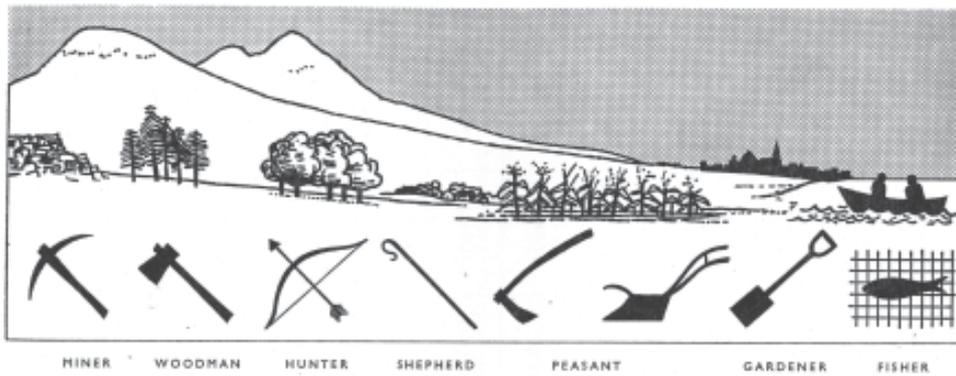


**Post-war CIAM, Team X, and the Influence of Patrick Geddes**

Five Annotations by Volker M. Welter

figure 1  
Valley Section,  
Patrick Geddes,  
1909



**T** To consider in detail the influence of the Scottish urbanist Patrick Geddes (1854-1932) on the architectural discourse of CIAM and Team X would require a far longer study than the pages of this bulletin allow. Instead, the following five annotations will map some basic lines of inquiry and will outline areas of Geddesian influence during the late 1940s and 1950s which are well documented, even if not well known. Geddes's thoughts were influential on both CIAM after the second World War and on the efforts of Team X to overcome the dogmatic positions of the earlier generations of architectural modernists. The first two annotations will briefly outline Geddes's theory of the city. They are followed by three more, which illustrate how that theory was disseminated, for example through the work of the British planner and urban theoretician Jaqueline Tyrwhitt; how one particular aspect of that theory, the idea of a heart of the city, became official policy of CIAM at the 8<sup>th</sup> congress in Hoddesdon in 1951; and, finally, how the British Team X member Alison and Peter Smithson reacted against the dogmatism of CIAM 8 and resorted in their search for an alternative to a different aspect of Geddes's theory, to the valley section.

### **First annotation: valley region and region-city**

Throughout his entire life Geddes was a biologist, a scientist of life. His particular interest was the interaction of life with the environment, which also underpins his fascination with cities and mankind's urban environment. Two diagrammatic drawings, the valley section and the Notation of Life, summarise Geddes's basic ideas about the city. Both diagrams are more than graphical representations of complex trains of thoughts, they are calls for action to improve the built and natural environment. The valley section depicts an ideal regional-urban condition, whereas the Notation of Life embodies concrete architectural proposals how to realise that ideal condition.

The valley section is a longitudinal section which begins high up in the mountains and then follows the course of a river down the mountains and through a plain toward its estuary at the coast. The valley section does not comprise a single valley, but a number of valleys. Seen from a bird's-eye perspective, the diagram depicts a fan-shaped region of valleys focusing on the river's estuary. Into this region Geddes inscribed different meanings. Along the bottom of the diagram he notes the so-called natural, i.e. best adapted, occupations represented by tools of different trades and crafts. For example, the miner is the natural occupation of the mountain zone where raw materials can be extracted from the rock. Or, the smaller farmer is best adapted to the relatively harsh condition higher up the plain. If these occupations, Geddes argued, exist in harmony with their particular environment, human societies would materialise in the form of such human settlements as can be seen along the valley section. Higher up in the mountains one finds isolated huts and small villages, further down these settlement increase gradually in size

until they culminate in a metropolis at the coast. This large metropolis is the one settlement which is not matched with one particular natural occupation. Ultimately, the large city was created by the united efforts of all the other natural occupations and smaller settlements. Geddes does not refer to the obvious fact that a geographical hinterland might support a coastal metropolis. Instead, he expresses in the valley region that Enlightenment theory of social evolution that describes mankind's development through the four stages of hunting, pastoral, and agriculture toward commercial societies.

It is important to note that the valley region was for Geddes not primarily a planning suggestion but first of all a depiction of an ideal type of city which could be found time and again throughout mankind's evolution. For example, the Greek *polis*—a form of society which did not know a conceptual distinction between town and country—was the earliest successful historic materialisation of the valley region. Potentially, any contemporary region could transform itself into a city modelled on the valley region with its network of settlements of various sizes and one large city as its centre. For Geddes, the entire valley region was a city—a concept I propose to call region-city—but within that city, the large city required particular interest. The latter was not only the end point of a historic evolution, but also the starting point of the renewal of the region-city. Comparable to Athens with the acropolis at its heart, the large city had to be elevated into the cultural and spiritual centre of the valley region in order to allow the ideal of the region-city to materialise once again. This brings us to the second diagram.

## **Second annotation: the city in evolution**

The diagram entitled 'The Notation of Life' was first published in 1927 although Geddes had developed the underlying ideas in the years flanking 1900. The diagram, a two-dimensional projection of a three-dimensional spiral, depicts Geddes's interpretation of mankind's development as an evolutionary process, relentlessly progressing forward and upwards. Each coil of the spiral begins in the upper left quadrant, moves toward the bottom, shifts to the right, and then back up to the top right quadrant. From there the spiral movement returns to the upper left quadrant, where on a higher level a new coil begins. On its way along the spiral human life evolves towards higher levels of consciousness and activity. In the upper left quadrant, life is relatively simple and can be understood within the nine combinations of the main analytical categories of Place, Work, and Folk. On the opposite level, the highest quadrant, life is no longer an instinctive interaction with the environment but a conscious scientific and artistic expression of this interaction. Geddes resorted to the nine Greek muses as a symbolically adequate representation of this level of evolution.

Geddes applied the diagram to the development of all types of human communities and societies including cities. Even more, he specifically claimed that in urban planning the diagram could be used as a zoning tool. At the centre of the diagram 'Town', 'School', 'Cloister', and 'City in Deed' are the four stages of a cycle of urban development toward a higher level of evolution. Any 'Town' could undergo this cycle, if and when its citizen began to reflect about their interaction with their environment in 'Schools' of thoughts, engaged in developing forward looking



initiatives and ideas in 'Cloisters', and realised the latter in the, literally, 'City in Deed'. The decisive level was that of the Cloister. Under this generic term Geddes subsumed universities, artists' studios, art schools, as well as such spaces of quiet communal reflection and individual meditation which a cloister, an abbey, and a hermitage could provide. These references have to be taken literally. Geddes proposed to implant into a town a cluster of cultural and educational institutions and appropriate buildings in order to stimulate and initiate the transformation of a town into a 'City in Deed'. Again, the Greek *polis* is one of his points of reference. For example, the city of Athens was *primus inter pares* among all the towns and villages which constituted the *polis* of Attica. Visually and intellectually, both Athens and Attica were dominated by the Acropolis. Similarly, the 'City in Deed' of the Notation of Life would be dominated by the institutions of the 'Cloister'.

During the 1890s, when Geddes undertook a large scale renewal programme in the Scottish capital Edinburgh, one of his intentions was to transform the Old Town into what can be called a cultural acropolis. Located on one of the highest elevations in Edinburgh's topography, Geddes established on the peak of the Old Town rock his 'Cloister' comprising the Outlook Tower, a regional laboratory and museum, Ramsay Garden, a vast complex of buildings comprising accommodation for students, flats for professors, intellectuals, and artists as well as an art school. The surrounding public spaces, streets, and historic houses Geddes envisioned as a communal open-air museum in which citizens could engage with the city and its history. The cultural acropolis was to dominate Edinburgh and the region beyond. Eventually, city and region would merge and form anew a region-city as anticipated in the diagram of the valley section.

Post-war CIAM, Team X, and the Influence of Patrick Geddes



figure 3  
Comparison of the  
urban-geographical  
structures of Athens  
and Edingburgh.  
Published by P.  
Geddes in 1911



figure 4  
The Outlook Tower,  
Edingburgh

There are other aspects of Geddes's theory of the city which this paper does not address. But the most important point is that for Geddes to create a city meant in the first instance to erect a cultural, educational, and spiritual superstructure rather than to arrange functional zones. This superstructure would cater for the immaterial requirements of the citizens and the community, for their dreams, aspirations, spiritual and otherwise. Only when it was in place, more practical reform of the urban environment, such as housing and hygiene, could be addressed adequately, because only then they would be bound into a larger conceptual whole which would prevent such urban reforms both to be guided by and foster a blatant, positivist materialism. Occasionally, Geddes even went so far as to call for the erection of new urban temples dedicated for example to the Greek muses, to culture, and to the city; thus anticipating in many regards Bruno Taut's *Stadtkrone* (city crown) by nearly 30 years.



### **Third annotation: disseminating Geddesian theory**

In order to trace Geddes's influence on the discourse about the city in the late 1940s and 1950s, this annotation will look exemplary at just one disciple of Geddes. Of course, the best-known disciple is the American urbanist Lewis Mumford who time and again referred to his revered master and the influence Geddes had on his own thinking and writings. Of both equally strong commitment to Geddes and of comparable importance for the discourse about the modern city since the mid-twentieth century was Jaqueline Tyrwhitt (1905-1983), although she is far less known today, if not to say forgotten.<sup>1</sup> Initially, Tyrwhitt had trained as a horticulturist but had also studied architecture in order to become a landscape architect. Eventually, her main interest switched to town planning, and Tyrwhitt emerged as a tremendously influential figure in the architectural world after the Second World War. In 1941 she joined the British MARS group, in 1947 she attended CIAM 7, in 1949 she became Assistant Director to Maxwell Fry, the Director of MARS, and from 1951–1964 she was acting secretary of CIAM. Since 1947 she was also a close friend of Sigfried Gideon, for whom she translated into English many of his publications. Her teaching career was equally impressive. It comprised visiting lecturer and professorial positions at the New School for Social Research in New York (1948), the School of Architecture at Yale University (1951), the University of Toronto (1951-55), and Harvard University (1955-1969). While at Toronto, she held with Marshall McLuhan a two year grant from the Ford Foundation for research into communication studies. From 1956 onwards, she worked as a member of the Ekistics movement with Constantinos Doxiades in Greece, where she finally settled in 1965 and lived until her death in

1983. However, at the beginning of Tyrwhitt's distinguished career stood her interest in Patrick Geddes.

Tyrwhitt had studied architecture at the Architectural Association School (AA) in London in the early 1920s. She returned to the institution in the late 1930s in order to study planning at the School of Planning and Research for National [later: Regional] Development which had been set up by the AA in 1933. The management of this planning school, Tyrwhitt wrote occasionally, was 'much impressed by the teachings of Patrick Geddes'. One member of the planning school's management was the physicist and structural engineer Eric Anthony Ambrose Rowse (1896-c. 1982).<sup>2</sup> Rowse had become assistant-director of the AA in 1933 and later, from 1936 to spring term 1938, Principal of the entire school. Before moving to the AA, he had held a position at the Edinburgh College of Art, where he had come into contact with the Geddesian urban theory that became a lasting influence on his life's work. In 1938, Rowse was dismissed from the AA due to internal politics, and the planning school was closed down. Subsequently, Rowse set up a commercial planning consultancy with the name Association for Planning and Regional Reconstruction (APRR). He ran the organisation until he was called up for military service during 1941, when Jaqueline Tyrwhitt became director of the APRR. She occupied that position until Rowse's return from active service in 1948.

With a commission by the War Office to set up a correspondence course in town planning for members of H.M. Forces and of allied forces Tyrwhitt restarted the planning school as a branch of the APRR in 1943. The objective was to train in town planning architects, engineers, sociologists, and other relevant professions as a preparation for the expected national reconstruction

programme once the war was over. Students enrolled on the course received regular mailings with study tasks which they had to return to the APRR. After the war, their training was to be completed by attending a three month residential course in London. Tyrwhitt claimed that in total c. 2000 corresponding students from many different nations had enrolled. Of these students, 170 men and two women later completed the final residential school, held in London between 1945 and 1947, and obtained subsequently associate membership of the Town Planning Institute. Although the history and influence of the APRR, the planning school, and the correspondence course remains to be researched, it can reasonably be assumed, that many architects and planners engaged in British reconstruction after the war had received their training in town planning through the efforts of Tyrwhitt and her colleagues. While the correspondence course drew on the expertise of many different British and foreign experts, which had been employed to compose course hand outs, amongst them for example the sociologist Karl Mannheim, the influence of Geddesian theory can be traced throughout the entire course materials.

Beside the correspondence course and other consultancy work of the APRR, Tyrwhitt spread the Geddesian message in publications and essays. In 1947 she published together with L. Mumford and H.V. Lancaster the slim, but still extremely valuable volume Patrick Geddes in India,<sup>3</sup> in 1949 she edited under the auspices of the APRR a new edition of Geddes's book Cities in Evolution from 1915,<sup>4</sup> and in 1951 she wrote for the Journal of the Town Planning Institute an essay entitled 'The Valley Section. Patrick Geddes' World Image' which despite its title was primarily an explanation of the Notation of Life.<sup>5</sup>

The work of the APRR and the efforts of Tyrwhitt in particular are important strands through which Geddes's urban thoughts were disseminated in Great Britain. Peter Smithson recalled in a telephone conversation with the author, that Geddes was extremely well-known in the late 1940s and throughout the 1950s.<sup>6</sup> More specifically, he remarked, that Geddes was so fashionable that his urban theory was even present at a provincial university such as Smithson's *alma mater*, the University of Newcastle/Durham. Likewise, Geddes's theory of the city influenced the eighth CIAM meeting which assembled under the title 'The Core of the City' in Hoddesdon, England, in 1951. As a member of the MARS group, Tyrwhitt was heavily involved in the organisation of the congress.

#### Fourth annotation: Geddes at the heart of CIAM

Recent scholarship has emphasised that the post-war meetings of CIAM aimed at reassessing the four functional urban zones of dwelling, working, recreation, and transportation as adequate tools for city planning. Eric Mumford argues in his study The CIAM Discourse on Urbanism 1928-1960 that especially CIAM 8 was concerned with defining a so-called fifth urban function, the heart or core of a city as a built community focus within the wider urban fabric.<sup>7</sup> As discussed above in the second annotation, Geddes pursued with the cultural acropolis a comparable idea; a concept he of course did not invent from scratch. Rather, Geddes could rely upon a debate about how and why the modern city could be provided with an adequate communal focal point, which stretches back at least to the early decades of the nineteenth century. For example, as early as 1847, Disraeli had demanded in his novel Tancred, or the new Crusade that the rapidly westward expanding London needed nothing as urgent as a forum or acropolis as its heart in order to be distinguishable from a bland urban mass. Similar thoughts can be found at the same time in the Ästhetik oder Wissenschaft des Schönen (3 vols, 1848-1851) of the German art historian Friedrich Theodor Vischer. Especially in Great Britain the concept of an urban core was a constant, even increasingly important element in the debate about the modern city since Geddes had attempted to cast it into a coherent theory at the turn from the nineteenth to the twentieth century.<sup>8</sup>

The suggestion for the theme of CIAM 8 seems to have come from the British MARS group, which defined the core in its invitation for CIAM 8 as 'the element which makes the community a community'. MARS also provided the framework for the pre-

sentation of urban designs at the meeting by defining five hierarchical levels for the provision of cores, namely village, neighbourhood, town, city, and 'metropolis or multiple city'; a sequence which recalls closely Geddes's valley section.<sup>9</sup> Reading through the lavishly published proceedings The Heart of the City: Towards the Humanisation of Urban Life, which Jaqueline Tyrwhitt edited in collaboration with J.L. Sert and E.N. Rogers, one is struck by the repeated references to a Geddesian understanding of the urban core.<sup>10</sup> The core as an element that 'made the city a city' as opposed to 'an aggregate of individuals' (Siegfried Giedion), as 'a meeting place of the arts' (Le Corbusier), as 'the repository of the community's collective memory' (J.M. Richards), as 'natural expression of contemplation, ... quiet enjoyment of body and spirit' (Ernesto N. Rogers), as 'background for spontaneity' and 'feeling of processional development' (Philip Johnson), and as 'expression of the collective mind and spirit of the community' (Jaqueline Tyrwhitt), are all statements that are not only anticipated, but can already be found, often word by word, in the manifold writings about the city by Geddes.<sup>11</sup>

In retrospect, CIAM 8 was not the hoped for beginning of a new phase in modern urbanism. Rather, it was the climax of a historic development which came to an end when in the mid-1950s the young architects, who were later to become known as Team X, formulated their critique of CIAM's ideas on architecture and urban design. The concept of a heart of the city was part of the intellectual baggage Team X was prepared to shed. Notwithstanding, individual members of Team X, for example Alison and Peter Smithson, continued to rely on Geddes's urban thoughts in order to develop alternative positions on modern architecture and urbanism.

### **Fifth annotation: shifting hierarchies of human association**

This final annotation focuses exemplarily on a small aspect of Geddes's influence on Team X, namely a few sketches of valley sections by Alison and Peter Smithson. In the aforementioned telephone conversation, Peter Smithson recalled that he had attended CIAM 8 for half a day. His impression was that the meeting was primarily concerned with Italian piazzas and their reintroduction into the completely changed circumstances of modern urbanism. This critique seems to centre upon the rather formalistic implantation into a modern urban context of an urban design element which had come down to CIAM 8 from a totally different historic period. A similar formalism the Smithsons detected, according to Peter Smithson, in the standardised council housing they saw going up everywhere, for example in the United Kingdom as well as Holland without any regard for particular local conditions. For an alternative they turned to Geddes's valley section which, as Peter Smithson stated, suggested different types of housing at various levels of the valley, housing adopted to local circumstances and communities. This is a rather liberal but perfectly acceptable interpretation of Geddes's valley region. Whereas Geddes had considered the various types of settlements in the valley region as expression of a historically harmonious interaction of the natural occupations with their respective environments, the Smithsons overlaid the diagram with a contemporary rather than a historic reading. They emphasised that architecture should reflect and respond to its surroundings according to the site of a particular architectural project within the geography of the valley region.

Elsewhere in their adaptation of the valley region, the couple came closer to Geddes's presumably original intentions. Although, according to Geddes, the entire valley region was potentially a city the one large city was somewhat privileged as it accommodated the cultural acropolis. The remaining smaller villages and towns Geddes envisioned to be under the spell of that cultural acropolis, though each settlement on its own could have a smaller community core, for example a village hall or similar. In short, inscribed into the region-city was a hierarchy of overlapping human associations ranging from the immediate neighbourhood of hamlet and village to the entire region. A sketch of the valley region which illustrated a draft version of the Doorn Manifesto picks up on this hierarchical structure of overlapping human associations.<sup>12</sup> Underneath the valley region a pyramidal structure is divided into smaller units, the so-called 'fields' of a 'scale of association'. This scale peaks underneath the central city of the valley section, whereas toward the edges the individual fields of the scale decrease in height and accordingly in their zones of influence.

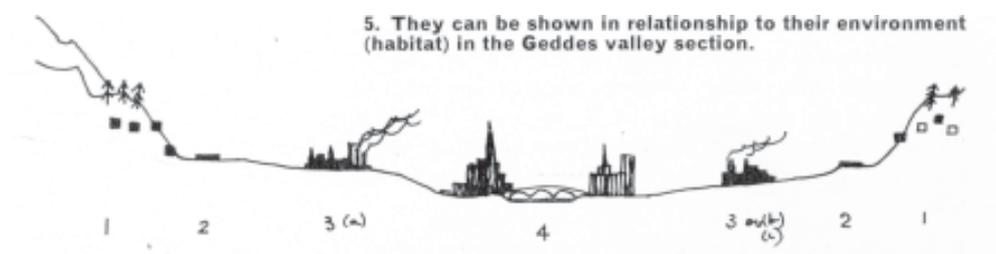
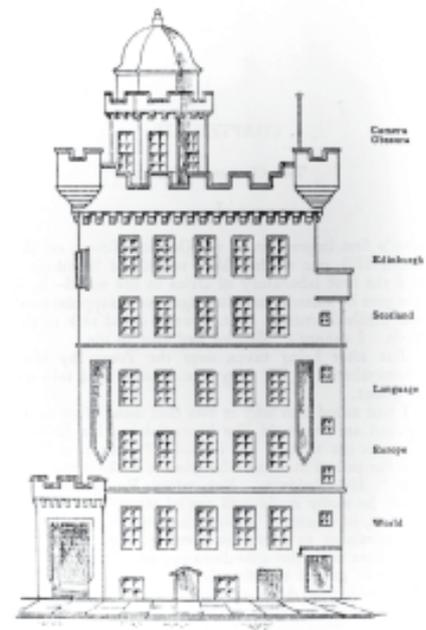


figure 7  
Valley Section as  
published in the  
Doorn Manifesto in  
1954

Despite this similarity, the Smithsons's hierarchy of overlapping human association comprise also an important deviation from the original Geddesian concept. Ultimately, Geddes's region-city was a stepping stone to the universe. A visitor to Geddes's Outlook Tower in Edinburgh would have begun the exploration of the city and surrounding region on the open platform of the top floor. From there, the view went over city and region, and the same view determined what was to be seen with the help of the camera obscura. On the floors below, the spatial frame of human association continuously widened from Edinburgh to Scotland to Europe, to the British Empire, euphemistically named '[English] Language', and, finally, to the world on the ground floor. The region-city was the basic building block of the entire world and the universe beyond; two globes, one of the earth and one of the sky where the final exhibits to be looked at before leaving the tower. While Geddes's hierarchy of human association aimed at widening the framework, the gaze of the Smithsons appears to have been directed the other way toward ever smaller units. A sketch from c. 1953 depicts a hierarchy with the city as the largest unit and the subsequent fields of association decreasing via the intermediate steps of District and Street toward the individual House.<sup>13</sup> Of course, when read from top to bottom—assuming the sketch would represent a section through a Smithsonian rather than Geddesian type of outlook tower—the gaze would widen from House to City, but it would still lack Geddes's distinct universal outlook. Nevertheless, the main difference between these two hierarchies of human association is conceptual rather than spatial. Geddes's hierarchy, rising from region-city to ultimately universe, never leaves the level of communities. The same applies to the hierarchy from village, to neighbourhood, town, city, and finally metropolis which CIAM 8



The Outlook Tower, Edinburgh, in diagrammatic elevation, with indication of size of its storeys—as Observatory, Summer School,

figure 8  
Diagram of the Outlook Tower, published by P. Geddes in 1915

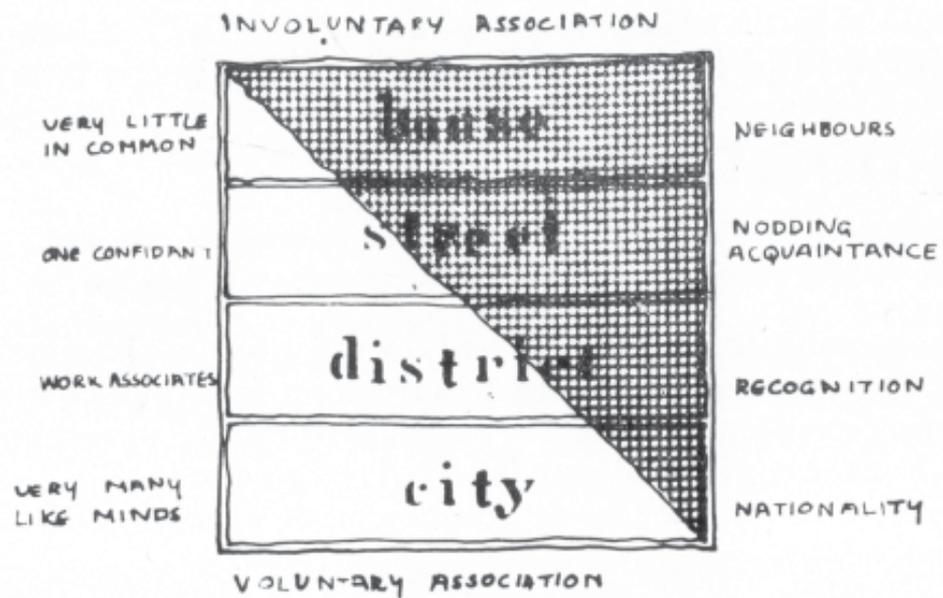


figure 9  
Diagram drafted by A. and P. Smithson and W. and J. Howell for CIAM 10, 1953

had discussed as an appropriate framework for urban cores of increasing size and importance. The Smithsons, however, juxtapose the individual house with the city, thus placing much greater emphasis on individuals and families in their relation to the city than Geddes or CIAM 8.

Easily a sixth, seventh, and more annotations could be added. An area of continuing inquiry is a comparative analysis Geddes's programme for children's gardens and play areas on unused plots of land in Edinburgh around 1900 with Aldo van Eyck's playgrounds on left over spaces in Amsterdam since 1947. Likewise, my ongoing research focuses on a comparison between the various grids and *grilles* developed and used by Geddes, Le Corbusier, CIAM, and Team X. Obviously, neither CIAM after the Second World War and latter Team X were exclusively influenced by Geddes's theory. Nevertheless, above annotations have hopefully succeeded in arguing that Geddes was an important voice in the discourse about modern architecture and urban planning since the mid-twentieth century. One wonders if Team 10 was actually aware of the depth of gratitude they, perhaps incidentally, expressed toward him when a Geddesian valley section was included in the Doorn Manifesto from 1954,<sup>14</sup> the year of the centenary of Geddes's birth in 1854.

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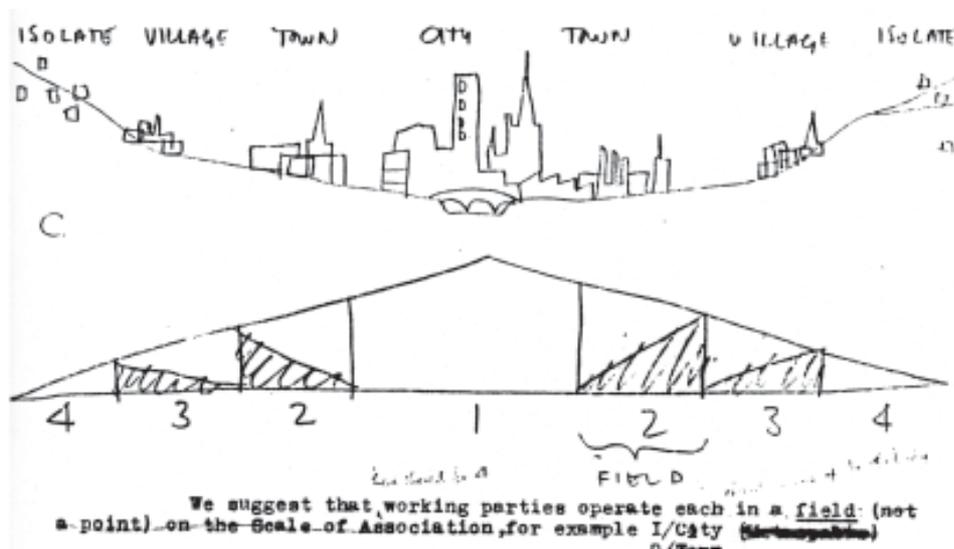


figure 10  
Valley Section, draft  
as preparation for  
CIAM 10, 1954

<sup>1</sup> On Jaqueline Tyrwhitt see 'Mary Jaqueline Tyrwhitt In Memoriam', *Ekistics*, 52 (1985), number 314/315.

<sup>2</sup> On Rowse and the planning school see Mary O. Ashton, "'Tomorrow Town': Patrick Geddes, Walter Gropius, and Le Corbusier", in *The City after Patrick Geddes*, ed. by Volker M. Welter and James Lawson (Bern: Peter Lang, 2000), pp. 191-210.

<sup>3</sup> Association for Planning and Regional Reconstruction, *Patrick Geddes in India*, ed. by J. Tyrwhitt (London: Lund Humphries, 1947).

<sup>4</sup> Patrick Geddes, *Cities in Evolution*, ed. by the Outlook Tower Association and the Association for Planning and Regional Reconstruction (London: Williams & Norgate, 1949).

<sup>5</sup> Jaqueline Tyrwhitt, 'The Valley Section. Patrick Geddes' World Image', *Journal of the Town Planning Institute*, 38 (1951), January, pp. 61-66.

<sup>6</sup> Telephone conversation with Peter Smithson, 29<sup>th</sup> October 2001.

<sup>7</sup> Eric Mumford, *The CIAM Discourse on Urbanism 1928-1960* (Cambridge, Ma.: MIT Press, 2000).

<sup>8</sup> For a history of this approach to the city see my 'From Genius Loci to the Heart of the City: Embracing the Spirit of the City', in *The Spirit of the City in Modernity*, ed. by Iain Boyd Whyte (London: Routledge, forthcoming in 2002).

<sup>9</sup> E. Mumford, *CIAM Discourse*, p. 203.

<sup>10</sup> Congrès Internationaux d'Architecture Moderne, *The Heart of the City: Towards the Humanisation of Urban Life*, ed. by J. Tyrwhitt, J.L. Sert, and E.N. Rogers (London: Lund Humphries, 1951).

<sup>11</sup> CIAM, *Heart of the City*, pp. 6, 41, 61, 73, 77, 78, 168.

<sup>12</sup> Alison Smithson (ed.), *The Emergence of Team 10 out of C.I.A.M.* (London: Architectural Association, 1982), p. 34.

<sup>13</sup> A. Smithson (ed.), *The Emergence of Team 10*, p. 9.

<sup>14</sup> Alison Smithson (ed.), *Team 10 Meetings* (Delft: Technische Universiteit, 1991), p. 21.