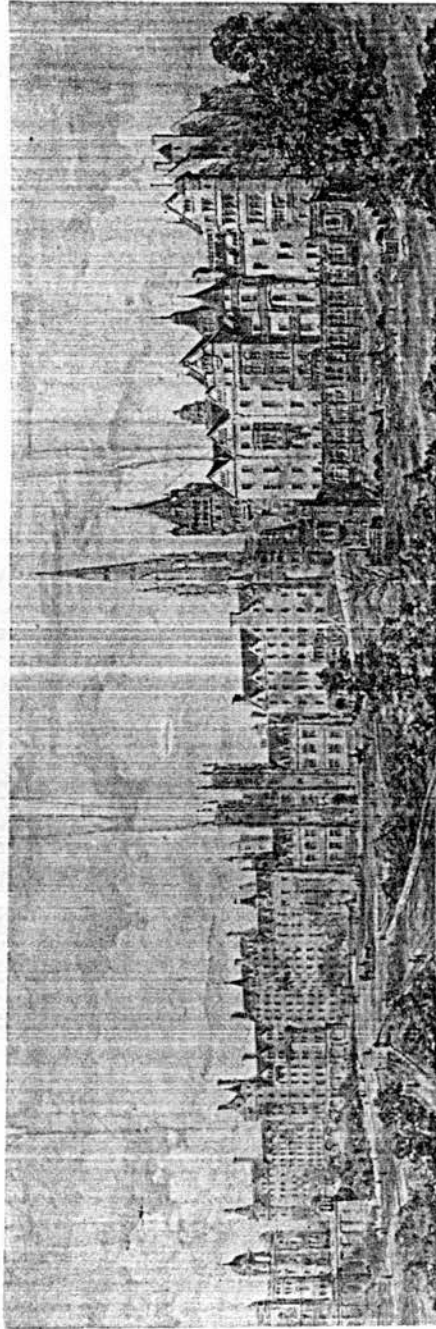
Figure 6.22
Perspective view of the development of the upper part of the Royal Mile. To the right
Ramsay Garden with the artist's studios in front. To the left the tower block, followed
by new buildings closing the gap in front of Lady Stair's house. Water-colour by
George Shaw Aitken, May 1893.
(SUA, T-GED 25/2/18)
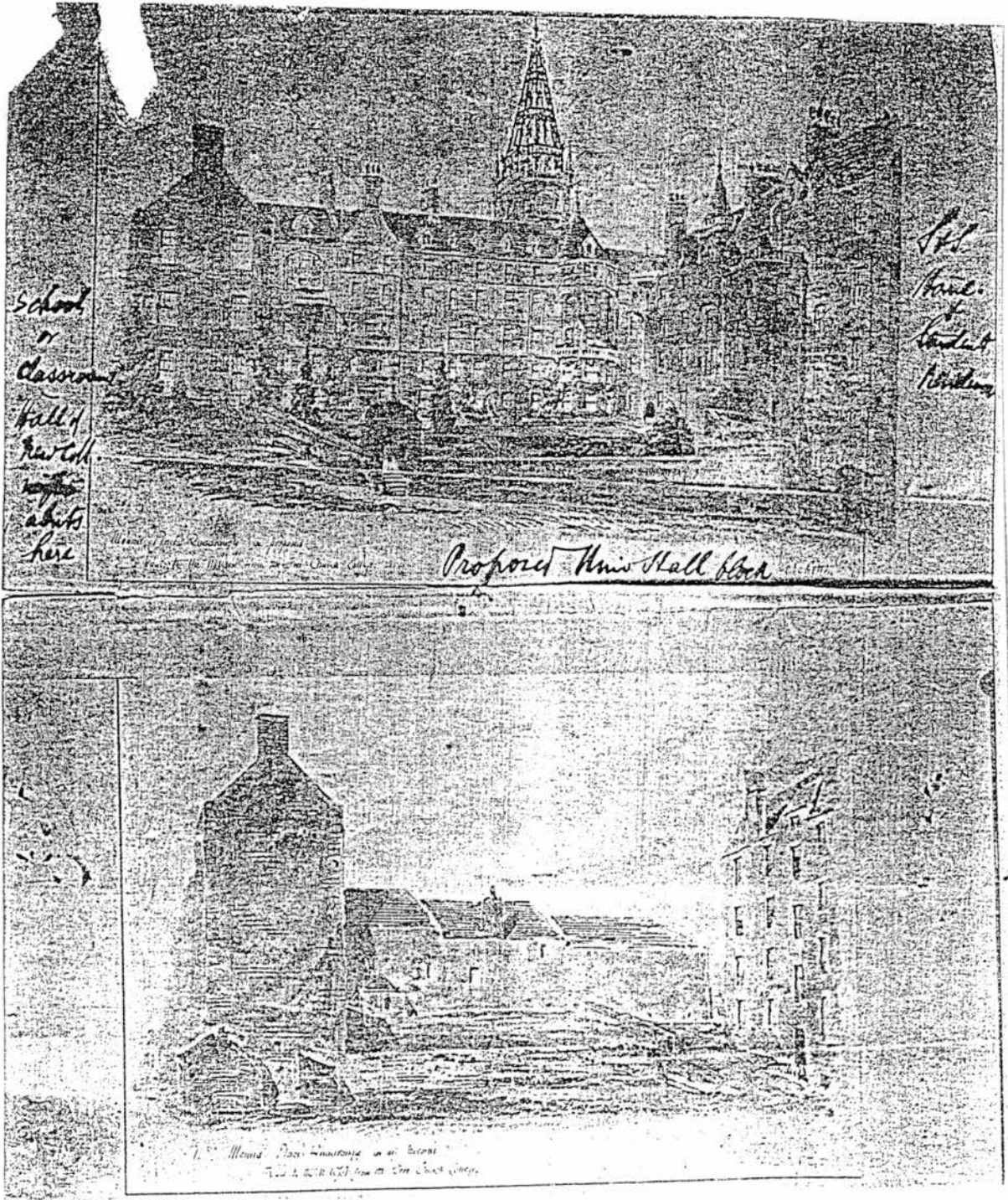
Figure 6.23
Perspective views of the University Quadrangle seen from the College. Below the site
before development, above the new block on the east side of Ramsay Lane with the
spire of the tower block behind. Drawings by George Shaw Aitken.
(SUA, T-GED 7/8/115)

461
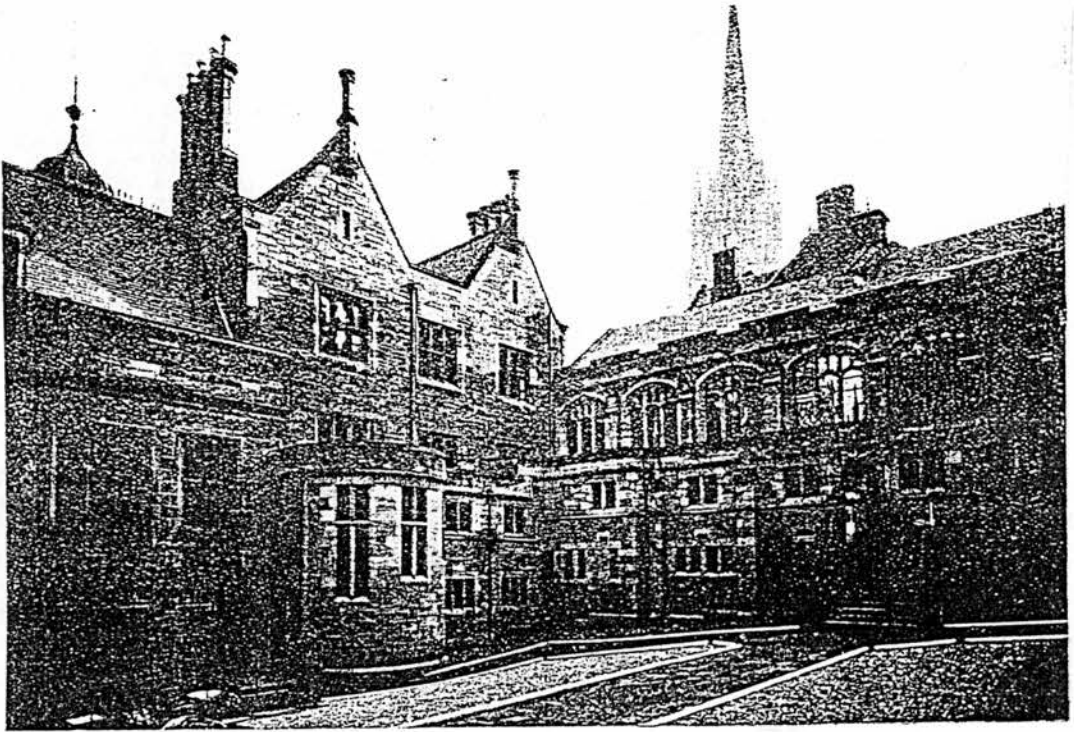
Figure 6.24
The University Quadrangle, view into the south-eastern corner. To the right Rainy
Hall, the new dining hall of New College, built 1899-1900 by Sidney Mitchell and
George Wilson.
(SUA, T-GED 12/2/490)
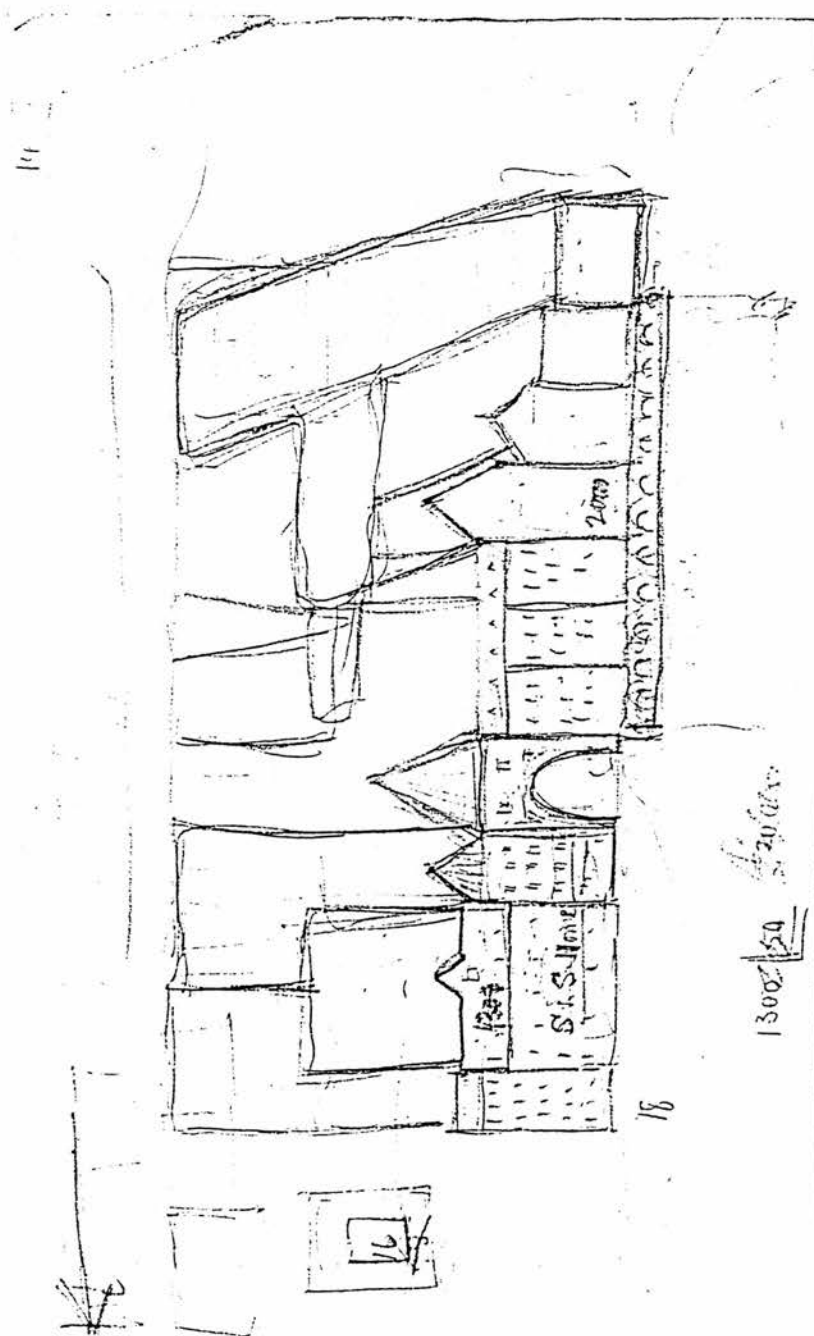
462

Figure 6.25
An early sketch of the new Cloister around Ramsay Lane, probably by Patrick
Geddes.
(SUA, T-GED 12/1/358)

"A Procession of Scottish History"

By W. G. Burn Murdoch, F.S.A. Scot.
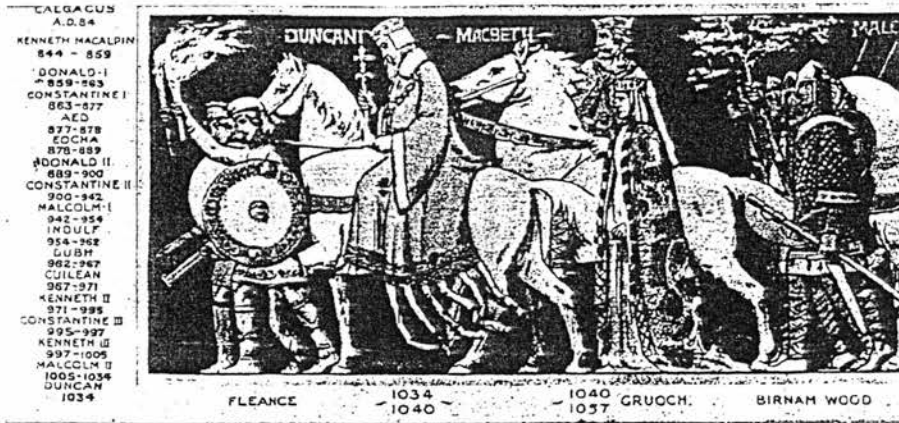
THE MACBETH PERIOD
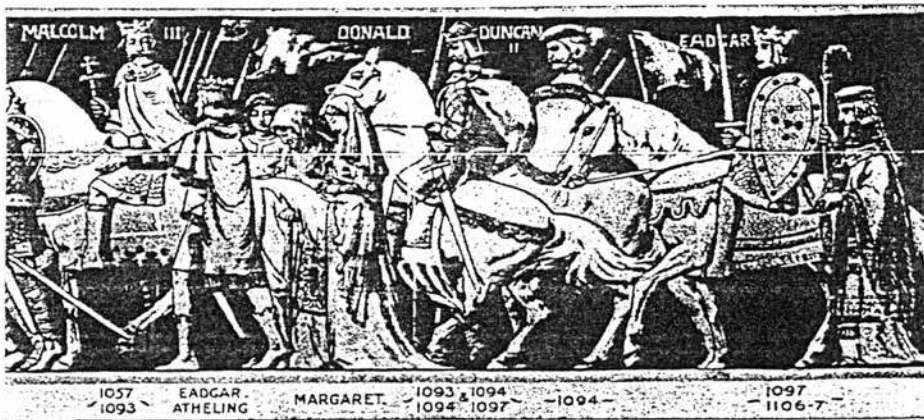
THE DUNCAN II PERIOD

THE CHARLES I AND CROMWELL PERIOD

Figure 6.26
Page from a prospectus advertising William Gordon Burn Murdoch's design for a
Scottish procession, which Geddes proposed as decoration (in Sgrafitto technique) for
the facade of the Castlehill Water reservoir.
(SUA, T-GED 12/2/418)
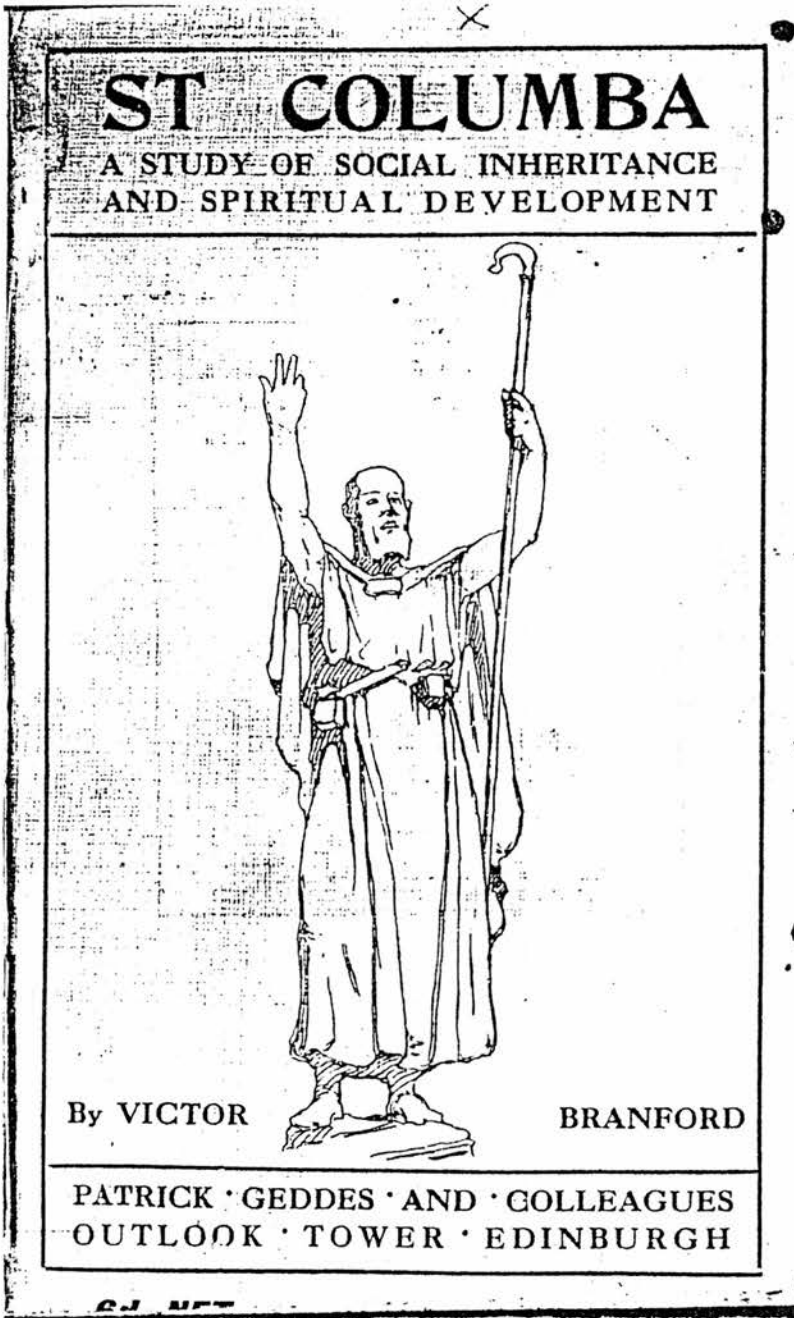
ST COLUMBA
A STUDY OF SOCIAL INHERITANCE
AND SPIRITUAL DEVELOPMENT

By VICTOR   BRANFORD

PATRICK · GEDDES · AND · COLLEAGUES
OUTLOOK · TOWER · EDINBURGH

Figure 6.27
Title page of Victor Branford's book on St Columba showing the design by Percy
Pourtsmouth for a statue of the saint.
(Branford, *St. Columba*, title-page)
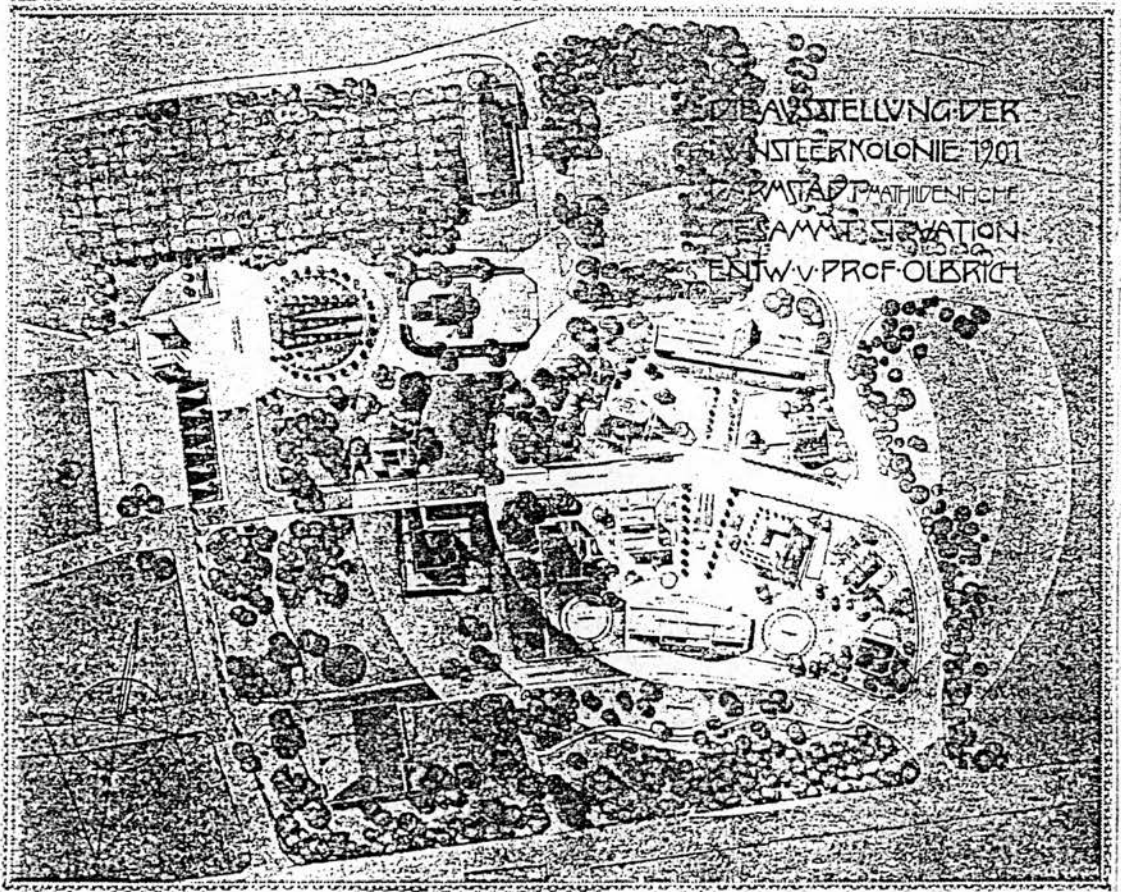
465

Figure 7.1
Artist colony *Mathildenhöhe*, Darmstadt, by Joseph Maria Olbrich, 1899-1901.
(*Joseph Maria Olbrich*, pl. 1)
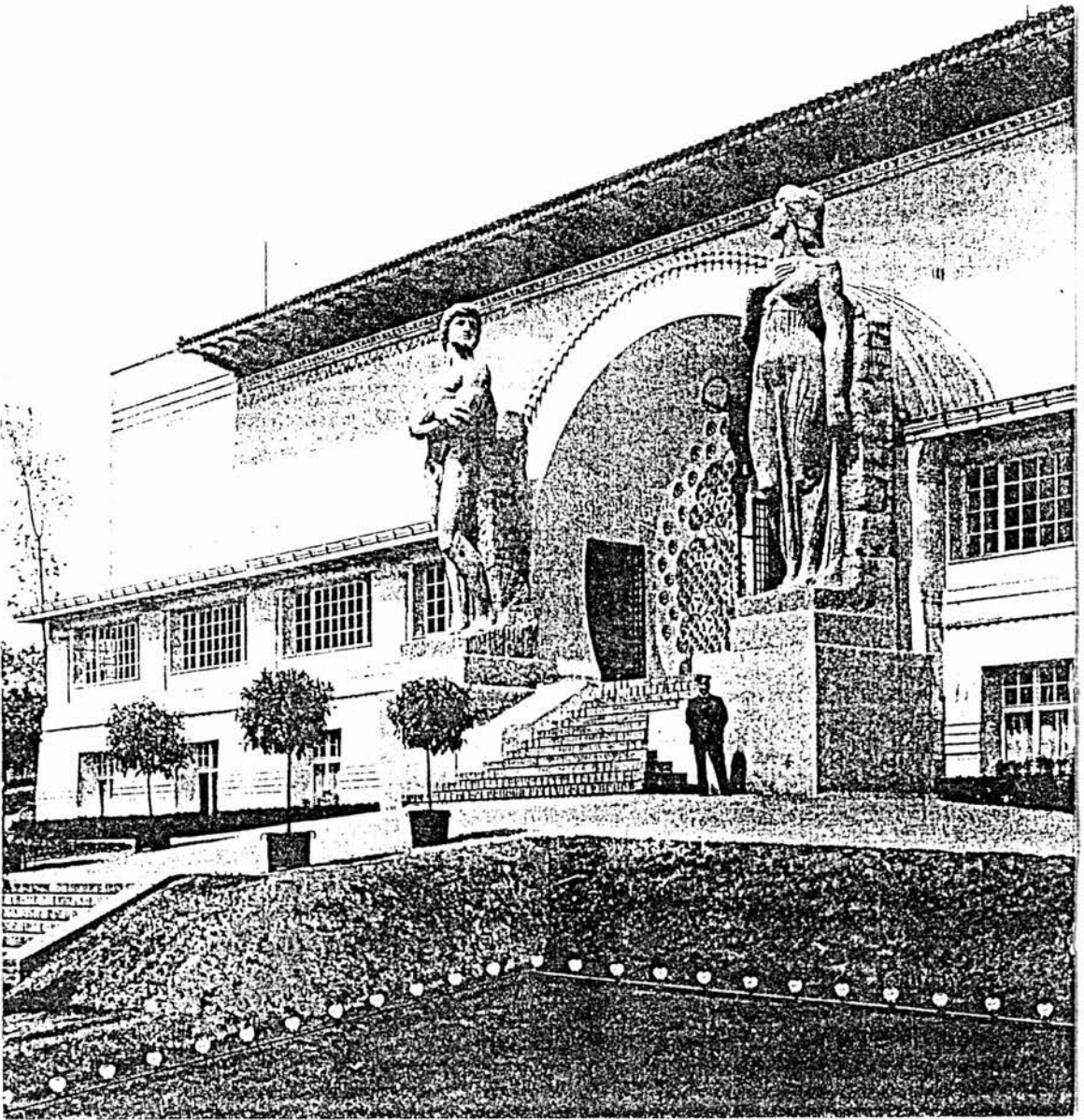
Figure 7.2
Temple of Creation - Ernst Ludwig House, *Mathildenhöhe*, Darmstadt, by Joseph
Maria Olbrich, 1899-1901.
(*Joseph Maria Olbrich*, pl. 2)
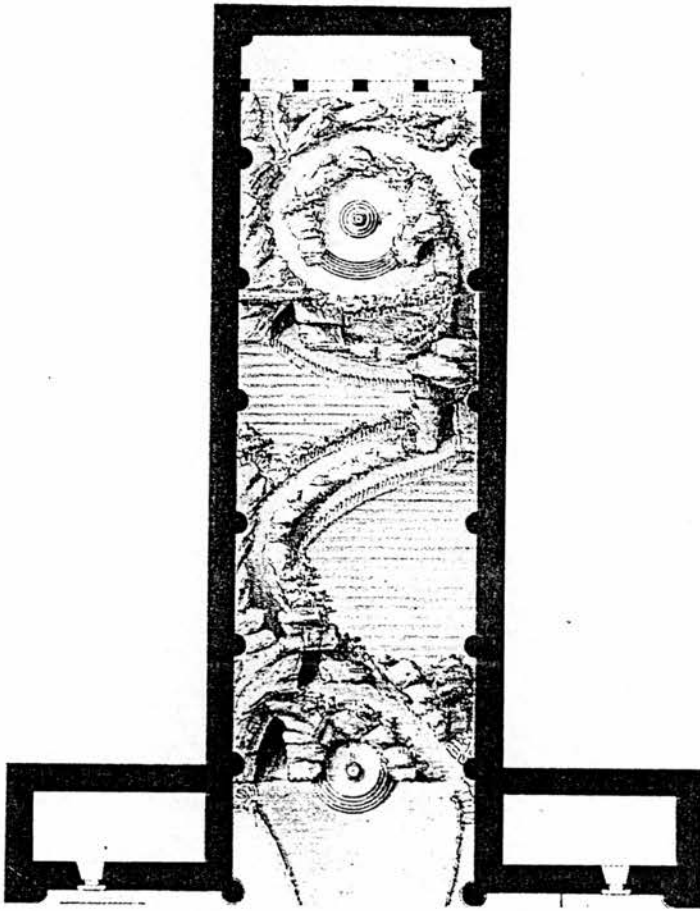
Figure 7.3
Holy Mountain in the Cathedral of Saint-André, Bourdeaux, by Brongniart, 1794.
(Harten, Harten, *Die Versöhnung mit der Natur*, plate XIII)
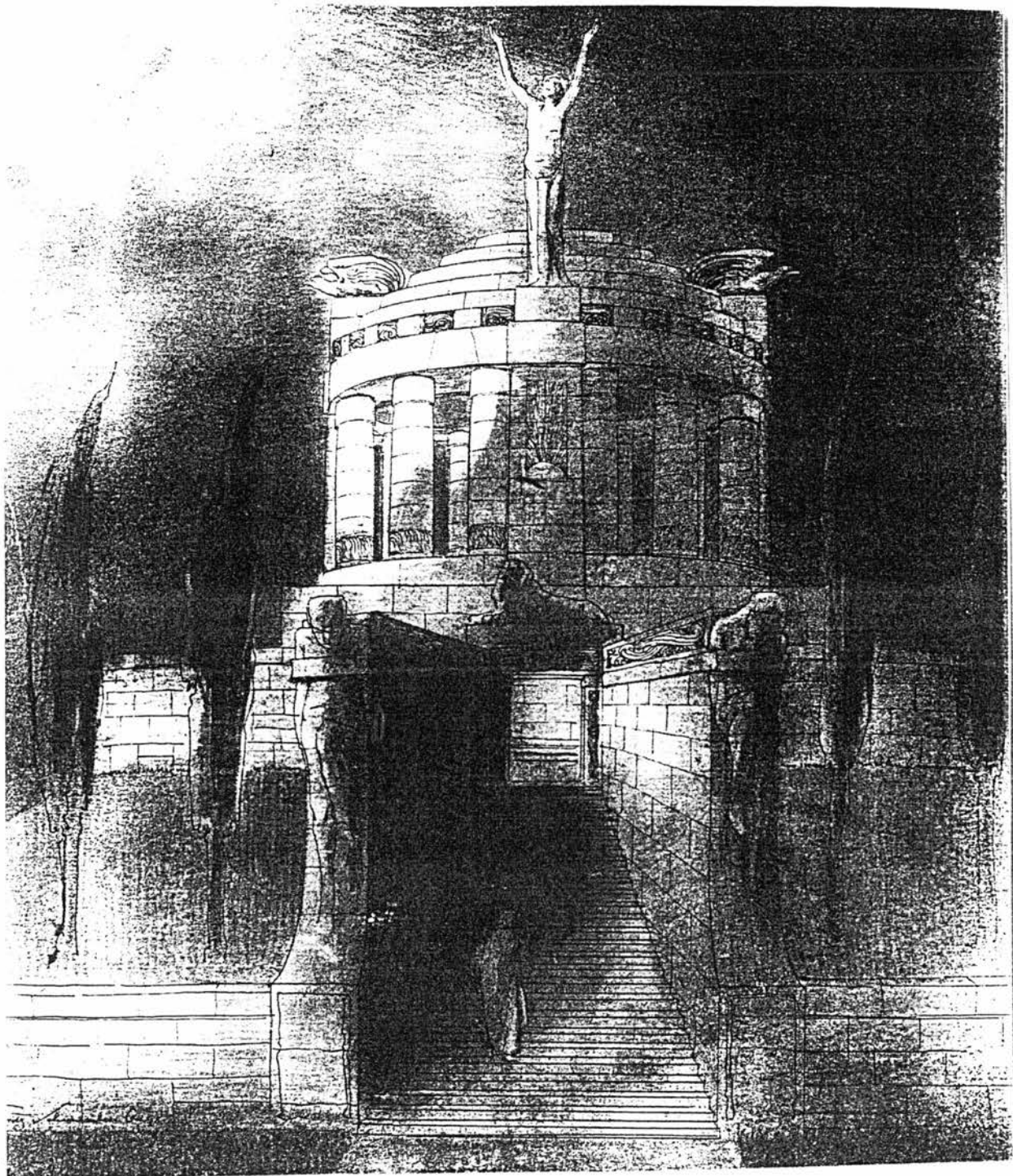
Figure 7.4
Temple for Nietzsche - Monument for Nietzsche by Fritz Schumacher, 1898-1900.
(Frank, *Fritz Schumacher*, p. 43)
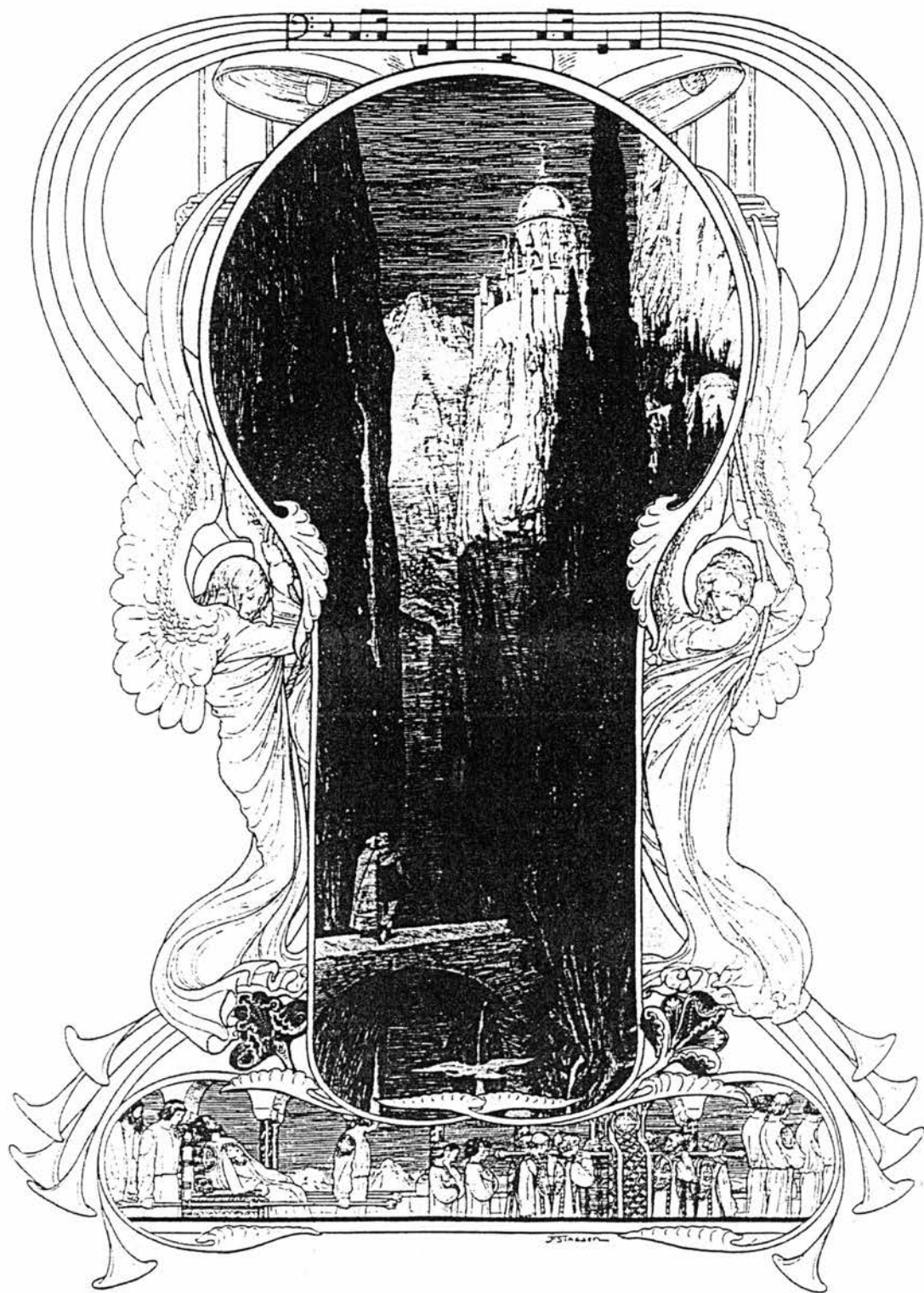
Figure 7.5
Temple of the Holy Grail - Illustration to Richard Wagner's opera *Parsifal* by Franz
Stassen, 1914.
(*Der Hang zum Gesamtkunstwerk*, exh. cat., p. 27)
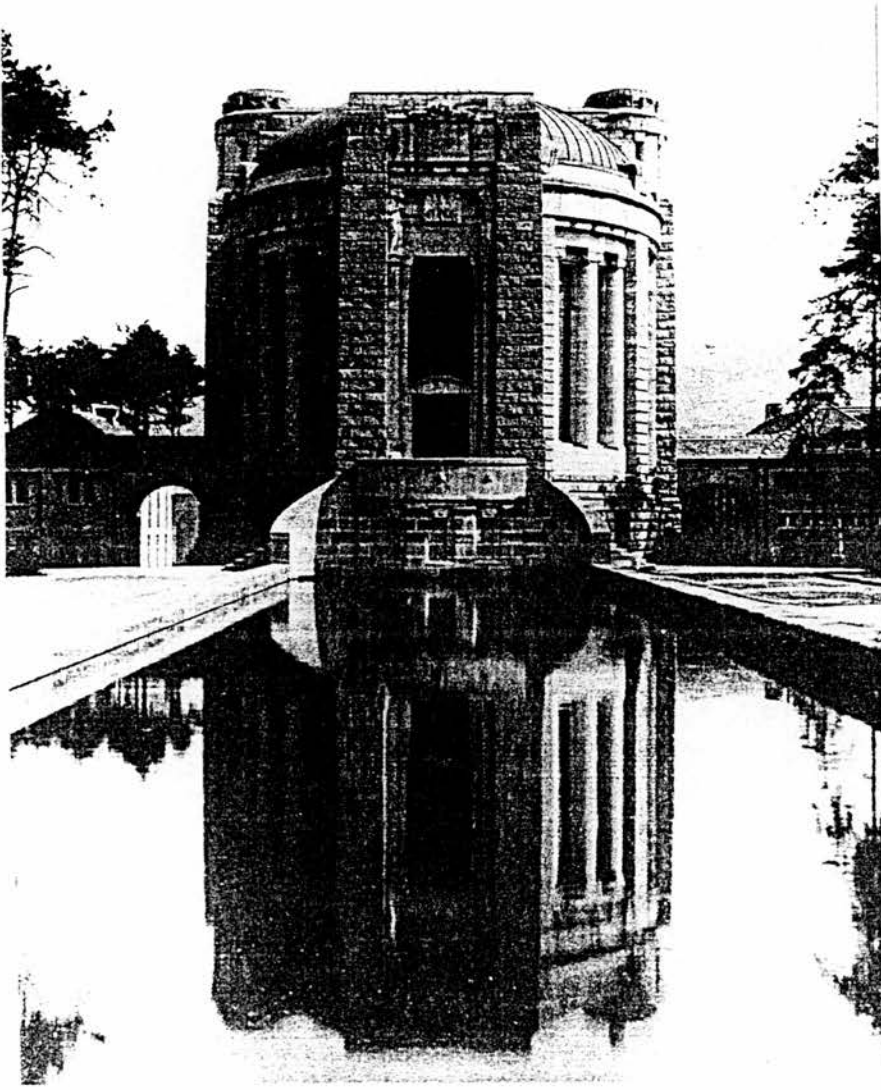
Figure 7.6
Temple of Death - Crematorium in Dresden-Tolkwitz by Fritz Schumacher, 1908.
(Sembach, *1910 - Halbzeit der Moderne*, p. 71)
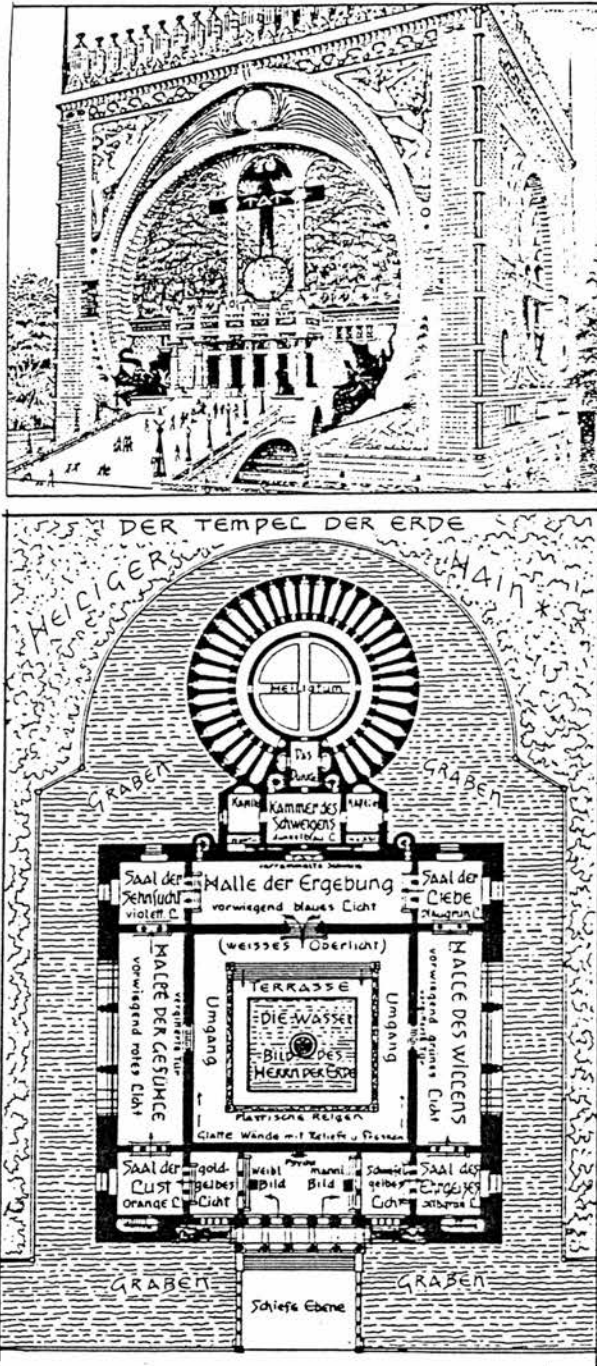
Figure 7.7
Temple of the Earth by Fidus (Hugo Höppner), 1895 (perspective) and 1901 (plan).
(Szeemann, *Monte Verità*, p. 92)
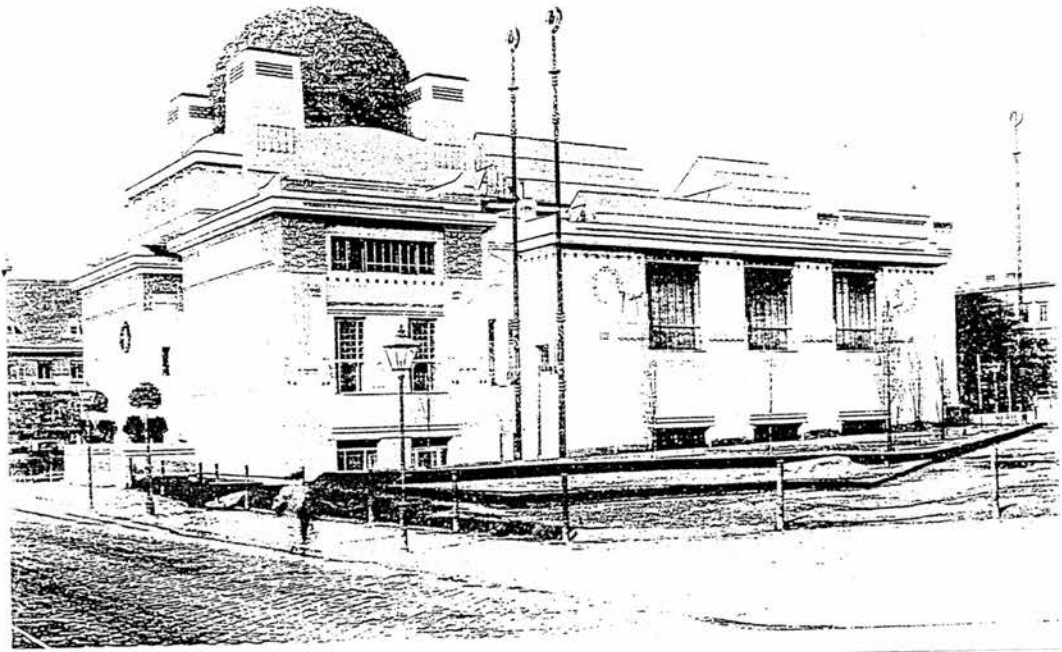
Figure 7.8
Temple of the Arts - exhibition building for the Secession Vienna by Joseph Maria Olbrich, 1898.
(Whyte, *Emil Hoppe, Marcel Kammerer, Otto Schönthal*, p. 15)
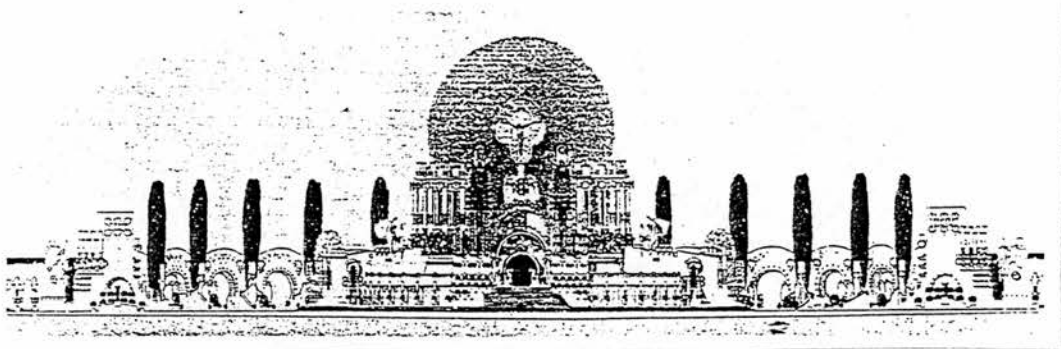
Figure 7.9
Temple of Death - Project for a Cemetery Church by Otto Schönthal, 1901.
(Whyte, *Emil Hoppe, Marcel Kammerer, Otto Schönthal*, p. 27)
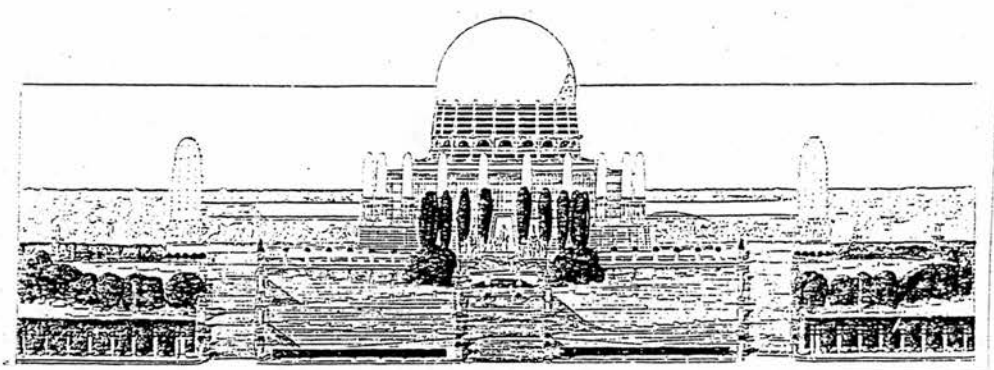
Figure 7.10
Palace of Occult Sciences - Project by Alois Bastl, 1902.
(Whyte, *Emil Hoppe, Marcel Kammerer, Otto Schönthal*, p. 28)
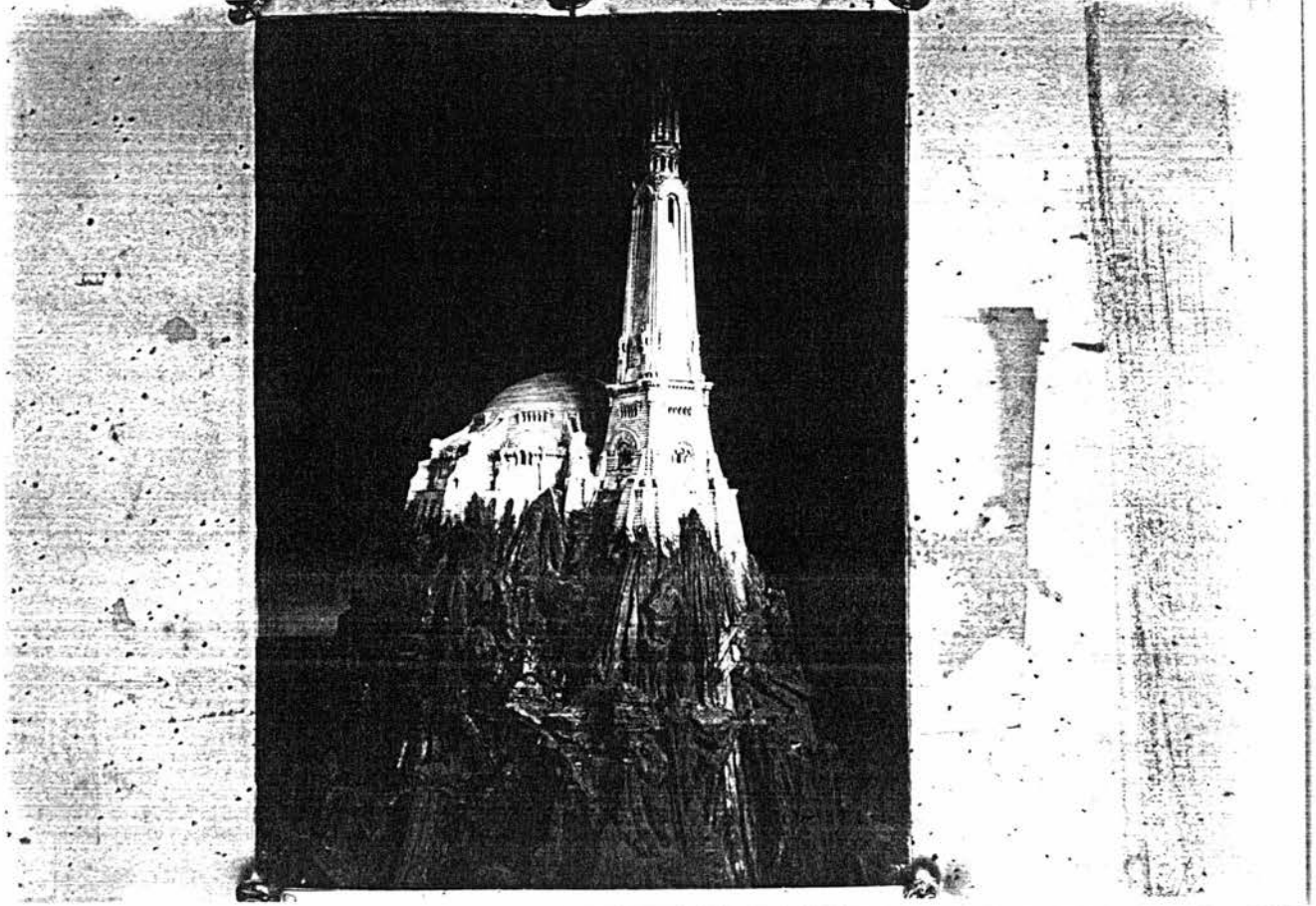
Figure 7.11
Temple of Thought - Model by François Garas, before 1907.
(Patrick Geddes Centre for Planning Studies, University of Edinburgh)
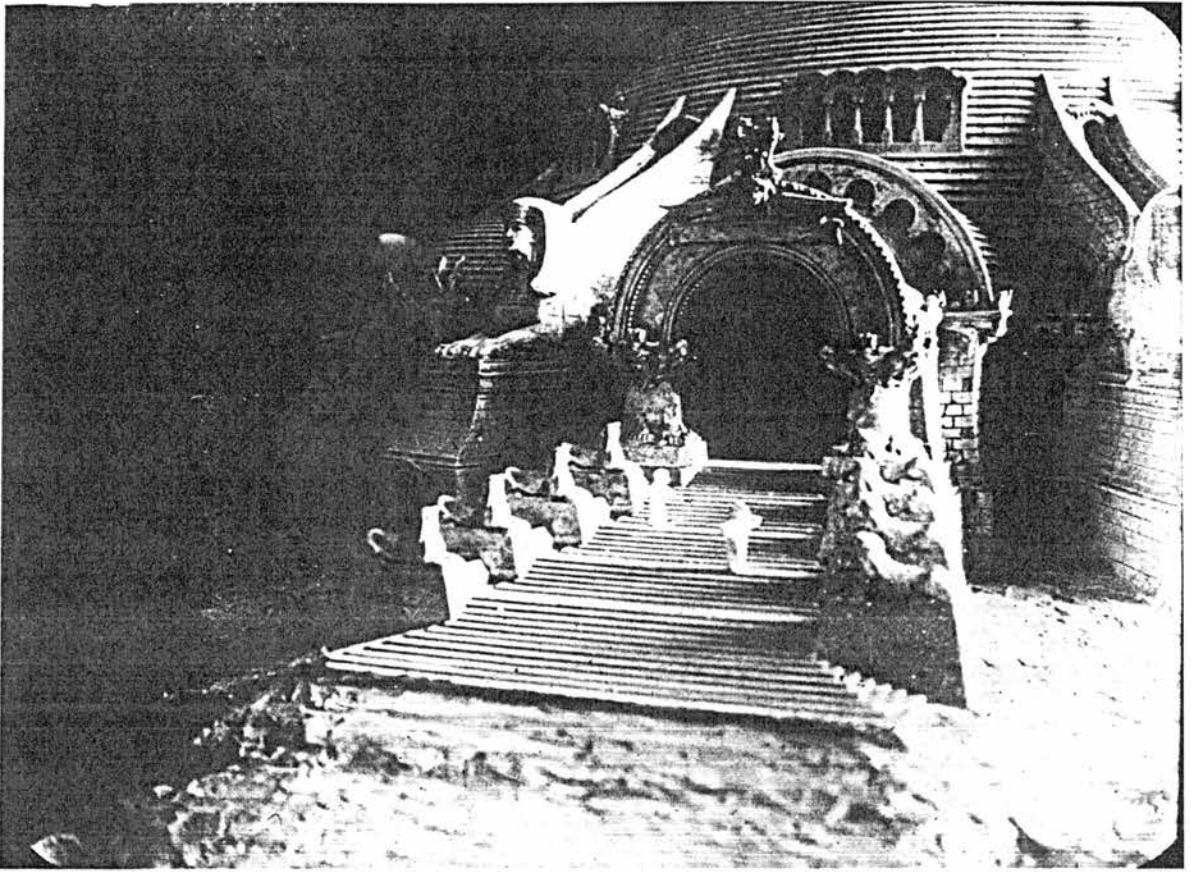
Figure 7.12
Temple of Thought - Entrance, Model by François Garas, before 1907.
(Royal Commission on the Ancient and Historical Monuments of Scotland)
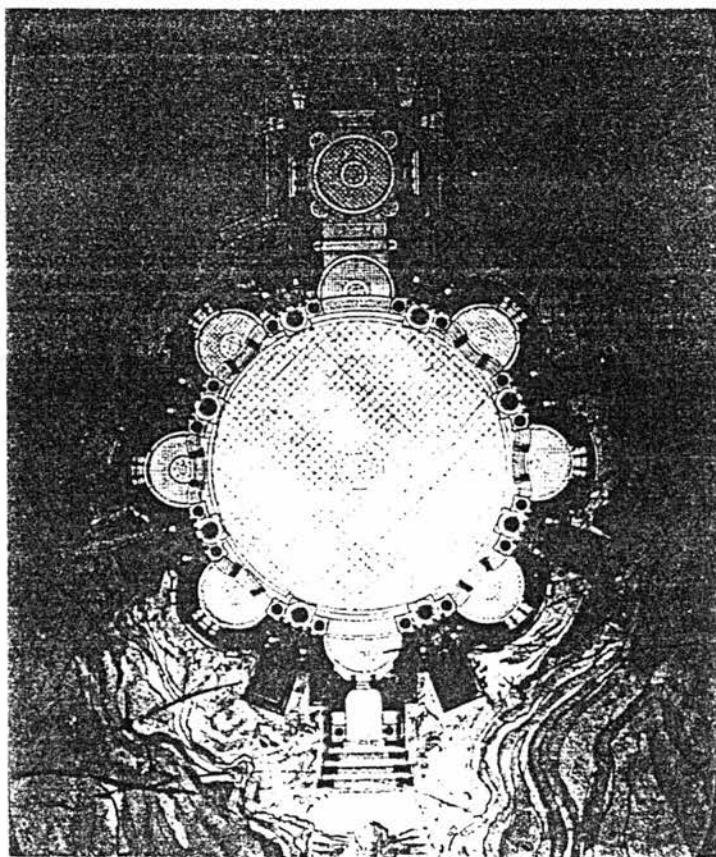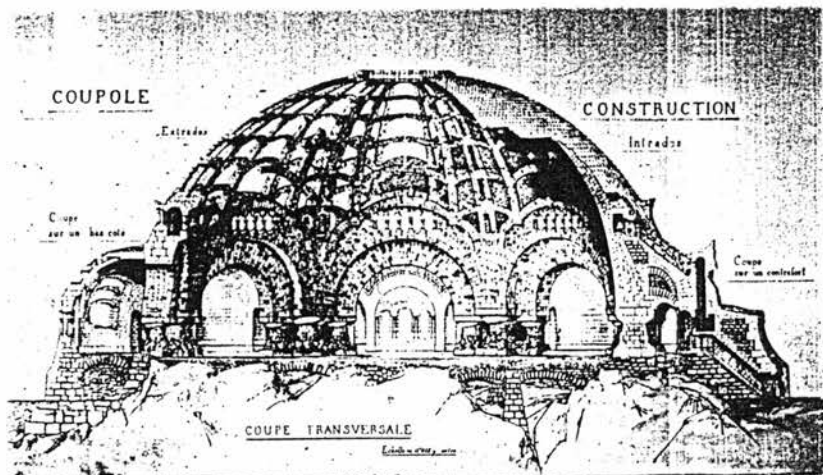
Figure 7.13
Temple of Thought - Plan and section by François Garas, before 1907
(SUA, T-TYR, box 1)

478
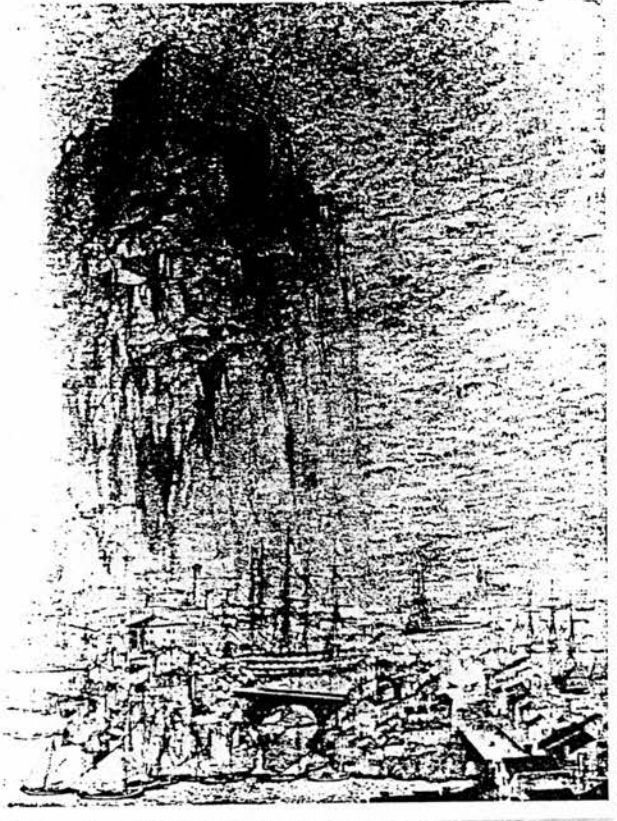
Figure 7.14
The Rock and Castle of Seclusion by Richard Dadd, 1861.
(Lucie-Smith, *Symbolist Art*, p. 36)
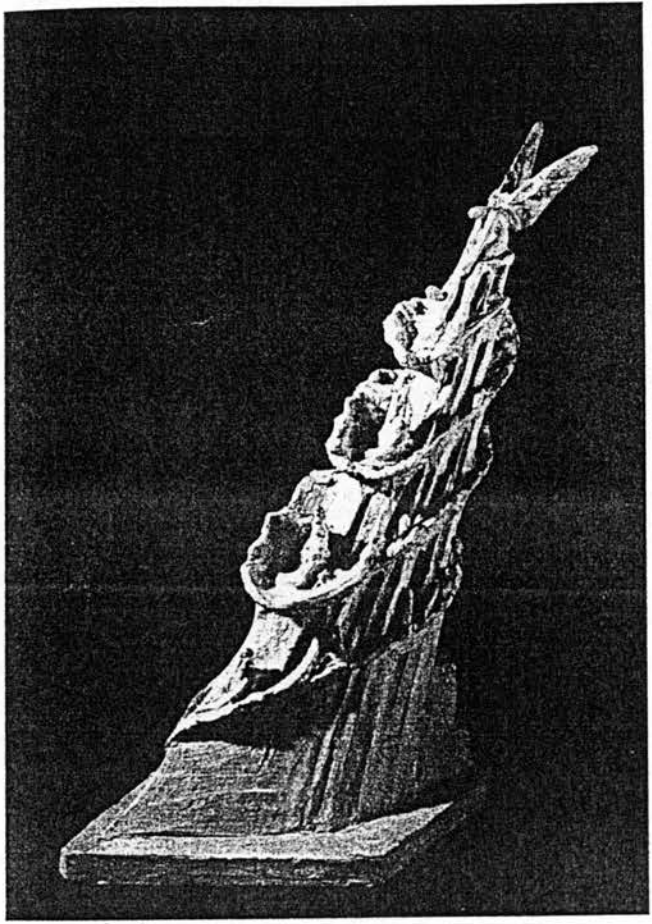
Figure 7.15
Design for a Monument by Hermann Obrist, c. 1898-1900.
(*Okkultismus und Avantgarde*, exh. cat., p. 697)

Figure 7.16
Crystal Castle by Wenzel Hablik, 1903.
(*Expressionist Utopias*, exh. cat., p. 38)
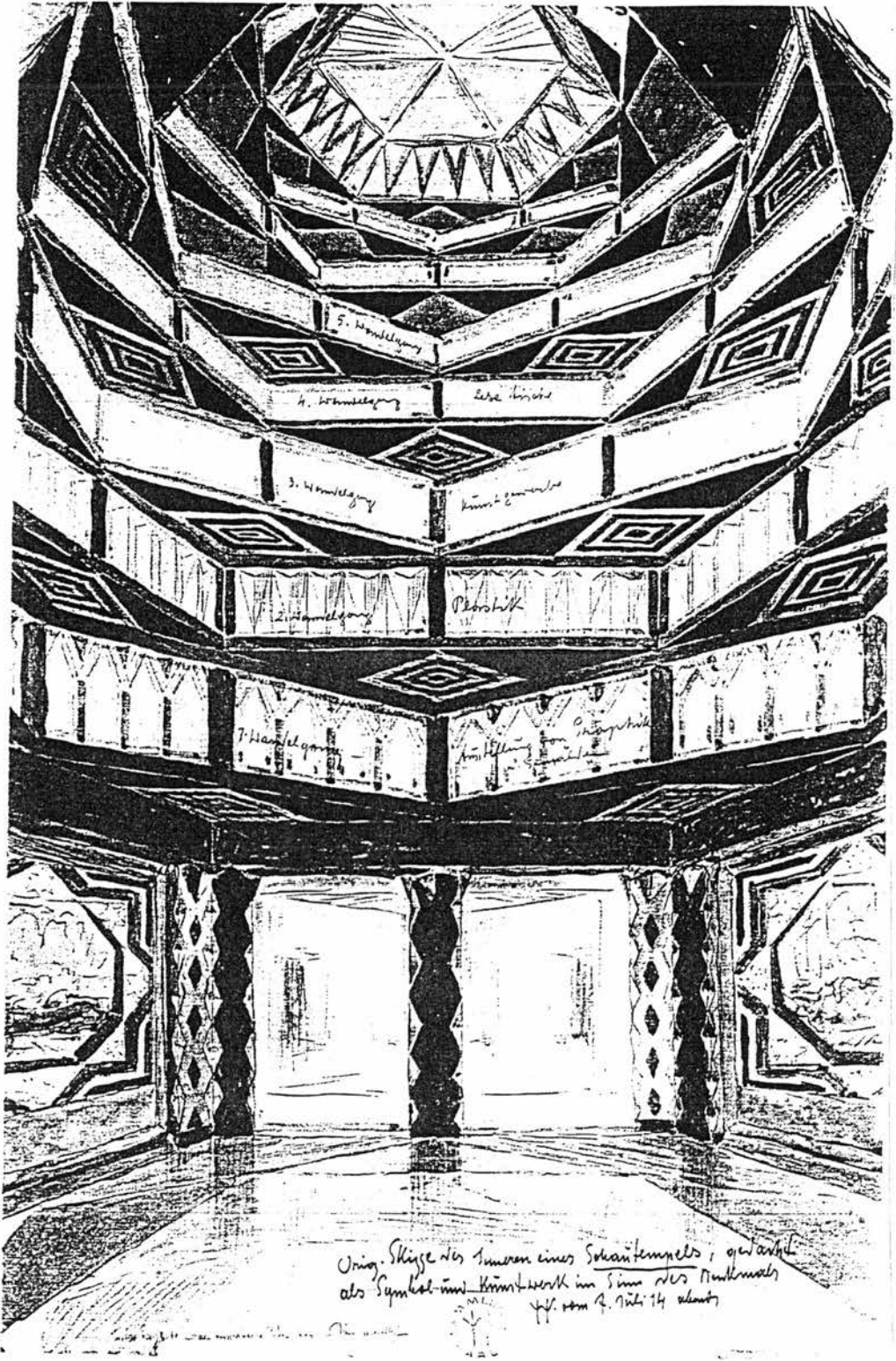
Figure 7.17
Temple of the City - Display Temple as a Monument of a City by Wenzel Hablik,
1914.
(*Der Hang zum Gesamtkunstwerk*, exh. cat., p. 365)
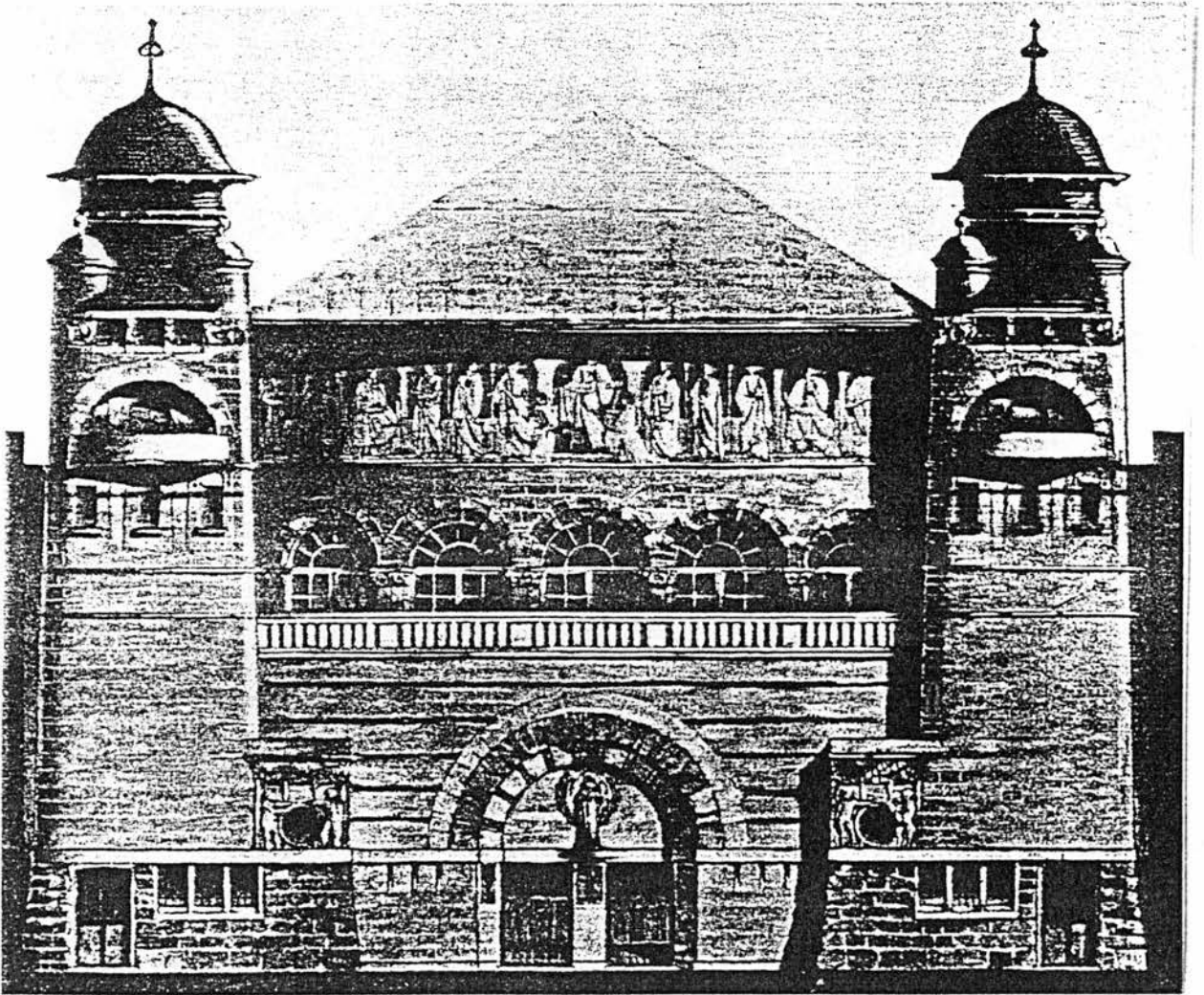
Figure 7.18
Temple of the Art and Culture - First design for the Whitechapel Art Gallery, London,
by C. Harrison Townsend, 1895.
(Service, *Edwardian Architecture*, p. 172)
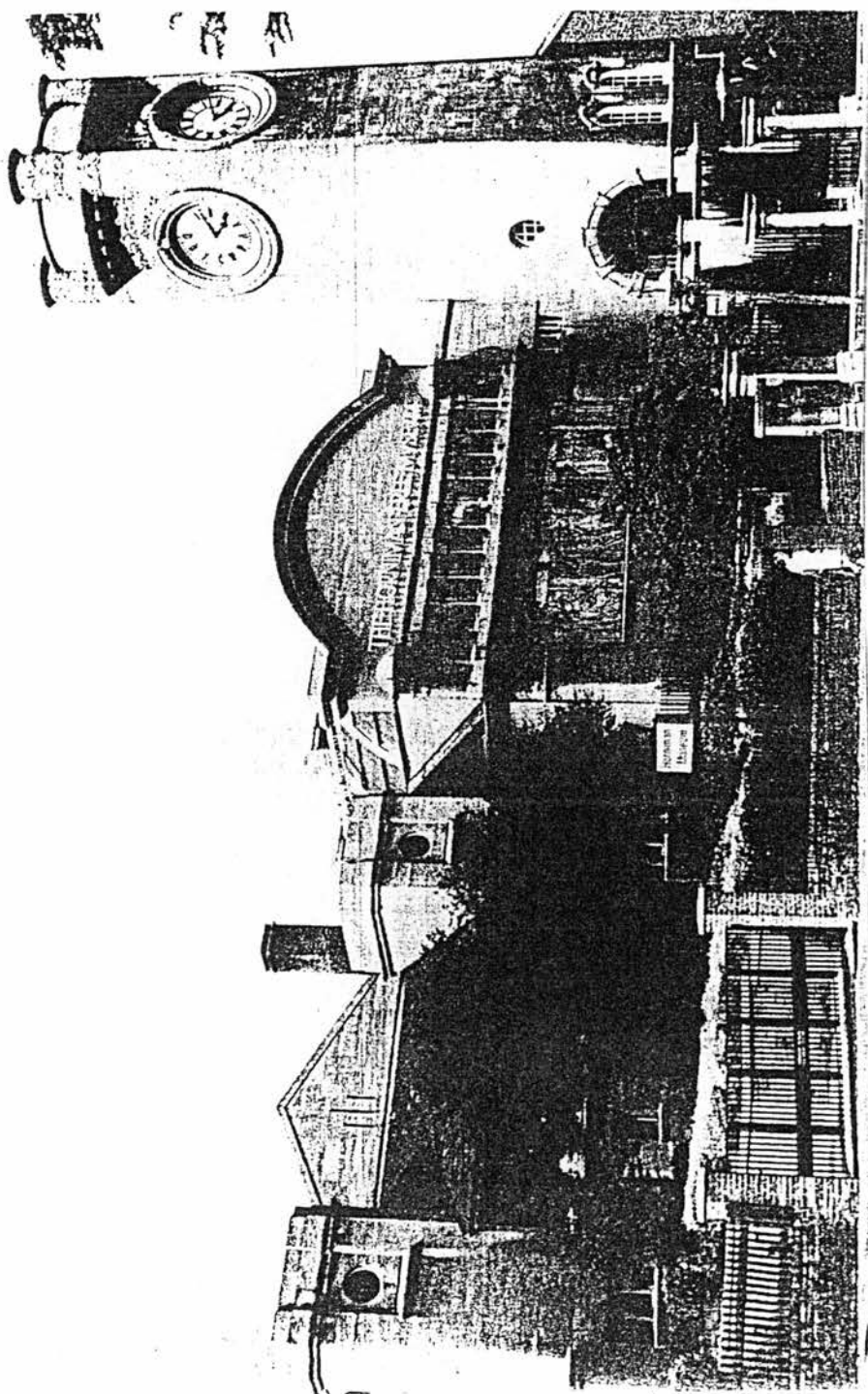
Figure 7.19
Temple of the Art and Culture - Horniman Museum, London, by C. Harrison
Townsend, 1896-1901. On the left side the extension by Townsend from 1910 on the
site where Geddes had begun in 1903 to built a botanic garden.
(Service, *Edwardian Architecture*, p. 174)
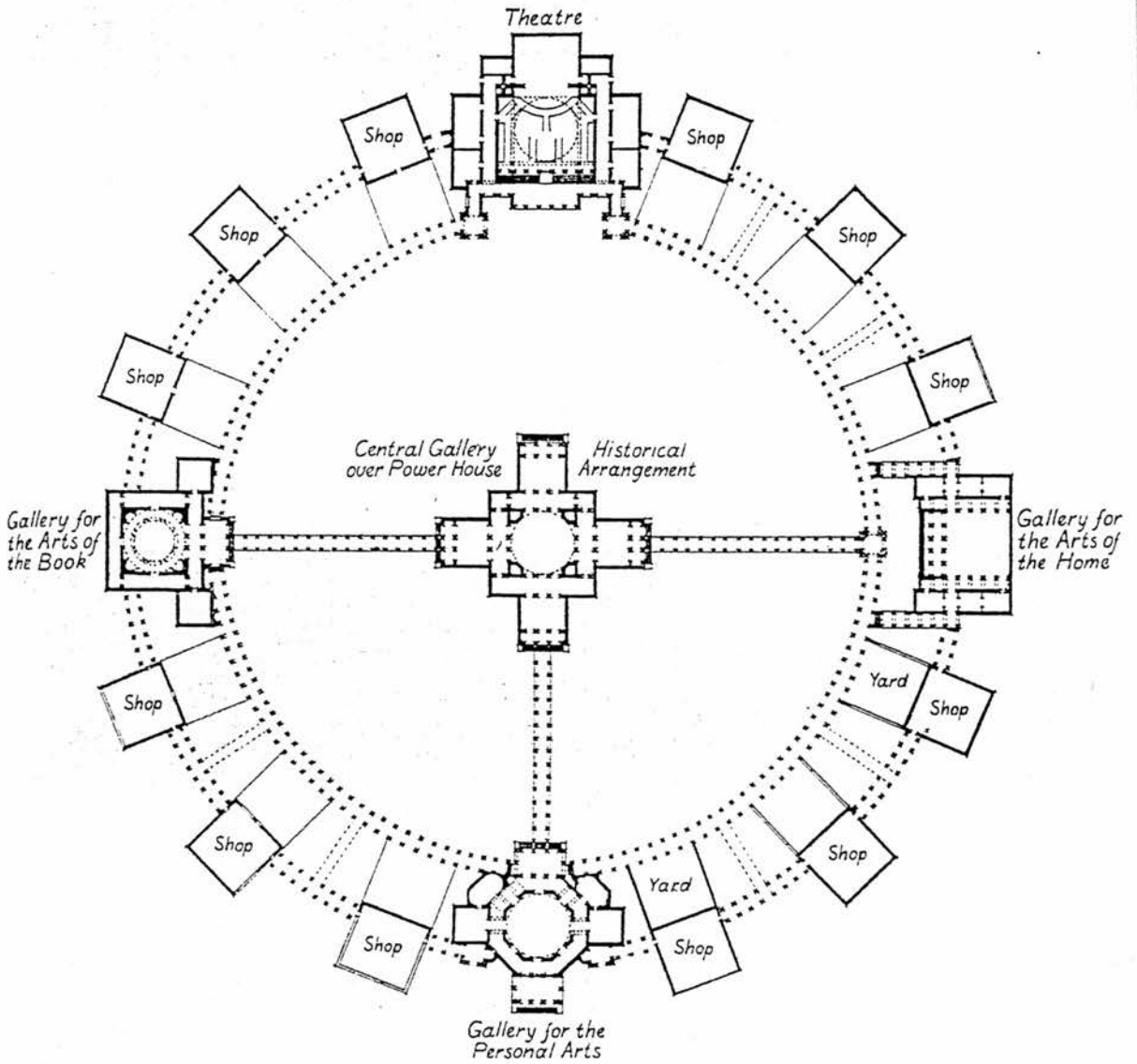
Figure 7.20
Temple of Arts and Crafts - Plan for a Art Institute by Charles Robert Ashbee, before 1917.
(Ashbee, *Great City*, plate facing p. 119.)
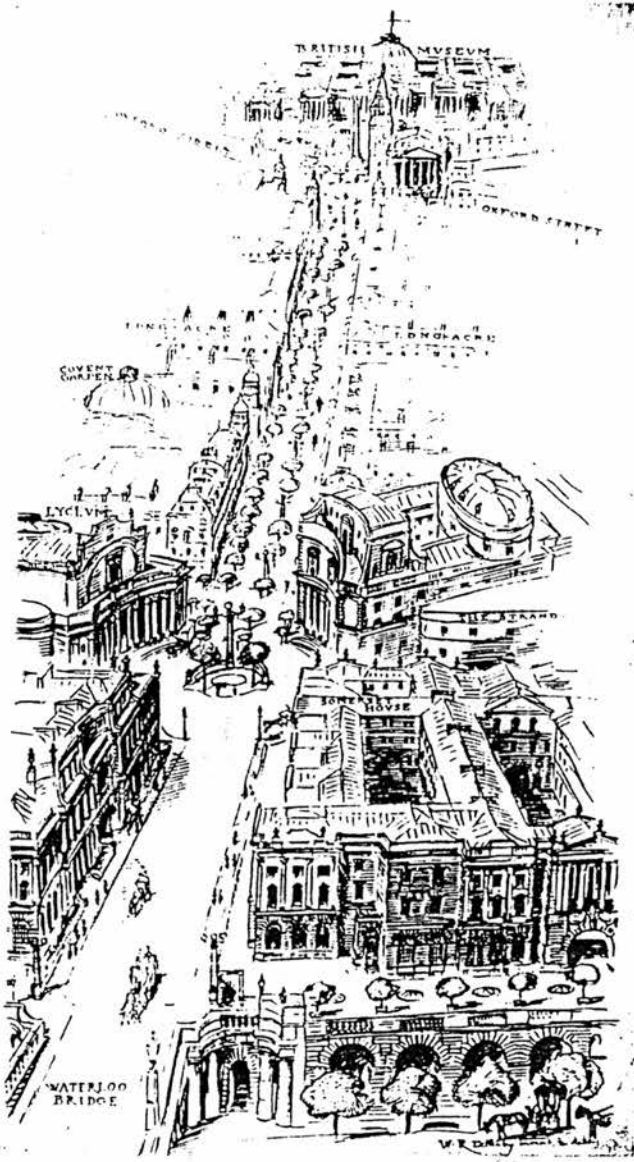
Figure 7.21
Sacred Way dedicated to the City of London - sketch by William Richard Lethaby, c. 1891.
(Rubens, *William Richard Lethaby*, p. 260)
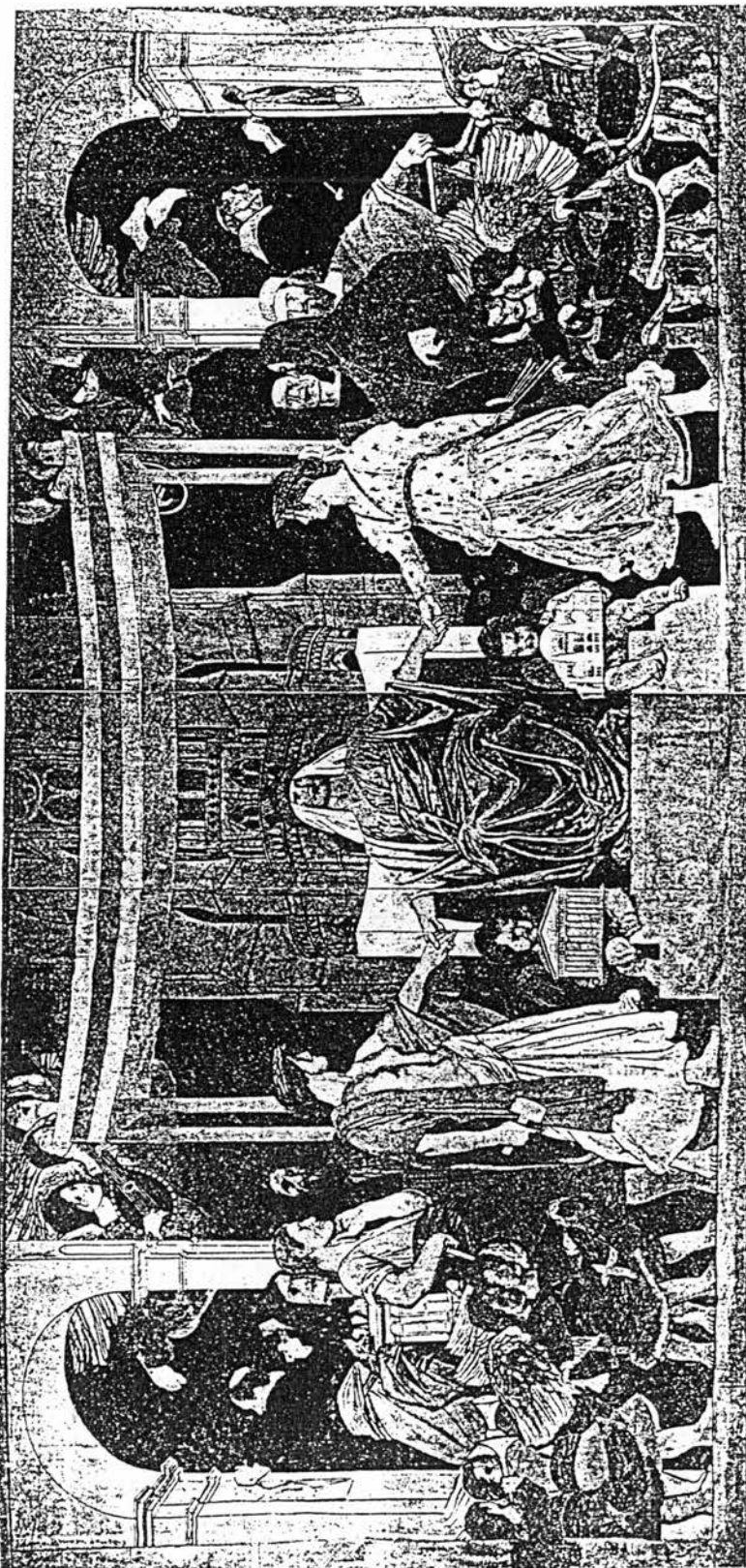
Figure 7.22
The Arts (serving the City) - Mural by Maurice Greiffenhagen, 1916, on display in the
Municipal Hall of the Arts and Crafts Exhibition in London, 1916.
(W. T. Whitley, 'Arts and Crafts at the Royal Academy', *The Studio* 69 (1916),
p. 71)
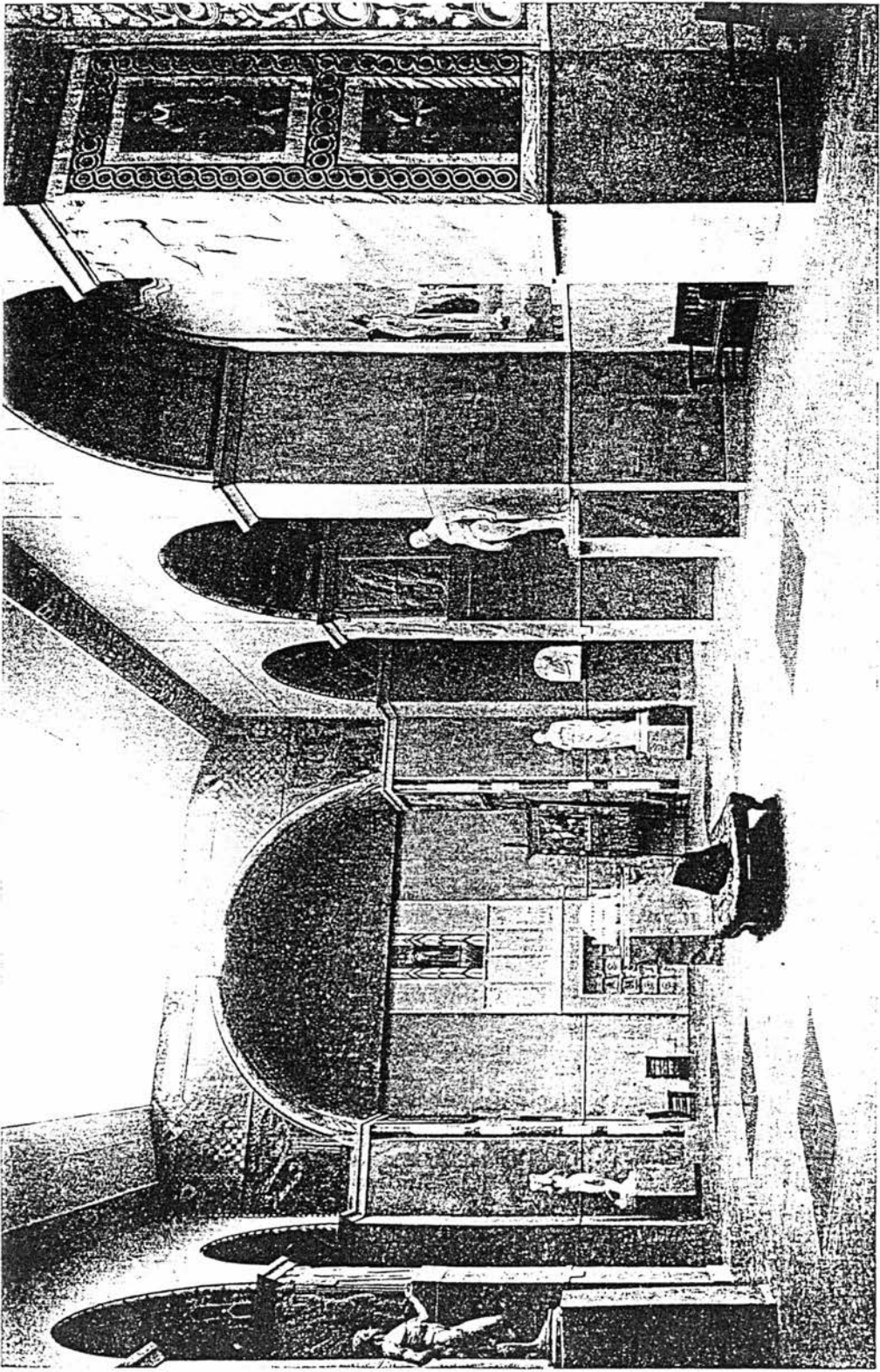
Figure 7.23
Temple of Life and Death - The Hall of Heroes by Henry Wilson at the Arts and Crafts
Exhibition in London, 1916. In the central background a model for a *Campo Santo*
displayed on a hexagon plinth, architect unknown.
(W. T. Whitley, 'Arts and Crafts at the Royal Academy', *The Studio* 69 (1916),
p. 123)
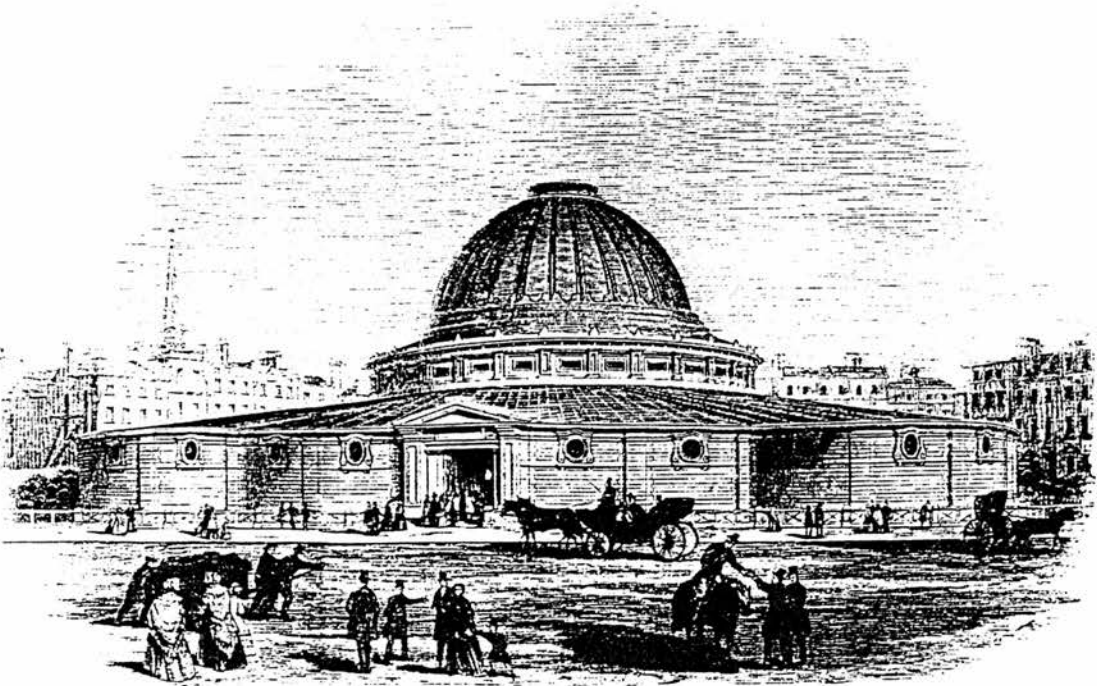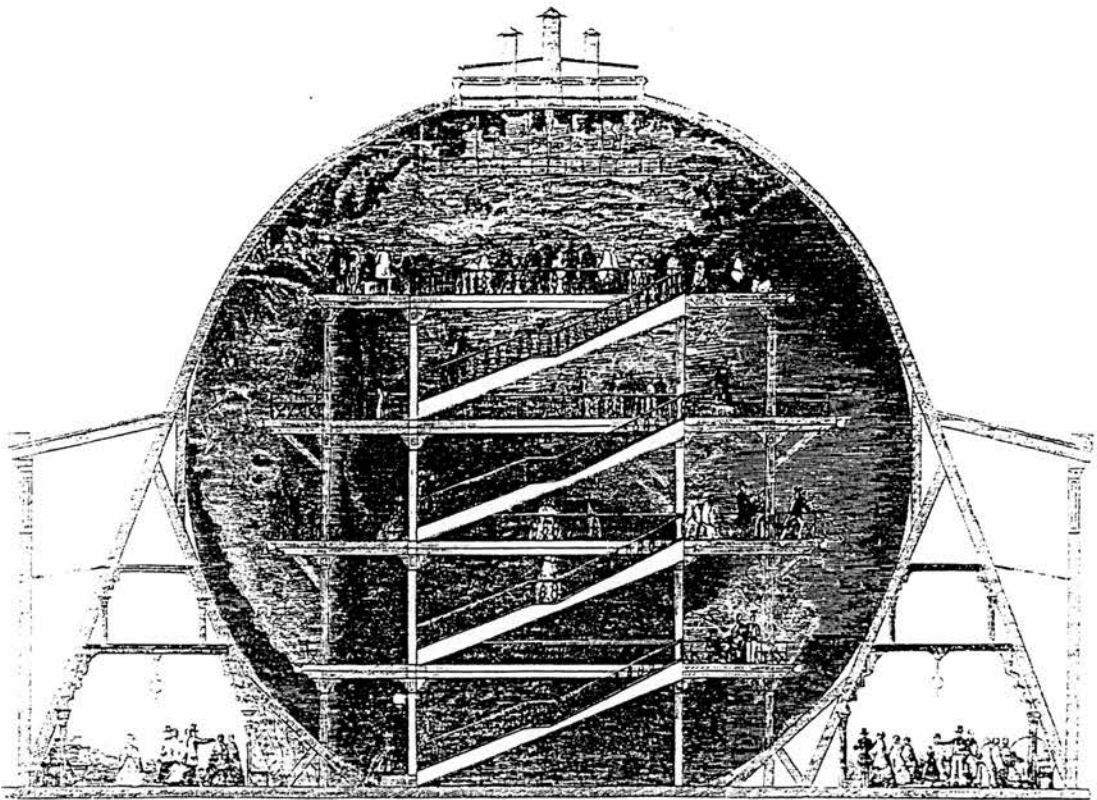
Figure 8.1
Temple of Geography - The Monster Globe by James Wyld, 1851.
(Markus, *Building & Power*, p. 220)
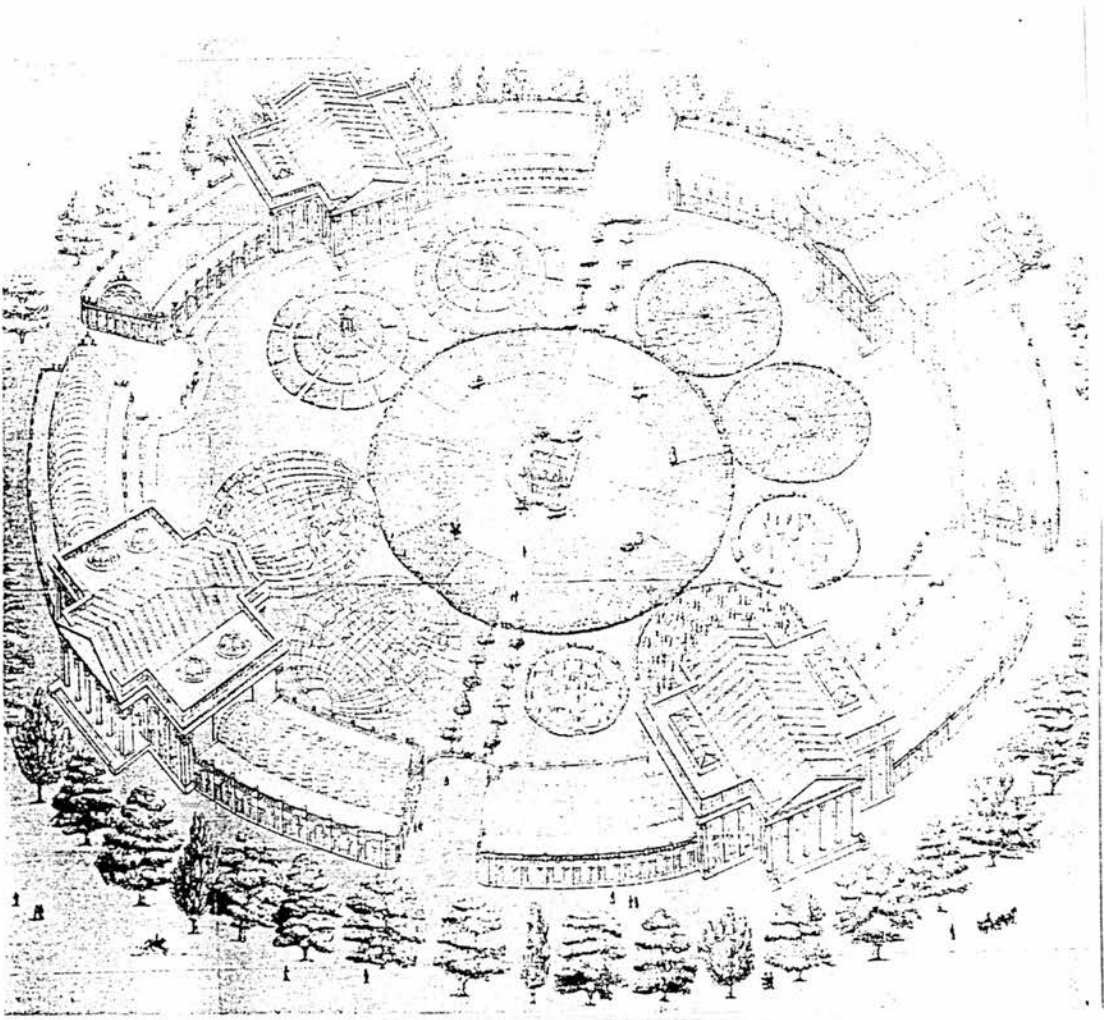
Figure 8.2
Terrestrial and Celestial Maps in the Centre of Pemberton's *Happy Colony*, 1854.
(Markus, *Building & Power*, p. 295)
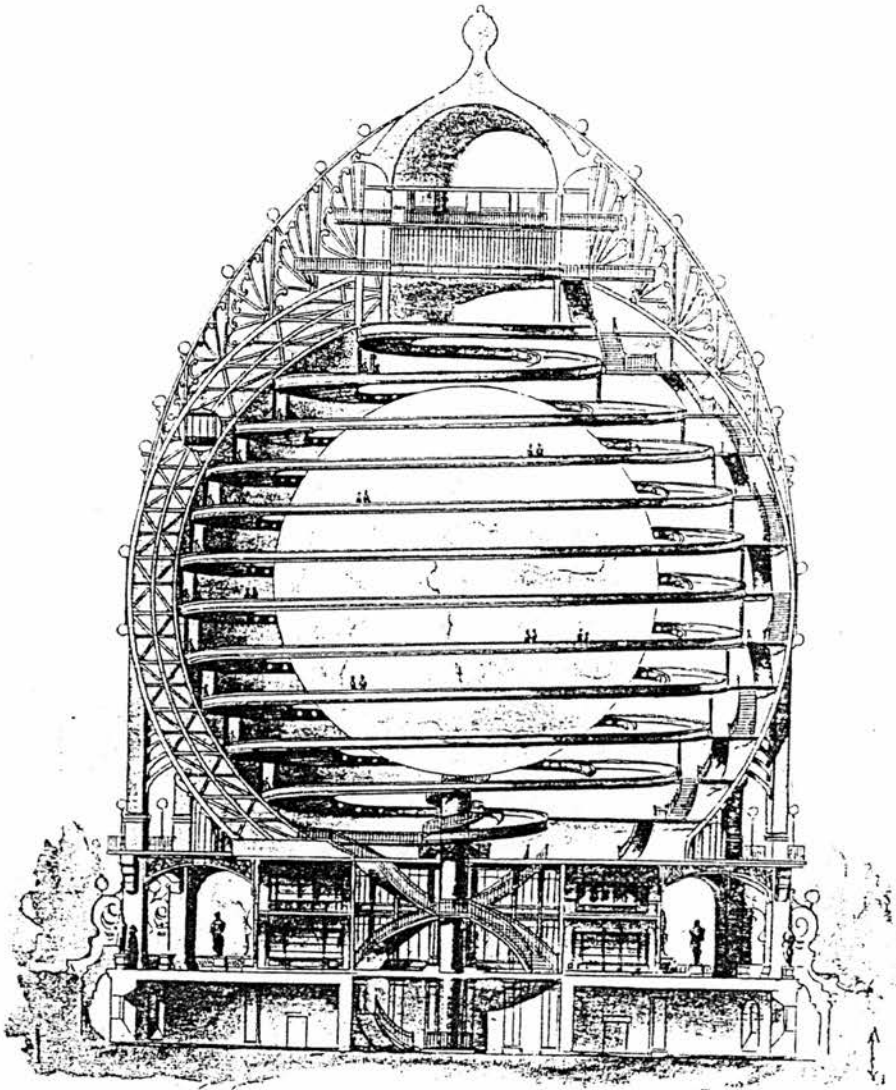
Figure 8.3
Temple of Geography - The Great Globe by Elisée Reclus, building designed by
Louis Bonnier, 1897-1898.
(Marrey, *Bonnier*, p. 193)
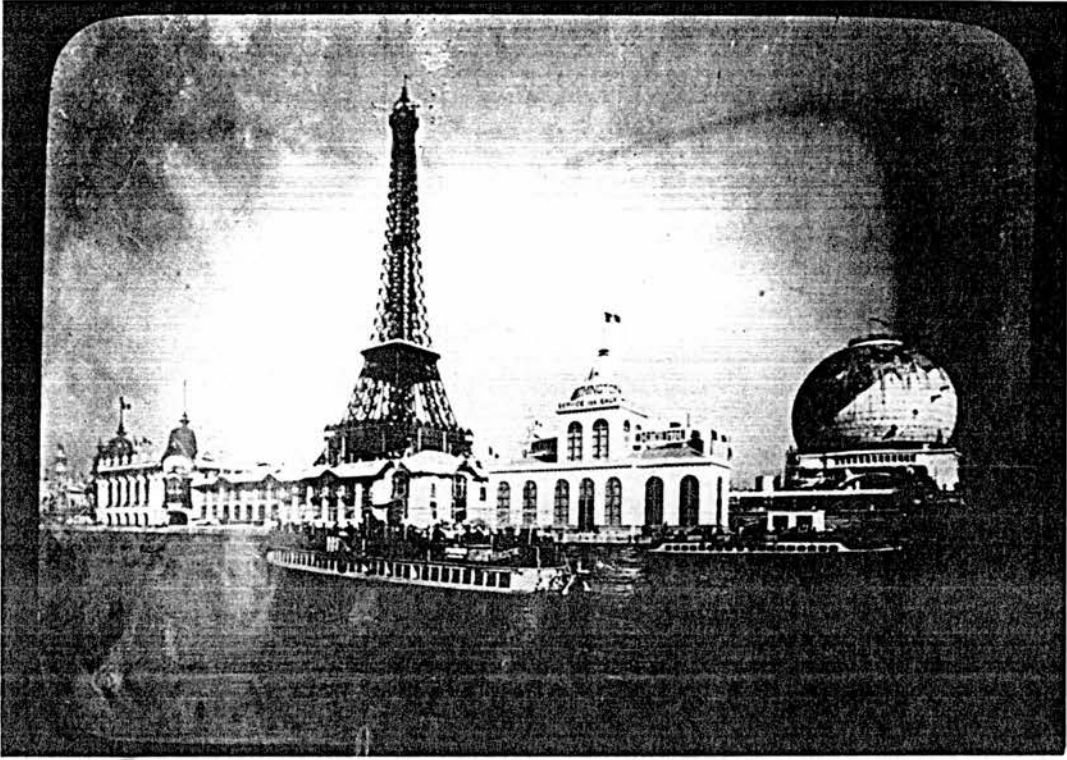
Figure 8.4
View of the International Exhibition at Paris, 1900, showing Galeron's celestial globe.
(SUA, T-GED 25/4/131)
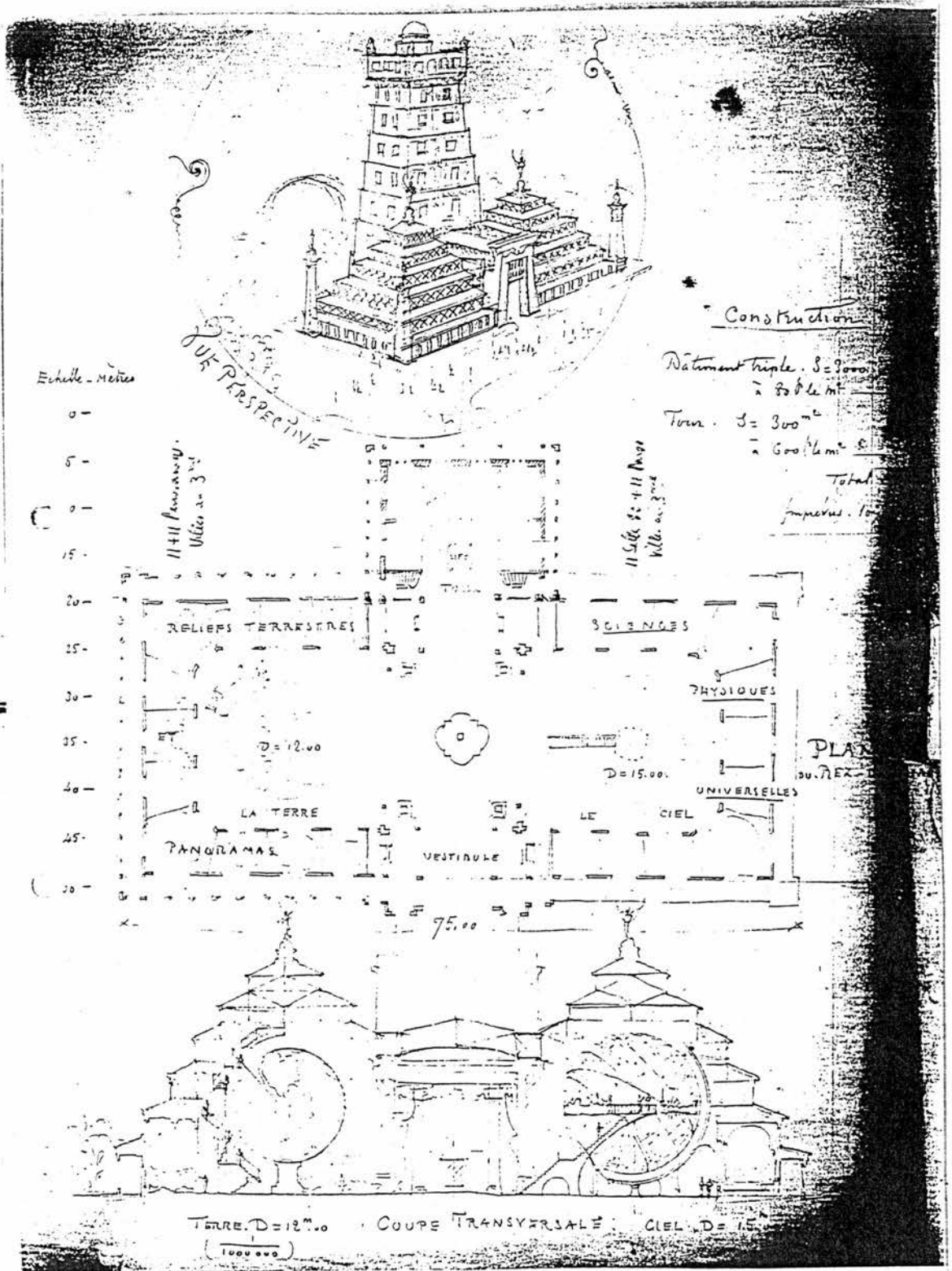
Figure 8.5
Temple of Geography - First design by Paul Louis Albert Galeron for Geddes's
National Institute of Geography, 1901.
(SUA, T-GED 6/2/23)
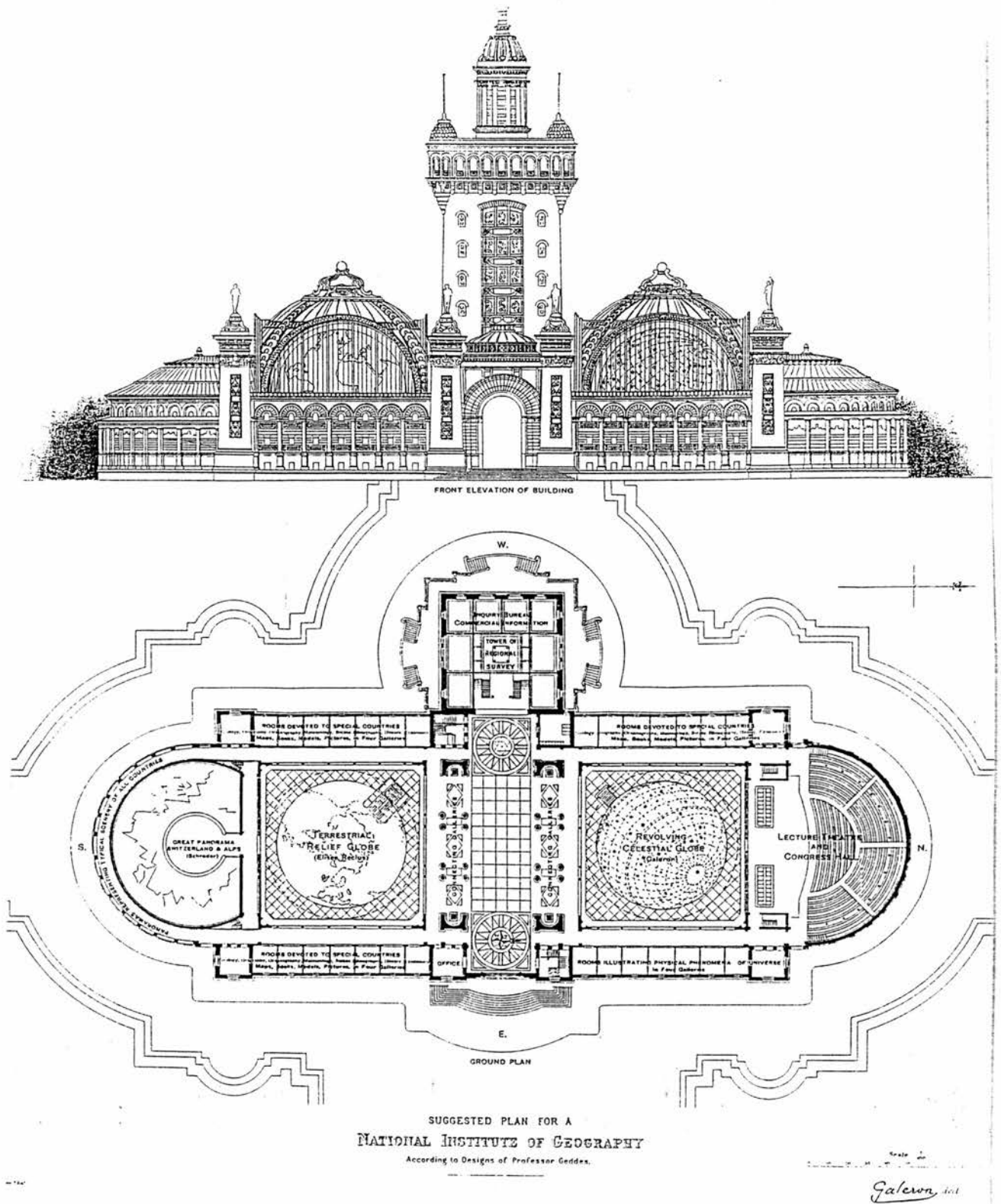
Figure 8.6
Temple of Geography - National Institute of Geography according to designs by
Patrick Geddes, drawing by Paul Louis Albert Galeron, before 1902.
(*Scottish Geographical Magazine* 18 (1902), plate facing p. 168)
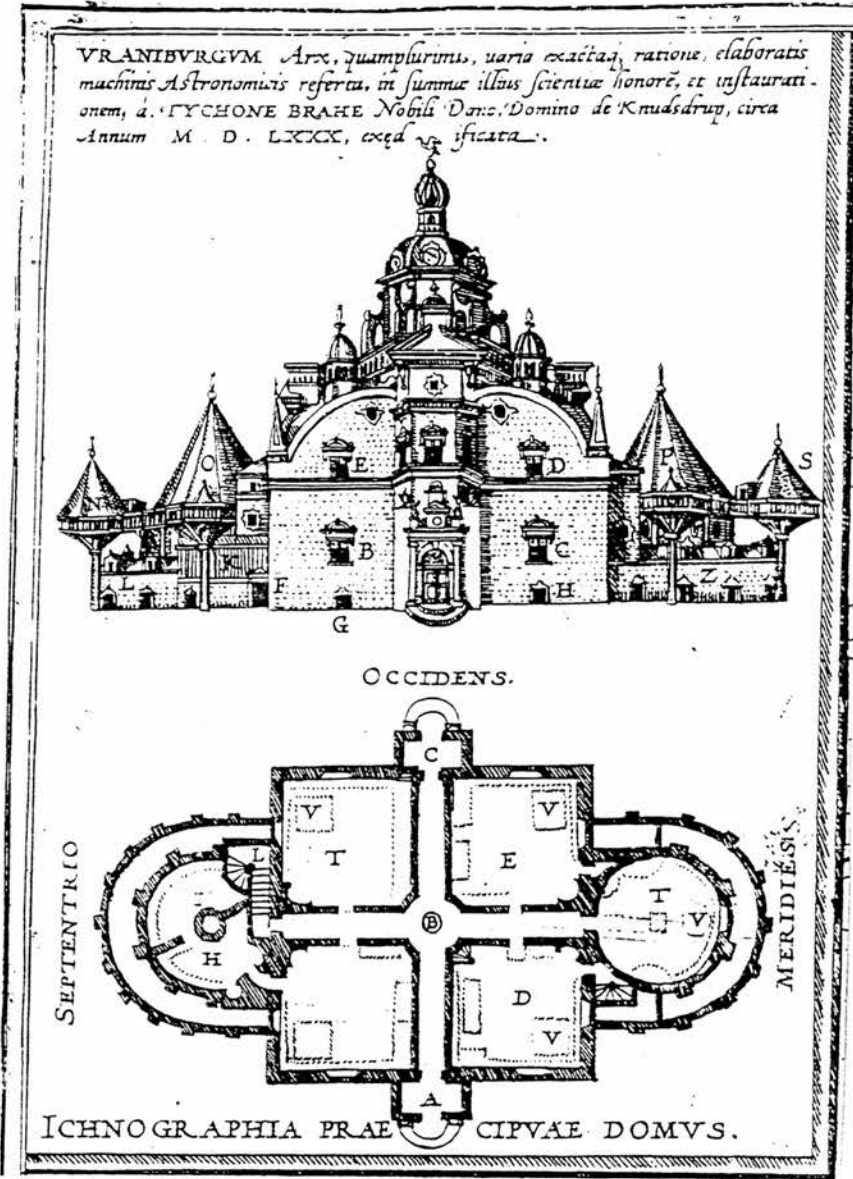
494

Figure 8.7
Ground plan and view of the main facade of Tycho Brahe's Uraniborg on the island of
Hveen. Detail from an engraving from 1588.
(SUA, T-GED 25/1/651)
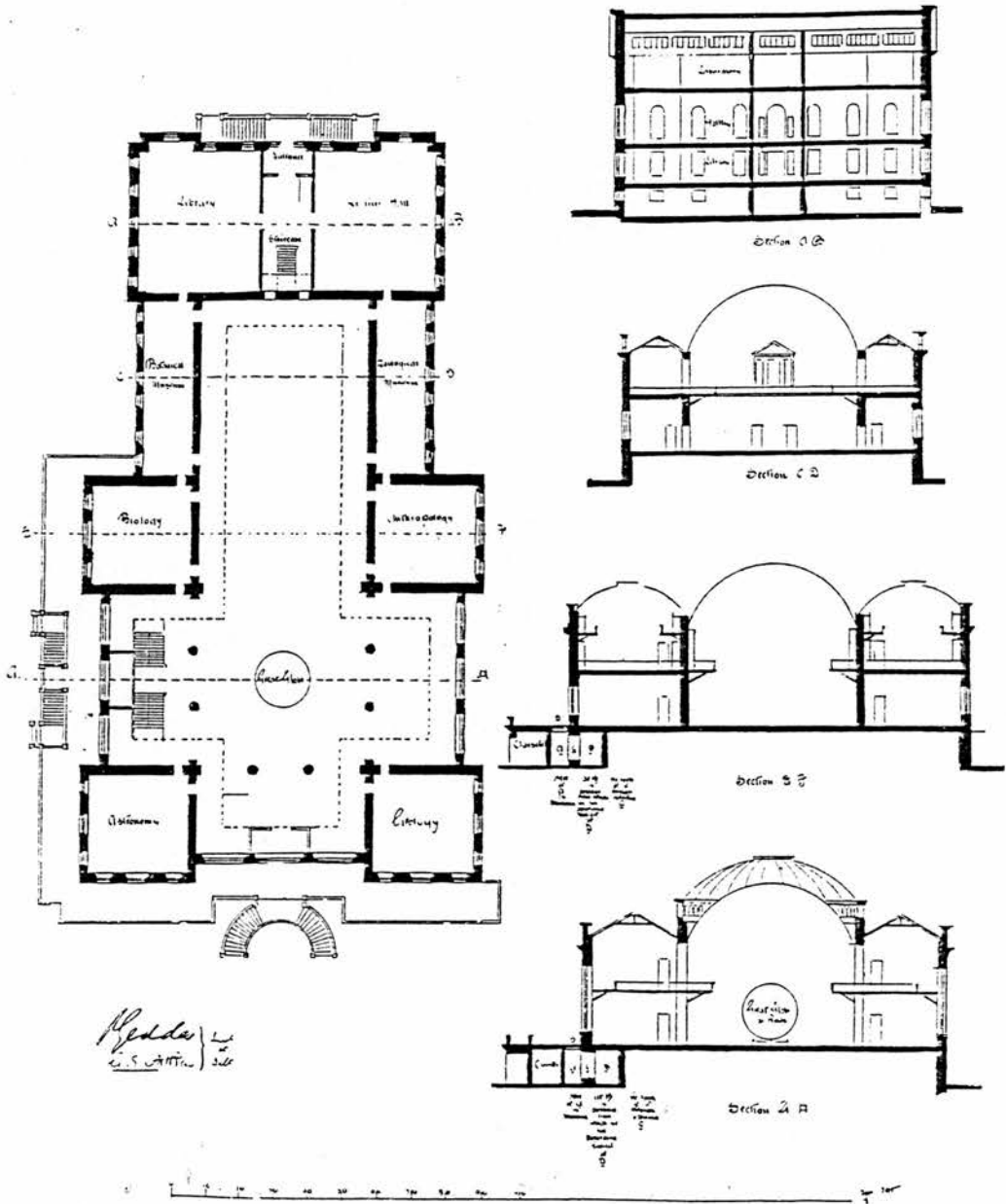
Figure 8.8
Temple of Geography - The Nature Palace in Pittencrieff Park in Dunfermline by
Patrick Geddes and George Shaw Aitken, 1904.
(Geddes, *Dunfermline report*, p. 110)

496
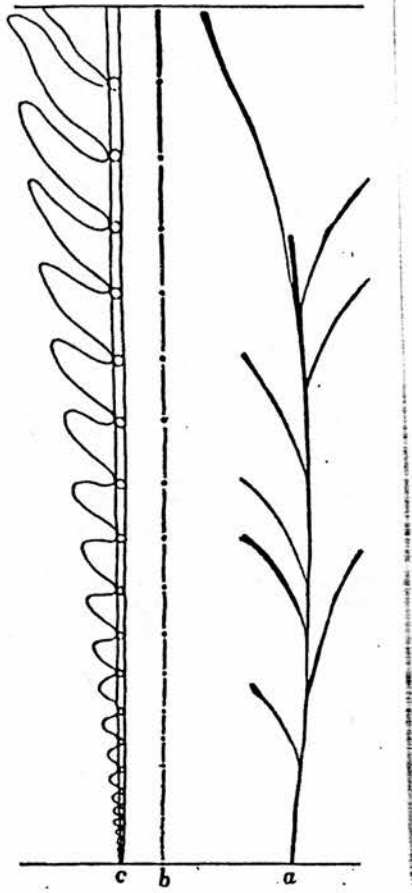
Figure 8.9
Genealogical Tree (left) by Patrick Geddes, 1886.
(Geddes, *Theory of Growth*, p. 929)

Phases of Human Life represented by Greek (Roman) Gods

Phases of Life / age	Gods = Men	Godesses = Women
1. infancy /0- ?	Eros (Cupid)	Hebe
2. early youth / -15	Hermes (Mercury)	Artemis (Diana)
3. adolescence / -30	Dionysos (Bacchus)	Aphrodite (Venus)
4. maturity proper / -45	Apollo	Pallas (Minerva)
5. sex fully realized / -60	Ares (Mars)	Hera (Juno)
6. early age / -75/80	Hepheestos (Vulcan)	Demeter (Ceres)
7. late age / 75/80-	Zeus (Jupiter)	Sybilla (Sybil)

For the phases compare: Defries, The Interpreter, p. 112. For the ages and alternative naming of the phases: T-GED 8/3/7. For the gods and goddesses: Defries, The Interpreter, pp. 120-121; T-GED 8/3/2.
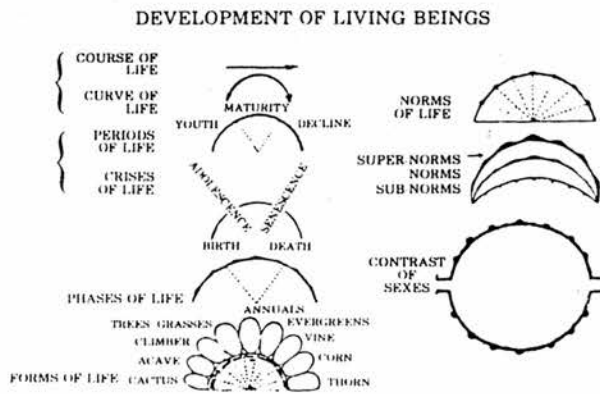
Figure 8.10
Phases of human life compared to Greek gods and to the phases of plant life.
(The lower figure: Meller, *Planning Theory and Women's Role in the City*, p. 91)
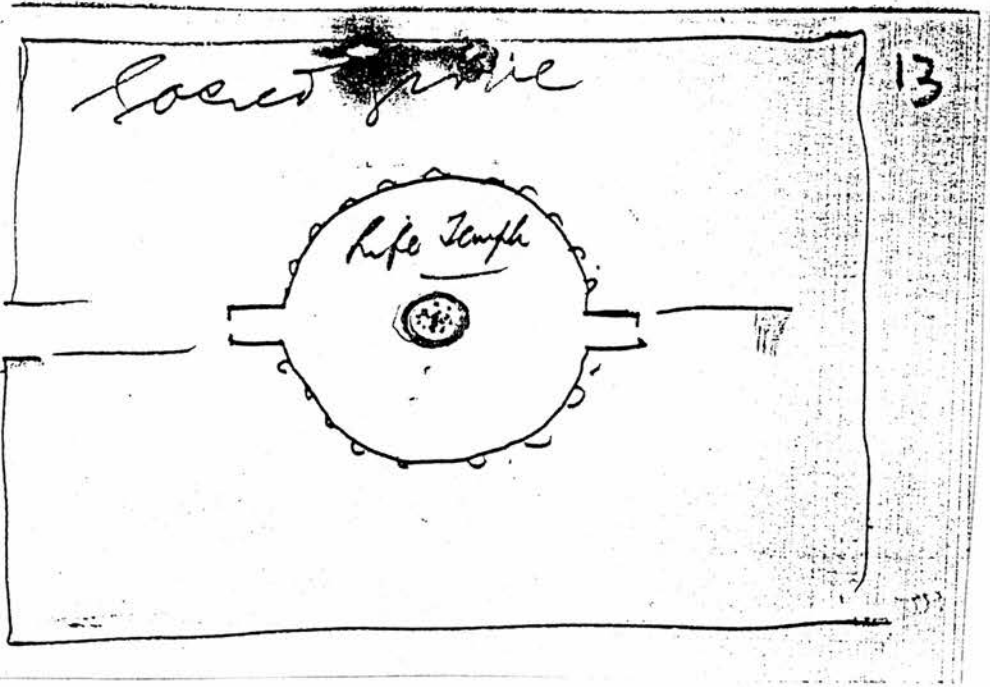
Figure 8.11
Temple of Life - Sketch by Patrick Geddes for a lecture to the Fabian Society, 1908.
(SUA, T-GED 8/3/7)
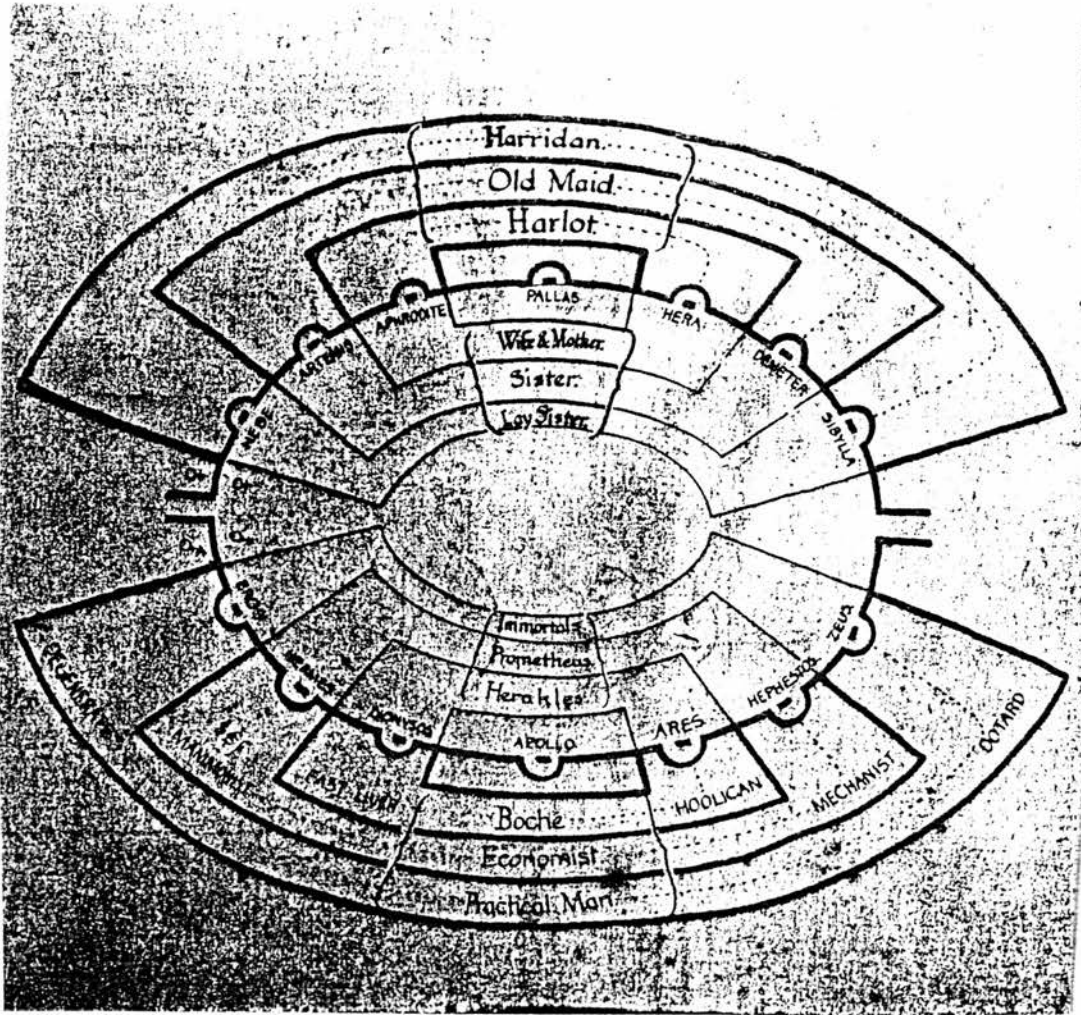
Figure 8.12
Temple of Life - Plan of the Temple for the Greek Gods according to ideas of Patrick Geddes, artists/architect unknown.
(SUA, T-GED 8/3/2)
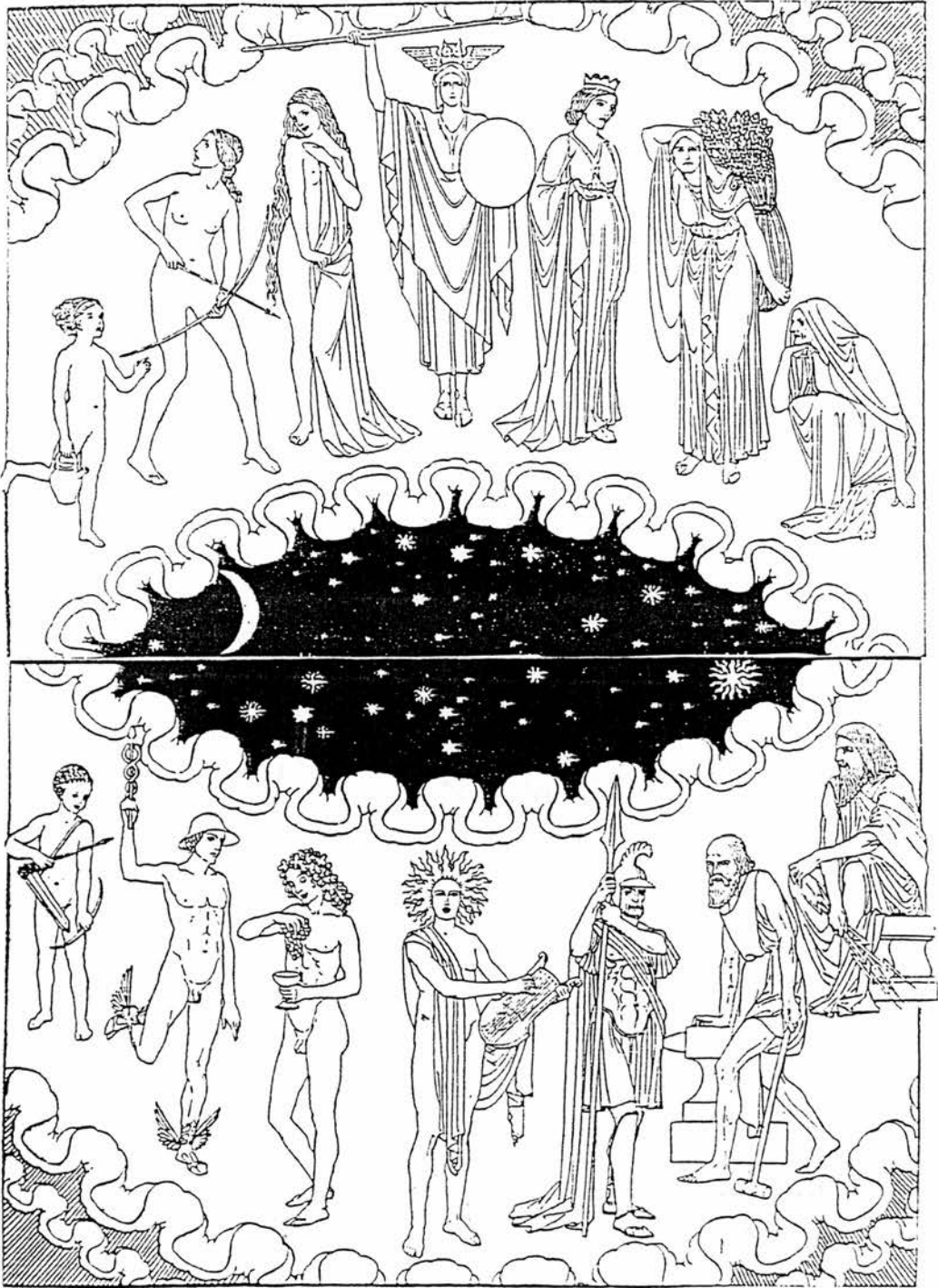
Figure 8.13
Temple of Life - The Greek gods and goddesses representing phases of human life
drawn by Philip Mairet (?).
(Abercrombie, *The Coal Crisis*, (appendix B) pp. xii, xiii)
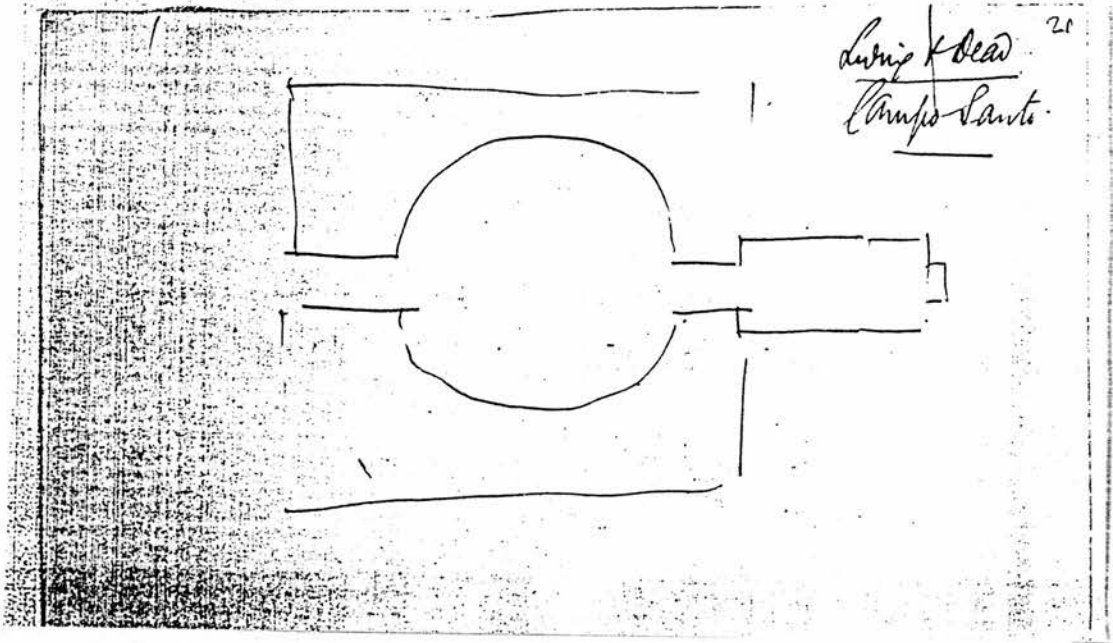
Figure 8.14
Temple of Death- sketch by Patrick Geddes for a *Campo Santo*, based on the shape of
his Temple for the Greek Gods.
(SUA, T-GED 8/3/1)
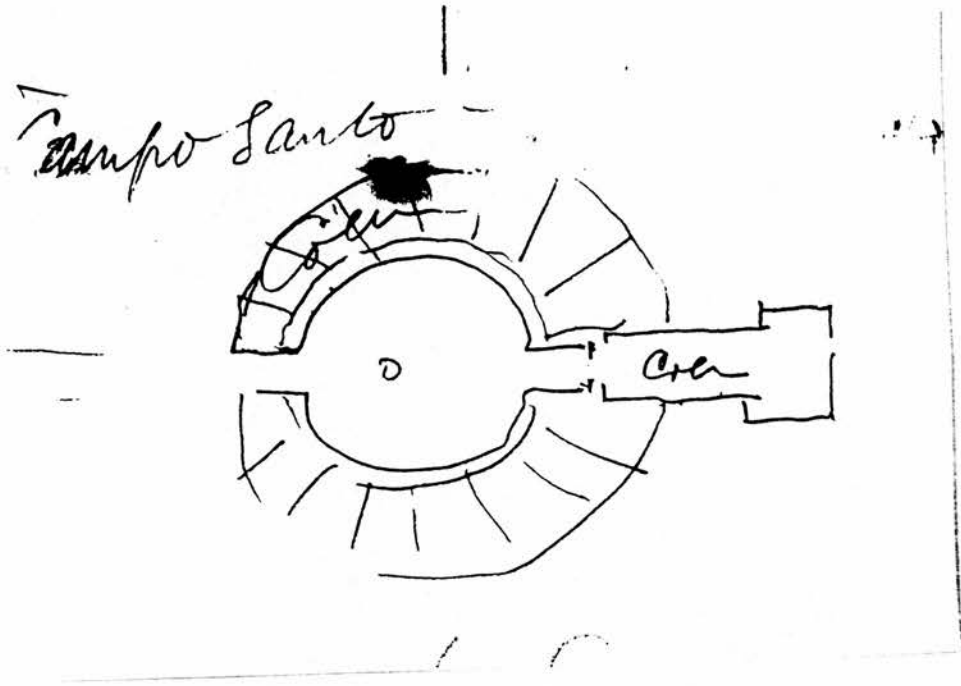
Figure 8.15
Temple of Death- sketch by Patrick Geddes for a *Campo Santo* with crematorium,
based on the shape of his Temple for the Greek Gods.
(SUA, T-GED 8/3/1)
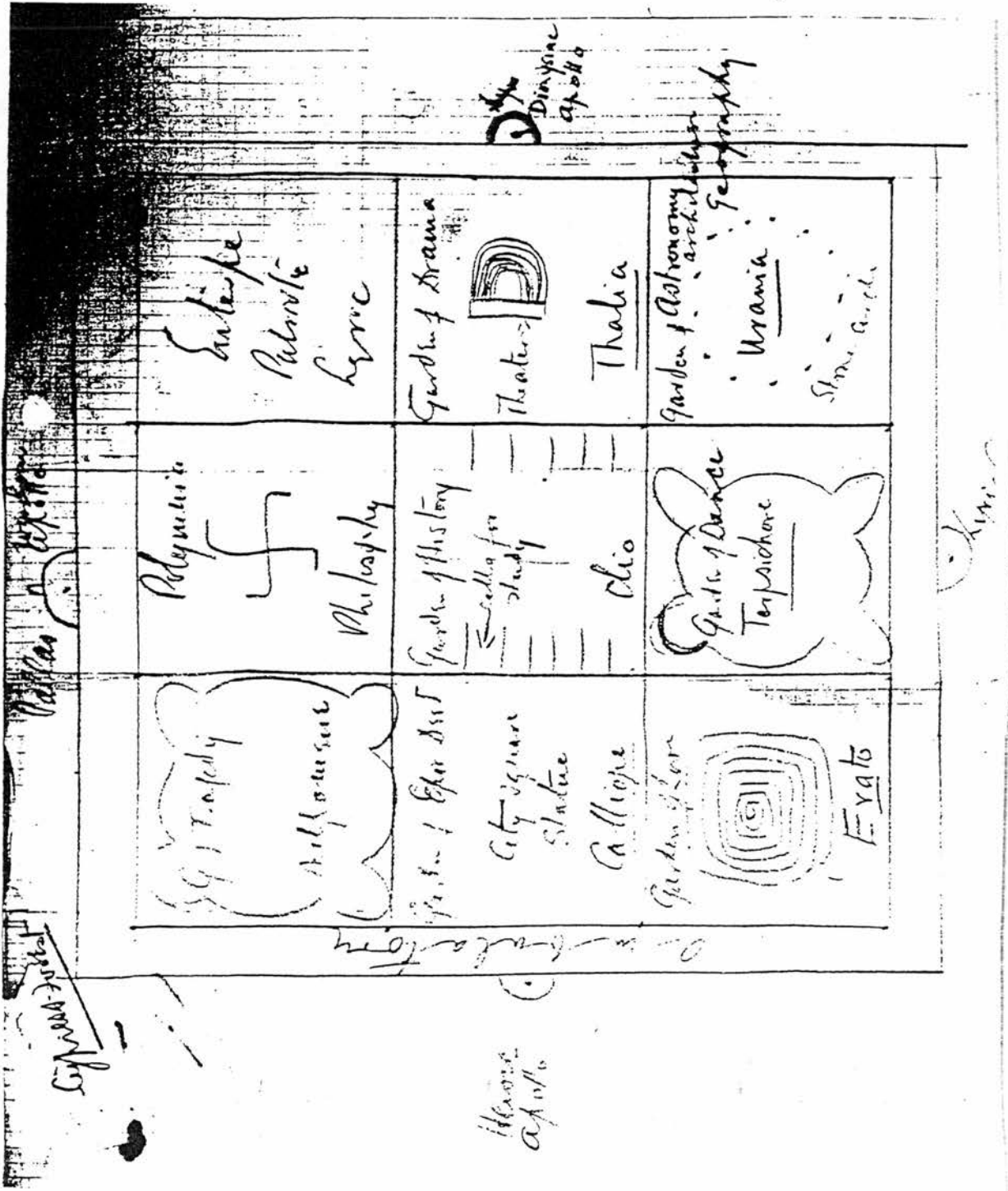
Figure 8.16
Garden for the Nine Greek Muses - sketch by Patrick Geddes.
(SUA, T-GED 8/3/1)
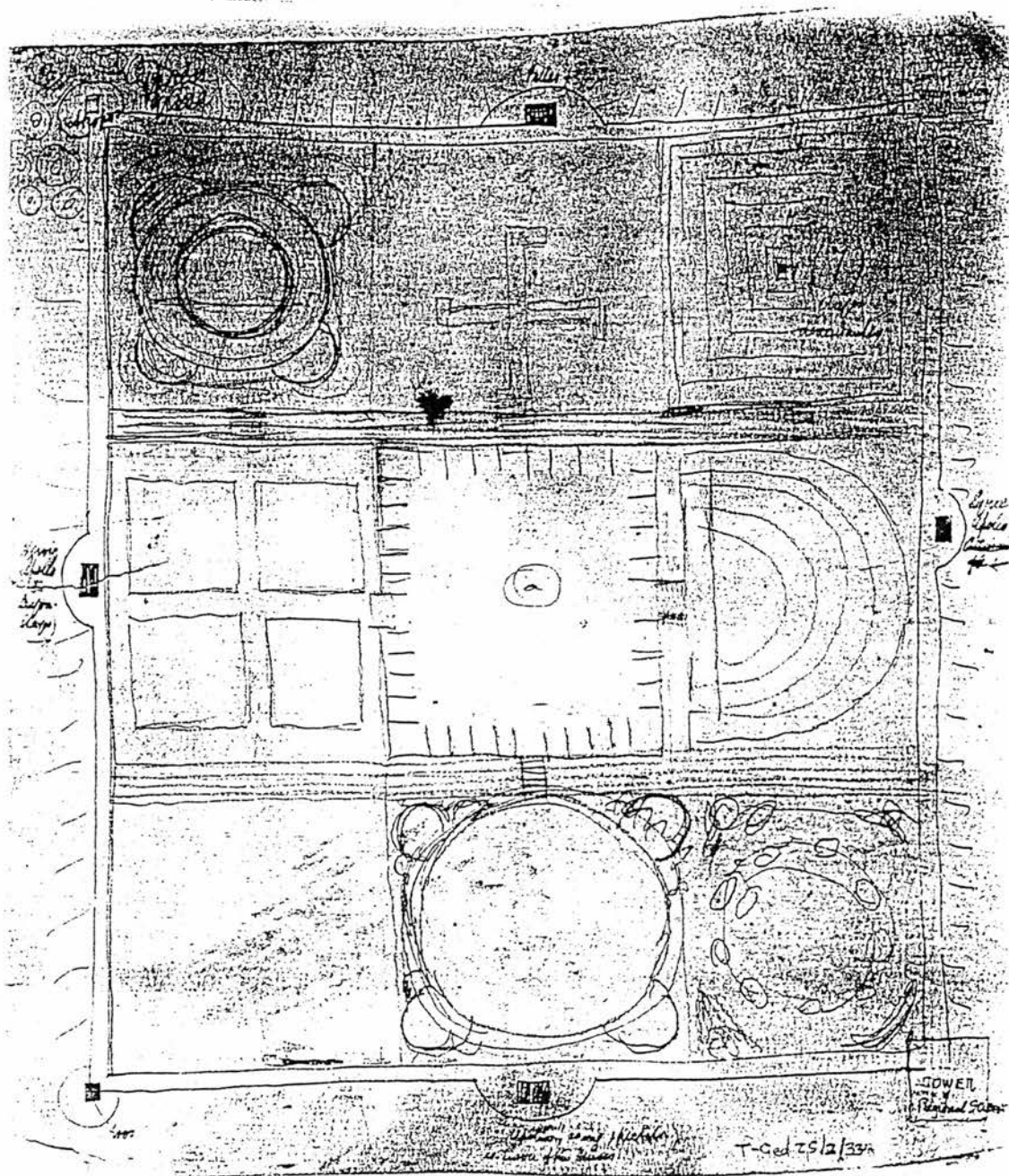
Figure 8.17
Garden for the Nine Greek Muses - sketch by Patrick Geddes for an unidentified
location.
(SUA, T-GED 25/2/33)

Figure 8.18
Garden for the Nine Greek Muses and the Four Social Types - reconstruction drawing
based on Geddes's description of the replanning of the palace garden in Pinjaur, 1922.
(Drawing by Volker Welter)

W

spiritual power — temporal power

cypress tree of life
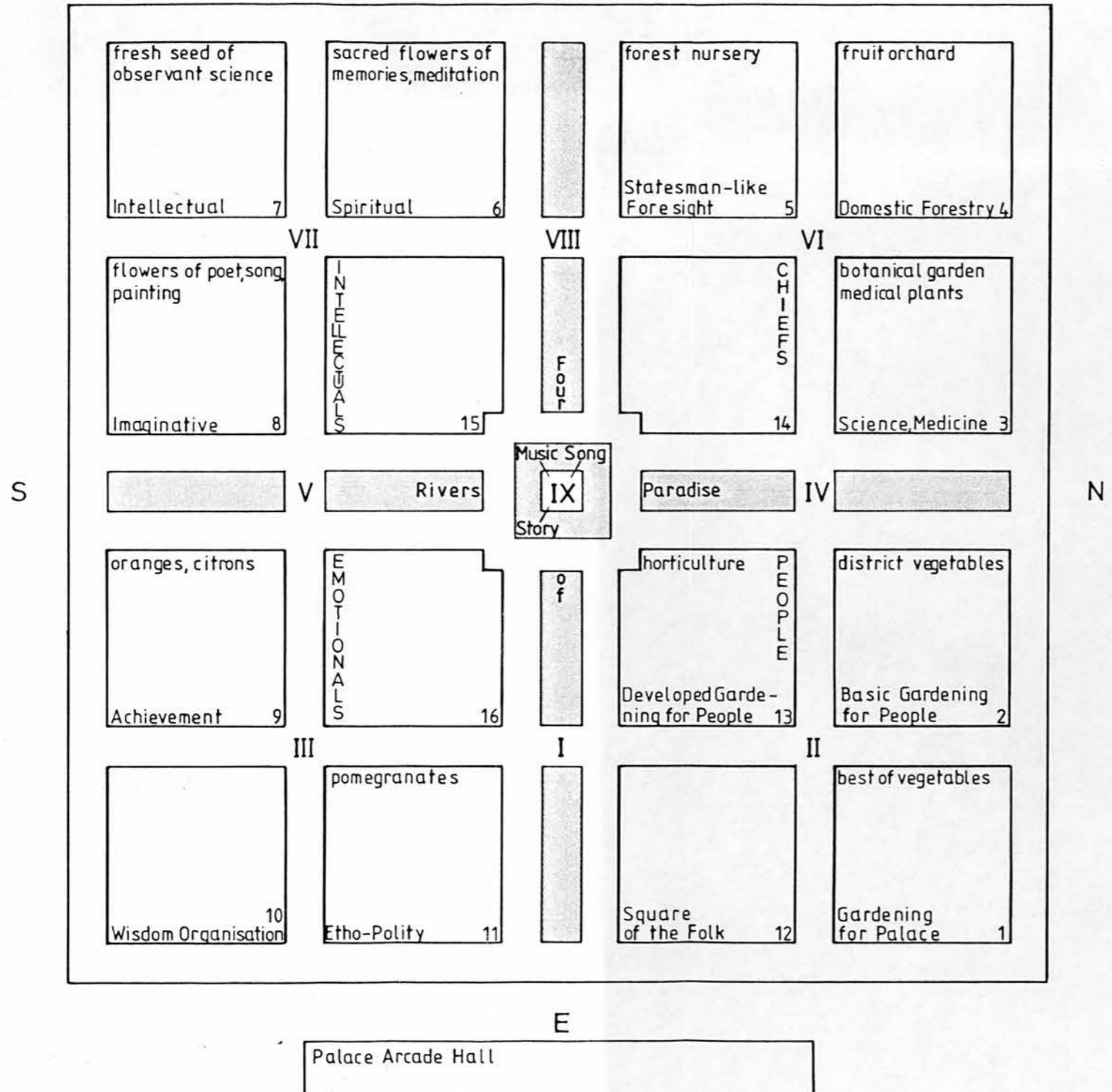
fresh seed of observant science	sacred flowers of memories, meditation	forest nursery	fruit orchard
Intellectual 7	Spiritual 6	Statesman-like Fore sight 5	Domestic Forestry 4

VII   VIII   VI

flowers of poet, song painting

INTELLECTUALS

CHIEFS

botanical garden medical plants

Imaginative 8   15   Four   14   Science, Medicine 3

S   V   Rivers   Music Song   IX   Story   Paradise   IV   N

oranges, citrons

EMOTIONALS

of

horticulture PEOPLE

district vegetables

Achievement 9   16   Developed Garde-ning for People 13   Basic Gardening for People 2

III   I   II

pomegranates

best of vegetables

Wisdom Organisation 10   Etho-Polity 11   Square of the Folk 12   Gardening for Palace 1

E

Palace Arcade Hall

vw96

Figure 8.19
Ground plan of the Bahai temple, 1922, by Frank C. Mears and Patrick Geddes.
(Courtesy of Hugh Crawford, Edinburgh)

Figure 8.20
Interior view of the Bahai temple, 1922, by Frank C. Mears and Patrick Geddes.
(Courtesy of Hugh Crawford, Edinburgh)

of Stornoway - He says L^d Pentland has written
to you, & I have told him to try the India
office people who wrote to me about Madras -
I enclose his note of experience - The Goodhue
period means he had very first class U.S.A.
experience as this is one of their best men -

Things are a little uncertain in Ireland
but I think there is more work coming there -
Still rather dull here but signs of improvement
I hope the exhibition goes well -

Yours Frank

Section. Lantern
is carried easily on central
pillar. steadied
by dome -

All round the dome
for bays are
alternating chambers
greater & smaller
closing. Some
concave elements
alternating with
later on

The top finial would be less tall & renaissance like.
If you've any strong criticism of outline on principle
(ie. Religious or other objection) perhaps you'd better write
so as to save me wasting time - This is of course
the roughest scribble on an idea not really thought out yet.

Figure 8.21
Page from a letter by Frank C. Mears showing an initial sketch for the Bahai temple.
(NLS, MS 10573, f.109)

Figure 8.22
Hall of Vision - "Sun-Burst on the Valley-Section' ", unknown artist.
(Abercrombie, *The Coal Crisis*, (appendix B) p. viii)
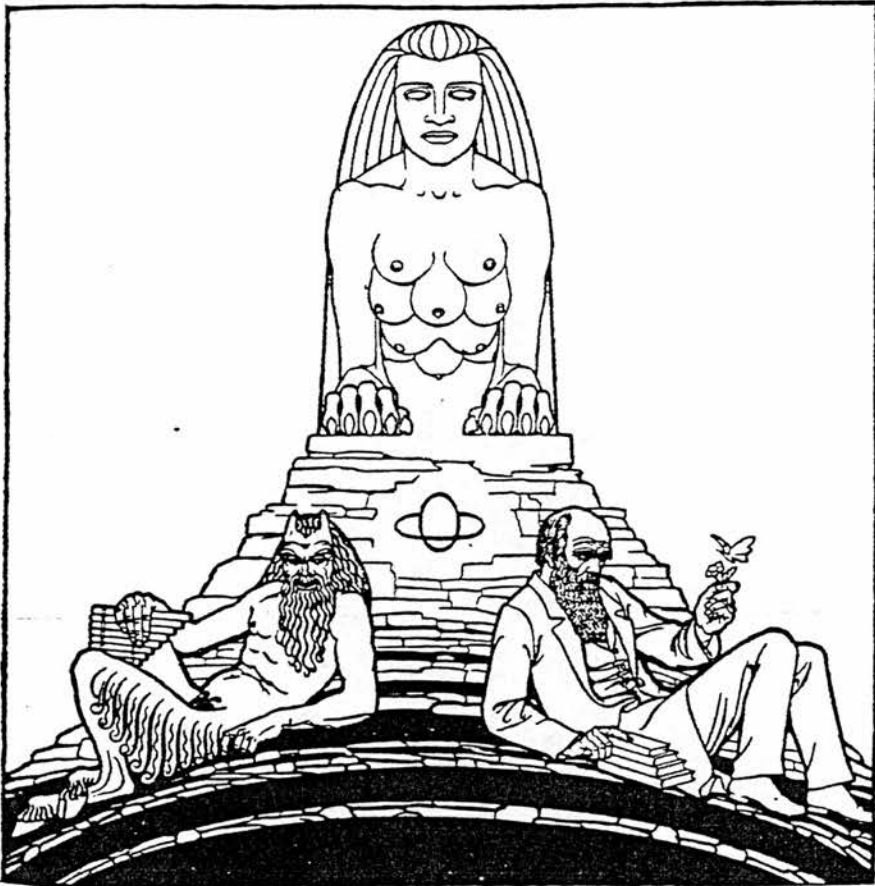
Figure 8.23
Hall of Vision - "The Life-Mother with Pan, Ancient and Modern [Darwin]" by Philip
Mairet.
(Abercrombie, *The Coal Crisis*, (appendix B) p. ix)
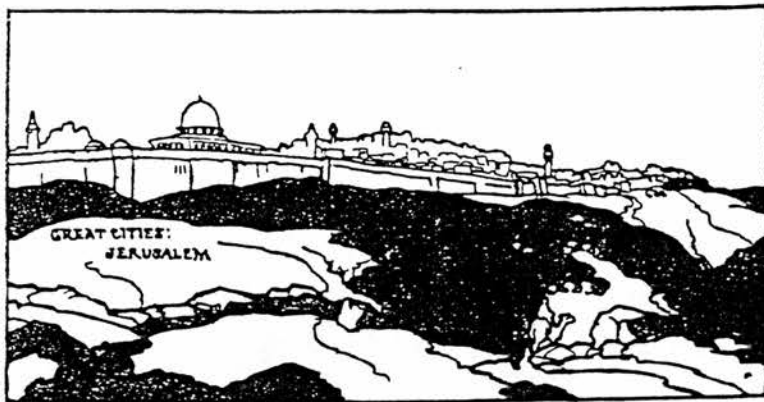
Fig. VIII.
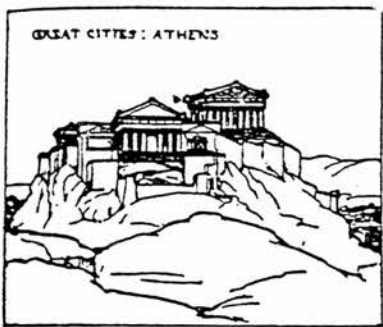
Figure 8.24
Hall of Vision - The City Acropolis in four Sacred Cities: Jerusalem, Rome, Athens, and Westminster, unknown artist.
(Abercrombie, *The Coal Crisis*, (appendix B) pp. xvi, xvii)

Figure 8.25
Hall of Vision - "The Classico-Christian Ideal", the paths towards the big city (right) and to the True City (left).
(Abercrombie, *The Coal Crisis*, (appendix B) p. xviii)
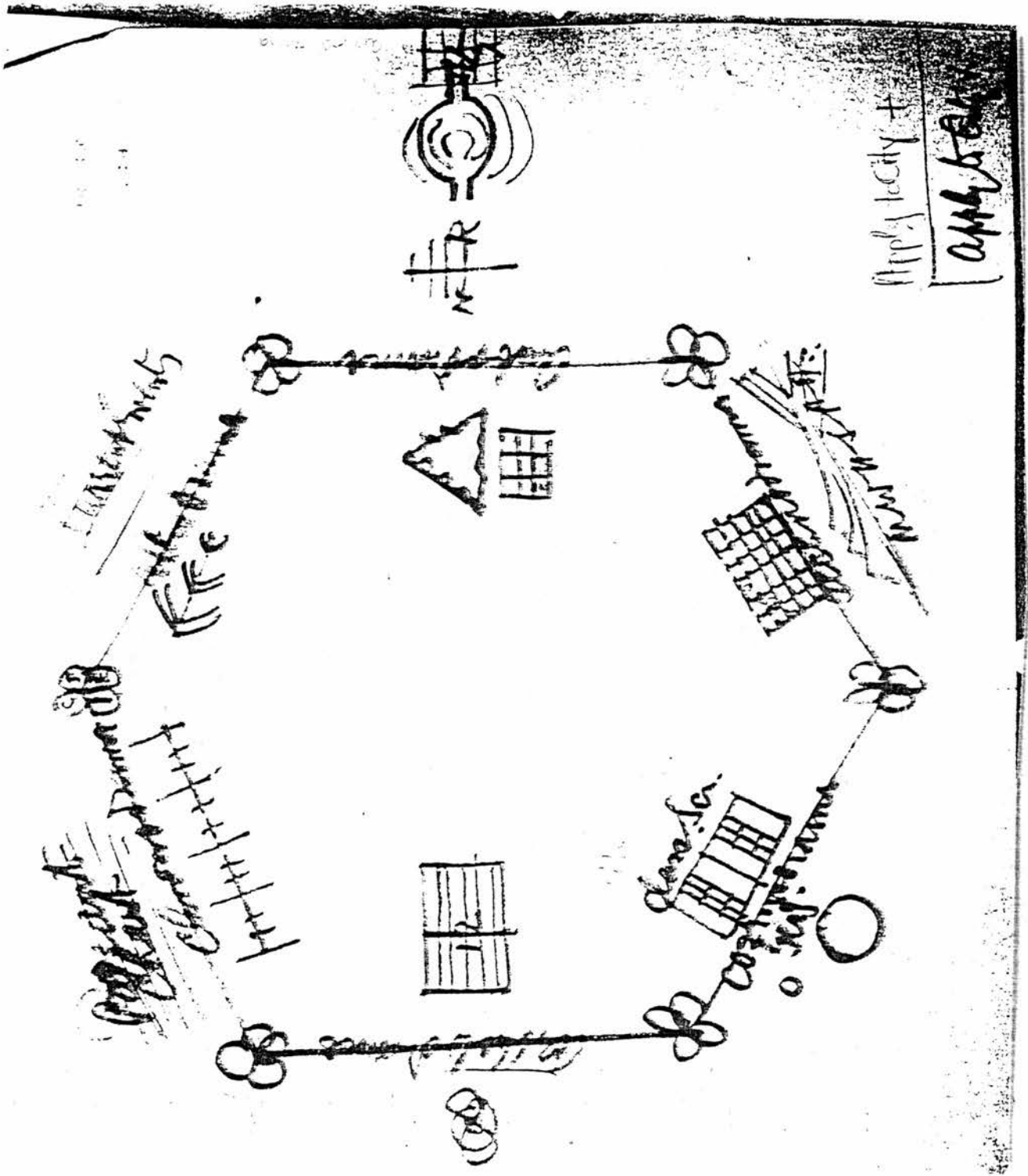
Figure 8.26
The Hexagon Crystal of Life, sketch by Patrick Geddes, not dated.
(SUA, T-GED 14/1/37)
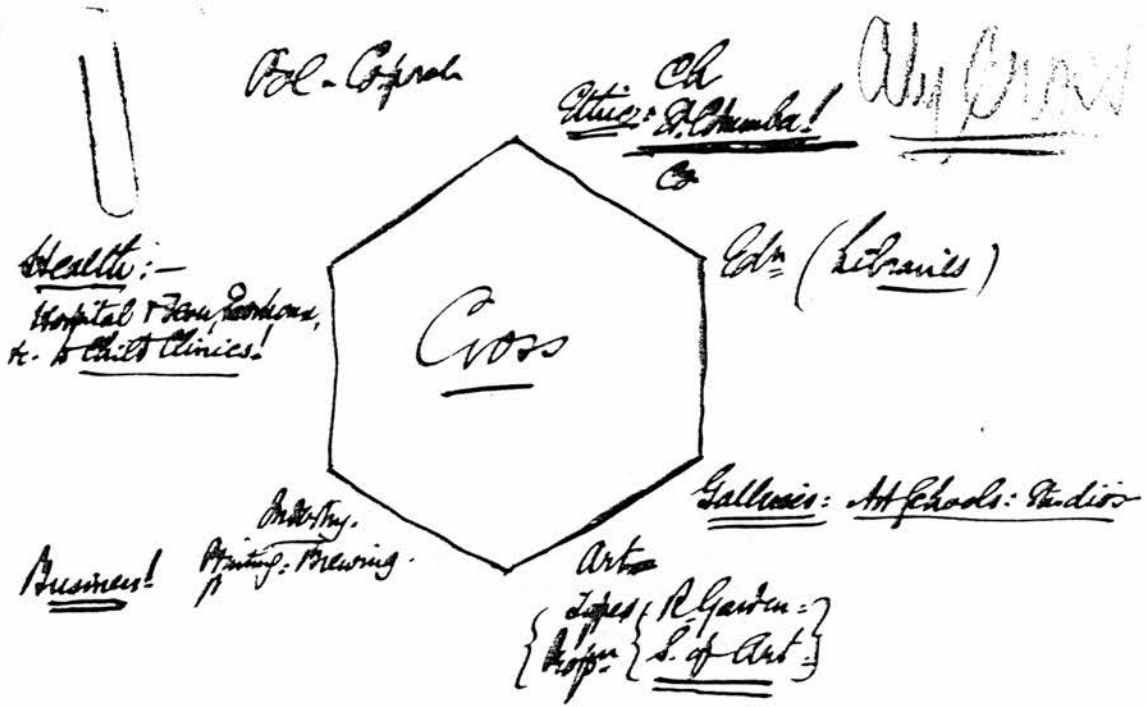
Figure 8.27
The City Cross - The Hexagon Crystal of City Life, sketch by Patrick Geddes.
(SUA, T-GED 14/1/37)
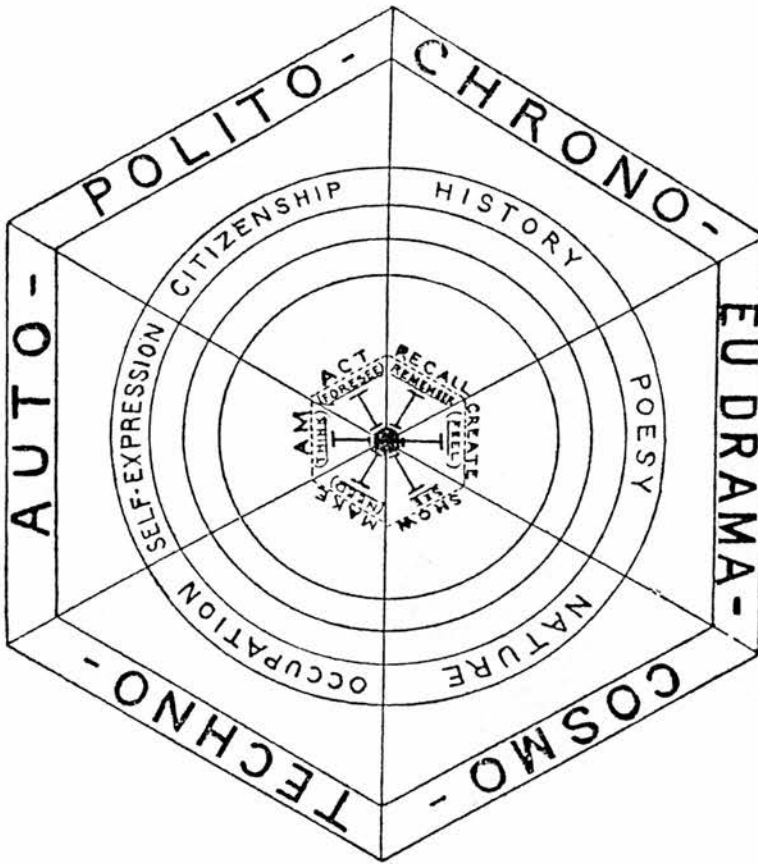
Figure 8.28
Hall of Vision - the Hexagon Crystal of Life as "The Scholar's Ideal of Life's Six-Fold Drama".
(Abercrombie, *The Coal Crisis*, (appendix B) p. xxii)
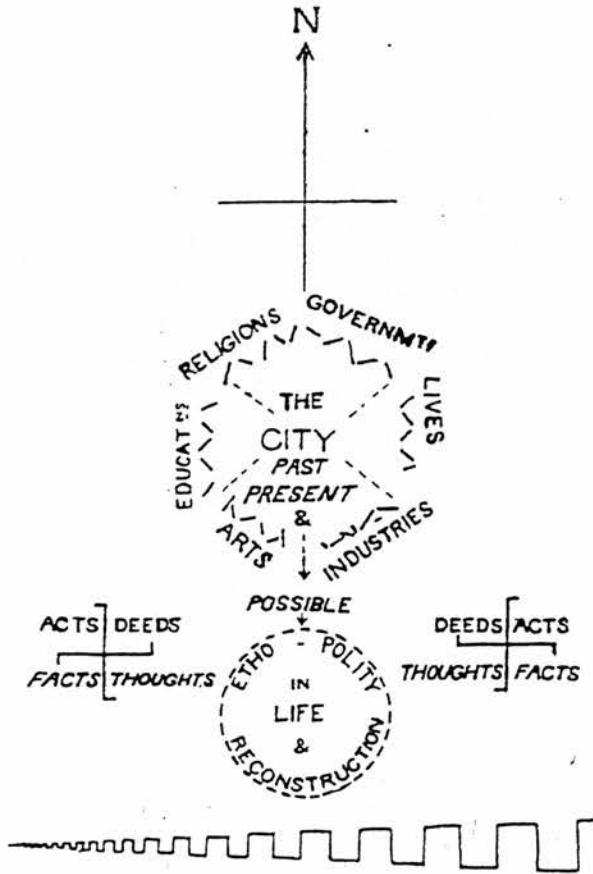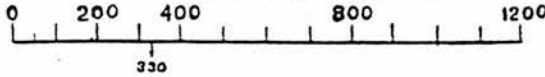
Figure 8.29
The hexagon as a symbol for the City as Organic Unity as illustrated on the plan for Indore by Patrick Geddes.
(Geddes, *Indore report*, I, plan x)
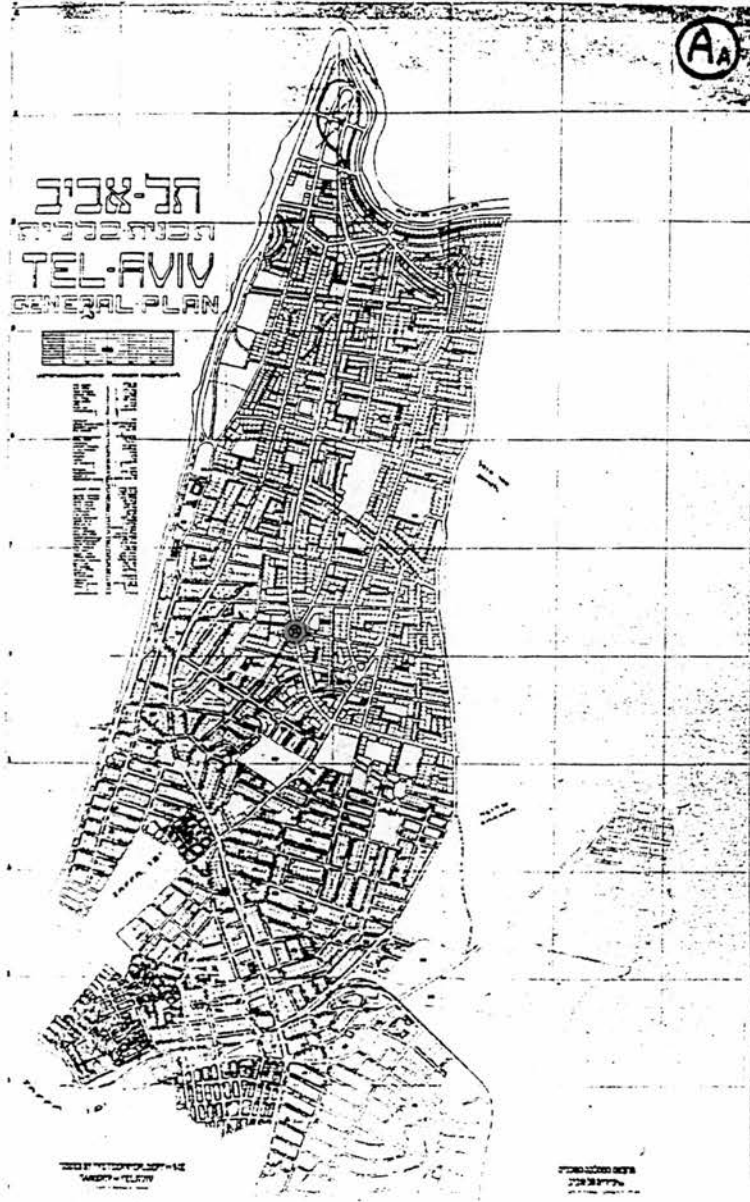
Figure 8.30
Hexagon Square at the centre of Geddes's master plan for Tel Aviv
(Collection Volker Welter)
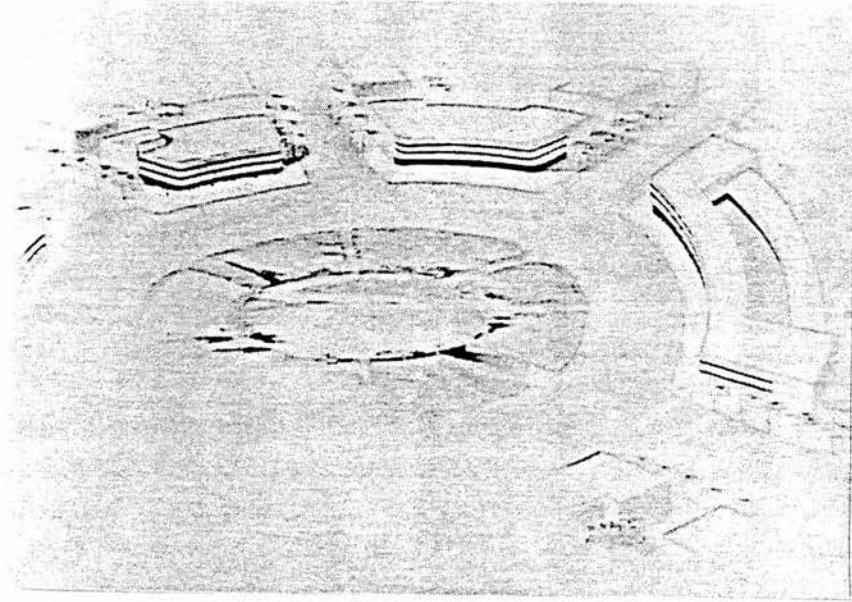
Figure 8.31
Dizengoff Square in Tel Aviv
Above: winning competition design by Genia Averbouch, 1935
Below: the built square, c. 1940s.
(Michael Levin, *White City International Style Architecture in Israel A Portrait of an Era* (Tel Aviv: The Tel Aviv Museum, 1984), p. 10)
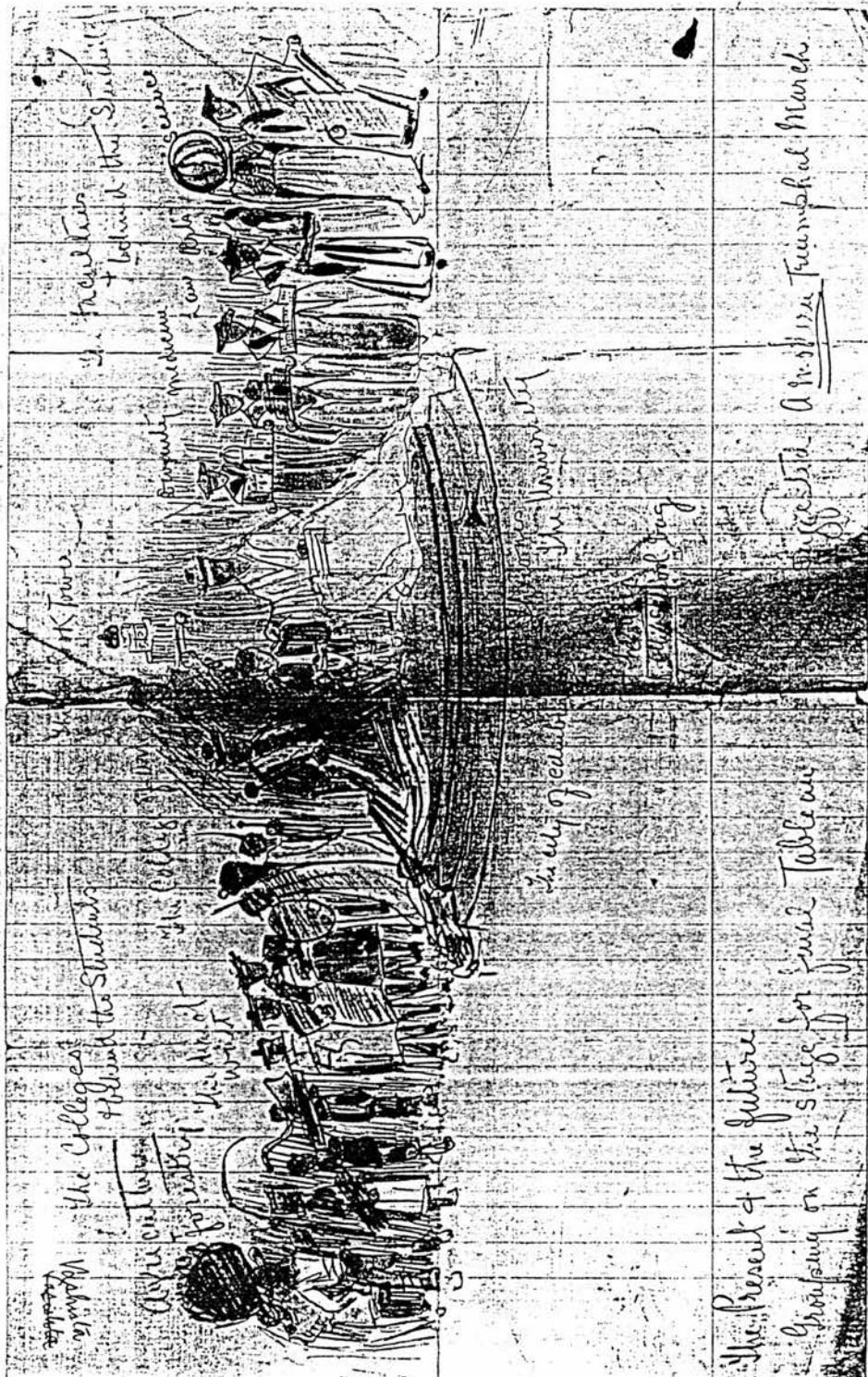
519

Figure 8.32
Celebrating the City - Sketch for the closing scene of the Masque of Learning showing
the unison between *Alma Mater* (right) and *Mater Civitatis* (left), not dated, unknown
artists.
(SUA, T-GED 12/1/112)
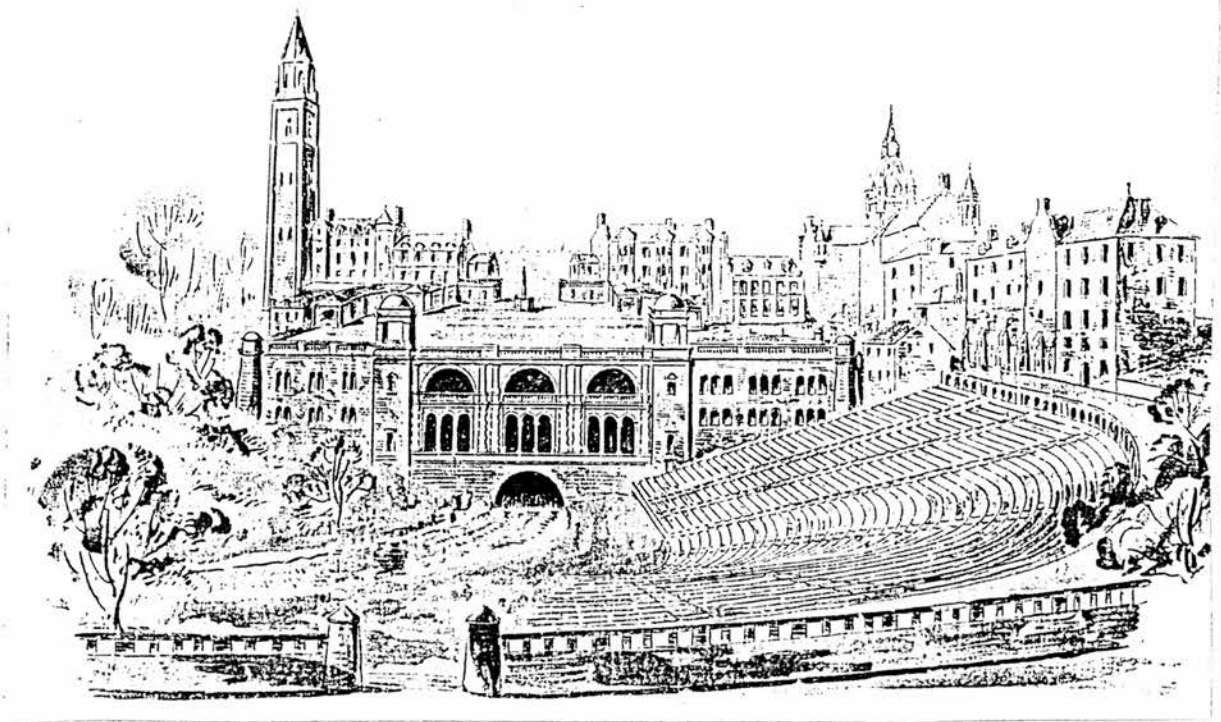
Figure 8.33
Perspective view of the new civic centre in Pittencrieff Park at Dunfermline, by Patrick
Geddes and George Shaw Aitken, 1904. To the right the tribunes of the amphitheatre,
the stage was to be temporarily moved into the river when needed. In the background
the Carnegie Square with the city cross at its centre, and a Music Hall underneath.
(Geddes, *Dunfermline report*, p. 189)

Figure 8.34
Pittencrieff Park Dunfermline, plan by Patrick Geddes, 1904. The buildings to the
right accommodate the history museums, library and the Nature Palace, to the north
are the amphitheatre and the Carnegie Square, to the bottom and left are various
sportsgrounds and theme gardens.
(Courtesy of the Carnegie Dunfermline Trust)
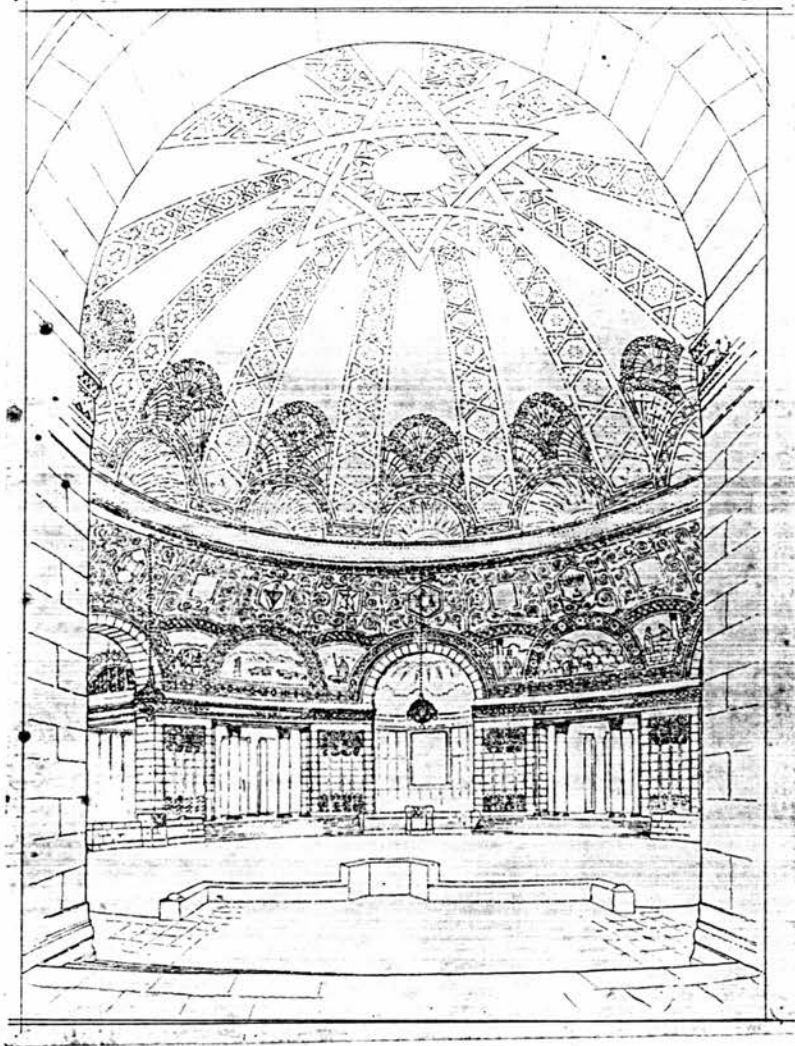
Figure 8.35
Interior view of the Great Hall of the Hebrew University, Jerusalem, by Patrick
Geddes, Frank C. Mears and Benjamin Chaikin, c. 1919-1920. The decorative
program is a composition of the Star of David, Geddes's hexagon symbol, and
representations of the natural occupations like the shepherd.
(Courtesy of Hugh Crawford)
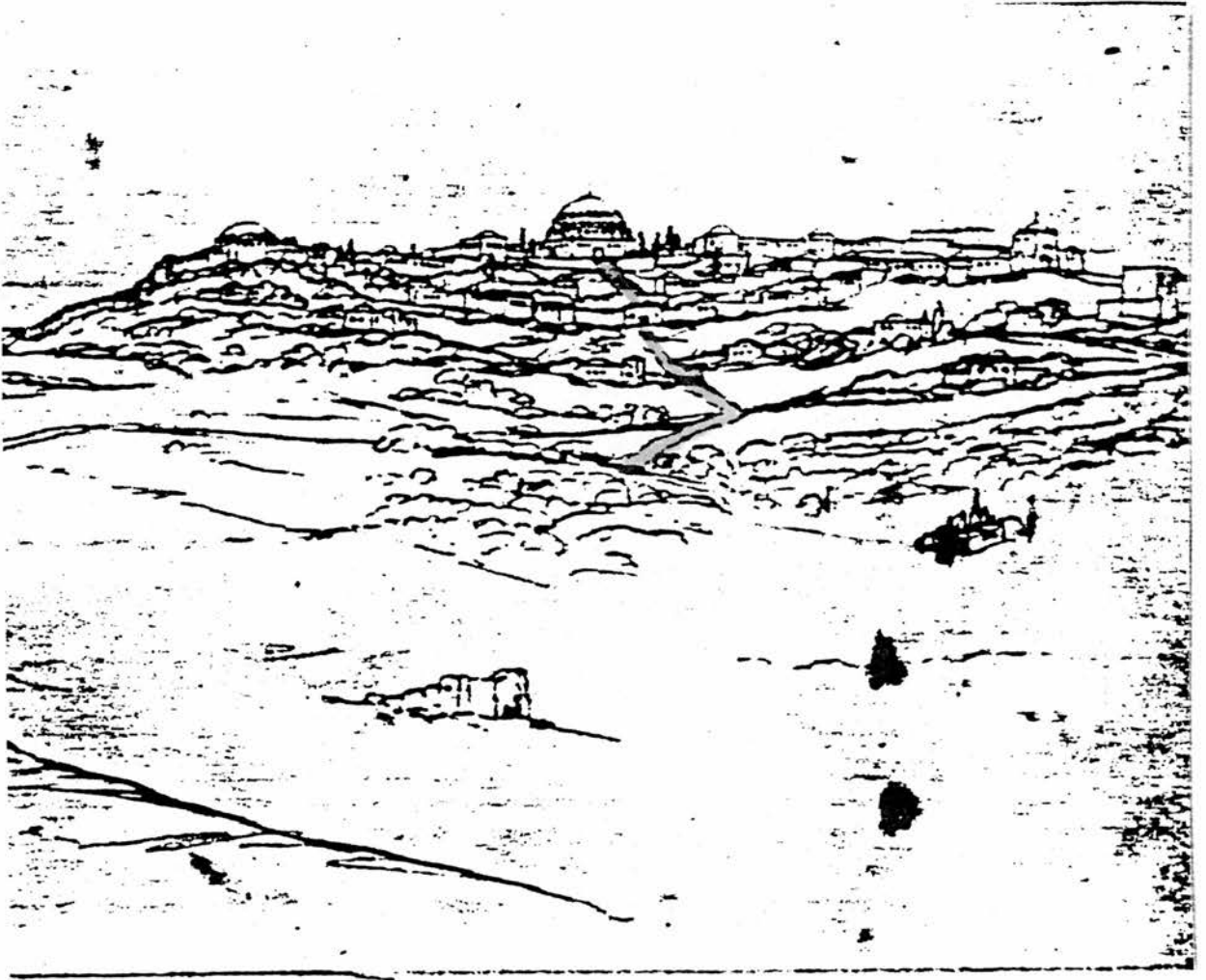
Figure 8.36
Detail of a perspective by Patrick Geddes, Frank C. Mears and Benjamin Chaikin
showing a distant view of the Hebrew University at Jerusalem, c. 1919-1920. The
street running up to the Great Hall was the sacred way, entering the university
complex halfway up the hill through a gate.
(Courtesy of Hugh Crawford)
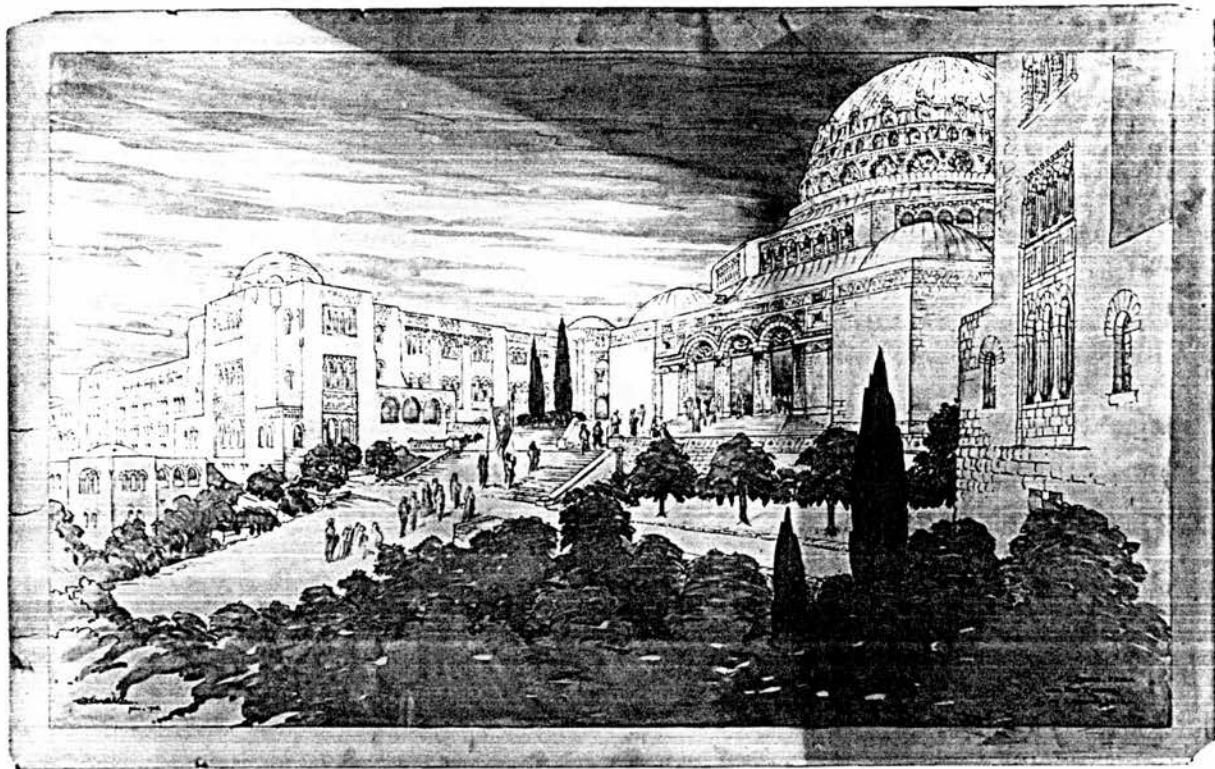
Figure 8.37
Perspective view of the flight of steps leading up to the Great Hall of the Hebrew
University, Jerusalem, by Patrick Geddes, Frank C. Mears and Benjamin Chaikin,
drawing by S. Carus-Wilson, 1928.
(Courtesy of Hugh Crawford)
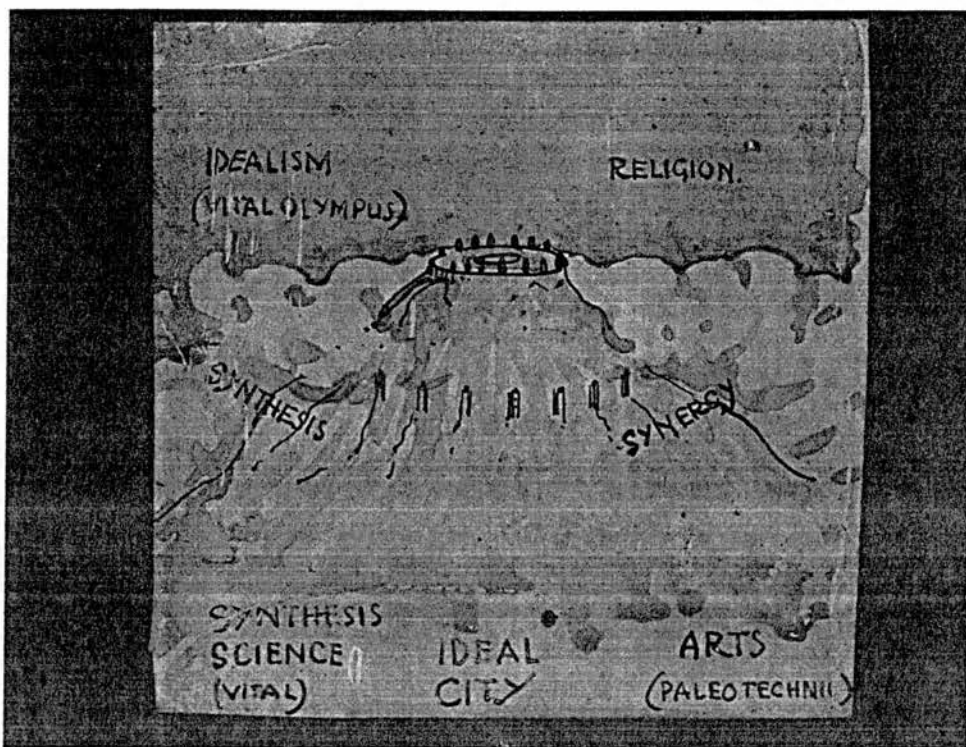
Figure 9.1
The Temple of the Greek Gods set above the Ideal City.
(SUA, T-TYR (Acc. 224), box 1, slide no. 28)
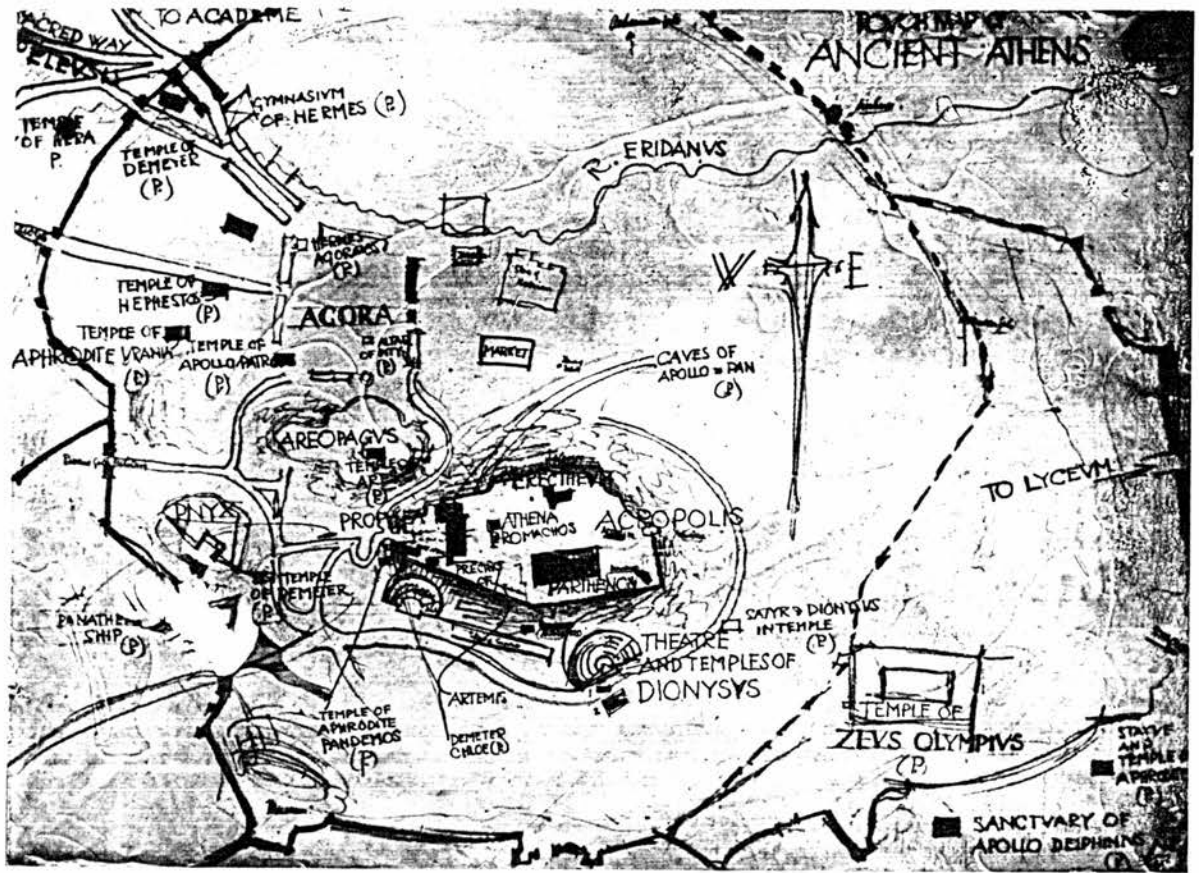
Figure 9.2
Sketch map of Ancient Athens - showing the Acropolis and the distribution of other
temples, public buildings and spaces in Athens. From a collection of lantern slides by
Frank C. Mears.
(Royal Commission on the Ancient and Historical Monuments of Scotland)
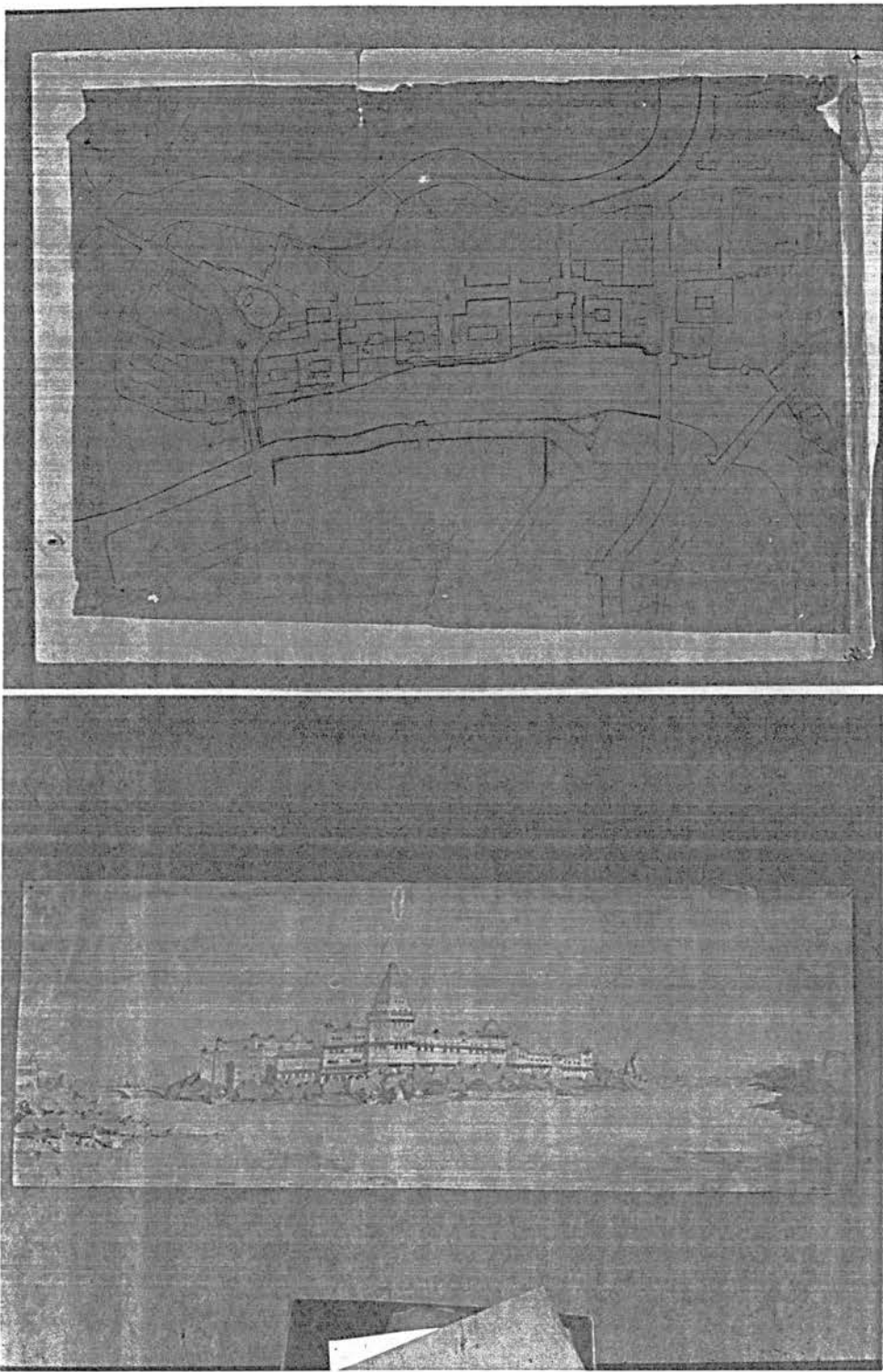
Figure 9.3
The University of Central India as the City Crown of Indore. Siteplan (anonymous)
and perspective water-colour (Frank C. Mears, 1920).
(SUA, T-GED 25/1/221A; 25/2/49)
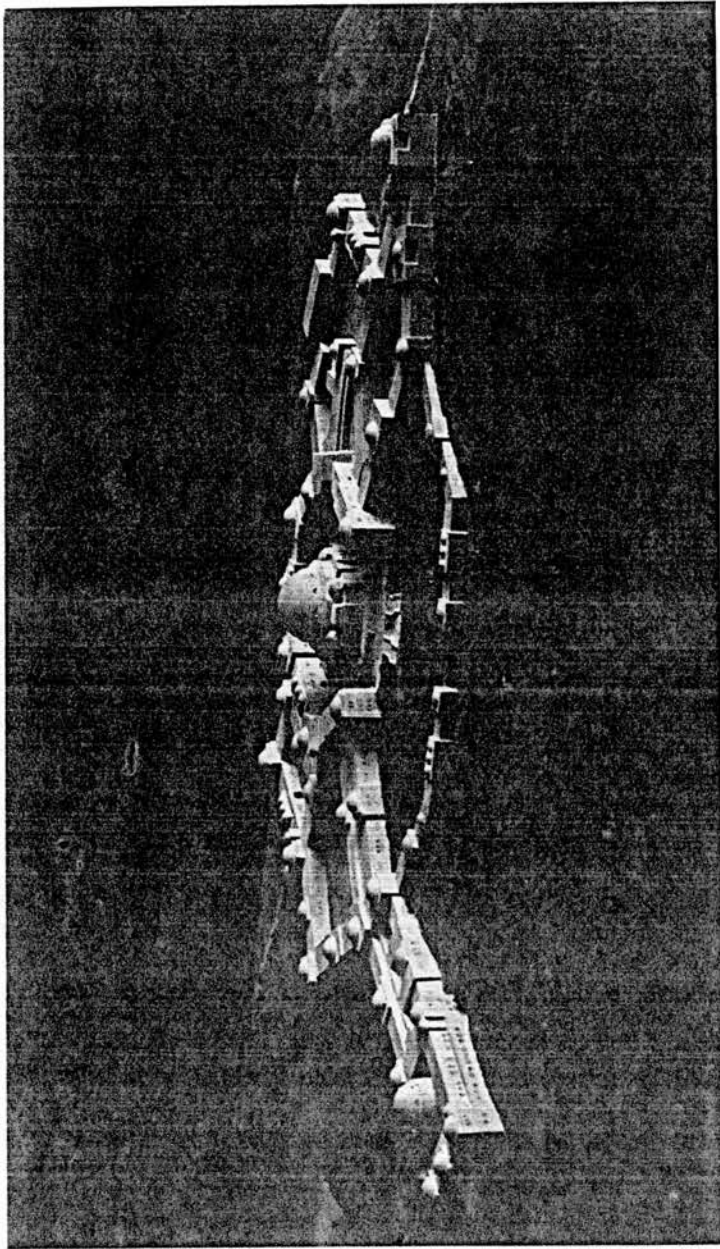
Figure 9.4
The Hebrew University on Mount Scopus as City Crown of Jerusalem. Model (1919)
by the sculptor Avraham Melnikoff (1892-1960) after the design by Patrick Geddes
and Frank C. Mears.
(SUA, T-GED 25/4/500)
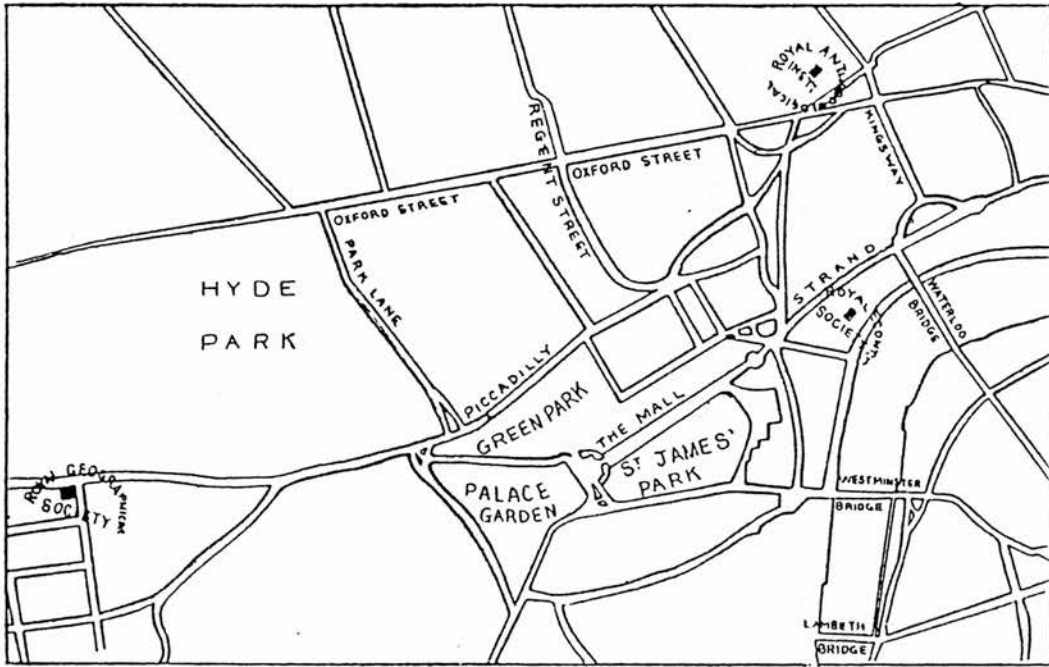
Figure 9.5
Map showing the physical separation of the headquarters of the Royal Geographical
Society, the Royal Economic Society, and the Royal Anthropological Society in
London.
(Geddes, *Co-ordination of the Social Sciences*, p. 56)
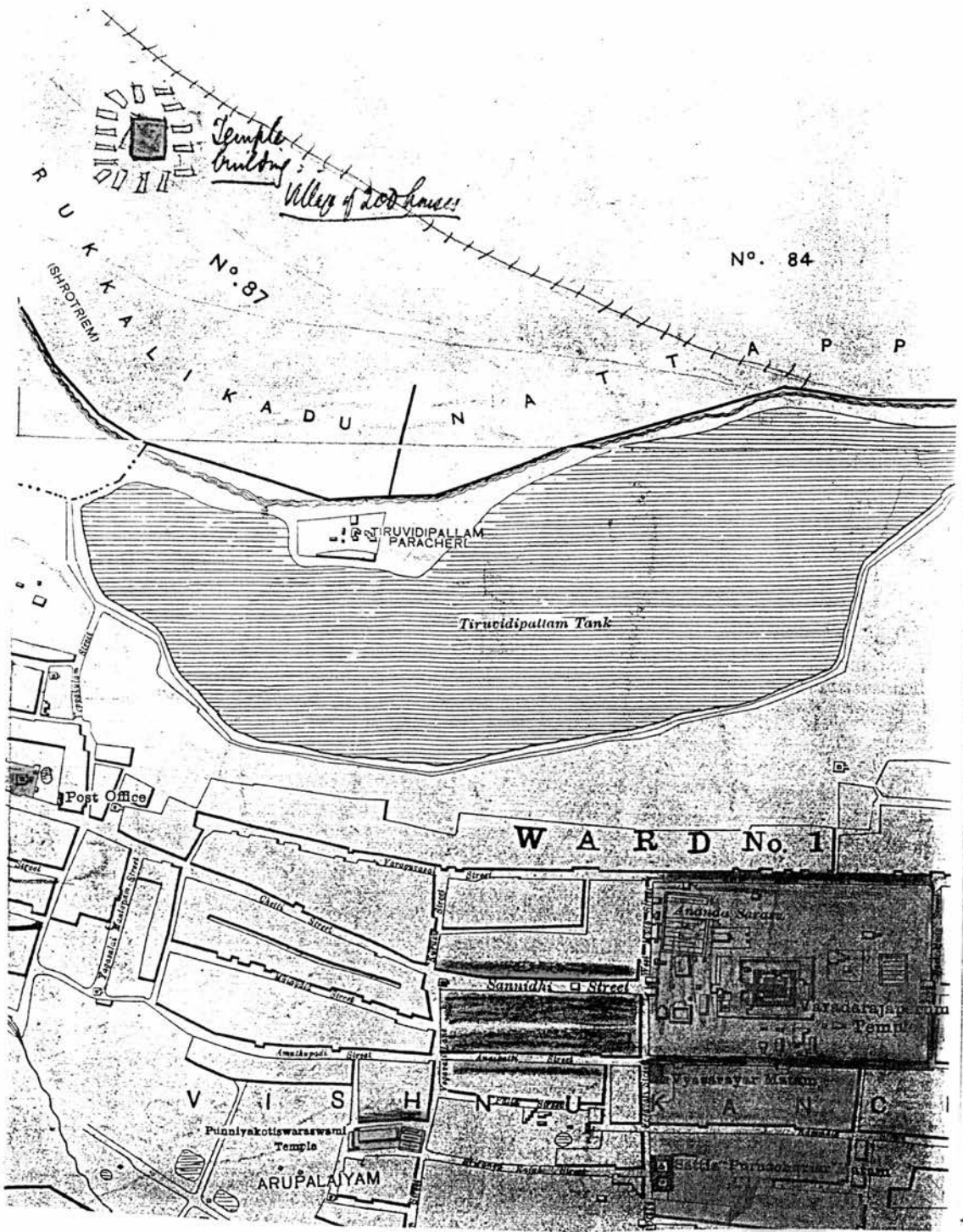
Figure 9.6
Map of Conjeeveram, India, with a proposal by Geddes for an extension to the north
east of Ward No. 2. Temple buildings are coloured yellow, ceremonial streets red.
(Colour scheme according to original map).
(SUA, T-GED 25/1/208)
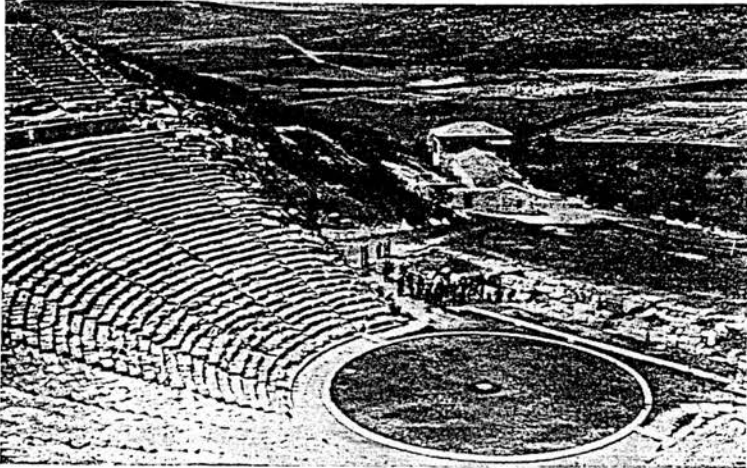
(b) Theatre attached to shrine of Asclepius, Epidaurus
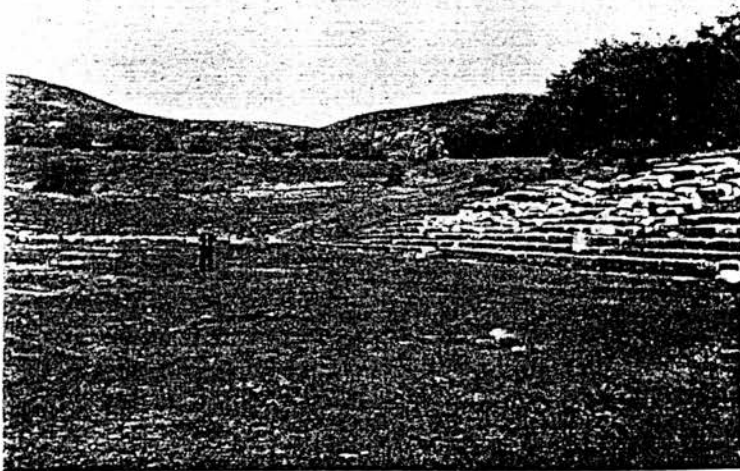
(b) Stadium attached to shrine of Asclepius at Epidaurus

Figure 9.7
Top: Amphitheatre at Epidaurus next to the Temple of Asclepius.
Bottom: Stadium (Gymnasium) at Epidaurus next to the Temple of Asclepius.
(Wycherley, *How the Greeks built Cities*, pl. XIIIb, pl. XIIb)

532
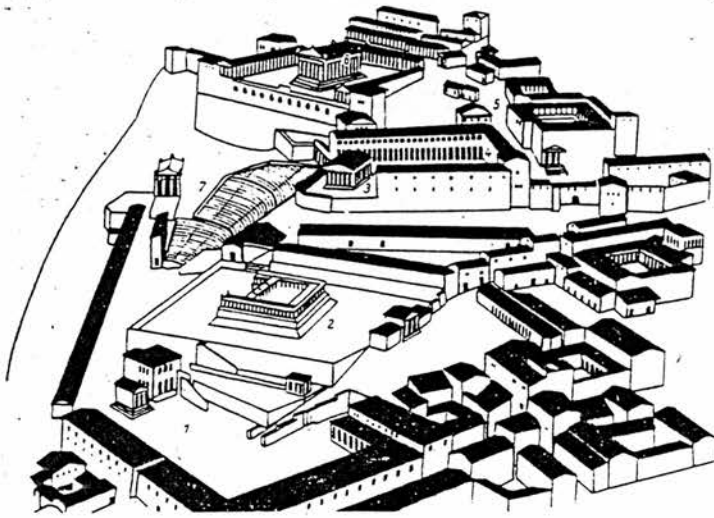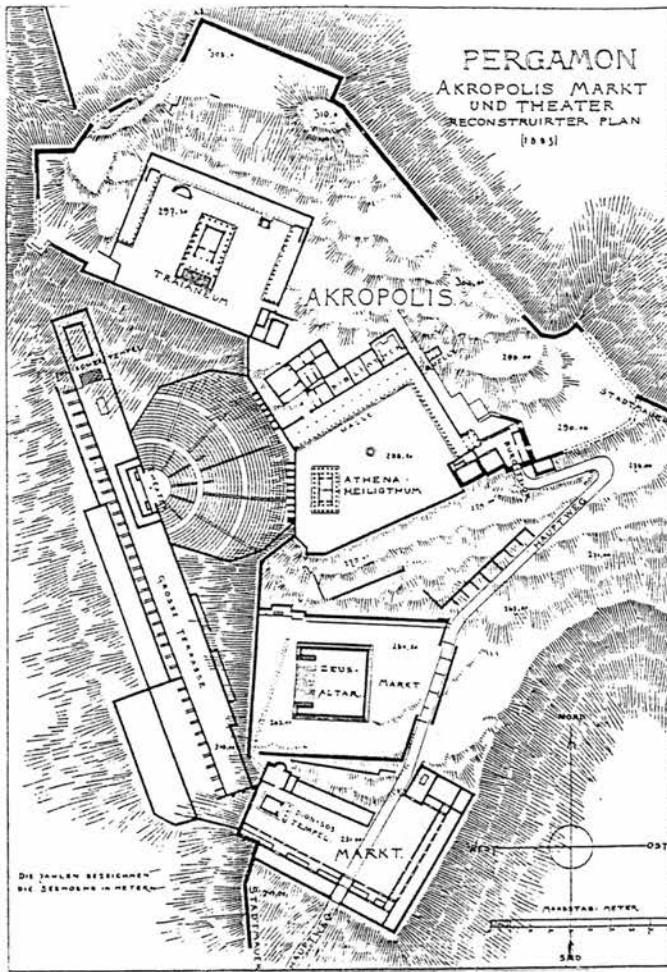
Figure 9.8
The Acropolis of Pergamon, site plan from 1885, and perspective reconstruction.
1 Agora, 2 Zeus Altar (Pergamon Altar), 3 Temple of Athena, 4 Library, 5 Kings
Palace 6 Temple of Trajan.
(Site plan: Durm, *Baukunst der Griechen*, p. 449)
(Perspective: Zinserling, *Abriß der griechischen und römischen Kunst*, p. 215)

533
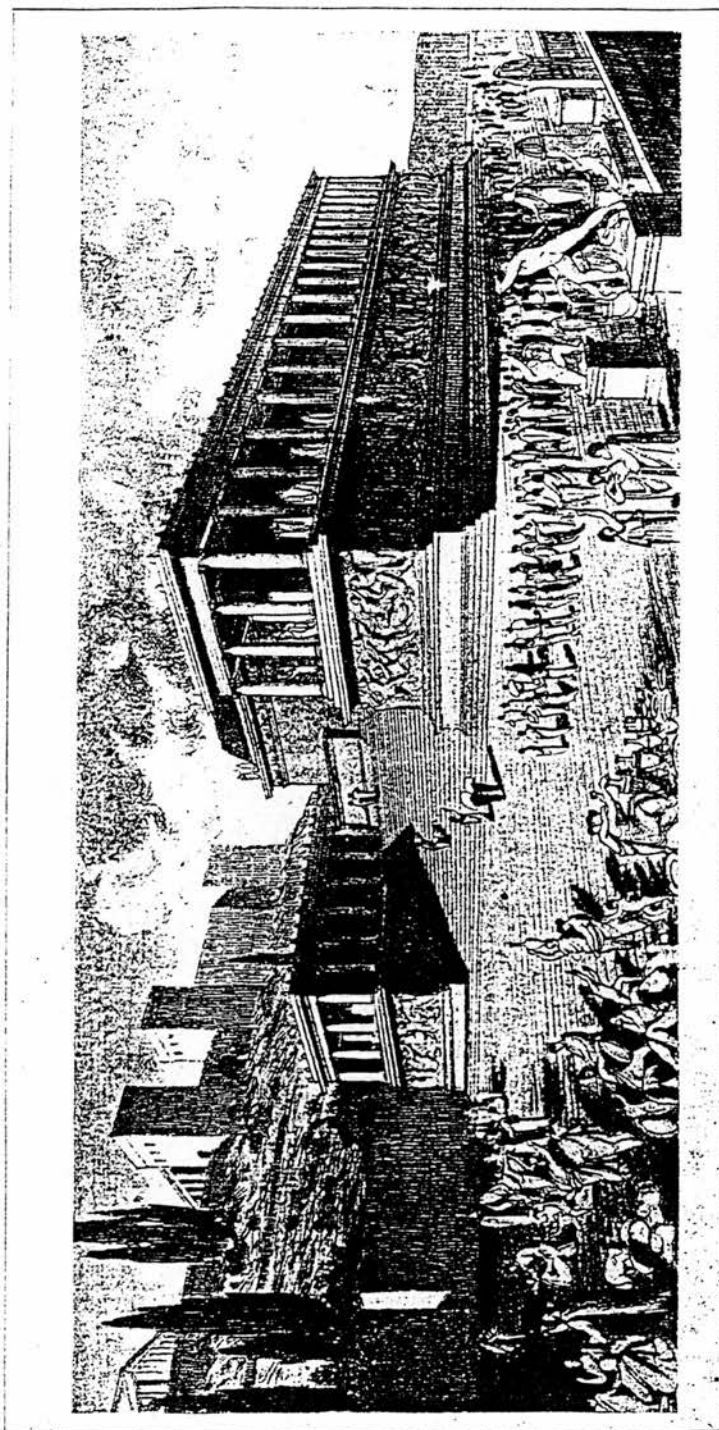
Figure 9.9
Zeus (Pergamon) Altar at Pergamon - Reproduction of a reconstruction, from
Geddes's collection of images of ancient Greek cities.
(SUA, T-GED 25/3/283)

Figure 9.10
The "true" plan of the City of Edinburgh - plan showing the cultural Acropolis of
Edinburgh.
(Drawing by Volker Welter)

REALISED PROJECTS
(built or owned by Geddes)

1 Ramsay Garden
2 Mound Place 1-2
3 Buildings Ramsay Lane
4 Outlook Tower and Garden
5 Cannonball House
6 Boswell's Court
7 James Court
8 Lady Stair's House
9 Blackie House
10 Wardrop's Court
11 Old Edinburgh Art Shop
12 Riddle's Court
13 Brodie's Court
14 St. Giles House
15 Johnston Terrace Garden
16 Castle Wynd Garden
17 Connachie's Close Garden
18 Westport Garden
19 Greyfriars Garden
20 Advocates Close
21 Chessel's Court Garden
22 Huntly House/Bakehouse Close
23 Reid's Court Garden
24 Watergate Housing
25 Abbey Strand Cottages

UNREALISED PROJECTS

I Ramsay Garden Studios
II Sculpture Gallery
III Tower Block
IV University Quadrangle
V Public Meeting Hall
VI Castlehill Building
VII National Library
VIII War Memorial
IX National Institute of Geography
X National Monument
XI Holyrood Hall

DECORATIVE/MONUMENT SCHEMES (+realised)

a Cast Iron Dragon+
b Witches Well+
c Scottish History Procession
d Burning Bush Relief
e Witches/Star of David Panel+
f T. Carlyle Bust
g Bruce Statue
h Knox Statue
i Wallace Statue
j St. Columba Statue
k 'Vivendo Discemus' Carving+
l Cast Iron Dragons+
m Blackie Portrait Medaillon+
n Kennedy-Fraser Memorial

LARGE PLAN

■ realised/unrealised projects by Patrick Geddes

○ exact extent of project unknown

◌ exact location of project unknown

▨ open space/garden

BOTH PLANS

▥ existing educational, cultural, religious, and municipal buildings

SMALL PLAN

▨ realised projects

☐ unrealised projects

EDINBURGH's OLD TOWN AS
A CULTURAL ACROPOLIS
[after Patrick Geddes]

edinburgh, december 1996

volker m. welter (copyright)

vw96

VIII 15 16 17 18 19 20 21 22 23 24 25 IX X XI

vw 96

Figure 9.11
The City Crown of Edinburgh - Ramsay Garden as seen from the south.
(Photograph by Volker Welter)

Figure 9.12
Sketch of Holyrood Hall, a Cloister at the eastern end of the Royal Mile,
complementary to Ramsay Garden. The central part of the building obviously
influenced by Alan Ramsay's hexagon shaped home incorporated in Ramsay Garden.
[Geddes, *Town and Gown Undertakings*, p. 3 (SUA 12/2/82)]
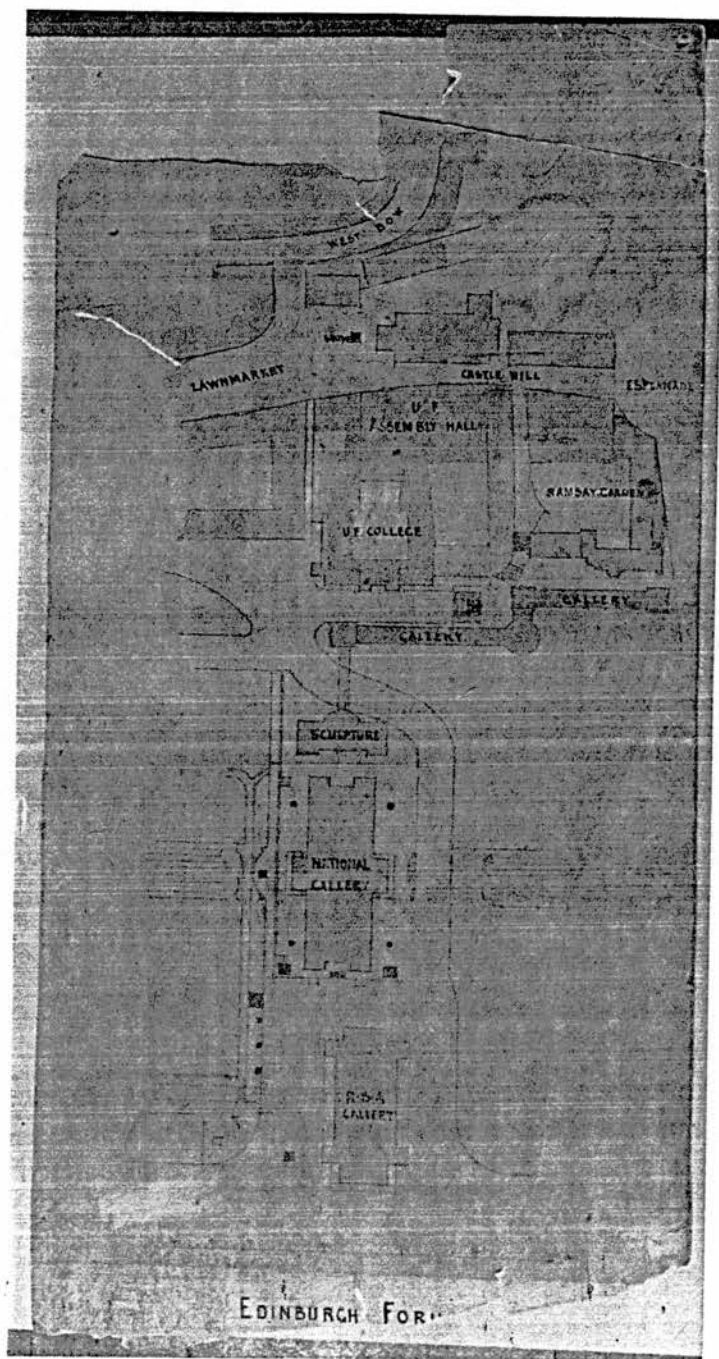
537

Figure 9.13
The proposed sculpture gallery between Ramsay Garden and the Scottish National
Gallery, siteplan by George Shaw Aitken for Patrick Geddes.
(SUA, T-GED 25/1/584)
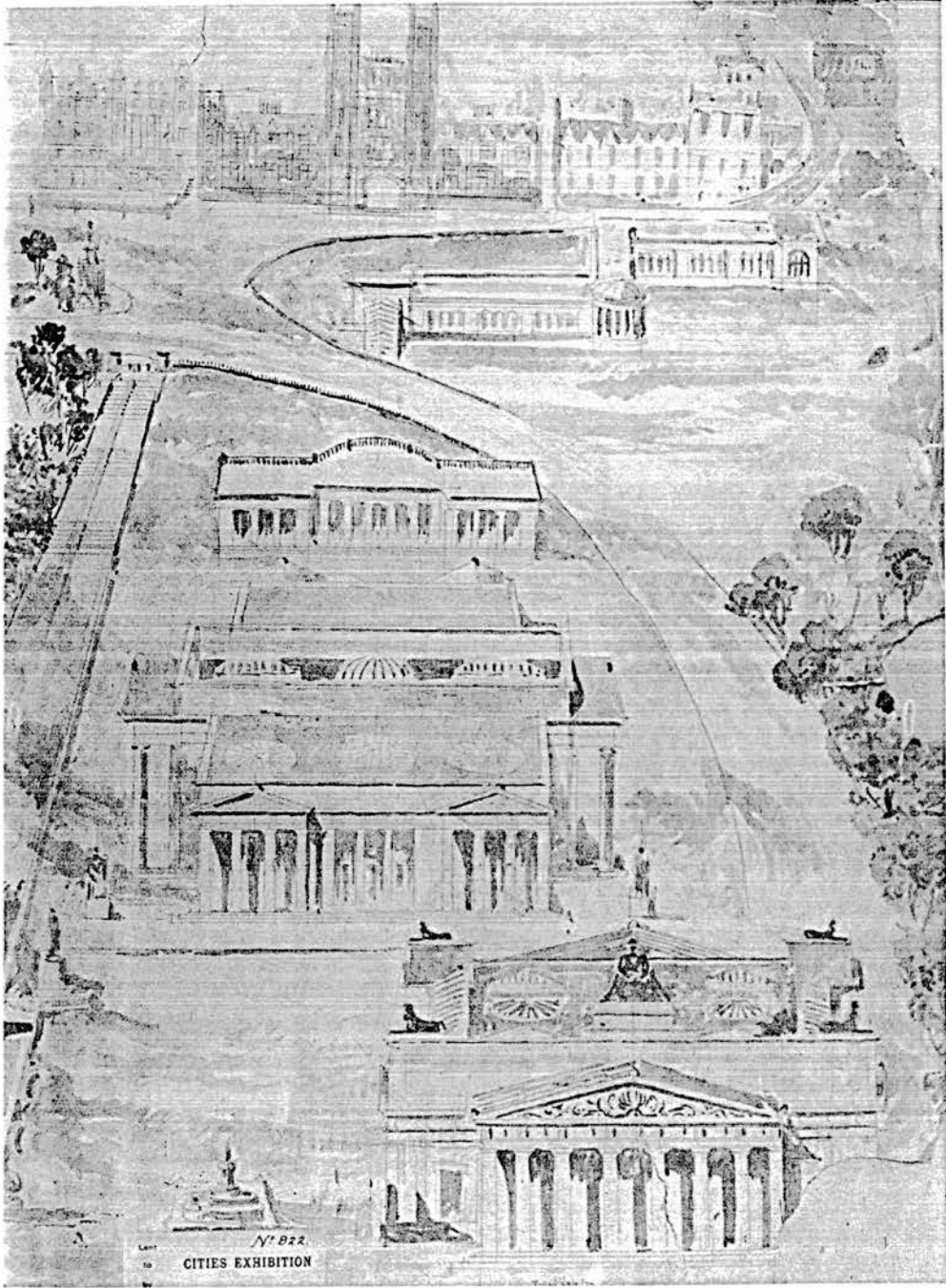
Figure 9.14
The proposed sculpture gallery between Ramsay Garden and the Scottish National
Gallery, bird's eye view by George Shaw Aitken for Patrick Geddes.
(SUA, T-GED 25/2/20)
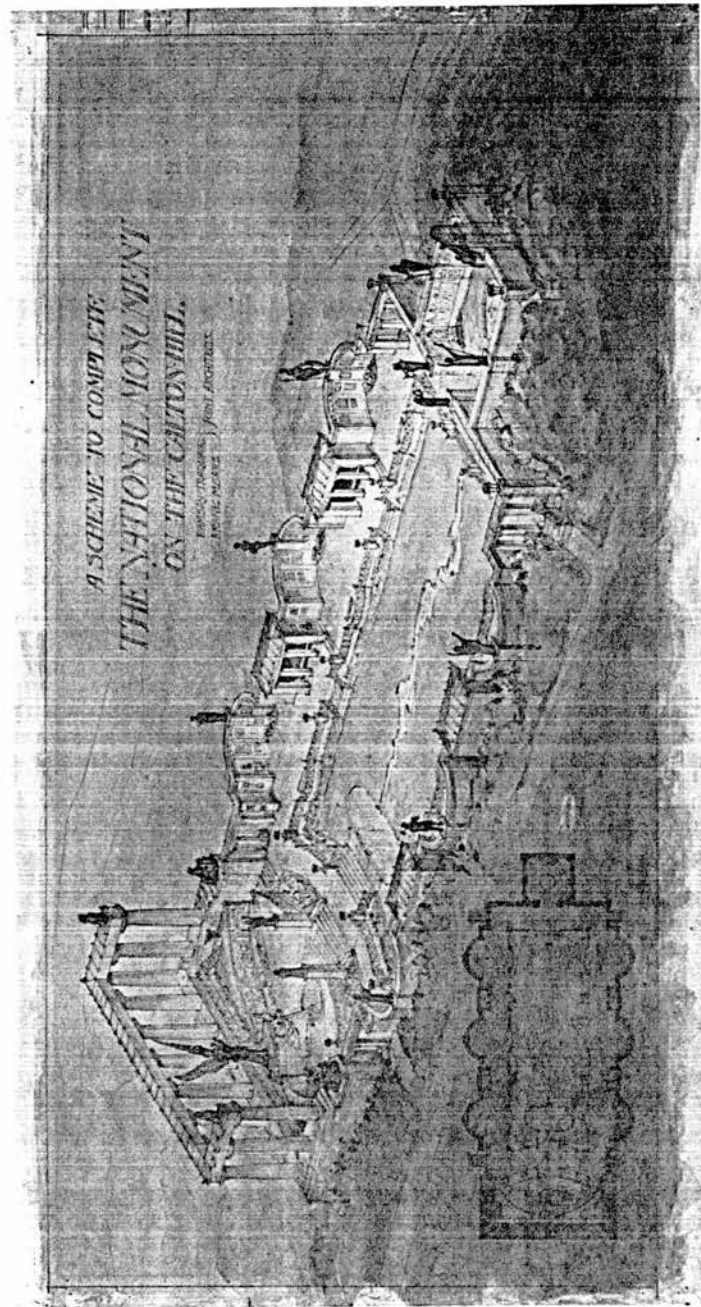
Figure 9.15
'A Scheme to Complete The National Monument on the Calton Hill' in Edinburgh. A
project by Ramsay Traquair and Frank C. Mears from 1912. Perspective water-colour
very likely by Ramsay Traquair.
(Courtesy of Hugh Crawford)
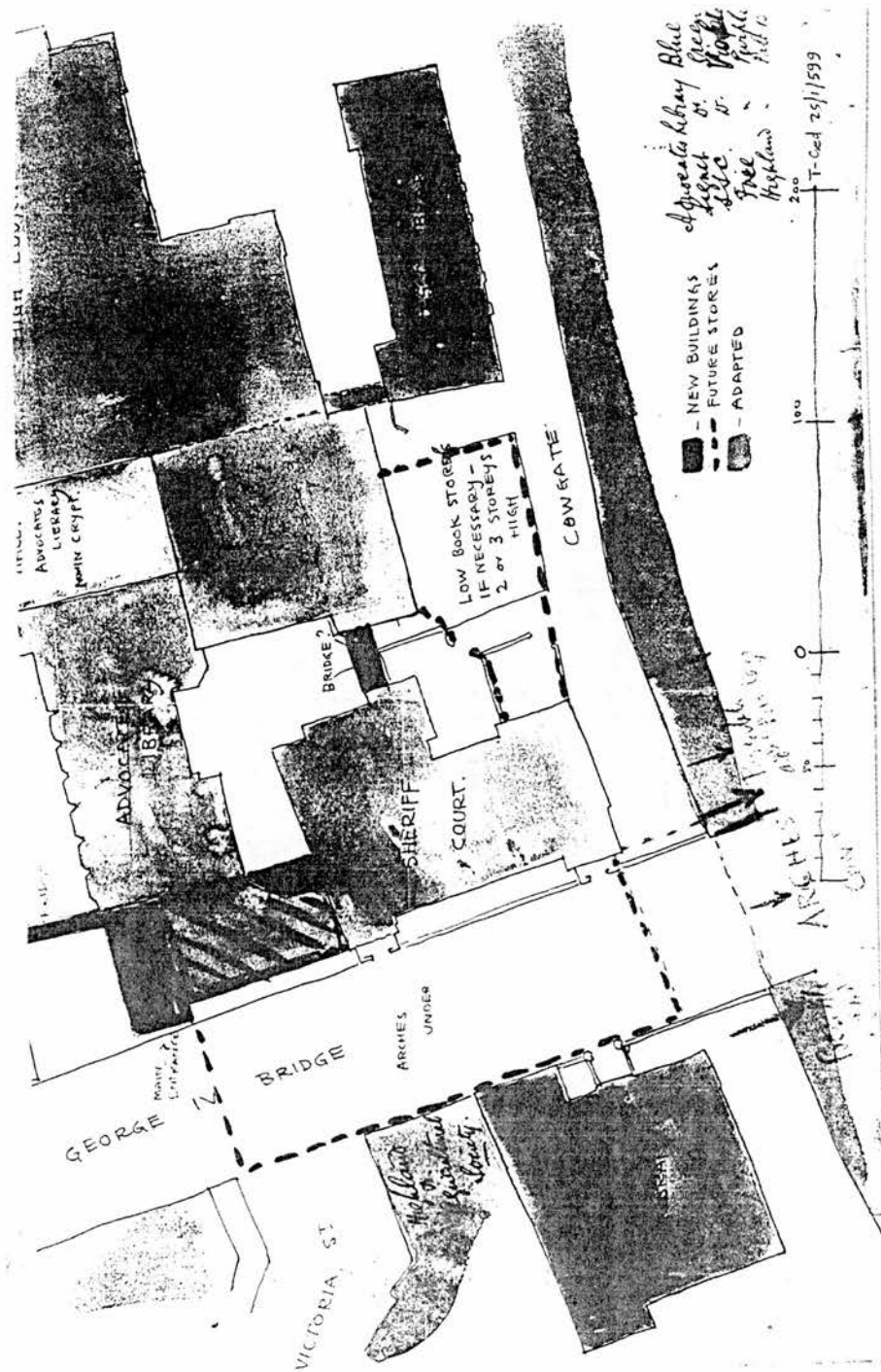
Figure 9.16
The proposed National Library of Scotland, a merger of existing libraries, as a
component of Edinburgh's cultural Acropolis, sketch by anonymous for Patrick
Geddes, c. 1911/12 (colours according to original sketch).
(SUA, T-GED 25/1/599)
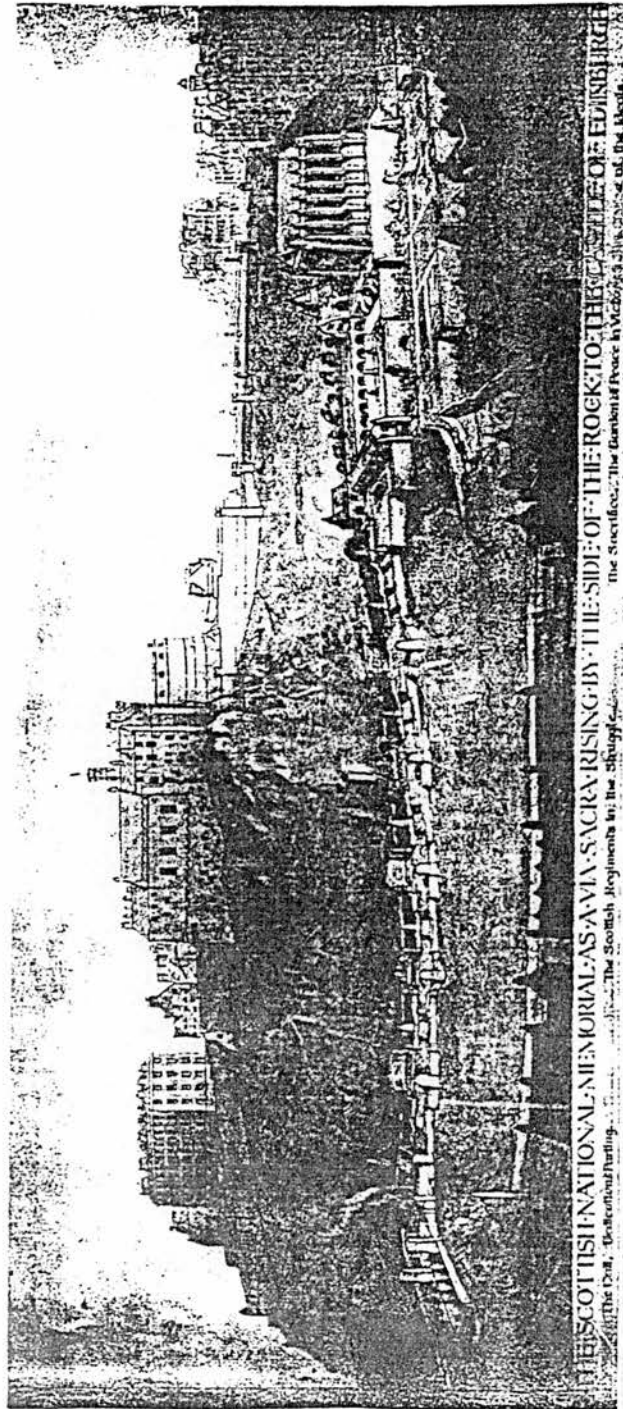
Figure 9.17
Perspective drawing of the 'Scottish National Memorial to Scots who Fell in the Great War' by Frank C. Mears, 1919.
(Mears, *Via Sacra*, final page)

APPENDIX

Parts of this thesis have been published in *Edinburgh Architecture Research* and in *Architectural Heritage*.

Volker Welter, *'The Republic* of Patrick Geddes', *Edinburgh Architecture Research*, 21 (1994), pp. 98-118.

Volker Welter, 'Patrick Geddes and the Organic City', *Edinburgh Architecture Research*, 22 (1995), pp. 11-30.

Volker Welter, 'History, Biology and City Design - Patrick Geddes in Edinburgh', *Architectural Heritage*, VI (1996), pp. 61-82.

The material in these articles is to be found in its entirety in this thesis.

A further essay treating additional material related to Patrick Geddes in Palestine has been published.

Welter, Volker M., 'The Geddes Vision of the Region as City - Palestine as *Polis*', in *Social Utopias of the Twenties, Bauhaus, Kibbutz and the Dream of the New Man*, ed. by Jeannine Fiedler (Wuppertal: Müller + Busmann, 1995), pp. 72-79.

A photocopy of this essay is enclosed in the appendix.
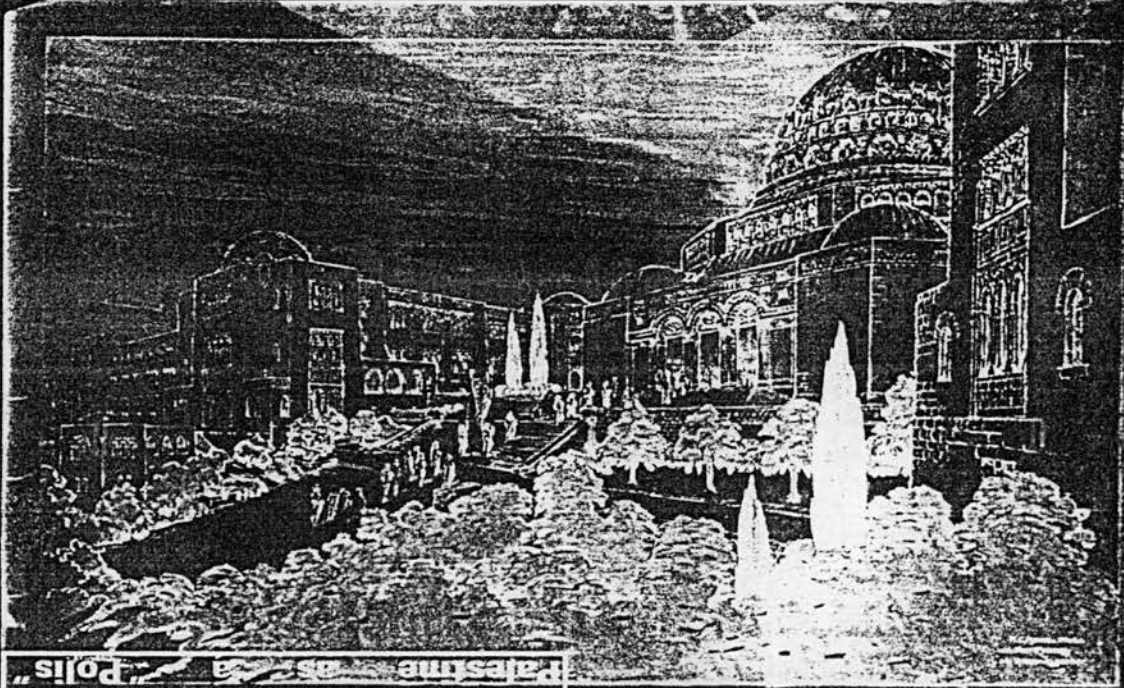
The Geddes Vision of the Region as City – Palestine as a "Polis"

Patrick Geddes was one of the first architects and town planners engaged by the Zionists after the Balfour-Declaration to prepare the resettlement of Palestine by the Jewish people. Although living in India at that time, Geddes was a well known figure in Great Britain as a pioneer, actively engaged in the establishing of town planning as an independent profession. His approach to city design, as Geddes called his profession, embraced both the material and the immaterial side of human life and society.

The underlying theory of the city Geddes developed after the late 1880's was a merger between biological ideas like the natural region and cultural-philosophical concepts like the Greek *polis*. Geddes seized the offer from the Zionists as an opportunity, late in life, to design finally a whole region as a city. The scattered references to Greek cities in his city design reports, for example the Tel Aviv report of 1925, or his enthusiasm for the Great Hall as the main feature of his design for the Hebrew University acquire a particular meaning if approached through a comparison with the characteristics of the *polis*. The strong idealistic trait in Geddes's city design work was partly responsible for his engagement by the Zionists, supported by Geddes's old friend David Eder.

Biographical Sketch

Geddes was born in Ballater in Aberdeenshire in the North of Scotland in 1854. He died in 1932 in Montpellier in the South of France. During his life he lived in Scotland, England, India and France. Geddes's academic education was in the field of biology, although he never finished his studies with a proper academic degree. He studied zoology in London under Thomas H. Huxley in the 1870's and lectured during the next decade in botany and zoology at Edinburgh University. From 1888 to 1919 he held a professorship in botany at Dundee University in Scotland.

In 1886 he moved with his wife into one of the most dilapidated houses in the Old Town of Edinburgh. This was the beginning of his involvement in slum restoration, sociology, and finally in town planning. After 1900 he spent more and more time in London where he was among the founders of the Sociological Society in 1904. In the same year he published his first town planning, or as he preferred to call it, city design report for the small Scottish town of Dunfermline, entitled "City Development: A Study of Parks, Gardens and Culture Institutes."[1]

Between 1914 and 1924 he lived mostly in India where he not only held the chair of civics and sociology at the University of Bombay but also wrote at least twenty town planning reports. During this period he visited Palestine three times: in 1919 when he was originally commissioned by the Zionist organization to work on the Hebrew University and various town planning projects, and subsequently in 1920 and again in 1925.[2] Around 1924 he returned to Europe and settled finally in Montpellier in the South of France. He occasionally returned to Great Britain, for example in 1932, when he was awarded a knighthood shortly before he died.

The list of Geddes's activities is considerably longer.[3] In Edinburgh he established the Outlook Tower as a civic laboratory, propagated public gardens in the Old Town, organized international summer meetings for students, and opened the first student run halls of residence. He also wrote historical pageants, fought for university reform and developed odd folded papers which he called thinking-machines. Furthermore, he commissioned designs for Temples of Life, propagated the return of the Greek Gods and planned Gardens of the Nine Greek Muses.

The driving idea behind all his activities was to unite "life" in a Bergsonian sense again into a whole, after the 19th century had torn it apart under the influence of positivistic science. In this respect he was very much akin to his time. Life for Geddes was more than a biological function, it was a social activity, which should follow Kropotkin's principle of "Mutual Aid." A society actively pursuing the aim of an integrated co-operative life could, according to Geddes, take only one social and spatial form—that of a city. It seems remarkable that Geddes suggested the city as a suitable form for a human society at a time when cities were considered the worst place for human beings to be. Around 1900 cities were rarely looked upon as something positive. Probably some *flaneurs* in the tradition of Baudelaire appreciated the city as their rambling ground. And the love-hate relationship with the modern city, with the metropolis, as to be found in the writings of the philosopher Georg Simmel, in the essays of the architect August Endell, or in the Expressionist art of the 1910's and 1920's was only emerging around the turn of the century.

The type of city Geddes pursued was not the modern metropolis but a contemporary equivalent to the ancient Greek *polis*. Therefore, his preference of the word "city" instead of town, but on this account his insistence on the return of the Greek gods and muses into the cities could be explained as well. The *polis* is of course an old and constantly popular reform-model for societies in a state of crisis. From this point of view, Geddes's ideas appear less advanced but more in accordance with his own time.

39 Patrick Geddes
The Valley Section

38 Patrick Geddes
The Basic Occupations
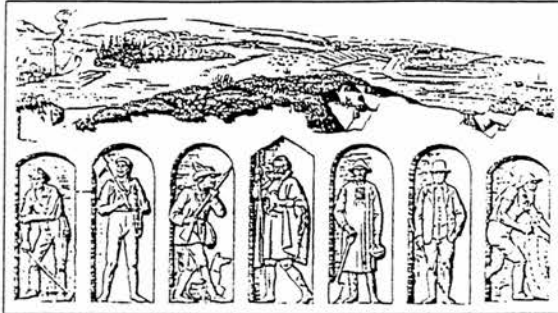
Geddes's Theory of the City

In one of his Indian reports Geddes summarized his town planning philosophy with the following words: "Town planning is not mere place-planning, nor even work-planning. If it is to be successful it must be folk-planning. This means that its task is not to coerce people into new places against their associations, wishes and interests—as we find bad schemes trying to do. Instead its task is to find the right places for each sort of people; places where they will really flourish."[4] The keywords in the quotation are: place, work and folk. Remembering that Geddes was a trained biologist it is not surprising that his notion of a place for a people derived from this very field. Geddes was deeply influenced by the theory of evolution. In contrast to his teacher Thomas H. Huxley, who was one of the fiercest defenders of the struggle of existence as the model for human relations, Geddes favoured co-operation as a possibility for human societies. In this he followed Kropotkin's anarcho-socialist model of mutual aid. However, Darwin's discovery of the natural selection as the basis of evolution emphasized the importance of the adaptation to the environment for the variety of forms that plant and animal life took in different natural regions. Geddes's notion of a place for a people was the idea of the natural region as developed in 19th century' biology and geography.

With the diagram of the valley section (ill. 39) Geddes summarized the region he had in mind. It was a section of the earth that followed a river from the hilltops via the estuary at the sea. But the implications of this diagram are more complex than they might appear at first sight, and the analysis of the valley section has to go further. Man distinguishes himself from animals through the ability to change the environment consciously through his own labour according to his needs. The emphasis on labour as the main characteristic of man and society was a common feature during the 19th century. For Thomas Carlyle labor had a kind of religious function. Whereas John Ruskin and William Morris considered labor more as a possible form of art; an approach that inspired Ruskin's
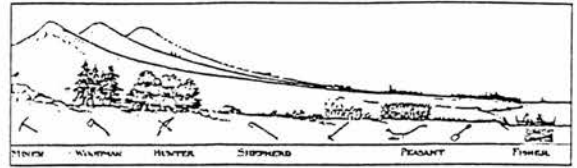
essay on the Gothic in particular, and the arts and crafts movement in general. Marx and Engels recognized labor as a means by which man raises himself above nature. Geddes held the opposite view: man should not attempt to rise above nature but should adapt himself through the work he bestows upon the environment. In the much criticized industrial city and society, exactly this adaptation had failed.

Different areas of the valley accommodated different occupations as listed at the bottom of the diagram of the valley section. These types of labor were the natural or basic occupations. (ill. 38) Of course, man also changed the environment with his work, but in Geddes's consideration of labor as the mediator between man and nature this played only a secondary role. Geddes went on analyzing the various professions in the modern town by tracing them back to these basic occupations. What seemed to be a straightforward analysis in which fishermen were regarded as forerunners of the shipping industry, revealed itself as an ideological cul-de-sac when Geddes declared the crofter as the "origin of the bank and insurance company." The crofter, struggling with poor soil in the upper parts of the valley, was forced to develop for his survival a "life-economy," as Geddes called it, and banks and insurance companies are, as well known, the institutions in which man saves money to secure his survival in case the capitalist economy brings hard times.[5]

So far the region is inhabited by human beings best adapted to nature by various occupations not deriving from the inhabitant's needs but determined by the possibilities immanent to the environment. All the inhabitants together formed a folk, the third term of Geddes's triad. They were a folk or a people because they lived in a single area, the region, and because they shared common traditions, common beliefs, common habits, in short a common culture or, to use a Marxist term, they developed a single superstructure. Thus, the natural region, the basis of the valley section, was reflected in a cultural equivalent. Going back into the history of human civilization the first cultural equivalent Geddes was able to identify was the Greek polis. The American critic Lewis Mumford, the most famous disciple of Geddes, provided the best description of the assumed identity between region and polis. Writing about the ideal polis, the Republic of Plato, he declared: "As the basis for his ideal city, whether Plato knew it or not, he had an 'ideal' section of land in his mind—what the geographer calls the 'valley section.'"[6]

Volker M. Welter
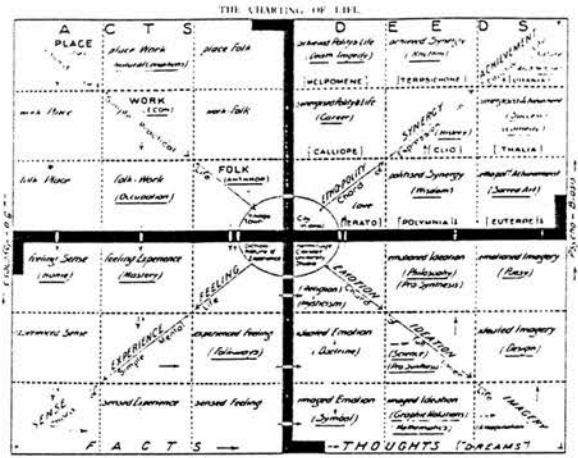
Two characteristics of the *polis* were of utmost importance for Geddes's adaptation of the *polis*. The *polis* consisted of both an urban centre or core like Athens, and the surrounding countryside including villages and smaller towns. There was *per definitionem* no difference between town and country. Within the region as defined by the valley section, there was no difference between town and country. The valley region contained a variety of human settlements beginning in the mountains with little hamlets, followed by smaller villages and towns, and at the end of the valley they all came together in the big city. This is only recognizable in older versions of the valley section (ill. 39), because most modern reprints omit these smaller settlements. They portray the valley as empty except for the big city.[7] However, the analysis of the division of labor in modern towns as derived from natural occupations now makes sense, because it was an attempt to explain the town as the continuation of the country. Everything which happened in the town was rooted in the country or region.

The second important point about the *polis* is the relation between the citizen and his city-state. This interdependent relationship, in which the one cannot exist without the other, is described for instance in Plato's dialogue *The Republic*.[8] Plato tried to define a good city by analyzing what a good man is. He explained: "Well, we are bound to admit that the elements and traits that belong to a *polis* must also exist in the individuals that compose it. There is nowhere else for them to come from."[9] Geddes stated the same by using a biological metaphor: "Like flower and butterfly, city and citizen are bound in an abiding partnership of mutual aid."[10]

Geddes's most famous diagram, the Notation or Charting of Life (ill. 40), was also developed around this relationship.[11] Four words form the center of the diagram: town—school—cloister—city. Along the outer frame are four words again: acts—facts—dreams—deeds. Acts, in the top left quarter, are the day-to-day life of each human being. They became facts, in the lower left quarter, if they were remembered in the individual mind of the citizens. But to think about facts and their probable shortcomings meant to dream; which leads to the lower right quarter. Realizing dreams was acting, therefore the word deed in the upper right quarter of the diagram. The same applied to the life of a community: the town, again in the upper left quarter, represented the day-to-day life. This became

reflected in schools of thoughts, history, or education. Some schools developed into the dominating intellectual focuses of their time; they were normally located in cloisters, monasteries, academies, universities, or similar institutions. The ideas about the life of the community which arose in these cloisters had to be implemented in the reality of the town. This was the moment a town became a city.

Geddes's city was the region comparable to the *polis*, or as he once said: "In short then, it takes the whole region to make the city."[12] But, it has to be added, the region as a city was determined by its cultural, spiritual and political centre, as Athens dominated Attica. Again, Mumford proves to be helpful; he wrote in 1928: " ... the city is the node of a region; it is the place where all the resources and advantages are brought together and made available for the whole population. Above all, the city gathers together, carries on, and makes available, the social heritage: through school and university, through laboratory and studio and museum and theatre, through its dominant religious and secular associations, the city is the repository of a community's more developed cultural resources. To the extent that these institutions exist and work harmoniously together, the germ of a city exists, even though the population be as small as a village ... "[13]

The primary task of the city designer was, therefore, to take care of the institutions which represented the cultural resources. The town planner was in charge of the material basis, the physical side of a town. The city designer had to attend to the immaterial side, the psychological needs of the city as a community. The existence and proper functioning of the cultural superstructure marked the border between a town and a city. The word city had a double meaning for Geddes. It referred to both the region as city and to any urban place or village with a working superstructure of cultural institutions.

Geddes in Palestine

As mentioned already, Geddes visited Palestine three times. He was never commissioned to formulate a strategy for the development of the whole of Palestine. The Zionists engaged him for relatively well-defined tasks like the Hebrew University in Jerusalem or the setting out of areas of land they already owned somewhere in Palestine. As usual, Geddes ignored the limits of his commissions because his understanding of planning forbade the exclusive focus on a small strip of land in an area which was likely to become a larger town like Haifa, for example. Both in Haifa and in Jerusalem, he managed to gain commissions from the administration of the British Mandate of Palestine to write additional reports on the future potential of both cities. He also wrote reports on Tiberias, on Talpioth, on Tel Aviv—the first new Jewish city in Palestine—and on other smaller settlements.

Despite the piecemeal character of his commissions Geddes designed for Palestine with the idea of a region as a city in mind. He declared: "For here [in Palestine] ... you have a comparatively simple society, of an unusually gifted people, in a small region, given over essentially to agriculture, yet with growing towns of their own, and one amazing culture-city."[14] Although the quotation reads like a comment on the Zionist project it is actually Geddes's analysis of the ancient Hebrew Scriptures. However, it also represents Geddes's view of Zionism, which he saw as the recreation of a once successful ancient region as a new city. All the required elements were there. The Zionists discussed the necessity to transform the Jews from being Eastern European *Luftmenschle* or town people into an agriculturally based population in Palestine. Geddes, who was without doubt acquainted with the methodological debate within the Zionist movement, could have interpreted this as a turn towards life-giving activities, the first step towards improving man's adaptation to his environment. The growing number of Zionist settlements organized on co-operative and communal principles might have looked familiar to Geddes, who was himself deeply influenced by anarcho-socialists like Kropotkin, whose theories were spread among parts of the Zionist movement through translations by the German anarchist Gustav Landauer. And any return of the Jewish people to Jerusalem was a return to, in Geddes's words, the "amazing culture-city."

•

The Hebrew University

Jerusalem was the site of Geddes's first commission. He visited the city in 1919 for three months. The result was two reports: one entitled "Jerusalem Actual and Possible" for the British Mandate Administration and the other one with the title "The Proposed Hebrew University of Jerusalem" which was commissioned by the Zionist Organization.

41 Frank C. Mears and Carus-Wilson (architects),
with Patrick Geddes (consultant), and Benjamin Chaikin (architect)
The Rosenbloom Building (Great Hall), Jerusalem
Perspective by Basil Spence, 1928 (?)
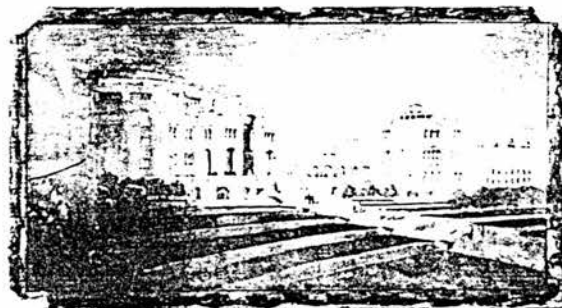
The site of the University was Mount Scopus north-east of the old city of Jerusalem. Geddes and his son-in-law, the Edinburgh based architect Frank C. Mears, organized the university complex adjacent to the existing Gray-Hill-House. The main feature was the Great Hall at the centre surrounded by a hexagon shaped ring of lower buildings. (ill. 41) Three wings of buildings outside the ring accommodated the institutes and departments. The north-east wing was intended for the natural sciences; the north-west wing for the faculties of engineering, architecture and town planning, and, finally, the west wing for the humanities. This arrangement of the departments expressed Geddes's desire to synthesize the branches of human knowledge into a single whole. Closely related disciplines like architecture, town planning and the applied arts adjoined common courtyards. The hexagon was given over to the three areas of knowledge for which the ancient Greek culture was most famous: philosophy, mathematics and music. They symbolized the synthesis on a higher level. The side of the hexagon facing the Old Town was left open in favour of a grand flight of stairs giving access to the courtyard within the hexagon and to the Great Hall.

The skyline of old Jerusalem with its huge number of domes in various sizes inspired the silhouette of the university. Seen from the Old Town the Great Hall clearly dominated the group of buildings; no other building came close to its height. (ill. 42) This hall was the feature that interested Geddes most. On a functional level the hall was simply a graduation hall, an *aula academica*. On another level it can be seen as a political statement. Sited next to the Muslim Dome of the Rock and the Christian Church of the Holy Sepulchre the Great Hall of the Hebrew University would have

dominated the skyline of Jerusalem as a symbol of the Jewish population of Palestine. The size of the dome was carefully considered, not only in comparison to other domes in Jerusalem, but also with similar domes in Rome and Constantinople. (ill. 43) On a third level the Great Hall leads back to Geddes's understanding of the region as a city based on the *polis*. The ancient *polis* was visibly dominated by religious buildings like sanctuaries and temples. Accordingly the life of the citizens was structured by sacrifices and religious activities. The main concern of religion in the *polis* was to strengthen the relation between the city and the citizen.

Geddes, as already mentioned, advocated an idea of life which would satisfy both materialistic and spiritual needs of human beings. For the satisfaction of the latter he firmly believed in the value of symbols like paintings or buildings. Existing buildings offered man opportunities to learn and to regain his own history. New buildings allowed for the expression of the idea of the city as developed in the cloister. Each true city in history was dominated by a single building or by a group of buildings incorporating the spirit of the city, the *genius loci*. Geddes for example compared Athens, the ancient *polis* and Edinburgh, the great Scottish culture city, and discovered a striking similarity: in both cities the buildings expressing the *genius loci*, the Acropolis in Athens and the castle and cathedral in Edinburgh, stood on a rock, clearly raised above the town. If a new town wanted to become city it needed a built symbol of its idea, which should be placed above the town to dominate it visibly. In Geddes's ideal city this symbol was a Temple of Life, an idea which fascinated him around 1900.

This is exactly the third meaning of the Great Hall of the Hebrew University. Geddes considered any university as a possible cloister, where a synthesis of human knowledge could be achieved. Synthesis was the main characteristic of the new "Ideal Life," which Geddes occasionally defined as "the great Unity."[15] If the Hebrew University was to be a cloister for Palestine as a city, then the Great Hall was the Temple of Life for the Region. Geddes wrote in a letter to Raymond Unwin: " ... I am greatly indebted to Frank Mears—who has ... materialized my longdreamed Dome of Synthesis (for Aula Academica) ... and whose convincingly pretty perspectives have delighted our clients ... . "[16] Like the route for a procession a street wound towards the university. Halfway up the hill it entered through a gateway the walled university area similar to the entrance into a temple area. On other perspectives groups of students carrying a banner with the Star of David climbed the final steps up to the Hall. (ill. 37) The Star of David was for Geddes more than a symbol of Zionism; it was a symbol of unity. Connecting the six points of the star leads to a hexagon. Three corners stood for environment, function and organism, different words for the triad place-work-folk. The remaining corners stood for the reverse relation: organism, function and environment.[17] Accord-

42 Skyline of the Hebrew University
Perspective, artist unknown, 1919 (?)

ingly the students following the banner could also be worshippers of Life assembling in their Temple. The interior of the Great Hall supports both interpretations. The walls are covered with symbols—among them the Jewish *Menora or the Magen* David—but also illustrations of the natural occupations like the shepherd.

In 1923 Geddes explained retrospectively this double character of the Great Hall. He wrote that he remembered his plan for a Temple of Life from 1904, when his friend the Zionist and psychoanalyst Dr. David Eder approached him in 1919 as a possible architect for the university.[18] Eder also ensured that Chaim Weizmann on behalf of the Zionist Organization commissioned Geddes and Mears for the university project. Both Eder and Weizmann played an important role in Geddes's commission to plan a university that was both a spiritual and cultural centre and a Temple of Life. Around 1900 Chaim Weizmann belonged to a group of young Zionists who called themselves "Democratic Fraction." In opposition to the political Zionism of Theodor Herzl, the Democratic Fraction supported the cultural Zionism of Achad Ha'am, who insisted on a spiritual reawakening of the Jewish people as the necessary first step towards a successful re-inhabitation of Palestine. In turn, the Democratic Fraction proposed at the Zionist Congress in 1901 the establishment of a Jewish University as a center for the cultural and spiritual renaissance of the Jewish people. Some of Geddes's ideas might have sounded familiar to Weizmann when the two men met to negotiate the contract.

Eder knew even more about Geddes's dream of a Temple of Life and the idea of the city it symbolized. In 1908 Geddes received an invitation from the biology-group of the Fabian Society, the think-tank of the Labour Party in Great Britain. He was asked to speak on eugenics. Geddes lectured in December 1908, interpreting the theme of eugenics in the context of his own ideas of a Temple of Life. The Temple he presented to the Fabians was dedicated to the Greek gods, which represented for Geddes the various stages of human life. However, important is the man who signed the letter of invitation from the Fabian Society—Dr. David Eder. This is one of the earliest known contacts between Geddes and a member of the Zionist movement. Geddes's Temple of Life was the first

connection between Eder and Geddes, and both Eder and Weiz-
mann were to become the most faithful supporters of Geddes's
dream of a Hebrew University as the symbol of the unity of life. As
late as 1949 Weizmann wrote: "I still hope before I die to see the
great assembly hall which Geddes designed rising on the slopes of
[Mount] Scopus."[19]

Geddes and Tel Aviv

Geddes designed a masterplan for Tel Aviv in 1925. The general
layout of the streets and of the residential blocks with interior
garden spaces follows Geddes's ideas but the architecture does
not: instead of small garden-city cottages, houses in the Bauhaus-
style were erected in the decades after the 1920's. However, espe-
cially two topics of the report refer to Geddes's idea of the city
inspired by the *polis*.

In Chapter V Geddes dealt with the "Sanatorium Quarter 'Marino'"
which he planned for an area in the north of Tel Aviv close to the
beach.[20] He suggested a sanatorium for tourists, an amphitheatre,
a sportsground and a *gymnasium*, a secondary school. He also
planned a small nature reserve north of an adjacent old Moslem
cemetery. A short paragraph in this chapter dealt with ancient
examples of health resorts, for instance Epidauros in Argolis.[21]
There, as Geddes explained, a theatre was placed next to the
"'Gymnasia' for the body"; in this case *gymnasia* meant a sports-
ground. In ancient times, he continued, these two places for the
healing of mind and body were very often complemented with a
Temple for the God of Healing. Geddes's "Marino Sanatorium"
provided both an open-air-theatre to heal the mind, and a sports-
ground to heal the body. Geddes did not suggest a Temple of Life
for Tel Aviv, but the nature reserve within the "Marino" quarter can
be considered as the Temple's equivalent. The reserve was a place
in which to study nature and to experience the Geddesian idea of
an integrated Life. Open-air-, or amphitheatres, sportsgrounds,
nature reserves, and large gardens as places to heal body and
mind, and to experience life were standard suggestions in most of
Geddes's town planning reports. They can be interpreted as an
answer to the contemporary demand of *"Licht, Luft und Sonne"*
("light, air and sun"), but in Geddes's report they are also a direct
reference to the *polis*.

Chapter VIII of the report dealt with the cultural institutions for the
new city.[22] As in the Jerusalem report, Geddes envisaged a cultural
centre consisting of museums and educational institutions. He
called this assembly an "Acropolis"[23] which he intended to concen-
trate in a small area on the highest available site within the topo-
graphy of future Tel Aviv. This location was of utmost importance
for Geddes. He wrote in the report: "Every city of the past which
has adequately risen to the conception of the Culture-Institutions

43 The Dome of the Great Hall, Jerusalem
Compared in seize with the "Pantheon Inside" in Rome,
"S. Sophia Pendentives" in Constantinople, today Istanbul,
and the "Dome of Rock Inside" in Jerusalem
Section by Frank C. Mears, 17 February, 1919
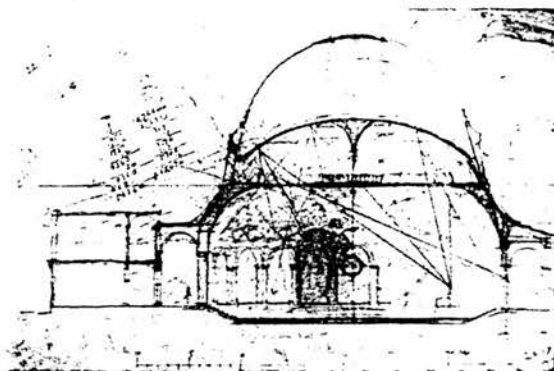
seen and felt appropriate to the expression of its ideals, and of its
developing civilization ... has chosen for these purposes the very
noblest site within its area."[24] Geddes's interest was not primarily
the purely aesthetic implications of this decision. He did not object
to the domination of a city-skyline through a cultural acropolis. But
he wanted to achieve more. Compared to Bruno Taut's *Stadtkrone*,
a place for contemplation, meditation and cultural activities,
Geddes's cultural Acropolis was more, it was the starting point for
the active participation of the citizen in the life of the city. Geddes
explained in the Tel Aviv report: "Such location ... carried with it a
full yet ever deepening civic sense, an extending and enduring
influence throughout the city; and thus became in time its main
glory; and this alike for its people and even for humanity
beyond."[25] Geddes extended the idea of a city crown in his book
Cities in Evolution by referring to Plato's distinction between a
town and a true city, made in the "Myth of the Golden Age of
Chronus" in the *Laws*. Plato's town was a simple dwelling-place
where some human beings ruled over the rest, whereas in a true
city, God—which means an idea—ruled the city. Geddes wrote:
"The great City [the town of Plato] is not that which shows the
palace of government at the origin and climax of every radiating
avenue: the true city ... is that of a burgher people governing them-
selves from their own townhall and yet expressing also the spiri-
tual ideals which govern their lives, as once in ancient acropolis or
again in medieval church or cathedral."[26]

Volker M. Welter

The Vision Failed

Geddes's city was conceived as a contemporary expression of the *polis*. He was far too much an evolutionist and scientist as to allow himself a simple retrospective view. His attempt to achieve a contemporary version of the *polis* allowed, even demanded, the application of the latest advances in town planning, general science and technology. He happily embraced modern garden cities or villages and welcomed new technologies like motor cars, or improved production and transmission techniques for electricity. But he also occasionally suggested town improvements of a surprising simplicity. Again he emerges to be very much a man of the late 19th century. Change and progress were always positive, although Geddes had one reservation: both had to be guided in the right direction. As an evolutionist Geddes took for granted the constant progress of mankind. His concern was less the basis of human life; he wanted to make sure that the superstructure would be in advance of the basis, because Geddes firmly believed that change in the consciousness of the people was the driving force towards a better society.

The Zionists had leaders, who came, as Geddes once wrote, "essentially from the professional and scientific classes."[27] They would take care of the basis for the Zionist project, the agricultural and industrial side of the life in Palestine. He, Geddes, wanted to contribute the missing synthesis, a vision for the new Life. He obviously did not realize that most of the Zionists had a vision for Palestine: to build a society based on socialist ideas. Until the late 1920's Geddes continued to propagate the Great Hall as the needed Temple of Life although in a more and more realistic version. Later perspectives show the building, now called Rosenbloom building, without its impressive dome, which has disappeared in favour of a less sublime stepped roof pyramid. Similarly, the student-worshippers gave way to young people casually strolling towards the hall, which, nevertheless, was an impressive building demanding subordination. But what had still seemed modern in the years immediately after World War I was now revealed in its true colours only ten years later—a vision derived from the 19th century, pursued by a man obviously no longer in accord with the demands of the Zionist movement. The Bauhaus architects and urban planners had more to offer, no Temple of Life, or *polis* but useful social housing. The future of the Zionist Palestine belonged to them.

Acknowledgement

1 Patrick Geddes, *City Development: A Study of Parks, Gardens, and Culture institutes*, Bournville: The Saint George Press, Edinburgh: Geddes & Company, 1904.

2 For the most recent analysis of Geddes's work in Palestine: Benjamin Hyman, *British Planners in Palestine, 1918-1936*, London School of Economics and Political Science, unpublished Ph.D. thesis, 1994.

3 A good introduction into Geddes's life and work: Helen Meller, *Patrick Geddes. Social Evolutionist and City Planner*, London, New York: Routledge, 1990.

4 Patrick Geddes, *Report on the Towns in the Madras Presidency*, Madura, 1915, p. 91. Quoted in Jacqueline Tyrwhitt, *Patrick Geddes in India*, London: Lund Humphries, 1947, p. 22.

5 Patrick Geddes, "Talks from the Outlook Tower. The Third Talk: The Valley Plan of Civilization," Marshall Stalley, ed., *Patrick Geddes: Spokesman for Man and the Environment*, New Brunswick: Rutgers University Press, 1972, pp. 321-333 (pp. 331-332).

6 Lewis Mumford, *The Story of Utopias*, New York: Viking, 1974, p. 33.

7 Compare for example Meller, op. cit., pp. 40-41.

8 For a detailed study of this aspect compare: Volker M. Welter, "The Republic of Patrick Geddes," *Edinburgh Architecture Research* 21, 1994, pp. 98-118.

9 Plato, *The Republic*, 435e.

10 Patrick Geddes and Victor Branford, *Our Social Inheritance*, London: William & Norgate, 1919, p. 24.

11 Compare: Welter, "The Republic of Patrick Geddes," op. cit.

12 Patrick Geddes, "Civics: as Applied Sociology. Part I," *Sociological Papers* 1, 1904, London: Macmillan 1905; Reprint: Hellen Meller, *The Ideal City*, Leicester: Leicester University Press, 1979, p.78.

13 Lewis Mumford, "The Theory and Practise of Regionalism," *Sociological Review* 20, 1928, pp. 18-33 (pp. 26-27).

14 Patrick Geddes, "Talks from the Outlook Tower, The Fifth Talk: Our City of Thought," Stalley, op. cit., pp. 349-364 (p. 361).

15 Patrick Geddes, "A Note on Graphic Methods, Ancient and Modern," *Sociological Review* 15, 1923, pp. 227-235 (p. 231).

16 National Library of Scotland, MS 10571, 145, Patrick Geddes to Raymond Unwin, 14/11/1919.

17 Patrick Geddes, *The proposed Hebrew University of Jerusalem. A preliminary report by Professor Patrick Geddes, assisted by Captain Frank C. Mears*, 1919, p. 29.

18 Patrick Geddes, "A Note on Graphic Methods," op. cit., pp. 227-235 (pp. 230-231).

19 Chaim Weizmann, *Trial and Error*, 1949, p. 257.

20 Patrick Geddes, *Town-Planning Report—Jaffa and Tel Aviv*, unpublished typescript, 1925, pp. 30-34, chapter V.v: Sanatorium - V.x: Sports Clubs.

21 Ibid, chapter V.vii: Ancient Examples, p. 32.

22 Ibid, chapter VIII: Cultural Institutions for Tel Aviv, pp. 51-62.

23 Ibid, p. 41.

24 Ibid, p. 56.

25 Ibid, p. 57.

26 Patrick Geddes, *Cities in Evolution. An introduction to the Town Planning Movement and the Studies of Civics*, London: Williams & Norgate, 1915, p. 254.

27 Patrick Geddes, "Palestine in Renewal," *Contemporary Review* 1921, pp. 476-484 (p. 481).