Patrick Geddes and the Missing Heart of Modern City Planning

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Land Use Planning Policy

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Abstract

This thesis examines the meaning of community from a land use planning perspective. What constitutes community in city planning, both from a historical perspective, and as this idea is applied to modern neighborhoods and cities? The theories and planning methods of early city planner and biologist Patrick Geddes will be used to answer this question. Geddes's theory of the city, and his chart, The Notation of Life, provide a holistic definition of the city that includes interconnected physical, social, emotional, and religious elements. Geddes's theory of the city revolves around people's connection to each other and the landscape and as such is also a definition of community. How he applied his theory to his many city and town plans and urban designs will be examined, as well as how some of these ideas can be applied to the Wells Avenue neighborhood's revitalization effort in Reno, Nevada.
I would like to thank my committee for their help and advising on this project:

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Foreword

Community As Connection

Central to the idea of City Planning is the concept of community. This word is difficult to define, but it is important, as it is used constantly in contemporary planning as well as in planning literature. My interest in writing this thesis was to understand where the idea of community fit into city planning in theory and in practice. First however, I had to figure out exactly what *community* meant. Through my studies in planning I discovered that the planner and urban theorist whose ideas and planning methods seemed to best embody and explain the concept of community was Patrick Geddes. In writing this thesis I discovered that to Geddes this idea centers around people, and around connection. This will be elaborated further in the chapters ahead, but basically, I explore the idea of community as connection between people, and between people and their landscape, built and natural, as well as the connection between people and elements of their non-physical world, be it social, emotional, and even spiritual. Patrick Geddes articulated that planning is the art of designing places to be mechanisms for helping people relate to each other, to shared history, and to place. He also articulated a philosophy of life, society, and the city based on a firm belief in the evolution and ‘improvement’ of people and society. According to Geddes the city was the vehicle for this evolution as well as the place or landscape upon which the development of society occurred.
My interest in planning is similarly based on my belief in the importance of the interconnection, of people to each other and to their landscape, as well as the importance of nurturing these connections. My personal belief is that if we disconnect from elements of our society, or from the elements of our natural landscape that we inhabit or use for resources, then we stop making decisions based on an awareness of the entirety of our world - or from all of the information available to us - and that something correspondingly disconnects within us emotionally as well. Planning as a discipline is foundational to ensuring these types of interactions within our society. Planning is one of the things that determines the design of our built landscape, and how that landscape creates or nurtures our connections to place and with each other.

Wanting to know how the built aspects of my neighborhood and city were created, and especially whether they honored or denied connections between people, and people and their landscape, was what sparked my interest in urban planning. As I began an academic exploration of land use planning questions, I simultaneously began a practical engagement with these same issues, in my own neighborhood. I wanted to know what really was at the heart of our neighborhood and our city communities, both physically and socially – what defined them and what created value in these places for us. In addition to all of this I wanted to be an active part of this process. I wanted to ‘connect’ to the intricacies of how my neighborhood and city functioned, especially in terms of how the landscape had been organized and could, or could not, be changed based on the needs of people. I came together with several neighbors to work on what were essentially planning exercises; over the past five years we have become a thriving
grassroots group of people who work to improve our built landscape and the interconnections that are nurtured by that landscape.

In short, my involvement with my neighborhood was motivated by some of the same questions that I was asking in my academic studies, and the same questions that I am trying to answer in this thesis. What are the central elements that define our community and what is missing, if anything, in creating an urban landscape that satisfies our social, physical, and emotional needs, to the extent that the built landscape impacts each of those needs? During the process of asking these questions, I have learned just as much through practical engagement with the Wells Avenue Neighborhood as I have by studying city planning at UNR (and I have learned a lot from both). Perhaps surprisingly, when I began I really didn’t see the ‘connection’ between my studies and my community work, and now I see connection everywhere. After five years of practical and academic research about planning and the idea of community, what I thought were two tandem tracks have come together into a shared answer. How we understand what community is, and the assumptions underlying this understanding, is to me the central question that planning asks. I will return to my own practical experience with planning and community in the conclusion to this paper. The question of how we understand community and how we do (or don’t) plan based on that is the topic of the next four chapters.
~ Introduction ~

The job of city planners is to help direct the creation and function of our urban landscapes. Central to that job is to foster the notion of, as well as the physical creation of, community. Yet the meaning of community is often taken for granted, or, at best, poorly defined. According to the Oxford Dictionary *community* is, “a group of people living in the same place or having a particular characteristic in common; a group of people living together and practicing common ownership; [and] a particular area or place considered together with its inhabitants….”¹ This definition implies that there are three aspects to community, each of which is based upon connection: a) through a common characteristic or *identity*; b) through *communality*, or ‘people living together and practicing common ownership’; or c) through *geography*, a connection to a particular area or place ‘considered together with its inhabitants.’ Each of these elements of community has both a physical and a conceptual meaning. In a) above, common identifying characteristics can be tangible, such as language or ethnic traits, or cultural and social like religious beliefs or shared traditions of art and music. *Communality* implies actual shared ownership of a physical place or places in proximity, as well as the communal sensibility that comes with living as a group or together in one geographic location. And c), *geographical connection* can be both the connection of people to a

physical place and the defining physical characteristics of that place, as well as the identity of a group around a shared landscape.

For the purposes of this paper I will use this definition of community, that community is connection in each of the ways mentioned above, both between people and between people and their landscape. This idea of community as connection is both concrete and abstract. It includes the physical ways that people are connected to their landscape and the physical characteristics of their city or neighborhood such as patterns of use and urban design, as well as abstract and philosophical ideas about how people in a community are connected socially through identity, religion, knowledge, and shared history or experience. Each of these types of connections is in some way relatable to the landscape: they always take place, and are somehow influenced by or within the context of a particular geographical area, such as a city block, the city as a whole, or the larger region and beyond.

This thesis will examine planning as it is informed by this idea of community. Central to this discussion is the biologist, social philosopher and city planner Patrick Geddes, who, more than any other thinker of his time, and perhaps more than any other city planner, understood the city, and the concept of community as connection. Geddes’s conception of the city included all of the ideas mentioned above, in an elaborate, all encompassing, and essentially holistic view that has influenced thinkers and city planners from the late 1800s through to today.²

² For a discussion on Geddes’s influence on early planners including Ebenezer Howard, Lewis Mumford and the Regional Planning Association of America see Hall 2002, Chapter 5, as well as Chapter 1 of this paper.
To introduce Geddes’s ideas I will begin with a brief investigation of his relationships, and the ideas he shared, with his contemporaries, Peter Kropotkin and Ebenezer Howard, and also his influence on Lewis Mumford. Following that, Geddes’s ideas about the city will be examined in detail; this investigation will focus on his Thinking Machines, the most elaborate of which, The Notation of Life, will be the subject of Chapter 3. The Notation of Life is a complex map of how Geddes understood the city, simultaneous with human life, as a nearly infinite collection of interconnections among the physical and temporal elements of community including history, culture, art, and religion; together all of these elements evolve into what he called the ‘ideal city’, or ‘City in Deed’. Throughout his life Geddes produced plans for towns and cities in Europe, India and beyond, and each of these plans is informed by his theory of the city. His ideas as they are applied to his plans, and examples of his planning techniques, will be discussed in Chapter 4.

Geddes was able to apply his wide-ranging theories and planning methods in a supremely practical manner on the ground. Ideas that originated in Geddes’s plans have continued to be enormously influential, they include ‘Survey before plan,’ historic preservation and slum revitalization, Conservative Surgery, open space, public gardens, and the concept of the region. From this synopsis of Geddes’s theory of the city and his planning techniques it will be clear how Geddes thought of community. Central to his ideas are the importance of connections of people to each other and to the landscape through urban design – basically Geddes planned for people. Finally, based on these

3 The ‘City in Deed’ refers to the final quadrant of Geddes’s chart The Notation of Life, which will be explained in Chapter 3.
conclusions I will take a brief look at how Geddes’s theories and plans can fit into a modern American neighborhood.
Ideas of Community from Geddes and His Contemporaries

Patrick Geddes was a biologist, botanist, and social theorist, as well as a city planner whose career and writings spanned from the late 1880’s to the early 1930s. Geddes was a central participant in and lecturer at the influential Town Planning Conference and Exhibition in London in 1910 (Boardman 1978, 243); and became one of the most influential thinkers of his time on the nature, organization and the design of cities. His work influenced many early city planners including Raymond Unwin and Patrick Abercrombie, Ebenezer Howard, Lewis Mumford and the Regional Planning Association of America, and pioneering sociologist Charles Booth (Meller 1990; Stalley 1972). Geddes also had communications and shared ideas with Peter Kropotkin, Mahatma Gandhi, and Charles Darwin (Boardman 1978; Meller 1990). It is in context of his peers in city planning, those who influenced him as well as those he influenced, that we begin our examination of Geddes’s ideas.

Peter Kropotkin, Ebenezer Howard, and Lewis Mumford each shared one central thing with Geddes – they all planned their visions for society and cities around people, the physical and social needs of all of the people in a town or city. Each valued Kropotkin’s idea of mutual aid (Hall 2002; Meller 1990; Ward 2002), basically that species need to cooperate in order to survive, and that cooperation should be one of the primary values informing the organization of cities. Below is a brief introduction to
Geddes, and following that a synopsis of each of Kropotkin, Howard, and Mumford’s ideas, as well as how their ideas were connected to Geddes’s.

*Patrick Geddes*

Geddes’s most recognized contributions to the field of planning are the following ideas, each of which are connected to one another: Place, Work, and Folk; the Valley Section; the Region; and his familiar entreaty, ‘survey before plan.’ Geddes’s background as a biologist was the basis for his reasoning that man, like an organism and its environment, is connected to and has a reciprocal relationship with his physical landscape (Boardman 1978, 216). One of the foundational ideas of Geddes’ philosophy, based on this idea that humans and towns are connected to the landscape in a way similar to organisms and their environments, is what he called Place, Work, and Folk. Derived from the ideas of early French sociologist Frederic Le Play, (1806 – 1882), this was Geddes’ starting point for understanding a city or town, and the way that he described the essential functioning relationship between humans and their landscape (Hall 2002, 146; Welter 2002, 11). ‘Place’ is the geographical site on which settlement is located, and based on the attributes of the Place, people (Folk) will do certain types of Work, but the type of Work, as well as the Place also contributes to certain characteristics of the people. This reciprocal interaction that Geddes’s begins to describe with the concept of Place, Work, and Folk has many different aspects and is foundational for much of his thinking (which will be examined in greater depth in Chapter 3); however, in its most basic interpretation it is his way to begin to describe the interrelationships that occur between the landscape and humankind. In his own words:
Let us call our Human Environment, our Place…and our human grouping, our folk…. And since, in a forest-place, we must hunt or starve on the plain, plough or starve; and, by the waters or on the sea either fish or starve, this pressure of place on folk is best summarized as Work. The Place, thus inexorably Works the folk: yet the Folk, increasingly, Work the Place. (Geddes 1927, 42)

These ideas also inform Geddes’s Valley Section, a diagrammatic template that he used to show attributes of the natural environment as they connect to the economic systems in a region. First published in 1905, this diagram, shown below, came at a time when geographers and social scientists were grappling with how to understand and define a city in terms of the new patterns of human settlement following industrialization, in which cities were growing outwards to meet each other and engulf outlying towns and the countryside (Welter 2002, 55-60).

![The Valley Section](image)

**Figure 1.1: The Valley Section**  
Source: Hall 2002 (Geddes 1905)

The Valley Section was defined by a geographical area of settlement, generally along a river system, that began in the mountains and ended at the ocean. The Valley Section includes small villages, agriculture, towns, and large urban and industrial areas (cities). In each location within the Valley Section particular occupations were associated with the corresponding physical resources and climate: miners and woodsman in the mountains;
then hunters and shepherds in the hills; farmers on the plains; fishermen near the sea; and in Geddes’s words, “finally at the mouth of its estuary, rises the smoke of a great manufacturing city, a central world-market in its way” (quoted in Welter 2002, 61). The Valley Section was not only a horizontal representation of some of the basic types of Place, Work, and Folk interrelationships found in different elevations and climates, but also linearly based on the evolution of humans, from hunter to farmer to modern humankind.

The Valley Section not only illustrated Geddes’s concept of the region but he also intended it to be used as a survey tool. Geddes insisted that each town or city should be surveyed with a diagram similar to the Valley Section in order to properly understand the challenges and needs of its inhabitants.Called a ‘regional survey’ by Geddes, it included, loosely, geographical information including natural resources and attributes of the landscape, as well the economic activities and habits that contributed to or were tied to the town or city. This area became known as the Region, though to Geddes this idea could extend beyond the definition of a geographical area to include various additional non-physical elements related to Place, Work, and Folk (Meller 1990, 134-138; Welter 2002, 64).

What is at the foundation of each of these ideas is *connection*. The ways that Geddes believed people are connected to their landscape can begin to be articulated through the concept of Place, Work, and Folk. The Valley Section, including the concept

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4 Geddes’s belief in and practice of the ‘regional survey’ was influential in Europe during and just after the First World War. It was also employed by Patrick Abercrombie in his planning exercises, and was the basis for the ideas of the influential Regional Planning Association of America, which will be discussed below (Meller 1990, 289-308).
of the Region, expands on the understanding of this connection and what it includes. And finally, Geddes’s insistence upon the value of the survey is based on his recognition that all of these connections and interrelations matter for the understanding and planning of a town or a city.

Peter Kropotkin

Geddes was influenced by the ideas of his friend and contemporary Peter Kropotkin (1842 – 1921; see, e.g. Tyrwhitt 1947, 12; Stalley 1972, 21). Kropotkin was a 19th century Russian anarchist, geographer and zoologist, and is considered one of the fathers of geography and by extension modern city planning (Hall 2002, 150-151).

Kropotkin’s most influential idea, and the basis of his understanding of community, is his theory of Mutual Aid, the concept that living beings, from ants to humans, all participate in the phenomenon of cooperation, and that this is the most important factor for their survival. Using examples from primitive tribes to modern societies, Kropotkin argues that mutual aid is the most basic ethic for living things (Kropotkin 1902; Kropotkin 1913). Though he acknowledges the role of competition, he argues that for animals cooperation is the most important survival technique, and for humans it is the most valuable component for a successful society. Consequently he posits that societies should be organized and informed by mutual aid.

Kropotkin’s main treatise on this idea was his work of the same title, written in the last decade of the 19th century and first published in 1902. In this work Kropotkin explains that mutual aid and support among animals and humans is one of the main factors of evolution, as opposed to the interpretation of the Social Darwinists that the
survival of the fittest is the main driver behind a species’ success. Kropotkin contends that the latter was actually a distortion of Darwin’s theory of evolution (Kropotkin 1902, 17-24). Though Kropotkin believed that struggle was a part of life, it was mainly a struggle against environment and not necessarily among or within species, and that this struggle actually encouraged cooperation over individual competition. In *Mutual Aid* Kropotkin shows that examples of cooperative effort and support are more common in nature than are struggle and competition, and that it is instances of mutual aid and support that have helped certain species survive and be propelled forward in the evolutionary chain. Kropotkin demonstrates that various types of birds, bees and mammals provide support and cooperation both within and outside of their species, in raising their young, gathering food and self-defense.

Kropotkin also provides extensive human examples of mutual aid. In tribal and village life, Kropotkin shows that communal relationships and choices were based on common ownership, and that all members of the group worked together on behalf of the whole. He argues that the same was true in medieval cities, where communities were successfully organized around guilds. Guilds provided protection, a community structure for resolving disputes, and even self-regulation of the markets for what was produced and sold or purchased in bulk by the city. In Kropotkin’s examples the guild structure was organized so that all members were equally valued and represented, and decisions were made based on what would be most beneficial to the group as a whole. In this model, goods purchased or produced in common were shared by all and prices were set by the group (Kropotkin 1902, 164-165).
Kropotkin takes this argument one step further when he employs scientific, ethnographic and societal examples to show “mutual aid...as an argument in favor of a pre-human origin of moral instincts” (Kropotkin 1902, 20). For him, these scientific and historical examples lead him to the conclusion that “mutual aid is the real foundation of our ethical conceptions” (Kropotkin 1902, 250). His examination of different species’ choices to cooperate in order to survive illustrates to him that the instinct of cooperation, or mutual aid, is the foundational value upon which all other values are based, and the structure upon which communities should be organized. This implies interaction and interconnection among all members of a community, or as Kropotkin himself put it, “man is appealed to be guided in his acts...by the perception of his oneness with each human being” (Kropotkin 1902, 251).

Kropotkin’s theory of mutual aid led him to create the concept of communistic anarchism as the model for societal organization. Though this model can only be achieved, according to Kropotkin, through a revolution of the masses, Kropotkin believed that a society based on the principles of mutual aid and cooperation was ideally one without government - where the absolute freedom and individuality of each person would precipitate true cooperation and equality in a community (Kropotkin 1913). Included in this vision for society was a universal “right to well being.” Kropotkin declared that, “all have a right to bread...and there is enough bread for all” (Kropotkin 1913, 30, 69).

Throughout his life Geddes shared and was influenced by this belief in the necessity of communal connections and mutual aid (Meller 1990, 100, 104-105, 325). Kropotkin’s ideas concerning the importance of interconnectedness, communality, and mutual aid were manifest in his theories of how society, cities, and towns should be
organized. He believed in the dispersion of people into the countryside, arguing that technological advances allowed everyone to be able to work in a garden or in the fields, and that such a reorganization could produce more than enough food for everyone in society (Kropotkin 1912; Kropotkin 1913). These ideas also resonated with Ebenezer Howard, who is addressed in the next section.

To Kropotkin community and connection were the foundation for how cities and towns should be organized. His ideas were based on his belief, the result of his scientific research, that the most fundamental value to living things was cooperation. All things were connected and benefited, over everything else, from cooperation with one another. This premise is a part of Geddes’s philosophy and one of the undergirding aspects of his theory of the city. Geddes said that, “like flower and butterfly, city and citizen are bound in an abiding partnership of mutual aid” (quoted in Welter 2002, 34). Geddes integrated many different aspects of human life into his understanding of the city, and each of these was connected to other elements and to the whole, just as people were connected to each other and to the whole in Kropotkin’s theory of mutual aid. Like Kropotkin, Geddes also took the view, elaborated in Chapter 3, that evolution is based more on cooperation than struggle, and said that, “creation’s final law’ is not struggle but love” (quoted in Boardman 1978, 117; Geddes 1886).

Kropotkin’s theories about community organization were also offered as a solution to the problems in 19th century cities (Kropotkin 1913, Chapters 1 & 2). His contemporary Ebenezer Howard (1850-1928) was motivated by similar issues (miserable, unsanitary, and overcrowded urban living conditions combined with low wages and inadequate access to healthy food) and also was influenced by Kropotkin’s theories and
his proposed solutions (Hall 2008, 162). Kropotkin’s influence on Howard is evident in Howard’s theory and designs for his Garden City – the Garden City was loosely based on Kropotkin’s articulation of the value of cooperatively organizing and dispersing the population more evenly into the countryside (Ward 2002, 23; Hall 2008, 8-10). Howard’s book, Garden Cities of Tomorrow, lays out a concrete plan for how a city based on how these ideas could be designed.

**Ebenezer Howard**

The design of the Garden City has been so influential to the history of city planning that geographer and urbanist Peter Hall calls Howard “the most important single character” in the history of city planning (Hall 2002, 88). What Howard values is clear – it is an extension of Kropotkin’s ideas of spreading the population into the countryside, cooperative work, and mutual aid; “Garden Cities” writes Hall, “were…the vehicles for a progressive reconstruction of capitalist society into an infinity of cooperative commonwealths” (Hall 2002, 88). In the beginning of Garden Cities of Tomorrow Howard expresses his worry about the overcrowding of cities and the exodus of people from the country, and suggests that one of the solutions is to “restore people to the land” (Howard 1902, 13).

Howard’s original Garden City design is shown below:
It is intended to create a balance of city and nature, or “Town” and “Country.” Howard articulated that the benefits of the town include, “science, art, culture, religion,” (Howard 1902, 15). Of the country he says that humans are, “fed by it, clothed by it, and by it we are warmed and sheltered” (Howard 1902, 16). He believed that these two elements – the benefits of society and the natural resources and benefits of the country, “must be married” (Howard 1902, 16). The Garden City was designed as a solution to the overcrowding in European cities, as a way to ensure that there was sufficient labor to work agricultural land, and as a means to realize Howard’s societal ideal of the union of town and country (Howard 1902, 13).
This illustration of the Garden City shows that the entirety of the design comprises 6,000 acres, 5,000 of which are dedicated to “Agricultural Land” and 1,000 are intended to house the actual “City.” Contained in the City are all of the uses that Howard presumed people would need, except for “various charitable and philanthropic institutions” such as “Asylums,” “Convalescent Homes,” and “Children’s Homes;” these are interspersed with the fruit trees, forests, and fields of the Agricultural Land. The City is designed around a central park, surrounding which, in widening concentric circles, are: areas for “Public Buildings” including a Town Hall and Museums; additional park and gathering spaces including Howard’s indoor/outdoor glass public space, “The Crystal Palace”; residential areas made up of homes that are interspersed with gardens; and finally, in the outer ring, “factories, warehouses, dairies, markets, coal yards…etc.” Surrounding all of this is a “Circular Railway” which is intersected by a larger “Main Railway” that connects to other Garden Cities (Howard 1902, 22-27).

Howard and Geddes differed in their theoretical approaches; Geddes was interested in the “institutions of cultural transmission and elaboration,” while Howard was more concerned with specific design (Clavel 2002, 55). Historical circumstances and several of the same thinkers of their era, however, influenced both men. Like Howard, Geddes was motivated in part by the need to find solutions to the overcrowding in 19th century cities, and looked to the values that Kropotkin articulated. Both also had a profound impact on the discipline of city planning.
Lewis Mumford

Lewis Mumford (1895 – 1990) was Geddes’s most important champion and interpreter. Mumford was a social theorist who, like Geddes, wrote about cities and city planning (Hall 143; Meller 1990, 302-303). He called Geddes his greatest influence and further developed Geddes’s conception of the region and promoted the application of this idea through the Regional Planning Association of America (RPAA) (Hall 2002, 8,155). Mumford credited Geddes with giving him, “the frame for my thinking” (quoted in Meller 1990, 181). Standing in part on the intellectual shoulders of Geddes, Mumford became one of the 20th century’s most influential thinkers about cities.

Based on a combination of Geddes’s and Howard’s ideas, the RPAA was founded in 1923 to propagate regionalism and the garden city design; to further relationships with British planners in America; and to begin to employ the regional survey in key areas (Hall 2001, 156). Led in part by Mumford, the RPAA advocated that new technologies could combine to create a balance in settlement and markets between the urban and rural areas of the Eastern and Southeastern United States. RPAA members promoted the creation of garden cities, where people and jobs would be disbursed from overcrowded cities into the countryside. This idea was based in part on Geddes’s conception of the region, which connected the natural resources and characteristics of the physical landscape with the type of goods that are produced in an area. In the words of RPAA member Stuart Chase:

The regional planning of communities would wipe out uneconomic national marketing, wipe out city congestion and terminal wastes, balance the power load, take the bulk of coal off the railroads, eliminate the duplication of milk and other deliveries, short circuit such uneconomic practices as hauling Pacific apples to New York customers by encouraging local orchards, develop local forest areas
and check the haulage of western timber to eastern mills, locate cotton mills near cotton fields, shoe factories near hide producing areas, steel mills within striking distance of ore beds, food manufacturing plants in small giant power units, near farming belts. Gone the necessity for the skyscraper, the subway and the lonely country-side! (quoted in Hall 2002, 160-161)

The RPAA’s suggestions implied a radical re-adjustment of civilization, based on producing and consuming goods and services in one’s own region. Though radical at the time, today very similar ideas are popular in ‘buy local’ movements across the U.S. The RPAA’s vision was greatly influenced by Mumford’s understanding of the region; itself an expansion of Geddes’s view, and with it came planning practices and a social agenda that aimed to initiate profound change in American cities.

As with Geddes’s, Mumford’s idea of the region, as well as his understanding of cities, was not just physical but also included “the cultural environments, considered as wholes, within which man finds his life and being and drama” (Mumford 1938, 303). As we will explore in the coming chapters, Geddes possessed a holistic understanding of the city that included many disparate physical and social elements. Mumford said of Geddes, “he saw both cities and human beings as wholes” (Mumford 1947 11-12). Inherent in this understanding of the city as a whole is that, as with an organism, the morphology of the whole includes every working part. The characteristics of the region that Mumford urges us to consider are similarly holistic but more detailed than Geddes’s, and they are updated with a more contemporary perspective. Mumford wrote that each of the following should be thought of as important to the ‘region’: the specific geographic physical characteristics such as soil, climate, and natural resources (Mumford 1938, 312); environmental balance or equilibrium, which can be thought of as the ecological
balance among species (including humans) (Mumford 1938, 312-313); and social

elements that are focused on the needs and attributes of people. In his words:

The city in its complete sense, then, is a geographic plexus, an economic
organization, an institutional process, a theater of social action, and an esthetic
symbol of collective unity…The city fosters art and it is art; the city creates
theatre and it is the theatre, that man’s more purposive activities are formulated
and worked out, through conflicting and cooperating personalities, events, groups,
into more significant culminations. (Mumford 1938, 480)

Central to Mumford’s understanding of cities is the idea that humans are the point
of value, or the most important element by which decisions about cities should be judged:
“the aim of the social process is not to make men more powerful, but to make them more
completely developed, more human, more capable of carrying on the specifically human
attributes of culture” (Mumford 1938, 303). In planning and understanding cities around
these ‘human attributes’, he acknowledges Kropotkin’s idea of mutual aid (Hall 2002,
162) and the need for cooperation, and human connection. In his 1938 book The Culture
of Cities, Mumford writes a history of cities from medieval times to the 20th century, and
focuses on the social and cultural interactions of people with their urbanized landscape,
including the historic design of their homes, towns, cities, and neighborhoods. He
explains how he thinks cities should function in terms of people and their social,
emotional, cultural, and economic needs. As explained below, Mumford’s ideas about
the region, about architecture, and his thoughts about how a modern city or town should
be organized around its social elements illustrate his people-centric theory of the city.

Mumford believed that ideally the design of buildings should not be based on
empty symbolism, but on function – on facilitating the needs of the inhabitants, and
creating, “a physical environment that respond[s]…sensitively to the vital and personal
needs of the occupants” (Mumford 1938, 412). He calls this “living” architecture, design “in adequate relation to life” (Mumford 1938, 412). In *The Culture of Cities* Mumford surveys the development of urban design and architecture, and he argues that architectural design historically has not made the connection between design and function, or design as a true reflection and home for human life; he does think, however, that hints of this connection have begun to show up. Art Nouveau, for example, though it ultimately fails to draw more than a symbolic connection between art/architecture and nature, was “right in exhibiting and glorifying life,” (Mumford 1938, 412). Modern architecture, he writes, has also taken a step towards reconnecting design with people-centric function through its simplified form and use of modern, machined construction materials, which he describes as, “prophetic emergents of…a society whose productive system and consumptive demands will be directed towards the maximum possible nurture… of the human group” (Mumford 1938, 415).

In regard to the organization of a town or city Mumford promotes design changes that will encourage interaction between people. Mumford argues for a design that places the school at the center or “nucleus” of a community; this idea assumes that a community needs a central point or place through which all members can be socially connected, and where a “purposive group life” which includes, quoting Comte, an “interaction of ‘temporal and spiritual powers’ ” can occur (Mumford 1938, 471). In *The Culture of Cities* Mumford uses the examples of public baths, the church, and the New England Town Hall as places that had served as this ‘nucleus’ in previous eras. He suggests that the school could be this point in modern society, but that to do so it would have to
incorporate not only learning for children, but also meeting spaces, and even performance and dance spaces for adults.

Other elements that Mumford argues would create a local landscape designed around the needs of people and fostering interconnections among them are his suggestions regarding the size and physical attributes of neighborhoods. He suggests that one neighborhood should be defined as that area “determined by the convenient walking distance for children between the farthest house and the school and playground in which a major part of their activities are focused” (Mumford 1938, 472). Its boundaries should not contain any major thoroughfares, so as to keep children safe, and in addition to homes, there should be “a representation of the larger social whole,” by incorporating light industries, as well as small plant or factory, into the neighborhood. In this way children can get the added experience of direct observance of the economic element of their world (Mumford 1938, 473). These examples show Mumford’s integrative approach to understanding and designing cities based on the needs of people as well as his belief that, “the deepest need of modern life is to re-integrate the organs of association by forming new civic wholes” (Mumford 1938, 470).

This ‘reintegration of the organs of association’ can be interpreted to mean the reforming of social connection within a community; this idea, as well as ‘forming a civic whole’ are ideas directly influenced by Geddes. As we will see in the following chapters, Geddes’s theory of the city, as well as his planning practices are similarly based on the goals of integration of uses, use patterns, and the interconnection, on various levels, of humans with each other. Based on Kropotkin’s premise that mutual aid or cooperation is the ‘foundation for our ethical conceptions,’ Geddes, Howard and Mumford each put
planning for people at the center of their ideas about how cities should be designed. Geddes was the first planner to articulate this and his ideas influenced throughout is life. Mumford wrote that,

Geddes’s greatest service was to open up the House of Life, from rooftop under the open sky to labyrinthine cellar….Nothing less than the total effort of all creatures and all minds, aided by stars in their courses, is necessary to convey even faintly the meanings and values of life. And from whom did I first learn this lesson? From Patrick Geddes. (quoted in Hall 2002, 156)

If we interpret ‘The House of Life’ as the city, then Mumford is saying that Geddes opened up an understanding of the city, and of life, which is essentially an understanding of the infinite elements of life and the city ‘from the rooftop under the open sky to labyrinthine cellar’.

Geddes tried to articulate his understanding of the city based on this myriad, even infinite, number of elements and how they connect with one another, and, he endeavored to plan based upon this idea. How Geddes proposed to explain this was difficult to understand, but then again, the articulation of the infinite elements present in human life and the city isn’t really an easy thing to map out and Geddes should be given credit for such a heroic effort; how Geddes’s tried to both express and implement these ideas is the topic of the following three chapters.
Patrick Geddes: Scientist and Planner

Patrick Geddes (1854 – 1932) is known as one of the fathers of city planning. He was a Scotsman who began his academic career as a botanist and biologist, training that influenced Geddes throughout his career. As an academic Geddes published on a wide range of topics including botany, biology, evolution, economics, sociology and city planning (Welter 2002, 257-9). In 1889 he produced an influential though controversial book on the evolution of the sexes (Meller 1990, 2). As discussed in Chapter 1 Geddes’s training in the classification of plants and animals and the relationships of species to their environment translated into the framework for the study and survey of the region, where landscape and environment – social and physical – are taken into account to gain an understanding of a town or city. He was also influenced by Kropotkin’s idea of Mutual Aid, which informed his understanding of how people were necessarily connected in cities.

In addition to his background in science and the study of evolution, Geddes was also a profound thinker about cities, a practitioner of slum and urban revitalization, and one of the first practicing city planners. He was an early advocate for planning as a profession. Like many of his contemporaries, including Peter Kropotkin and Ebenezer

5 Geddes was, “a passionate advocate of planning as a new type of professional career. As a founder-member of the Institute of Town Planning he pressed for a recognition of the special skills required in this new and testing discipline” (Green 1904, 15).
Howard, Geddes engaged in the conversation about how to address the profound social issues that had come with the rapid industrialization of Europe’s biggest cities, including overcrowding, a lack of sanitary living conditions and sufficient wages and food (Meller 1990, 68, 73; Hall 2002, 154). Geddes’s response to the issues of overcrowding and unsanitary living conditions was to directly engage with the problem through what today we would call urban revitalization. In 1887 he moved into the slums of Edinburgh, called the ‘Old Town’, and together with his wife and others, lead a project to improve the living conditions there through public hygiene projects, beautification, renovation and demolition of select buildings, and even the creation of social programs for slum residents (Stalley 1972, 17-19). Later slum revitalization became a central part of Geddes’s planning practice in India.

**Academic and Professional Career**

*Academia*

For most of his life Geddes was a professor of biology and botany in Scotland; however, during his career he continuously traveled and lectured throughout the world. As his career progressed he became more of a social philosopher and city planner than a scientist, though he still published on biology up until the last years of his life (Welter 2002, 255-267). Geddes participated in many academic fields at once including economics, evolution, botany, sociology, and city planning, as well as engaging in projects, exhibitions, and planning exercises across Europe and later in India. This wide ranging engagement with may disciplines was possible in a time when many academic fields were not yet well developed, and the study of urban planning was in its infancy;
even for his time however, Geddes was unconventional and often frustrated his university employers with his disparate projects (Stalley 1972, 19). Peter Hall called Geddes, “an unclassifiable Polymath,” (Hall 2002, 143) appropriate for this scholar who even mastered the art of theatre and performance – Geddes regularly created and directed plays, called masques about the history and development of cities and civilization (Meller 1990, 149-151).

*Cities*

Geddes’s interest in cities was clear from his first foray into organizing and slum revitalization in Edinburgh the early part of his career. Following that he engaged with the topic of city planning in a number of different ways. In addition to his revitalization projects in the slums of Edinburgh’s Old Town he also undertook the rehabilitation of tenements in the same neighborhood, turning them into student housing (Meller 1990, 76-79). It was around this same time that he began to think and write about how cities evolved and should be structured. He stressed the importance of surveying and considering the geography and landscape from which a town or city grows, including the physical attributes of the region as well as its cultural and social history. From this he developed a complex theory of the city, based partly upon evolution and partly upon environmental attributes. This theory was an expression of his view of the world as an interconnected, ever evolving, physical and conceptual living thing, as well as a sacred place whose ultimate physical manifestation was the City. Geddes’s understanding and lifelong study of the city was interchangeable with his understanding of human life and its evolution – this theory will be addressed in detail in Chapter 3.
Planning

The products of Geddes’s career as a thinker about cities included ideas and theories about the city as well as actual physical plans. The first of these products was his previously discussed “reconditioning” of 85 flats and four homes in the Old Town of Edinburgh (Green 1904, 13). The projects in the Old Town were part of a larger vision to integrate and improve the slums, and to provide better housing (Stalley 1972, 20, 28). Near the turn of the 20th century he made designs for gardens in Edinburgh and in London, and in 1904 he was commissioned by the Carnegie family to produce a plan for Pittencrieff Park in the Scottish city of Dunfermline (Welter 2002, 255-267). In 1911 he began to display the Cities and Town Planning Exhibition, a ‘living museum’ containing his ideas about cities. He took the Exhibition to cities in Europe and the Middle East and eventually to India - continuing this project in different forms throughout his life. In 1914 he began what would be a decade of producing town plans for cities throughout India. During this time he also produced plans for Hebrew University and towns in British Palestine, including Tel Aviv (Welter 2002, 255-267).6 By the end of his life Geddes was recognized as the first of “four knighted pioneers of British Planning” the other three were Howard, Unwin and Abercrombie (Green 1904, 9; Meller 1990, 300-3).

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6 For further discussion of Geddes’s Plans in detail see Chapter 4.
Geddes as a Thinker

Exhibitions

Geddes’s Exhibitions, as well as his famous Outlook Tower in Edinburgh, are examples of how Geddes thought and represented his ideas. The way that Patrick Geddes expressed himself to others and the world, and how he communicated his ideas on paper, were reflections of his diverse and wide-ranging intellectual style. He used a combination of history, biology, evolution, geography and sociology to describe and understand cities. In the ever-changing Cities and Town Planning Exhibition(s) he was famous for using media that were varied and unconventional. A description of Geddes’s exhibit at the Town Planning Conference and Exhibition at the Royal Academy in 1910 illustrates this. Geddes had an entire gallery to himself called “The Edinburgh Room,” and used, “newspaper cuttings – crude old wood cuts – strange diagrams – archeological reconstructions” to “illustrate a continual lecture upon the city….” Even though others’ exhibits “easily excelled…in polish and shop finish,” Geddes was “present nearly all the time,” to elaborate upon his collection of artifacts, maps writings and diagrams (Stalley 1972, 68).

Geddes’s exhibitions were not just another part of his life’s work; they were also an example of how he connected the physical with the subjective or social through his ideas, in order to produce an experience that, he believed, would advance the evolution of a city. Geddes said, “education is not merely by and for the sake of thought; it is in a still higher degree by and for the sake of action” (quoted in Stalley 1972, 13). In service of this idea, Geddes intended his exhibitions to be both an experiential and educational tool.
that would further both the development of a city as well as the evolution of society.\footnote{Geddes’s belief in social evolution will be addressed in detail in Chapter 3.}

The marriage of thought and action through experience is central to understanding Geddes as a thinker; it is also a form of connection. Physically walking through an Exhibition on the City might combine tactile, visual, written, and aural (in the form of Patrick Geddes’s voice) representation of ideas about the city. For his audience this created a learning experience made up of relationships among the landscape, history, culture, and urban design of their town and as a result, Geddes hoped, one would leave with a different sense of the town, region or even of civilization as a whole. Geddes’s Outlook Tower, explained in more detail in the following section, is an example of this process/experiential-education, and his belief that participation and engagement, ‘education’ together with ‘action’, contributed to the evolution of cities, and society. Geddes’s Exhibitions, the Outlook Tower, and his tools for organizing his own ideas, called Thinking Machines, each have elements of this process (Meller 1990, 102).

*The Outlook Tower*

Geddes’s Outlook Tower in Edinburgh was an amalgamation of varied media and types of information, put together to further an understanding of a city, a region, and of human civilization in general that he believed would benefit the people of Edinburgh and beyond. The Outlook Tower was a building that Geddes had purchased as part of his revitalization efforts in the Old Town of Edinburgh. His vision for the Outlook Tower was informed by the same belief that motivated him to create the Valley Section and to argue for a survey of the region - in order to improve their environment, people had to
understand it. To this end Geddes created an Exhibit that included geography and history, and had to be based on experience as well as ideas (Meller 1990, 92-93).

Figure 2.1: Diagram of the Outlook Tower in Edinburgh

Source: Geddes 1915

A citizen of Edinburgh who came to visit the Outlook Tower would begin at the top floor, where a camera obscura provided a view of Edinburgh and its surrounding region; from there they began their descent, floor by floor, first to an exhibit dedicated to the historical development of Edinburgh; then to a display about Scotland including a
map correctly oriented to points of interest and diagrams and pictures; then down to the next floor which was devoted to exhibitions about the history culture and geography of British Empire and English-speaking countries, including the United States. Below that was Europe; and below that, on the ground floor, the Tower consisted of an exhibit that included the entire world, from which the visitor would again emerge (with what was hoped to be a new perception about their city) onto the streets of Edinburgh (Meller 1990, 102-103; Welter 2002, 79).

Geddes saw the Outlook Tower “as a unique public institution, at once a tool for the city designer and a civic museum” (quoted in Welter 2002, 78-79). The Outlook Tower contained not only maps, diagrams, and historical exhibits, it also contained symbols in the stained-glass windows that represented Geddes’s beliefs about life, as well as a school of art, whose students worked on the exhibits as part of their education (Meller 1990, 103). The Tower also contained a small room that Geddes called a ‘Thinking Cell’; this was a room for meditation and reflection, intended to augment the experience of the Tower by giving its students an opportunity to “[turn] over in memory the outlook and its mirrored reflection” (quoted in Welter 2002, 220). Geddes also believed that the The Outlook Tower itself was an integrative educational experience that was a contribution to the evolution of the city. Geddes saw cities as, “amphitheatre[s] of social evolution” (quoted in Welter 2002, 80); the Outlook Tower was a kind of intellectual amphitheatre from which to study, and engage in the process of, that evolution through the experience of the Tower. Geddes included models and versions of the Outlook Tower in his exhibitions and created proposals for similar structures to be
built in other cities, as part of museums or ‘Palaces’, and later in life as part of his temple designs (Welter 2002, 220).

Thinking Machines

A more abstract, conceptually more elaborate method through which Geddes represented his ideas was what he called Thinking Machines; one of his most well known is shown below. Thinking Machines were papers folded into quadrants, an idea he devised on a research trip to Mexico during which an illness rendered him temporarily blind. Geddes’s eyesight returned gradually after a few months, but during his convalescence, which he later called, “the worst, yet best experience of my life,” Geddes developed a tool for organizing and connecting thoughts that he would use throughout his career (Boardman 1978, 78; Geddes quoted, 78). Forced by his blindness to rely upon his sense of touch, Geddes would trace the squares of a windowpane and associate each pane with a thought – sort of a visual-tactile classification tool (Stalley 1972, 11). He realized that he could use folded papers in the same manner and when his vision returned he continued to ‘think’ in this manner. For the rest of his life he expressed many of his most complex ideas on pieces of paper that were folded into four, nine, sixteen, and thirty-six quadrants.

To make the discussion of The Thinking Machine #1 easier, the following table indicates the typeface that will be used to discuss different elements of the chart:

<table>
<thead>
<tr>
<th>Chart Element</th>
<th>Typeface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quadrant Names</td>
<td>ALL CAPS</td>
</tr>
<tr>
<td>Triad (3 main ideas) within each quadrant</td>
<td>SMALL CAP</td>
</tr>
</tbody>
</table>
Thinking Machines were meant to represent a thought process or an idea that began in the first quadrant and moved counterclockwise through stages. The example below, which I have labeled ‘Thinking Machine # 1’, illustrates the evolution of a TOWN into a CITY. This thinking machine shows how Geddes connected the physical to the conceptual, as well as how different elements of a society relate to each other and to the evolution of a particular city or of society as a whole.

![Thinking Machine #1](image)

**Figure 2.2: Thinking Machine #1**  
Source: Geddes 1905

The first quadrant, TOWN, includes **place**, **work**, and **folk**. These have the same meaning as discussed in Chapter 1, which Geddes calls a “social formula” that describes the physical relationship of people to place (Geddes 1905, 70). In this thinking machine the first quadrant represents the physical TOWN, “objective life,” or in Geddes’s words “the ‘everyday world of action” (quoted in Welter 2002, 34). The next quadrant is
SCHOOL. It represents the transition from the objective physical world to experience.

As a place develops, and PLACE, WORK, and FOLK interact upon each other,

types of people, their kinds and styles of work, their whole environment, all become represented in the mind of the community…Thus…there have obviously arisen local turns of thought and modes of speech…similarly a style of workmanship…There are distinctive manners and customs.” (Geddes 1905, 72-73)

These local experiences that are specific to a town and the result of the interactions between a people and their work and landscape are subjective elements that Geddes represents with the idea of SCHOOL, along with LORE and LEAR.

Moving counterclockwise the next quadrant is the CLOISTER, which represents the evolution of the city from experiences and conventional teaching to “schools of thought” and ideals (Geddes 1905, 72). The Cloister can be thought of as a physical place, such as a University or monastery, where IDEAS are formulated, as well also as the idea or state of mind in which IDEAS, art (IMAGES) and philosophies (IDEALS) are fostered. The final quadrant is the CITY, defined by POLITY, CULTURE, and ART. It represents the City, which is also Geddes’s ideal of the city, a place in which each aspect of the thinking machine has combined, interacted, and evolved to achieve what Geddes called “synthesis” (Geddes 1905, 90). According to Geddes the life of a city kept cycling through these quadrants as it developed dynamically and so the fourth quadrant could move into the first again to acquire additional physical, anthropological, and ideal elements, in a continuation of its evolution. A more complex version and analysis of this

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these ideas will be the central focus of Chapter 3, as part of the examination of Geddes’s theory of the city and his most developed thinking machine, The Notation of Life.

**Conclusion**

The Thinking Machine #1, along with Geddes’s Exhibitions and the Outlook Tower show how Geddes as a thinker was a connector of disparate ideas. He used varied techniques and media, including imagery and experiential learning, to not just communicate his ideas but also create a process that acted as another layer of learning or communication. Geddes worked on many levels at once – as a thinker he was multidimensional and cross-disciplinary. He communicated many different types of relationships or connections through mediums that in themselves created connections. As he said, “the world of thought cannot be permanently divorced from the world of action” (Geddes 1886, 4); he sought to simultaneously create thought from action, and vice versa. His understanding of the city was holistic, and it was made up of each of the connections defined earlier as community, as well as additional elements relating to religion and emotion.

The idea that connection is the foundation of Geddes’s theory about the city is manifest in The Notation of Life. It is through The Notation of Life that Geddes’s theory of the city, and the city as community, are illustrated most fully. Geddes’s view on the city was holistic – he emphasizes the relationships of humans to their physical landscape, to economies, to education, culture, the arts, and even to love and spirituality – and of course, to each other through each of these elements. Geddes’s understanding of
community is so important, varied, and profound because he saw the city and all of these aspects as the connecting vehicle.
Chapter 3

Geddes’s Theory of the City

“This bettered city of the opening future”
- Patrick Geddes

Key Philosophical Ideas & Introduction to the Notation of Life

The purpose of this chapter is to present Geddes’s theory of the city in detail, and by doing so show that he saw community as we have defined it: i.e., as comprising interconnected ideas of identity, communality, and geography, each of which has physical and conceptual elements. What Boardman (1978) called Geddes’s most complex thinking machine, The Notation of Life, illustrates these ideas. Geddes perfected the Notation of Life over many years – he used it as a representation of his theory of life and the city, and also believed that it could be used as a tool for understanding and surveying cities (Boardman 1978, 467). Geddes understood life and society holistically, as an “organic unity” (quoted in Novak, 1995, 35) that was made up of many parts. He believed in its improvement and theorized about how to make it better from a physical, practical, and even societal perspective. Cities were the centerpiece of Geddes’s quest for social improvement, and the primary landscape, or geographical place, upon which this theoretical and philosophical journey took place. The Notation of Life is shown below.
To introduce The Notation of Life it is important to first discuss some key ideas upon which Geddes based his theory of the city. The following are central to understanding Geddes’s views, as well as how he represented them through The Notation of Life; those that were not discussed in Chapters 1 and 2 will be discussed in further detail later in this chapter:

- Cooperation and mutual aid are the foundation for understanding society: Geddes believed that humans should work together for mutual benefit, and that because of this they were communally connected to each other.
Social Evolution: Geddes reasoned that society is evolving in a way similar to the evolution of species in the natural world, as part of this theory he believed also that society could be improved by human effort; he believed that knowledge was central to the process of social evolution.

Thought and action are tied together: Geddes believed learning should be experiential and that thought and learning should be used for the betterment of society, or in his words for ‘action’.

Similar to the interrelationship between thought and action, conceptual and physical are also connected: Geddes’s understanding of place integrated the ‘subjective’ and ‘objective’ worlds; this will be discussed in further detail below. The Notation of Life integrates thought and action; objective and subjective; and physical and temporal.

Similar to his conception of the region, Geddes’s understanding of life and the city was holistic, wherein each of its elements or individual structures collectively make up the whole. Geddes scholar Helen Meller put it another way; she said that Geddes sought to prove that “human society could be classified and thus understood as a living unity, however complicated or diverse the manifestations of human life” (quoted in Meller 1990, 58).

The Notation of Life is at once based on and expressive of each of the ideas listed above. It represents the process of the evolution of society in tandem with, but also by means of, the city; in doing so it also shows how Geddes thought a society and a city should be built. The Notation of Life begins with the basic elements Place, Work, and Folk – and diagrammatically maps out how they interact and evolve to create other
physical and social elements that, through a series of interrelationships, and over time, develop into a city. The idea of the city that is represented by Geddes in *The Notation of Life* is not only physical it is also his representation of an ideal that is the result of the positive evolution of the social elements that are included in the chart and make up the city.

At this point it is important to note the difficulty of the task that Geddes was taking on. Like his other thinking machines, *The Notation of Life* was a one-page chart. It was divided into 36 quadrants and was essentially a diagram, or topography, of not only how the physical and social construct of a city evolved, but also how each of the social, conceptual, and physical elements of a city interact. *The Notation of Life* includes work places and the development of basic economies, schools and folk traditions, schools of thought and philosophy, metaphysics and religion, academic disciplines, Universities and Cloisters, museums, history, architecture, wisdom, civics, and even love.

*The Notation of Life* will be explained in further detail below, but preliminarily, in reference the definition of *community* from Chapter 1, Geddes’s *Notation of Life* is a map of the ways in which people and their landscape interconnect through geography, identity, and communality. Geddes attempts to represent a holistic vision of human life in reference to the landscape of the city, made up of what could be an infinite combination of complex social, physical and even emotional interconnections. Kropotkin’s theory that mutual aid and cooperation are the foundational values upon which society is based, and the implied communal connection that goes along with this,
are ideas that inform Geddes’s own theory of the city.⁹ The interactions that he maps out in The Notation of Life are based in part on the connection of people with one another.

To return to the difficulty of Geddes’s task of defining the city in a simultaneously detailed and holistic way a few things should be said. Geddes scholar Peter Green describes Geddes’s mind and theories as having the ability to “trace a multi-linear relationship – relationship of person A to B and to environment C with reverse relationships between B and AC, C and AB superimposed” (Green 1973, 8). Geddes’s rare ability and willingness to encompass, grapple with, synthesize, and even order many (or most) of the ideas that make up our understanding of human life was a gift but also a hindrance. The depth and breadth of what he was trying to express – and on a one-page chart no less – and the basic difficulty of explaining this multivariate view of the world, was combined with a famous incomprehensibility, both as a writer and as a speaker. Though Geddes published a lot in his lifetime, he did not write a lot on his most complex ideas about society and the city – what he did write was brief and incomplete (Hall 2002, 144-145; Whyte 2002, XVII; Meller 1990, 2-3).

Perhaps for these reasons there is little scholarship on The Notation of Life. Though it is mentioned and explained briefly in works about Geddes, the only detailed explanations of it that I was able to find were by Geddes himself. Geddes’s own explanations are used extensively below to interpret the chart’s meaning (Geddes 1904; Geddes 1906; Geddes 1927). Two of these sources are lectures to the British Sociological Society; the first, in 1905 was not well received; and the second, made in

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⁹ Kropotkin’s influence on Geddes and Geddes’s views on cooperation and mutual aid were explained in Chapter 1
1914, was received so poorly that, “the reporters from newspapers sent to cover Geddes’s lecture refused to report it” (Meller 1990, 49-50, 55). Despite all of this, many thinkers about cities and urban planners, Lewis Mumford among them, cite him as a great influence. Mumford said of Geddes:

The Life and work of Patrick Geddes prefigure the age in which we now live. The tasks that he undertook as a solitary thinker and planner have become the collective task of our generation. Over the terrain that he explored as a scout, a whole army is now moving into position. (Mumford 1947, 7)

Mumford credited him with being a pioneering and originating influence in the fields of geography, sociology, and of course, city planning (Mumford 1947, 7-10), as well as the person who taught him how to understand the myriad elements of life (Hall 2002, 156; see also Chapter 1). Though Geddes was difficult to understand as a writer and speaker, some of that difficulty must be attributed to the nature of what he was trying to explain: essentially the social and physical development and function of the city through a diagram that he hoped would help planners and city designers understand and consider all of the elements that were important to urban life. But this is precisely why his ideas are important, and perhaps also why he has had such an influence in planning. He tried to explain, or chart out, something that was nearly impossible but profoundly relevant.

*Evolution*

Central to Geddes’s understanding of the city was his belief in and study of evolution, and his adaptation of the ideas of evolution to the social sciences. His early mentor and teacher was Thomas Huxley, Darwin’s contemporary and collaborator (Meller 1990, 25-31). Influenced by Peter Kropotkin, Geddes took a somewhat different
view from the conventional interpretation of Darwin’s theory of evolution. Geddes’s biographer Philip Boardman said that though Geddes believed that,

...cruelty and selfishness exist...among creatures as well as men...He saw altruism coexist with egoism in even the lowest organisms and proclaimed the importance of cooperation as a factor in evolution. (Boardman 1978, 117)

In Geddes’s words, “creation’s final law’ is not struggle but love” (quoted in Boardman 1978, 117). The biologist and sociologist Herbert Spencer, who propagated the idea of social evolution, also influenced Geddes. Spencer believed that evolution could be seen in society, and that the methods of understanding evolution in nature could also be applied to the organization and societal interactions of humankind. Geddes’s interpretation of Spencer’s ideas was not strict however; he did not agree with environmental determinism or Social Darwinism. He believed in a more reciprocal relationship between humankind or society and the environment, wherein society in general could improve as a result of nurturing both the environment and people (Geddes 1927, 42-43; Meller 1990, 143; also see formula for ‘Social Life’ below); and his application of the concept of evolution to society was more like a metaphor than a direct and concrete analogy.\(^{10}\) His belief in social evolution was akin to a belief in the potential for progress and the improvement of social conditions for humankind, including propagating education, quality of life, and social institutions. He said that humankinds’ “impressionability to the ideal” was our saving grace in that it provided a motivating factor to make society better (quoted in Meller 1990, 312).

\(^{10}\) On this matter Geddes said: “For note that we are thus definitively and from the outset avoiding the confusion of the ‘organicist’ doctrine, into which Spencer and others have too largely fallen...We are but broadly and simply parallelizing, in the above general way, the process of organic life with that of society.” (Geddes 1927 42-43)
One aspect of Geddes’s reasoning that the improvement and positive evolution of society was possible was his foundational belief in the value of knowledge and science. Like many of his contemporaries who were Humanists, Geddes valued reason and science and the importance of always increasing one’s knowledge; however, Geddes’s scientific ideas and his belief in social evolution did not rule out a belief in those elements of life which could not be scientifically explained, including religion or spirituality. Geddes scholar Volker Welter explains that, though Geddes was a scientist and a believer in reason, he did not think, “the material world was devoid of meaning other than what the human mind ascribe…[ed] to it.” He depended on reason and science for those things that science could explain, but also thought that, “the rational-scientific principles on which the order of modern sciences rested would only be beneficial to mankind if they were complemented by a metaphysical and spiritual orientation.” (Welter 2002, 22-23)

In practice Geddes based his projects as well as his planning exercises on his belief in social evolution. His activities such as slum revitalization and historic preservation in Edinburgh – and the construction of the Outlook Tower and his Exhibitions – were not an end in themselves; they were also a way of providing education and improvement to society (Meller 1990, 79).

*The Natural World as a Metaphor for Social Interaction*

Just as his framework for understanding society was loosely based on his scientific understanding of evolution, similarly, his understanding of how a person interacts with his or her environment was similar to a biological understanding of the
relationship that an organism has to its environment. In an elaboration of the interaction that happens between Place, Work, and Folk, discussed in Chapters 1 and 2, Geddes draws a parallel between the relationship of an organism to its environment, and the relationship between humans and their environment. Geddes’s formula below is a representation of “Organic Life,” expressed as \( x \). It represents the interactions between organisms and their environment. In the formula, \( E \) represents Environment, \( O \) represents Organism and \( F \) represents, “a sign of the activity, the functioning between them” (Geddes 1925, 42). \( F \) describes the interaction between an organism and its environment as essentially a reciprocal relationship, with organism and environment acting upon each other. \( F \) is a general quantifier that includes any type of activity that may happen between \( E \) and \( O \):

\[
x = E \rightarrow F \rightarrow O : O \rightarrow F \rightarrow E.
\]

This formula for Organic Life represents the general interactions (and interconnectedness) of an organism to its environment. Conceptually parallel to this definition of organic life \( (x=EFO:OFE) \) is a second formula that Geddes created to represent “Social Life”. Here \( x \) equals Social Life and \( P \) is Place, \( W \) is Work, and \( F \) is Folk; in the same way that organic life interacts with its environment, place has a reciprocal interaction with people. In the formula below, Work or \( W \) is similar to \( F \) in the formula above – it is the functional connector between a place and people, the general quantifier for this interaction:

\[
x = P \rightarrow W \rightarrow F : F \rightarrow W \rightarrow P.
\]

Though Geddes admits that this is a controversial interpretation, it helps explain how he looked at human life and cities as having a similar reciprocal connection to
landscape or environment as an organism does. Geddes applied this formula to other key conceptual relationship as they are explained in The Notation of Life below. He believed that conceptually there was a similar relationship between **Sense, Experience,** and **Feeling,** and the other ‘Chords’ in each quadrant of The Notation of Life (explained below). (Geddes 1927, 42-44)\(^{11}\)

**Society as a ‘Living Unity’ ~ Understanding The Notation of Life**

The following exploration of The Notation of Life consists of an introductory explanation of how the chart works and a discussion of some of its key elements, followed by an analysis of the contents of the chart by quadrant. The Thinking Machine #1 was explained earlier in Chapter 2. Like the Thinking Machine #1, The Notation of Life is made up of four quadrants that illustrate the development of an idea, counterclockwise, beginning in the first quadrant and ending in the fourth; however The Notation of Life is also a matrix, where each quadrant is made up of nine squares that interrelate according to axes that correspond to the three main ideas, or triad, of that quadrant. The triads of The Notation of Life and how the squares and concepts of each quadrant interrelate will be explained below.

\(^{11}\) Interestingly, Geddes also says of these formulas that, “the left-hand sides of both formula express the determinist aspect of life...while on the right-hand sides we have similarly the case for freedom.” (Geddes 1927, 43) This is also a reference to his disagreement with environmental determinists – though he believed in the effect of environment on an organism, he also strongly believed that the reciprocal was true.
Subjective and Objective

Similar to The Thinking Machine # 1, The Notation of Life illustrates how Geddes thought that a city develops, from a simple physical place, the ‘Town’ or ‘Village,’ into an ideal city, in four steps. These steps, or quadrants, have the dual goals of showing a) how Geddes believed that the process of societal evolution can happen concurrent with the evolution of a city; and b) Geddes’s vision of what the ideal city or human life would contain (Geddes 1906). Geddes reasoned that the city and the process of social evolution that takes place there had ‘inner’ and ‘outer’, or ‘subjective’ and ‘objective’ aspects. In the Thinking Machine # 1 the quadrants were named TOWN-SCHOOL-CLOISTER-CITY. Correspondingly, in The Notation of Life the quadrants are named ACTS-FACTS-DREAMS-DEEDS. Below is a diagram that relates each of the quadrants of The Notation of Life to subjective or objective elements of life.

![Diagram of Geddes's Chart of 'Inner' and 'Outer' Life](Figure 3.2)

Figure 3.2: Geddes’s Chart of ‘Inner’ and ‘Outer’ Life; Source: Boardman 1978 (Geddes)

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12 Geddes uses the swastika symbol to show direction within the chart. His use of the swastika significantly predates its association with the Nazi Party. Though The Notation of Life was not published until the 1920’s, the creation of the diagram dates back to 1904-1905. (Welter 2002, 33) The swastika was widely used as a religious symbol in a variety of ancient and modern cultures before the 1920’s, and Geddes’s use of it is symbolically important to the meaning of The Notation of Life - this subject will be discussed in further detail below.
As we described in Chapter 2, though each of these quadrants has a corresponding physical place (or places), the first and last are primarily related to the landscape, while the second and third, SCHOOL and CLOISTER are more conceptual. For example, as explained in Chapter 2, the second quadrant of The Thinking Machine #1 is SCHOOL, which denotes the development of stories, craft work, and other forms of localized identity; the third quadrant is CLOISTER within which the development of IDEAL[S] and IMAGERY occur. The chart above illustrates a similar pattern of representing subjective elements in quadrants 2 and 3, and objective or physical elements in quadrants 1 and 4.

Geddes said that “life, from its simplest to its highest manifestations, evolves through increasing interaction of the inward with the outward world, and conversely” (quoted in Meller 1900, 12). This chart is useful in understanding one of the basic progressions through Geddes’s conception of how society and the city evolve. We will see below that each quadrant of The Notation of Life similarly has a progression from physical objective, or ‘outer life’ to subjective ‘inner life’ and back again. The titles of each of the quadrants in the diagram above correspond to the titles of the four quadrants of The Notation of Life; the final quadrant of the diagram above is ‘Full Effective Life’, or ‘Deeds.’ This is actually a culmination, or combination, of the subjective and the physical – the ‘Deeds’ of the ‘Full Effective Life’ of the final quadrant are informed by the ‘inner life’, or subjective elements, as well as the ‘Simple Practical Life,’ of the previous quadrants. In The Notation of Life the final quadrant represents the physical city as well as the ideal of the city, which is a combination of, in Geddes terms, ‘thought and action.’
How the Chart Works

The following is an explanation of how The Notation of Life works using the first quadrant, ACTS to show how the elements of the chart interact.

To make the discussion of The Notation of Life easier, the following table indicates the typeface that will be used to discuss different elements of the chart:

<table>
<thead>
<tr>
<th>Chart Element</th>
<th>Typeface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quadrant Names</td>
<td>ACTS</td>
</tr>
<tr>
<td>Main Triad in each quadrant</td>
<td>PLACE WORK FOLK</td>
</tr>
<tr>
<td>Diagonal ‘Chord’ in each quadrant</td>
<td>CHORD OF SIMPLE PRACTICAL LIFE</td>
</tr>
<tr>
<td>Name of each square</td>
<td>Folk-Work</td>
</tr>
<tr>
<td>Sub-aspects of squares</td>
<td>Occupation</td>
</tr>
<tr>
<td>4-small quadrants in center of chart</td>
<td>‘Village Town’</td>
</tr>
<tr>
<td>Names of 9 muses in quadrant 4</td>
<td>[POLYMNIA]</td>
</tr>
</tbody>
</table>

In the Thinking Machine #1 the quadrants were named TOWN-SCHOOL-CLOISTER-CITY and represented generally a town’s evolution into a city. In The Notation of Life each quadrant represents a larger concept that is similar to the ones from the Thinking Machine #1 however, it is much more complex and integrates many more concepts into the evolution, not just of a city, but of a city as the vehicle for the evolution and improvement of society. The ideas that are explained in each quadrant of The Notation of Life are represented by the name of the quadrant, as well as the ‘Triad’ (diagonal line of squares that lead to the center of the chart). So, for example, in the first quadrant (Q1), shown below:
The name of the quadrant is **ACTS** and the triad is **PLACE, WORK, and FOLK**. The small names in the very center of the chart correspond with the names of the quadrants from the Thinking Machine #1 – this innermost circle represents the physical places that correspond with each quadrant, in this case, ‘Village Town.’ The diagonal line that runs across the triad, Place, Work, and Folk is called the ‘chord’ and also represents one of the main ideas of this quadrant; in Q1 the chord is the **CHORD OF SIMPLE PRACTICAL LIFE**.

For each quadrant the chord represents the nature of the social life that is associated with the quadrant, or stage in the development of the city – they correspond with Figure 3.2 above, Geddes’s chart summarizing the states of subjective or objective, ‘inner’ or ‘outer’ life. So, for Q1, the ‘Village or Town’ is created from the basic elements of **PLACE, WORK, and FOLK**, which interact to create a corresponding social life that Geddes refers to as the **SIMPLE PRACTICAL LIFE**.
Geddes’s idea of Place, Work, and Folk was discussed in Chapter 1, and also above in Geddes’s formula for ‘Social Life.’ This reciprocal relationship was described above with the formula $PWF:FWP$; however, in The Notation of Life we can see that the interactions among these three elements is not only linear and reciprocal, as in the formula, but also two dimensional – in Q1 Place, Work, and Folk expand into a matrix to create the aspects of the ‘Village Town’ that are seen in each of the individual squares. Looking again at Q1 above, we see that the top horizontal axis, as well as the left hand vertical axis, represents the relationships of Place, to Work and Folk. Since the center axes are Work, the top middle square, as well as the left hand middle square, represents the interrelationships between Place and Work – and so they are, respectively place-Work and work-Place.

In this quadrant Geddes is trying to map out the relationships that make up a ‘Village’ or ‘Town’. This first stage in the evolution of the city is the most simple – it is the interactions between the landscape (Place), and people (Folk). Created through these relationships are the most basic elements of the Simple Practical Life, expressed as sub-aspects of Folk-Work and place-Work: Occupation[s], and Natural Condition[s]. He expresses the three basic aspects of Q1, Place, Work, and Folk, as the sub-aspects Geography, Economy, and Anthropology. The sub-aspects of the squares of the quadrant are those that are the most descriptive; these express real elements in the life of a place as it progresses to a city. In Q1 Geddes describes the life of a ‘Town’: its origins are people moving onto a certain place, and as a result of the basic interactions that occur Occupation[s], an Economy, and cultural attributes (Anthropology) are created.
Each of the quadrants in The Notation of Life functions in the same way as has been described above for Q1. They comprise a matrix, based on the three main concepts of that quadrant (the triad), which illustrate the complex interrelationships that make up the elements of social and physical life that evolve into a city. The chart itself is complex but so is the subject matter – and so the complexity is appropriate.

There is one additional working aspect of the chart: the directional arrows within The Notation of Life that connect quadrants as well as squares within and between quadrants. The Chord in quadrant one is a set of arrows that point back and forth between PLACE, WORK, AND FOLK, indicating that interaction; however, these arrows also point to the very center of The Notation of Life, to indicate that all of the interrelationships in quadrant 1 make up the physical place, ‘Village Town’. Also, there are arrows that point from one square to another, indicating relationships between specific squares, as well as from one quadrant to another; the movement of the chart is counterclockwise – and it is as this larger counterclockwise progression through concepts and elements in the chart that represents evolution. If we take a step back from the details of the chart, we will notice that the overall counterclockwise movement of the chart is represented by the boundaries between each quadrant, made by the shape of a left facing swastika:
The Swastika Symbol

Geddes employs the swastika to communicate the overarching idea of social evolution. As a representation of the physical plane, The Notation of Life illustrates the progression from town to city; however, the many social, religious, cultural, and even emotional elements that are incorporated into the chart in addition to the physical, are intended to represent, in their interaction, human society as a ‘living unity’, and how that living unity develops into a city, and potentially an ideal society, represented by Geddes in the relationships and elements of the fourth quadrant, the ‘City in Deed.’ Visually the swastika with its ‘arms’ facing left, indicates counterclockwise motion, and is similar to a spiral or continuous circle. Geddes’s choice of this symbol is important to the meaning of The Notation of Life. As mentioned above, Geddes’s earliest renditions of the chart dated at least two decades before the symbol came to be universally associated in the West with the Nazism. To my knowledge, neither Geddes himself nor his modern interpreters have directly explained his choice of the swastika; however, in Geddes’s
time, and for many centuries before, the swastika was a religious symbol that was used around the world including South Asia, Europe and Scandinavia, as well as in Ancient Greece and native American cultures. The word swastika originated from the Sanskrit work svastika, meaning “well being, good fortune, and luck” (Heller 2000, 20; Boxer 2000).

Geddes was linked with the Celtic Revival of the late 19th century and studied Scottish tradition and history (Green 1973, 15). In Scotland and England the swastika was “known as the fylfot (as in ‘many feet’), and it was the embodiment of good fortune and auspicious beginnings” (Heller 2000, 8). In other cultures it represented, life, fertility, and the cycle of the seasons (Heller 2002, 4-9). Geddes use of the swastika may have been in honor of Scottish tradition, but he also may have employed it because of its wider significance as a religious symbol of the cycle of life. Geddes used the term “spiral”, the continual circular movement represented by the swastika, to describe evolution. He referred to the “spiral of evolution…always pointing the way” (quoted in Meller 105). The swastika represents the idea that there is continual movement form one quadrant to another, and even from the fourth back to the first, just as there is continual evolution and change in human life and society. In Geddes’s own words: “Where does the fourth quarter lead? To the first again, or a fifth if you prefer.” (quoted in Boardman 1947, 469)

The following is a detailed breakdown, by quadrant, of The Notation of Life. Looking at the chart by quadrant gives us an idea of the elements of life and the city that Geddes thought were important – how they reacted with one another, and how they interrelated with each other to evolve in to the ‘City in Deed.’
The Quadrants

ACTS

The first quadrant of The Notation of Life, ACTS, is an expression of the basic physical elements of life, upon which a city is founded, and how they interact with each other. As just explained these basic physical elements are PLACE, WORK, and FOLK and they interrelate with each other. This quadrant defines the town and how it is created and it contains the key aspects of the definition of community from Chapter 1. ‘People in relation to their landscape’ could be either place-Folk, or folk-Place (which occupy opposite or mirror locations in the Q1 matrix), or Geography a sub-aspect of PLACE. People ‘living in common’ is by definition inherent in this entire quadrant, which describes people living in a common geographical location, the ‘Village Town’; and as discussed in Chapters 1 and 2, Geddes saw the interactions between people in places as based on cooperation and communality. People ‘with a common identity’ is present in this quadrant in the sub-aspect Anthropology, as well as in the fact that he connected people to their place and their work by definition.

FACTS

Quadrant 2 (Q2), called FACTS is a matrix of elements based on the triad SENSE, EXPERIENCE, and FEELING.
Figure 3.5: The Notation of Life, Quadrant 2

According to Geddes, this triad is the “parallel psychological side” to the **place**, **work**, and **folk** triad from Q1 (Geddes 1927, 44). As can be seen in Figure 3.2 above this also shows the transition from Q1 to Q2 as a movement from the physical to the subjective.

In Q2 the main elements, or triad, are ‘psychological’ representations of the life that has evolved from **place**, **work**, and **folk**, correspondingly, the chord in this quadrant, the **chord of simple mental life**, ‘parallels’ that of Q1, the **chord of simple practical life**.

**Practical life.** The corresponding subjective experience of Q1’s **place** is **sense**; of **work**, **experience**; and of **folk**, **feeling** (Geddes 1927, 44). As Geddes puts it:

```
Sense, Experience, Feeling. Can we not relate these to Place, Work and Folk? Plainly enough. It is with our Senses that we come to know our environment, perceiving it and observing it. Our feelings are obviously developed from our folk in earliest infancy by our mother’s love and care. And our Experiences are primarily from our activities, of which our work is the predominant one. (in Boardman 1978, 470)
```
Just like Q1, Q2 is a matrix of interrelationships between **Sense**, **Experience**, and **Feeling**; and these three main elements of the matrix combine to make up the nine squares of the quadrant. The sub-aspects of this quadrant indicate what has developed from the evolution of Place Work and Folk into the **Simple Mental Life**: **Home**, **Mastery**, and **Folk-ways**. As discussed in Chapter 2, the origin of Geddes’s thinking machines was from folded pieces of paper; folding, or imagining how the quadrants face or mirror each other if folded, illustrates how the quadrants mirror each other conceptually, and how certain squares correspond with one another. Looking at the squares from Quadrant 1 that mirror those in Q2, we can see that the ‘evolution’ from the physical **Simple Practical Life** into the psychological expression of those aspects in the **Simple Mental Life** goes from **folk-Place** at the bottom of Quadrant 1 to **feeling Sense** and its sub-aspect **Home** at the top of Quadrant 2 – these squares correspond to one another, and there is a directional arrow from **folk-Place** in Q1 to **feeling Sense** in Q2:

![Figure 3.6: The Notation of Life, Quadrants 1 and 2 Detail](image-url)
The development of ideas from one quadrant to another can also be seen by following the square with sub-aspect *Occupation* in Q1, to *Mastery* in Q2 – just as *Home* is the ‘psychological’ FACT that has developed from the physical *folk-Place; Folk-Work* and its sub-aspect *Occupation* have become *Mastery*. The corresponding physical place for Q2, 'School Nature & Experience,’ is where each of the ‘mental’ interrelations and evolutions develop from *Place, Work, and Folk* and into *Sense, Experience, and Feeling*. *Mastery* of what might be just an *Occupation* in Q1 could occur at an actual school just as *Folk-ways* which in Q2 is the evolution of *work-Folk* from quadrant 1, could be thought of as a particular craft and could be taught in a school. Geddes describes the development of Q2’s FACTS this way:

> The types of people, their kinds and styles of work, their whole environment, all become represented in the mind of the community, and these react upon the individuals, their activities, their place itself…Similarly, there is a characteristic variety of occupational activity, a style of workmanship, a way of doing business. There are distinctive manners and customs – there is, in short, a certain recognizable likeness, it may be an indefinably or subtle or an unmistakably broad and general one, which may be traced in faces and costumes, in tongue and literature, in courtesy and in conflict, in business and in policy, in street and in house, from hovel to palace, from prison to Cathedral. Thus it is that every folk comes to have its own ways, and every town its own schools. (Geddes 1906, 72-73)

**THOUGHTS (“DREAMS”)**

The third quadrant of The Notation of life, **THOUGHTS (“DREAMS”)** is a further and more profound journey into the subjective.
As in the second quadrant, the third is made up of aspects of ‘inner life’, though here these are more complex and varied, and of course, more developed or ‘evolved’.

The triad at the center of this quadrant, Imagery, Ideation, and Emotion, parallels Sense, Experience, and Feeling from quadrant two, where: Sense has become Imagery; Experience has become Ideation; and Feeling has become Emotion.

The matrix of quadrant three includes interactions between Imagery, Ideation, and Emotion that create what, as a departure from ‘School’ in the second quadrant, could now be called schools of thought. For example, the interactions in this quadrant produce the sub-aspects Graphic Notations, Mathematics, Philosophy, and Doctrine. In Geddes’s own words at this point of evolution of the city -
[The]...members are no longer mainly concerned with the town’s working life or even its educational service....It is that their essential relation and responsibility are now with the highest aspects of truth, as they understand it, and with the deepening of their own contact and that of others with this. (Geddes 1904, 220)

An example of the evolution that Geddes is describing can be mapped by following the center squares of quadrants 1, 2, and 3, to see how these particular aspects of place and life evolve. In quadrant 1, the center square is **Work**; in quadrant 2 this becomes **Experience**; and then in quadrant 3 this becomes **Ideation** and its sub-aspect **Science** – the evolution of **Work** begins with the physical idea of work in Q1, to the **Experience** of work (or perhaps the ‘experience’ gained from work as well as a technical understanding taught in ‘School’) in Q2, to the development of **Science** based on that experience. In this example **Science** or the pursuit of an understanding of ‘the highest aspects of truth’ is based on the experience of the initial physical element from Q1.

Another important example of Geddes’s illustration of the evolution of different elements of society through The Notation of Life is the development of **Religion** (which leads to the sub-aspect **Mysticism**) as seen in the centermost squares of the chart:
**Figure 3.8: The Notation of Life, Center Squares**

FOLK in Q1 becomes FEELING in Q2, which becomes EMOTION, sub-aspect Religion in Q3. It is significant that Geddes includes EMOTION into his idea of the city and the elements that interrelate to make up society – by doing this he acknowledges one of the most important aspects of human life. Geddes explains the development from FOLK to FEELING using the example of the relationship between mother and child, explained in the following quote:

> The mother lavishes her care and affection month after month upon her babe; and some day – after about three months, child-students tell us – she is rewarded by its returning smile. While this, the infant’s folk-feeling has begun to emerge to life and light. (Geddes 1927, 45)

Geddes continues his explanation adding that as the youth grows older he breaks from his parents and begins “inspiring and compelling sympathies beyond the old family ties, and thence leading into the widening world” (Geddes 1927, 46). In doing so he
evolves **FEELINGS** into **EMOTIONS** that have reference to things outside of his family, as well as creating what Geddes calls a ‘common emotion.’ An example of a ‘common emotion’ is young men going off in a group to fight a war, ‘leaving weeping mothers behind them’ (Geddes 1927, 46). It is at this point in societal evolution also that humans may leave to go on religious journeys; as examples of this Geddes cites the Buddha, Moses, and Mohammed each of whom left his kin in search of **EMOTION**, which in Geddes’s words may deepen into “mystic intensity, even of union with the Ideal, the Divine” (Geddes 1927, 46-48). He said that it is at this stage in the evolution of society, represented in the **THOUGHTS/DREAMS** Quadrant of The Notation of Life that there is a “crucial spirit…which produced the prophets of Israel, the questioning of Socrates, and so on….” (Geddes 1906, 83).

The chord that is aptly associated with this Quadrant is **THE CHORD OF FULL INNER LIFE**. The places that are associated with this quadrant are ‘Hermitage Cloister University Studio’. Each of these are actual physical places that might house the type of subjective, meditative activity that would produce the elements and sub-aspects of Q3, such as: **Religion** or **Mysticism**; **imaged Ideation** or **Mathematics**; **ideated Imagery** or **Design**; and **emotional Imagery** or **Poesy** (like poetry). The ‘Hermitage’ or ‘Cloister’ are the places where the ideas, or **IDEATION**, are created that will inform the final Quadrant, the ‘City in Deed.’

Each community developing a similar general series of culture institutions, from the simplest presentation of its geography, landscape and architecture, to the complex development of industrial, technical and scientific instructions; and for provisions also for the institutions of custom and ethic in school, law and church. Just as place, occupation, and family are intimately connected in the practical world, so there respective culture institutions must more and more be viewed as a whole. Civic improvers will find their ideals more realizable as they recognize the complex unity
of the city as a social development of which all the departments of action and thought are in organic relation…” (Geddes 1906, 80)

**DEEDS**

It is here, in the final quadrant of The Notation of Life, DEEDS, where Geddes tries to represent ‘all the departments of action and thought…in organic relation.’

Though on the surface DEEDS may be synonymous with ACTS, the name of Quadrant 1, Geddes had a deeper understanding of DEEDS – as an ACTS informed by **EMOTION**, **IDEATION**, and **IMAGERY** from Q3.

![Figure 3.9: The Notation of Life, Quadrant 4](image)

This quadrant is the culmination of the interrelationships that are developed in the chart through the previous three quadrants – here we have the ‘highest’ values and most
complex elements of life, including *Wisdom, Sacred Art, Success, History,* and *Love.*

This final quadrant of The Notation of Life also brings the cycle of evolution from the subjective, or ‘inner life’, back to the physical. Geddes described the process of a city evolving from **THOUGHTS** (Q3) to **DEEDS** (Q4) as a return to the objective/physical realm, but far beyond the simple **PLACE, WORK, AND FOLK** of the first Quadrant. Q4 is a culmination of the development of the **SIMPLE PRACTICAL LIFE** from the ‘Village’ or ‘Town,’ through **SENSE** and **EXPERIENCE,** and **IMAGERY** and ideas, back to a physical place that is a **SYNERGY** of both an ideal and a physical place at once, the ‘City in Deed.’

In Geddes’s words:

> From this varied cloister there are further doors; and these open out once more into the objective world; though not back into the too simple everyday town-life we have long left. For though we have out-lived these everyday Acts and Facts, and shaped our lives according to our highest dreams, there come at times the impulse to realize them in the work anew, as Deeds (quoted in Boardman 1978, 472)

Though some of the aspects of this final quadrant are ideas, they are ideas that can also be actions, for example, **Love** and **History**; also, each of the elements of this quadrant is collective, as opposed to meditative like those in the third quadrant.

The central square of the matrix of the fourth quadrant is **SYNERGY.** In the Thinking Machine #1, Geddes includes **CULTURE** in this final quadrant; The Notation of Life is a more complex version of the Thinking Machine #1, and so ‘culture’ is a simpler version of the central idea of the triad of Q4, **SYNERGY.** Culture is the synergy of the anthropological elements from the first quadrant, developed through the **SENSE[S]** and **FACTS** of Q2, to **Religion** and **IMAGERY,** and finally into that thing which exists in real time, and is acted out and participated in day-to-day in any large city – culture. Another
important element of the final quadrant of The Notation of Life is **ETHO-POLITY**, which Geddes described as an “ethic bond” combined with “social purpose” (Geddes 1927, 59). The City is the place where a people have evolved into embodying a particular ethic that creates a common social purpose. This is the ideal city in which Geddes imagines each of the diverse elements of life that develop through the quadrants of The Notation of Life culminate and synthesize.

Lastly, it is also important to mention that each square in this Quadrant also includes the name of one of the nine Greek Muses, and represents an art, or inspired creative element, including dance, art, poetry, history and astronomy. In ancient Greece each of the muses was considered a source of creative knowledge and so their role here in the final quadrant of The Notation of Life is appropriately symbolic of the interactive role of art in the life of the city.

In the final Quadrant of The Notation of Life the final evolution of **FOLK**, into **FEELING**, then **EMOTION (Religion)**, is **Love**. Also in the final quadrant Geddes equates his physical and ideal conception of the city with **ACHIEVEMENT**. **ACHIEVEMENT** is one of the central ideas (and is a part of the triad) of this quadrant; it is the result of the evolution of **PLACE** to **SENSE, IMAGERY** and then finally **ACHIEVEMENT** – importantly its sub-aspects are **Nature & Architecture**. Here the actual physical landscape of the city, which has begun from **PLACE** – a raw landscape uninhabited by people – cycles through the quadrants to its final manifestation **Nature + Architecture**, the physical natural landscape plus the actual physical buildings that people have created to make up the city. In this final square Geddes urges us to understand and maintain this connection, from nature, through its evolution from **PLACE** to ‘City,’ the actual buildings, or **Architecture**
of a city. And so he implies within this also that architecture, the physical construct of the city should be connected with the landscape, and with nature.

What Geddes tried to graphically represent with The Notation of Life is what he believed was the ideal state for humankind, which could be achieved, in the modern world, through the vehicle of the city. According to Volker Welter, “The Notation of Life is not merely descriptive or analytic but a call for action, as it contains Geddes’s methodology for the improvement of the human condition” (Welter 2002, 31). The types of interconnection that make up community as discussed in the Introduction to this paper—geography, identity, and communality—are embodied in The Notation of Life from the beginning through to the common culture, History, and DEED[S] in the final quadrant.

Geddes expands the idea of community into a holistic conception of the city through the Notation of Life; he makes a:

…critical selection among the ideas derived from experience, and the formulation of these as Ideals; and furthers the organization of these into a larger and larger whole of thought; in fact, a Synthesis of a new kind. (Geddes 1906, 83)

For Geddes, the City is:

…a specialized organ of social transmission. It is the vehicle of acquired inheritance. It accumulates and embodies the cultural heritage of a region, and combines it…with the cultural heritage of larger units, national, racial, regional, human. It stamps the resultant product upon each passing generation of its citizens…The city receives the experience of each passing generation and hands the record on to the next…It is the instrument primarily of the regional members, but serves also as the memory of larger groups. (quoted in Welter 2002, 93)

**Spirituality (As a Metaphor) The City as a Temple**

To Geddes, the final evolution of the City is an ideal, and metaphorically and physically the temple within which human life is nurtured, created, and celebrated. In
The Notation of Life *Architecture* has its place in the fourth quadrant. The architecture of the City is the physical fabric that makes up the ‘City in Deed’; and Geddes uses the temple as a metaphor for the city. Geddes incorporates temples into his urban designs (see discussion in Chapter 4), but in the quote below he uses the term not only in its conventional sense, to refer to singular religious structures; but also to describe the central part of the city that is used for communal gatherings and events as well as a metaphor for the City as a whole:

…the Acropolis of Athens, the Temple of Jerusalem, the Capitol and Forum of Rome are classic and central examples, and in the mediaeval city, pre-eminently the cathedral; though beside this we must not forget the town house and its belfry, the guild houses, the colleges, the great place, the fountains, the city cross, and if last, still best if good at all, the streets and courts and homes. (Geddes 1906, 88)

Temples are central gathering points: each functions, according to its historical and geographical particularities, for religious, pagan, political, artistic, theatrical performance or display, and even as a gathering place for craftsmen. Geddes implies that the ‘streets and courts and homes’ of the City can also be temples, since in its ideal form the city’s architecture serves as the physical place, locational representation, and vehicle for the life, including its spiritual aspects, of a people.

*Communal Activity and Ritual in Cities*

Geddes’s conviction that cities contain emotional and spiritual elements is evident in his participation in and creation of communal activities and exercises in the city. Geddes organized and took part in, festivals, ritual events and activities during which he likened the city to a cathedral. He describes a large funeral procession for a professor
and prominent citizen of Edinburgh as “a communion of multitudinous sorrow, that reverent throng amid which the broad Cathedral was but the sounding chancel, the square and street the silent transept and nave” (quoted in Welter 2002, 222). Throughout his life Geddes participated in many events that served a similar function. In Edinburgh after the completion of one of his revitalization projects in the Old Town, he staged an opening celebration that included students and others from the city symbolically passing a torch from young to old (Welter 2002, 223). Geddes’s plays or Masques, which he wrote and produced as an enactment of the history of civilization in relation to a chosen city, typically enlisted the participation of hundreds of people, and were intended both as an interactive educational experience for the citizens of that city, but also as a way to create a communal activity (Welter 2002, 223-224, and Meller 1990, 149-151). Geddes exhibitions, along with the preceding examples, are like a living Notation of Life in which connections between physical, social and religious elements of the city are created, and these elements of the city evolve and gain greater meaning in the process.

Conclusion: Geddes’s Theory of the City

Geddes’s idea of the city is an expansion of the definition of community discussed in the beginning of this paper – it is a set of interconnections between humans and each other around their landscape, and humans and their landscape – and includes aspects of geography, identity, and communality. Geddes’s believed that the city was itself the vehicle for the interrelationships that make up community. Through The Notation of Life he articulated how complex subjective elements such as religion and emotion could be added to our understanding of community as the city. As a biologist and botanist Geddes
understood the city morphology as a collective of individual elements that together comprised the whole. In adopting this biological metaphor – the city as organism, Geddes expresses his holism, that parts and aspects of a city constitute, through their interrelationships, the whole; and that in this understanding the city is not merely landscape, but vehicle, not simple background or substrate, but active contributor to or participant in those relationships and connections. The city is the creator as well as the essence of community, a living organism as well as the temple within which human life evolves.
Chapter 4 ~

Geddes as City Planner: Community Through Urban Design

Introduction and Overview of Geddes’s City Plans

Throughout his life Patrick Geddes applied his theories about cities to actual on the ground planning exercises. Like many of his contemporaries he was passionate about urban renewal and finding solutions to the problems of overcrowding and disease in the slums of Europe and beyond. This, combined with his theories about the city as a living cathedral for the evolution of human life, informed his city and town plans. Geddes produced plans for cities in Scotland and England, as well as for the British Empire in cities in the Middle East and India. Because Geddes was a philosophical and holistic thinker, most of Geddes’s ‘town plans’ comprise not only detailed layouts of architectural, landscape, and grid designs, but also philosophical justifications and explanations of these designs.

One of Geddes’s first forays into the practice of city planning was his organization of the Edinburgh Social Union in 1884. Geddes and a group of his colleagues created the Social Union in response to their desire to improve living conditions in the slums of Edinburgh’s Old Town (Stalley 1972, 17). The Social Union led slum clean up and improvement initiatives including education and recreation for tenement residents, as well as assistance for home and building repairs (Stalley, 1972, 17). By 1886, however, Geddes left the Social Union to pursue a more aggressive and
hands-on approach. Together with his wife Anna, Geddes moved into the Edinburgh slums to lead by example. The Geddeses fixed up their own home and helped their neighbors do the same; they addressed sanitation issues and led beautification efforts including painting and planting gardens. They also began raising money to purchase buildings for rehabilitation or demolition. In this early project in Edinburgh, Geddes exhibited a willingness to acquaint himself with and work alongside people from any station in life, a trait that would characterize both his surveys and his planning throughout his career. The Geddeses nurtured relationships with the residents of the slums, inviting them into their own home and forging social bonds (Meller 1990, 73-79).

In 1904 Geddes was commissioned by Andrew Carnegie to produce a design plan for Pittencrieff Park, in the center of the town of Dunfermline, Scotland (Green 1904, 13). Convinced as he was of the holistic interconnection of all of the elements of a city Geddes produced a comprehensive report that was not just a design for the park but also a design for the city and the region; a proposal for a cultural center with various exhibits; and a treatise on his philosophy of the city – Geddes even included a rough overview of the ideas presented in The Notation of Life (Green 1904; Geddes 1904). After studying and surveying Pittencrieff and the town for seven months (Stalley, 1972, 49) his plans for the park grew to include elaborate landscape improvements; indoor and outdoor gardens; different types of recreation areas; the rehabilitation of the historic estate buildings; designs for new buildings to hold natural history, art, history, and anthropological exhibits; an open air theatre; and architectural additions to approaches and boundaries between the park and the town. His plans for improvements to Dunfermline included housing and sanitation improvements, and plans for what we would today call a ‘green
way’ system made up of a connected network of parks, waterways, and open space that extended into the countryside. Geddes’s Plan for Dunfermline is discussed in further detail below.

During the years following the Dunfermline Report Geddes was involved in other planning projects in Europe, and toured extensively with his Exhibitions. Geddes continued his work in Edinburgh’s Old Town, adding the renovation of historic buildings for University housing to what we would call today his (one-man) ‘redevelopment’ of the area. He was also part of private planning projects in other cities in Europe including designing gardens as well as preserving and adapting historic buildings for contemporary uses. In 1919 Geddes was commissioned by the British Crown to design plans for towns in British Palestine including a Plan for Hebrew University and the surrounding area (Welter 2002, 255-267).

In the later years of his life Geddes he also took commissions from the British government to produce city plans in India. The Governor of Madras (Lord Pentland, who was a fan of Geddes) employed him to study and produce town plans for that city (Stalley 1972, 75). This began a decade of work in India from which Geddes produced approximately 50 town plans and lectured at universities throughout the country (Stalley 1972, 74-86). One of the central principles of Geddes’ planning initiatives in India was his Conservative Surgery approach, which he combined with his belief in maintaining Indian cultural traditions, including architecture, the place of women in Indian culture, and the function of gardens (Beattie 2004, 134).

Late in his life, Geddes also began to create designs for what he called temples. While not necessarily meant as religious institutions per se (though some were), his
temples were more broadly intended to house some of his most important ideas of the city – they were an expression and physical home for his idea of the city as cathedral and his belief in the value of creating a holistic learning experience for members of the community of a city, as well as a physical manifestation of the Synthesis that occurs in the final quadrant of The Notation of Life.

The following is a synopsis of some of the key elements in Geddes’s city designs and how these can be understood. This includes details from his Dunfermline Report; his Conservative Surgery method and other elements from his Indian town plans; and finally his designs for temples. Each of these physical practices of Geddes’s has the same thing in common – each is centered on the connection of people to each other and to their landscape. As he planned for particular uses his designs were always informed more than anything else by what people needed and how they would use towns, roads, gardens, or public spaces. Even when his designs were his own imposed idea of what he thought people needed, they were still centered around connecting people to their history, culture, and to each other; or, in other words, around the idea of community as we have defined it – connections through geography, identity, and communality. Geddes thought about what connected people to a place and to each other in a place, and his city plans reflect that. Obviously Geddes’s philosophy, as expressed in the Notation of Life, informs all of these plans, methods and designs with the notion that the landscape and institutions of a city evolve directly, intimately, and reciprocally with the people who live there. This philosophy is reflected in all of Geddes’s urban plans, from the most simple to the most complex.
In all of Geddes’s plans, and planning exercises, whether employed by a private organization or the British government, he did not address the role of government in planning. Part of the reason for this may have been that he was planning before the invention of modern zoning laws and planning agencies; or perhaps this was a reflection of his sympathy with anarchist thinkers who believed that the most effective organization came from the people, individually and collectively. As discussed below Geddes generally engaged directly with the people for whom he was planning, even when his plans were commissioned, and sometimes carried out by, the governing authorities.

**Plan for Dunfermline, Scotland**

In the Dunfermline Report Geddes’s plans connect people to the landscape through small, simple details, and also incorporate his large holistic idea of the city. In his preface to the Dunfermline Report, Geddes makes his underlying theory about the city clear. Geddes’s plan for Pittencrief Park and the City of Dunfermline was based on a thorough survey and would incorporate disparate elements including landscaping, architecture, education, and history; the Report itself would ‘discuss needs and indicate possibility’:

> Such a monograph - as at once naturalistic, horticultural, architectural, educational, and social, and in all these respects having to utilize past history and present resources, frankly to discuss needs, and boldly to indicate possibilities – cannot be prepared without wide inquiry and general reflection; in fact, its local questions inevitably raise the general ones of city life and development, and these form well-nigh every point of view.” (Geddes 1904, 1)

This ‘wide inquiry and general reflection’ are part of Geddes’s belief in the necessity of surveying. As discussed in chapter 1, the survey was rooted in his scientific background
and was a central part of the planning process for Geddes. Discussed previously in Chapters 1 and 2, Geddes reasoned that, just as an organism should be understood in relationship to its environment, so should a neighborhood, town, or city be designed in consideration of its larger geographical region as well as its social and natural history. For his survey of Dunfermline Geddes spent seven months taking pictures and touring the park and old town extensively, he also studied the city and region’s natural history, physical geography, history, and culture (Stalley 1972, 49).

Approaches and Parkways

The Dunfermline Report provides a relatively simple illustration of how Geddes planned for the connection of people to the landscape. For example, in the central element of the Report, the plan for Pittencrieff Park, he aims to use its approaches and borders to integrate the park and the town into one another. The park was first and foremost a preserve for nature and a place for people to experience the more beneficial physical elements of the landscape – in Geddes’s words, it acted “as city lungs and workers’ breathing spaces, especially at breakfast and dinner hours” (Geddes 1904, 99). On one of many approaches to the park he added trees, widened the parkway and added walking paths. Figure 4.1, below shows an existing approach to the park contrasted with Geddes’s sketch of his proposed changes.

13 In the Dunfermline Report Geddes suggested that, in addition to the regional survey he conducted, there should be a complementary volume that was a ‘social survey,’ that would also be used in the planning of a city or town. “This sets out from the standpoint of the present condition of the people, their occupation and real wages, their family budget, therefore, and culture level.” (Dunfermline 1904, 19)
In the sketch of the proposed changes trees are planted along the road leading to the park to shield and separate an industrial use; walls are removed or made smaller to open up and accentuate the view; and a small fountain and other architectural
embellishments are added. A shallow pond is also added to allow wading and house a ‘dovecot,’\textsuperscript{14} thus the pond is intended to be both an aesthetic and a practical improvement (Geddes 1904, 25).

Geddes treats other approaches to Pittencrieff Park in similar ways. By adding trees and landscaping to roadways, and accentuating or opening up views to the park, Geddes creates a connection between the town and the park. Geddes thought that parks planned in isolation from the town in which they were located were “a disastrous loss to the improvement of a city,” whose “present beauty might have been doubled had the approaches and interconnections of its parks been adequately studied instead of independently conducted” (Geddes 1904, 22). He employs this same design principle in his plan for a regional ‘open space’ plan - in which he similarly designs parkways that connect parks to each other as well as to streams and areas of ‘nature.’ This plan is discussed in the next section.

As mentioned earlier Geddes’s plans for Dunfermline hardly stopped at the park itself. Along its borders Geddes sought to improve at least some aspects of the existing residential neighborhoods. Geddes proposed using trees to shield the park’s vista from the dilapidated housing that backed up to it; however, he also suggested various aesthetic improvements to houses that faced the park – including the removal of trees, so that these homes could enjoy the view; the addition of foliage and gardens; and the lowering of exterior walls so that the view for those looking out of the park would be “pleasing”

\textsuperscript{14} “A house for doves or pigeons; usually placed at a height above the ground, with openings for the doves to enter by, and internal provision for roosting and breeding.” (Oxford English Dictionary, s.v. “Dovecot,” \url{http://0-www.oed.com.innopac.library.unr.edu/view/Entry/57150?redirectedFrom=dovecot#eid} (accessed November 12, 2011).
(Geddes 1904, 32-33). These changes would create a reciprocal aesthetic benefit both to those who enjoy the park and those who live around it, helping to strengthen the connection between park and town. Geddes’s plans for parkways, park entrances, and approaches and bordering areas were meant to integrate park and town by creating visual and aesthetic connections between the park and the people who use it.

**Historic Preservation**

What we today call ‘historic preservation’ and ‘adaptive reuse’ were central elements in all of Geddes’s planning exercises, including his plans for Dunfermline. He argued for preserving old buildings for their historic significance, which he interpreted quite broadly; in addition to their functional value, in Geddes’s view old structures could also connect people to their history. Arguing against demolishing existing buildings, Geddes said:

> I plea merely for fair trial before condemnation, for the thrifty and open-minded – that is, many-sided- consideration of each survival of the past and of its value whether as an actual asset or as a possible one…I have once and again found buildings too hastily despaired of by others to be capable of cleansing and repair, or of alteration and incorporation with such new buildings a may be required – in short, of renewed usefulness and even beauty. (Geddes 1904, 11)

In the Dunfermline Report Geddes proposes to preserve and restore most of the existing buildings in and around Pittencrieff Park – again prefiguring modern ideas of adaptive reuse, he argues for repurposing the original and historic buildings of the Pittencrieff Estate and/or incorporating them into new buildings.

One example of this is a group of old stables and an adjacent mansion that he describes as “grim, dull, miserable, dirty-looking, dilapidated, even squalid…” (Geddes
Despite their condition Geddes argues for their preservation. He argues that, not only are they functionally still valuable because of their close proximity to a proposed large public gathering space, where they could provide shelter and house lavatories, but they are historically valuable as well. He explains that the buildings are in the style, and perhaps even the direct product of, influential Scottish architect Robert Adams, and so in addition to arguing for their preservation, Geddes proposed a design for an addition to the stables in Adams’s style. Geddes’s design for the stables and the mansion includes landscaping, a greenhouse, a ‘camellia house’, and an aviary that incorporates the existing low galleries of the stables. (Geddes 1904, 52-53)

Another example of historic preservation in the Dunfermline Plan is based less on the design of the building and more on its historic use and implications for local and regional culture. Geddes suggests that old mill buildings within Pittencrieff Park provide an example of a craft and industry important to Dunfermline’s history. He argues that these should be preserved as an “Open-Air,” “Labour,” or “Craft” Museum. The buildings would be “repaired and improved” and “supplied with the old and simple machinery of our forefathers,” which could then be used to “bake the resultant oatmeal and flour into cakes and scones for the refreshments…of our visitors. Here…we have at once a pleasing and an educative feature - the restoration of the fundamental domestic industry.” The plans for the Mill were part of a larger exhibition that he called the “Crafts Village.” As Geddes believed that history was part of a process of evolution and learning, so his museum designs, like his exhibits and the Outlook Tower, were meant to be participatory and interactive. In addition to the bakery, with its opportunity to purchase an example of what the mill once produced, he suggests that nearby, along the
millstream, “we put in a succession of notched stones, in which boys may put their own little water mills and rig up their models of primitive forms like the Norse one.”

Exhibitions like these prefigure modern day ‘living history’ museums, where towns and buildings are preserved and coupled with historical reenactments to give visitors an interactive learning experience.\(^\text{15}\) (Geddes 1904, 132-135)

These examples of historic preservation are an illustration of Geddes’s belief in the importance of the connection between people and their history and culture, through their landscape, as well as the process that accompanies making that connection. In The Notation of Life Geddes illustrates his belief that an interactive experience of history and culture is an integral part of the evolution of the city, and the ultimate \textit{Synthesis} that happens in the ideal city emotionally and experientially interrelates people to place, craft traditions, history and culture. (Geddes 1904, 132)

\textit{Park, City, and Regional Holism in Geddes’s Plan for Dunfermline}

Geddes’s design for a series of connected parks and open spaces, and a proposed group of historic and cultural museums and exhibits designed as a part of Pittencrieff Park, are examples of how Geddes as a planner carries out his holistic view of the city and region as an organism made up of interconnected elements. Though he was commissioned only to draw up his ideas for improvements to the park, Geddes reasoned that it was impossible to make improvements to the park that did not interrelate to the physical region and the social, emotional and subjective elements of the city as well.

\(^{15}\) Some modern day examples are and Colonial Williamsburg, and New England’s Old Sturbridge Village.
Instead, Geddes insisted on relating the physical landscape of park and town with the cultural life of the people of Dunfermline. His plans accomplished this by connecting Pittencrieff Park to other parks and green spaces, and through the exhibits and cultural institutions he envisioned within and adjacent to the park.

In the Dunfermline Plan Geddes argued that as a city grows outward, and in complexity, the city should plan for “the formation of open space wherever possible” (Geddes 1904, 98). He reasoned that this would be one antidote to overcrowding and its associated health concerns, as well as to the criticism that Dunfermline was a “dirty and ill-built town” (Geddes 1904, 98). The plan shown below creates parkways or greenways between parks and other pieces of open space as well as improvements along a stream that runs through Pittencrieff Park to the Town Loch. This portion of the Dunfermline Report is another example of Geddes’s methods predating similar planning techniques that are popular today.
Geddes’s description of this plan includes a summary of the benefits of this design to the town and a summary of the holistic vision of how the park and the city connect with the region, Scotland, and the entire United Kingdom. Geddes gives voice to the value he places on the interrelationship between the green spaces, as well as parts of the city to the region and beyond:

We look at our map as a whole, … we see its two Parks brought together by their verdant parkways and this splendid central group spreading out its radiating
avenues to suburbs, country, and coast towns, ancient and modern. Here, then, we should have a complete city, Old and New, which would be in its way the first in Scotland; in fact, an example and encouragement to city progress throughout the United Kingdom and beyond. (Geddes 1904, 98-99)

*Cultural Institutions, Museum, Outlook Tower in Dunfermline*

The illustration above is an example of Geddes’s holistic vision: even small details or design elements of an urban plan are part of a larger conception of the physical landscape as an interrelated whole. Similarly, his plans for Dunfermline and Pittencrieff Park include museums and exhibitions that integrate the cultural, historical, and natural history of Dunfermline, giving them a physical home and place where they can be learned about through experience. In the example from the previous section, the Old Mill is repurposed to be part of what Geddes called his Crafts Village, this is part of his plans for what he calls a “Nature Palace,” which includes a “Natural History Museum,” “Art Buildings,” and an “Institute of History,” each adapted or added on to older buildings in or adjacent to the park (Geddes 1904, 110). Geddes’s plans include details of what each of the buildings in the Nature Palace would contain – like his exhibits described in Chapter 2, they are designed architecturally and for content that creates an interactive learning experience for the audience, in this case the people of Dunfermline. There is also a version of Geddes’s Outlook Tower in the Nature Palace and, as with the open space plan, he adds a regional perspective by showing how these institutions would relate to the University system in Dunfermline and Scotland as a whole (Geddes 1904, 176).

Similar to the process of evolution and experiential learning illustrated in the Notation of Life, inherent in Geddes’s Plan for Dunfermline is the creation of an ideal
physical landscape through which interconnections are created between the people of Dunfermline and their physical landscape, as well as their shared history and cultural institutions. Within his plans are the mechanisms that foster evolution, from **Work** and **Place**, to **Experience**, **Imagery**, and **Ideas**. His park and open space designs connect **Place** to **Experience**, and his Nature Palace designs connect **Experience** to **Imagery** – here the Nature Palace is a design for a physical place that to Geddes would be like the **Cloister** as we defined it in Chapter 3, a place where **Experience** becomes **Imagery** and **Imagery**, **Deeds**. Ideally the institutions that make up the Nature Palace would provide an experience for the people of Dunfermline that will lead them to ‘relate…individual tasks to the social whole’ by incorporating **Science** and **Design** to create **History**, **Art** and **Synergy** in order to improve society and develop into, as Geddes called it, the ‘bettered city of the opening future,’ the ‘City in Deed’ from The Notation of Life:

> Here then, is such…[a] presentment of the needed Culture-Institutes of this bettered city of the opening future – Naturalistic, Historic, Civic, and each with its local colour and popular use, so offering to every soul full and living contacts with Nature and with Humanity, and relating individual tasks to the social whole. (Geddes 1904, 3)

**Planning in India**

Geddes’s planning exercises in India further illustrate how his theory about the city is carried out through his planning techniques. His insistence on the need to ‘survey before plan’ and his technique of ‘Conservative Surgery’ both embody the importance of studying peoples’ needs and patterns of use, and how people connect to their landscape. Geddes planned for people, and his work in India illustrates this best. In contrast to his
European plans, design solutions to the problems of overcrowding and poor sanitation, were an even more immediate need; the problems there were more profound and complex than those he had addressed in Europe. Geddes’s commissions in India took him to many of the densest slum quarters in the British colonial cities (Meller 1990, 210-211).

Survey Before Plan

In India, as in Scotland, Geddes began his work by studying the history, culture, traditions, and patterns of settlement and use that had created the cities for which he was to devise plans (Tyrwhitt 1947, 17; Beattie 2004, 134). Writing about his survey methods in the city of Kapurthala, Geddes said, “First it seeks to unravel the old city’s labyrinth and discern how this has grown up” (quoted in Tyrwhitt 1947, 27). Geddes’s work on a town plan for the Barra Bazaar section of Calcutta began as usual with his ‘diagnostic survey’ exercise, into which he incorporated various topographic and regional facts. This included elements as diverse as traffic patterns, occupations, and housing. Geddes described this survey as follows:

…topographic facts, local advantages, the defects and difficulties; they re-study communications, and these in relation to traffic requirements of each kind, and their active working and congestions and so on. Similarly for shops and shopping; and also for the various occupations and crafts of the given area, and throughout their range, from skilled to unskilled. They give particular attention to housing; and this of each and every class; but especially to that of the people, since this has hitherto been most neglected (quoted in Beattie 2004, 135).

His research explored many different sources to gain an understanding of people’s basic needs, work lives, and uses of land and buildings. He also studied and took into account people’s cultural and religious traditions. The combination of each of these techniques created a holistic understanding of the town, made up of various disparate elements, and
Geddes worked from this understanding to create the least disruption and the greatest benefit to all of the people for whom he was planning. Geddes described this school of planning (his own) as one that:

…studies the whole place as it stands, seeking out how it has grown to be what it is, and recognizing alike its advantages, its difficulties and its defects. This school strives to adapt itself to meet the wants and needs, the ideas and ideals, of the place and persons concerned. It seeks to undo as little as possible, while planning to increase the well-being of the people at all levels, from the humblest to the highest. (quoted in Tyrwhitt 1947, 25)

Conservative Surgery

One of Geddes’s most well known planning techniques was his idea of Conservative Surgery. Elements of this were employed early in his career in his revitalization efforts in Edinburgh’s Old Town; however, this technique was most fully developed and employed in his work in India as his unique answer to the extreme overcrowding and sanitation issues that he was required to address. Most of the planners who had preceded Geddes in India were engineers who had proposed razing entire neighborhoods and creating gridirons that cut through neighborhoods without consideration of the existing pattern of streets or homes (Beattie 2004; Tyrwhitt 1947, 40; Meller 1990, 211-213). Geddes, rejecting these ideas as not merely ineffective but “one of the most disastrous and pernicious blunders in the chequered history of sanitation” (quoted in Tyrwhitt 1947, 47) took an entirely different approach (Beattie 2004). He eschewed the traditionally valorized, “mathematical straight line” (quoted in Tyrwhitt 1947, 47) believing instead that streets should be straightened and widened only where it would genuinely ease congestion, and that demolition should take place only where
absolutely essential – for example in interior blocks or where lack of light and air had the largest impact on poor sanitation:

Conservative surgery in more detail consisted of, first, ‘enlarging the existing lanes,’ and secondly, ‘with the addition of some vacant plots and the removal of a few of the most dilapidated and unsanitary houses, these lanes can be greatly improved and every house brought within reach of fresh air as well as of material sanitation….’ (quoted in Tyrwhitt 1947, 41)

An additional aspect of Conservative Surgery was, as seen in his plans for Dunfermline, the value of conserving existing buildings. He argued for the historic and functional value of existing buildings, based both on structural soundness and on the buildings’ role in the past experiences and communal life of a town or city (Stalley 1972, 56). Geddes reasoned, and articulated in many of his reports, that his Conservative Surgery method was not only less disruptive to existing patterns, it was also less expensive (Tyrwhitt 1947; Stalley 1972, 77). The following illustration shows a before and after example of Conservative Surgery from Geddes’s Report on the Towns in the Madras Presidency, 1915:
Figure 4.3: Conservative Surgery  Source: Tyrwhitt 1947 (Geddes 1915)

The Conservative Surgery approach planning was focused on small, block-by-block changes, as opposed to sweeping demolition. Instead of replacing entire buildings and sanitation systems (or lack thereof), Geddes’s plan called for creating small open spaces that would increase air and circulation, many of which included gardens and compost piles, both to create a neighborhood resource as well as to act as a partial solution to waste disposal. Destroying a few of the most run-down houses also allowed
for the creation of courtyards and small playgrounds. Geddes even suggested putting courtyards or open spaces on the second story roofs of lower buildings. In focusing on courtyards he honored an element of traditional culture and architecture in India, which consisted of a family’s group of structures built around a courtyard (Stalley 1972, Ch 5; Beattie 2004).

As mentioned previously, Geddes’s Conservative Surgery method also tended to be far less costly than proposals that razed slums and called for extensive new construction. In the Barra Bazaar example the colonial town planners had proposed demolishing the slums, and straightening and widening most of the streets, at the expense of buildings and valuable frontages (Beattie 2004, 136-7). Alternatively, Geddes’s solutions were accomplished at less cost and with the least disruption of the existing lives and use patterns of the residents (Beattie 2004, 135, 144).

Simply follow the existing lane a little way, and then pull down a few houses, enough to make a little square; plant a tree and let the people make a little shrine if they like; woman will sit and children will play there. Then go one a little further and make another space. Your way of ‘driving streets through’ means the destruction of four hundred houses or more; my way means destroying about fourteen…. (Geddes, quoted in Boardman 1978, 284)

As Geddes saw it, conservative surgery was a simple recognition of the value of existing structures, and a willingness to roll up one’s sleeves and clear away the dirt, ‘rubbish,’ and most offensive or as we would say today ‘blighted’ properties:

Despite the many differences between east and west I continually find the same contrasts as those with which I am familiar at home, between the antique beauty of the simple homes and sacred buildings, which are the best elements of any historic town, and the slum conditions with have in recent times invaded and immersed them. Improvement is not achieved by vainly lamenting the past or by harshly insisting upon the needs of ‘progress’, but by simply setting to work to clear away the accumulation of miscellaneous rubbish and filth. (quoted in Tyrwhitt 1947, 75)
Temples

A lesser known, and less studied, area of Geddes’s physical plans is his designs for temples. Early in his career Geddes designed ‘temples’ that were not specifically religious but rather cultural gathering and learning places that also had religious design elements. His Temple of Geography in his planned National Institute of Geography and the Nature Palace design from the Dunfermline Report are examples of this. Later in his career Geddes designed temples in Tel Aviv, for followers of the Baha’i faith in India, and as part of his town plans in India (Welter 2002, 200-206; 218-220; Tyrwhitt 1947). Both Geddes’s early designs, as well as his designs for religious temples, represent his belief, articulated also in The Notation of Life, that spiritual and religious elements were an integral part of life and the city.

As discussed in Chapter 3, Geddes viewed the city both metaphorically and physically as a temple – he thought that parts of the city became temples during ritual events, and that the aspects of everyday life could be religious, and in this way the city was a temple. On a more specific level, Geddes recognized the importance of traditional religious gathering places. He viewed medieval cathedrals, neighborhood temples in India, and the designs of temples in ancient Greece as places where the spiritual or religious elements of society entered into the interrelationships of the city and of life, as well as places where the SYNERGY in the final quadrant of The Notation of Life could occur. Geddes wrote that medieval cathedrals included aspects of each of the four quadrants of The Notation of Life: basic craft work and construction based on the geography, or the Place, Work, and Folk, of a region and local myths or stories as well as biblical ones expressed in art and paintings; and that these elements combined to make
the cathedral, “the highest agency of the times towards bringing to bear upon the
community the best cultural resources, the synthesis of ideals and of knowledge…the
orchestration of all the arts – painting, sculpture, and architecture, music and symbol-
drama” (Geddes quoted in Welter 2002, 216).

Welter calls Geddes’s early designs for temples ‘temples of knowledge,’
examples of these are the Nature Palace from the Dunfermline Report and early designs
for a ‘Temple of Geography’. These are similar to his exhibits, in fact the Temple of
Geography was planned to be a permanent exhibit (Welter 2002, 179-180). Many of
these designs included Outlook Towers and museums and were meant to be ‘cathedrals’
for geography as well as knowledge in general (Welter 2002, 176).

Figure: 4.4 Temple of Geography: Source: Welter 2002 (Sketch by Louis Albert Galeron, after
design sketches by Geddes, 1902)
In his design for the Temple of Geography he planned exhibits on: industry and commerce, engineering, agriculture, hygiene, biology, history, astronomy, geology, and “a Peace Museum to educate visitors in world citizenship” (Meller 1990, 132; Welter 2002, 185). As described earlier Geddes’s Nature Palace design in Dunfermline was also dedicated to elaborately housing exhibits on a number of physical and social sciences. Geddes said of the Institute that it was “a Temple of Geography, devoted to the Universe in general and the earth in particular” (quoted in Welter 2002, 185). His goal was to make the study of the earth and its physical make up sacred – this representation of the earth communicated his belief in “the unity of the world” which was the “the basis and symbol of the brotherhood of man” (quoted in Welter 2002,179). Geddes’s acknowledgement of ‘the brotherhood of man’ was a nod to the inherent communal aspects of society, based on Kropotkin’s theory of mutual aid and cooperation.

The temple and institute are like Geddes’s theory of the city, a conception that was intended to be inclusive of every element of human life reflected in many fields of knowledge at once. Of the power and role of physical temples in integrating the emotional and religious elements of life Geddes wrote:

Life individual, associated, collective: Love, through all passions, simplest to highest; Death too, in all its mysteries, its fears, its hopes;…Religious emotions and aspirations, ideas and doctrines,…they find expression in new images, in fresh symbolism; and this at length in temples, to house and synthesize them, each and all. (quoted in Welter 2002, 174)

This exploration of Geddes’s temple designs leads us to the outrageous, radical, or perhaps supremely practical assumption of Geddes’s that science and religion could be integrated, or at least, should be connected, through human society and the design of
cities. This is seen in The Notation of Life as well as in his temple designs. The Notation of Life includes the sciences along with art and religion in Quadrant 3; he clearly thinks that both have a place in social evolution, as well as in the study and design of cities.

Late in Geddes’s career he was commissioned to design a temple in Tel Aviv and a temple for the Baha’i religion in India. Each of the commissioned designs was intended primarily for religious use; however, he made sure to integrated them into the design of the surrounding town, and also included in their designs elements from his ‘knowledge temples.’ In both Geddes plans for the Nature Palace in Dunfermline, and his design for his temple in Tel Aviv he envisions the ‘temples’ as the sacred central element of the cities and creates landscape and design elements that integrate them with the town (Geddes 1904; Welter 2002, 235-241). Also, included in his designs for both the Baha’i temple and the temple in Tel Aviv were elements from his exhibits on geography and the physical sciences. The design for the Baha’i temple had “libraries, a school of comparative religions, and a range of museums” (Welter 2002, 205). In Tel Aviv as well the temple integrated symbolic and actual elements dedicated to the study of the geography of the surrounding region into the design of a religious gathering place (Welter 2002, 230-231). Just as Geddes believed that all fields of knowledge have a place in the social evolution of life and the city, and therefore have sacred elements, his designs for religious spaces similarly integrated knowledge of the physical and social sciences.

Geddes’s understanding of the temple is both as a physical place and as a metaphor for the city as a whole; in both cases, the temple is that place where the many
elements of life and society, as represented in The Notation of Life, evolve into and through the city in its ideal and real form. In the language of The Notation of Life, temples were the vehicles in the city in which the **WORK** and **FOLK** from the **SIMPLE PRACTICAL LIFE** became the **EXPERIENCES** and **FEELINGS**, then the **IDEATION** and **IMAGERY** of the ‘Cloister,’ and then finally emerged into the **SYNERGY** and **ACHIEVEMENT** of Geddes’s ideal ‘City in Deed.’ For Geddes the boundaries between his designs for ‘temples of knowledge’, religious temples, and the city itself, were necessarily blurred, as each interrelated with and had aspects of the other.

**Conclusion**

Geddes wrote that each design decision and planning exercise should be inspired by an ideal (Geddes 1904, 19, 220). In the preceding examples of his planning techniques it is clear that the ideal that infuses his design is the same that he summarizes in The Notation of Life. Informed by the values of community and cooperation, he reasoned that people and their needs, history, and patterns of use are central to the essence of a city and how it should be planned. For Geddes, how people connect – functionally, but also culturally and emotionally – to the landscape, is what determines design:

It is our social and educational hope and purpose, our conception of civic progress, which must determine our selection amid the many possibilities of life...these ideals now stated, their housing may be profitably considered – that is, their buildings fitly constructed and planned; and this concluded their garden setting within the whole city, park, and landscape, becomes practicable. (Geddes 1904, 19)
Geddes planned for these types of connections at every level; he considered patterns of use based on needs and traditions, and so he designed streets, gardens and blocks accordingly. Speaking of the need to balance ideals with practical design applications he argues for both and says that one necessarily informs the other:

[The] would-be practical world…without this evolutionary idealism, is continually sinking into material failure or stagnation, moral discouragement or decay….Let us then unite both elements, and, in the immortal phrase of Socrates, at once ‘labour and make music.’ For even modest practical effort…a high note must be struck from the very outset.” (Geddes 1904, 220)

To Geddes urban design is informed by an all-encompassing interrelational idea of the city, one that gives a sacred element to both the development and the existence of the city – and this ideal can be exercised through practical planning and design. Lewis Mumford said of Geddes:

He saw both cities and human beings as wholes; and he saw the processes of repair, renewal, and rebirth as natural phenomena of development. His ideal of the best life possible was always the best that was latent in a particular site and situation, the development of a particular family, group, or community: not an abstract ideal that could be imposed by authority or force from the outside. (Mumford 1947, 11-12)

Inherent in Geddes’s theory about and designs for the city is the recognition of the value of the specific traits, history, and needs of the people who inhabit a particular place; not, as Mumford said, ‘an abstract ideal that could be imposed by authority from the outside’, but an ideal based on the (thoroughly surveyed and studied) attributes and needs of the people who lived in that place.
I began this study of community with a definition of community as connection - of people to each other in ways that relate to the landscape, and of people to the landscape. The connections that this definition implied were around *geography, identity* and *communality*. Geddes’s understanding of the city as mapped out in The Notation of Life incorporates each of these elements in different variations and combinations, as well as the products that are developed from identity, communality, and place, as a town grows into a city, both physically and socially. Intertwined with physical development are the creation of schools of thought and ideals, religion, history, the arts, and Geddes’s idea of *Etho-Polity*, an ‘ethic bond’ informed by ‘social purpose’.

Geddes’s planning exercises honored and tried to practically apply his vision of the city. His designs were informed by his conception of how a city develops, physically and as the vehicle through which a community and society evolve. Geddes reasoned that a city was an integrated whole made up of specific evolving attributes, each of which had a place in the urban landscape; this understanding was based on the interconnections that Geddes mapped out between a place and its inhabitants, together with all of the elements that developed from peoples’ emotional and practical interaction with their geography and each other. The end product of all of these interrelations, synonymous with the
definition of community, is the **Synthesis** of these elements to **Achieve** what Geddes called in the final quadrant of The Notation of Life **Effective Life**.

Geddes’s theory of the city can provide an answer to the questions I posed at the beginning of this paper. How can we understand community, and what makes up community, in a modern neighborhood or city? Geddes’s Notation of Life maps this out in detail. The principle of Place, Work, and Folk is congruent with geography, identity and **communality**. He takes the basic interrelationships of people with each other in a place and expands this concept as it grows from the make-up of a village or town, into styles of workmanship, schools and basic disciplines, **Experience[s]**, and **Sense[s]**. From there the concept develops further into schools of thought and art, religion and ideals, and finally to careers, performance, and history. The outcome is the intertwined possibility of societal improvement through the city. In Geddes’s mapping out of these elements of the city what we see is that each of these is important and that people’s connection to these elements, and the **process** of their development, are important as well.

Geddes’s definition of the city can be applied to our modern understanding of cities and how as planners we approach their physical design. Each of the elements, physical and conceptual, that Geddes charted in The Notation of Life exist in modern cities, and many of them are, at the least, elements that people ask for in the design of their communities. **Connectivity** – between open space and urban living spaces, and between where people live and work is a buzzword in contemporary planning.16 The

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16 Many cities have ‘connectivity’ plans including Sarasota Florida, and Norwalk, Connecticut; the City of Austin Texas has an entire ‘connectivity’ department, called the “Neighborhood Connectivity Division”; elements of these plans include connecting parks and open space in urban areas and increasing walkability.
desire, or perceived need, to have elements of ‘culture’, history, and the arts in cities in part drives the desire for downtown redevelopment (Hall 2002, Ch 11). And the recognition of the value of the natural landscape and our ‘natural resources’ together with recreational opportunities is written into many cities’ urban planning documents.\textsuperscript{17}

The belief in mutual aid, or cooperative interconnection between people, wherein all who participate in the ‘community’ are an important part of its workings, is inherent in Geddes’s methods as a planner and in The Notation of Life. It was for this reason that he planned for universities and public gathering places as well as for the improvement of the slums and the working classes. His planning exercises in specific and general ways are based upon the physical and social elements of life, such as Place, Work, and Folk as well as all of the more abstract aspects that emerge from their combination and development. His plans for cities included central public spaces with exhibitions in history, geography, and art that promote an interactive education around, as well as the propagation of, these aspects of society. His plans also included practical planning solutions that kept the fabric of people’s social lives intact and promoted increased connections with each other and with a city or neighborhood’s physical attributes, such as gardens, parks, historically valuable structures, and religious gathering places, that for him were integral parts of the whole of city and human life. His plans preserved elements that had organically developed and had an important role in the history and current use of a city, even as they created new places for people to gather and participate

\textsuperscript{17} Most local governments in the United States have some form of ‘Open Space’, ‘Natural Resources’, or ‘Greenways’ plan. Examples of this in Northern Nevada are the City of Reno’s \textit{Open Space and Greenways Plan} (2007), and Washoe County’s \textit{Regional Open Space and Natural Resource Management Plan} (2008)
in communal life. When we talk about cities, neighborhoods are the communal units that make up the urban fabric of a city.

Geddes’s articulation of the way that people connect to place and to each other to form a city, and how we can plan based on this, can be directly applied to modern neighborhoods. In a modern community we value the same characteristics that Geddes mapped out in *The Notation of Life*. The answers that he provides regarding how to understand a city, and what community is, add a missing element to how we plan for cities today. Though we value ‘open space’, the arts, and public gathering places; oftentimes these concepts are disconnected from the reasons we want those elements in our communities in the first place – and so it follows that their designs are often disconnected and ineffective. What Geddes offers is a holistic understanding of the city and of community – his idea of the city is not an easy thing to conceive of because of all its myriad and disparate interworking parts. Yet his challenge to us is precisely to make the effort – to try to see the whole as well as these many parts in our conception of our communities, and also in our urban design efforts. Geddes’s diagrammatic understanding of the social and physical interrelationships that make up a city is, especially in modern society, an approach we do not generally take. In the modern world of increased specialization and compartmentalization we rarely make an effort to look at the whole and really try to include all of its working parts; instead we drill down to minute details in order to gain a better understanding and in doing so we lose our connection to the whole, or the place from which we began.

Geddes’s challenge to holistically understand the interrelationships between the disparate physical social, and even emotional and spiritual elements of a city and why
they matter, should be basic to every design that will be used by people everyday. Planning and urban design should be connected to its purpose. What are the reasons that we design public gathering spaces, want to physically relate the places where we work to the places where we live, and integrate open space or nature into our neighborhood designs? Geddes’s theory makes these connections for us, and brings us closer to realizing the purpose(s) for city planning and neighborhood design. To see the city as a whole, socially and physically, including its relation to its geography and region as well as to its cultural patterns and social development, and to synthesize this into a vision that includes and acknowledges that humans desire places for spiritual congregation and ways to relate their landscape with their history, as well as places for learning and working – to consider this whole and its elements is to consider what really is the heart of a city. And to design with purpose and holistic understanding in mind, to retain the conception of the interrelationships among each of these elements of the whole is to plan with a more profound level of information and to truly design our urban landscapes with community in mind – it is function informed by holistic practicality.

Restoring the Heart of Planning in the Wells Avenue Neighborhood – Reno, Nevada

And so to return again to my parallel desire to understand what community means in relation to the physical landscape, both theoretically and academically as well as in my own life and neighborhood, I have found that the answer is one and the same. And this resonates with Geddes’s understanding of the city – his theory was both philosophical and conceptual as well as physical and practical – thought for the sake of action. To conclude this paper some examples follow of planning projects from the Wells Avenue
neighborhood now seen through the lens of Geddes’s theory of the city and his planning methods. In modern cities, neighborhoods – geographically and spatially, as well as to a certain extent socially – are the most common level of communal organization. Because of this, the conception of community can be applied to neighborhoods just as it can be to cities and towns. As this paper has shown, community is synonymous with Geddes’s theory of the city, both of which are concepts as well as processes, physical places as well as DREAM[S] for SYNERGY and ACHIEVEMENT in society.

Overview

[Note: The stories recounted below are first hand: I was involved as a participator, an organizer, or both on each of these projects.]

The group that initiated the urban planning and infrastructure improvement projects in the Wells Avenue neighborhood was the Wells Avenue Merchants and Property Owner’s Association (WAMPA). WAMPA was founded in 2000 with the goal of organizing the businesses on Wells Avenue, the central commercial artery of the neighborhood, around common interests and concerns (WAMPA 2011). All of the members are locally owned businesses and most board members have been in the neighborhood for over a decade, some approaching three decades, and some have second-generation ties to the neighborhood. In 2006 this organization lobbied the City of Reno to update the Wells Avenue Neighborhood Plan – the planning, zoning, and urban design document that governs the properties, and landscape, of the neighborhood (West of Wells 2011). Out of the Wells Avenue Neighborhood Plan planning process a group of residential property owners and residents came together to work on some of the goals that
were codified in the plan as well as some of their concerns about high crime and blighted properties in the neighborhood. The West of Wells Neighborhood Group was founded in 2007 and began a crime reduction effort followed by a number of planning, neighborhood improvement, and ‘community building’ projects. Since then they have organized a tree planting project called Roots for Wells; a neighborhood wide clean up effort; a historic preservation and education effort; and, in partnership with the Wells Avenue Merchants Association, a neighborhood celebration including a parade and street party. In hindsight I can see that the neighborhood projects that have been a success have been so because they have been informed by an ethic of cooperation and a vision that is based on the direct experiences and needs of the people in the neighborhood, as well as their sense of history and connection to a larger vision of the neighborhood and the city. Three examples follow.

*Roots for Wells Tree Planting*

In 2009 and 2010 the West of Wells group organized a neighborhood tree planting project called Roots for Wells. Through this project the neighborhood planted over 150 street trees. This project had the dual goals of a) beautification and addition of natural landscaping to compliment existing trees and a neighborhood park; and b) creating an event that was both educational and communal. The tree planting began with a survey of the trees in the neighborhood. The survey was conducted by neighborhood residents and students from UNR, and consisted of written and verbal outreach to property owners as well as a walking survey that gathered detailed information, block by block, about the specific locations in which trees would be planted. Both the survey and
the planting were successful and contributed to realizing the goals of the project: the survey ensured that feasible locations for the trees were chosen in consideration of surrounding uses including auto traffic and existing trees and homes; and during two planting days neighborhood residents and volunteers from throughout the city planted all the trees in less than six hours. As of December 2011, two years after the first trees were planted, 90% of the trees survived and are thriving.18

In his Dunfermline Report Geddes writes about the value of planting trees, not only as a possible communal ‘survey’ activity between citizens, but also as one of the “shrewder ‘investment in futures’” that a city or town can make (Geddes 1904, 29). What we found through the Roots for Wells project was that even before the planting, through the survey itself, the process of education and neighborhood improvement was begun. Because of the survey absentee property owners became aware of and engaged

18 Statistic on success of the tree planting from Barrie Schuster, project organizer.
with the neighborhood group, and also gained knowledge about the value of their existing
trees and the maintenance required to keep them healthy. While walking the
neighborhood and thinking about the locations of existing and future trees, neighborhood
residents got to know their neighborhood and its natural assets better. In this way the tree
planting itself was an educational and communal event. Those who participated in the
planting gained knowledge about the value of the trees to the neighborhood and how to
plant and maintain them; and as groups of neighbors worked together to plant trees
around the neighborhood they created new relationships and had a new experience of the
landscape of the neighborhood. And finally, similar to the tree lined streets that Geddes
added in his plan for Dunfermline, the Roots for Wells project created an additional
neighborhood asset to further connect people to the natural landscape – trees were chosen
that were either native to the landscape or appropriate for the climate. The trees added to
the beauty of the neighborhood by complimenting the landscaping of the neighborhood’s
older pedestrian oriented homes; and the new trees created tree lined streets which were
adjacent and added additional connection to a neighborhood park.

*Historic Preservation*

Many residents chose to move in to the Wells Avenue neighborhood specifically
for its historic homes, built between 1900 and 1940. One of the important aspects of
Geddes’s holistic and interrelated understanding of the city is history. History – of
workmanship and crafts, the region and geography, and of a people and their city – is one
of the threads that winds through the Notation of Life and is a recurring element in his
surveys and town plans. The neighborhood group has often discussed the value that the
neighborhood’s history has for them, in both its architecture and its larger connection to the City. As a result the neighborhood group has initiated a number of historic preservation and information projects that have created a deeper sense of connection for residents to their homes and the neighborhood, brought people in the neighborhood together, and inspired art projects.

One of the founding members of the neighborhood group organized a survey of all of the historic homes in the neighborhood, the survey project, and the document that was produced, is called the Wells Avenue Conservation District. The survey included a workshop on the different architectural styles in the area that was attended by members of the neighborhood as well as students from the University. The survey was an informational exercise in practice, and produced a document that will be used to recognize the value of the Wells Avenue neighborhood’s architectural history.

Neighborhood residents also lead historic walking tours, publish a newsletter with articles on neighborhood history, and post information about the history of Wells Avenue to their website. The survey, walking tours and the website all have elements of Geddes’s exhibitions in that they are experiential teaching tools as well as existing records and displays of the neighborhood’s history. A future goal of the Wells Avenue neighborhood group is to create a permanent exhibition of some aspects of the neighborhood’s history. Suggestions for doing this include posting signage throughout the neighborhood to create a living exhibition made up of the neighborhood’s homes; an oral history exhibit; or an exhibit inside of the historic US Bank building on Wells Avenue (this building will be discussed below). In the meantime the website, as well as some neighborhood businesses, house historic photos, and some merchants and residents, both young and old,
are readily available and regularly called on to recount the historical details of their homes and businesses.\textsuperscript{19}

The Wells Avenue neighborhood’s historic preservation add to the neighborhood’s identity and communality, and hence are part of what makes up the meaning of community. Creating experiences that engage with the history of our neighborhood strengthens neighborhood identity, and our geographical ties to this place. Some of the results of these projects are an increased interest in the neighborhood’s history, as well as what are now self-perpetuating history projects – historic walking tours have increased and are well attended; WAMPA and the neighborhood groups (and their websites) have become a resource for increasing historical knowledge of the area; and many of the neighborhood residents have learned about the history of their homes and retell these stories around the neighborhood and to others who have subsequently also been inspired to learn more about the history of the Wells Avenue area.

Emily Rogers, a local photographer, recently completed a photo exhibit that was inspired by historic articles on the West of Wells website and by stories she heard from neighborhood residents. Emily photographed and spoke with younger residents who were eager to recount the history of their homes, as well as longtime (40-year or more) residents who had also become involved with neighborhood group and wanted to tell the stories of their homes. Her exhibit consisted of color images of historic Wells Avenue homes – each of the images contained some visual representation of either the current resident or was placed in a modern context to indicate that the photo was taken in 2011.

\textsuperscript{19} Examples are Tom Stewart and Truckee Meadows Herbs; Silver Peak Restaurant, see pictures in the historic portion of the restaurant; and Barrie Schuster, though only in her early 40’s and a resident of the neighborhood for a mere decade, is the neighborhood’s resident amateur historian.
To further connect past to present through the architecture of the neighborhood, Emily’s exhibit included historic newspaper clippings with articles about the original residents from each of the homes featured in her photographs.\(^{20}\)

Learning about and participating in our neighborhood’s history has expanded our understanding of the place in which we live. The projects have added to and helped us develop our own *identities*, as well as that of our neighborhood, which, together with our neighborhood’s (living) history have expanded our connection with our *community* and each other.

*Streets as Cathedral*

The Fiesta on Wells Avenue was a community celebration and party that was organized by the Wells Avenue Merchants Association together with the neighborhood group in 2008, 2009, and 2010. The event consisted of a parade and street party. Though the first event was 3 years ago, the same group still works together on neighborhood projects. During the parade, we all agreed that something happened that was similar to how Geddes described the funeral procession of his friend in Edinburgh (Chapter 3). The organizers of this event agreed that during the parade the street was transformed – the parade had animals and performers of all types – each of which had a connection to the neighborhood through neighborhood residents or a neighborhood business. The crowd was nearly 8,000 people, hundreds of whom became part of the parade as they followed

\(^{20}\) Emily’s exhibit was shown at Sierra Arts in downtown Reno: [http://www.sierra-arts.org/exhibitions/rogers/](http://www.sierra-arts.org/exhibitions/rogers/) (accessed December 2, 2011)
the last marchers, a mariachi band and a group of ‘dancing’ horses, into the center of the neighborhood for a party.

Each of us who was involved in this event felt that in that moment the street was transformed into, to use Geddes’s word, a cathedral, and the SYNERGY that occurred changed the working relationships of the neighborhood for the better as well as the understanding that we had of ourselves as a neighborhood – and those changes persist today. This SYNERGY created a change: our sense of that portion of the street as a place before the event as compared with after, even today, is different. This experience created a memory and shared history that has associations with that portion of the street as the center of our neighborhood, a metaphorical place where, once, and maybe again, the neighborhood can gather for a communal experience that connects us further together with each other and with the landscape of our neighborhood.

_A ‘Temple of the City’ for Wells Avenue_

In the way that Wells Avenue became a metaphorical cathedral during the Fiesta on Wells, perhaps we also need a physical or metaphorical ‘temple’ or exhibition for our neighborhood. The picture below is of the building that lies at the main intersection of the neighborhood (the place where the parade ended in the previous description).
It is the tallest building in the neighborhood and was originally a church (WAMPA 2011). This church was once the cultural center of the neighborhood – it was a Catholic church where many of the Italian families in the neighborhood worshipped. Older people in the neighborhood still remember events, dances and meals there. Though it is no longer used as a community gathering place the building is still the geographic center of the neighborhood and is used iconically by some of the neighborhood groups – it is seen as an important architectural and historical symbol of the neighborhood. Geddes believed in exhibits to give people a sense and experience of their city – perhaps we need something like this in which to house a Wells Avenue historic/neighborhood exhibit, or to act as a central gathering place. For now however, this historic building, somewhat ironically, is privately owned and used as a bank.
Conclusion

Many of the projects that the groups in the Wells Avenue neighborhood have initiated have been successful because of their ability to connect the need for the project to the needs of the neighborhood as a whole, or to the vision of the neighborhood as a whole. All of the projects described above were initiated by people in the neighborhood because of a sense of their neighborhood’s needs and current uses. In this way the holistic sense of the city that Geddes’s had is honored. The experiential and educational nature of these projects is an additional reason why the projects have been a success. People from within, and outside of, the neighborhood have become involved and participated in projects, and in doing so have learned about the neighborhood, its assets and issues, and its history. In the process of these planning improvements SYNERGY, ACHIEVEMENT, and perhaps even, to complete the triad from the Fourth Quadrant of The Notation of Life, ETHO-POLITY, have been realized. 21 Citywide recognition and encouragement have replaced a reputation for high crime and blight, and the connection of the neighborhood to the city as a whole has increased.

What I have learned from Geddes about the meaning of community is an explanation of how people are interconnected in many different ways – and a sense that this is important. Geddes’s theory of the city has some elements that are easy to understand, and some that are more abstract – the conception of a place, or a city, as a whole is difficult, perhaps impossible, to ever hold in our minds completely, though Geddes continues to challenges us to try. The work of Patrick Geddes can inspire

21 From Chapter 3, Geddes defines Etho-Polity as an “ethic bond” combined with “social purpose.”
modern planners – and indeed all citizens of neighborhoods, towns and cities – to be idealistic as well as supremely practical. To plant trees as well as build temples to the city.
~ Bibliography ~


