

## **Jaqueline Tyrwhitt: From Town Planning to Urban Design**

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Jaqueline Tyrwhitt (1905-1983) was a British town planner, editor, and educator who was at the center of a group of people who shaped the postwar Modern Movement in Europa and USA. In the course of planning for the physical reconstruction of postwar Britain, Tyrwhitt forged an influential synthesis of planning ideas grounded in the bioregionalism of the pioneering Scottish planner Patrick Geddes and informed by the tenets of European modernism, as adapted by the Modern Architectural Research Group (MARS), the British branch of Congrès International d'Architecture Moderne (CIAM). Tyrwhitt's contribution to the development of these ideas – in diverse geographical, cultural and institutional settings and through personal relationships – was connected to her role in the revival of transnational networks of scholars and practitioners concerned with a humanistic, ecological approach to urban planning and design, notably those connecting East and West. She was a key agent in the diffusion and cross-fertilization of this set of planning ideas and in the evolution of a collaborative planning and community design praxis that incorporated features of an emergent “postmodern globalist” civic culture.<sup>1</sup>

Tyrwhitt willingly worked behind the scenes, translating, synthesizing and mediating ideas that transcended national and disciplinary boundaries, making it a challenge for scholars to see the connections she helped to establish (Abb. 1). Tyrwhitt exerted her influence, often anonymously, through collective leadership, or as an intermediary or catalyst. This chapter illuminates how Tyrwhitt's ideas emerged from her role in defining an expanded concept of planning as an activity integrating physical and social factors, and how those ideas in turn helped define a new field of activity, urban design.

### *Formative Influences*

Born into a family descended from the original English gentry, Tyrwhitt trained for a career as a garden designer, which included a year at the Architectural Association (1924-1925), and practiced for several years. Tyrwhitt enjoyed designing gardens, but wanted to do more meaningful work, so after taking an economics course at night she became an organizer for the League of Industry, where she became conversant with the issues and people calling for a reorganization of industry along the lines of “planned capitalism.” In 1935, in order to learn more

about the integration of industry with agriculture, Tyrwhitt took a job at Dartington Hall, the experimental estate established by the philanthropists Leonard and Dorothy Elmhirst, which fostered new methods of farming and forestry, the creation of related industries, a progressive school, and arts and crafts workshops. Tyrwhitt probably came across Patrick Geddes's *Cities in Evolution* (1915) there, which inspired her interest in town planning.<sup>2</sup>

In 1936 Tyrwhitt decided to study Geddes' approach to regional and town planning at the School of Planning and Research for National Development (SPRND) that E.A.A. Rowse, a follower of Geddes, had recently established at the Architectural Association in London. Geddes's ideas provided the conceptual basis for the school's curriculum, notably, that a plan must be preceded by both regional and civic surveys. It offered a more comprehensive post-graduate course than the existing programs at Liverpool and London Universities, and would admit as students graduates of subject related to planning, such as sociology, public administration, geography and economics; the other schools only admitted architects, engineers or surveyors. Tyrwhitt enrolled in the two-year diploma course at SPRND in October 1937. She supplemented her studies with research for the Garden Cities & Town Planning Association and for the Industries Group of Political and Economic Planning (PEP). Tyrwhitt passed her final exams in July 1939, becoming among the first – and last graduates – of Rowse's school, which closed when Britain declared war on Germany in September 1939.

Tyrwhitt joined the Women's Land Army and served for over a year in the New Forest, an area of large tracts of unenclosed pasture land, heath and forest in southern England, where she enjoyed rural life while managing two sawmills. Rowse convinced Tyrwhitt to return to London to direct the Association for Planning and Regional Reconstruction (APRR), a new organization created to carry on SPRND's research work.

### *The War Years*

Tyrwhitt assumed her position as APRR director in February 1941, in the midst of the blitz, at a pivotal moment in British planning history. The war had convinced the public of a need for physical as well as social and economic planning to build a better post-war world, and Tyrwhitt led APRR into the center of that conversation. Tyrwhitt modeled APRR on PEP, in which she was among the few active women members. APRR's research agenda included regional planning, industry, agriculture and nutrition, population, housing and recreation, health and

education, and uses of waste. It aimed to develop multi-disciplinary survey methods and mapping techniques to apply Geddes's ideas to postwar reconstruction. Like PEP, APRR published the results of its research in standardized *Broadsheet* format. The idea of standardization to facilitate communication across specializations was a key aspect of APRR's effort to create a 'composite mind' – Rowse's metaphor for the type of cooperative intelligence ideally generated by a multi-disciplinary team that was a requisite for comprehensive planning along Geddesian lines. In December 1941, Tyrwhitt began to organize a correspondence course in town planning for those serving with the armed forces. She redesigned Rowse's pre-war school as the new School of Planning and Research for Regional Development (SPRRD), operated as an arm of APRR. The War Office agreed to offer the three-part course, which followed Geddes in emphasizing the need for a synoptic perspective of the region as the planning unit, and for an interdisciplinary team approach in order to integrate physical, economic and social factors. A new chapter in Tyrwhitt's career – planning educator – began when the first students arrived by mail in December 1943. By April 1944 there were about 200 enrolled students, and the school was APRR's biggest job – which Tyrwhitt ran practically single-handedly. She then turned her attention to preparing a post-war Completion Course for those who wanted to qualify for Town Planning Institute membership – professional certification.

#### *A Geddesian Line of Modern Planning Thought*

In the spring of 1944 Tyrwhitt articulated the synthesis of the Geddesian line of planning thought and modernist ideals that was being forged in the context of the work of APRR, SPRRD and their collaborators in the article "Town Planning" in the first issue (1945) of the *Architects' Year Book*. [Anhang 1]. Tyrwhitt composed this text in the context of her own growing involvement with the MARS group. MARS group member Jane Drew, a founding editor of the *Architects' Year Book*, explained that the journal was committed to showing how European modernist social-aesthetic ideals could be adapted to postwar conditions in England.<sup>3</sup> Modernist planning ideals had been codified in the Athens Charter, written by Swiss architect Le Corbusier, based on discussions at the fourth CIAM Congress in 1933, and restated for an American audience by the émigré Spanish architect Jose Luis Sert in his book *Can Our Cities Survive* (1942).<sup>4</sup> "Town Planning" is Tyrwhitt's first contribution to that discourse.

In “Town Planning”, Tyrwhitt acknowledged the limits of pre-war CIAM principles by presenting town planning as a discipline encompassing: the Region, the Neighborhood, Work, Food, Health, Education, Transport, Leisure and Holidays – not simply the four “urban functions” of Dwelling, Work, Recreation and Transportation stipulated in the Athens Charter. She followed Geddes in establishing the region as the basic unit for planning, and a comprehensive regional survey as the basis for a planning process that is both scientific and democratic – top down and bottom up. In making her case Tyrwhitt invoked “the space-time scale of our generation [that] has been grandly set forth by Giedion and needs interpretation in all forms of physical planning”, – a reference to the already canonical *Space Time and Architecture* (1941) by Swiss architectural historian Sigfried Giedion, CIAM general secretary.<sup>5</sup> For illustrations Tyrwhitt drew on pictures from both *Can Our Cities Survive* as well as APRR publications.

#### *Post War Planning for Reconstruction: Information and Exchange*

In spring 1945, Tyrwhitt undertook a lecture tour of North America on behalf of the British Ministry of Information, to report on town planning for post-war Britain. This journey proved to be a life changing experience for Tyrwhitt, opening new horizons and significantly extending her personal and professional networks. As a member of MARS, Tyrwhitt was warmly welcomed by CIAM émigrés in the United States; she was particularly impressed by Giedion and his friend, Hungarian painter László Moholy-Nagy, who opened her eyes to a greater appreciation for the world of art. She later recalled: “I continued my former work but with a different viewpoint.”<sup>6</sup> Tyrwhitt explicitly stated this new perspective in “Training the Planner”, published in the 1946 reference book *Planning and Reconstruction*: “a plan is a design [...] and the planner must be a designer; [...] a creative artist who not only sees what is in terms of what could be, but has the power to set this down in such a manner that his vision is shared and understood by others.”<sup>7</sup> Tyrwhitt’s new perspective and internationalism are evident in the choices she made in her edited collection, *Patrick Geddes in India* (1947), composed of excerpts drawn from the town planning reports Geddes prepared for Indian cities between 1915 and 1919. Tyrwhitt’s intent was to demonstrate the practical application of Geddes’s principles to the current worldwide task of urban reconstruction. Those principles included: “diagnosis before treatment”, i.e., survey before plan; “conservative surgery”, i.e., rehabilitation rather than removal; and “bio-regionalism”, i.e.,

that people and place are inseparable (in Geddes's famous triad: place-folk-work). Moreover, through Geddes's words, Tyrwhitt urged Westerners to learn, as Geddes had, from Indian civic beauty – “at all levels, from humble homes [...] to palaces” – to look at life holistically.<sup>8</sup>

It was to meet an urgent need for reliable and comprehensive social data that Tyrwhitt launched an expanded version of APRR's Information Service, which offered data visualization and compilation services. One component of this service was APRR's library, of which Tyrwhitt was particularly proud. She oversaw the adaptation of the Universal Decimal Classification system to suit APRR's work: organizing the main topics of physical planning and related subjects from a planner's broad perspective. In conjunction with its growing library, APRR launched a monthly *Reference Sheet* listing recent acquisitions and featuring an annotated bibliography on special topics. In this way, Tyrwhitt directed APRR to provide the information to implement the “broader conception of planning” called for in the Town and County Planning Act of 1947.

A practical reason for the development of APRR's library was to support the Schools's three-month completion course, which began in January 1946. There was such demand for this course that it ran for seven consecutive sessions, ending in December 1947. Tyrwhitt then stepped down as director of studies in favor of Rowse, who had returned from military service. As Britain's post-war planning system became institutionalized, though, the Town Planning Institute resolved to recognize only training programs affiliated with a college or university. SPRRD's war-time correspondence course and post-war completion course had provided an important arena for developing the relevant subject matter in an interdisciplinary way before planning became an academic specialization. Tyrwhitt was especially proud that SPRRD had trained a small but influential cohort, whose members made significant contributions to post-war reconstruction worldwide, assuming positions throughout the British Commonwealth and Dominions and at the United Nations.

Tyrwhitt's last project for APRR, which closed in 1950, was to codify SPRRD's training course in the *Town and County Planning Textbook* (1950). Tyrwhitt considered the *Textbook* “as APRR's swan-song [ ... ] it does contain the *raison-d'être* of our existence, and the proof that it was worth it”.<sup>9</sup> She states in her preface that it was the “remarkable success” of the correspondence course that convinced APRR there was a growing demand for the publication of such a program of study. Preparation of this *Textbook* – the first of its kind in Britain – involved

revising and supplementing the original lectures with new material from several social science disciplines to reflect the requirements created by the 1947 *Town and Country Planning Act*. APPR's decision to publish the *Textbook* was probably also triggered by the formation of the Schuster Committee on Qualifications for Planners ((should there be a short explanatory endnote on this committee?)) in May 1948, which initiated more than two years of deliberation on the scope of planning and the role of planners to guide universities that were building training programs. APPR's *Textbook* attempted to define the curriculum, and organize the related parts of this new field of expertise, at a critical juncture in the history of the profession, when planning practice was becoming codified and planning education standardized. She explained why APPR was credited as editor: "Just as Planning is not the work of one brain but rather the result of a joint effort of many individuals trained previously in different specialist fields, so the evolution of this book should be recognized as the product of such a team."<sup>10</sup> Tyrwhitt deserves credit as the guiding spirit of this team effort that produced a collection that represents the "sum of town planning theory and practice" at that time.<sup>11</sup>

Tyrwhitt was explicit about the synthesis of Geddesian and modernist social-aesthetic ideals this collection represented: "Patrick Geddes's triad 'place, folk, work' and the four points of the CIAM *Charte d'Athènes* 'living, working, developing mind and body, circulating' are fully treated and though the purpose of the book is to impart technical information, there is a constant warm under current of enthusiasm for the well-being of a lively and diversified humanity."<sup>12</sup> Her contributions to the collection include "Chapter 6, Society and Environment: A Historical Review", "Chapter 7, Surveys for Planning", and the "Bibliography", based on APPR's classification system. These contributions – as editor, author, compiler, and indexer – exemplify the various means by which she translated the ideas that evolved in the context of the collaborative group work she fostered at APPR and SPRRD. Collectively these topics represent three facets of her scientific humanist conception of planning:

- grounded in an evolutionary macro-historical theoretical perspective;
- based on empirical research, using the survey method both as an analytic tool and as a means of civic engagement in the planning process; and
- a holistic, integrative process, that requires the coordination and classification of different branches of knowledge.

All together Tyrwhitt's contributions to the *Textbook* convey her confidence in "Civic Design that can evolve from an honest survey and an intelligent analysis."<sup>13</sup> In chapter 6, Tyrwhitt provides man's search for ways of life suited to fundamental human needs as a framework for such planning. Her construction of this past – paying particular attention to treatment of the urban center – concluded with a discussion of modern trends focused on the evolution of the Garden City concept. She called for a more creative approach to civic design, grounded in love for existing places. "Each place has a true personality [...] which it is the task of the planner, as master artist, to awaken."<sup>14</sup> Tyrwhitt argued that "planning exponents have tended to divide into two classes", and only one is heir to the Geddesian tradition: "The first link Folk and Work. They believe that the best life can be lived in a new town of limited size closely related to sufficient industry to provide its population with their daily bread. [...] The second link Folk, Work and Place. They are convinced of the inter-relation of history and environment with man's daily life, and that the problems of congested, unhealthy, over-grown cities can only be solved with these cities are considered as a whole, in their regional setting."<sup>15</sup>

#### *A Transnational Life Leads to Theorizing*

As Tyrwhitt's work for APRR gradually came to an end she found herself both free and forced to join the tide of European intellectuals looking for new opportunities abroad. England faced serious economic problems at war's end, enduring austerity and rationing through the early 1950s. Openings for women in the workplace created by the war closed in favor of returning veterans. The international connections Tyrwhitt made propelled her into a new phase of her career as a transnational actor. The years 1948 through 1955 were fruitful but unsettled, as she assumed a series of academic posts in North America, became Giedion's close collaborator, joined the CIAM inner circle, and worked with idealistic planners and designers who renewed their international ties in the context of the new UN organizations then being established. In the spring of 1948 Tyrwhitt established a foothold in New York City, where she was hired to give several lectures at the New School for Social Research. Tyrwhitt was in demand as a speaker because there was great interest in British planning and she quickly lined up invitations to lecture on that topic at Yale, Harvard, Columbia Universities and Massachusetts Institute of Technology. These engagements helped Tyrwhitt sharpen her critique of the garden city (of about 50 000 people) divided into neighborhood units (of about 5 000 -10 000 people), which had been

adopted as the basis of Britain's postwar policy of decentralization via New Towns.

Concomitantly, Tyrwhitt also worked on both sides of the Atlantic as a liaison between Giedion and the MARS group to help plan CIAM's first educational undertaking, an international summer school to be held in London; she helped run the CIAM summer school in July 1948. In focusing on "the architectural aspects of central urban replanning", this course served as a precursor to the urban design program that Tyrwhitt assisted Sert – who became CIAM president in 1947 – and Giedion to establish at Harvard a decade later.

Tyrwhitt returned to the New School that fall to lecture on "Town and Country Planning in Britain and the US". In between her classes she traveled to speak in other cities. She spoke on "Post-war trends in England in Planning and New Town Development" at the University of Chicago; and she gave an informal talk at the nearby Institute of Design – which Moholy-Nagy had founded as a New Bauhaus – where she was fascinated by a course given by "the Dymaxion man", Buckminster Fuller. Tyrwhitt was inspired by Fuller's geodesic geometry to devise a hexagonal design for a decentralized metropolis "as an aesthetic exercise".<sup>16</sup>

After leading seminars at Harvard and Massachusetts Institute of Technology she felt confident enough and inspired to further develop her hexagonal diagram as an alternative model for a decentralized metropolis (Abb. 2). She presented these ideas in a lecture, "The Size and Spacing of Urban Communities", at Vassar College, in February 1949. The paper based on this lecture was published in the *Journal of the American Institute of Planners* in summer 1949.<sup>17</sup> In June the *APRR Information Bulletin* published a synopsis of Tyrwhitt's theoretical model, and part of her hexagonal diagram. [Anhang 2] Her argument followed two lines of reasoning: about people's needs, and current trends affecting development.

Adopting American-style language, Tyrwhitt suggested that the planner's aim to provide "equal opportunity for full individual development" was comparable to other democratic efforts to provide equal opportunity for education, health and housing. The American *Housing Act* of 1949 pledged a decent home for every American family. While the garden city type of community catered well to the needs of many families with children, Tyrwhitt argued that it could not satisfy the "twentieth century needs of a family as individuals, throughout their life". Furthermore, rather than impose a concept of a perfect city "upon a reluctant world", she thought, the planner must understand current trends and "recognize the dynamic within each that can, by wise and sympathetic guidance, make the lives of the inhabitants of a given area richer and freer". Current



trends pointed toward continued decentralization, resulting in further decline of central cities. Yet “our civilization [...] grew from within the great cities of the past. How can we interpret these trends to develop the civilization of the future?”<sup>18</sup>

Tyrwhitt proposed replacing the garden city ideal with “a sounder one” based on realistic premises. Since the trend toward segregated suburbs was “to some extent natural”, and “one cannot change human nature overnight”, a physical planner could not do much to solve that problem. That said, Tyrwhitt proposed a “mixed neighborhood” with a population of 15 000 as the basic “social unit”, which, when paired, forms an “urban unit” of 30 000, organized around a high school, where “true social integration will become increasingly easy and normal”. She proposed using the “urban unit” in place of the “neighborhood unit with its [...] almost universal, connotation of a segregated community”. An hexagonal grid containing 30 urban units provided the organizing principle for Tyrwhitt’s ideal metropolis of a million people – “a descendent of the satellite town, the linear city, la ville radieuse, and other theoretic planning patterns”.<sup>19</sup>

Tyrwhitt’s effort to reinterpret the garden city and neighborhood unit in modern terms constituted a substantive contribution to the tradition of geometric planning concepts generally, and to hexagonal concepts in particular. Her contribution to this line of thought is two-fold: a pragmatic way to redirect decentralizing trends away from producing sprawling, socially and spatially segregated suburbs, and toward the development of compact, diverse communities via the “urban unit”; and to emphasize the nodal role of the large city as the cultural center of the metropolitan region.

### *Cities in Evolution: A Framework for Theorization*

In speculating about an ideal decentralized metropolis Tyrwhitt’s imagination was guided by her deep understanding of Geddes’s model of urban developmental processes. While based in New York in 1948 she also worked on her abridged edition of *Cities in Evolution* (1949). Tyrwhitt served as “general editor” of this widely read edition, which she produced on behalf of APRR and in collaboration with Geddes’s son Arthur. They hoped the book would serve – as Geddes had intended for WWI – as a guide for post-war reconstruction inspired by a realistic utopianism. Geddes asserted: “Eutopia [...] lies in the city around us; and it must be planned and realized, here or nowhere, by us as its citizens – each a citizen of both the actual and the ideal city seen increasingly as one”.<sup>20</sup>

First published in 1915, *Cities in Evolution* had been out of print for more than a generation. “Perhaps it is only now [...] that the time is really ripe for the reprinting of this book”, Tyrwhitt explained in her introduction, pointing to some of the reasons why: “Now that simultaneous thinking – a process that seemed almost magical when demonstrated by Geddes with the aid of his folded papers – has become insisted upon in the popular writings of every philosophical scientist. Now that sight from car and aeroplane, together with developments in cinematography and television have made simultaneous vision a common human experience. Now that not only the work of the Peckham Health Centre but almost every book published on popular psychology, give overwhelming evidence of the profound effects of the opportunities available in the immediate environment upon the physical and mental development of the individual.”<sup>21</sup>

Tyrwhitt’s edition of *Cities in Evolution* omitted five chapters, but added an appendix that included Geddes’ Notation of Life thinking machine diagram (Abb. 3) – based on his folded paper aids – an essay on that diagram as “an early general systems model” by John Turner, one of her former soldier-students, and excerpts from a lecture Geddes gave at the New School in 1923 that explained his concept of the Valley Section – and which she had reprised as her last lecture there – based on rough shorthand notes she had found.

It was in Geddes’s “Notation of Life and Valley Section” diagrams that Tyrwhitt found a conceptual framework for her own theorizations about the ideal city. Tyrwhitt wrote “The Valley Section: Patrick Geddes’ World Image”, published in *The Journal of the Town Planning Institute* in January 1951, to specifically elucidate these theoretical concepts.<sup>22</sup> Whereas she had exercised her editorial voice silently in Geddes in India, rewriting passages to eliminate verbal obscurities; and quietly in *Cities in Evolution*, adding and subtracting text, in “The Valley Section” she constructed a narrative using Geddes’ texts in order to articulate her interpretation.

Tyrwhitt’s stated aim in “The Valley Section” is to remind planners – for whom Geddes’ phrases “survey before plan” and “place-folk-work” had become commonplace – that Geddes’ “real contribution to planning thought and practice was to link these two concepts indissolubly both with each other and with Comte’s theory of ‘Peoples and Chiefs: Intellectuals and Emotionals’” – the typical personalities who are “carriers” of a culture.<sup>23</sup> To make this case she extracted text from Geddes’ lectures that clarified the connections between the “Notation of Life” and “Valley Section” diagrams. In presenting Geddes’s texts in this particular way, against a backdrop of a new appreciation for his thought, which resonated with contemporary trends in social thought,

she not only played an important role in translating Geddes's ideas – making them accessible – she essentially produced a work unique in its own right: a general way of conceptualizing, and thus for theorizing about, universal urban and civilizational developmental processes.

Among the many ideas on display in this article, Tyrwhitt shows that the “Notation of Life” and “Valley Section” diagrams together operate as a cross-disciplinary, multi-level model of guided social evolution: social learning operating in space and time. From this systemic perspective, city and region, part and whole, subjective and objective, past, present and future, are inextricably related. This model provides a theoretical framework for comparative, historical study of human settlements and an analytic approach to the problems of cities as complex interactions of functionally interdependent parts and developmental processes. The key to planning for the future is to understand – and raise public awareness about – trends and their consequences. The hope for the future lies in the unique ability of our species to set goals and follow a course of action, imagine a future, grounded in the realities of a particular place, and choose a path, among alternatives, to realize it. This model demonstrates the agency of a consciously formulated idea as a driving force effecting social change; as well as the connections between the regional survey, an imaginative plan, and civic design.

Tyrwhitt's work on “The Valley Section” provided the larger intellectual context for her engagement in a range of activities: teaching a course on utopian traditions in town planning at Yale; writing the introduction to an issue of the United Nations' new *Housing and Town Planning Bulletin* on the integration of community facilities with housing;<sup>24</sup> producing one CIAM book – *A Decade of New Architecture* (1951)<sup>25</sup> – for Giedion and developing another on town planning with Sert; and planning for CIAM 8, which the MARS group proposed to focus on the theme of civic centers, and host in England in 1951. The MARS proposal countered one by Le Corbusier to use a grid he and others devised to articulate CIAM town planning principles. These engagements placed Tyrwhitt in the middle of the conflicts that flared between architects and planners around the growth of planning as a profession and the growth of architects' interest in the planning aspects of redevelopment and civic design.

Tyrwhitt strategically timed publication of “The Valley Section” to introduce Geddes's “Notation of Life” diagram, with its model of circular causality, as an alternative to Corbusier's “Town Planning Grid”, which she felt inappropriately emphasized the linear sequence of architectural design and building construction rather than town planning. Tyrwhitt had asserted, in the

November 1949 *APRR Information Bulletin*, that most British professionals viewed planning as a continuous – Geddesian – process, focusing on action based on analysis of recurring survey work rather than the production of a static master plan. Corbusier’s grid was more suitable for smaller scale civic design projects, which the British considered the domain of the architect.<sup>26</sup> In June 1950 Sert asked Tyrwhitt to reconcile the two themes proposed for CIAM 8. She proposed modifying Corbusier’s grid to examine civic centers, now called the “core”, at five “scale levels” of community: housing group, neighborhood, town or city sector, city, and metropolis – in other words, the regional hierarchy of social units represented in “The Valley Section”.<sup>27</sup> This new format was labelled the “MARS Grid”. In October, when Tyrwhitt began writing “The Valley Section”, she clearly intended “Geddes’ World Image” to lend weight to and complement the “MARS Grid”.<sup>28</sup>

#### *A New Theoretical Concept: The Urban Constellation*

Amid the percolation of ideas stimulated by Tyrwhitt’s teaching, travels, lectures, and work on the CIAM town planning book, her visit to Hungarian born painter György Kepes, then teaching at the Massachusetts Institute of Technology, in April 1951, yielded an important analytic insight: a further development of Geddes’s concept of the conurbation. Kepes, a former Bauhaus teacher, gave Tyrwhitt a tour of his exhibition at MIT, “The New Landscape”, for which he had assembled scientific images made with new visualization technologies, such as x-ray machines and infrared sensors. Tyrwhitt recalled that the “photographs of the heavenly constellations [...] of microscopic biological life [...] of plant cells [...] of inorganic crystalline formations”, inspired her to come up with the term “urban constellation” to describe the relationships of cities, villages and towns, organized around “a vital city center” – a discernable “orientation of apparently independent units towards a nucleus”.<sup>29</sup>

Tyrwhitt tried out this new concept in her talk, “The Next Phase in City Growth. The Urban Constellation”, at the American Institute of Architects (AIA) conference in Chicago in May 1951. An excerpt was published in *Progressive Architecture* as part of a discussion of whether the threat of nuclear war called for urban decentralization. Tyrwhitt answered resoundingly, “No. There must be a vital city center to which all parts of the constellation have access [...] Only in a living space that contains within it sufficient diversity of opportunity, can the human spirit gain

that confidence and resilience that enables it to develop its full potential – and even at times to ‘rise above itself’.”<sup>30</sup>

In June 1951 Tyrwhitt helped prepare CIAM 8, which took place in early July. Participants presented their work formatted according to the MARS grid, which Tyrwhitt organized by “scale-level” for discussion. In her opening remarks as chair of the session on the social and historical background of the core, Tyrwhitt introduced her concept of the urban constellation – “a new term in the planning dictionary” – as an organizing principle for the five scale levels of community.<sup>31</sup> Tyrwhitt’s remarks at CIAM 8 were limited, but she secured a place in the record of CIAM discourse for her conception of modern urban planning and design through the key rapporteur role she played, and in producing the book based on the conference: *The Heart of the City. Towards the Humanization of Urban Life* (1952), for which she was credited as translator as well as lead editor.<sup>32</sup> Tyrwhitt did not assign herself a chapter in the book; she had hoped to expand on her ideas in her introduction to the book’s second part (examples of projects.) [Anhang 3]. Due to space constraints, however, her text had to be brief. Tyrwhitt used her limited space to emphasize that the *core* was “the gathering place of the people. [...] whether planned or not [...] a physical setting for the expression of collective emotion.” Tyrwhitt thus ascribed to the core a key role in the process represented in Geddes’s “Notation of Life” diagram, the setting where “the whole awakened, [...] the voice of the people at its best – morally and emotionally” is heard, expressing the civic consciousness that gives rise to “the flowering of cities”.<sup>33</sup>

Tyrwhitt’s translation and summary of the resolutions that were passed at CIAM 8 formed a conclusion to this book as well as to this era of CIAM: The core as a means for “animation of spontaneous nature [...] seems a heritage that our group, after twenty years’ work, can now hand on to the next generation. Our task has been to resolve the first cycle of the work of CIAM by finding a means to transform the passive individual in society into an active participant in social life.”<sup>34</sup>

Some young architects and planners – notably the group known as Team X – took up this line of thought when they adopted Geddes’s “Valley Section” as a humanistic alternative to the Corbusian line of CIAM town planning ideas; their understanding of the “Valley Section” was based on reading Tyrwhitt’s translations of Geddes’ texts and conversations with Tyrwhitt, who advised them. Tyrwhitt used Geddes’ ideas to enrich CIAM discourse, not subvert it. She

succeeded in moving modernism beyond functionalism to a new humanism, at least in the Geddesian arm of the planning branch of the post war modern movement.

*Translating Theoretical Concepts to Practice: The Core and the City*

In “The Core and the City”, published in the *Architects’ Year Book* in 1953,<sup>35</sup> [Anhang 4] Tyrwhitt elaborated on the argument she made at CIAM 8: The “cure for our [...] amorphous modern cities” was not decentralization but “creation of new Cores – new concentrations of activity – by a visual emphasis upon centers of integration rather than upon bands of separation”, such as greenbelts.<sup>36</sup> Tyrwhitt probably wrote this article in London in summer 1952, after completing her first year as a visiting professor at the University of Toronto, where she was setting up a new graduate planning program within the School of Architecture. She now felt she had the basis for a book re-analyzing town planning ideals. The significance of the “The Core and the City” lies in her effort to translate CIAM’s theoretical discourse on modernist urbanism into terms that the typical British practitioner could understand and use to make physical planning more responsive to social and economic trends.

Here, Tyrwhitt drew on her understanding of Geddes’ “Notation of Life” diagram to frame how the idea of “good practice” is mediated by a consciously or unconsciously held image of the ideal way of life, one that crystallized over time from a concept proposed as a radical remedy to a particular societal problem to a universal remedy. Thus, she proposed, the garden city concept evolved from a revolt against the nineteenth century slum to “the current panacea... theories of escape into small settlements.”<sup>37</sup> Passage of the *Town Development Act* of 1952 exemplified the persistence of this doctrine in Britain despite continued growth of large urban areas.

Tyrwhitt argued that people were now drawn to cities not primarily for jobs, but for access to opportunities for social interaction and cultural resources – “the bright lights of the city and all that they imply” – found mainly in a small area: the core. She couched her argument in terms of “eternal human needs” for diversity and inter-exchange that attract people to the *core*; and asserted “a fundamental human right [...] of citizens to move about freely in the core of their city”.<sup>38</sup> The most important consideration in the animation of a core as a focus for urban activities is to provide a range of open spaces, notably, places for casual discussions among strangers, i.e., civic discourse.

To illustrate how the *core* of the city formed part of the hierarchy of inter-related centers at various scales within “the urban constellation”, Tyrwhitt presented examples from CIAM 8. They were not meant to suggest solutions to the problems of a particular community, but rather represented the creative ferment generated by CIAM’s work. Those debates epitomized international concern with the social and economic forces driving metropolitan growth in all Western industrial nations in the 1950s, producing suburban sprawl and declining of central cities. The old urban patterns were breaking down, and there was a need to rethink basic assumptions, but what were the new models?

Tyrwhitt specifically proposed the new ideal of the *core* as a guiding concept to positively influence the future form of growing middle-sized British cities – which were encouraged by British policy to export their “surplus” population to a small town. Rather than “kill” these cities by imposing this cure-all, Tyrwhitt called for building on existing trends to create the “new urban constellation”. Her proposals drew on the repertoire of CIAM ideas, including: limiting the pedestrian oriented core to a walk able area (adopting a research-based spatial metric); and revitalizing the blighted inner urban ring by introducing fingers of natural areas (i.e., green urbanism) to define mixed income communities large enough to support new or revived local cores with schools and shops.

### *Translating Theory to Policy: The Village Center*

In 1953-1954 Tyrwhitt served as the first woman to lead a United Nations (UN) Technical Assistance mission as advisor to the Government of India’s International Exhibition of Low Cost Housing, held in New Delhi, and director of a concurrent UN Seminar on Housing and Community Improvement in Asia and the Far East, another first. She designed a working model of an Indian Village Center as the UN’s contribution to – and centerpiece for – the housing exhibition. Tyrwhitt intended the Village Center – an adaptation of the CIAM-inspired core set amid experimental houses – to demonstrate the necessity and benefits of integrating rural housing policy into the political and economic revival of village life, based on “the restoration of responsibility to the village panchayat [council] – a restoration of the self-reliance and pride that made the Indian village of earlier times the real home of thought and culture in India”.<sup>39</sup> Tyrwhitt successfully employed this working model of a core at the “scale level” of the village as one means of introducing her Geddesian line of modern planning thought into UN discussions at this

critical initial stage in the evolution of the technical assistance program and community development policy.

### *Education in Urban Design: Establishing a New Academic Field*

Tyrwhitt turned 50 in May 1955 and entered a new, highly productive phase of her career, refocused on curricular innovation. She had been recruited by Sert to join the faculty at Harvard University, where he was now Dean of the Graduate School of Design and chair of the Department of Architecture. As an Assistant Professor of City Planning, Tyrwhitt helped Sert introduce a new curriculum, and rally support for a new professional degree program in urban design, deemed: “the meeting ground of architects, landscape architects, and city planners.” In her first year at Harvard, Tyrwhitt played a key role in organizing a major conference on urban design, convened in April 1956, “in view of the great interest in urban renewal and urban redevelopment and the continued growth of cities in this country”.<sup>40</sup> A major incentive was the availability of federal funding under the *Housing Act* of 1954, which encouraged the rehabilitation and conservation of urban areas to improve living conditions, rather than slum clearance. Federal and state legislation made financial support for urban renewal projects contingent on the preparation of plans, including land use, open space, neighborhood facilities and infrastructure elements. There were already many renewal programs underway or about to be launched – and a shortage of trained planners to do the work.<sup>41</sup> The premise of the Urban Design Conference – and the new urban design curriculum – was that this type of work called for a more comprehensive and more creative approach to physical planning. By focusing on aesthetic aspects of urban design, Sert hoped this conference, the first of a series, would build consensus among faculty of the three Graduate School of Design disciplines on the “common basis for joint work” – and thus avoid academic turf battles.

Although Tyrwhitt was not a speaker at that conference, in his introduction Sert echoed her words at CIAM 8 about the urban constellation as a new model for metropolitan growth: “every American city, because of its growth has to break up into constellations of communities. The necessary process is not one of decentralization, but one of centralization”.<sup>42</sup> This reference would not have been lost on the many people in the audience that had ties to CIAM. By adapting CIAM discourse on urbanism to address the problems of American cities, the conference was



newsworthy in part because it signaled a reaction to the anti-urban sentiment then prevalent in American culture.<sup>43</sup>

Based on the success of the first Conference on Urban Design, the next task, for the second conference, in April 1957, was to operationalize this new field, whether it was called urban design or physical planning. At a meeting that Tyrwhitt organized to plan this conference, participants agreed to narrow the field to “the design section of the planning process”. Sert hoped that discussion of the goals of urban design so delimited at the second conference would result in a “concise statement about planning philosophy”.<sup>44</sup> Sert then relied on Tyrwhitt to organize several meetings in 1958 to prepare for the third Conference on Urban Design, one aim of which was to solidify support for the new urban design degree program, which had not yet been approved. A working seminar in November 1958 selected six recent large scale residential developments to discuss at the third Conference on Urban Design the following April (a two-year sequence similar to CIAM methods). To bolster the case for urban design as an academic discipline, Sert further depended on Tyrwhitt to relate discussions of those six projects in the urban design seminar conducted by Giedion and Eduard Sekler, to preparations for the third Conference on Urban Design.

Sert’s efforts paid off that year when Harvard approved the new master degrees in urban design, the first in the US, to start in the fall term of 1960; in Sert’s words, “physical planning in our cities” finally emerged.<sup>45</sup> Sert had depended on Tyrwhitt to foster the collaborative, cross-disciplinary effort to achieve that objective. However, by June 1962, when Tyrwhitt reported on urban design at Harvard at a conference organized by American Institute of Architects and Association of Collegiate Schools of Architecture (ACSA), most of the students enrolled in the program were architects. [Anhang 5] Moreover it had “become less and less practicable to organize” opportunities for collaborative work on an urban design problem beyond the first term environmental design studio required for all students.<sup>46</sup> The rift between planning and design faculty and students at the Graduate School of Design deepened over time.

Tyrwhitt explained at the AIA/ACSA conference that Harvard’s urban design program operated on two scales: the macrocosm and the microcosm. “The first is a frame of reference, conceptually sensed but not necessarily visually apparent at any one moment. The second is directly concerned with what is physically visible at the human scale [...] with the design of variant elements within the conceptual system.”<sup>47</sup> Tyrwhitt felt more confident theorizing about the macro-scale, and

under her direction the sixth Conference on Urban Design in April 1962 addressed the topic “Designing for Inter-City Growth”. To conceive of the macro-design of large metropolitan regions posed a new challenge, entirely different from the micro-design of the core of the city or elements of urban renewal projects, such as previous Urban Design Conferences had addressed, and which could be approached with design principles derived from architecture. By then several models for metropolitan growth had been identified as alternatives to the sprawl spurred by highway construction and post-war suburbanization. Tyrwhitt coordinated the urban design studio with conference panels that studied four of these patterns: new towns, inter-city corridors, concentrated peripheral growth, and rationalized sprawl. Those mid-20th century alternatives continue to frame 21st century debates about planning for “smart growth”, “new urbanism”, and “sustainable development” versus unconstrained market driven processes.

### *Ideal Cities that can Grow and Change*

A strong influence on Tyrwhitt’s thinking about this problem – of how large-scale urban forms could provide a pattern “for living in equipoise within a rapidly changing environment”<sup>48</sup> – was her work (1961-1962) on a team studying the “City of the Future”, a research project under the leadership of Greek planner Constantinos Doxiadis, funded by the Ford Foundation. It was in this context that she refined her hexagonal diagram as a theoretical model for a region that could absorb rapid growth without destroying existing communities, which she presented in a 1963 paper titled “Shapes of Cities That Can Grow”.<sup>49</sup> Tyrwhitt wanted her model to provoke debate, and she received some harsh criticism from those in the audience who took her diagram “a little too literally”. What mattered is that she had the courage to speculate in public about a new conceptual order at the scale of megalopolis, a new urban ideal. And Tyrwhitt presciently reasoned that strategic public investment in transportation systems could lead to a desirable urban form, assuming some public control over land use. She concluded: “Planning for order at the largest possible scale which will allow for change without disruption, and planning for respect for tradition and continuity at the smallest scale, while allowing the greatest possible freedom of expression to the individual: these are the main goals of physical planning which need to guide the work of the student and the practitioner.”<sup>50</sup>

Tyrwhitt’s thinking about the ideal city and how to achieve it was firmly rooted in her work in the 1940s, which aimed at democratic planning to build a better postwar Britain and training

planners to meet that challenge. As she became a transnational actor, she gained a broader perspective on British planning principles and learned the importance of speculative thinking, to help move the still young profession beyond the limitations of doctrine derived from inherited ideals – the garden city model. Her new perspective also enhanced her understanding of the enduring relevance of Geddes's model of urban evolution, which privileged the agency of ideals. She drew on Geddes's ideas both to conceptualize how decentralizing trends could generate polycentric spatial patterns, as well as to explain how a dynamic urban constellation comprised of diverse communities could be integrated around civic cores. She was among the few who linked such theorization with practice and pedagogy, transcending disciplinary, national and cultural boundaries to define urban design as a new focus for collaboration.

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<sup>1</sup> This chapter is based on my book *Jaqueline Tyrwhitt. A Transnational Life in Urban Planning and Design*, Surrey: Ashgate, 2013. The author acknowledges the rights granted to her for the use of this book in this chapter.

<sup>2</sup> That book was out of print but there was probably a copy in the Dartington Library. Geddes and his son Arthur had a special connection to Leonard Elmhirst and Dartington through their work in India with Rabindranath Tagore.

<sup>3</sup> Jane Drew, "Editor's Foreword", in: *Architects' Year Book*, Bd. 1, 1945, S. 5.

<sup>4</sup> Jose Luis Sert, *Can Our Cities Survive?*, Cambridge (MA): Harvard University, 1942.

<sup>5</sup> Sigfried Giedion, *Space Time and Architecture*, Cambridge (MA): Harvard University, 1941.

<sup>6</sup> Jaqueline Tyrwhitt, letter to Adolf Max Vogt, 12.1.1969. Royal Institute of British Architects (RIBA) Library, Tyrwhitt Collection, (TyJ/60/2).

<sup>7</sup> Jaqueline Tyrwhitt, "Training the Planner", in: *Planning and Reconstruction*, hrsg. von T. ((full first name?)) Todd, London: Todd, S. 209-213, Zit. S. 210-11.

<sup>8</sup> Patrick Geddes, *Geddes in India*, hrsg. von Jaqueline Tyrwhitt, London: Lund Humphries, 1947, S. 26.

<sup>9</sup> Jaqueline Tyrwhitt letter to B. ((full first name?)) Wells, January 23, 1950. Part of papers added in 2013 to the Tyrwhitt Collection in RIBA and not yet catalogued at the time of this writing.

<sup>10</sup> Jaqueline Tyrwhitt, "Preface", in: *Town and Country Planning Textbook*, hrsg. von Association for Planning and Regional Reconstruction, London: Architectural Press, S. xv-xvii, Zit. S. xv.

<sup>11</sup> Brenda White, *The Literature and Study of Urban and Regional Planning*, London: Routledge, 1974, S. 45.

<sup>12</sup> Jaqueline Tyrwhitt, "Town and Country Planning Textbook", in: *Information Bulletin. Association for Planning and Regional Reconstruction*, Nr. 202, März, 1950, S. 1.

<sup>13</sup> Jaqueline Tyrwhitt, "School of Planning", 3.3.1953. RIBA (TyJ/38/2). ((please precise the kind of document: manuscript/typoscript, article, speech, etc.))

<sup>14</sup> Jaqueline Tyrwhitt, "Society and Environment. A Historical Review", in: *Town and Country Planning Textbook* (wie Anm. 10), S. 96-145, Zit. S. 139.

<sup>15</sup> Ibid.

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- <sup>16</sup> Jaqueline Tyrwhitt, Journal, 24.11.1948. Part of papers added in 2013 to the Tyrwhitt Collection in RIBA and not yet catalogued at the time of this writing.
- <sup>17</sup> Jaqueline Tyrwhitt, “The Size and Spacing of Urban Communities”, in: *Journal of the American Institute of Planners*, Bd. 15, Nr. 2, 1949, S. 10-17.
- <sup>18</sup> Ebd., S. 14.
- <sup>19</sup> Jaqueline Tyrwhitt, “Culture and Cities”, in: *Information Bulletin. Association for Planning and Regional Reconstruction*, Nr. 202, Juni 1949, S. 1.
- <sup>20</sup> Patrick Geddes, *Cities in Evolution*, 2. Aufl., gekürz., hrsg. von Jaqueline Tyrwhitt, London: Williams and Northgate, 1949, S. xxx.
- <sup>21</sup> Jaqueline Tyrwhitt, “Introduction”, in: Patrick Geddes, *Cities in Evolution*, (wie Anm. 20), S. ix-vii, hier S. x.
- <sup>22</sup> Jaqueline Tyrwhitt, “The Valley Section, Patrick Geddes’ World Image”, in: *Journal of the Town Planning Institute*, Bd. 37, Nr. 3, 1951, S. 61-66.
- <sup>23</sup> Ebd., S. 61.
- <sup>24</sup> Jaqueline Tyrwhitt, “Community facilities and services in large-scale housing developments”, in: *Housing and Town and Country Planning*, (United Nations Publications, Bulletin 5), Lake Success (NY): Department of Social Affairs, United Nations, 1951, S. 2-6, 80.
- <sup>25</sup> Sigfried Giedion, *A Decade of New Architecture*, Zürich: Girsberger, 1951.
- <sup>26</sup> Jaqueline Tyrwhitt, “The CIAM Grid”, in: *Information Bulletin. Association for Planning and Regional Reconstruction*, Nr. 198, Nov.1949, S. 1.
- <sup>27</sup> Tyrwhitt had co-authored the MARS group’s definition of the *core*: “the element which makes a community a community, and not merely an aggregate of individuals.”
- <sup>28</sup> Tyrwhitt continued to compare and contrast the CIAM grid and Geddes’s “Notation of Life” diagram in the context of work with Doxiadis, who developed an *Ekistic* grid to study human settlements. Tyrwhitt and Gwen Bell featured this discussion in their introduction to *Human Identity in the Urban Environment*, (Middlesex: Penguin, 1972), their anthology of articles from the journal *Ekistics*, which Tyrwhitt edited 1956–1972.
- <sup>29</sup> Jaqueline Tyrwhitt, “Background of the Core”, CIAM 8, Hoddeston, England, 9.7.1951. RIBA (TyJ/46/6) ((please precise the kind of document))
- <sup>30</sup> Jaqueline Tyrwhitt, “Do New Towns Provide Safety? No”, in: *Progressive Architecture*, Bd. 21, Nr. 9, 1951, S. 77.
- <sup>31</sup> Jaqueline Tyrwhitt, Jose Luis Sert, and Ernesto Nathan Rogers, *The Heart of the City: Towards the Humanisation of Urban Life*, New York: Pellegini, 1952.
- <sup>32</sup> Jaqueline Tyrwhitt. “Cores within the Urban Constellation”, in: *The Heart of the City* (wie Anm. 31), S. 103-06, hier S. 103.
- <sup>33</sup> Tyrwhitt 1951 (wie Anm. 22), S. 65.
- <sup>34</sup> Jaqueline Tyrwhitt, “A Short Outline of the Core”, in: Tyrwhitt/Sert/Rogers 1952 (wie Anm. 32), S. 168.
- <sup>35</sup> Jaqueline Tyrwhitt, “The Core and the City”, in: *Architects’ Year Book*, Bd. 5, 1953, S. 39–47.
- <sup>36</sup> Jaqueline Tyrwhitt, “Cores within the Urban Constellation”, in: Tyrwhitt/Sert/Rogers 1952 (wie Anm. 32), S. 104.
- <sup>37</sup> Tyrwhitt 1953 (wie Anm. 35), S. 39.
- <sup>38</sup> Ebd., S. 43.
- <sup>39</sup> Jaqueline Tyrwhitt. “The Village Centre”, in: *Proceedings of the South East Asia regional conference, New Delhi, 1954*, New York: United Nations, 1957, S. 220–25, Zit. S. 220.

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<sup>40</sup> Jose Luis Sert, “Graduate School of Design”, in: *Report to the President of Harvard College and Reports of Departments*, Cambridge (MA): Harvard, 1956, S. 492–501, Zit. S. 492.

<sup>41</sup> Carl Feiss, “Editorial”, in: *Journal of the American Institute of Planners*, Bd. 20, Nr. 4, 1954, 170–173.

<sup>42</sup> Jose Luis Sert, “Introduction to the Urban Design Conference. Graduate School of Design, Harvard University”, 9. 4.1956. Loeb Library Special Collections (SERT D029). ((please precise the kind of document))

<sup>43</sup> Eric Mumford, *Defining Urban Design, CIAM Architects and the Formation of a Discipline*, 1937-39, New Haven: Yale, 2009, S. 122.

<sup>44</sup> Jose Luis Sert, “City Planners Advise Urban Redesigning”, in: *Harvard Crimson*, April 13, 1957. <http://www.thecrimson.co/article.aspx?ref=108737> (16.6.2012).

<sup>45</sup> Jose Luis Sert, “Design School Offers Three New Master’s Degrees in Urban Studies”, in: *Harvard Crimson*, July 16, 1959. <http://www.thecrimson.co/article.aspx?ref=112579> (16.6.2012).

<sup>46</sup> Jaqueline Tyrwhitt, “Education for Urban Design. Origins and Concepts of the Harvard Program”, in: *The Architect and the City*, hrsg. von Marcus Whiffen, Cambridge (MA): MIT 1962, S. 121-138, Zit. S. 124.

<sup>47</sup> Ebd., S. 123.

<sup>48</sup> Jaqueline Tyrwhitt, “Shapes of Cities That Can Grow”, in: *Architectural Association Journal*, Bd. 79, Nr. 876, 1963, S. 87-102, Zit. S. 88.

<sup>49</sup> Ebd.

<sup>50</sup> Jaqueline Tyrwhitt, “The study of regional and urban planning”, in: *Ekistics*, Bd. 52, Nr. 314/315, S. 445-448, Zit. S. 448. This double issue of *Ekistics* is dedicated to Tyrwhitt.