On the pedagogical functions of the city:
a morphology of adolescence in Athens, 1967–1973

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This essay looks at the city as a space of affective, cognitive and social exploration that supports the formation of self during adolescence. The first part reconstructs memories of a particular morphology of growing up in Athens, Greece. Here, the use of the word ‘morphology’ refers to the spaces, movements and perceptions of the city that are inexorably linked with the evolution of intentional actions, habitual behaviors, and social interactions. This morphology is subsequently analyzed according to the geography, social principles and social networks involved. The final part of the essay proposes a definition of the pedagogical functions of the city. It is argued that the spatial morphology of the city supports the development of the cognitive and affective codes that underpin the open-ended exploration of environment as part of the process of identity development.

Keywords: Urban culture; pedagogy; search; social networks

Introduction
This essay discusses the pedagogical functions of the city as an environment for growing up. Growing up is about becoming a particular person who, among other things, has learned to understand a range of contexts, to position themself in relation to them, and to think and act in particular ways. Insofar as the knowledge, habits and modes of conduct learned are characteristic of a culture, the process of growing up is also a process of becoming a member of such culture, or perhaps of distinctive sub-cultures within a larger cultural setting. Indeed, the multiple nuances of meaning of the word ‘culture’ conjoin a process of individual development and growth with the transmission of a characteristic sets of ideas, habits and behaviors (Eliot, 1948; Williams, 1976). Here, I am interested in the way in which the spatial structure of the city as a physical artefact opens up an affective, cognitive and social space of exploration which interacts with the formation of self, both as a particular person and as a member of a culture.

We are accustomed to linking learning to pedagogy, whereby the transmission or development of forms of conduct or knowledge involves an interaction between a provider and an acquirer. Pedagogy, of course, does not need to occur only within relatively stable settings such as the family; nor does it necessarily need to be organized into a coherent process of development, with pedagogical actors

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explicitly adhering to similar pedagogical principles, as with the school. It can also be distributed over many interactions occurring without overall coordination at different times, or in different places; it can involve a range of actors and the providers may not necessarily be conscious of exercising a pedagogical role. This distinction is reflected, for example, in Basil Bernstein’s (2000) contrast between segmented and institutional pedagogy.

In what follows I describe the way in which the city enters into a pedagogical relationship with a network of friends who distributedly and symmetrically act as transmitters and acquirers as they grow up. One might immediately question whether it is useful to evoke the term ‘pedagogy’ in this context. Why not simply ask how the city supports individual and collective learning? I want to argue, however, that there is a difference between the processes of informal and distributed learning that may occur in the city, and the specific effects that the city itself may have, given a pedagogical relationship that those growing up may establish with it. I am essentially adopting the distinction, most clearly drawn by Basil Bernstein (1975, 1990), between what is being learned and the principles that may drive the learning. The term ‘pedagogy’ applies most strongly to the latter. I argue that dense, connected, diverse and intelligible cities can bring forth particular structures of learning, particular ways of becoming aware and defining oneself.

It should be clear from the above that I do not use the term pedagogy in relation to formalized bodies of knowledge, such as mathematics or history, nor in relation to codified skills, such as playing a musical instrument or mastering the mechanical maintenance of a car. Rather, I focus on knowledge that is associated with the acquisition of a particular sense of self, a particular orientation to growing up. The pedagogical effects of the city that I am interested in bear on these rather tacit and pervasive kinds of knowledge that are harder to pin down than the formalized mastery of a subject or the codified mastery of a skill.

The reference to ‘city’ in this context is likely to raise uncertainty: does one talk about the city as an institution, as a form of social organization, or as a physical environment? To some extent, the uncertainty arises from received and unquestioned habits of thought that separate the ‘physical-spatial’ milieu and ‘society’ (Hillier and Leaman, 1973). It is much more useful to think of the organization of space and of society as intertwined, as for example in the work of such diverse thinkers as Goffman (1959), Foucault (1975), Giddens (1984), or, more critically from the point of view of the arguments presented here, Hillier and Hanson (1984). Then, the question becomes how the social organization of physical space interacts with the creation and organization of more abstract cultural spaces – those that are realized in patterns of geographical localization and in patterns of action or behavior. Such an approach is evident in the work of Lefebvre (1974).

Here, I am thinking of the city as a physical environment with a particular spatial morphology, which supports processes of growing up. The spatial morphology of the physical environment is explored, perceived, mapped, and made one’s own through sustained patterns of behavior. Its structure supports and situates concomitant mappings of the multiple patterns of social activity that are continuously accommodated and enacted in physical space. Over time, these patterns of activity and behavior become habits. Dewey (1922) has emphasized that the emergence of habits in the process of growing up entails both a process of habituation to environment and the capacity to adjust activity to meet new conditions or to express active preference or choice. The spatial morphology of the city functions pedagogically insofar as it structures this interactive coming-to-terms with environment.
The next section provides an account of memories of growing up in Athens, in the period between September 1967, when I entered secondary school, and June 1973 when I graduated and moved to London to pursue studies in architecture at the Bartlett School of Architecture and Planning. My years at secondary school coincided with the period when Greece was governed by a Junta (21 April 1967 – 24 July 1974). In 1999, President Clinton expressed regret that the USA supported that Junta in the context of the cold war. The government of the Junta was universally opposed by all political forces, so much so that more conservative politicians were imprisoned side by side with more radical ones. Nevertheless, the cultural spring that flourished in the early and mid-1960s came to an abrupt end and its dynamics never resumed with quite the same creative force. The coincidence between my adolescence and this particular period in Greek history is significant to the argument. I will argue that at a time when formal education got severely restricted and distorted by the Junta into closed modes of thought and action, the city continued to support open modes of acting, learning and thinking. It provided a pedagogical field in which it was possible to enact and test the cultural principles first instilled in at least some middle class families.

I chose to allow the voice of memories to be different from the voice of this introduction and of the reflections that are presented in the final sections of the essay. This is the closest I can come to sharing with the reader the ‘raw material’ that underpins reflection. Quite clearly, the memories of urban adolescence that I narrate, now at the age of 62, must have been filtered by subsequent thought, particularly since I have been studying the social and cultural functions of the city throughout my academic career. A reassurance that relevant memories are not too distorted is provided by the fact that those who grew up with me recognize, in the text that follows, a shared background of situated behaviors, thoughts and feelings.

**Remembering an urban morphology of adolescence**

The text below ‘wrote itself’ as I reconstructed memories of growing up, moving from those that spring up most vividly to those that require greater effort or emerge by pursuing chains of association. I have subsequently inserted sub-titles to help the reader navigate a landscape which is, by its nature, part narrative, part montage and part collage.

**Image**

In Athens, apartment blocks are tightly packed on a warp and weft of streets laid straight over slopes and hills. Every path cuts under a theater of window frames, balcony projections and cross views. People overhead recognize each other by appearance rather than name. Main streets work like rulers, they mark distances and point to destinations. On these main streets, even as long views take over, edges can become spectacular. The sense of display, when present, is anchored on the sidewalk itself. Shopfronts and the postures of passersby acknowledge, with varying degrees of intensity, the patterns of co-presence and the rhythm of densities and differences experienced as one advances into the perspective of what the street has to offer. One of my earliest impressions of the larger city was from regularly standing at the front of trolleys, accompanied by my grandfather who insisted that I get a good view on our way to our destinations: shoe shops, toyshops or movie theaters in the center of the city. The main streets, aligned with shops, filled with people, punctuated by neoclassical public buildings, appeared as a stage of a larger life, watched with curiosity and anticipation as the trolley pursued its familiar orbit.
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Figure 1.

Figure 2. (Left)

Figure 3. (Right)
Panepistimiou Street, neoclassical Trilogy (National Library, University of Athens, Academy of Athens) - 2017.
Friends
Memories of more actively exploring this environment on my own are tied up with memories of building friendships. In the earliest stages, the possibility of friendships was suggested by acquaintances with the children of other parents who were friends with one’s own parents; or, by regular encounters with other kids in such places as parks or public squares where one was taken by one’s grandparents or caretakers during working hours when parents were at work. The more important friendships, however, grew out of the dense ties of proximity and interaction first formed within school enclosures. Schools, and more particularly school yards during the breaks between class times, gave an almost visual and physical sense that friendships were not merely binary relationships, but were rather defined against the background of patterns of aggregation and dispersion continuously shaped and reshaped over time. The desire to have ‘best friends’ and ‘close friends’, the predilection that friendships should be imbued with hierarchies and priorities, only underscored the awareness that any particular friendship valued greatly was played out on a playground of other encounters and acquaintances, actual or potential. I now see that ambient relationships brought forth infinite games of light and shadow, filtering and translucence, refraction and reflection, focus and dissipation. One paid attention to significant expressions and behaviors, registered particular faces, pondered over certain things said, as though tuning to signals within an atmosphere of ongoing transmissions. But I knew already then, as did everyone else, that when friendships clustered in stable companies or bands they acquired multiplicative rather than additive force.

Apartments
As trajectories linking one’s own apartment to those of others were made, so friendships came to be defined as urban networks, spilling out of school enclosures. These networks were much more extensive that those linking the nodes of family. During the late grades of primary school and the early grades of high school, visiting friends’ apartments was about discovering previously unknown extensions of the world. One apartment might become linked to the discovery of the sound of ‘Help’, another to the discovery of the sound of Elvis in Las Vegas; the first Kodak Instamatic 100 would be seen at one place, the first portable record player at another; the red cloth hardbound editions of at least some of the books by Kazantzakis, could be taken for granted in almost any apartment. Otherwise, bookshelves took one into hidden folds of the world. While Hugo, Dickens and Tolstoy were almost as frequently encountered as Cavafy, Seferis, Ritsos, or Elytis there was also an inexhaustible range from Camus to Steinbeck, from Sophocles to Brecht. Very alluringly, one could sometimes get exposed to the banned books by Marx, Engels or Lenin, and, in their vicinity, to those by Kordatos or Glinos. The massive Great Greek Encyclopedia, the Encyclopedia of the Sun or Papyros Larouse were imposing; they looked a little like pieces of furniture, unlike the 1960s pocket-size paperbacks by Galaxias Editions, or the then current Penguins or Livres de Poche. Such well-designed little books celebrated mobility, they implied that reading could be carried around rather than be anchored at a desk.

Performance
Most important, however, visits to apartments provided opportunities to witness the possibility of performance, and thus of forms of expression that were as often the counterpoint as the complement to communications at school. To own and to know how to play a musical instrument was to assume a very particular status, that of being able to create an audience. The company of friends became expressed as a community probing the relationship between style and feeling, perhaps
even understanding. With the advent of the Philips Compact Cassette Recorder EL3302, these efforts could be evaluated, repeated and improved; more important, they acquired the authority of something that could be registered past the moment. And yet, knowledge that things could get better through rehearsal, ended up adding greater value to playing live. Performance in living rooms, school assembly rooms, cinemas or small sports venues compressed all the long cycles of preparation into intensity, it discharged all mental projections into enactment. When things fell in place, life itself was felt as a deliberate outcome.

*Parents*

Only after all these years do I realize how discrete the presence of the parents who provided the apartments and their contents was, mothers most gently bringing meals into the rooms or, sometimes, laying the table in the kitchen. In kitchens, the world, as though by its own force, returned to the dimensions of what was actually available. Mothers, by their art, made what was available also be delightful. I now feel certain that parents must have known that in those apartments the bands of friends discovered afresh the possible meanings of things that to them might have become worn with the years; they must have known that this process of transmission and discovery, locally framed in each apartment and globally indeterminate as apartments got linked into networks, was the hallmark of upbringing children in an urban society. Family values never had to be spoken of. They were already present in the choices of friendships made and in the directions of inquiry pursued.

*Cinemas*

Nodes of network convergence other than apartments were also present: cinemas, stores, and cafés. For our generation cinemas were most important, movies were discussed even more intensely than books or songs, perhaps because they helped visualize how re-embedding myths back into some reality, down to a fleeting glance and a small gesture, might be like. Thus, movies extended into long animated conversations in coffee shops that stayed open into the late night. Of all the images of seeing movies, one is very distinctively Athenian of that time: open air movie theaters, some on the roof-terraces of apartment buildings, but an even greater number operating on unbuilt sites amidst them. The latter conferred to movies an intense theatricality. Neighbors watched from balconies. Lights turned on in the apartments momentarily sculpted cones and prisms into the empty volume between the projector and the screen, before shutters got closed, in deference to the event below, leaving only grilled frames of dimly illuminated privacy suspended over our heads. Nothing could more powerfully underscore the fact that the stories projected on the screens were only some of the many more stories being played out all over the city. During the intermission, when cheese pies, pastries, ice creams and drinks were peddled, one could take stock of the fact that the open air cinema was often rendered as a garden, with planters, flower pots, plants climbing on party walls, or even vines climbing over pergolas. Cinemas could then be imagined as privately curated commons of the imagination, carved into the solid composition of public streets and private apartment blocks.

*Shops*

The shops, at least those that the band of friends to which I belonged frequented, were different. Often holes in the wall on side streets, densely packed so that you could hardly circulate inside, and each uniquely specialized. Where does one find affordable high quality replacements for record player styluses? Are Ibanez guitars and Farfisa amplifiers, then cheaper, able to imitate the sound of Fender? Where does one get army surplus sleeping bags,
Figure 4. Cinema Lila, Naxou Street – 2017.

Figure 5. Cinema Riviera, Valtet-siou Street – 2017.
preferably of US origin because they are lighter and more comfortable? And, more often, where can one get to leaf through books, books in Greek, English, or French, including books that circulated “underground” during the years of the Junta? In these shops, learning was a normal function, delivered over time; on small allowances, buying was sparse. One was constantly triangulating between one’s intuition, information shared over the network of friends, and information imparted by the shopkeeper. Each shop had two addresses, one in the geography of the city, and one in the geography of the collective expertise developed by bands of friends. And it had two faces, that of the shopkeeper, and that of the friend who could be trusted to know how that shop compared to others of the same kind that one had not visited or could not visit.

In general, shops were empowering. They provided instruments that made other things possible: Books to fuel discussions; equipment to enable performances; equipment to play music; equipment to travel with. I remember this intense instrumentality associated with shops as competing with their other evident function: image making. Finding the right faded blue jeans or Converse All Star shoes, was important; as important as finding barbers that could make your hair cut look as though it complies with government-imposed school norms while actually being longer, particularly the part tucked behind the ears. But none of that was more important than books, cartridges, and sleeping bags.

Vacations
The dense city of concrete had another side, two to ten hours away: vacation landscapes. To be on vacation, whether staying at hotels or rental rooms, or sleeping out in the open, was to be away from the city, but also to be quintessentially of it. There was something truly magical about getting out on the Greek landscape over a relatively long period of time, free of all normal routines. This was a time of transition, the identity of the traveler already fading, the identity of the tourist still being defined. Main village and town streets were not completely covered by the tables of cafés and restaurants; there was no abundance of shops selling mass-produced “popular art” and “souvenirs”. Hotels provided a base for exploration, they were not yet seeking to trap patrons into ‘all included’ packages or miniaturized worlds of leisure. Visitors were sufficiently few to be recognizable as visitors. In the mist of it all, provisionally shedding the identity of ‘students,’ away from family, we had a chance to try out who we were, to play out individual and collective identity.

Music
At that time, the natural cultural tension between anonymous urban adolescents, local culture, and city dwellers returning to their ancestral homes for the summer was mostly expressed over music and dance. On one side traditional music and dance, sometimes of a deeply rooted local idiom. Partly growing out of it, the music of major Greek composers, Hadjidakis and Xarchakos, but above all else Theodorakis whose songs, even though banned by the Junta, would be heard in many taverns and most certainly on many beaches. On the other side, rock and roll, a vague term stretching to encompass Bob Dylan as much as the Beatles, the Stones and the Kinks, Jefferson Airplane as much as Cream, the Velvet Underground as much as Chuck Berry. This was a very flexible rock and roll, particularly in the early years when lyrics might be known through periodicals transliterating the words without translation. One took liberties filling in any desired meanings between the words that were clearly recognized. Guitar belonged to rock and roll; bouzouki to Greek music; the electric piano had a strange ability to cross boundaries. The special domain of local music was the village or town square, especially during the nights of festivals associated with patron saints. The special domain of rock and roll was the open air.
'disco', and, hesitantly at the beginning, the music bar. Discos and bars were usually at the edges of towns and villages, thus more likely to offer views of the landscape. The shared domain was any place where companies of friends could gather in clusters, spread out or compacted into aggregates; the tavern, but more characteristically the beach. Music travelled very much in people. You arrived into the landscape already soaked in music, and you traded music like a precious currency that required and brought forth intimacy, singing, joining-in in song, or offering yourself as a willing audience of music played by others. The landscape had its own light, its own colors, its own shade and its own sounds. Your music was like your footstep: a very transient implant noticeable only at close range. Then came the arrogant loud speakers of bars and cafés using music to cover up the waning of conversation. Much later came the iPod and the option to isolate oneself in music.

Books
Books as well as music were carried over from the city to vacations. One could ‘live’ in books all the more easily during vacation time, but such life was mostly either private or shared within the band of friends only. Unlike music, which was being negotiated all over, literature traversed places in relative silence. I was reading Arthur Koestler’s ‘Arrival and Departure’ as ‘Croisade sans Croix’ at Matala, I was reading Albert Camus’ ‘L’Exile et le Royaume’ as ‘Η Εξορία και το Βασίλειο’ at Agia Roumeli, we discussed Nikos Kazantzakis’ Report to Greco’ at Ano Trikala Korinthias. Such reading captivated me and still marks past moments as I recall those 45 years later. In situ, the books functioned alternately as supports crouches, as sun glasses, or as hiding places relative to the main protagonist of experience, the landscape itself. The landscape always enfolded the pages, as it enfolded the music, and absorbed us into its own force. It was not just a matter of light and transparency, of delineation and color, of texture and smell, of temperature and perspiration, of catching one’s breath or of allowing oneself to come to a complete rest into the moment and the place. These worked as inducements for experiencing one’s own capacity to move, to perceive and to feel. While in the city made me most aware of wanting, of thinking, and of doing, the landscape made me most happy of being.

Landscapes
In the landscape, the dwellers of the dense city of concrete learned to link movement to description and to the intentional choice of position. Both were induced by the abundant presence of panorama, and diversity in panorama. You arrived at a bay, a promontory, a col, a ridge, a plateau. The Greek landscape always offers intuitions of a gestalt-like visual integrity of place, a pairing of a relatively stable framing horizon and a multifaceted “here”, much in the manner described by Γιαννόπουλος (1961). One becomes actively aware of the deep relationship between looking and moving. Eventually one chooses a place to sit, have a drink, read a book, or simply stare. The satisfaction of finding such a place comes from the awareness that the view that is thereby prolonged is one of a set. If you have a camera you try to take a photograph that shows the view presented in a way which contains intuitions of other views implicitly present. In memory, the chosen view acts like a sample frame that triggers movie sequences. It is never entirely clear whether the choice of the view where one lingers is made by the moving subject or by the architecture of the landscape itself.

The sense that the world is intelligible in this way, as multifaceted localities within relatively stable horizons, as a plurality of views some of which claim particular emotional priority, was reflected back on the manner in which one thought of the self within the social and geographical networks of the city.
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A desire for deliberate staging, a desire to choose where the networks of friends would converge gradually evolved. The networks of friends, the shops, the cinemas, were taken for granted as the ‘environment’ one grew roots in. However, returning from vacations one could not entirely take the familiar city for granted. The city got discovered anew as though it was a landscape. Quite naturally, one gravitated to the foothills of the Acropolis, the shores of Piraeus or Faliro, the hills of Lycabettus, Strefi or Philopappus, all the places that offer distance and panorama, or hidden places that can be reached by walking over the orbit of panoramas. One came to have some preferred cafés and restaurants away from the home neighborhoods. One began to deliberately set conversations about music and politics, desire and love, presence and absence in places which offer particular views or atmospheres.

I remember of becoming conscious of deliberately taking stock of visual purviews available within the city, prior to becoming conscious of deliberately taking stock of the living history or the collective memory embedded in places. Going to a particular coffee shop that had been frequented by authors of previous generations sure was exciting, but it remained a learned thing. Working class neighborhoods might have been visited in recognition of a heroic aura conferred by historical events in living memory, but how could one disentangle that from the romanticism that was offered by such settings of lesser traffic, and lower volume?

Spaces of citizenship
While returns to the city from the countryside accelerated a more reflective awareness of perception, city life itself propelled a more reflective awareness of the difference between citizenship and habitual patterns of urban life. Gradually, the urban morphology of adolescence came to reflect the discovery of society as something larger than the networks of friends. Political or cultural gatherings testing the limits of what was legal under the regime’s attempts to legitimize itself was a part of it. To be present in such gatherings was recognized as a statement. The meaning of assembly was only incidentally related to place. Some cinema or theater owner, some institution had taken the risk to host the event, but the place did not fundamentally matter. The topic of the meeting might have been the evolution of Greek language, the formation of the European Community, or the work of Seferis: some topic that lent itself to the indirect affirmation of the values of democracy. But the essence of the meeting was presence itself. The largest gatherings hijacked some of the basic rituals of social life: the funerals of Papandreou, in 1968, and Seferis, in 1971, became covert anti-Junta demonstrations. Measures of area could be used as measures of political support, one would make statements such as “the procession stretched all the way from the temple of the Savior to the Temple of Olympian Zeus”. Up to that point community had been a background terrain discovered as a by-product of building the network of friendships. As one became part of a capillary flow of connections, community emerged in the manner in which watermarks form on soil after rain.

With politically motivated gatherings, community became explicitly defined in relation to boundaries. After all, on the 21st April, 1967, the Junta had announced itself by tanks stationed in major public spaces in Athens, by a curfew, and by a prohibition of meetings of more than six people. Therefore, initially, boundaries were to be transgressed or affirmed. Later, upon reflection, they were to be deliberately posited and arranged. After more than thirty years, this experience of political space as a space of boundaries was peculiarly rekindled by an American colleague who regularly recalled, in a voice of controlled emotion, an inscription on an ancient piece of stone: “όρος ειμί της Αγοράς” – “I mark the boundary of the agora’. In this demarcation, he recognized the tangible emergence of the idea of
citizenship and public gathering that defines democratic culture. Ironically, Greeks of my generation, even if less heroically, had to follow on the footsteps of Greeks of previous generations. Not finding an institutionally demarcated functioning space of politics available to them, they literally personified, in many places over the city, the principle metaphorically personified by the stone that can still be viewed near the Attalos Stoa.

**Arrests**

But if bodies were called to act as boundaries of political space, so the price could be felt as pain. Some people had experienced this unambiguously, when members of their families or friends got arrested for political activity. During the regime of the Junta, the arrest of someone first became known as a disappearance. An effort had to be made to find out where the person was detained. An even more persistent effort had to be invested in getting some occasional visitation rights. Strategies had to be devised, whether actual or imagined, to find codes of communication, through language, through eye contact, or through touch, when touch was allowed, to feel the state of the person during supervised visits. Detention places could be anywhere: local police stations in neighborhoods one had never visited. Places one had previously ignored, right in the middle of Athens, such as the headquarters of the military police. The experience seemed primordial; it was certainly raw. Political space was the space of power, power was physical rather than abstract. The world of families, friendships, movies, books, conversations, holidays and music could not be taken for granted. Fear was part of life. To let the city know that you, as part of it, did not succumb to fear, you might go out at night and write slogans on walls. Fear was thus disciplined into a calculus. The more secluded the street, the less the risk of being caught provided one developed a good sense of how to look and how to listen, but also the less the effect. Small groups of like-minded people tested secluded and less secluded streets in incremental steps. Fear was attenuated by indulging a game of hide and seek.

**Languages of defiance**

Political space, once inhabited, had an effect on how one listened to language. The nuance of how things were stated got appreciated within the everyday, with emphasis on things not stated at all. In this sense, the everyday became literature. At school, or at least in the semi-private or private schools that claimed some independence from the state, historic anniversaries were celebrated in ways that rendered the celebration perfunctory, or in ways that shifted meaning to an assertion of democratic values. The mandates of stale nationalism promoted by the Junta in self-justification were thus neutralized. The battlefield of innuendo was, however, the study of civilization. At the Lycée Leonin, the study of French civilization, nominally a part of learning French, became a platform for exploring ideas outside those sanctioned by official pedagogical discourse. Gavroche could embody youthful revolt, Rimbaud could embody a seemingly revolutionary distancing. One knew that at Moraitis School, enlightened teachers stretched free discussion to the limit. ‘Efivos’, their student publication, was read more widely by many who were eager for some little opening of free expression. My sister, a student at Moraitis School, remembers ‘Efivos’, the publication of the school, as an oasis of free expression as she remembers the school as a whole as an island of creativity. One went to the annual theatrical plays staged by the students with the expectation of coded messages. ‘The Tale Without a Name’ by Kambanellis, for example, staged at the Moraitis School, linked virtue to resistance. In Athens College, staging ‘Coriolanus’ was a barely disguised act of defiance.
A sense of defiance also permeated some of the more ordinary habits of normal life. On special weekends we went to boîtes to listen to live music. We particularly sought performances by Dionysis Savopoulos whose band used the instruments we associated with rock, producing sounds that resonated with those of rock bands while also retaining motifs of Greek musical genres or of the ‘new wave’ of songs that flourished before the Junta. It was known that Savopoulos had been arrested and had suffered while in detention. His songs, sometimes with multiple versions of lyrics, more explicitly or more covertly anti-Junta, linked the musical ethos of rock with a desire for cultural resistance. Much more important to us, Savopoulos showed how one can cross the Greek language and the sound of rock without detriment to the tonality and expressiveness of language. The Greek language is eminently polysyllabic, with stress requirements that could easily run afoul of the emphases of melody, so much so that many early rock songs by Greek composers exuded the unintended impression of parody. We also went to performances by Nikos Xilouris, whose voice had as much power as his Cretan lyre, and who, at the time, sang traditional songs as well as songs by Yannis Markopoulos. In Savopoulos’ boîte the air was filled with anticipation and intimacy. There was a sometimes mystical sense that a new thing was being born. The room was often completely silent as everybody listened to the lyrics, frequently for the first time. With Xilouris things were different. The audience typically joined in the singing, applause accompanied key refrains or key verses, one was joining in a feast as though the voice, the lyre; the statements had always been there and were being asserted in revival. I shared the excitement at Xilouris, it was contagious. And yet I was more at home with the latency then exuded by Savopoulos. The music sang by Xilouris confirmed to all that there was a deeply rooted democratic culture, crossing between traditional song and authored compositions, a culture that did not accept defeat under the Junta. The music sang by Savopoulos proposed that there were modes of feeling to be discovered, whose power and dynamics were not yet tested. I doubt that we, or Savopoulos, ever became the people that the music drove us to wish we could become. But I still cherish the memory of a room filled by many distinct individual wishes to grow good and do right, projected by the glow of the eyes, like barely visible candles, seeking their intersections and the collective surfaces they might be able to define.

The Acropolis

Back in the space of the city staging oneself in public view gradually became as important as staging oneself to get a desired view of the city as a scene. At first, given Athens, these two staging desires resulted in a motion of a pendulum. Few places in Athens could simultaneously respond to the desire to situate oneself in the landscape and the desire to situate oneself in society. The hill of Areopagus was such a place. When you looked at it at night you had to try hard to distinguish bodies from rock formations. Single people, couples, small companies, all sat long in silence or in conversation, on occasion brought together by song. Sometimes I left the hill with an inner illusion that while sitting there, I could see, between myself and the stretching surface of night lights, any movie I wanted to project, always aware that the Acropolis stood behind me, and looked at the city over me, through me, and subtracting me, all at the same time. Not quite the Acropolis of school books, certainly not the Acropolis of 19th century paintings, not even just the Acropolis of the Funerary Oration by Pericles, so often evoked by my father, but some other Acropolis. A more intimate Acropolis that existed as a promise whispered every time one saw it in the course of life, from streets, balconies, windows, and terraces, every time the everyday got
punctuated by the recognition of sight, every time that what one had learned about the Acropolis got filtered, quite involuntarily, by the circumstances of one’s life. Movie theaters were the commons of the imagination, Areopagus was a shrine to the power of imagining, and the Acropolis stood as the witness of everything.

**Lacunae**

Even as the Acropolis was so pervasively present, in actual view, in habits of movement and encounter, or in the mental image of the city, there were landmarks which were caught in a quasi-lacuna: they were known, proximate and unfrequented. The pre-eminent of these was Omonia Square. In shared collective knowledge (Ιωάννου, 1980) this was not only one of the major central squares of Athens but also, by virtue of being a transportation node, the most likely meeting point for people coming into Athens from other places. In addition, its main coffee shops had not only been celebrated by the previous generations of Athenians, but had also featured in well-known modern paintings, such as the ones featuring the coffee shops ‘Neon’ and ‘Parthenon’ by Tsarouchis. And yet we did not claim Omonia as our own, we did not become regulars at the many bars and coffee shops in the streets surrounding it. Later, as University students, we went to try beverages not easily available elsewhere; salep was still sold by street vendors on the sidewalks in the early hours of the morning. Or, we went there to buy the Sunday editions of newspapers well ahead of dawn. These were the years when newspapers magnetized our interest not only as information media but also as media in which public identities, individual or collective, were constructed and contested, following the fall of the Junta in 1974. In retrospect, the tacit avoidance of Omonia seems to register an awareness that the city is not only claimed by our social networks, and the imagined possible extensions of our social networks. There were other people, other trajectories, other habits, other facial expressions, other tones of voice and other inflections of language. And thus, Omonia stood for a whole set of spaces which, while occasionally visited as part of expeditions of discovery or of promenades of reflection, whether solitary or with companions, where perceived as spaces of alterity. Over time, these spaces came to excite more sociological modes of imagination.

**Kiosks**

A common reference for such modes of imagination was provided not just in Omonia, but in many places in Athens, locally or globally central: the newspaper kiosks. They sold a seemingly inexhaustible array of things from a very confined space – newspapers, magazines, cigarettes, candy, crackers, paper tis-
sues, soap, combs, aspirins, condoms, sometimes worry beads, sometimes belts, sometimes even light bulbs. Newspapers and magazines would usually hang on their external walls or from the awnings. A diverse crowd often gathered around kiosks, in those days usually men.

After 1974, you could distinguish those who glanced over newspapers of one political inclination or another; those that perused the foreign press, when this was available, thus acquiring a more exotic aura; then, much more explicitly, those who showed interest only for athletic newspapers, particularly on Mondays, when the Sunday matches were reported. You could see children look at the latest issue of comic books; and the guilty and intense looks to magazines with nudes on the cover, hardly concealed by faking an appearance of distraction. Mothers and grandmothers would approach to buy kids chocolate. Small groups engaged in commentary on the events of the day: events within sight – some person that passed along inviting attention – or more distant – some action of a football player that was misconceived, some statement by a politician that was revelatory of otherwise concealed intent, some connection between world events that if made would reveal larger schemes that befuddle the common man. So intense were those conversation groups that interrupting in order to buy anything felt almost like bad manners. And, one’s standing, as communicated by appearance and presence, could readily be assessed, by noticing the order in which attention was received, when several customers competed for it. These kiosks were a de-facto counterpart to the more specialized shops that had become tacitly associated with one’s sense of identity. Approaching the centrally placed kiosks one felt society was present as a spatial aggregation of people who were otherwise quite different. This could alternatively lead to a form of alertness and curiosity, or to indifference, depending on one’s mood.

**Markets**

In the later years of secondary school we walked streets to view shops that were unlikely to satisfy instrumental needs, shops that had the power to project identities different than one’s own. So there was a ‘street of smells’, Euripidou Street, where shops sold spices and herbs; there were ‘streets of color’, specialized in fabrics around Perikleous Street. The southern end of Athinas Street was all about ‘nuts and bolts and tools’. And, in the old central market of Athens, the meat and fish halls revived the old images of ‘butcher’ and ‘fisherman’, the association between ‘food’ and ‘animal’ in ways that began to erode in the neighborhoods, as supermarkets started to present meat, poultry and fish in standardized packages, from the 1960s onwards. A lamb sliced in two along its length, hanging in a butcher shop, surely had great power to suggest ‘otherness’. There, in the central market, I can remember with nostalgia my grandparents discussing with neighborhood butchers what piece to cut, how to cut it, and how to prepare it, the knowledge of the cook interacting with the knowledge of the butcher.

**Self**

Looking back, memories of self are indissolubly linked to remembering how it felt to do things – the moment just before a performance starts, breathless with intense anticipation, and then the long walk in the streets afterwards, replaying in your mind every sound that fell between what you wanted and what your fingers did; the moment when the conversation has run its course and you feel complete, at the slippage between late night and early morning; the moment when you settle into a familiar perspective of the city and you feel at home and time becomes undisturbed and embracing of all movement; the moment when you lie on a sofa on a balcony listening to a record as though on a magic carpet and the voices of friends are like dock-lines bringing you back; the moment when you walk out of a movie
theater and the environment you just left on the screen gets superimposed onto the environment of the street you came in from and you are, briefly, two people in one and the city is, briefly, covered in magic dew; the moment when you question whether speaking up at school, in endorsement or in challenge of a statement made by a teacher, would be courageous or pretentious, and you decide to speak up because it is better to maybe regret something said than certainly regret something left unsaid; the moment when the soldier on guard at the military police headquarters threatens you to leave or be taken into custody, and you do not move until someone confirms that your loved-one is held there; the long walks on city streets in search of comfort, that the city was the same when home was not; the long walks on city streets in conversation or in pursuit of a line of thought that sometimes played hide-and-seek and at other times marched a step ahead.

Geography

The recollections described above are geographically situated so that some spatial dimensions of past life can be measured. The average straight line distance between any two homes of the four friends I consider most intimate in our relationships to each other is 1110 meters. The average shortest street network distance is 1369m. The five of us shared multiple interests and engaged in multiple joint activities. From now on, I will refer to ‘straight line distance’, as contrasted to ‘shortest distance along the street network’, as ‘radius’. If I add the three friends in most regular contact based on membership of a rock band, the average radius between any two homes increases to 1904 meters and the average street network distance to 2297 m. If I consider all 14 friends who went to the same school the average radius between any two homes is 1741 m. When I include all 20 friends that we saw regularly, the average radius rises to 2614 m. The locations of homes are shown in Figure 1.1. For comparison, the average radius between the homes of close family members was 2223 m, given that my father lived separately in an inner suburb and not at the city center. Family homes locations are shown in Figure 1.2. The network of friends was not centered upon the school but extended south of it, towards the city center. The average radius of our homes from school was 3007 m.

Reasonable proximity between homes facilitated contact but greater proximity did not systematically indicate greater intimacy. Two pairs of ‘best friends’ that were clearly recognized towards the middle of the period under consideration were linked by very different radii of 400 and 1734 m respectively. Sometimes, people who lived in close proximity saw each other only through the mediation of other people. A most important person in my adolescent life, the first person that allowed me to kiss her, lived at a radius of 2605 m from my home and an average radius of 2941 m from the homes of all other friends. She was introduced to me at a party in the home of one of the less intimate friends who lived at a radius of 4967 m away from her, and at an average radius of 2691 m from all other homes.

Thus, while proximity facilitated contact, the strength of ties could comfortably overcome distance. We were and we felt able to move freely within the city of Athens. To a very large extent this mobility was a function of public transportation. At that time, it would have been impossible to travel distances greater than a couple of kilometers by any other means. Taxis could only be afforded in exceptional circumstances and most of us could not borrow family cars because we had not reached driving age.

The homes of 14 of the 21 friends were one or two street turns away from Patision Street. Patision Street is already shown on maps drawn in 1854 and 1860, in anticipation of the growth of the city to the north of the old town, and already recognized as the main axis of social and cultural life in 1862 (Mnips 1966, p.111). During the period under considera-
Figure 7.
Location of homes, cinemas, shops and gathering places mentioned in the text.
The urban environment was, in many respects, rich. Taking cinemas as an example, there are at least 50 that my friends and I can remember and locate with precision, many now extinct. These are shown in Figure 7.3. They were situated at an average radius of 1493 m from my home. Ten of these cinemas were on Patision Street, six more within 100 m from it. Twelve cinemas were within one kilometer of straight line distance from my home. Others, situated at a radius of up to 3 km, required a ride on a trolley bus or bus. One could often find clusters of five to ten cinemas within less than 5 minutes’ walk. It was almost as if the distribution of cinemas created multiplexes, whose linking circulation tissue was the city itself. Reconstructing the map now, on Google Earth, I can remember the unique experience of stopping to see photographic stills from movies playing and movies forthcoming, displayed on special stands or display cases hanging.

As shown in Figure 9, Patision Street is the central street of Athens if distances are measured in terms of direction changes, a measure that is sensitive to the cognitive syntax of the city rather than to physical effort alone (Peponis, 2015). In moving from one home to another, our group found in Patision Street its main geographical and cognitive reference for further exploration of the city, particularly since this street was part of the trajectory of all the bus and trolley-bus lines we used. The walking paths we actually took from one home to another were varied, given the options afforded by the street grid.

Figure 8. Patision Street - 2017. Photograph by Takis Koutsogiannopoulos.
Figure 9.
Structures of syntactic centrality in the municipality of Athens. For the purposes of these maps, distances were computed according to direction changes which represent cognitive as contrasted with physical navigation effort. 2.1: Streets are colored on a spectrum from red to blue, according to closeness centrality; streets that are more easily accessible are in red and those most secluded in blue. 2.2: Streets are colored on a spectrum from red to blue according to betweenness centrality; streets that lie on a greater proportion of all possible shortest paths are in red and streets that lie on a small proportion of all possible shortest paths are in blue. 2.3: Streets are colored on a spectrum from red to blue according to betweenness centrality weighted by closeness centrality (Hillier, Yang, Turner, 2012). Streets in red are more likely to be used for trips of varying lengths while streets in blue are less likely.

Books could also be found in used book stores in the arcades or basements of the flea market of Hephaestus’ Street, at a radius of 1900 m from home, along with old maps, some produced by the British and some by the Germans during the Second World War. Bookstores locations are shown in Figure 7.4.

Stores related to music were all closer to the city center. Seven shops selling instruments were at an average radius of 1200 m from my home as were the two recording studios and the offices of the record label associated with our band; five venues for live music we frequented were at an average radius of
The city was well connected. The street length within the municipality of Athens is approximately 946 km, or just under 4 km per hectare. The average distance between intersections is about 60m, a value that lies within the range of street network dimensions that is optimal for pedestrians according to Siksna (1997). Indeed Athens is characterized by relatively high volumes of pedestrian movement even though the poor maintenance and narrow width of sidewalks does not always support comfortable walking.

The city was rich and diverse in terms of the opportunities to do things that it offered, as indicated by the account of the places offered above.

Most important, the city was intelligible. Intelligibility was based upon the connection between secondary short streets to the primary streets that form the cognitive skeleton of the city. The median linear extent of streets is about 340 m but as primary streets are much longer the mean is about 600 m. The linear extent of Patision Street, discounting changes of direction less than 15°, is 5502 m (the street has a different name for part of its length). Given the length and connectivity of Patision Street, many destinations could be reached by taking a few easy to remember turns onto the intersecting streets. The total length of streets that can be reached from Patision Street after turning up to one or two corners is 63.653 km and 209.762 km respectively, representing 6.7% and 22% of the total street network length of the municipality of Athens (Figure 10.1). The total linear extent of Patision, Alexandras and Vasilissis Sofias Streets, the three longer streets inside the municipality of Athens (disregarding street name changes), after allowing for small direction changes of up to 15°, is 13.426 km. The total length of streets that can be reached from these three streets after turning up to one or two corners is 116.621 km and 337.042 km respectively, representing 12.3% and 35.6% of the total street network length of the municipality of Athens (Figure 10.2).
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Figure 10. Matrix of the contribution of key streets to urban connectivity. The first row shows selected long streets that are likely to act as references in cognitive maps and navigation plans. The second row shows the same streets as well as those intersecting them. The third row shows, in addition, all the streets that are accessible after turning two corners from the reference streets. The first column takes Patision Street as the sole reference. The second column takes Patision, Alexandras and Vasilissis Sofias Streets, the streets of high centrality values, as reference. The third column takes Patision Street, as well as the streets of the neoclassical triangle that are commonly recognized as the historic core of the city, as reference.
The symbolically and functionally important streets in Athens include the ones associated with the city plan developed in the 1830s and implemented, after successive modifications by the 1840s (Mπίρης, 1966). Ermou to the south, Pireos to the west, and Panepistimiou and Stadiou to the east form the so-called ‘neo classical triangle’. The triangle bisector in the north-south direction is Athinas Street. These streets are associated with major public buildings and contain the central commercial and business district of the city. The southbound extension of Patision Street, called Aiolou Street, is one block to the east of Athinas Street. If we take these main streets as a set, their total linear extent is 12.601 km. The total length of streets that can be reached from these three streets after turning up to one or two corners is 100.568 km and 289.648 km respectively, representing 10.6% and 30.6% of the total street network length of the municipality of Athens (Figure 10.3).

Thus, a significant portion of the city is closely linked to a small set of primary streets that lent themselves as cognitive anchors and could function as a cognitive skeleton for navigation. This is consistent with Hillier’s (2002) description of the invariants of city structure. The only qualification of the theory that cities become intelligible thanks to the presence of a network of major streets, is that the sub-set of the network that is active for any particular individual or group of individuals may vary, and that different subsets may become active for the same people at different points in time. For example, we alternated between taking Patision or the neoclassical triangle as frames of reference. Other accounts of life in Athens are centered on different subsets of the total set of primary streets.

Society

Our social networks over these years had two geographical poles: the city and the school. More than two thirds of all my friends, and every close friend or member of the music group went to the same school. The criteria for our selection of friends, however were linked to matters not central to school functions. Preferences for music, literature or movies helped make an initial connection. The development of trust and affective ties depended on the resonance of personality, manners and character. Paradoxically, the assertion of a moral independence from school was fundamental to mutual evaluation.

Our engagement of music offers a palatable illustration of what I mean by that. Our musical preferences were not based on cultural values espoused at the school. On the contrary, at a time when the Junta promoted a caricature of ‘Greek Orthodox’ values, our musical preferences, if noted, would be classified as discrepant. The school had a band, led by a most humane and gentle professor of music and that band included in its repertoire current songs among those we loved. Their orchestration, by the professor, made them more acceptable by creating a common sound that obliterated everything that we thought was most expressive and characteristic in the original. This was analogous to the way in which Paul Mauriat’s orchestra turned everything, from movie themes to popular songs, into a continuous stream of ‘easy listening’, a sort of cleansing of what was most powerful and unique in an idiom. So, our music group set itself in expressive opposition to the school band and was positioned as a challenge to sanctioned school culture. By the time we were about to graduate, we had built enough recognition outside the school and enough support in the school, to become the main act in the graduation dance with most professors, including the music teacher, conspicuously joining the students in dancing in front of the stage.

Our relationship to the school as an institution was not simple. There was a strong sense of resentment. We resented having to spend so much of our time seated in standard furniture arrayed in standard
rooms for so many hours, weeks and months; having to engage subjects towards which we were, to say the least, indifferent; being evaluated according to our ability to memorize and recite textbooks; having to adhere to the imposed ‘military haircut’; being publicly ranked based on monthly or bi-monthly grades in an all-school-gathering – this was particularly demoralizing for those whose performance was graded below average over a longer period of time.

At the same time, there was a deeper allegiance to the school’s core mission, education, an allegiance of which we became even more conscious over time, and also after we graduated. We respected the professors who projected a strong attachment to their subject. We appreciated that some of them provided us with a solid foundation from which to approach Western and Greek culture, either by going beyond the curriculum prescribed by the Ministry of Education, or by taking advantage of the opportunities offered by the courses in French language and French culture which were particular to our school, the Lycée Léonin. We also appreciated the subjects that by their nature, remained unaffected by the ideology of the Junta, while also requiring critical thinking, most importantly mathematics and physics.

The question then is what gave us the authorization and the confidence to engage the school and yet take a distance from it. What supported us in developing a critical perspective on our condition and also on the acquisition of knowledge? To this question I can only provide one answer. The authority to take a critical distance from the school was based upon the education we had received at home as well as the reciprocal reinforcement we offered each other. We were middle class kids whose parents saw knowledge as a core value, as a prerequisite for a rewarding life and also as a means to a career that might transcend the limitations of income and social position that they had confronted. We grew up in a culture that was open and alert, with a variety of local roots but receptive to currents of thought and feeling in many other parts of the world. More fundamentally, we grew up in a culture that valued the development of individual personality and independent thought. We were trusted to make good decisions. We had been led to internalize moral principles. We were granted important freedoms, including the freedom to move freely in the city and dispose as we wished of our time, provided that we continued to do well at school. By the age we went to secondary school most of us were past the stage in which moral upbringing depended in the calculated deployment of forms of restriction or punishment and into a stage where values were upheld through discussion and persuasion, approval and rejection. In short, at home we were recognized as persons. It was natural that as we also recognized each other as persons, within our networks of friends, so we developed a predisposition for a critical appraisal of our own condition, a negotiation of identity in school, in relation to school, but also independent from school, and, if necessary, adversarial to it.

The culture inculcated at home was quite widely spread, but I do not think that it was universal. It was certainly sufficiently strong to shape our mutual recognition of each other as having a common basis of character and values. In this context, the city became an arena in which we explored ways of thinking, acting and feeling that could not meaningfully be contained within the home and could not find free expression in the school. The city was the larger world in which we tested whether we could become the people that we aspired to become, act out the intentions that were formed within the networks of socialization and friendship. In the city the desire to be a particular kind of person was placed in the context of an awareness of collective public space.

There were barriers in our relation to the city that we took for granted. The geography of our life did not include a single major public building, museum, gallery, university, or city hall. Only later, in London,
would I learn to frequent, appreciate and identify with such public buildings and appreciate the fact that they were public. We did not frequent Syntagma Square, in front of parliament, or the National Garden, adjacent to it. Our promenades rarely included the open spaces around Zappeion, a venue for official events, next to the National Garden. We automatically avoided all spaces directly associated with the government and the power of the state. The idea of a public realm was not equivalent to the idea of the state, but in many ways opposed to it.

In February 1973, university students briefly occupied the Law School at the center of Athens in protest against the regime of the Junta. The event had great appeal and symbolic resonance but none of us school students participated. In November of the same year, university students occupied the National Polytechnic of Athens, on Patision Street, for four days, setting up an independent radio station and calling on large crowds of people to gather outside to protest the regime of the Junta. The occupation ended with the forceful intervention of the police and the army. A tank smashed through the gates of the Polytechnic forecourt. Eleven dead were immediately acknowledged by the Junta, thirty four dead were cited by a post-Junta judicial inquiry and larger numbers are claimed by some. By then I and two of my closest friends had some close friends who were not close to me. Thus, a larger network was understood to exist because each member of a particular dense cluster had reliable affective access to people who were not members of that cluster.

We were not conceptualizing these formal properties at the time, but we were aware of some of their functional consequences. When organizing any event more ambitious than a usual Saturday night outing, the larger network that could be accessed became very relevant, either as a pool of people who could satisfy specialized needs (who had access to a good tape recorder, or a printer or a copying machine), or a pool of people who could sustain a focused critical discussion (who were writing poems and had achieved recognition), or simply of people that would respond to a call (who would come to a musical performance at a particular venue). We were even more aware of the implications of the multiplicity of criteria for the formation of ties. Sometimes one regretted that a person critical to one effort would not respond to every affective or intellectual overture addressed to them. Sometimes one enjoyed that fact that a conversation could shift from a discussion of film, where on person’s authority was recognized, to a discussion of literature where someone else was deemed to have more to say. In short, the multiplicity of ties provided scope for a multiplicity of roles and identities within the band of friends.

Social networks

If the city, the school and the homes in which we met were the main geographic poles of our life how might the internal organization of our community of friends be described? I will start with formal properties. First, our network had clusters of high density; each person had strong ties to every other person in the cluster. Second, ties were multiplex: some, for example, were based on active collaboration in music performance or in informal publication efforts; some were based on common preferences regarding film or literature; some were based on particular affinities of character; some on common desires regarding where and how to spend summer holidays. Third, our network was polyfocal: each of my close friends had some close friends who were not close to me. Thus, a larger network was understood to exist because each member of a particular dense cluster had reliable affective access to people who were not members of that cluster.

Social networks

If the city, the school and the homes in which we met were the main geographic poles of our life how
Indeed, the foundations of our community could be sought in the direction of both sameness and difference. Taking sameness first: you could not be a member of our close band of friends if you sympathized with the military regime; if you were not passionate about music, film or literature; if you were not willing to commit to particular projects, whether the success of the music group, an informal publication of writings, or merely the systematic discussion of a topic. In other words, the foundations of our solidarity which might be thought of as 'mechanical' (Durkheim, 1933) only became apparent when one tried to rationalize inclusion or exclusion. Differences were important to the internal function of the network. The music group was of course founded on playing different instruments, being endowed with a good ear or a good voice, being able to write lyrics or come up with tunes. Our ability to engage different aspects of culture hinged on the recognition that different people had authoritative knowledge of different things. Thus, we experienced solidarity based on complementarity, a local ‘organic solidarity’. There were also differences that were largely invented, in parts to provoke debate. For example, we split into camps on questions such as whether John Lennon or Paul McCartney were the quintessential Beatle; or whether a tasty cooked meal, however frugal, was a significant aspect of the enjoyment of life or could, in principle, be replaced by appropriate industrially packaged nutritional substances; or whether we got attached to literature because it was good or because it offered pleasure. Finding differences, actual or contrived, was a celebration of the fact that each one of us was recognized as unique within the band of friends.

Our network of friendships never acquired a corporate definition. Only occasionally would the will of one person, or the consensus of the group, put pressure on an individual to do something they would rather not do: to prolong the session of the music band rather than go out, to play one song rather than another, to spend a night at one place, during holidays, rather than another. As a general rule all participation was voluntary, and thus more intimate allegiances within the larger group were shifting. Even the name of the music band could also be used to describe the larger band of friends, or, by extension, a certain attitude to life that others could share. Collective identity was expressed in what we did together. It was ruled by conventions that were continuously negotiated within our interaction rather than stated as a regulatory principle prior to the interaction itself. Collective identity in action was perhaps the strongest expression of our solidarity.

**Search space**

The city was dense, connected, rich and intelligible. Our primary socialization in the family had made us members of an open culture that promoted personal development and responsibility. The city provided us with a field in which we could act out insights, sensitivities, aspirations and collective identities developed in action. This occurred against the background of an overtly restrictive school culture. Our movements in the city operated mostly under the radar of the military Junta, occasionally edging towards defiance but never, in our case, towards direct confrontation in public space. Against this background, how can the pedagogical functions of the city be understood? Did the city merely support a culture that was founded on the values, attitudes and predispositions that were originally inculcated at home and subsequently reinforced, modified and developed within the networks of friendship and collective activity? Or did the city in some ways help to shape our culture? I want to argue that the city played an active role in the construction of our sense of ourselves.

My argument starts from the critical gap between the abstract projections of what might be desirable and the exploration of what is feasible or
perhaps open to empirical test or enactment. Take for example the general imperative ‘to be creative’. I do not know what meaning it would have outside a defined context. I learned to play the guitar because I was able to see and hear how others did it and ‘pick up’ some manner of sound. Not being blessed with a musical voice I could only aspire to perform songs because I had a friend with an exceptionally good one who would allow me to be a guitarist to his singing. We sustained the effort to form a music group because we were able to exploit or create opportunities for performance. The formation of the group itself depended on exploring the network until one found those who had congruent tastes and could play the instruments needed. Writing songs became possible because our socialization suggested things ‘worth saying’, as our listening to music suggested genres worth imitating. Similarly, I got to love poetry because my father and mother would sometimes read poems to my sister and me after family meals. I cultivated the love of poetry because I met others who also loved it. I could test the range between the poems of major writers and those that one might aspire to write because some of the friends of my friends had succeeded in publishing books. In the end I knew not to put my energies into poems because those around me helped me understand that the poems I wrote did not express a feeling or an insight that was worthy of the attention of others.

Thus, growing up and becoming a member of a culture can also be defined by the manner in which one closes the gap between aspiration and enactment. The question then becomes: how did the city affect us by supporting certain kinds of behavior consistent with an original formation of character in the home? I would like to answer this question by focusing upon the idea of ‘search’. Adolescence is of course a time when one searches who one is to become, whether the search is highly constrained or not, whether it is highly motivated, encouraged or incentivized or not, whether it involves difficult choices or not. The idea of search also applies, much more tangibly, to the urban environment. The connected, dense and rich city made possible the range of activities described above only because we were able to search for things in it.

Search in physical space can of course be defined in various ways. First, one can posit something whose location is not known or remembered with certainty. For example, one searches to find where one left a book one was reading, or the cinema where one was taken by friends to see a particular movie. Second, one can posit a general desire and look for specific interpretations of that desire at the same time as one looks for specific locations. For example, one can search for a coffee shop that offers a pleasant environment for a conversation and also an appealing view over an urban scene. Third, one may start a search with a more ill-defined desire, such as to take a walk that offers some excitement and some stimulation and discover that within 30 minutes one can cut a path through the more picturesque locations at the foot of the Acropolis, the ones celebrated in paintings, then proceed to the narrow streets with shops, workshops and small manufactures, to the north, continue through streets selling spices or cloths, and emerge in the larger spaces of the neo-classical plan of Athens. What is found in this case, is an experience of urban diversity, of atmosphere, of scale and architecture, packed within a short distance of walking.

Thus, growing up and becoming a member of a culture can also be defined by the manner in which one closes the gap between aspiration and enactment. The search that answers this question might be defined as directed, in the sense that it has a known aim. Second, the question of knowing what things exist. The search that answers this question might be defined as open, in the sense that the aim is only discovered in the course of the search, or as a consequence of the search. In our growing up in Athens we engaged the whole spec-
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Doings things in the city and getting to know the city itself were part of one and the same process of intellectual and emotional development. In the same way, developing aspirations and closing the gap between aspiration and enactment was part of a process of growth which was inextricably linked to the development of a network of friendship, a nexus of conversations and a world of joint activities. In the memory of that period it is hard to disentangle the growth of knowledge of the city from the growth of activities in the city. It is equally hard to disentangle the growth of a sense of self from the growth of a sense of belonging in a society. In discussing how environment directs growth Dewey (1922, p.38) has remarked that “physical things do not influence the mind except as they are implicated in action for prospective consequences. … persons modify one another’s dispositions only through the special use they make of physical conditions” including, in this context, facial expression as a change in the physical environment. In my own recollection of growing up, places, faces, connections, and the growing ability to discriminate, to develop intentions and to act are all linked into a multifaceted process of search. In the next section I will try to unpack what is entailed.

Spatial codes and pedagogies
The idea of directed search implies, quite fundamentally, that the environment is conceived as a set of potential destinations accessible by specific paths which have ego’s position as origin. If one assumes that the origin is always ego’s home address, then the paths form a radiating star-like pattern which may or may not be biased towards some directions over others. Often, more paths may extend inwards from one’s home towards the city center than outwards away from it. If over time, any chosen destination can act as an origin for a path leading to another, then the set of paths forms a web linking the particular set of destination-nodes.

By contrast, the idea of open search implies that the environment comes to be conceived as an overall syntax of spatial relationships allowing ego to move from one place to every other place, without prejudice about what counts as a destination. Destinations are as at least as likely to be discovered along the way as they are likely to be associated with the termination of a particular exploration. Portions of the paths taken can themselves be defined as future destinations, and be visited for the sake of a promenade. The web of places and relationships discovered through open search encompasses an indefinite rather than a finite number of particular destination-nodes and paths linking them. But if the number of nodes and paths is intuited to be indefinitely large, then what is it that one learns? From the point of view of spatial cognition what one learns is a map of environment, one that is often described as ‘coordinated’ in environmental psychology (Gärling & Golledge 1989; Golledge, 1987; Moore, 1974). A fully coordinated map represents an environment as a whole. It is contrasted to a partially coordinated map, which represents more completely some parts of environment leaving other parts out or representing them only incompletely. Both are contrasted with an ego-centric map, which contains only the paths that link a set of destinations to a person’s home-base.

However, the two kinds of search, open and directed, have broader affective and cognitive correlates. In directed search typical questions are: have we been here before? Does this street lead to the one I am looking for? Is one path shorter than another? In open search one learns, in addition, to also negotiate the criteria that one uses to distinguish one place from another and to read the affordances of one place over another in a particular set of circumstances: do I care more for a panoramic view or for a deeper one linking proximate to...
distant locations? Do I care for the sense of intimacy emanating from dense pockets of seating, or for the sense of performance implied by seating arrayed along a sidewalk? How different will this place feel if I came back in the evening? As one shifts between open and directed search, so one intuits that the questions ‘where things are’, ‘what things there are’, and ‘how do we look at things’ are all inter-linked.

The idea of directed search is compatible with a clear demarcation between the sense of oneself, looking for something in particular, and one’s knowledge of the environment in which that thing is to be found. On the other hand the idea of open search allows for a subtle fusion between the sense of oneself, in the process of developing new knowledge of what is available, identifiable and desirable, and the knowledge of environment. Thus, the cognitive and affective orientation of subjects to environment implied by the distinction of directed and open search, is as important as the maps of environment that subjects might develop. To express this difference in orientation some of the concepts proposed by Basil Bernstein lend themselves to adaptation.

Basil Bernstein\(^6\) (1973) has distinguished two sets of principles, or codes, whereby subjects interpret signals and develop responses during verbal communication: restricted and elaborated. In restricted codes, subjects choose from a limited set of alternatives, while in elaborated codes they chose from a wider range. Restricted codes arise when communication is highly pre-structured by social rules or by context so that the meanings to be transmitted are highly prescribed. Elaborated codes arise when the situation at hand is open to interpretation according to more general principles as these are internalized and applied by a particular person.

The definition of the two codes can be applied to the processes of searching through environments. In the case of directed search, say for a particular restaurant, the successful termination of the search would be concluded in the same way for any two people separately involved in it. In the case of an open search, say for a restaurant with a relaxed atmosphere, the search could terminate in different places for any two people separately involved in it, or even for the same person at different points in time. Furthermore, even if terminated at the same place, different readings of the place might be involved. The relative unpredictability of outcome in the case of open search arises precisely because criteria are negotiable and the negotiation engages not only the structure of environment but also the affective and cognitive predisposition of the person. Open search elicits elaborated codes and directed search elicits restricted codes for engaging environments.

Suppose then that in the course of growing up, the environment is conceived as a field of things to be discovered and meanings to be constructed. In describing different types of curricula, Basil Bernstein (1975) distinguished between collection and integration types. In the former, contents, whatever they may be, are separated by strong boundaries and clearly distinguished. In the latter, contents are permeable to each other. To think of the city as a curriculum would of course be an inappropriate metaphor, not least because the city presents knowledge only insofar as knowledge is embedded in things. However, if the city is a field of things and meanings to be discovered then the distinction between collection and integration relational principles is still applicable. A city in which different kinds of destinations are geographically kept apart for example restaurants mostly in one area and performance venues in another, might induce us to think of the environment as a collection of separate things. By contrast, a city in which different kinds of destinations are geographically mixed and easily inter-accessible might induce us to think the environment as a mode of integration of things. Thus, the distinction of collection and integration codes...
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My own recurrent attraction to the ideas of Bernstein has to do with the link between social structure and agency. If description retrieval is the correlate to the emergence of configurational structure in the production of spatial systems, as argued by Hillier and Hanson (1984), then we have to accept that agency, mediated by culture, must feature in our theories of space. Description retrieval may be revealed objectively by its morphological consequences, whether in the design of space or in the pattern of space occupancy, but is never automatic. The very word 'syntax' implies a structure which is continuously enacted. This, in turn, implies intention, motivation and judgment not just abstract understanding, explicit or implicit. Since early discussions with Basil Bernstein, made possible by Bill Hillier, on the manner in which the syntax of museum space transmits principles of the organization of knowledge, I thought that any theory of socio-spatial structure cannot ultimately be separate from a theory of agency, including design agency. I thought this even as my work was often directed to the study of morphological patterns that are objectively present without being explicitly conceptualized prior to our own work, as for example the relationship between spatial structure and the distribution of movement.

The idea of ‘search’ allows me to revisit Bernstein from the perspective of a spatial practice with pedagogical consequences. It allows me to think of description retrieval as a fundamental part of culture.

might be applied to describe the way in which we think of the city as a field to be explored.

The argument of how cities can assume pedagogic functions can now be formalized. The starting premise is the idea of the city as an environment that potentially offers a wealth of things (different kinds of shops, different kinds of buildings open to the public, different public spaces), behavioral settings (places to sit along the street, promenades, parks), or stimuli (newspaper displays, shop windows, panoramic views). From this point of view, the city can be more or less rich. A given amount of wealth can be mixed or separated, dense or sparse in its geographical distribution over space. A mixed and dense distribution of wealth implies collateral exposure to other things as one accesses one thing in particular. Reaching one destination leads to exposure to other potential destinations.

Dense, connected and diverse environments naturally lend themselves more easily to open search, or elaborated codes of engagement, because they are not structured in a way which reinforces pre-conceived distinctions. For example, if one of two familiar paths linking my home to the home of a friend passes near a movie theater, and another path passes near a pizza shop, then my choice of path might be decided according to whether I feel inclined to take a detour to satisfy my appetite or to check whether there is a movie worth seeing in the evening. In this example, in order to make a path to my friend’s home I activate my knowledge of the environment as a system of relations. If I am neither hungry nor contemplating to go to the movies in the evening, but have some time to kill I might even decide to make a path never previously taken just for the sake of enriching my knowledge of environment. In general, if the same vicinity is visited to see movies, buy guitar strings, peruse books and have lunch it is likely that the vicinity will be traversed in a variety of paths. Over time, it will be understood as an integrated system of potentialities.

Mixture and density however, are not just matters of abstract geographic distribution. Mixture and density cannot be experienced independent of street connectivity and the interface of settings to streets. For mixture and density to affect urban experience many different things must be proximate, but they also must also lie along, or be linked by, available paths. If a city is rich, mixed, dense and connected then it can, in principle, support a process of discovery and learning. There is, however, an additional condition which is critical. Any idea of exploratory navigation implies that the city is intelligible. One feels confident to explore new paths only if there is a reasonable expectation that one can return to places already familiar.

The linkage between the objective properties of environment and learning occurs through the postulate that rich, dense, mixed, connected and intelligible environments will naturally tend to support, if not induce, open search behaviors. The question ‘what things exist and are available’ is gradually grafted into the question ‘where things are’ and in turn both questions are penetrated by the awareness that one looks at things according to evolving criteria. In Bernstein’s terms, elaborate modes of engagement with environment are likely to grow. And as this takes place so the environment itself is increasingly perceived as a mode of integration rather than simply as a collection of things.

Postscript

The confidence that open search is possible and available is the thread that links the network of streets, the network of friends and all the activity whose trace has since been absorbed into what we have become, severally and jointly. Our activities did not create a larger structure, social or mental, that others could join or that others could readily recognize outside the networks of face-to-face rela-
introduced by Theotokas, the novel does not seek to resolve the ideological and political dilemmas that preoccupied him; rather, it portrays multiple personalities and multiple points of view, so as to characterize with accuracy the cultural climate of 1930s. That the city is the theater of the coming of age of the protagonists is evident from the staging of key moments in specific locations often described in detail in order to create a sense of resonance between the atmosphere of place and the mental state of the actors. Confirmation that the city itself was a field of search is offered directly by the patterns of meaningfulness ascribed to it. Characteristically, the students of Argo often meet at the coffee shop Aigli, in Zappeion, a central park of Athens affording a generous panoramic sweep over the Acropolis, Hadrian’s Gate, the temple of Olympian Zeus, and the mountain of Hymettus. The power of the panorama is repeatedly evoked in relationship to the shifting views and moods of the protagonists. Zappeion is also situated near the termination of Syngrou Avenue. Since the turn of the century (Μπίρης, 1960, p.252), the avenue links the center of the city to the coast of Faliro. Theotokas describes Syngrou as a perfectly straight metallic strip of asphalt that spans between Hadrian’s Gate and the blue of the open sea. The poem ‘Syngrou Avenue 1930’ by Seferis (Σεφέρης, 1964, p.98) is dedicated to Theotokas in acknowledgment of the fact that he ‘discovered it’. The ‘discovery’, has to do with the recognition that Syngrou evokes a sense of modernity. In an earlier essay, originally published in 1929, Theotokas (1973) stated that Syngrou evokes a newborn and hitherto unexpressed rhythm of a powerful lyricism. For him, Syngrou expresses new experiences of the city that do not resonate with those described in traditional writings, however powerful. Thus, in ‘Argo’, Syngrou Avenue and the places that offer panoramas are set in contrast to the streets of the old city north of the Acropolis as
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The reader can identify three narrative threads that run through the book. The first is the recognition that the city is a field of serendipity. Walking on Patision Street, the author was overpowered by surprise when he suddenly saw the German flag on the Acropolis – a confirmation that nothing remained untouched by the occupation; leaving the Lycée Leonin to return home he saw, also on Patision Street, a chariot slowly pulled by men, carrying two bodies of people that had died of famine; later, walking on the same street, near the Polytechnic of Athens, he saw the first Greek flags coming out of windows and raised on balconies, as he hears, by word of mouth, that ‘they are leaving’. Major historic moments are thus remembered as serendipitous events on streets. Serendipity could also be exploited by small groups to take action using limited means. For example, when the forces of occupation started calling on individuals to enlist in the ‘Security Battalions’ which assisted the Axis, a small resistance group showed up on a city market in Fokionos Negri shouting slogans, distributing pamphlets and calling on shop keepers to close their shops in protest. The action took advantage of the fact that the market and the surrounding coffee shops were usually crowded so that the brief initiative could have maximum impact and exposure. Such limited local actions were very different in scope and power from the massive popular demonstration that opposed the earlier German attempt to enlist Greeks to help the German army – a demonstration which also had the support of the powerful National Liberation Front (EAM) led by the Communist Party. The aim of local actions was to assert the presence and aspirations of the organizers as much as to influence the chain of events.

A second thread is the progression from networks of friendship originating in school or clustering around particular neighborhoods to formally structured resistance groups of increasingly broad ambition. A third thread, running parallel to the search for appropriate patterns of organization, is the search for information or the dissemination of information, usually by word of mouth but also by printed matter – posters, underground journals, pamphlets. The two threads can be seen to come together as the author enlists in a resistance group for the first time. There had been a first kernel of friends who trusted each other to discuss ideas and contemplate actions. The author refers to it as ‘a coming to life of the Argo of Theotokas’. When the building housing the National Socialist Patriotic Organization (ΕΣΠΟ), which collaborated with the Nazis to recruit Greeks to fight on the side of the Wehrmacht was blown up, in September 1942, word of mouth identified the organization responsible as the Panhellenic Union of Fighting Youths (ΠΕΑΝ).
Later, a trusted friend revealed that he had joined the same organization and gradually the whole network of friends was recruited. The link between the spontaneous networks of friendship and the organized resistance groups is so tight that I am tempted to quote from the book:

A neighborhood can become a scenario, a song or a novel. Such was this tiny neighborhood, a small square in the area of Kypseli, unknown to most Athenians: Thasou Square. And Takis, an adolescent 17-18 years of age. Takis Kapralos. Takis of Thasou Square was very different from the student of Lycée Leonin, or from the first year student of the School of Law. … Each house in the vicinity had at least one child. Boys and girls that played together since they were children, danced as they grew older, dreamed and fell in love. Theorists and technocrats, poets and builders, rich and poor. … I first met them as a company of friends and as a company of friends I found them all enlisted in ΠΕΑΝ, led by Takis. (Πεπονής, 1970, p.43).

Thus, the two books encapsulate a spectrum of relatively open search associated with coming of age: the first leaning more towards the pursuit of meaningfulness, the second towards deliberate, organized action. Rodis Roufos’ Chronicle of a Crusade (Ρούφος, 1972), roughly coinciding with the period covered by Personal Testimony, could perhaps be cited as a bridge. It was originally published between 1954 and 1958, when the author was 30 and 34 years old respectively. Such writings firmly embed search within the city, not only by providing details of geographical location but also by engaging urban space as the resonant stage for the development of patterns of emotion, understanding, intention and organization. They do not, however, theorize open search in relation to the city, nor do they identify the pedagogical function of the relationship to the city that is established through open search. Only in retrospect might they be mined for insights or evidence relevant to the arguments pursued in this essay.

The evidence of thematic consanguinity and theoretical displacement relative to such earlier texts triggers a final comment about the motives that can retrospectively be read into the writing of the present essay. Leaving aside any nostalgia, the essay is written after the word ‘search’ became associated with Google. As contemporary technologies transform the experience and functions of built space, so it is natural that one might want to bring into explicit theoretical focus formative structures and relationships of searching that could previously be taken for granted. Had the internet been at our disposal all these years ago, I think that we would probably have felt more empowered in many of our endeavors. I suspect, however, that the internet is quite a different thing when used as an amplification of the dense, connected, rich and intelligible city than when used in the absence of it. Do people growing in sparse and homogeneous suburban environments enter different modalities of intense search or are they subject to more restricted codes of development?

A broader theory of the city as search engine has yet to be made explicit (Peponis, 2006). A testable theory of how the pedagogical functions of the city depend on its spatial morphology has yet to be elaborated. Any rigorous test will have to control for the fact that while the city may structure the modalities of search, in does not, on its own, generate its motivations and thus its affective and intellectual orientation. The underlying motivations of our search were first seeded in the network of homes, where the experiences of preceding generations that are so briefly acknowledged in this post-script were translated into parenthood. In describing open search as a pedagogical relationship to the city I also acknowledge the interplay...
between the morphological and the motivational aspects of inhabiting the city. The latter depend on subjects being immersed in a broader – but not universal – culture that precedes them, as well as in the formation of a local cultural identity that they come to actively construct.

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