from FACTORIES to FINE ART

The Origins and Evolution of East London's Artists' Agglomeration, 1968–1998

Thesis submitted in partial fulfilment of the requirements of the University of London for the degree of Doctor of Philosophy.

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Body text set in Times 11pt at 17pt spacing.
This thesis was prepared on Apple Macintosh computers using AppleWorks & Adobe Photoshop software

Abstract

This study traces the development of the East End's artists' agglomeration from its origins in 1968 until 1998 through a geographical history of the studio blocks in which those artists have worked. The thesis concentrates on visual artists and the ways in which they have commandeered space in which to work. The thesis argues that the agglomeration may be conceptualised as a complex adaptive system which has evolved in the "edge of chaos" urban environment which arose in the East End as it made the transition from an industrial to a post-industrial district.

The core methodology draws largely on ethnographic techniques. Information was gathered from fieldwork, which in this project comprised semi-structured tape-recorded interviews and semi-participant observation in the form of my involvement with a project "ViA" which is developing an information service for the East End's artists.

The qualitative approach is Grounded Theory. Interview transcripts were "coded" for themes, and these themes explored further in subsequent fieldwork, from which further coding was carried out in an iterative process. The themes which emerged were then combined with the archival research and the findings of the social network analysis, forming the foundations of a theoretical model.

The quantitative approach is social network analysis at an organisational level, which establishes that the organisational networks are weak, from which it is inferred, in combination with the qualitative evidence, that the significant networks are informal, a sort of "grapevine".

These foundations are developed into a unified theory which draws on existing models concerning the development of such "creative milieux" and then carries these forward using concepts more commonly found in chaos theory and complexity theory such as inherent unpredictability, sensitive dependence on initial conditions, adaptive topographies and fitness landscapes, and emergence. I argue in conclusion that the artists' agglomeration in the East End is an emergent phenomenon arising from the actions and interactions of individual artists in search of studio space. It can thus be conceptualised as a "complex adaptive system", capable of learning, growing and spontaneously developing new properties, and finding new directions which cannot be predicted simply by looking at the system's constituent parts in isolation.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

Acknowledgements

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ONE

INTRODUCTION

The original building will stand deep within its own grounds, preferably on a river bank. It should be large enough for a pilot-group (astronauts of inner space) to situate itself, orgasm and genius, and their tools and dream-machines and amazing apparatus and appurtenances; with outhouses for "workshops"; large as could accommodate light industry; the entire site to allow for spontaneous architecture and eventual town planning.

Alexander Trocchi, *Sigma, a Tactical Blueprint,* quoted in Hewison, 1986

1.1 About this Thesis

This is not art history. But it *is* urban history, and it does relate to artists, specifically those for whom London's East End has, since the late 1960s, become increasingly important as a place of work. The root of this new role is the decline of London's docks and manufacturing industries, which left a legacy of empty and apparently redundant industrial property, much of it dating from the late 19th and early 20th centuries. Furniture factories, carpentry workshops, print workshops, warehouses; all were victims of a decentralisation process which had its origins in the late 1930s and 1940s, and which by the 1960s and 1970s was unstoppable. Such property tends to be well-lit and spacious, with high ceilings, and large open floor spaces which readily lend themselves to sub-division into smaller units. It is also cheap to rent or lease. Ideal, in other words, for artists' studios. And artists were happy enough to accept the inconvenience of a workplace which may be relatively far from public transport, or even local shops and other amenities: one of the East End's largest studio blocks, for example sat in not quite total isolation on the edge of Stratford Marsh.

But the decentralisation which has since proved so beneficial to artists did not extend only to industry. People also moved out of central London's worst slums, either to the suburbs, or to the New Towns. Often they were the victims of war-time bombing, forced to go where the work and the homes were. Others were only too happy to leave behind the slums of Bethnal Green and Shoreditch for new houses with gardens, and new jobs, although sometimes, as Young and

Willmott found in their classic study *Family and Kinship in East London*, when they got there they felt disappointed and isolated, no longer part of a community. The houses they had left behind, mostly 19th century terraces, were often derelict, and earmarked for demolition as part of the LCC's, and later the GLC's slum-clearance programme.

These houses were not demolished immediately, often lying empty for months, or sometimes years. In the early 1970s, increasingly large numbers of these houses were let on short leases to artists as living and working accommodation, often in the face of local hostility from those who had been evicted. Over time, small communities established themselves in streets of condemned houses. These were communities not of the local people, but of artists. These small communities were, and still are, part of a much larger "artists' community"—I use the phrase advisedly—in the East End, which forms a loose, ill-defined network across the area. It will become apparent that in fact there is no overarching "artists' community" in the East End: in truth it is a loose agglomeration of artists which has built up over the last three decades.

But where artists have colonised old industrial buildings in depressed, but still reasonably central parts of the city where rents are cheap, developers have, sooner or later, tended to follow. Whether this is coincidental, or a direct causal link is discussed in subsequent chapters. However the immediate consequence of a developer interest is increased property prices, forcing the artists to leave. Better known instances of this include SoHo in New York; Montparnasse in Paris; St. Katharine's Dock and Butler's Wharf in London. In fact, the beginnings of an artistic community in the early 1970s coincided with the beginnings of a gentrification process which, in the late 1990s, is considered interesting enough to be worth national coverage by some of the broadsheet newspapers. Indeed, parts of the East End are now fashionable, and not only for artistic types. Rising property prices, both in the rejuvenated Docklands and in other pockets of the East End such as Shoreditch and Hoxton, are fuelling fears of another wave of decentralisation, but this time of the artists themselves. In response to these trends, an increasing number of artists' organisations are attempting to consolidate their positions, often through buying their studio block from their landlord, and through developing what are at present largely informal social networks at a more formal level, with both corporate and local authority involvement.

In 1998, the two main studio providers in the East End, SPACE and Acme, celebrated their thirtieth and twenty-fifth anniversaries respectively, and the "arts scene" in the East End appears to be in the throes of a major transition. This in itself makes the East End artists' agglomeration an intriguing topic for research, but like any researcher, I must acknowledge a personal interest too.

In 1995, as a resident of the East End with an interest in art—both looking and making—I was aware through the media that the East End has many artists: I was also working in an urban planning department with a research interest in the creative industries and urban regeneration. This was enough to generate the initial question about artists in the East End, which might be put very loosely as "How did the East End artists' agglomeration come to be?" Of course such a question suggests in the first instance an exploratory approach to the research, relying primarily

on induction to generate further questions, and indeed the first few months were spent exploring both the rather sparse literature on such areas and the East End itself. It quickly became apparent that the written history of the East End arts scene as a whole was effectively non-existent. So from these initial enquiries, a more focused research objective, and a mode of inquiry—semi-structured interviews and "semi-participant" observation (both covered in chapter two)—were developed and pursued. The research objective is apparently rather simple:

To map and describe the development of visual artists' studio organisations in the East End

Of course like all "apparently rather simple" objectives, this one serves as a portal to more subtle questions to do with how cities change, urban governance, social dynamics, property markets and, not surprisingly, art. The connections are not always obvious, but they exist, and informal social networks turn out to be the critical link. They enabled the exchange of information which allowed three things: the possibility for early experiments in using redundant buildings for studios to succeed and gain momentum; the signposting of opportunities for other artists to follow with similar initiatives; the development of a critical mass of artists sufficiently large for the local authorities to sit up and take notice of the fact that they exist, and may have something to offer the East End socially, culturally, educationally and economically.

The picture which emerges therefore owes its existence as much to the needs of global capital as to the opportunistic creativity of the artists, their networks and the way in which this phenomenon has evolved. It mirrors, too, changes in the way art, and by extension "culture", is perceived at both a social and economic level, revealing a gradual acceptance by local authorities of art and artists as a positive force in the processes of urban regeneration. And lastly, it proves an interesting example of how what was once simply a largely unknown phenomenon became, through a rather Latourian process of legitimisation by others, some sort of "scene" in the hands of the printed media.

But I opened with the statement that this is not art history, even though it deals with that topic, and before moving on, the reader deserves some idea of what it is they should expect. This chapter deals with definitions and the problems of how to count the number of artists in the East End, and then provides a general outline of the theoretical and methodological approaches.

The literature covered in this thesis is diverse: the main topics are grounded theory, social network analysis, complexity theory and evolutionary theory. In view of the fact that a variety of theoretical, and indeed methodological approaches are pursued herein, it will make much more sense to cross each theoretical bridge as we come to it. So the reader looking for a "literature review" chapter will be disappointed, although relieved perhaps that they do not have to trawl through several different—and not obviously connected—sets of literature, some of which are not mentioned again until the latter half of the thesis.

Chapter two, then, describes the core methodological approach, grounded theory, and at the risk of over-emphasising that methodology, sets out as transparently as possible the way in which the research was carried out. The underlying ethos here is that a future hypothetical re-

searcher should be able to replicate this project (time frames notwithstanding) with a reasonable degree of certainty and accuracy: here they will find the necessary information to do that.

Chapter three furnishes a general socio-geographic-economic [sic] context for the project through a brief history of the East End, with particular reference to housing and industry which, between them, have provided the bulk of studio space to artists in the years and decades following 1968. Chapters four to seven cover the history of how the East End artists' agglomeration came to be. They divide the three decades from 1968 to 1998 into four phases: *The Early Years, 1968–1974*; a *Hiatus, 1975–1980*; a period of *Consolidation, 1981–1985*; and the most recent phase which has seen *The Rise of the Small Independents, 1985–1998*. In these four chapters we listen to the artists as they tell their own stories of how over the last three decades they came to work in East London, and what it means to them. Although primarily a narrative history, these chapters also offer a tentative analysis of the underlying mechanisms which characterised and drove this historical development, and they look forward to the development of the more substantive theoretical aspects of the project in chapters eight and nine.

Chapter eight breaks with the qualitative approach which has hitherto dominated the thesis, and introduces formal social network analysis—the mathematical representation of social networks. By demonstrating that the "formal" social networks amongst artists' organisations and studio blocks are very weak this chapter confirms, as the qualitative evidence previously presented clearly demonstrates, that it is the "informal" social networks amongst individuals which are the significant ones, since the system's behaviour emerges from them. The chapter also offers a brief survey of some of the ways in which networks have been theorised.

Chapter nine argues that the consequence of this is that the East End artists' agglomeration can reasonably be conceptualised as an emergent system, and complexity theory and evolutionary theory are combined with extant theories of "creative milieux" to demonstrate how and why this is the case.

Chapter ten concludes the thesis, summarising the points made in it, reflecting on the research process, suggesting areas for further research, and closing with some anecdotally based thoughts and observations on the way in which the East End artists' agglomeration has changed in the two years since fieldwork was completed, and on what it is likely to do next.

The next two sections of this chapter explore the various definitions of the East End itself, and the tricky problem of counting the East End's artists. Section 1.4, the last of this chapter, outlines the theoretical and methodological approaches to the research.

1.2 Of Meanings and Definitions

Defining the "East End" is not easy. Davies (1990) notes that it has been reckoned to start from Aldgate Pump; from the junction of Whitechapel Road and Commercial Road; and that it has been reckoned to comprise the old borough of Stepney. Davies records Geoffrey Fletcher's observation that inhabitants of Rotherhithe and Bermondsey south of the river saw themselves as

East Enders, so these areas should be included; and he records Ashley Smith's definition of the East End as being the riverside districts on the north of the Thames (Davies, 1990:6). Davies himself defines the East End as "the area stretching from Shoreditch and the City in the west to the River Lea in the east, and from Hackney in the north, to the Thames in the south" (ibid).

Fletcher's definition, which includes the docklands areas south of the river, is the most appropriate for this project. To an extent, the artists' East End is defined by the artists themselves—the edge of the artists' networks comprising the edge of the East End—but even then the boundaries are, and must be, blurred. Borough, ward and postcode boundaries could all be used, and all would be equally arbitrary and, in all probability, inaccurate. The East End's boundaries must therefore be considered as "soft" boundaries, and this "East End" includes artists' studios in the borough of Tower Hamlets, the southern half of the borough of Hackney and

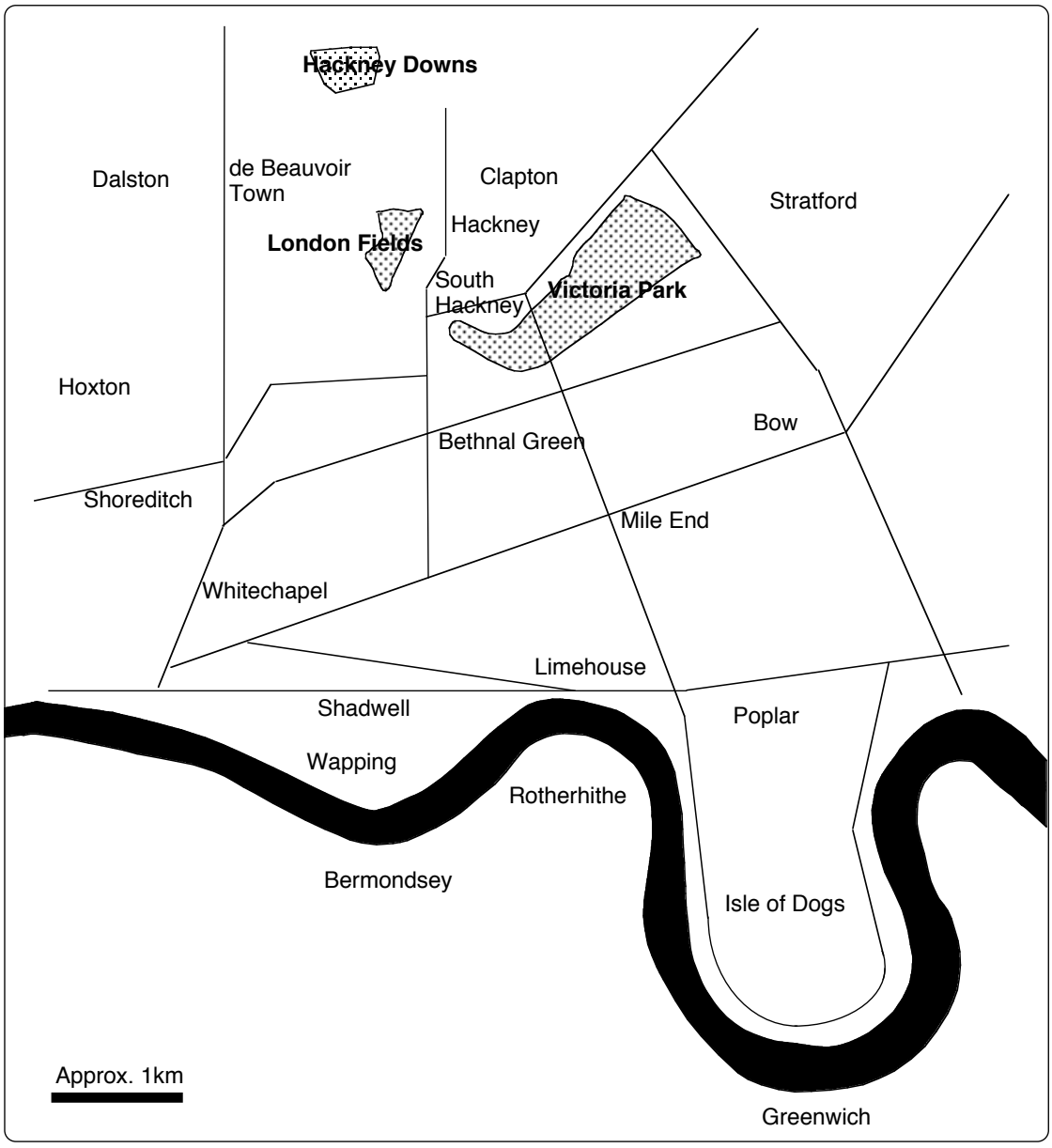


Figure 1.1 The Study Area

the docklands areas of Bermondsey and Greenwich (figure 1.1 below).

Besides the problem of what we mean by the "East End", we have the more abstract question of what we should call this phenomenon: the title plumps for the word "agglomeration"; this is why.

Various words might be invoked: "community", "cluster", "concentration", "agglomeration", and other words or phrases which are more specifically geographical, like "neighbourhood" or "quarter". The word "community" carries considerable intellectual baggage, including such unwieldy questions as what we mean by a "community", and of whether a "community" is necessarily spatial: besides, the argument which is developed herein is that there is no "artists' community" as such. "Neighbourhood" and its synonym "quarter" refer to a particular locality which can reasonably be defined in terms of the activity going therein. But the East End has many activities, and to call the East End the "artists' quarter" or "neighbourhood" would be no more accurate than calling it the "light-industrial quarter". That leaves the other three: although ugly and prosaic, they do at least have the advantage of being relatively easy to define, referring as they do to specifically spatial attributes. "Cluster" implies a relatively dense grouping compared with the other two, so that had better be kept for later use. And of "agglomeration" and "concentration" we can discard the latter by virtue of its implicit internal uniformity. So we are left with "agglomeration" which although one of the ugliest words in the English language, is almost ideal for our purposes since it means, according to my Oxford English Dictionary, to "accumulate in a disorderly way" (Sykes, 1982). That, it turns out, is precisely what the East End has done with artists, and that is why it is the word chosen for the title of this thesis. And within this agglomeration, we can talk of smaller, denser clusters of artists, such as those near Old Street, or Brick Lane.

The Visual Arts—taken here to include painting, drawing, sculpture and installations, both in and outside a gallery environment—are the primary focus of this study because they comprise the oldest and largest artistic presence in the East End. Of course the term "large", as we shall see in the next section, turns out to be a matter of interpretation.

1.3 The Legend of Ten Thousand Artists

It is probably best to bring media coverage into this tale sooner rather than later—the media is also discussed in chapter seven—and there is no better place to start than with how many artists there are in the East End. The nature of the creative industries generally, and the visual arts in particular, makes them difficult to quantify, not least because many artists work part time to make ends meet and are therefore difficult to count. *The Independent* of 4th December 1990 reported that "London's East End has the biggest concentration of artists in Europe" (Alberge, 1990), and this assertion continues to crop up in articles nearly a decade later. This may well be true, but reports in some of the national newspapers (cf Glaister, 1996; Pile, 1996; Walters, 1996) that there are 10,000 artists in the East End of London are much less easy to pin down. A

brief interview with one of these journalists in 1996, shortly after the appearance of his article, revealed that he believed this statistic to come from a London Arts Board (1996) report. However, the journalist could not recollect precisely where in the report it is cited. It will repay us, then, to have a look at some statistics, and try to separate the rumour from reality.

In fact the London Arts Board's report was predated by Urban Cultures Ltd's report (1994), which offers little in the way of statistics pertaining to visual artists, except to note that there were 33 "artists organisations" and 105 "artists—commercial and industrial" (Urban Cultures Ltd, 1994:55). The figures from the London Arts Board (1996) are more useful. Their report estimates that there were 23,000 visual artists in the United Kingdom, of whom 6,000 to 8,000 were full time. In London, the LAB put the number of visual artists at 2,500 to 3,000. Artists in "all categories, including graphic and commercial" were reckoned to number 95,640 in the UK and 26,310 in London (LAB, 1996). In fact, no specific reference is made to the East End. The phrase "all categories, including graphic and commercial", needs unpicking too. It is actually a category referred to in the Arts Council of England's 1995 report, *Employment in the arts and cultural industries: an analysis of the 1991 census* (O'Brien & Feist, 1995). This category is defined in the Standard Occupation Classification as *SOC 381—artists, commercial artists and graphic designers* (ibid:6). This report (p.48) found that there were 25,300 "artists, commercial artists and graphic designers" in the London Arts Board region—the thirty-two boroughs plus the City—close enough to state with reasonable certainty that in 1991, there were approximately 26,000 artists, commercial artists and graphic designers in London. What this statistic does not tell us is how many of those are visual artists, nor does it tell us where in London those visual artists are. What the report does tell us (p.50) is that of those "artists, commercial artists and graphic designers", 47% were employees, 43% were self-employed and the remaining 10% were unemployed.

Data for the research presented here was gathered from a variety of sources. The archives of SPACE Studios (which at the time were about to be catalogued) furnished information about SPACE's early studio blocks, as well as lists of participants in Open Studios events (whereby artists open their studios to the public for a weekend) in the early 1970s. Artists listed as participants in the biennial Whitechapel Open Studios were also counted. Acme (1995) records numbers of artists in Acme studios. Finally, informants were asked during the course of interviewing how many studios the block had, and whether any are sub-divided, or shared. The reliability of these sources—and I think they *are* reasonably reliable—is discussed further in chapter two.

These inquiries established that there were in 1991 approximately 900 artists working in studio blocks in the East End; roughly a third of London's visual artists if we accept LAB's figures. So we now have the following figures for the number of visual artists in London in 1991:

- Arts Council of England: 25,300 "artists, commercial artists and graphic designers" (SOC 381) in London;
- of whom 43%, 11,180 were self-employed;
- London Arts Board: 26,310 "artists, commercial artists and graphic designers" in Lon-

don;

- London Arts Board: 2,500-3,000 full-time visual artists in London;
- Author's research: 856 studio spaces in the East End (see ch.2, s.2.3.1).

Given that fine artists tend to be self-employed (Honey et al., 1997), it is not unreasonable to make the tentative suggestion that a large proportion of the Arts Council's 43% comprises visual artists. If we argue that say three-quarters of 43% of the 26,000 "artists, commercial artists and graphic designers" are visual artists, then there were in 1991 approximately 8,400 visual artists in London. Figures of 100% of 43% and half of 43% would give 11,180 and 5,590 visual artists respectively. However, if we take the average of the LAB's figures, 2,750, we find that this amounts to only 25% of self-employed "artists, commercial artists and graphic designers" as counted by the Arts Council. The only reliable figure we have for the number of artists in the East End in 1991 is the author's own, recording that there were approximately 900 artists in studio blocks at that time. So where does that leave us?

For a start, these figures put the figure of 10,000 artists in the East End cited above into some sort of perspective: it appears that there probably were not 10,000 visual artists in the East End in 1991, at the time of the census, and the growth in the number of studios since then (discussed below), does not suggest that there were 10,000 in the East End in 1998. Probably there never have been 10,000 artists in the East End, at least, not visual artists.

There is however a twist. Available statistics cover London as a whole, and simply counting those artists who—apparently—rent out space in studio blocks is not perfectly accurate, even if it is the best we can do. Studios within blocks may be sub-divided, sub-let or both. Artists may hire out single studios which do not figure in the lists, or they may simply work from home. These artists are the ones I call "dark matter", a phrase stolen from astronomy. It refers to the seventy percent of the mass of the universe of which current theory dictates the existence, which cannot be seen, and which is subject to constant theoretical scrutiny.

In the same way, while there is broad agreement that these artists exist, they are not readily visible, and estimates of their numbers vary widely from 500 to several thousand. We know for sure that in 1998 there were some 1400 artists in studio blocks. The question is whether the "dark matter" comprises a minority or the majority of artists in the East End.

We know already that census data simply puts artists in a Standard Occupation Classification *SOC 381, artists, commercial artists and graphic designers*, which clearly does not give us an adequately fine-grained breakdown of what does and does not constitute a visual artist. And of course these data are for 1991, and as we shall see in subsequent chapters, the arts scene in the East End has changed quite considerably since then.

In other words, all we have to go on are "off-the-cuff" estimates given by interviewees, based on their own experience and intuition; estimates, furthermore, which vary from a few hundred (Acme, 1997) to several thousand (Lampert, 1998). And while astronomers have equations describing the universe from which they can extrapolate the quantity of dark matter in the universe, we, unfortunately, do not have equations describing the arts scene from which we can

derive estimates for the quantity of artistic "dark matter".

The claim in the foyer of the Whitechapel Art Gallery that over 7000 artists live in East London is thus difficult to pin down, both in terms of numbers and geography. Roughly two thousand artists submit pieces for the Whitechapel's biannual "Open Exhibition", but this is open to any one who cares to submit their work, be they a full-time professional, or an accountant who paints on Sunday afternoons. And the fact that an upper limit of a thousand participating artists was set for the Whitechapel's "Open Studios" (whereby local artists open their studios to the public) makes the point that there is a strong concentration of artists in the East End, and although this cannot be precisely quantified, we can make some rough calculations which eloquently pin down the extent of the concentration of London's artists in the East End.

The East End had in 1991 approximately 900 artists in studio blocks in the East End as it is defined above. This figure excludes artists working from home, or who have individual studios. The London Arts Board region has an area of 1578 sq.km. (Llewelyn Davies, 1996), and the LAB estimates that there were some 2,750 artists in this area, or 1.74 artists per sq.km.. The East End had 900 artists in an area of approximately 30 sq.km., or 30 artists per sq.km.. In other words, the concentration of artists in the East End in 1991 was more than fifteen times that of London as a whole.

Admittedly, the conclusions which can be drawn from the available figures are limited, but three things seem clear enough. First, there is an unprecedented concentration of artists in the East End, large enough to draw national media attention. Second, pockets of the East End have become fashionable, with a consequent increase in interest from property developers, and rising property prices. Third, the question of how this probably unique phenomenon came to be needs to be addressed, if we are to learn useful lessons from it. This third question, as we saw above, is in effect the research question: in the next section we shall take a brief look at how it was answered.

1.4 Theoretical & Methodological Approach—An Overview

When and how theory makes its real entry into the research process is often masked by the canons of reporting. This is especially so in the constricted format of thesis and dissertation writing, in which the typically tedious review of the literature in a traditionally perfunctory second chapter includes an equally tedious recital of "relevant" theory.

(Wolcott, 1995:187)

As we learned in section 1.1 above, this thesis does not have the "literature review" chapter which is frequently demanded by the (unwritten) orthodoxy. Nonetheless, despite the fact that the various theoretical and methodological strands are woven into the body of the thesis, advance warning of what those strands are, where they come in, and how they relate to one an-

other and indeed to the whole, will help the reader orientate himself for the journey ahead.

This thesis is firmly in the tradition of empirically-grounded research, exemplified most famously in the work of the Institute of Community Studies (for example Young & Willmott 1957, 1973). It is also a direct descendant of Hall's (1962) *The Industries of London since 1861* and, in a very literal sense, walks much the same ground as did Hall in the late 1950s.

Nonetheless, I did not set out to explore the East End arts phenomenon from a particular theoretical base, and there is a sense in which this thesis simply tells the tale of a search for facts, and the subsequent search for a theory which explains them.

First though, we must deal with another question, and it is to do with how our definition of the "cultural industries" can mediate our theoretical approach. We saw above that disaggregating the visual arts from other forms of artistic practice is no easy task. Visual artists mostly work in isolation, as this project points out, and as Honey et al. (1997) pointed out in *Career paths of visual artists*; this simple fact immediately cuts off certain lines of theoretical enquiry. Artists are not institutions, even if they work in a studio block—as the majority do—and the studio blocks are not institutions in any conventional sense either: they do not compete with other studio blocks for a market, since demand for space outstrips supply; they are not like a company which is geared to selling products since artists are mostly self-employed and lead often lonely professional lives; artists do not *have* to work near an arts shop, and most do not; nor do artists have to be near their dealer (should they have one). In fact, the kind of overarching "creative milieu" pinpointed by Anna Lee Saxenian in Silicon Valley (Saxenian, 1994) simply does not exist in East London, as you will find out in the pages that follow. This fact alone makes it impossible to meaningfully theorise in terms of the "new economic geography" of authors such as Allen Scott or Michael Storper. And as Singh, Tucker and Meinhard (1991:390, emphasis added) point out, institutional theory is "mainly concerned with how the *institutional* environment, comprised of socially created beliefs and cognitions, widely held in society and reinforced by *corporate* actors, affects organisations", so this is not much help either, primarily because the East End artists agglomeration evolved in an "edge of chaos" environment.

In fact the whole notion of the "cultural industries" is in itself somewhat nebulous; this study focuses specifically on the visual arts partly for this reason, but also for the reasons set out in section 1.2 above. Pratt (1997b) has attempted to brings some consistency to the theorisation of the cultural industries by excluding the visual arts, noting simply that "[c]ultural industries are broadly defined for the purposes of this paper as music, film, radio and television, publishing and advertising" (Pratt, 1997b:2). These of course *are* all institutions and perhaps lend themselves more readily to the type of theoretical analysis pursued by writers on innovative firms such as Lundvall, Freeman, Gesling, Scott, Storper, Dosi and Pratt himself.

But these writers stress various aspects and facets of the institutional nature of companies, and comment on how those aspects and facets interact. So Lundvall (1995) highlights the role of learning and knowledge in economic development, arguing that institutions need to learn if they are to succeed, a point underpinned by Freeman's (1995) observation that historically, networks of scientific and technical institutions in both private and public and sectors have underpinned

the capacity of an economy to adapt to major changes. Through these networks, argues Freeman, changes in the institutional framework can be brought about, either through people's ideas for improving existing institutions or inventing new ones, or through the failure of existing institutions to cope with the change and their consequent decline. Gelsing (1995) builds on Mark Granovetter's 1973 observation that firms rely on weak ties to gain access to information that would otherwise be unavailable, a concept encapsulated two decades later in Storper's slightly tortuous phrase "untraded interdependencies". Gelsing also offers an often overlapping two-way typology of institutional networks: "trade networks", which are in effect business to customer, and "knowledge networks" which are geared to the exchange of information rather than goods (ibid). Dosi argues that innovation is an evolutionary process and Pratt (1997a), extending Latour's (1987) reading of scientific discovery, argues that others have to be convinced of the merits of a new invention for it to become an innovation.

Murdoch (1997) brings us full circle: actor network theory, he observed, argues that "society" emerges from the networks. In fact, what these commentators all seem to be arguing —although none makes this particular point—is that the *institutional* form of an economy is, to some extent at least, a function of its social networks. To be sure, while such an approach might prove useful for the "institutionalised cultural industries", we shall see that it does not in truth readily lend itself to the conceptualisation of emergent systems such as that with which we are dealing: this was a case of artists responding to their own immediate needs. It is also worth making the point that authors such as Freeman, Gelsing, Lundvall, Scott and Storper have tended to concentrate on high-technology firms, not individual artists.

So while it is true that general concepts such as learning, knowledge and evolution find their way into this thesis, we should be cautious of assuming the consequence that this literature is axiomatically relevant to our study. Artists, even if they *are* a peculiar form of one-person business, are not companies, and we should not force theories of industrial growth upon them. The basic "unit of measurement"—with due respect to those about whom I am talking—is the individual artist.

This thesis, then, is about the commandeering of space by artists. Even so, it would be perfectly reasonable to conceive of this thesis as the first of a two volume work. The second would be about the sociology of artists' networks and the production of the art itself: this possibility is something I shall pursue further in the concluding chapter, under the broad and familiar heading of "areas of further research".

Nonetheless, there is a theoretical thread running through this thesis. It was conceived of as a useful way of conceptualising the East End artists' phenomenon *after* the completion of the fieldwork, and it is only made explicit towards the end of the thesis: however it did inform the final written version, and runs through the thesis as a sort of loose "sub-plot". At its heart lies complexity theory, which argues that certain systems, which comprise individual actors (or "agents"' as they are more commonly referred to in complexity theory) called "complex adaptive systems", have emergent properties and evolve as a consequence. I shall argue in chapter nine that the East End artists' agglomeration is a complex adaptive system, and draw on estab-

lished methodological techniques, both qualitative and quantitative, to support this argument.

The core techniques—around which the bulk of this thesis is constructed—have their basis in grounded theory, which was originally developed in the early 1960s by Glaser and Strauss (1967), and explored more fully as a distinct approach to qualitative research in Strauss (1987).

> The methodological thrust of the grounded theory approach to qualitative data is toward the development of theory, without any particular commitment to specific kinds of data, lines of research, or theoretical interests. So, it is not really a specific method or technique. Rather, it is a style of doing qualitative analysis that includes a number of distinct features, such as theoretical sampling, and certain methodological guidelines, such as the making of constant comparisons and the use of a coding paradigm, to ensure conceptual development and density.
>
> (Strauss, 1987:5)

Grounded theory and the associated fieldwork techniques are explored in more detail in the next chapter.

The quantitative technique, as noted above, is social network analysis and that is used to explore the networks amongst artists' studios and other organisations. As we shall see in chapter eight, this basically serves to confirm that the organisational networks are weak, and that it is at the level of the individual that we must seek answers to our questions of how the East End artists' agglomeration evolved. Actor Network Theory offers a useful linkage with chapter nine through the notion that society is an emergent phenomenon of the networks which comprise it.

And so we come full circle, back to complexity theory. But before closing this chapter, and starting on our journey, there is one point that I want to emphasise. It is that of the two approaches, and I think appropriately for a history, the qualitative techniques are the more important: if this thesis has what might be called a "methodological nucleus", it lies in grounded theory. Through this, we gain the deepest insights into how the East End artists' agglomeration came to be; the quantitative techniques then lend formal weight to the qualitative findings, and allow us to confirm—or otherwise—the validity of some of the hypotheses generated through the research. So without further ado, we shall turn our attention to those qualitative techniques, and take a closer look at what Wolcott (1995) called "The Art of Fieldwork".

TWO

ON FIELDWORK

…fieldwork can become more artful at the same time [as it becomes more scientific], with the important reminder that, in its own ways, art is every bit as rigorous and systematic as science. I do not argue on behalf of a "soft" or "fuzzy" approach to fieldwork, only against a fieldwork in which there is no allowance for fuzziness or ambiguity. I do argue on behalf of an approach that keeps humans always visibly present, researcher as well as the researched.

Wolcott, 1995, *The Art of Fieldwork*, p.15

2.1 When Methodologies Collide

Galaskiewicz (1979:37) notes that there is in social science research considerable leeway allowed in the methodological process, simply so that a methodology appropriate to the research can be developed. This project draws on four distinct methodological techniques; desktop and archival research, fieldwork, grounded theory and social network analysis. Sources for archival materials are listed in the references. Social network analysis, because of its relatively complex nature, is introduced not in this chapter, but in chapter eight, where it is also applied, and it is explained in more detail in Appendix Two, *Social Network Analysis*.

This chapter thus deals primarily with the general methodological approach to the project, and how the fieldwork was carried out. It is worth reiterating the point made in the first chapter that one of the aims of this chapter is to render the research process transparent enough for a researcher to replicate the work described herein reasonably closely and confirm (or otherwise) the findings. Section 2.2 therefore explores theoretical and practical approaches to qualitative research and fieldwork, concentrating on grounded theory and ethnographic techniques, but also introducing an autobiographical element. Section 2.3 defines the population boundaries, and section 2.4 explores the mechanics of the interview process. Section 2.5 summarises the chapter and explains how the various methodological components are combined in the remainder of the thesis.

2.2 The Art of Fieldwork

2.2.1 The Problems Outlined

The title for this section is taken from Wolcott's (1995) book of the same name, and neatly sums up the fact that ethnographic studies of social systems can never be exact. As the opening quote makes clear, Wolcott does not argue that fieldwork is *an* Art, but rather that it should be more artful, and that the human element in fieldwork should not be kept hidden in deference to (rather disingenuous) objectivity.

Wolcott also observes that fieldwork is becoming "more scientific" a view based largely on the increasing use of computers in social science which, capable of processing large quantities of data in relatively short periods of time, will tend to trade depth for breadth, and render fieldwork a data-driven activity (ibid:72). The risk, he argues, is that fieldwork—and by that he is thinking primarily of "participant observation"—will be replaced by simple "data-gathering" (ibid). And, as he observes, "fieldwork takes time" (p.77).

It is with these ideas in mind that I have pursued my own studies of the artists' agglomeration in London's East End. But before exploring the purely practical issues of the project, there are certain methodological ghosts to be laid to rest. These are the questions of objectivity versus subjectivity, whether qualitative data, like quantitative data, can be subjected to genuinely rigorous interrogation and the results presented accordingly, and whether these apparent opposites should be set against one another in the first place. This section, and indeed this thesis, argue that they absolutely should not be set against one another, but rather that each of the two pairings is a side of the same coin. We shall deal first with the question of "objectivity versus subjectivity".

2.2.2 Objectivity versus Subjectivity: the Question of Bias

It is hard to sustain convincingly the notion, proposed by Lorenz (1950:232, cited in Wolcott 1995:163) that:

> It is an inviolable law of inductive science that it has to begin with pure observation, totally devoid of any preconceived theory and even working hypotheses.

Beer (1973:49, cited ibid:164) dismisses this view as the "doctrine of immaculate perception" noting Karl Popper's observation that "preconceived theories or working hypotheses must always be involved in scientific observation to enable the scientist to decide what is to count as a fact of relevance to his investigation".

However, Popper's "preconceived theories" and "working hypotheses" are, at the beginning of this project at least, nothing more than that. That is because this project has its basis in *grounded theory* (examined more closely in sections 2.2.3 and 2.2.4). Grounded theory, as we saw in the previous chapter, has its origins in the 1960s, and is a technique which aims to lend

rigour and consistency to qualitative, fieldwork-based research. Strauss notes that:

> …while much research involves routine operations and can at times be boring, assuredly also at its most creative, it is exciting, fun, challenging, although sometimes extremely disturbing and painful. This means that researchers, as workers, can and should care very deeply about their work—not being simply possessive about its products or jealous of their research reputations, but find deep and satisfying meaning in their work.
>
> In short, the researcher, if more than merely competent, will be "in the work" —emotionally as well as intellectually—and often will be profoundly affected by the experiences engendered by the research process itself.
>
> (ibid:9–10)

This of course raises the whole question of whether a researcher who is "profoundly affected by the experiences engendered by the research process" can ever be objective. And Robinson (1998:425) points out that such an approach is furthermore open to the criticisms that in relying on the researcher's powers of observation, and skills in selection, it is neither replicable nor unbiased, nor if it concentrates on a small-scale social setting, is it well-suited to developing generalisations. But he adds that such charges—in essence that the research lacks external validity—would seem to point to the adoption of a more positivist approach, an approach from which participant observation aims to move away (ibid:425). Wolcott's way out of this dilemma is to accept the existence of bias as inevitable, and to argue that far from guarding against bias, we should regard it as something we cannot do without. The important thing is to be aware of its existence, "not to deny bias or pretend to suppress it, but to recognise and harness it" (Wolcott 1995:164–165). An extreme example of "bad bias" might be when we reach conclusions about outcomes before carrying out any investigation, or the assumption that a particular topic should be approached from a specific theoretical angle. But "neutrality" may be no more helpful in carrying out research, as Jacobs (1977) discovered during fieldwork for a study of prison life, when in attempting to be neutral, he alienated himself from the white section of the prison population, who then ceased to be useful informants.

The role of bias then, should be to "stimulate enquiry without interfering in the investigation" (Wolcott, 1995:164). Conceptually, this means adopting an approach of "disciplined subjectivity" (Erickson, 1984:61). In practice, as Whyte (1984) has demonstrated in his work, the result will be a "melding of subjective and objective components in the research and a two-way flow between researcher and researched through which the researcher learns about both the object of study and themselves at the same time" (Robinson, 1998:424).

Strauss refers to the data gathered through this process as *experiential data*:

> Experiential data are essential data, as we shall see, because they not only give added theoretical sensitivity but provide a wealth of provisional suggestions for making comparisons, finding variations, and sampling widely on theoretical grounds. All of that helps the re-

> searcher eventually to formulate a conceptually dense and carefully ordered theory. The researcher's will not be the only possible interpretation of the data (only God's interpretations can make the claim of 'full completeness'), but it will be plausible, useful, and allow its own further elaboration and verification.
>
> We should add that the mandate to use experiential data gives the researcher a satisfying sense of freedom, linked with the understanding that this is not a license to run wild but is held within bounds by controls exerted through a carefully managed triad of data collection/coding and memoing. This triad serves as a genuinely explicit control over the researcher's biases.
>
> (Strauss, 1987:11)

The question of bias, then, cannot be avoided, but it can be addressed, and it is time to do so in the context of this project.

The choice of subject—artists in the East End—was my own. At a personal level, it was derived from an interest in the history of the East End, and an interest in art, in terms of both making and viewing it. As a resident (at the time of writing) of the East End, who holds a genuine affection for the place, and as someone who believes very strongly in the value of art to society, I can hardly claim to be a neutral observer, indifferent to his subject except insofar as it provides data. And in order to get closer to my subject, I became involved with a project run through Chisenhale Studios to develop a formal web-based information network for artists in the East End, subsequently christened Vision in Art (ViA). My involvement with this project is discussed in section 2.2.5 below. For all that, as we saw in chapter one, there are sound research reasons for carrying out a project of this nature, primarily in terms of getting a better understanding of the underlying dynamics and motivations of those involved in such a phenomenon.

The question of bias in *this* project then, has been addressed from within a framework of Erickson's (op cit) "disciplined subjectivity", primarily by taking what informants say at "face value" and by the use of extended quotations taken directly from the transcripts of the tape-recorded interviews. This way, informants are able to speak for themselves rather than be subject to the researcher's paraphrasing what they have said. Such an approach also gives the reader the opportunity to examine the writer's interpretation against what the respondents actually said. The researcher's task then, in terms of telling a historical story, is to put what the informants say in a broader historical context, and to make conceptual links which can be developed at a more theoretical level. This is done through the use of coding, a technique developed in grounded theory. And it is to the substantive aspects of grounded theory that we now turn.

2.2.3 Grounded Theory—The Analysis of Qualitative Data

Grounded theory, like any other scientific analysis, has its basis in data which first has to be gathered, then analysed. Grounded theory has three aspects of inquiry: induction, deduction and verification (Strauss, 1987:11). We shall begin by looking at how each of these three aspects

has informed this project.

Induction comprises "the actions that lead to discovery of an hypothesis" (ibid). Such actions could be intuitive "hunches" provoked by previous experience or knowledge (ibid:12). However, Miles and Huberman (1994:17) argue that if a loose or unstructured research design is adopted, so that hypotheses are discovered during the course of data gathering, there is a limit to which induction can be a useful research tool, noting Wolcott's (1982:157) observation that it is "impossible to embark upon research without some idea of what one is looking for and foolish not to make that quest explicit". But in the first instance, induction is the only means of generating hypotheses.

In this project then, induction was used to generate the initial research objective set out in chapter one. For the sake of clarity it is repeated here:

To map and describe the development of visual artists' studio organisations in the East End.

The roles of *deduction* and *verification* are rather clearer, based as they are on the widely accepted view that conclusions are deduced from data. However, as research has continued, so new theoretical positions have been explored which take the available data and subject it to new hypotheses, which can then be tested against further data in a process of verification. Chapter nine, which attempts to develop a theoretical model for the dynamics of the East End artists' phenomenon, was developed precisely along these iterative lines, whereby chaos/ complexity theory—originally explored as an interesting and potentially useful avenue—was used to generate further hypotheses which could then be tested using data both historical and gathered from the field. But this is of course qualitative data, and to test it effectively, we must analyse it consistently.

2.2.4 Grounded Theory—The Coding Paradigm

Importantly, grounded theory offers a way of analysing qualitative data systematically, consistently and transparently, and so enables the development of theory which can be understood and interrogated:

> Grounded theory is based on a concept-indicator model, which directs the conceptual coding of a set of empirical indicators. The latter are actual data, such as behavioral actions and events, observed or described in documents and in the words of interviewees and informants. These data are indicators of a concept the analyst derives from them, at first provisionally but later with more certainty
>
> (Strauss, 1987:25).

Strauss (1987:17-19) lists eight points to consider in the process of qualitative analysis:

- the raising of generative questions which make it possible to consider hypotheses, concepts and so forth;
- the discovery of putative linkages amongst the concepts;
- the verification of theory through the gathering of new data;
- the relevance of coding to the real world of data;
- the integration of theory in terms of linkages, core concepts, categories and so forth;
- the continuous generation of memos to assist in keeping track of evolving ideas and theories;
- the recognition of the temporal and relational aspects of the coding paradigm triad which comprises data collection, coding and memoing (discussed below).
- during writing, the need for additional integration.

(Strauss, 1987:17–19)

The basic model for doing this is an iterative process of data collection, coding and memoing (figure 2.1).

Data collection through interviews is discussed in section 2.4 below, so we shall move straight to coding. This is an essential procedure, and Strauss (1987:27) suggests the following coding paradigm, whereby phenomena are referenced as falling under one of four headings.

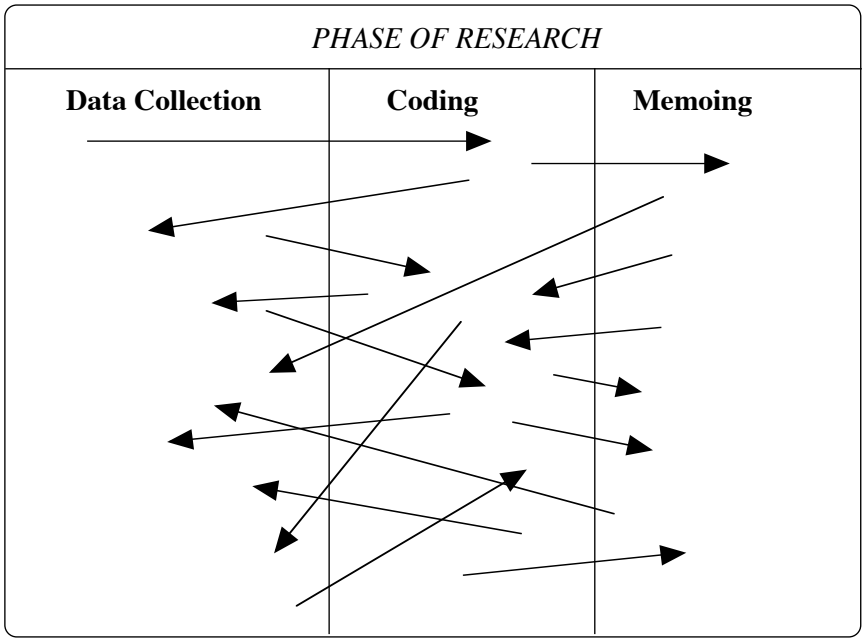


Figure 2.1
Coding Paradigm
(Strauss, 1987:19)

They are:

I. Conditions
II. Interaction among actors
III. Strategies and tactics
IV. Consequences

These four categories are used in this project, and through *open coding*, the data is broken down into sub-categories more specific to the research questions (see figure 2.2 overleaf for an example of a coded interview page). Open coding is the initial coding procedure, when concepts and dimensions which seem to fit the data are extracted, and used as a "springboard" from which further, more focused coding can be done (ibid:28, 63). Open coding of the data suggested that the four categories could be be broken down into sub-categories, the generation of which allowed coding to proceed to *selective coding*, whereby coding is limited to these sub-categories. The sub-categories are:

I. Conditions
- the need for workspace
- lack of income
- cheap rents

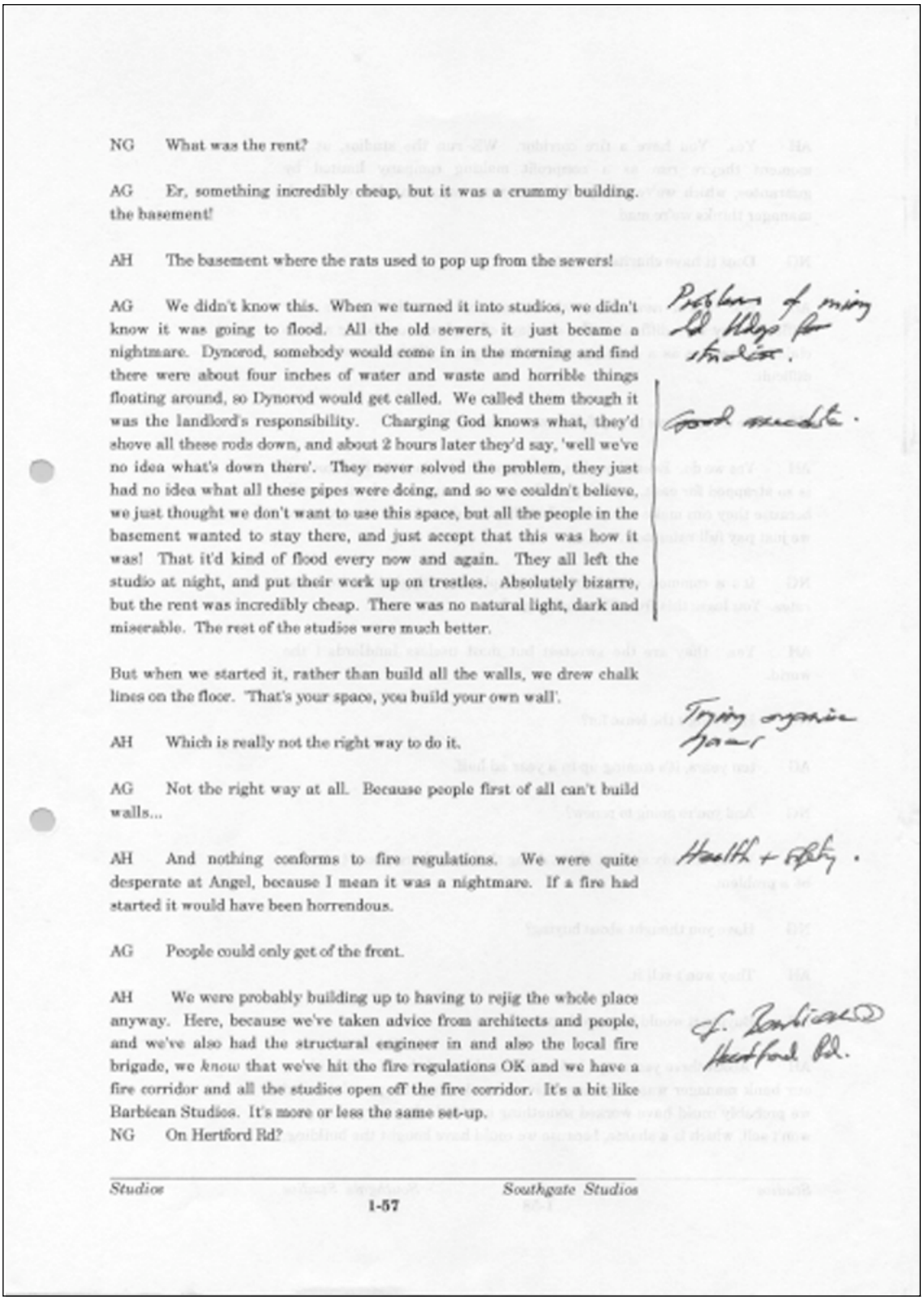
II. Interaction among actors
- word of mouth/"grapevine"
- independence as organisational units
- Open Studios

III. Strategies
- charitable status
- "just getting on with it"

IV. Consequences
- organic, artist-led growth

As these sub-categories were teased out of the data, so it became apparent that one *core category* was emerging: the organic growth of the networks. This core category enables the laying of foundations for a general theory of the historical dynamic of the growth of the East End artists' agglomeration, a theory which is developed more fully in chapter nine.

As coding proceeds *theoretical memos* are generated. These are notes of linkages and concepts which may contribute to the development of theory later in the research process; they are continually refined and updated during the course of the project, through to writing up.



NG What was the rent?

AG Er, something incredibly cheap, but it was a crummy building. the basement!

AH The basement where the rats used to pop up from the sewers!

AG We didn't know this. When we turned it into studios, we didn't know it was going to flood. All the old sewers, it just became a nightmare. Dynorod, somebody would come in in the morning and find there were about four inches of water and waste and horrible things floating around, so Dynorod would get called. We called them though it was the landlord's responsibility. Charging God knows what, they'd shove all these rods down, and about 2 hours later they'd say, 'well we've no idea what's down there'. They never solved the problem, they just had no idea what all these pipes were doing, and so we couldn't believe, we just thought we don't want to use this space, but all the people in the basement wanted to stay there, and just accept that this was how it was! That it'd kind of flood every now and again. They all left the studio at night, and put their work up on trestles. Absolutely bizarre, but the rent was incredibly cheap. There was no natural light, dark and miserable. The rest of the studios were much better.

But when we started it, rather than build all the walls, we drew chalk lines on the floor. 'That's your space, you build your own wall'.

AH Which is really not the right way to do it.

AG Not the right way at all. Because people first of all can't build walls...

AH And nothing conforms to fire regulations. We were quite desperate at Angel, because I mean it was a nightmare. If a fire had started it would have been horrendous.

AG People could only get of the front.

AH We were probably building up to having to rejig the whole place anyway. Here, because we've taken advice from architects and people, and we've also had the structural engineer in and also the local fire brigade, we *know* that we've hit the fire regulations OK and we have a fire corridor and all the studios open off the fire corridor. It's a bit like Barbican Studios. It's more or less the same set-up.

NG On Hertford Rd?

Studios *Southgate Studios*

1-57

Figure 2.2 An example of an interview, written-up and then coded for themes. The section marked 'good anecdote' is used later in the dissertation.

In the report itself, these codes and sub-categories emerge first as themes within the historical narrative, and subsequently as an armature about which a conceptualisation of the problem can be developed. Thus as the research process moves from concrete to abstract, so too does the report.

2.2.5 The ViA Project

Necessarily autobiographical, this section deals briefly with my involvement in a project to develop a formal network for East End artists which, about a year into its existence, was christened Vision in Art.

The project itself was the brainchild of the part-time Education Officer at Chisenhale Studios (five minutes' walk from my home) called Aileen Ryan. The free local newspaper, *East End Life*, published by the London Borough of Tower Hamlets, drops onto my doormat once a week, and I usually scan it briefly, looking for items of interest. About a year and a half into the project, once I was comfortable with the topic, research questions and methodology, but before I had started formal interviews, I decided that as part of the research I should volunteer to help in a project connected with the East End arts scene, as a means of "getting under the skin" of my subject. This approach was very much in the spirit of "participant observation" common in ethnography in the work of social scientists such as William F. Whyte and Michael Agar (to name just two practitioners), although my involvement has been less "immersive" than theirs. Ryan had written a short article for East End Life which appeared in Autumn 1997, asking for help with a project she was trying to get off the ground. I volunteered to help, attending meetings, and helping Ryan develop her ideas, and at the same time gaining insights about who the "movers and shakers" are, the way in which artists work, rumours which circulated within the art scene, and other "inside information". Much of this cannot be used directly since it is "off the record", coming under the general heading of "clandestine observation" (Wolcott, 1995:151) but such information is nonetheless useful in that it contributes to the understanding of the dynamics, and thence in the conceptualisation process.

At the end of 1998 ViA organised a conference titled "Your Forum" which, as the name suggests, put the idea of an East London web-based arts network to the "artistic community". The project was broadly welcomed as a useful initiative which could plug many of the holes left uncovered by the informal networks which have developed over the years.

2.2.6 The Art of Fieldwork—Discussion

It is clear enough that fieldwork, like any other research, is not simply a matter of pure and objective observation. Rather, it is a somewhat immersive, iterative process, mediated by the observer's own preoccupations and interests. Indeed, compared with the strictly followed and recorded research protocols found in the natural sciences, fieldwork is a messy process which can all too easily lack transparency.

It is this lack of transparency which grounded theory attempts to address, simply by adopting a defined and systematic approach to data collection and analysis. This is important, for it means that, timeframes aside, a researcher wishing to verify or challenge the findings of this research has the information necessary to repeat the "experiment" described herein reasonably accurately. One of the first questions this researcher might ask is who they should talk to. The next section addresses that question.

2.3 Population Boundaries and Sampling

2.3.1 How the Stats Were Won and Where It Gets Us[1]

The population for this study comprises artists; artists' studio blocks, both "independent", that is run and administered as a single and separate organisation, and "tied"—centrally administered by a larger organisation, in this case either SPACE or Acme; art dealers and galleries; independent arts organisations which function in effect as consultancies; and local authorities, and each is considered in turn. Over seventy studio blocks have existed in the East End since 1968—not all survive—and during the course of this research, the author interviewed people who have been directly involved with fifty of them. A variety of sources was used in the compilation of this sample: those sources which were culled from census data have been covered in section 1.3; others are set out herein.

The archives of the Whitechapel Art Gallery go back to its foundation—for example the fascinating original and lengthy correspondence in which Canon Samuel Barnett engaged in his efforts to get the gallery (literally) off the ground is available to be read. So too are the more recent documents upon which this project relied for much its data: the catalogues for the Open Studios list all of the studios taking part, and list the participating artists from each studio, as well as giving contact details for the studio. Since the Open Studios were biannual events until 1998 (after which they were abandoned when the Arts Council withdrew funding) this formed the basis for a crude two-yearly "census" of artists in East London. Addresses were also given, so it was a simple task to decide which fell within the geographical study area, and which did not: the Open Studios event covers a wider area than this project. These covered the years from 1990 to 1998. A 1989 Open Studios event was covered in the *Independent* (Duffin, 1998).

Similar data for the early years of the Open Studios was gathered from a trawl of SPACE Studios' archives, which had not been catalogued at the time of research. SPACE's archives also had details of SPACE studio blocks from 1968 to the present day, and these also carried details of numbers of artists, landlords, original building use and so forth. Acme's (1995) publication *Acme Studios for Artists* gives a complete history of Acme, including numbers of artists, landlords, dates of opening (and closure) and original use of buildings. The *London Art and Artists' Guide* also proved useful.

[1] With apologies to REM

Non-documentary sources augmented those set out above. Contacts made through my involvement with ViA proved useful, and of course information about the history of studio blocks was gathered in the interviews. As ever in a project such as this, the final source of information relied on shoe leather, coffee shops, the occasional pub, and the evidence of one's own eyes and ears: my own professional background, the restoration of historic buildings, also proved useful here, particularly in determining ages and uses of buildings. Although parts of the study area were already known to me, others were not, and naturally enough I visited all of the studio blocks, if only to see what they looked like, and their local context.

My belief is that the data set gathered is, on the whole, reliable and if not exhaustive, then certainly the best we have. Even so, the fluid nature of the artists' agglomeration means that no data set can be perfect, and here I want to touch on ways in which this data set might fall short. First, and most important, is the issue of "dark matter" mentioned in section 1.3: subdivided studios, two or three person studios which keep themselves to themselves, or artists who work from home for example. Recall that I referred to these artists as "dark matter" because, like its astronomical namesake, its existence is generally accepted, but cannot be measured: estimates, or rather guesses, varied from 300 to 7000. My own view, based on anecdotal evidence gathered in the course of research, is that for the period covered by the project at least, the lower figure is more likely than the higher. The second, lesser, issue is that not all artists participate in Open Studios events, but figures for artists in studios as listed in the Whitechapel Art Gallery catalogues were generally consistent from one event to the next, and this is of minor importance compared to the "dark matter". The data set for studio types and ages is presented in Table 2.1 overleaf.

2.3.2 Artists

Each of the forty "independent" studio blocks is administered by a working artist. If each of the "independent" studio blocks is interviewed, it follows that not only has each of the blocks been interviewed in its capacity as an "arts organisation", but each of the forty artists who serve as administrators for the studio block has also been interviewed. A similar approach was adopted by Galaskiewicz (1979) who, in his study of the exchange networks of a medium-sized town in the United States, chose to interview the highest ranking executive officers of his selected organisations (Galaskiewicz, 1979:45).

The geographical area is itself finite, and so of course are the numbers of artists' studios, arts organisations and other actors within this area. Although there are, as we saw in chapter one, 1400 artists in the East End at the very minimum, there were, at the end of 1998, roughly sixty studio blocks, of which approximately twenty are administered by either Acme or SPACE, leaving some forty "independent" studio blocks. SPACE and Acme are easy enough to pin down, and, like most of the "independent" studio blocks are artist-led—established and run by artists for artists.

Table 2.1 (overleaf) Original uses and ages of buildings converted to artists' studio blocks, 1968 to 1998. *Sources: Whitechapel Gallery archives, SPACE archives, Acme, 1995, author's fieldwork.*

St Katharine's Dock	'68–'71	1826	Warehouses
Ravenscroft Studios	'70–date	mid 19th c.	Furniture Factory
Butlers Wharf Studios	'71–'80	19th c.	Warehouses
45/47 Tabernacle St.	'71–'86	??19th c.	
Martello Street	'71–date		Clothing Factory
71 Stepney Green	'71–date		School
Barbican Arts Group	'72–'88		Light industrial
Old St Patrick's Sch., Buxton St.	'72–date	mid 19th c.	School
124-130 Tabernacle St.	'73–'79	??19th c.	
Acme Short Life Housing	'73–'81	late 19th c.	Housing
Beck Road	early '70s on	late 19th c.	(Short-life) housing
New Crane Wharf	'74–'84	19th c.	Wharves
New Crane & Metro' Wharves	'74–'86	19th c.	Wharves
Bombay Wharf	'74–'90	late 19th c.	Spice Warehouse
Metropolitan Wharf	'79–'89	19th c.	Wharves/Warehouses
Chisenhale Studios	'80–date	late 19th c.	Veneer Factory
Belsham Street	'81–'93		
Milbourne Street	'81–date		
Bonner/Robinson Road	'81–date	mid 19th c.	Brush Factory
Richmond House	'82–date		
Old Ford Studios	'83–'85	late 19th c.	Housing
Brittania Works	'83–date		
Orsman Road Studios	'83–date	1920s	Players Cigarette Factory
Winkley St.	'84–'93		
Fawe Street Studios	'84–date	Early 20th c.	Canned Pet Food factory
Cable Street Studios	'84–date	mid 19th c.	Sweet Factory
Vyner Street Studios	'85–'92		
Victor House	'85–date		
Carpenters Road	'85–date	1930s	Yardley Cosmetics Factory
Hanbury Street Studios	'85–date	19th c.	Weavers' Houses?
Delfina Studios	'87–date		Clothing factory
New Hoxton Workshops	'87–date	19th c.	light-industrial
Pixley Street Studios	'88–'97	early 20th c.	light industrial
MT Studios	'88–date		
Deborah House	'88–date		
Chilton Street	'89–'90	19th c.	light industrial
Maryland Studios	'89–date		Clothing factory
B.A.G. Hertford Rd.	'89–date	?? Early 1950s	Light industrial
Balls Pond Studios	'89–'98	1989	Purpose-built ceramics studios
Rufus Street Studios	'89–date	??19th c.	warehouses
Cooperage Studios	'91–'92		
Limehouse Arts Foundation	'91–date		
Southgate Studios	'91–date	1920s/30s	light industrial
Teesdale Street Studios	'91–date		
Copperfield Road	'92–'94	1920s	Warehouse (Regents Canal)
Bombay Wharf	'92–'96	19th c.	Spice Warehouse
Spitalfields Studios	'92–'98	late 19th/1920s/50s	Fruit & Veg market
Eastway Baths	'92–date	? late 19th c.	Public Baths
Copperfield Road	'92–date	1920s	Warehouse (Regents Canal)
Red Door Studios	'92–date	19th c.	police st'n (& sewing machine factory)
Columbia Road (Ezra St)	'93–'94	19th c.	light industrial
Brick Lane Studios	'93–date	18th/19th/20th c.	Truman's Brewery
Commercial Road Studios	'94–date	1920s	Garment Trade Premises
Standpoint Studios	'94–date	Early 20th c.	Printworks
Westland Place Studios	'94–date	late 19th c.	wharves/warehouses
Wharf Studios	'94–date	mid/late 19th c.	Print works
Oxford House	'95–date		
Panchayat	'95–date		
Turquoise Arts Group	'95–date		
Eastway Laundry	'96–date	? late 19th c.	Public Laundry
Sara Lane Court	'96–date		
Birdcage Studios	'96–date	19th c.	?? Housing
Bow Arts Trust	'96–date	late 19th/early 20th	motorcycle workshops
City Studios	'96–date	1920s	warehouses
Florence Trust	'96–date	1866	Church
Underwood Arts	'96–date	1920s	warehouses
Arbutus Studios	'97–date		
Baches Street Studios	'97–date		
Spitalfields Farm Studios	'97–date		

? = author's estimate

2.3.3 Art Galleries

With three exceptions, all of the art galleries based in the East End at the end of 1997 were interviewed. The Whitechapel Art Gallery, one of three publicly funded galleries in the area, stands out from the others by dint of its size, its age, and the fact that until 1998, when the London Arts board withdrew funding, the Whitechapel acted as a focus for the East End artists' agglomeration through its organisation of the biannual Open Studios.

The director, Catherine Lampert, was interviewed, since as director she is best placed to offer an accurate overview of the Gallery's position in the East End. This reflects Galaskeiwicz's (1979) approach to interviewing executive officers in corporate organisations.

The three which were not interviewed all declined on the grounds of "lack of time", and their histories and the parts they played in the development of the East End arts scene have been constructed from written material, supplied in some instances by the galleries themselves, and most often from magazine and newspaper articles. As with all histories which rely on journalistic sources, they should be treated with some circumspection, although where these galleries have been quoted in articles, and that quote is relevant to the history, it has been reproduced to lend an element of continuity to the narrative.

2.3.4 Local Authorities

Although establishing which local authorities cover a particular geographical area is not difficult, finding out who to interview is. One can start by telephoning the "arts department" and asking to speak to the person in charge, but the nature of a local authority's involvement in the arts is such as to require input from several different departments. A public art project involving a local school may for example involve the local authority's departments of art, planning and education. If the project were near a boundary with another borough, then departments from both local authorities may become involved.

A sampling technique loosely based on snowball sampling (see ch.8, s.8.3.2) was therefore adopted, whereby the interviewee in the arts department (the stage one sample) was asked to name other significant actors. This generated a stage two sample. The stage three sample, generated in the same way, tended to comprise actors in the samples for stages one and two, bringing the sampling process full circle. Confirmation of the relevant actors within the local authorities was quite frequently provided by other interviewees who, unsolicited, offered names of the people within their local authorities whom they believed to be important actors.

As is noted in section 8.3.2, the snowball technique was eventually abandoned as a rigorous sampling technique, except as a means of tracing potential interviewees.

2.4 The Interviews

2.4.1 Initial Enquiries

Before starting the research proper, and before I became involved with the ViA project, preliminary, informal and impromptu interviews were carried out with a view to addressing questions such as the likely response to the research, the potential for tensions between actors, and the general dynamics of the East End art scene. It was thus the very first stage of data collection.

Anecdotal evidence suggested, perhaps not surprisingly, that tensions exist between artists and dealers, and that there is the potential for tension between some arts organisations and local authorities. True, the number of informal interviews carried out—approximately ten—did not carry sufficient weight to draw definite conclusions, but their primary purpose was to provide useful "signposts" to what might arise during the fieldwork. One studio administrator, for example, argued there is no single artists' network in the East End. Those networks which do exist, they argued, tend to revolve around the dealer system—the circuit of private views organised by professional art dealers—at which the same faces can be seen. For those outside that "system"—many community oriented artists for example—the networks, and the concomitant advantages of being a part of them, are at best limited, at worst effectively non-existent.

This informal exploratory work thus gave a "toehold" in the artists' East End, and contributed to the inductive development of tentative hypotheses and research questions which might assist in the conceptualisation of the research. This made it possible to establish the initial formal research framework with more certainty than would have been possible without the informal exploratory work.

2.4.2 Interview Procedure

Young and Mills (1980:10) note that in an exploratory study—of which this is in essence an example—the information gathered from a rigidly structured survey design is of limited value. They offer three "classic fieldwork techniques"—interviews, projective techniques and repertory grid techniques.

Projective techniques, which encompass a "few basic ideas including… word association, sentence or drawing completion, and… the ordering, structuring and interpretation of stimulus material of various types" have their origins in psychology and emphasise experience rather than behaviour (ibid:21). Although interviewees might be expected to allude to their experiences in their descriptions of how they interact with other actors, such techniques would not be appropriate for a study such as this, which seeks "hard", relatively unambiguous data. Repertory grid techniques are also based in psychology, and seek to "map" the personal constructs of a person's inner world. Again, this technique is not appropriate for this study.

Interviews, however, *are* appropriate, but they do have their problems, not least by virtue of their interactive nature (ibid:10). The "product" of the interview is actually a joint construct of the investigator and the respondent, and some commentators have argued that this is a weak-

ness, since it fails to attain absolute neutrality and objectiveness, even if all the questions are closed, and variability is minimised (ibid:11). What tends to happen is that the respondent gives an "interview induced reflection, whereby the interview situation itself invokes responses or views which were previously unrecognised by the respondent" (ibid). Further, both respondent and interviewer will carry preconceptions which shape their attitudes towards one another. So:

> …the background characteristics of each participant in the interview have additional importance because they provide cues for the other participant. Certain attitudes, motives, and stereotypes are triggered in the respondent's mind by his perception that the interviewer possesses certain background characteristics. The interviewer may be influenced in the same fashion by his initial perceptions of the respondent. Such reactions may in turn influence the behaviour of both participants.
>
> (Cannell & Kahn, 1968, quoted in Young & Mills, 1980:11)

However, the interactive nature of the interview can be turned to advantage if the interview becomes a genuinely two-way process in which information is shared (ibid:13). In fact, some commentators argue that the quality of information gained in an interview can be improved if this approach is adopted (ibid). Thus the impossibility and indeed pointlessness of eliminating the interpersonal effects in an interview mean that the better strategy is to seek to manipulate the variables within the interview format to achieve the most satisfactory result (ibid).

The interviews for this project were, unless noted otherwise in the list of informants, tape recorded at the respondent's place of work. Prior to the interview, the approach was as follows. First, the respondent was telephoned and asked if they would like to take part in the project, which was briefly described to them. The respondent was then sent a copy of the questionnaire, the project abstract and a covering letter explaining that the interview would be tape-recorded, that they could if they wished remain anonymous, and roughly how long the interview would take. This time was usually over-estimated rather than under-estimated so that during the interview, the respondent would not feel rushed. The letter was then followed up with a further telephone call to make an appointment for the interview.

The interview itself was kept as informal and relaxed as possible. The tape-recorder had a separate desktop microphone about the size of a small paperweight, designed specifically for recording group discussions. This was placed in the centre of the table, and the tape recorder itself, although quite small, was placed to one side, along with spare tapes and batteries, out of the way. Generally, the respondent offered a cup of tea or coffee (always gratefully accepted!), which helped "break the ice", and over which I briefly described the project, explained what I hoped to get out of the interview, and showed some examples of work I had already done on the project. During the interview, I sat with a pad in my lap, with the questionnaire hand-written on one page. If the respondent drifted away from the questionnaire, they were allowed the freedom to do so. When they had finished making their point, the questionnaire sequence was simply resumed. Quite often, such points were "off the record", and somewhat political, or even personal

in nature. The insights gained through such comments are only indirectly of use; they serve more to relax the general tone of the interview, and allow the interviewer to probe more deeply, and the respondent to speak more frankly.

The questionnaires (see Appendix One) were divided into four parts. The first part explored the history and philosophy of the particular organisation—how and why it came in to being, while part two explored the administrative structure of the organisation. The first two sections were in effect historical research, and therefore discursive in approach. Section three gathered information about each organisation's linkages with other organisations. They were asked to give a numerical indicator of the strength of the relationship for the formal social network analysis (although see chapter eight for a full explanation), and to describe the relationship: why it is important, or unimportant; the form which the relationship takes—for example a relationship between a local authority and an arts group will be different from that between the arts group and another arts group; the length of the relationship, how it has changed over time, and whether it has the potential to develop further. By gathering such information, the expressed numerical values are elucidated, and thereby put into a dynamic and historical context. Equally, the qualitative findings can be further explored in the light of the quantitative data. The fourth and final section of the questionnaire gave the respondent the opportunity to add their own comments, observations and prognosis for the East End as an "artistic enclave". This fourth section thus enabled the respondent to offer their views on what they perceived to be the important factors in the "artistic" East End.

2.6 Summary

The methodological approach is presented graphically in figure 2.3 (p.38), and this diagram serves as a simple map of the territory to be explored. The process presented has been adopted because it makes possible the integration of the historical facts and the evolutionary dynamic of its subject. It has three "lines of attack": two—desktop and archival research, and grounded theory—have been covered here; the third—social network analysis—is dealt with in chapter eight (also see Appendix 2). The latter two are pursued through interviews, for at present the history of the East End arts scene is, with the exception of a few magazine and newspaper articles, primarily oral; the desktop and archival research has assisted in the tracing of the development of artists' studio blocks, and in setting out the historical contexts within which that development took place.

The interviews have thus served to provide data on both the historic development of the studios, and on the nature of the social networks which exist amongst artists in the East End, although, as chapter eight will show, those networks often prove too fine to be readily visible.

Grounded theory enables the development of both a historical narrative and of theory through the systematic analysis of qualitative data gathered from the interviews. The data analysis is systematised through a "coding paradigm", comprising *data collection*, described above,

coding the data into categories which can be developed as narrative themes in the writing-up process, and *theoretical memoing*, whereby categories emerging in the coding process are conceptualised and combined in an iterative process to generate theory.

Social network analysis takes data gathered in interviews to develop formal models of the social networks amongst art organisations. This aspect of the project is discussed in detail in chapter eight.

The theories generated through grounded theory are then combined in chapter nine with the findings of the social network analysis, extant theories of "creative milieux" and chaos/complexity theory to develop a theoretical model of the artistic networks in London's East End. Before we move to the substantive history though, we shall look briefly at the history of the East End in the years leading up to the influx of artists.

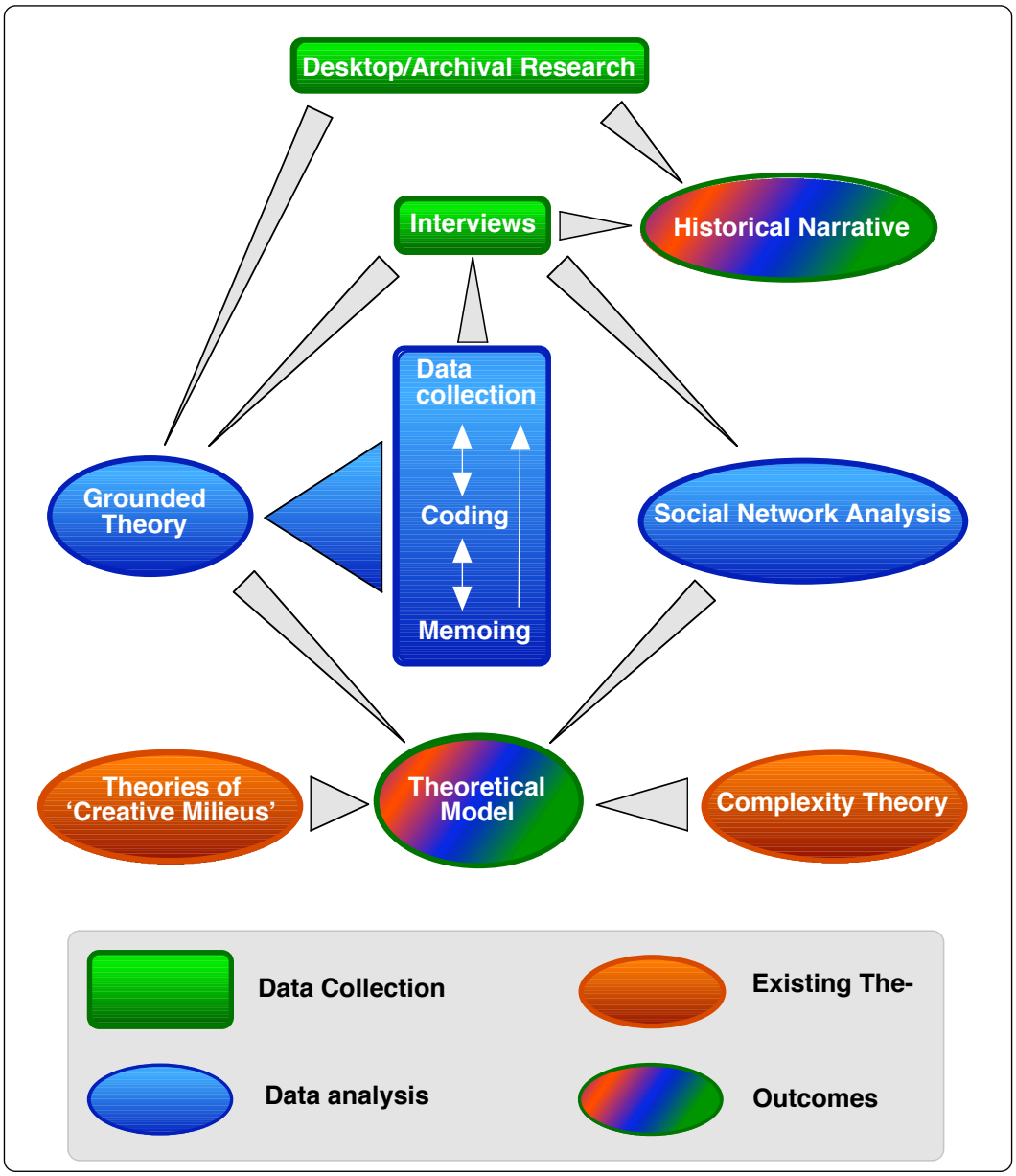


Figure 2.3 The Methodological Process

THREE

EAST LONDON'S INDUSTRY AND HOUSING,1945–1975

3.1 Why We Should Know How We Got Here

The high geographical concentration of artists in the East End could hardly have happened anywhere else in London. To be sure, the basic circumstances which made it possible have occurred in other places, both in Europe and beyond, but not at the same scale, and rarely with the same end result. So the historical and political contexts which made it possible need a closer look, not least because in understanding how the East End got to be what it is today, we might have a better idea of where it may end up tomorrow. In the four chapters which follow this one we shall explore the way in which the artistic networks germinated and grew, but this growth would not have been possible without the physical infrastructure and economic circumstances upon which the artists so heavily relied.

The richness of the East End's past precludes any but the briefest of forays into the historical undergrowth in a work such as this, and besides, that history is set down in great detail elsewhere. We shall—with the odd exception—steer clear of any theorisation of these changes, for the point of this chapter is to map the historical terrain in which the artists were able thrive. This chapter therefore describes the history of the East End, first in terms of its industry and then in terms of its housing: it concentrates however on the three decades from the end of the second World War to the mid-1970s, by which time the district's evolution as an "artists' quarter" was well under way.

The East End has had the dubious privilege of being London's back yard since medieval times, and despite the fact that the vast majority of its industrial activities have in the last few decades declined dramatically, its image as an insalubrious, dangerous and poverty stricken place still casts a gloomy shadow over the area (Cox, 1994:9). So before looking specifically at the industrial and housing contexts from which the artistic networks came, we shall look briefly at the history of the East End from the preindustrial era to the second World War. For although much

has been written about the East End and its social and political history (cf. Foster, 1999; Hall, 1998; Cox, 1994; Davies, 1990; Hall, 1988; Palmer, 1989; LDDC, 1986; Fishman & Breach 1979: Sinclair, 1950; to name a few), a short overview will help the reader to understand better the general context of the project, and the nature of the area with which we are dealing. Be warned though. Artists get scarcely a mention until the end of the chapter.

3.2 A Brief History of the East End from the 1600 to 1945

3.2.1 Introduction

The East End has, since medieval times, spread eastwards from its origins at Aldgate, the eastern-most entrance to the City of London. Although by the 17th century it had long been home to market gardens, bakeries, lime kilns and other industries, only at this time did the East End begin to coalesce as an urban area, slowly at first, but with increasing rapidity as industrialisation took a firmer hold, and the docks pulled the East End towards the River Thames. This section looks briefly at the history of both the docks and the various hamlets which became in time the collection of districts now called the "East End". As with any history of somewhere polycentric we have a choice of how we construct the narrative. We can either follow a strict chronology and move from district to district within a particular time period, or we can trace the history of each district in a single section, jumping back and forth across time as we move from place to place. I have adopted the latter option, and described the history of each "hamlet" in turn, starting nearest the city, in Spitalfields, and then moving, as East London has itself, east towards Bow and Mile End, and north towards Bethnal Green and Shoreditch. The docks get a sub-section to themselves at the end of this section.

3.2.2 Spitalfields and Whitechapel

The East End has attracted successive waves of immigrants since the mid 17th century, when the Spanish and Portuguese congregation, the first professing Jewish community in modern Britain was established. 1656, the year in which this took place, is significant, for it marked the end of a three-and-a half century ban on Jews in Britain, established by their expulsion in 1290 under Edward II, and overturned by Oliver Cromwell (Davies, 1990:51).

However the first major wave of immigrants to the East End—the Huguenots—came in the late 17th century, in the wake of the campaign by Louis XIV against non-Catholics; of the 200,000 Huguenots who left France, approximately 60,000 came to England (ibid). Some settled in Wandsworth and Soho, but the majority adopted Spitalfields as their new home and established a flourishing silk-weaving industry which, by 1824, employed 50,000, and which, by the late 1830s, had also become a sweated industry based on wholesaling (Davies, 1990:34; Weinreb

& Hibbert, 1983:809; Hall, 1962).

There was, it seems, little hostility towards the Huguenots; there was not much of a silk-weaving industry to be threatened and the English aristocracy were keen to imitate French fashions. Their integration into London life was as a consequence rapid (ibid). There was however one major handicap which, indirectly, was eventually to prove the undoing of the silk-weaving industry: the climate. The mulberry tree, whose leaves are used to feed silkworms, did not thrive in the English climate, making the industry highly dependent on supplies of silk from abroad. Nonetheless the silk trade remained secure while the 1766 prohibition on imported silks was in place (ibid). However, the Government's free-trade policy of 1860 allowed the duty-free import of silks, and this pushed the industry into decline: already under pressure from mechanical advances in weaving in the north of England, by 1880, only 3,300 worked in the silk-weaving industry (ibid).

The changes wrought by international trade did not stop at the silk-weaving industry though. By the first decade of the 19th century, when the East India and West India Dock Companies collaborated in the construction of Commercial Road as a more direct route to the City than the Ratcliffe Highway, Whitechapel High Street was already "lined with coaching inns, the road was full of traffic, carts with garden produce, market women with baskets of fruit, flocks of sheep, herds of cattle, brewers' drays, and haywains for the hay market that survived until 1928" (NELP, 1986:16; Weinreb & Hibbert, 1983:955).

Besides being home to the Huguenot population, Whitechapel, along with St. George-in-the-East, was where much of London's German population lived during the 19th century (Farrell, 1990). Little is known of their history. Originally established in the 17th and 18th centuries, by 1851 there were nearly 10,000 mostly Lutheran Germans in the East End, and by 1891, this figure had risen to nearly 27,000 (ibid). The reasons for their leaving Germany were mostly economic; frequent agricultural depressions, and the onset of industrialisation had sub-divided shareholdings until they became too small to support those depending on them (ibid). Like many immigrants, they were prepared to take on the dangerous and unpleasant jobs which the natives would not, and the sugar refineries in Whitechapel provided employment for much of the German population. The Irish and the Chinese also formed significant minorities in the East End during the 19th century; the Irish around Rosemary Lane (now Royal Mint Street) and the Chinese in Limehouse (Davies, 1990:47).

Mayhew painted a grim if colourful picture in the mid-19th century, noting that the lodgings in Whitechapel "are occupied by dredgers, ballast heavers, coal whippers, watermen, lumpers and others whose trade is connected with the river as well as the slop-workers and sweaters working for the Minories. The poverty of these workers compels them to lodge wherever the rent of the rooms is lowest" (Weinreb & Hibbert, 1983:955). Interestingly, Mayhew also noted a strong Jewish presence (ibid).

In fact the pogroms of the late 19th century in Poland and Tsarist Russia had compelled many East European Jews to emigrate; in 1881–82 225,000 Jews fled Russia, and between 1870

and 1914, approximately 120,000 Jews arrived in London, although some were en route to the United States (Davies, 1990:84). Some had trades, but many others did not. Easy to exploit by dint of their poor knowledge of the English language and a poverty so extreme that bread and fish refuse counted as a daily meal, many became absorbed into the local "rag trade" (Hall, 1962:63). By 1888, Whitechapel alone could boast 1,015 tailoring workshops in what was by now a notorious sweated industry (Cox, 1994:147). Nor did their problems stop at employment conditions: the clothing industry was effectively cut off from the surrounding English population at all levels—social, cultural and economic (ibid:64). A prevalent under-current of anti-Semitism promoted a cool reception, and resulted in the Aliens Act of 1906 although the new Liberal Government did not strictly enforce it (Davies, 1990:84). And even within the Jewish "community" there existed rifts, for the new wave of Jews—who were Ashkenazi Jews—was also looked down upon by the established Sephardic Jews from Spain and Portugal (ibid:85).

Most of the new Jewish immigrants settled in just a few streets in Spitalfields and Whitechapel, a concentration which came about through the need to be near a synagogue, public baths and a kosher butcher (ibid). This strong spatial concentration, and an emphasis on education and culture, resulted in the rapid development of support networks—the Jewish Working Men's Club in 1872; the Jewish Friendly Society Movement in 1885; the Workers' Friend Club in 1906 (ibid). Whitechapel Library was adopted as a meeting place, and many Yiddish theatres sprang up, although few now remain (Davies, 1990:86).

After the 1917 Revolution, some Jews returned to Russia, but the East End's Jewish population still numbered over 80,000 between the wars (ibid:108). They were by now becoming increasingly integrated, although anti-Semitic sentiments remained strong, flaring infamously in the Battle of Cable Street, and during the 1930s they dispersed, first to Clapton and Stoke Newington, then to Golders Green and Finchley, and subsequently to Ilford and Newington Park; the 25,000-Jewish community in Stepney in 1950 had, by 1990 fallen to less than 7,000 (ibid). A final irony: the Museum of the Jewish East End located itself in Finchley, eight miles north-west of its subject.

3.2.3 Mile End and Bethnal Green

Although the terraces of Fournier Street and Elder Street reflect the affluence of the more successful silk-weavers, Spitalfields had retained its reputation for being a poor area. So too did the adjoining Mile End New Town, whose industries burgeoned during the 18th and 19th centuries to include dyeing, warehouses for Truman's brewery in Brick Lane, metal works, sugar refining, timber and fish-curing (Weinreb & Hibbert, 1983:516, 808). Mile End New Town's population rose from 5000 in 1801 to over 18,000 a century later, while Bow, farther East, grew from a village of 2,500 in 1820, to a suburb of 50,000 in 1908 (Weinreb & Hibbert, 1983:517; Davies, 1990:120). Mile End Old Town, farther East, remained relatively undeveloped until the 19th century, when its population rose to over 100,000, many of whom worked in the City (Weinreb &

Hibbert, 1983:517). Compared with other East End districts however, Mile End was "quietly respectable", having little of the poverty endured by its neighbour to the north, Bethnal Green. Even so, it was in Mile End that the work of the Salvation Army began, and it was here that Ashbee founded his Guild and School of Handicraft in 1888 (ibid).

Bethnal Green, by contrast, although a quiet rural area inhabited by the wealthy in the 16th century had, by the late 17th century, succumbed to the spread of the silk-weaving industry from Spitalfields to the south-west (ibid:61). It was claimed in 1743, when it became a separate parish from Stepney, that "the hamlet contains above eighteen hundred houses, and is computed to have more than fifteen thousand inhabitants… consisting chiefly of weavers, dyers and other dependents… crowded into narrow streets and courts… three or four families in a house" (ibid). It was estimated that by 1840, there were six times as many looms in Bethnal Green as in Spitalfields and Mile End New Town (ibid). The subsequent decline in the weaving industry in the mid-19th century was, to an extent at least, ameliorated by the rise in other home and workshop industries, but the area remained notorious for its poverty; Charles Booth's survey of 1889 found that forty-five percent of the population lived below subsistence level—the highest proportion in London (ibid). The situation was bad enough for some of the more altruistic Victorians, most famously Angela Burdett-Coutts, to sit up and take notice; Victoria Park was laid out in the 1840s, Bethnal Green Toy Museum was opened in 1872.

In 1900, Bethnal Green became a Metropolitan Borough. The slum clearance programmes of the first half of the twentieth century transformed the urban landscape, and the mean rows of terraces gave way to new housing estates built by the London County Council and private bodies such as the East End Dwellings Company. At the same time, the local industrial base began a period of steady decline, which by the second World War was, in the view of the 1943 County of London Plan, unstoppable (Weinreb & Hibbert, 1983:61; Forshaw & Abercrombie, 1943:96).

3.2.4 Shoreditch and Hoxton

Shoreditch, contiguous with the western-most end of Bethnal Green, has its geographical origins at the junction of Kingsland Road and Old Street, both Roman roads. The site of England's first playhouse—it was dismantled in 1598 and moved bodily to Southwark where it was re-erected as the Globe—Shoreditch, including Hoxton, was estimated by 1750 to have a population of roughly 10,000. Five decades later this had risen to 35,000, and by 1851, 109,000 (Weinreb & Hibbert, 1983:785). Hoxton, in reality a part of Shoreditch, originally had a reputation for its market gardens, but the rapid urbanisation soon extinguished this rural aspect, and by the end of the nineteenth century, the area had a reputation for both extreme poverty and, bizarrely, its many flourishing music halls.

The industrial base here, and the livelihood of the local people, was founded chiefly on manufacturing. From the mid-nineteenth century to the mid-twentieth century, Shoreditch and Hoxton constituted the primary focus of London's furniture industry (Hall, 1962:75). Originally

centred around Old Street, it spread north to Hoxton, and eastwards into Bethnal Green, areas, incidentally, which now have rich concentrations of artists' studios. Like the clothing industry in Spitalfields and Whitechapel, the East End furniture industry was a wholesale system reliant upon cheap sweated labour which was often only partially skilled (ibid:87). And like the clothing industry, much of the labour was Jewish (ibid). But from 1890, the wholesale system started to go into decline due to the rise in factory production coupled with improved communications and the fact that the major market was not the export market, but the London region (ibid:92). Until 1925 cheap land was readily to be had further north-east in the Lea Valley marshes; the furniture manufacturers, seeking precisely that, began their north-easterly drift well before the second World War (ibid).

In a curious historical echo, the Bangladeshi community which now occupies Whitechapel has followed a similar pattern to their Jewish predecessors; the same emphases on religion, hard work and the family; the sweated rag trade, but in fewer numbers (Weinreb & Hibbert, 1983:956). It is this half of the East End—Spitalfields, Whitechapel, Bethnal Green, Mile End, Shoreditch, Hackney—which comprises the main study area. But it is the other half which has the higher public profile: the Docklands.

3.2.5 London's Docklands—from the 16th century to World War Two

London's quays and hithes, the progenitors of the docklands, have their origins in the Roman and Saxon eras (Weinreb & Hibbert, 1983:229), but it was from the beginning of the sixteenth century that London began its inexorable journey to prominence as England's main trading centre. The journey was steered by the merchant classes, and serviced by those who lived at the river's edge east of the Tower, and by the late sixteenth century the quays and hithes garnered sufficient trade—and smuggling—to warrant royal intervention on the part of Queen Elizabeth who passed a law compelling all ships to discharge their cargoes under supervision at 17 "legal quays" where duty was collected (ibid). These quays, situated between London Bridge and the Tower, soon proved inadequate to the task as trade increased during the 17th century, and extra "Sufferance Wharves" were added for the unloading of goods carrying low duties (ibid). The riverside areas east of the Tower were transformed as the demand for shipping turned a relatively quiet rural area into a dense urban industrial district (LDST, 1973b:4). The riverside hamlets of Limehouse, Poplar, Ratcliffe, Shadwell and Wapping, originally all within the parish of Stepney, became parishes in their own rights as they saw their combined population grow twelve-fold, from somewhat under 6000 in the late 1500s to over 70,000 by the dawn of the nineteenth century. South of the river, Deptford's population rose from 1000 to roughly 20,000, while by the end of the eighteenth century, Rotherhithe had a population of 10,000 (ibid).

But the docklands as we now know them came into being during the late eighteenth and early nineteenth centuries, growing dramatically and spawning strong working class communities. By the end of the 18th century, London had grown dramatically—from an estimated popula-

tion of 650,000 in 1750 to nearly a million by the turn of the century (ibid:614). International trade had grown too; the docking facilities by now needed concerted attention, and in 1796 a parliamentary committee debated the problems, and made proposals for the improvement of the situation. The proposals remained just proposals, and the docks eventually came into being through the piecemeal efforts of private companies (ibid:230). The first enclosed dock, the West India, was completed in 1802, followed by the London (1805), the East India (1805), Surrey (1807), St. Katharine's (1828), West India South (1829), Royal Victoria (1855), Millwall (1868), Royal Albert (1880), Tilbury (1886) and King George V (1921), the only dock not built by private enterprise (ibid). London's population, like that of the East End, rocketed, from 2.6 million in 1851, to over 6.5 million in 1901 (ibid:614).

The effect of this rapid development on the riverside was dramatic. The Isle of Dogs, which at the turn of the nineteenth century had been rural, was, five decades later, a thriving industrial area, centred on Thomas Cubitt's new town, and with the river frontage entirely built up. By the turn of the twentieth century, Silvertown, in the mid-nineteenth century a rural area, had also succumbed to heavy industrialisation (LDST, 1973b:6). At a social level, the working conditions imposed by the dock companies resulted in slums, abject poverty, disease, crime and, on a more positive note, a burgeoning sense of common identity.

The urban fabric which developed on the back of this rapid industrialisation was quite unlike the planned squares and ordered development which were typical in west London at this time. Buildings were thrown up cheaply and hurriedly in narrow and cramped rows of terraces, grouped around insanitary courtyards which proved well suited to the spread of disease. The nineteenth century riverside, like the rest of the East End, was an unhealthy and poverty stricken place, for all its commercial liveliness (ibid:5).

Despite this seemingly unstoppable growth, the threats from free trade, competition from the railways, labour disputes, inter-company rivalry, and fierce competition with the Port of Liverpool were never far away, and in 1909 the Port of London Authority was established to halt the docklands' relative decline (ibid). The PLA succeeded: by 1939, eighty new acres of dock water had been created, along with six miles of new quayside and a dredged fifty mile long channel, 1000 feet wide by 30 feet deep at low water, to take large ships. The total tonnage using the Port rose from less than 40 million in 1909 to over 60 million in 1939 (ibid). In 1909, London handled 28 percent of Britain's sea borne trade. This figure had risen to 38 percent by the start of the second World War. But after the War, the PLA turned its attention to Tilbury and the new system of containerisation which could reduce turn-around time from a fortnight to 36 hours, using far fewer people in the process (Pudney, 1975). The decline had begun, and few people could have predicted just how different a place East London would be in fifty years' time.

3.2.6 Summary: the East End's Industry until the second World War

As London has grown, so too has its back yard, the East End. From market gardens and bakeries

in the fifteenth century, to silk-weaving in the eighteenth century, to furniture in the nineteenth and early twentieth centuries, the history of the East End is inextricably linked with the manufacturing industries, the docks which kept them supplied with raw materials, and the people who worked in them. Indeed the social and economic fabric of East London has been moulded, not to say scarred largely by the manufacturing industries (Poynter, 1996:288). By 1910, the borough of West Ham was able to boast in a leaflet that it was the "factory centre of the South of England", with over 300 manufacturing firms, dominated by those to do with chemicals, engineering, metalwork, food, drink and tobacco (ibid). And even in 1960, after a long and steady process of dispersal away from London, East London and South West Essex still had a higher concentration of manufacturing industries than anywhere else in South East England. In the mid-1990s, the manufacturing industries continue to play a larger role in East London than in other parts of London (ibid), although they have, over time, moved away from the centre. Whereas they used to be in the inner boroughs of what are now Tower Hamlets and Hackney, they are now in the outer boroughs of Barking and Dagenham, and Newham.

Gavin Poynter notes two phases in the development of East London's manufacturing industries (ibid). The first, in the latter half of the 19th century, was concentrated in what this thesis refers to as the East End. Industries located there partly through historical precedent, and then through legislation which pushed them into the suburbs where the by-laws were weak or non-existent, land was cheap and transport in the form of waterways and railways was good (ibid:289). Besides shaping the Victorian East End, this first phase placed the area firmly at the forefront of a "new-unionism" amongst unskilled workers through such incidents as the match girls' strike of 1888, which resulted in the foundation of the first women workers' union (ibid:290). The second phase, which covers the first half of the twentieth century, had its major period in the years between the two World Wars, and saw the dispersal of industry away from the East End to outer East London and South West Essex (ibid). It seems reasonable to add to Poynter's breakdown a third phase, the latter half of the twentieth century, which has seen a consolidation of the processes of deindustrialisation, decentralisation and dispersal which started in the second phase and it is to the beginning of this third phase, during the second World War, that we now turn our attention. For it is in this phase that we can find the early clues which can help us understand why there are now so many artists in such a small area.

3.3 "No New Phenomenon" The Dispersal of Industry 1943–1975

London's industry has been moving outward for many years. It is no new phenomenon.

Forshaw & Abercrombie, *1943 County of London Plan*. p.92

3.3.1 Introduction

By the time World War Two began, manufacturing industry was starting to leave the East End, London's population had peaked at just over 8.5 million, and the forerunner of the shipping container was already in use for the transport of wine, even if its ultimate significance for the future of the London docks had not yet been realised (Forshaw & Abercrombie, 1943:84; Weinreb & Hibbert, 1983:614; Pudney, 1975:174). As Forshaw and Abercrombie eloquently noted in the 1943 *County of London Plan*:

> …though there has been a pause in her growth, London has not remained unaltered during these years of war; she has undergone change of an altogether unprecedented kind. A large part of her population has been evacuated; some of her industry and business, and a number of Government departments have temporarily left her, although not enough to affect substantially the daily hum of metropolitan activity; her docks are less active and the roads in certain parts little used; large areas of building, though small in comparison with London, have been destroyed by air attack, and still more buildings have been damaged more or less irrevocably. …There is thus presented to London a unique stimulus to better planning.
>
> (Forshaw & Abercrombie, 1943:1)

3.3.2 Industry in the East End —After the War

This "unique stimulus" presented itself not least to an East End which then, as now, had many factories: cheap clothing in Shoreditch and Bethnal Green, shoes and boots in Hackney, tobacco products in Shoreditch and Stepney, heavy engineering in Poplar, biscuits, jams and pickles in Bermondsey, brewing in Stepney, furniture in Shoreditch, Hackney and Bethnal Green, printing and paper in Shoreditch, heavy chemicals in Poplar and Bermondsey (ibid:85–86). In 1938, for the boroughs of Bermondsey, Bethnal Green, Hackney, Poplar, Shoreditch and Stepney, there were 10,750 "factories engaged in productive industry" employing 215,254 people (ibid:88–89). With the exception of the industry in Poplar and Bermondsey, both relatively close to the River Thames, the East End's industrial base was not in heavy industry, but in light industry. The two predominant industries in the East End, furniture and clothing, shared certain characteristics. They were highly organised, they employed mostly local labour in a variety of small workshops and big factories, and they were geared towards supplying the major West End stores (Hall, 1962; Forshaw & Abercrombie, 1943:86).

The 1943 Plan records the decentralisation of engineering, reflecting a trend which Forshaw and Abercrombie note had already existed for some years, as engineering expanded in what were then the peripheral boroughs of the County of London—Islington, St. Pancras, Wandsworth, Camberwell and Lewisham. Clothing, by contrast, was expanding as the number of small clothing manufacturers proliferated, although the larger factories were also showing a tendency to decentralise. Forshaw and Abercrombie conclude, and five decades' hindsight tells us that they were pretty much right, that clothing "must be regarded as one of London's more static in-

dustries, measured in terms of mobility" (ibid:87). The furniture industries, by contrast showed a higher rate of decentralisation than any other London industry, a trend which Forshaw and Abercrombie saw continuing as hand-made furniture and polishing workshops died out. "Great future expansion" was predicted for the printing and paper industries, but then so was the decentralisation process, by then already twenty years old.

As far as Forshaw and Abercrombie were concerned then, a continuing and increasing desire on the part of London's industry to decentralise was an inevitability about which the Government could do very little. Improvements in transport, the cost of moving back to central London for those medium-sized concerns which had already decamped, a tendency to locate on industrial estates at the urban edge, a trend towards London-based firms having "shadow factories" elsewhere, an increasing swing towards mechanical efficiency (itself driven by the war effort) and towards mass-production, increasing demand for consumer goods after the war: all these things they saw as unstoppable trends (ibid:96).

They were right of course. Forshaw and Abercrombie had pinpointed some of the basic reasons for deindustrialisation (as opposed to decentralisation) which Fothergill, Monk and Perry (1987) set out in more detail over four decades later: the fact that factory buildings all too frequently outlive the processes for which they were originally designed; the reality of the tight constraints placed on firms by the availability of suitable premises; the the failure of supply of industrial property to adjust effortlessly to demand; the extent of influence of supply on the "location of manufacturing firms' activity" (ibid:110). And these lead, in due course, to the now familiar picture of a factory stock which as a whole was only partly suited to the needs of modern industry (ibid:37) and much of which was effectively redundant from an industrialist's point view.

But Forshaw and Abercrombie also envisaged a continuing decentralisation of London's population (Forshaw & Abercrombie, 1943:96). Nonetheless they did not see this as a necessarily bad thing. Rather, they argued that the decentralisation of industry from the dense inner areas to the outskirts should be positively encouraged in industrially congested areas, where industry and housing mixed haphazardly, although they also made the point that a policy of decentralisation should not be pursued for its own sake, or in areas where there was no obvious improvement to be had (ibid). And despite the predicted loss of many factories and firms, they also envisaged many small factories and workshops remaining, albeit in reduced numbers as mass-production techniques took their toll of the smaller concerns (ibid:97).

But if the 1943 Plan envisaged a continuing decentralisation of industry, the same cannot be said of its predictions for the London Docks. Although even then the future of St. Katharine's Dock was under scrutiny, Forshaw and Abercrombie's view was that the Docks would continue to function as the nation's primary port for the foreseeable future, and so would not be "directly affected by the plan". They did however offer proposals for the improvement of access to the docks, as well as speculative suggestions as to how the docks might be rationalised and brought more up-to-date after the war, improvements designed to tie in with their proposals for opening

up sections of the river front to the public wherever possible (ibid:15).

When Abercrombie and Forshaw were writing though, the future of the docks did in truth look uncertain. The heavy bombing by the Luftwaffe took its inevitable toll, and left many of the dockland areas ablaze, and hundreds of civilians dead (Pudney, 1975:167). At the end of the war, only two-thirds of the PLA's warehousing remained, along with just half of its storage space (ibid:170). The mechanisation which had made tentative inroads into goods handling practice before the war became, along with the decasualisation of labour, a major concern (ibid). These two issues were at the root of many of the thirty-seven strikes in the decade after the war, as the upstream docks, built originally for sailing ships, found themselves unable to compete with the larger docks farther downstream which quickly the embraced the forklift truck—a few had been left behind by the Americans at the end of the war—and set about increasing turnover time and capacity at a stroke (ibid:173). Mechanisation continued with the innovations of containerisation and the roll-on/roll-off system, whereby a trailer can be pulled onto a ship, transported to its destination, and simply driven away from the ship at the other end (ibid). By the mid-1960s, the stage was set for the docks to move downstream, from London to Tilbury.

The East End's industrial base likewise saw a continuing decline in its fortunes, as the mass production techniques and the move towards a wholesale system foreseen by Forshaw and Abercrombie combined with ongoing policies of decentralisation. The war had already left its mark though. Between 1939 and 1948, the borough of Shoreditch saw employment halved from over 100,000 to just over 50,000, while employment fell in Hackney from 80,000 to 57,000, in Stepney from 113,000 to under 75,000, and in Poplar from 52,000 to 32,000. The population also declined sharply as the war took its toll: in Hackney from 205,200 to under 173,000; in Bethnal Green from over 90,000 to under 61,000; in Shoreditch from over 77,000 to 45,000; in Stepney from just under 200,000 to less than 100,000; and in Poplar from just over 131,000 to 75,000 (LCC, 1951:62-63).

The docklands also collapsed dramatically, over the quarter century from the mid 1960s. Their demise at the hands of containerisation was complete and traumatic: in the space of fourteen years, from 1967, all of London's docks closed. The Tilbury docks, 26 miles downstream, were something of an anomaly when they were built in 1886. But their capacity for containerisation, and the fact that they are nearer the sea, allowed them to benefit from the changes of the 1960s and 70s, and so to become London's primary dockyard. Employment in the docks fell from 22,815 in 1967, to 7,120 in 1980, and this was before the Royal Docks closed (Davies, 1990:120). Furthermore, three times as many jobs were lost in dock-related trades (ibid). London's manufacturing industries, like its docks, also experienced devastating changes: employment in London fell from 4.3 million in 1961 to 3.5 million in 1989. Of the lost jobs, 800,000 were in manufacturing, while unemployment rose tenfold from 40,000 in the mid 1960s to 400,000 in 1985 (Hall, 1998:889).

If the collapse of the Docklands had been dramatic, their physical regeneration, and the accompanying political shenanigans have been no less so. By the beginning of the 1970s, there was

a recognised need for a strategy which would address the decline in the Docklands. A 1973 report by Travers Morgan and Partners offered five options for the "renewal" of the area, none of which won the support of the local community (Mills, 1995:4). It was in effect sidelined, and in 1976 replaced by the Docklands Strategic Plan, a collaborative effort between the local authority and community groups (ibid). The plan argued in effect for massive injections of public funding to entice manufacturing industry back to the Docklands, and to "recreate an economy based in the past reliance on manual skills, manufacturing, distribution, warehousing etc." (Ward, 1995:29). This too had been sidelined by 1980, and two years later, the area was designated as an Enterprise Zone, a year after the London Docklands Development Corporation, a government quango, was established (ibid:31). Its role was to attract private investment into the area.

The LDDC was controversial, and as significant in terms of the urban interventions it promoted as the companies which had built the docks themselves. The economic base of the area shifted from industrial to offices, the river changed from being a work space to an aesthetic space (Davies, 1990:121). Opinions as to the LDDC's effectiveness vary. Sue Brownill's classic 1993 study, *Developing London's Docklands—another great planning disaster?*, is unequivocally critical of the LDDC, closing thus:

> But it must be never be forgotten that the LDDC represents a major failure of inner city policy and that it is the local working class residents who have had to pay the price for this. When the epitaph for the LDDC comes to be written, Ted Johns from the Isle of Dogs may well have done so already. "I think that's going to be our fate. I think people are everlastingly going to come down here to see how not to do things. As an experiment it's been a costly failure. I mean in terms of human lives" (Brownill, 1993:182).

James Bentley's *East of the City—the London Docklands Story* (1997) is, in stark contrast to Brownill's book, a rather sentimental account of the area's history, glossing over much of the controversy which racked the proposals for the Docklands from the start, and presenting the LDDC as the dynamic hero in a tale which had only one possible outcome.

The fact remains though that the local communities felt that their views of how their area should be regenerated were ignored, and that development was geared towards business needs rather than local needs. So the LDDC was criticised, most memorably perhaps in a public art project which used giant billboards to convey the local communities' message that the LDDC had failed to deal effectively with problems such as rising unemployment (Brownill, 1993; Davies, 1990; Miles, 1989).

Other commentators have argued that the LDDC got things done, that the Docklands would still be as derelict and run down as they were in 1980 if the LDDC had not acted decisively, but let conventional planning mechanisms take precedence (Bentley, 1997; Sheppard, 1997; Ward, 1995). It is certainly the case that the project has suffered from mixed fortunes, partly through the partial failure of the City to extend its activities eastwards (Poynter,

1996:294), and partly, perhaps, because it has simply not had long enough to develop as an urban area.

3.3.3 Summary—Industry in the East End

Like any city, London has its industrial hinterland. Traditionally, that has been the East End, both by dint of its proximity to the river Thames, and because the prevailing winds blew the fumes and odours eastwards, away from London itself. Mostly rural until the nineteenth century, it exploded into a bustling, dirty, poverty stricken place with the onset of the Industrial Revolution, and in the process became the industrial hub of the British Empire. It additionally became the home of some of the country's most infamous slums. Their story is told in the next section.

For the time being though, it will repay us to stop briefly and recall the ground we have just covered. The East End has its origins in the collection of hamlets which coalesced during the nineteenth century to form London's industrial district. Particular areas within the East End came over time to specialise in particular industries; clothing and furniture in Shoreditch and Bethnal Green, shoes and boots in Hackney, heavy engineering and chemicals in Poplar, brewing in Stepney and Mile End, foodstuffs in Bermondsey. And, heavy engineering and chemicals excepted, all of these industries were long-established manufacturing industries, and supplying all of them with the necessary materials were the docks.

Hall (1962:114–119) concluded that these long-established manufacturing industries had certain facets which could help to explain their location. Those industries requiring bulky raw materials, sugar refining, leather tanning or furniture manufacture for example, tended to be relatively near to the docks. London, as the capital city, was a major market, and it made sense to locate as near to that market as possible. It was also a wealthy market which could afford luxury goods, simply by virtue of the fact that it was home to many exceptionally rich people and institutions. The City of London had been a home for speculative capital since the sixteenth century, and by the beginning of the nineteenth century, the wholesale system was established in trades such as clothing, footwear and furniture. Until the first World War, London was the financial capital of the western world, and it remains one of the financial centres of the late twentieth century global economy. Such a concentration of wealth makes it an attractive market-place for those with goods to sell. London's sheer size makes it a powerful supplier of labour, and the East End's history is punctuated with periodic influxes of new skilled and semi-skilled labour which settled in the first instance in the East End. Finally, Hall found that small manufacturing concerns, needing to keep up with the latest fashions, could best gather their information through the grapevine—informal networking mechanisms—which enabled them to remain competitive, so they tended, in true Marshallian style, to agglomerate. And as we shall see in the next chapter, many of these factors apply also to the East End of the artist. First though, we shall look briefly at the story of London's post-war housing predicament.

3.4 Housing in the East End, 1945—1975

3.4.1 Introduction

Continuing resilience in the face of devastating war time bomb attacks has been an enduring part of the East End legend, and rightly so, but the facts of the devastation speak for themselves. In the eight months from the "Blitz" of Autumn 1940 to May 1941, 30,000 Londoners lost their lives and hundreds of thousands more saw their homes damaged or destroyed (Davies, 1990:111). And it was the obvious targets for bombing, the East End's docks and industry, which bore the brunt of attacks which inevitably left large tracts of housing damaged or destroyed.

3.4.2 Outward & Upward—Housing After the War

In fact, the war accelerated a process of decentralisation which had been in existence for some years beforehand, primarily through local authority-led slum clearance programmes and the development of the London suburbs by private developers. However the war's aftermath inevitably and irrevocably changed both the nature and the extent of the problems brought about by London's continuing expansion. A deliberate policy of balanced decentralisation of both population and industry from London had been set in motion as a result of the 1940 Barlow Report and the 1943 County of London Plan, and this, combined with the effects of the war, served to galvanise the authorities into taking action to address the issue (LCC, 1951:111). The East End slum, even in the 1920s and 30s when conditions had improved dramatically over those of five decades previously, still most commonly comprised mean rows of over-populated terraced housing, grouped around dirty and insanitary courtyards. The late 19th and early 20th century tenements built by bodies such as the Peabody Trust or the East End Dwellings Company which replaced some of the worst slums, although more solidly built and having better sanitation, were themselves cramped and gloomy places for which the landlords charged above-average rents (Moye, 1979:22). Lavatories and washing facilities were still frequently communal, and the space provided was still too little to cater for the typical family—the East End Dwellings Company for example averaged 1.6 rooms per dwelling, while the Peabody Trust averaged 2.3 rooms per dwelling (Munby, 1951:81).

The war, then, destroyed many of these areas, and many Londoners simply left the capital either as evacuees or to help the war effort. But even though many did not return to London once the war was over, overcrowding remained rife, with an estimated 250,000 families still waiting to be housed at the end of 1950. Of these, 30% needed to be housed as a matter of urgency (ibid). Some 11,500 houses were earmarked for slum clearance at this time, displacing an estimated 17,300 families, although the requirements of the rebuilding process meant that a total of 14,000

houses would have to be cleared, displacing some 20,000 families (ibid:112). Overall, it was estimated that 113,200 families, or over 0.4 million people, would need to be rehoused in the five years from 1951 (ibid). The solution proposed by the LCC had two phases—from 1951 to 1956, when roughly 62,000 dwellings would be built in the Administrative County, and from 1957 to 1971, by the end of which it was envisaged that over 185,000 dwellings would have been built (LCC, 1951:113–114). These then were the targets which the LCC felt that it could realistically attain in the given time periods, but even so, there remained an envisaged and unsolved shortfall of over 0.25 million dwellings, or 0.75 million people, who would have to be accommodated outside London (Hall, 1963:86).

Within the Administrative County the redevelopment was intended to reflect the community structure of London as Forshaw and Abercrombie had described it in the 1943 plan. Indeed, their proposals for developments, which would respect the old community structure but provide a decent physical environment were, in some measure at least, carried through. The main focus of house-building during the 1950s however, remained the rehabilitation of the existing housing stock, although new housing completions, mostly in the form of prefabricated bungalows, averaged some 25,000 per year (Tennant, 1998:26). Even so, the housing shortage continued relatively unabated—in 1951 there were over 480,000 more households than dwellings, while by 1961, although this figure had fallen, it was only to 300,000 (ibid). In 1955, the Conservative Government launched a massive slum-clearance programme which would run until the mid-1970s, while the high-rise tower blocks originally championed by Le Corbusier, and subsequently by both the architectural profession, and the Government, who offered a subsidy for a flat in a tower block three-times that offered for a house, began to proliferate (Hall, 1988:223–224).

The reservoir of sites cleared by wartime bombing had dried up by the mid 1950s, and although slum clearance could continue, it was becoming painfully clear that the capital's housing problems were unlikely to go away in a hurry. And it had by now become quite apparent that Patrick Abercrombie's 1945 population projections for the County and the London Region as a whole were appalling underestimates, based as they were on 1930s assumptions that the birth rate would continue to fall (ibid:91–92). The London County Council was drawn to the conclusion that it would have to look beyond its county boundaries to the outer boroughs if it was to house its population (Tennant, 1998:27).

However, it was also clear that the existing metropolitan structure was inadequate to the task of making these changes, geographically wide-ranging as they would necessarily be. A Royal Commission was charged with the task of "considering the case" for reform of London's government, and in 1960 presented its conclusion that 33 new boroughs should be formed which would subsume the outer suburban districts to create a new "Greater London". The new boroughs, now the principal units of local government, would have considerable autonomy over local housing and land use planning. Overseeing the new administrative area would be a Greater London Council, better reflecting the physical extent of the capital, for which it would produce a

new strategic plan. Both the LCC and the boroughs resisted this plan, and fear was expressed that the tensions which existed between a new, centrally organised GLC and the vociferously independent outer boroughs could polarise London's Government, leaving it reliant for its power on the suburbs, but with a political vacuum at the centre. Nonetheless, the Conservative Government acted on the recommendations of the Commission and passed the 1963 Local Government Act which, two years later, brought into being the Greater London Council (ibid).

In 1965, the idea of having a strategic authority functioning at a metropolitan level was quite novel, and inevitably problematic. Far less stable than the LCC, which saw just two changes of political control in 76 years—the last three decades were entirely under Labour—the GLC had changed control twice before it reached its first decade (Young, 1977:12). Any attempts by the new GLC to develop and implement a coherent housing plan—a necessarily long-term project—were as a consequence foiled by short-term political battles (ibid). So although the 1965 Milner-Holland Report identified the GLC as the appropriate body to assist decaying areas of London through a process of redistribution of population, both the GLC's *Housing Needs Report* of 1970, and the *Strategic Housing Plan* of 1975 made little headway (ibid). The 1964 South East Study meanwhile, and the 1967 report by the South East Economic Planning Council, projected massive increases in the region's population which would require significant increases in house building both within and outside Greater London (Tennant,1998:29). And of course the population of London had not declined to the extent predicted by Abercrombie in the 1944 *Greater London Plan*, although this and the 1943 *County of London Plan* still informed the basic principles of post-war planning in the London region (ibid).

The suburbs, which had vehemently, and in the end unsuccessfully fought the imposition upon them of a metropolitan structure, were now faced with the possibility of an influx of people displaced from the Administrative County. The nature of the transition from the LCC to the GLC had served to confuse matters further as the GLC found itself the unwitting inheritor of a broad swathe of moot issues and temporary powers which served merely to underline the contradiction between the role which the GLC was intended to serve, and the statutory authority available to fulfil that role. By 1967, it was already clear that the GLC could either pursue the power it required, or simply cut its strategic coat to suit its statutory cloth (Young, 1977:11).

Horace Cutler, incumbent from 1967 to 1970, therefore sought to shift the strategic emphasis. Instead of new council housing, housing associations—"quasi-public" organisations (ibid:14)—would be encouraged, and a programme to sell thousands of council houses implemented (ibid). Again though, time was too short to get the policies properly off the ground, for while getting expanded aid to housing associations was not particularly problematic, more time than that available was needed for the housing association sector to mature enough to be able to deal with a programme of that magnitude (ibid). But notwithstanding the split which tore the London Conservatives apart between 1970 and 1972, the root problem remained the same:the GLC was now a decade old, but appeared to have failed in its task of solving London's housing problem—a problem which refuses to disappear over two decades later. Ken Young, writing in

1977, noted almost despondently that:

> …The resource deficiencies of the GLC are not statutory, but arise from a lack of *information* on local housing and land-use situations, combined with a lack of *appreciation* of local political conditions.
>
> …[The] GLC was dependent on the boroughs for much of its data collection and provision, but lacked the political muscle to demand it. …The years 1965 to 1975 were then for London's metropolitan policy-makers a decade of frustration. The alternatives in London Housing policy and the recurrent offensives against the suburbs have served to heighten the awareness of the basic conflicts of interest between the differing social areas of the conurbation, and increase both the sensibilities and the abilities of the defeated suburbs.
>
> …The pace and scale of employment and population loss in the inner city is already shifting attention from housing conditions to broader based measures to maintain the vitality of the urban area (Young, 1977:19–24, italics in the original).

And what he was referring to, one suspects, were the decline of the London Docklands, discussed above, and the concurrent phenomenon of "gentrification".

Of course it was East London which was the focus for much of the concern about slum clearance and housing, and it was there too that the process of gentrification first took hold in the capital. Much of the slum clearance and house-building in the post-war years was the product, however flawed, of a political will to address a social problem which was itself the product of a particular juncture in capitalism—the industrial era. Gentrification—a term originally coined by the sociologist Ruth Glass in 1964—referred to the systematic upgrading of turn-of-the-century residential property, and the consequent displacement of a relatively poor community by a wealthier one (Glass, 1964:xviii). We might now include certain obsolete industrial building types in that general description. It is a product of a particular juncture of capitalism—what has been called the "post-industrial" era (cf. Castells, 1996; Savitch, 1988; Young & Mills, 1983; Zukin, 1982).

Indeed it might be argued that gentrification is the link between the artist and the old industrial district, although, particularly if you are an artist, you will more likely be arguing the case that the artist is the link between the old industrial district and gentrification. And of course artists, gentrification and old industrial districts might simply be three sides of the same triangle. The point is that they are linked, so we must discuss all of them.

Gentrification is in essence an international phenomenon, common in the western industrialised world in cities both big and small (Smith, 1986:17). It has tended to be treated as some new urban frontier, primarily economic in character, and a "process led by pioneers and homesteaders whose sweat equity, daring and vision are paving the way for those among us who are more timid", although as it turns out, it is the "banks, real-estate companies, the state or other collective actors" who generally get there first (ibid:18–19). It is also just one of several frontiers

in a geographical space which is differentiated across a number of scales—local, city-wide, regional, global—for example (ibid). But, as previous sections in this chapter have made abundantly clear, the restructuring of urban space is hardly a new phenomenon.

Smith argues that there are five main factors involved in the process of gentrification: first, suburbanisation and the emergence of the "rent gap"; second, the decentralisation of advanced capitalist economies and the growth of white-collar employment; third, the spatial centralisation and simultaneous decentralisation of capital; fourth, the falling rate of profit and the cyclical movement of capital; fifth, demographic changes and changes in the nature of consumption (ibid).

Of these five aspects, the most important for us, as we shall see in chapter nine where we develop a theoretical model, is Smith's notion of the "rent gap":

> [The] outward movement of capital to develop suburban, industrial, residential, commercial and recreational activity results in reciprocal change in suburban and inner-city ground-rent levels. Where the price of suburban land rises with the spread of new construction, the relative price of inner-city land falls. Smaller and smaller quantities of capital are funnelled into the maintenance and repair of the inner-city building stock. This results in what we have called a rent gap in the inner-city between the actual ground rent capitalized from the present (depressed) land use and the potential rent that could be capitalized from the "highest and best" (or at least a "higher and better" use), given the central location (ibid:23).

Smith continues:

> At the most basic level, it is the movement of capital into the construction of new suburban landscapes and the consequent creation of a rent gap that creates the economic *opportunity* for restructuring the central and inner cities (ibid).

Smith also argues that deindustrialisation helps explain the nature of the land-use and building stock typically associated with gentrification, and where we might expect it to take place (Smith, 1986:25). "The transformation of old industrial areas" he notes, "…did not simply begin with the conversion of old warehouses into chic loft apartments; much more significant was the early urban renewal activity which, although certainly a process of slum clearance, was also the clearance of 'obsolete' (meaning also devalorized) industrial buildings (factories, warehouses, wharves etc.) where many of the slum dwellers had once worked" (ibid).

Beauregard acknowledges the general validity of Smith's thesis, but adds that an "emphasis… must be placed on contingency and complexity, set within the structural dimensions of late capitalism" (Beauregard, 1986:35). In fact, Beauregard chooses to describe gentrification as a "chaotic" concept (ibid:40). It should be noted here that Beauregard uses the terms "chaos" and "complexity" loosely, as descriptions of the general nature of the process, rather than in the

strict technical sense in which they will be used later in this thesis.

Gentrification, then, does not simply terminate a chain of cause and effect: it is just one of several possible outcomes, and there are parallels here with the evolution of the East End artists' agglomeration. First both gentrification and the evolution of the East End artists' agglomeration have been reliant on a fluid and unpredictable urban context which has come about through the collapse of the East End's industrial base, and the lack of any obvious replacement for it. Second, Beauregard's assertion that contingency plays a part in gentrification is also applicable to the East End artists' agglomeration. These observations are discussed further in chapter nine.

3.4.3 Summary—Housing in the East End, 1945–1975

The history of London's post-war housing has two main threads. In the first instance, there was the more-or-less systematic policy-led decentralisation of London's population on the back of slum-clearance programmes and the need to rebuild a war-torn city. The East End was at the heart of this programme. Second, there has been the relatively new phenomenon of gentrification, which, it is argued, has been the spatial manifestation of processes which include the decentralisation of capital from what have historically been London's industrial areas. Again, the East End has been at the very core of this process, most notably in Hackney and Islington in the 1970s, the Docklands in the 1980s, and now Hoxton and Shoreditch in the 1990s.

3.5 Discussion

We have looked in the previous two sections at the aftermath of the second World War, and in this summary we shall come up to date. It should by now be clear enough that the East End's history, while rich and diverse, has rarely been happy. The last three decades have been marked by unprecedented upheavals at the hands of a rapidly changing global economy which no longer favours the location of manufacturing industry in western cities. And those industries which remain need more up-to-date premises than many, or even most, of those on offer in one of the world's oldest industrial districts. For the first time in its urban history, the East End is not an industrial area. It has changed from being the industrial heart of London, to an area looking for a new role in a post-industrial world. Its population has fallen dramatically. Tower Hamlets—an amalgamation of the old Metropolitan Boroughs of Bethnal Green, Poplar and Stepney in 1965—had a population of 570,000 in 1901. By 1931, this had fallen to 489,000, and had halved to 231,000 by 1951 (Davies, 1990:120). The population has fallen more slowly in the decades since then, but in 1991 had dwindled to 161,000 (Tower Hamlets, 1996).

Nor is it a geographically coherent area. In terms of its historical development, it never has been. Those areas which now comprise the East End—Shoreditch, Hackney, Mile End, Bethnal Green, Whitechapel, Wapping, Poplar, Limehouse, Bow, Millwall—all have their own histories, both in terms of geographical development and in terms of cultural development. And although the boroughs of Tower Hamlets and Hackney provide a broad and coherent administrative and

geographical definition of the East End, the area retains its polycentric character and urban structure. Davies goes so far as to argue that there is a risk of there being two East Ends—the "old", comprising Spitalfields, Bethnal Green, Whitechapel, Mile End and Hackney, and the "new" comprising the reinvigorated Docklands (Davies, 1990:123). Eric Sorensen, then director of the LDDC, noted in a seminar at University College London that the administrative boundaries of the LDDC were in fact arbitrary, and that they could usefully have been extended north to include areas such as Bow, Bethnal Green, and Whitechapel (Sorensen, 1996). Clearly, the separation of the "Docklands" from the rest of the East End is not always helpful. In terms of urban regeneration, at least at a physical level, the "old" East End—the geographical focus of this project—still has some way to go in its adjustment to the new order.

There are, then, certain clues we can take with us into the next chapter. The East End's predominant industries—furniture, clothing, printing—were not "heavy" industries. The infrastructure they have left behind is in the form of relatively well-lit, spacious factories and warehouses. The docks left behind a huge legacy of empty warehouses. The Greater London Council was racked by political in-fighting, and failed to implement anything like a coherent housing policy. But it did encourage the development of housing associations. Most significantly though, the East End has been in a state of flux since the second World War. Indeed, few people in 1965 would have predicted the onset of gentrification in the East End. Fewer still would have predicted that the area would one day become home to the majority of London's artists.

FOUR

THE EARLY YEARS, 1968–1974

It is probably hard to find industrial milieux that are less planned and regulated than those old, semi-slum-type districts in the great cities of the world where small industries and crafts have congregated.

Törnqvist, 1983, *Creativity and the Renewal of Regional Life*

4.1 A Chronological Explanation

Our story really begins here, and in this and the next three chapters, we shall see how the studios in the East End originated, how their numbers grew, and how they became established across an ever-growing geographical area. As ever in a history such as this, a certain amount of jumping about is necessary, either in time or space. Here the treatment is broadly chronological, and the jumping about is spatial. This enables us to cover more clearly the changes in context over time, and to trace more cleanly the spin-offs and moves as artists shifted from one place to another in their pursuit of cheap studio space.

But before moving to the substantive issues, a precautionary note. Much of the material in these four chapters is derived from interviews with those involved in either establishing or running studio blocks, galleries or other arts organisations. But in several cases overlaps exist, historical connections occur within the narrative, and certain actors become familiar to us. It is therefore worth making the point that, as with any oral history which is written down for the first time, an emphasis falls inevitably upon those with whom the writer has spoken, and who have been keen to share experiences and views which may fall outside the relatively strict rubric of the questionnaire, but which add immeasurably to the richness and depth of the story. Wherever this has been the case I have, as far as possible, used extended passages from the interviews, and let those actors tell that story. I have also tried to place their stories within a broader context of recent cultural and art history.

Section 4.2 sets out the origins of the first artists' studio organisation in East London, and in section 4.3 we see how a group of artists from Reading University met their need for both living and working accommodation. Section 4.4 sums up before looking forward to chapter

five.

4.2 New Uses for Old Docks…

In 1967 a group of graduates from St. Martin's School of Art moved into the the "Stockwell Depot", a disused brewery in Lambeth, to continue their work in a "mutually competitive and critical" environment: this was, argues Robert Hewison, a direct response to the materialistic values of Pop Art (Hewison, 1986:237; figure 4.3). But the notion of many artists working together under one roof, even if in separate studios, was not one that had become common currency in the late 1960s: London's artists generally worked from home. But 1968, when Bridget Riley won the International Prize for painting at that year's Venice Biennale, was a year of upset. Although most famously manifest in May's student riots in Paris, a more general disillusionment was becoming apparent, as *Time* magazine's upbeat 1966 description of "Swinging London" gave way to Richard Hamilton's vituperatively pun-titled *Swingeing London* artworks, increasingly vociferous condemnation of the Vietnam War, student sit-ins—most notably at Hornsey College of Art and the London School of Economics—and destructive bickering within those "underground" groups spearheading the counter-culture which, argued Bernice Martin, was itself dependent upon the materialist society against which it purported to align itself (Hewison, 1986).

The art world in London was likewise becoming more fractious. The early 1960s had seen a "more exciting" London art world "with Pop Art" (Collings, 1997:35) and a boom in art sales, but as that decade drew to a close contemporary art dealers were feeling the pinch of a gloomier economic climate (Hewison, 1986:231). Christopher Finch, writing in *Studio International* in March 1968 noted "I do not think I am alone in detecting symptoms of atrophication in the London Art Scene", while the art historian Edward Lucie-Smith reported in *Art in Britain 1969–70* that "it is clear that commercial art and galleries are struggling to survive. In 1969, for the first time, one began to feel their days were numbered" (both quoted in Hewison, 1985:231–232). As artists became more disenchanted with the gallery system, art itself was beginning to develop a broader base, particularly in terms of community art, which by definition exists outside the gallery system, and conceptual art which, in theory at least, also exists outside it (ibid).

Along with the near collapse of the commercial galleries, a simultaneous decline in patronage had left many artists increasingly unsupported: one such was a friend of Riley's, Peter Sedgely, who was himself in need of studio space, and whose dealer had recently succumbed to the general malaise (MacRitchie, 1996). Not surprisingly perhaps, an old idea of Sedgely's—the generation of an artists' community—resurfaced at about this time, and on Riley's return from Venice it was discussed at her home in West London (Riley, 1998:interview).

That such an initiative should have come from Riley and Sedgely is not, with hindsight, such a bolt from the blue. The seminal exhibition *The Responsive Eye*, held in 1965 at the Museum of Modern Art in New York City, had made Riley internationally famous in the art world, while her visually disturbing black and white canvases quickly and controversially became a model for the latest fabric and fashion designs (Kudielka, 1992). Riley herself was fêted by the

New York art world—the Abstract Expressionist Ad Reinhardt took her under his wing—and when she visited New York for the exhibition, she took the opportunity to visit other artists, including Elsworth Kelly and Agnes Martin, in their studios (Riley, 1998:interview). Sedgely also visited New York somewhat later, and of particular significance for both of them were the studios, including those of Kelly and Martin, situated in redundant warehouses at the Battery, on the lower west side. In fact, Kelly and Martin were two of the last artists to have studios there, since the whole area was about to be redeveloped as Battery Park City. Both Riley and Sedgely were inspired by the idea of working in this way, Sedgely long having cherished the idea of creating an "artists' community", a notion which he in turn had borrowed from Vincent van Gogh.

The time was right: the number of artists graduating from art schools had risen steadily in the light of the 1960 "Coldstream Report", actually the "First Report of the National Advisory Council on Art Education 1960", chaired by Sir William Coldstream, and reporting to the Minister of Education (Coldstream, 1960). This had not only sought to put art education on a firm footing through the introduction of a National Diploma of Art and Design but had also foreseen a consequent rise in the number of students pursuing such courses: its final recommendation was a programme of new building to cope. Prescient indeed, for the number of students enrolled on "Dip AD" courses rose from just over 1400 in the academic year 1963/64, the year of its introduction, to over 5000 in 1965/66, exceeding 7300 a decade after it was proposed (Statistics of Education, 1964–1972[1]).

So Riley and Sedgely's project went ahead. Its start was inauspicious: in "a moment of enthusiasm" they visited a warehouse in Southwark which had been offered to Sedgely. It formed part of the Marshalsea Debtors' Prison, originally closed down in 1842, and sited just north of St George's Church, in Borough High Street. Utterly derelict, and with a nervous landlord seeking an economic—in other words not affordable—rent, the building was briefly used, but proved in the end quite unsuitable. No bad thing perhaps, for a better alternative, immediately east of Tower Bridge, awaited them (Riley, 1998, interview; MacRitchie, 1996:6).

In fact it turned out to be a much better alternative. St. Katharine's Dock had been closed by the Port of London Authority in 1967, and the story of how it came to be the East End's first artists' studio block owes a lot both to coincidental social contacts, and persistence on the part of those who initiated the project. Initially spotted by Sedgely and Riley after an evening out with some friends, it rapidly became apparent that warehouse buildings such as those at St. Katharine's Dock might be just what they were looking for (MacRitchie, 1996:6). An actress friend of Riley's, Irene Worth, knew the head of the PLA as a "dining acquaintance", so Riley and Worth wrote to him asking for a meeting at which they could discuss the possibility of renting St. Katharine's Dock, or at least a part of it, for use as artists' studios. They discovered that the Greater London Council had recently acquired St. Katharine's Dock from the PLA, and although the GLC had put the Dock on the market, and made it the subject of a competition for its regeneration, they did not expect to sell it for some years. The GLC was also aware that empty,

[1] These figures are taken from Statistics of Education for the years 1963 to 1970. They cover full and part time students taking the National Diploma of Art and Design in England and Wales (cf Appendix 3).

St. Katharine's Dock would be an easy target for vandalism (Riley,1998:interview). So after a meeting with Desmond Plummer, the Head of the GLC, attended by Riley, Worth and Professor Tony West, then in the Faculty of Urban and Regional Studies at Reading University, Riley and Sedgely were given permission to occupy the Ivory Warehouse on condition that they relinquished their Squatters' Rights and started their own company: they called it Arts Services Grants Ltd. ASG's umbrella covered two organisations, both founded by Riley and Sedgely. SPACE—Space Provision Artistic, Cultural and Educational provided studios, while AIR—Art Information Register—was a relatively short-lived non-selective registry of artists holding slides of artists' work, and brief biographies, set up as a direct response to the decline of the West End art market described above (MacRitchie, 1996:7). AIR was also the name later given to ASG's gallery, again a relatively short-lived initiative. (Riley, 1998:interview; MacRitchie, 1996:6). They took on a three year lease of the Ivory Warehouse (figs. 4.1–4.2) and the Match Shed, both semi-derelict, with every floor covered in pigeon guano, and without even the most basic amenities. Even so, offers of help came in fast enough, and a core group of Riley, Sedgely, Peter Townsend, Irene Worth, Tony West and, slightly later, Heather Lee and Richard Leechman became established at the heart of SPACE (Riley, 1998:interview).

The project garnered a lot of publicity, not all of it friendly. Some art critics fiercely opposed the whole idea, Riley recalls, not least because the initiative of SPACE sat in direct opposition to the traditional notion of the solitary artist toiling heroically away in a freezing garret (Riley, 1998:interview). Some artists and indeed art schools also criticised the idea, although their motives seem less clear (ibid). An over-riding fear that the artists would be incapable of self-organisation ultimately proved ill-founded. Catherine Lampert, currently the Director of the Whitechapel Art Gallery, had a studio in Ravenscroft Studios in the early 1970s and recalled that "certainly the attitude in the 70s in the Arts Council was it [was] awful that they lived in their studios, not only for health and safety, but it suggested that artists weren't serious" (Lampert, 1998:interview). MacRitchie (1996:7) reports that Sedgely held the view that the Arts Council was piqued that AIR in particular was "doing something they should have been doing themselves", and that the Council was also unhappy with the non-selective nature of the Registry, the general principle of self-help and the fact that AIR and SPACE were clearly very successful. By the time the Registry was closed in 1975, as a direct result of the Arts Council cutting its funding, it had some 600 artists on its books (ibid).

The criticisms and indeed confusion—the Arts Council did in fact contribute to the establishment of SPACE studios in St. Katharine's Dock, as did the Gulbenkian Foundation (Archer, 2001:3)—over the Arts Council's role in all this comes as little surprise in view of its historically ambivalent attitude to "the arts" in general. The root of this ambivalence lies in the Arts Council of Great Britain's Royal Charter, granted in August 1946, which required it both to increase accessibility to the arts, and to improve their execution (Hewison, 1995:43). The problem was that quality and quantity were constantly playing one against the other, and throughout its history the Arts Council of Great Britain tended to prefer quality to quantity. Its inability to solve this dichotomy has been explored in more detail by Hewison (1995). As we shall see in

the next three chapters, this combined with spending cuts in the 1970s and 80s to make it unpopular with both those in the art world and those in Government: arts projects big and small closed down—AIR was just one example of this—and there followed its eventual demise and reconstitution in 1995 as the Arts Council of England, with a more limited remit than its predecessor (ibid).

But clearly, and from the very beginning, as Riley and Sedgely had already demonstrated, the artists *were* serious. So while Peter Sedgely worked behind the scenes in an administrative and management capacity, Bridget Riley visited people, drumming up support (Riley,1998: interview). In the event the Arts Council gave a £3000 grant for lighting and partitions, and Henry Moore, who had just won an award which required that half the prize be given to a "good cause", decided that SPACE fitted the bill, and the studios were consequently equipped with heaters (Riley, 1998:interview; MacRitchie, 1996:6). Max Rayne also gave money, as did the bankers Kleinwort Benson, contacted through friends of friends (Riley, 1998:interview).

So in only a short period of time, roughly ninety, mostly self-selected artists had established a base there, and the idea of an artists' "community" became a reality. By Christmas 1968, SPACE was ready for a party to celebrate its success for which Robert and Lisa Sainsbury provided the food (Riley, 1998:interview). St. Katharine's Dock was now well and truly up and running. Early criticism that it was not selective failed to stick, and perhaps it was this fact—that anyone could have a go—which encouraged others to take similar initiatives.

The atmosphere at St. Katharine's Dock in those early years of SPACE was, it seems, close to the open, creative and communitarian spirit for which Sedgely had hoped, as Robin Klassnik, the founder of Matt's Gallery, recalls.

Robin Klassnik:

> In '68 I graduated from Leicester College of Art studying painting, came to London. My friends lived in London. I came to London as a [graduate], and, I don't know how, but read somewhere that there were studios going at St. Katharine's Dock. Went down there, got a studio immediately, and became one of a hundred artists at St. Katharine's Dock, and it was amazing, quite amazing. I was young, I was 21, and there were people there that I'd heard of such as Bridget Riley, who started it with Peter Sedgely.
>
> …And it was, those two years were far more important to me than the five years at college. I seemed to learn much more being with other artists.
>
> …It was a little open plan, but it was like a vast community. We installed our own kitchens and all ate there, and we'd all go out, not all hundred drinking at night, but there'd be, it was quite, it was 1968, so it was quite communally oriented. And yes, the studios were much more open, there was far more talk going on between a hundred artists, because it's for the first time. So in a way, in some ways it could have been bad, because it was like an extension of being at college, and a safe kind of world, but I learnt an awful lot, and had to give up painting immediately once I got there because of the structure of the building. The way the space was so large… (Matt's Gallery, 1998:interview)

Although Klassnik "gave up painting" many artists did not. Indeed, SPACE's original proposal made reference to the "greater scale on which painter and sculptors are working" (Archer, 2001:3) and, although Riley's work did not increase in size once she arrived at St. Katharine's Dock (SPACE, 1970), it had in the years preceding SPACE: her 1964 painting *Shuttle 1* was just 44 inches square; *Late Morning*, made in 1967 was 141 inches by 89 inches, nearly three times the size (Stangos, 1981; Lynton, 1980). The scale on which the Abstract Expressionists worked—in particular Barnett Newman and Jackson Pollock—had influenced the western art world: London was not immune.

Indeed, it might be argued that St. Katharine's Dock unwittingly brought to fruition one aspect of a cultural revolution envisaged by the writer Alexander Trocchi in the *Sigma Portfolio*, a collection of essays and papers, which he wrote during 1964 (Hewison, 1986:108). One of these papers, "Sigma, a Tactical Blueprint", was reprinted in the *Journal of the Architectural Association*, and so reached a far wider audience than those which had merely been circulated amongst Trocchi's friends and associates, although not, it seems, Sedgely and Riley. But it is here that we find Trocchi's idea for an artistic community set out (quoted ibid:110):

> The original building will stand deep within its own grounds, preferably on a river bank. It should be large enough for a pilot-group (astronauts of inner space) to situate itself, orgasm and genius, and their tools and dream-machines and amazing apparatus and appurtenances; with outhouses for "workshops"; large as could accommodate light industry; the entire site to allow for spontaneous architecture and eventual town planning.

As it turned out, the original assay of this project at a Quaker community during a summer's weekend in 1964 turned into a disastrous concoction of drink and bickering which served only to terrorise their hosts (ibid). But in Trocchi's "Tactical Blueprint" we can see shadowy predictions of what would succeed a few years later in East London, not so much in the fact that Trocchi envisaged a riverside setting for the community nor even for its ambitious goals of "spontaneous architecture and eventual town planning", but in the scale and general nature of the project, summed up in the phrase "light industrial".

So before moving on, it is worth looking at what it was that made the St. Katharine's Dock project possible, and to do that we need first to take a closer look at the circumstances surrounding St. Katharine's Dock at the time. We know from the previous chapter that the collapse of the docks was dramatic, and we know that St. Katharine's were among the first docks to be closed down. In fact, the speed of the collapse caught the GLC, the local authorities and the PLA completely by surprise. The PLA sold St. Katharine's Docks to the GLC for £1.25 million, and the Conservatives then in power at County Hall initiated an open competition for their reuse (Hall, 1998:892). This left a gap. St. Katharine's Docks closed in 1967, the competition brief was published in 1969, and until the winning developers, Taylor Woodrow, moved in, the buildings were destined to stay empty. And by a happy coincidence, two artists were looking

for cheap studio space, and seeing the opportunity presented by St. Katharine's Docks, grabbed it.

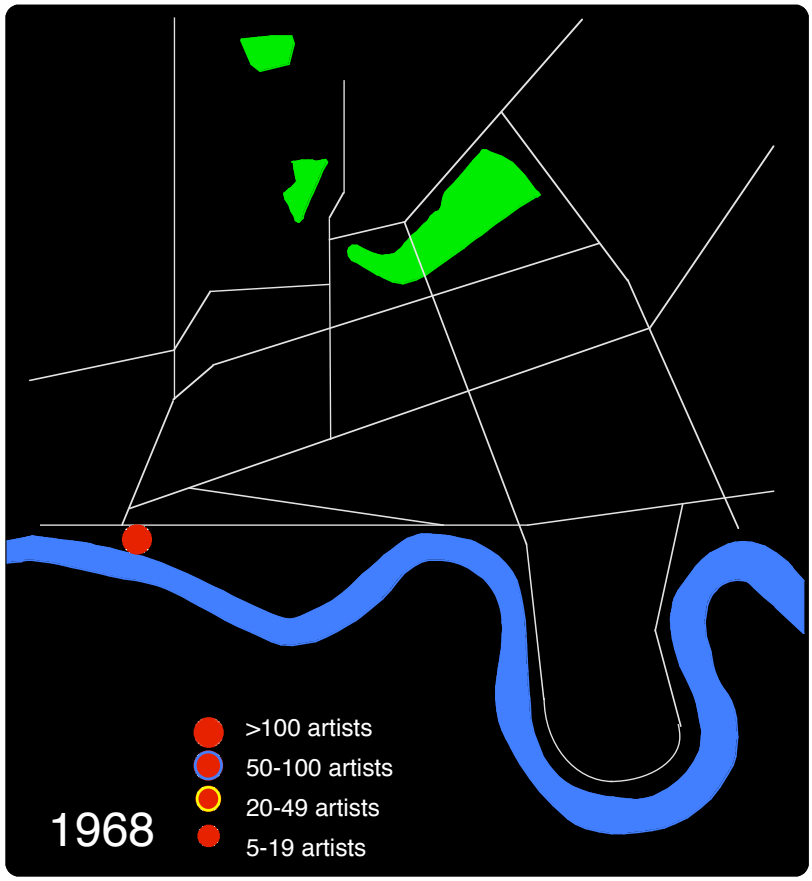


Figure 4.1 1968, and SPACE opens for business at St. Katharine's Dock

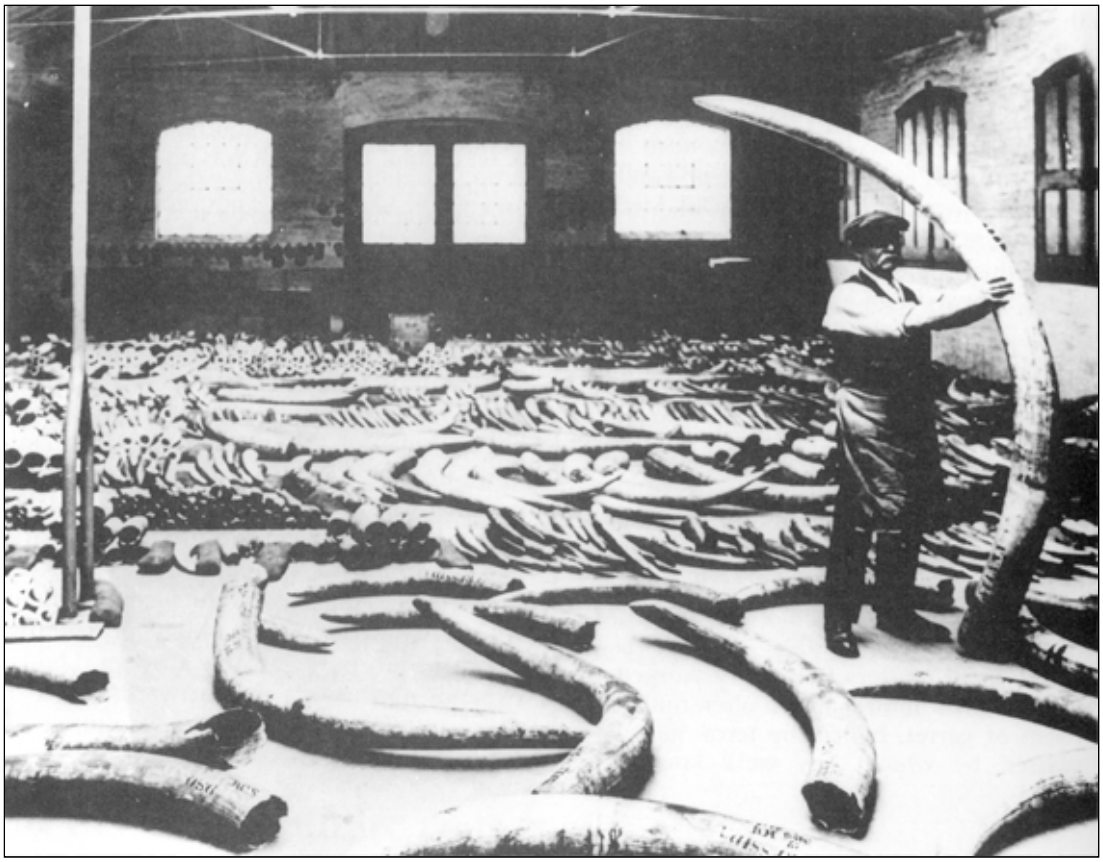
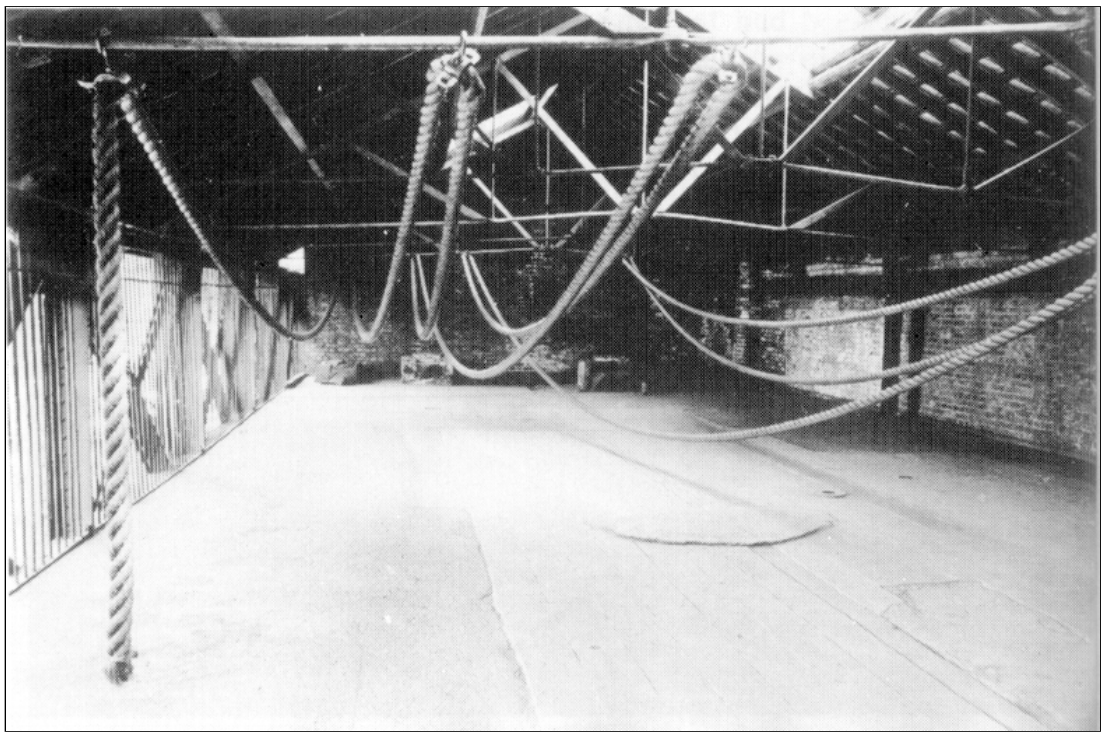


Figure 4.2 Above: Ivory Warehouse at St. Katharine's Dock. (Davis, 1990:100)

Figure 4.3 Below: Conceptions in Space' by Roelof Louw. This studio was in Stockwell in south-west London, but illustrates the way in which warehouse spaces could be exploited artistically (Hewison, 1986:175).



The SPACE project, then, seems to have been driven by a combination of necessity and ideology, in the form of Sedgely's need for a studio, and his desire to form some kind of artists' community; these two factors were of course underpinned by the rise in the number of artists graduating from college, and by an uncertain property market. Importantly, Sedgely was not alone, and in Riley found an ideal working partner: while he remained behind the scenes, she "fronted" the project, visiting people who might be able to help and drumming up support for their idea. And in their searches for this support, they relied on social networks of which they were already a part. So their initial contact with the Port of London Authority was through a friend who knew the head of the PLA as a "dining acquaintance", while other contacts such as Professor West lent kudos to their ideas. In the GLC they found a potential landlord with the flexibility to look favourably upon new and untried initiatives, and the pragmatism to make the demands necessary to encourage the artists to establish a firm footing for their project. The context then was one of fluidity, both in the property markets and the art world, which allowed such initiatives to happen. Even so, Riley, Sedgely and the others had to work within existing structures—setting up their own company for example—which meant that their idea would not founder on its own instability. Indeed, a robust approach was essential to the survival of what was a fragile initiative in an unstable context.

But by 1971, the competition to redevelop St Katharine's Dock was decided, and the developers were ready to move in. The artists were evicted, and forced to look elsewhere for potential studios. An old school at Stepney Green and a clothing factory in Martello Street in Hackney were taken over, housing roughly seventy artists. 45 Tabernacle Street was also pressed into service, providing spaces for a further 21 artists.

Only a short while after SPACE left the riverside, Butlers Wharf, a vast disused warehouse complex, operated by the Butler's Wharf Company and used for rubber, spices, wines and spirits amongst other things (Ellmers & Werner, 1988:96) crept in to the picture. Directly opposite St Katharine's Dock on the south bank of the Thames, Butler's Wharf became established as an artistic haven rather different from St Katharine's Dock. Maurice Agis, later a co-founder of Chisenhale Studios, was at Butler's Wharf from 1975 to 1981:

> …basically, I think there were about 300 people there at one point… it was a huge area, lots of artists… but the thing is it was a very mixed bunch of people. I mean there was Dance X, which is now Chisenhale Dance Studio, there were printers there, there were furniture makers, there were artists of different kinds. It wasn't all painters like here [Chisenhale Studios], or sculptors, it was a much more mixed bag. I think the thing that was impressive, it was kind of much more community-based and it was all very ad hoc and there was no organisation as such as you understand it. There wasn't an organised group that moved in, worked and then moved away.
>
> Rent was cheap… Punk rock, there was a lot of groups getting down there and rehearsing stuff. …the activity was very organic, we didn't have exhibitions so much, …there was literally no organisation, it was very anarchistic. There were parties, a lot of events. …I

> think it was very active, I think it was very conducive to creative activity. (Agis, 1998:interview)

Agis found his studio through word-of-mouth, and rent was paid to the landlord through a third party, "a rather Colonel Blimp type, who was a benevolent character, but who used to make sure we all paid our rent on time, and if we didn't, little letters would come" (ibid). In 1979, parts of the building were closed down to the artists, and as rumours began to circulate that redevelopment was likely, a group of artists collaborated at a more formal level, with support from lawyers, to fight the evictions which now looked probable. Despite their efforts, which included getting the press involved and presenting proposals for turning part of the complex into managed studios, the artists were evicted in 1981, and Butler's Wharf was redeveloped in the 1990s, with restaurants, gift shops and apartments.

The origins and organisation of Butler's Wharf and St. Katharine's Dock were quite different. Whereas St. Katharine's Dock was the subject of a formal proposal to the GLC (Riley, 1998:interview), Butler's Wharf, no longer operated by the Butler's Wharf Company which had in 1972 ceased to operate its wharves (Ellmers & Werner, 1988:92), was simply let out to anyone prepared to pay rent to the landlord (Agis, 1998:interview). SPACE was founded with a view to forming an "artists' community", while Butler's Wharf became one. Yet despite these differences, the artists were permitted to remain for only as long as that was the best financial option for their landlords. It is reasonable to argue that in both cases, the artists were a useful "holding option", providing a trickle of income where there would have been none, and procuring rudimentary maintenance for the buildings. The pattern which has emerged since the early 1970s, originally at St Katharine's Dock, later in that decade at Butler's Wharf, SoHo in New York, a story memorably told in Sharon Zukin's *Loft Living* (1982) to which we shall return, and more recently along an axis taking in Brick Lane, Hoxton Square and Old Street suggests that there are cases where the presence of artists does indeed help breathe life back into such redundant areas (BAAA, 1993:27). But although artists may be early beneficiaries of industrial decline, should the area they are in become the subject of regeneration, then they are likely to be priced out of it, even if they are not on short lease anyway. Despite the differences in their organisational structures, both St Katharine's Dock and Butler's Wharf Studios were unable to resist the pressures of the property market, and both groups of artists were obliged to look elsewhere for space. How they did that is a story to which we shall return. First though, we shall explore an approach to providing studio space rather different from those of St Katharine's Dock and Butler's Wharf: the housing association.

4.3 … New Life for Old Houses

When Jonathan Harvey left Reading University in 1973, he, like many other graduate artists, decided to come to London, where he met David Panton through a mutual friend (she would

subsequently become Panton's wife). But while London offered the best career opportunities for fine art graduates, it did not offer the cheap living and working accommodation which Panton and Harvey actually needed. They were not alone in this, and knew it: crucially, they decided to do something about it, then did it.

Jonathan Harvey:

> …the philosophy was developed from the notion of self-help. The people who were involved in setting up the original project were artists in the main. They'd come to London, they were faced with the economic problem of trying to find somewhere to work in order to be able to sustain their practice. We were aware of enormous quantities of empty short-life GLC housing stock due for development. [There were] two paths in terms of obtaining that property—either through squatting or legally through forming a housing association.
>
> So the initial philosophy was about wanting to get enough property to deal with the immediate needs of the seven people that you need to form a housing association.
>
> (Acme, 1997:interview)

David Panton:

> There was a degree of desperation there. I mean we did know of the existence of the organisation of SPACE for example.
>
> But that presupposed that you had somewhere to live, and we were in the position of having zero as far as having living space, working space or indeed money, so we could not avail ourselves of what cheap studios were already available, so we had to start literally from scratch.
>
> (Acme, 1997:interview)

The founding members of Acme were thus a "part of the general migration into London" on which graduate artists would embark to establish themselves (Acme, 1997:interview). As ever, the "grapevine" proves crucial to our story, and so too does serendipity. Like so many artists since, Harvey and Panton found out about the East End through pre-existing contacts, friends from Reading University who had come to London a year or two before Harvey and Panton, and had "stumbled on East London and found that there was so much property because of potential development schemes, I think organised by the GLC, and had stumbled on the notion... of forming a housing association" (Acme, 1997:interview). It is perhaps worth laying to rest here the interesting question of whether Professor Tony West, who was of course instrumental in supporting SPACE in their early days and was also at Reading University, knew Harvey and Panton. In fact he did not, and the "Reading Connection" is merely coincidental (Harvey, 1999:personal communication).

However, the criteria for the formation of a housing association demanded more (actually seven) people. It was only on the arrival of Harvey, Panton and some friends of theirs, all Fine Arts graduates from Reading University, that the critical mass of seven people existed; they es-

tablished a housing association, and choosing "the most clichéd name we could find" they named it Acme (Baker, 2000:Acme Interview). The basic aim at inception was little more than survival and there was no specific intention of providing a service for other artists; but having been successful in their use of this mechanism, Acme were targeted by the GLC who had become keen to hand more property over to them.

Jonathan Harvey:

> The GLC at this time had enormous quantities of empty property and they were using housing co-ops and associations to take those up. A number of those other groups who didn't consist of artists but were dealing with people that had particular housing needs were actually unable to take a lot of property because it was in too poor a condition. …Because we were dealing with artists who themselves were very capable physically, practically, of actually taking a fairly derelict house and making use of it, we were able to attract far more property than other groups. We'd never say no to a house. We'd take on houses that were in absolutely appalling condition because there was the energy and the need. Property came very rapidly. Within a year we were managing something like sixty, eighty houses.
>
> (Acme, 1997:interview)

David Panton:

> It's a classic point about artists very directly being a regenerative force, that the whole notion, the whole activity and practicality of being an artist is quite suited to doing that kind of, making something out of nothing. It may be extremely unorthodox, sometimes it can turn out to be perfectly orthodox, but nevertheless, artists, when presented with that situation, don't go particularly floppy.
>
> We felt an obligation… the Council were busy throwing properties at us because what we had done off our own bat actually represented a very good bargain as far as they were concerned. We were a "best option" in quite a number of circumstances for them to off-load more property.
>
> What we had done was entirely self-help, and with this particular ingredient we had created, if you like, something out of nothing to suit ourselves. We were in a position to be a conduit, a pipeline to legitimate other people's access to the same kind of thing. Service does not arrive at that point. We were not going around doing things for people, we were allowing artists to do it for themselves.
>
> This I think would be the thrust for most of the formative years. …Our service in a sense was that we had the appropriate legal entity that allowed people to do this, and ninety-nine percent of it was actually through self-help.
>
> (Acme, 1997:interview)

The mechanism was relatively simple. The GLC would offer Acme a house with a limited life, and Acme would rent it from them. The house would come with a grant for its refurbishment,

and the cost of the rent would be passed on to the artists who took the house over.

The result of this was that Acme found themselves with more housing than they needed. However, they knew of other artists who needed cheap accommodation, and began to shift from being a self-help group to an organisation which could provide a service for others (Acme, 1997:interview). The enormous quantities of short-life housing(figures 4.4–4.5, p.72) which the GLC had available, combined with a policy of encouraging housing associations, meant that Acme's growth in the early 1970s was rapid. They had registered with the GLC in late 1972, persuading them to transfer two derelict shops in Bow to Acme on 21 month leases. By December 1974, Acme managed 76 houses, providing living and working accommodation for 90 artists (Acme, 1995:14). Harvey and Panton, the core figures in the group, found their time increasingly taken up by administration, but Acme was by now a going concern. With the help of funding from the Calouste Gulbenkian Foundation, they became part-time officers (ibid).

Acme, then, was supported by the GLC at a practical level. But it seems that political considerations meant that supporting Acme, and in effect encouraging artists to move in to houses from which local people had been evicted, was not a policy about which the GLC felt it could be overt.

Jonathan Harvey:

> The GLC didn't really want to know that it was artists. They were happy that those properties were being used, were being maintained.
>
> They didn't want, at a kind of "officer level", it really to be known about that. That the major user was artists. That was kind of irrelevant, and it might have made things slightly difficult.
>
> (Acme, 1997:interview)

David Panton:

> Because all this, obviously, was operating under the housing policies of the day, which certainly weren't about cultural regeneration or flexibility or other things coming in. It was pretty dogmatic left-wing housing policies at the time.
>
> (Acme, 1997:interview)

The "dogmatic left-wing housing polices" had arrived on the back of a Labour victory in the April 1973 GLC election, and the party that came into power was considerably more Left-leaning than its mid-sixties predecessor: the manifesto was bluntly and unequivocally titled *The Socialist Strategy for London* (Young & Kramer, 1978:151). Unsurprisingly, the Conservative Government's policy of encouraging the privatisation of the housing sector found little favour in the new GLC whose policies, anathema to the Conservatives, included the acquisition of private housing to be turned to municipal stock: this was a policy still more readily pursued after the replacement in February 1974 of the Conservative administration with a minority Labour government (ibid:160).

In the light of such changes and policies, it is not so bewildering that the GLC chose not

Figure 4.4 Above: Old Ford Studios, 1983.

Figure 4.5 Below: Orsman Road Studios before conversion, 1983

Photos: Acme, 1995:16

to advertise the fact that short-life housing, rather than being acquired for conversion to municipal stock, was instead was being handed over to Acme, and thence to artists who might not be seen as the most deserving candidates for accommodation. For the fact remained that the decline in industry and the docks in the East End, which threatened not just jobs but the communities which had grown up with those livelihoods, meant that artists were unlikely to be made welcome in their new environment: there existed a genuine risk that they would be perceived as benefiting unfairly from others' misfortune.

David Panton:

> There were several kinds of hostile environment in East London. There was what you might regard as the general one, a suspicion of strange people coming in, especially if they were beginning to inhabit properties that previous occupants had actually been forcibly removed from, through processes of slum clearances and ending up in tower blocks. But also prevailing, on a cultural level was the whole sort of argument between community art and individual art, and it got quite Orwellian. … "community art good, individual art bad" was a pretty pervasive local government attitude towards art. What we were doing, we felt, was desperately trying to support, if you can phrase it like that, individual art activity.
>
> (Acme, 1997:interview)

The "Orwellian" attitude of the local authorities at this time was perhaps to be expected. 1972, the year of Acme's inception, also saw the removal of spending limits for local authorities, and as they grew keener to support the cultural and social heritage of the area, so they took an increasingly pro-active role in promoting the arts for these purposes (Whitechapel, 1995:5). And in 1974, the Arts Council had formally endorsed the notion of community arts after extensive lobbying from Free Form Arts Trust, amongst others (Free Form, 1997:interview). For organisations such as Acme, then, the safe option was to keep a low profile. As Jonathan Harvey points out: "…it's only at abolition that the GLC felt it could then recognise what had previously happened, and to lay claim, or to claim credit for the fact that they'd helped so many artists indirectly" (Acme, 1997:interview).

This belated change of heart on the part of the GLC, like the agglomeration of artists in the East End itself, has its origins in the dynamics of changing from an industrial to a post-industrial economic base (Hewison, 1995:238). The GLC Labour Group's winning 1981 manifesto carried little mention of the arts. By 1986 however, the decline of the old industrial constituencies and the emergence of new ones meant that the voters who needed wooing now came from a variety of backgrounds, cultures or even countries: the arts were seen in this context as the cutting edge of a "radical social and economic agenda" (ibid). Ironically though, Acme had by this time ceased to take on short-life housing—which enjoyed a dramatic shift in status from unwanted to desirable, as we shall see in chapter six—choosing instead to concentrate on light industrial property.

But in the early 1970s the GLC's housing policy was somewhat shambolic, and furthermore it was also the subject of tense political wrangling which tended to stifle any initiatives on this front: it is useful to revisit Ken Young's observation, cited in the last chapter, that "…the resource deficiencies of the GLC are not statutory, but arise from a *lack of information on local housing and land-use situations*, combined with a lack of appreciation of local political conditions" (Young, 1977:19, emphasis added). Acme, of course, could only benefit from this.

The contextual picture which emerges then is one of fluidity. Politically, and in terms of its housing policy, the GLC was turbulent: and importantly, planning and building regulations were less stringent than they are now. The historic buildings lobby was then in its infancy having been galvanised into action by Hermione Hobhouse's unsuccessful campaign to save the Euston Arch from demolition. But at this time, semi-derelict 19th century houses in the East End of London were not high on the agenda.

David Panton:

> You could take liberties with property then [the early 1970s] that one wouldn't dream of doing now. And that was the whole context of dealing with property. Things were pretty lackadaisical and non-problematic. So the notions of self-help on a fairly primitive do-it-yourself basis fitted in fairly well. To have that sort of attitude now would get you into big trouble
>
> (Acme, 1997:interview).

Self-help in one form or other is a recurring theme, and central to the histories of the two other studio organisations formed in the early 1970s, Barbican Arts Group and New Crane Studios.

The Barbican Arts Group was established in 1972 as an artists' collective, intended to provide affordable work space for "painters, sculptors, photographers, printmakers, ceramicists

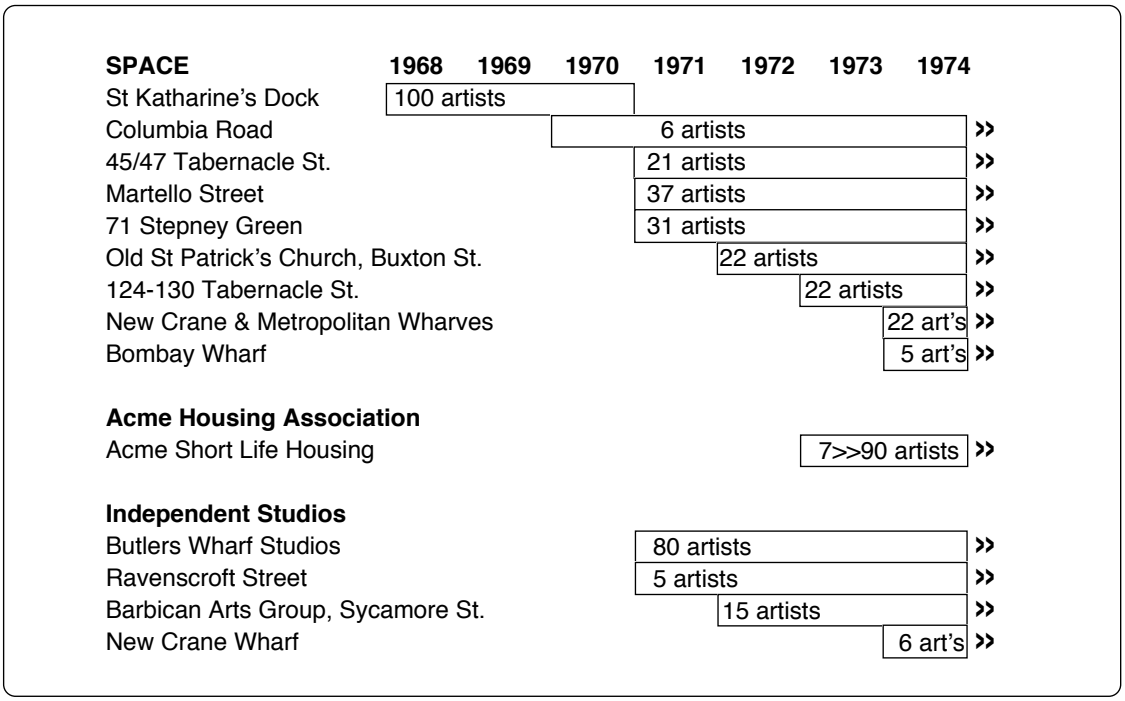
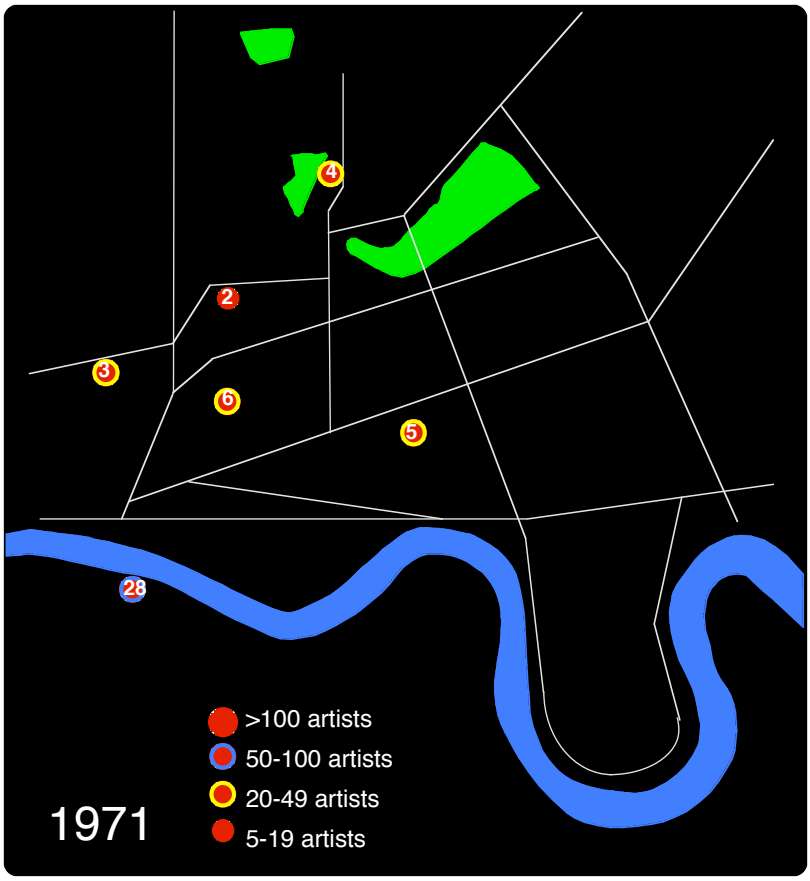
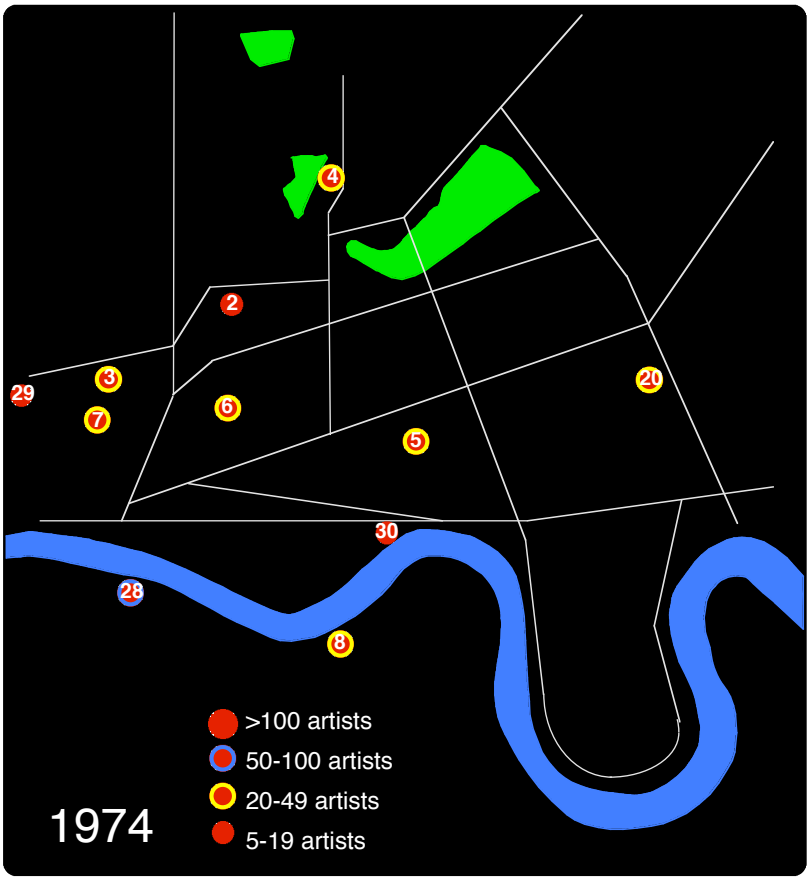


Figure 4.6 Studios in the East End, 1968–1974.



1-16, SPACE Studios; 2. Ravenscroft Studios.; 3. 45/47 Tabernacle St.; 4. Martello St.; 5. 71 Stepney Grn; 6. Old St. Patrick's Ch.; *24-62, Independent.* 24. Butlers Whf.;

Figure 4.7
Map of Studios, 1971



1-16, SPACE Studios.
2. Columbia Rd.; 3. 45/47 Tabernacle St.; 4. Martello St.; 5. 71 Stepney Grn; 6. Old St. Patrick's Ch.; 7. 124-130 Tabernacle St.; 8. New Crane & Metropolitan Wharves; 9. Bombay Whf.

20-27, Acme
20. Various Short Life Housing - Acme HQ shown; size reflects no. of houses. Acme houses were/are distributed across East London; for clarity, only studio blocks are shown in this and subsequent maps.

28-68, Independent
28. Butlers Whf.; 29. Barbican Arts Grp.; 30. New Crane Whf.

Figure 4.8
Map of Studios 1974

Figures 4.9 & 4.10
New Crane Wharf, circa 1974. Home to both New Crane Studios (until 1984), and later studios run by SPACE (until 1987), the wharf was one of the earliest studios in Wapping.

Photos: Ken Oliver

Figure 4.11 View across the River Thames from New Crane Studio, circa 1975. Property developers had not yet cottoned on to the desirability of such vistas. Photo: *Ken Oliver*

Figure 4.12 Interior of New Crane Wharf, circa 1974. The attraction to artists of such expansive work spaces is readily apparent in this photograph. Photo: *Ken Oliver*

founding artist, Ken Oliver, relates:

> I left the Royal College in '74. I did printmaking and wanted to set up a print workshop, me and a friend, and obviously we were looking for the cheapest and the largest spaces we could get. We went to SPACE and they said "well we've got this block in Wapping that we're looking at". They hadn't decided whether they were having it or not, so we got in touch with the landlord at the same time as SPACE did, and took this, got a group of us together, because it was quite a big space, about 4000 square feet.
>
> [There were] about six of us. We had one end as a painting studio, four, five painting studios—it was left as sort of open plan—and then the other end was an etching workshop, where people came in and hired the space on a day rate, which generated income for paying for the whole floor basically (Fawe Street Studios, 1998:interview).

The similarities with previous initiatives—a group of arts graduates in need of cheap work space—are familiar enough, but there are two points about the dynamics of the process which need highlighting. The first is an observation: compared with SPACE, Oliver and his friends were able to move quickly in their acquisition of New Crane Wharf, not least because they could operate as a small autonomous unit. The second is the fact that the source of Oliver's information about New Crane Wharf was SPACE. In other words the New Crane Wharf group benefited from knowledge originally acquired by SPACE, and subsequently shared by them to enable the founding, or finding at least, of the Oliver group's studio. This is intriguing simply because it is another example of the way in which the transfer of information contributed to the survival not only of individual artists and a single group of artists, but also to the growth of the East End arts community as a whole. If we think of this community as a system—and this is a point we shall explore in greater detail in chapter nine, and merely touch on here—then we can argue that the system is learning through information transfer, and becoming stronger as a consequence.

In the event, SPACE did finally establish studios in both New Crane Wharf and the adjacent Metropolitan Wharf: both generated spin-offs; Cable Street Studios from Metropolitan Wharf and Fawe Street Studios from Ken Oliver's New Crane Studios (figures 4.6–4.12). We shall come back to these later, but first we shall pause and look back at the terrain we have already covered.

4.4 Discussion

We do not have to look so very far back to get our initial bearings: partly as a result of the "Coldstream Report", partly in response to the fashionable nature of the newer art forms such as Pop Art, the number of of fine art graduates had increased considerably during the 1960s. Many came to London and in so doing fuelled a steady and largely unmet demand for studio space: the majority of artists simply worked from home in the absence of anything better. However the cultural climate both generally and in the London art world at the end of that decade was not a comfortable one. Many contemporary art dealers had gone out of business, in turn leaving some artists without the conventional means of selling work.

The winds of change did not stop dead once through the gates of art and culture. The ensuing turbulence whipped up both confusion and anger as the beginnings of de-industrialisation made themselves felt: most important was the general decline in the East End's economic fortunes; the decline of its manufacturing industries, the steady drift downstream to Tilbury of its dock trade, and the steady reduction in population, all described in chapter three.

Of course, from the point of view of the artist, these are all contingent circumstances, and it is to contingency that we now turn our attention, that serendipitous combination of factors without which the artists' ideas quite possibly would never have got off the ground, and over which they had absolutely no control. But for the artist in need of a studio, it was precisely this de-industrialisation which made available precisely the type of property which the artist could use as a studio.

In the East End of the early 1970s, then, the GLC had an area which was moving irrevocably into catastrophic decline through circumstances quite beyond its control. But this was an environment in which SPACE and Acme were able to flourish. The GLC, more by luck than judgment perhaps, offered practical support to both organisations, not least through its willingness to be flexible and open to new ideas and initiatives which might prove beneficial both in terms of the physical maintenance of their property base, and in terms of contributing to the regeneration of the area. The foundations had been laid then: a peculiar construct of artists' needs, artists' visions, and tacit help from the GLC and others, all cemented together with a hefty dose of contingency.

So by 1974 the number of artists working from studio blocks and Acme live/work accommodation in the East End totalled over 350, a figure which excludes artists working from home or individual studios—the "dark matter" referred to in chapter one. These studio blocks were spread quite widely across the East End, with small but noticeable concentrations near the River Thames and in Shoreditch. And although this would not have been apparent at the time, the basic elements for the current concentrations of studios in Stratford, and along an axis stretching north from Spitalfields to Dalston were now in place. Thus we can see, admittedly with the undoubted benefit of hindsight, that a formative geographical pattern had been established, and although it would evolve, its basic form and the underlying structure expressed therein would remain unchanged.

Equally (and as we saw in table 2.1) in the first six years of the East End's putative new

role as London's artistic crucible, the basic blueprint of property types which could usefully be converted to studios was roughed out to a reasonable degree of accuracy, and would be subject to few additions over the following two-and-a-half decades.

But the first half-dozen years are most notable for the rapid growth and diversification of a new artistic agglomeration in East London. Both SPACE and Acme were completely new initiatives which were not guaranteed to be successful. That they were is due partly to the drive of those in charge and their determination to raise support and funding, partly to the massive decline in East London's fortunes and partly to the fact that the GLC was flexible—or desperate, or shambolic, or all three—enough to allow such initiatives the leeway they required to move ahead. The same can be said of the "independent" studios set up elsewhere during this period. The diversity of approaches—Acme, SPACE, Butlers Wharf, New Crane Wharf and Barbican Arts Group all worked along different lines—was perhaps no more than one might expect from groups of people predisposed to be creative, desperate to survive and with no firm precedents to follow. Here, necessity was indeed the mother of invention.

But this diversity is not just interesting for its own sake. By coming at the problem of finding working (and frequently living) space from a variety of angles, the different organisations, although acting solely on their own accounts, collectively established an agglomeration which was both resilient and flexible. Had one of the organisations failed, the artists therein could have moved elsewhere, or started up their own studio: in subsequent chapters we shall see this process in action. And if for the moment we conceptualise the artists' agglomeration as an system that evolves organically—a notion that is explored fully in chapter nine—it becomes apparent that such flexibility, resilience and responsiveness, when combined with the fluid context of the East End at the time, prove ideal for such a system to flourish.

But in the mid-1970s, something strange happened. Even more rapidly than it had started, the growth in the number of artists' studios stopped, almost as if those involved in the initial race for survival had sprinted to safety and now needed to pause to catch their breath. The question, of course, is why?

FIVE

THE HIATUS, 1975–1980

Anarchy for the UK
Is coming sometime, maybe.

The Sex Pistols, *Anarchy in the UK*, 1976

5.1 Of Politics, Punk (and Painters)

1970s London had more on its mind than fine art. Notable for its political turbulence, 1974 saw two general elections after the Conservative government was brought down by strikes (its Labour successor met the same fate in 1979): the first election resulted in a minority Labour government, while in the second Labour scraped a knife-edge majority of four (Hewison, 1995:160). Unemployment topped the million mark in 1975, and that year Britain confirmed its 1973 commitment to join the Common Market in a referendum which nonetheless saw over thirty percent of the electorate vote against joining (ibid:161). The post-war consensus which had survived more or less intact until the late 1960s broke down. The consequence was a "crisis of national identity that was national, regional and social" (ibid): the National Front rose in prominence, not least in response to Enoch Powell's infamous "rivers of blood" speech in 1969, and the nationalist parties in Northern Ireland, Scotland and Wales all established a firmer political foothold, much to the concern of the Labour government (ibid:163–171).

Combined with the concurrent economic crisis, the arts were not in the most comfortable of positions. Theatre, and its "community arts" aspect in particular, had been hit by economic cuts, and despite its formal support for community arts, the Arts Council's 1975 Annual Report reflected the economic climate and was called simply *The Arts in Hard Times*. Furthermore, the increasing polarisation of the Labour and Conservative parties was reflected in the Arts Council, leading the Labour party to acknowledge in its 1977 document *The Arts and the People* that the arts and politics were inextricably linked. However, even with a Labour administration, attempts to democratise the Arts Council proved fruitless, and the art establishment's hegemony

was left more or less unshaken, and not particularly stirred (ibid).

In the end it was left to the owner of a King's Road clothes shop, Malcolm McClaren,to release the safety valve on the undercurrents of seething resentment. His creation of the *Sex Pistols* in 1975 was the beginning of punk, an aggressive, (self)-destructive backlash against everything that "the Establishment" stood for. It was led by style: spiked hair, bondage gear, crude piercings. The music was aggressive, the lyrics brutal and often political. As Dick Hebdige observed, punk tangibly, visibly and volubly responded to and dramatised what was by then referred to as "Britain's decline" (ibid).

5.2 The Hiatus, 1975–1980

However the visual arts did nothing quite so dramatic, although punk did spawn a new style of graphic design which drew on the traditions of collage and montage. COUM Transmissions, based in Martello Street Studios and perhaps the most notorious "arts group"—the two main protagonists, Genesis P. Orridge and Cosi Fanni Tutti, specialised in more or less sexually explicit performance art—eventually formed a punk band which they called Throbbing Gristle. But how did all this affect the agglomeration of artists in the East End?

As we saw in the last chapter, from 1968 to 1974 the number of artists in studio blocks in the East End rose from zero to more than 360. But from 1975 to 1980, the number of artists in studio blocks in the East End actually fell slightly to fewer than 340. Interestingly, the annual return on industrial property in the UK rose rapidly, peaking in 1978 at 32% before falling again to 20% in 1980 (RICS, 1999:35): this is a point we shall explore in more detail in the next section.

In fact only one new studio block—in Metropolitan Wharf where SPACE already had studios—was established between 1975 and 1979, and that was in 1979. The years 1975 through to 1978 saw no new studio blocks at all in the East End, and activity in terms of the acquisition of space for conversion to studios was confined to Acme's consolidation of their housing portfolio.

Yields on industrial property aside, are there other factors which may have contributed to this sudden, and sole instance of numerical stasis? For example, is it at all significant that new initiatives at this time tended to be in terms of the art itself and how it was presented? To preempt one of the theoretical preoccupations of chapter nine, if we were to assume that there was some sort of evolutionary dynamic underpinning the in-migration of artists, how did it change, and why so suddenly?

Interestingly, the artists interviewed who were active at this time are quiet on this point. But it would be wrong to argue that nothing was happening. In 1975, SPACE organised the first East London Open Studios event, subsequently taken under the wing of the Whitechapel Gallery, whereby artists opened their studios to members of the public for a weekend, and in effect turned them into temporary galleries.

And then in 1979, Robin Klassnik, who as we saw in the previous chapter was one of the original artists at St. Katharine's Dock, but had since moved to Martello Street at London Fields in Hackney, went a step further, turning his own studio into a permanent gallery:

> …in 1972 I did a piece called postal sculpture, "yellow postal sculpture", which was where I, by chance, would distribute between 4 and 8 thousand brown paper envelopes. In this particular postal sculpture, which happened mainly in shops, in places such as Hornsey or Canning Town (this was at the ICA, for better or for worse doing it in an art gallery context…) and there was this yellow postal sculpture where I distributed these envelopes and you're asked to put a yellow object in and return the envelope, self-addressed envelope, and I would then make the piece of sculpture out of these yellow objects.
>
> And through that things came from all round the world because I would put these on windscreens in car parks in Piccadilly etc.. And one of these came from Poland, and we got, I got a handful of yellow cotton on bobbins, and it was from a guy called Jarislaw Kozlowski. And that was in 1972, and he, I discovered, we started writing to each other and I discovered he was running an unofficial alternative art gallery in Poland and, in '76 I think, he invited me to go over and show. It was showing there that gave me the idea or the concept of being able to use my own studio in Martello Street to open up something on the lines of what he had.
>
> His was truly alternative, and truly unofficial, for it was originally in his house. And from there [he] moved into the Students' Union, where for three days each month for six hours he would have room in a Students' Union building—four, five hundred square feet—where he'd put on an exhibition. For three days, two hours. After he'd started off showing—Richard Long, Laurence Weiner, John Hilliard, Michael Craig-Martin—they were established names already, and they were prepared for two hours to make a piece of work for this space. I was invited, and I made my piece, and I was very touched by the way it was run.
>
> …Anyway, it gave me the idea to open up, and it took me three years, three to four years before I actually had the courage to say OK, I have this space in Martello Street, it's a reasonable space, I have lots of ideas, some of which I can't quite articulate. You spent lots of time doing nothing, why don't I just open up a gallery in this space and try it? And I did that. I opened up once in '79, and in fact Matt's Gallery is one of the first I think, obviously I can't categorically say it was one of the first, it was definitely the first over the last thirty years, a space just to open up, I think there were people around just before me, I think there were people showing in their houses, Jenny Steiner, I think from time to time used her house as a gallery, but this was within a studio complex (Matt's Gallery, 1998:interview).

A wry response to the West End practice of naming a gallery for its owner, Matt's was named after Klassnik's Old English Sheepdog, Matt E. Mulsion. With the help of friends, Klassnik

cleaned up his space, painted the floor grey, and opened his gallery in 1979 with no idea of how long his nascent enterprise would last. Klassnik was clearly keen to keep the purity which had so impressed him at Kozlowski's shows in Poland.

> The first show was by the artist David Trystwick, who worked with Synis as well several times, and we did the first show. The next show, second show by Gerald Fisher and all the work since day one was made specifically for the space. Whether it be painting, or sound-works or sculpture.
> …This is where, this would be its first outlet, so the works were made with that in mind. And it went on, I subsidised it by teaching, it was run on a shoestring budget, the artist him or her self would have to invigilate with me, or without me if I was teaching on that day.
>
> (Matt's Gallery, 1998:interview)

Klassnik's initiative, and the uncompromising lucidity with which he pursued it, were perhaps symptomatic of a more general level of confidence on the part of artists in their ability to survive in what was, *prima facie*, a hostile environment. Clearly artist-led—such an initiative could hardly be anything else—experimental, small-scale and risky, the very fact of having the cheap space available in the first place made it possible to take such risks, particularly since Matt's was, in its early days, financed by Klassnik himself (Matt's Gallery, 1998:information sheet).

Demand for studios remained sufficiently high across London that Acme had to look elsewhere for space. In fact, although the bulk of Acme's property remained in the East End, Acme moved its headquarters in 1976 to Shelton Street, Covent Garden, and set up the Acme Gallery in a disused banana warehouse in the nearby fruit and vegetable market, again with the help of funding from the GLC, the Arts Council and the Gulbenkian Foundation, and in 1977 Acme became a revenue client of the Arts Council (Acme, 1995:15). In a move prefiguring their policies from the early 1980s onwards, discussed in the next chapter, new Acme studio blocks were established in Brixton and Hammersmith in disused industrial property rather than short-life housing, which by the end of the 1970s was threatening to become increasingly scarce as gentrification took hold, as David Panton explains:

> The property boom in the late '70s and early '80s put paid to the notion of there being free or cheap property lying around, with nobody interested in it. Everything suddenly became very valuable. The local authorities and GLC who did stuff let on a short life basis in one way or another tried to claw it back in order even to redistribute it within that authority or resell it off.
>
> (Acme, 1997:interview)

SPACE meanwhile concentrated on consolidating its existing assets in the East End, and

in 1978 moved its HQ from Shaftesbury Avenue, where it had been based since 1975, to Rosebery Avenue on the northern fringe of the City, where AIR Gallery was established as a permanent gallery space (SPACE, 1998: anniversary leaflet).

There is a certain irony in all this: for all that the East End arts scene appears to have been relatively stable—at least insofar as the number of artists working there remained more-or-less unchanged—as we saw at the beginning of this chapter, the arts world in its broad sense was of course undergoing its most significant upheaval since the 1960s, and any initiatives in the visual arts world at this time were less about survival, as they were in the first six years, and more about presenting work, and enabling others to survive and present their work. So as well as starting up the Acme and AIR Galleries, Acme and SPACE co-wrote the leaflet *Help Yourself to Studio Space* (Acme/SPACE, 1975), which had the specific aim of passing on the knowledge gained through their own differing experiences (fig. 5.1 overleaf). And in 1977 Acme commissioned and published the first edition of the *Artists' Guide to London*, a compendium of art galleries, shops where artists' materials could be bought, museums, studios and so forth.

The picture which emerges of the years from 1975 to 1980 is one which indicates that the East End arts scene, in terms of its physical infrastructure at least, was reasonably stable. True, it was not gaining artists, but neither was it losing them.

The interesting thing here is that again we see a pattern of relatively rapid diversification of ideas followed by a consolidation of those that work. Those that did not work simply did not survive: to put an evolutionary "spin" on the topic, they were selected out. Conversely, those that had no need to change did not do so. So Matt's Gallery, for example, had become settled in its function by 1980, and functioned in much the same way a decade later.

Robin Klassnik:

> It's still the same, even while we're here [Copperfield Road]. Nothing's changed except we have much larger premises, some might say that we now have an institution. I don't think we have an institution. We have something which is very similar to its original model except it has grown up. I think we've always acted as an institutional museum. I've often said that I saw myself as a museum from day one, and I don't think that was arrogant of us. It's a museum.
>
> (Matt's Gallery, 1998:interview)

Matt's Gallery then, was the first non-commercial art gallery in the East End after the Whitechapel (although people are not prevented from buying work if they wish to do so). But 1979 also saw the foundation of Art for Offices, the first commercial gallery organisation in the East End, and in the story of its foundation, we also gain some germane insights into the broader urban context at the time.

Founder and Director Andrew Hutchinson:

> I wanted to have my own business and make some money and I thought, rightly or

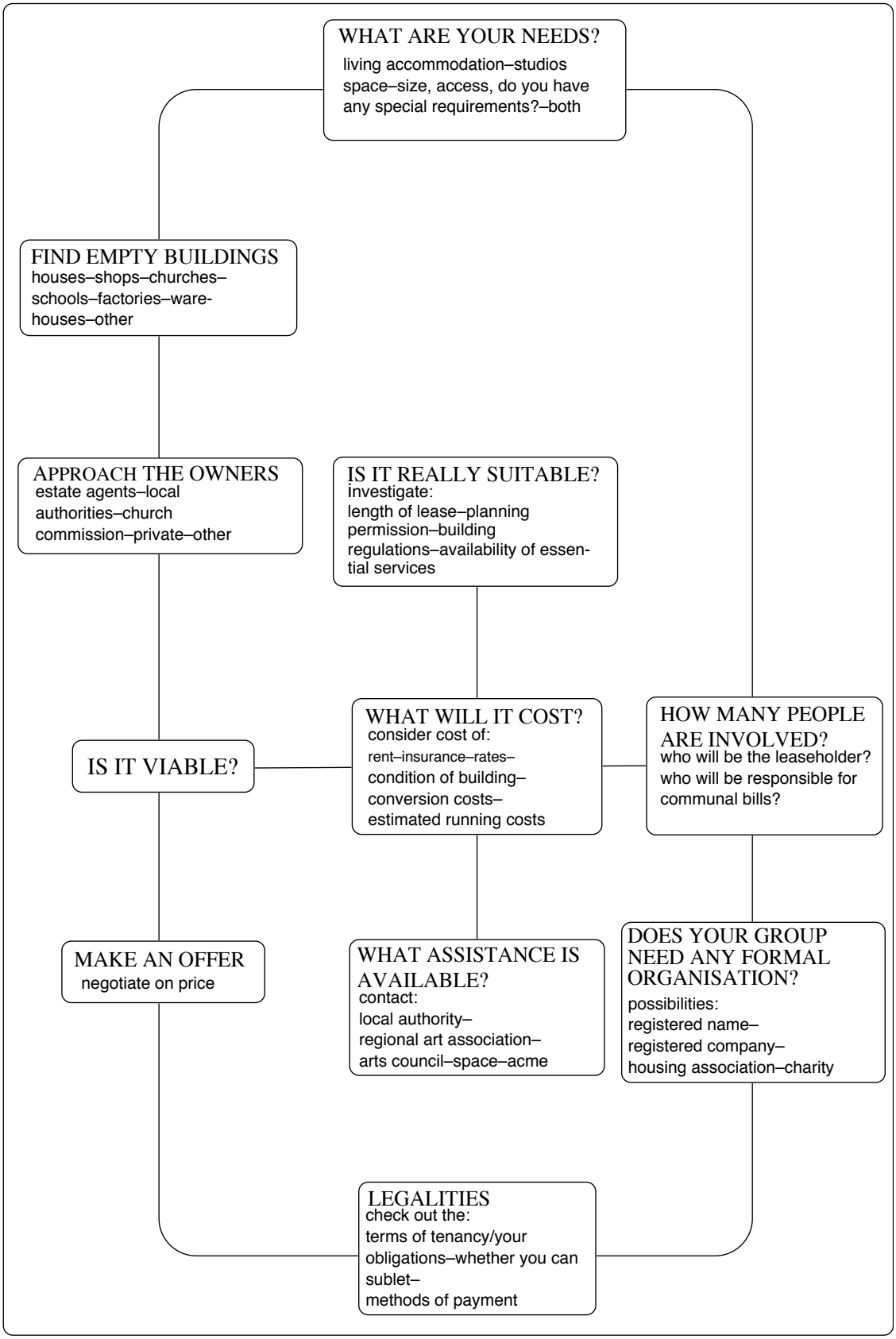


Figure 5.1 Explanatory diagram from the joint Acme/SPACE publication *Help Yourself to Studio Space*—as relevant in 2001 as it was in 1975.

Source: SPACE/Acme, 1975

wrongly, the biggest market, potential market for art was not in the private sector, the private collector, but in the commercial sector, and on a little bit of research, one discovered in 1978 that there was no company such as Art for Offices in the UK except for one, and actually we started at the same time, 1979, so we were one of two to start this ball rolling.

…You went into Chase Manhattan Bank in New York and they had wonderful paintings and an extensive collection and there were hundreds of companies like that in the States. There were very very few in the UK—Unilever, a few were starting up then, literally had only started up in the last twenty years, or twenty-five years maximum, so it's still quite early days, and that wasn't the fault of the companies and the clients. I think they probably wanted to have art and an art collection, but there was no mechanism for doing it, other than an enthusiast—the MD, Chairman of the board—actually going out on behalf of the company and visiting lots of different galleries and acquiring art. We came up with the concept of having a centralised "one-stop" service where we can do everything from sculpture to signed prints to paintings to tapestries to photography to ceramics, where the client can rent the art as well as buy it, have work specially commissioned—site-specific stuff—so we collected artists like crazy, and we're now up to over 800 on our books, because we need that range of art.

The reason for settling in Wapping was purely an issue of economics, and getting the most floor space for the least money.

Andrew Hutchinson:

When you start a business and you've got no money, you go for the lowest possible overheads and we were paying 50p a square foot rental and we took 3000 sq. ft. in Metropolitan Wharf as our first space; we ended up with 9000 sq.ft. when we left eleven years ago. Our rental was 1500 quid a year.

…I did [know there were lots of other artists there at the time]. But it was those factors. It was low rental, it was adequate space. We were advised initially by a few people we consulted—business men and so on—that no one would come to Wapping, you know no business man would *ever* come to Wapping Wall to a gallery. Where the hell was Wapping? You know, people didn't go east further than St Katharine's Dock, you know, it was unknown territory…

Docklands was a desolate, decaying ghastly area, so no one went there, or came out alive, or so was the conception! People said "you've got to be in Dover Street, you've got to be in Piccadilly, you've got to be central, a business man is not going to come to Wapping". We proved them wrong, absolutely wrong. They came with their chauffeurs and probably a few security guards [laughs], but er… we even got the Duke of Gloucester down one time and he came on his motorbike! But it was no problem, it was an adventure and it was great and it was successful right from the start.

(Art for Offices, 1998:interview)

For Hutchinson then, and from his business's point of view, Wapping could hardly have been better: overlooking the River Thames, with more than 3000 square feet of space; right on the edge of the City of London, and with the low overheads typically associated with that sort of property at that time, Art for Offices both tapped into a new market, and by dint of their locatio were able to survive despite the prevailing scepticism.

But perhaps the project which most effectively sums up the combination of a broadening of aims and an increasingly pragmatic response to external factors such as the property markets was that born of the demise of Butlers Wharf Studios in 1979: Chisenhale Studios, Chisenhale Gallery and Chisenhale Dance Space, which established themselves in a derelict veneer factory in Chisenhale Road, Bow. A blue plaque on the brickwork tells us that it was where Spitfire propellers were made during the second World War, and its brick frontage runs along Chisenhale Road, overlooking a Victorian school, in an area which otherwise comprises late 19th century terraced houses. Along the back of the studio block, and behind the houses on that side of the road, runs the Grand Union Canal. Initially there was no financial support for the new venture, and the thirty-five or so artists involved each donated £90 to a central "kitty" to which they added £10 each week. This sum was augmented by £2000 which had been raised at a farewell party at Butler's Wharf (APT, 1990:4). One of those founding artists was Maurice Agis:

> I think the fight came when they started closing it [Butler's Wharf] down in 1979, 1980. There were tales of planning, tales of building, tales of development. Then we became a bit more organised because it was all under threat. Then a group of us got together and created an organisation which then went to see lawyers—Artlaw.
>
> We approached them and they decided to write letters and we got the press involved. We came up with a constructive plan. We said that one of the buildings should be put at the disposal of the artists, paying rent, and should be refurbished. This would have been a fantastic idea. This was the dream, and this was the idea. We tried to persuade the organisation, company to make over one of the buildings on the front, turn it into studios, proper working studios. We were looking ahead and thought this would be such an investment for them, and a fine thing to do. I still think it is and I think it would have been absolutely fantastic to have one of those buildings. Now it's too late, you know, but at that time, I think it would have been a… looking at the future kind of project.
>
> When we were told to leave, a group of us got together, we formed this space, deciding that never again would we subject ourselves to that kind of, like, bum's rush. That's how APT started. By getting together and deciding to formalise ourselves in a charitable set-up, and get proper leases and all that kind of thing, get lawyers and stuff involved. Sadly that kind of activity which I find myself involved in, is pretty flat. It's like a bloody school half the time, and it's only practical in the sense that it kind of like protects you, the building and you as an individual, but it's not organic, it has no dynamic, it's just a place you rent, and we tried indeed to set this off in a more, like, realistic way with having a strong com-

munity base and having a gallery for the artists. That's all eroded, that's all gone by the board, and it's just another arm of the Establishment now. And indeed I think all these organisations are. They're about as dynamic as a wet paper bag as far as I'm concerned. Because they just literally come just simply as a practical thing to safeguard their security. There's no artistic or social ideology behind it.

(Agis, 1998:interview)

Agis's view, of course, although regretful of the fact that there is, and has been no "social or artistic" ideology behind the foundation of many studios, is basically accurate—the point primarily was to enable artists to work, and to exhibit that work. But as Sue Jones, the current director of Chisenhale Gallery explains, the studios and the gallery have since drifted apart, and the original ideology has been lost in the process.

The gallery was left as an empty space when the artists moved in to the building—they'd planned it to be a gallery. It was a much bigger space then as well. And they really started by having individual exhibitions, and invited other artists and did educational projects. And then I think it was '86/'87 that they took on a curator. And then it wasn't till '93 that the gallery actually became a separate company. A company in its own right with its own board of trustees. And that was a sort of painful transition.

…[because] the artists really had a sort of specific idea about how it would be when they started it, and the whole building was very much together as a co-op. And the gallery moving away and becoming its own place with no attachments to the studios any more was a difficult thing to comprehend.

NG Was the gallery originally ideologically driven as an artist-led space?

SJ That was very much the idea, yes. …I think because when it was run as an artist-run space. They realised they needed a curator to drive it to make things happen to build up the energy and the programme. And then of course having curators meant that the curators wanted to do what *they* wanted to do, and to have their own programme and not just show artists in the building, or be managed by a group of artists. They want to have their own programme with their own integrity. So it moved away.

(Chisenhale Gallery, 1999:interview)

Chisenhale Studios and Gallery was the first of the "independent" studios to be established within a relatively formal structural framework, and marked the beginning of a new phase in the growth of the East End's agglomeration of artists.

But in the turbulent years leading up to the turn of the decade, it was almost as if the artists had the freedom to act, and the necessary spaces in which to do so; they could simply get on with their work. They did not need to follow the property markets; that was the job of Acme

and SPACE, who supplied the studio spaces (figures 5.2–5.4).

However, contemporary debates about the role of art, and the questioning of the modernist "art for art's sake" ethic, did serve to shift the focus on to how the public money used to finance arts organisations could be better used to benefit that public. The Labour Government's 1977 report *The Arts and the People*, which as we saw earlier explicitly acknowledged the political dimension of artistic practice, crystallised the official view that the arts could and should bring genuine benefits to local communities (Whitechapel Art Gallery, 1995).

It was at this time then that the Whitechapel Gallery, originally founded in 1896 by Canon Samuel Barnett, and completed to the designs of C.H.Townsend in 1899 with financial help from John Passmore Edwards (Weinreb & Hibbert, 1988:956), began its rise to prominence as something of a focus for might very loosely be called an East End "arts scene". The Gallery's original impetus had been the bringing of art to the East End's impoverished and beleaguered communities, but this "community role" had gradually declined in importance during the decades since its foundation, as its profile as a contemporary gallery of international stature had risen. Thus the general shift towards community art helped to recover the original impetus, and in 1977 an Education and Community Officer was appointed, while the following year the exhibition *Art for Society* aimed to demonstrate to visitors

> ...that contemporary art might play a larger role in shaping their daily lives. It will also succeed if it provokes discussion about the role and purpose of art amongst that "small un-

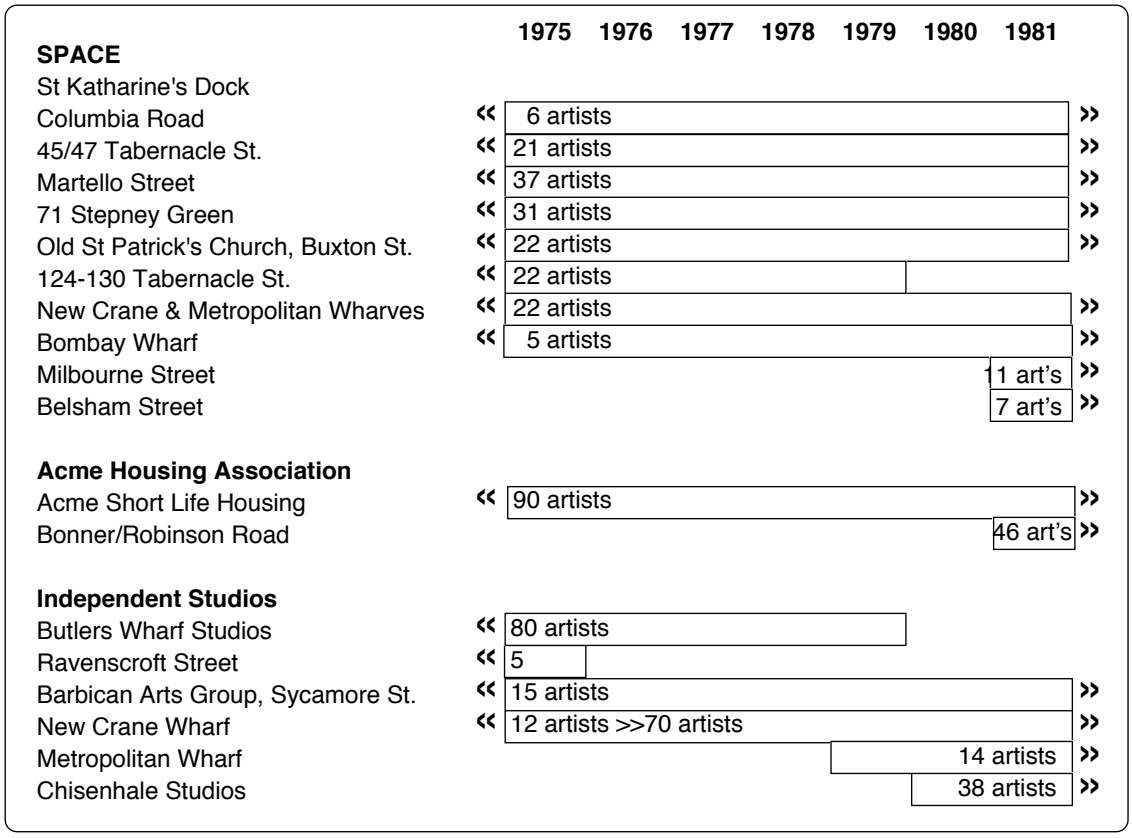
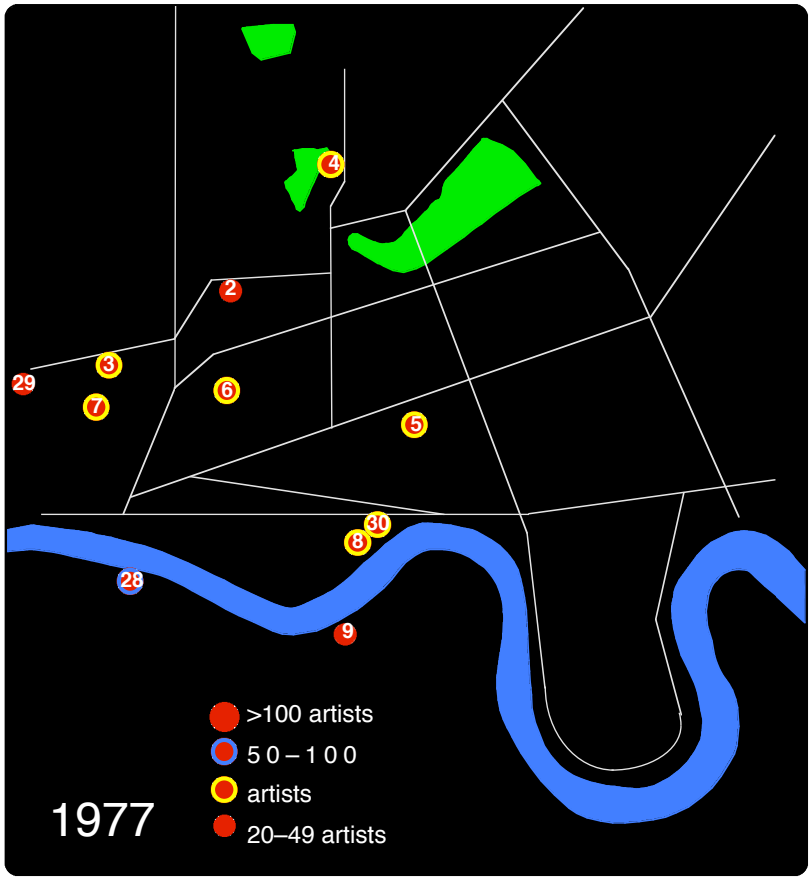
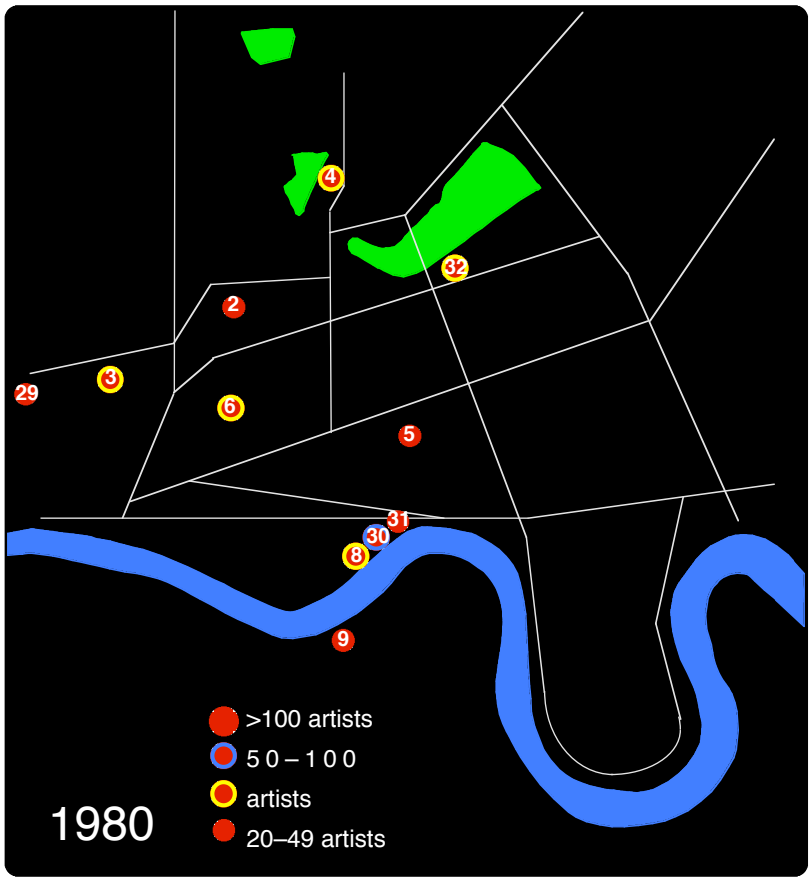


Figure 5.2 Studios in the East End, 1975–1981



1–16, SPACE Studios. 2. Columbia Rd.; 3. 45/47 Tabernacle St.; 4. Martello St.; 5. 71 Stepney Grn; 6. Old St. Patrick's Ch.; 7. 124-130 Tabernacle St.; 8. New Crane & Metropolitan Wharves; 9. Bombay Whf.; *20-28, Acme.* 20. Various Short Life Housing - Acme HQ in Covent gdn, approx 140 houses managed across London; *28-71, Independent.* 28. Butlers Whf.; 29. Barbican Arts Grp.; 30. New Crane Whf.

Figure 5.3
Map of Studios, 1977



1–16, SPACE Studios. 2. Columbia Rd.; 3. 45/47 Tabernacle St.; 4. Martello St.; 5. 71 Stepney Grn; 6. Old St. Patrick's Ch.; 8. New Crane & Metropolitan Wharves; 9. Bombay Whf. *20-28, Acme.* 20. Various Short Life Housing - HQ in Covent Gdn. approx. 200 houses managed across London; *28-71, Independent.* 29. Barbican Arts Grp.; 30. New Crane Whf.; 31. Metropolitan Whf.; 32. Chisenhale Studios

Figure 5.4
Map of Studios 1980

typical proportion" which comprises the community of artists, critics and followers of contemporary art (*Art for Society* Catalogue, quoted in Whitechapel Art Gallery, 1995.)

The stated aim of addressing the artistic community was important, for although the Gallery had exhibited the work of local artists in the Open Exhibition since 1932, it had not attempted to take this concept beyond its own walls (ibid). But as the local artistic population had grown in the early 1970s, so the Whitechapel developed strategies for taking art to the people, either by showing slides of the exhibition to local schools, or by including in the exhibition artworks located outside the Gallery. The emphasis on combining the practice of art with the study of contemporary art meant that by the early 1980s, the work of the Whitechapel differed significantly from that of the many other galleries pursuing similar ends (ibid). And in carving out this niche for itself the Whitechapel Gallery, like the other studios and organisations in existence at this time, was simply attempting to secure its own future.

5.3 Of Painters, Property and Percentages

The last chapter closed with a question about why the number of artists and studios in the East End stopped rising, and I speculated at the beginning of this chapter that one answer might lie in the property markets at that time. So before closing this chapter and moving on to the period from 1981 to 1985, I want to look briefly at what had been happening in the property markets during those dramatic early years, and beyond. All figures for returns on property are taken from *The UK Property Cycle—a History from 1921 to 1997* (RICS, 1999). The graph in figure 5.5 overleaf shows the growth in the number of artists in studio blocks in the East End from 1968, and the national annual real rates of return on industrial property (source RICS, 1999:35).

The first point to note is that there appears to be a pattern for the years from 1968 to 1998, which can be described thus:

- IF the increase in real rate of return on industrial property declines relative to the previous two year point THEN the rate of increase in in-migration of artists increases relative to the previous two-year point AND

- IF the increase in real rate of return on industrial property increases relative to the previous two year point THEN the rate of increase in in-migration of artists declines relative to the previous two-year point.

This pattern holds for all but two measurement periods, 1970 to 1972, and 1978 to 1980, and for both these "anomalies", there are, I think, plausible explanations. In the first instance, the initiatives of SPACE, and then Butler's Wharf simply absorbed excess demand from artists for studio space—a process of "taking up the slack". In the second instance, the sudden drop in the number of artists can again be traced back to SPACE and Butler's Wharf, but this time in a re-

versal of the previous scenario. In 1979, some eighty artists were evicted from Butler's Wharf, and SPACE lost twenty-two studios from 124-130 Tabernacle Street. In other words, of the nearly four-hundred artists in the East End in 1979, a hundred lost their studios—in relative terms a cataclysmic event—and the figures suggest that of these about half found new spaces, whilst the others—presumably—dispersed. Whether these artists moved to other parts of London, or to single studios in the East End is not known, and this question of "dark matter"—artists to whom anecdotal evidence refers, but who do not appear in the statistics—was covered in chapters one and two. In fact, as figure 5.5 shows, this "loss" is apparent simply as a large "dent" in the steady growth in the number of artists in the East End.

However, for the remainder of these two decades, the pattern set out above holds, with the rate of increase in the number of artists mirroring neatly the fortunes of the industrial property markets. The question of whether these patterns are evidence of a causal relation is not easy to answer, but there does seem to be a fairly clear-cut correlation in the evidence.

But once we get to 1988 something odd happens, and the pattern simply collapses for six years, and in an unexpected way. When rates of return on industrial property increase, so too does the rate of in-migration of artists. When the rates of return decrease, the rate of in-migration follows suit.

The answer perhaps is that by now, the collapse of the East End's industrial base was, to all intents and purposes, complete: one might expect that to be reflected in rental values for the

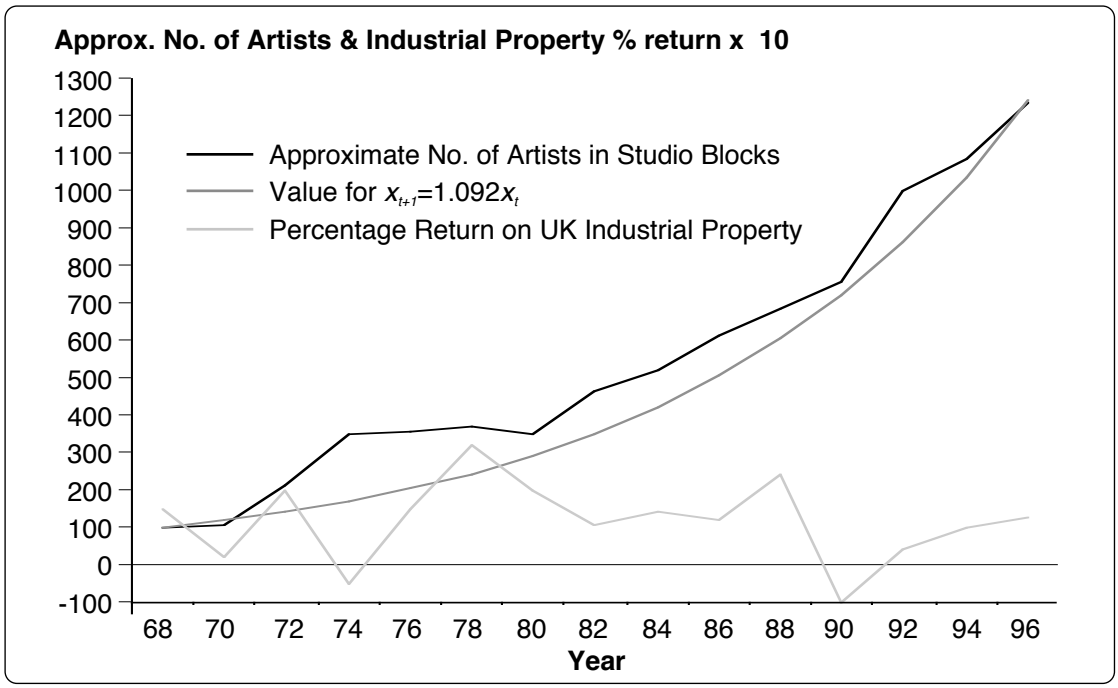


Figure 5.5 Growth in the number of artists in studio blocks, 1968–1998, compared with percentage returns on UK industrial property (source: RICS, 1999) during the same period. This graph excludes artists working from home or in single studios, for whom estimates are based in hearsay and vary from 500 to over 2000. The figures presented in this graph were calculated by the author through archival research, by visits to the studio blocks themselves where they were still functioning as artists' studios, and by interviews with those who occupied studio blocks which have since closed. The growth is roughly exponential, approximating to x_{t+1}=1.092x_t where x_{t+1} is the number of artists one year after x_t.

area. The problem is finding what those values are. A trawl through the advertisement columns of the Evening Standard reveals little consistency in the way in which industrial property was advertised, nor it does tell us a great deal about the state of the property. Typically, an advertisement comprises a postcode and telephone number, a brief description (for example "light industrial" or "factory"), sometimes the floor area, and sometimes the rent; in terms of rent per unit area per unit time, there is considerable variation (Table 5.1). The only obvious pattern is that in terms of column inches of advertisement space, the East End tends to predominate, which is hardly surprising. The point though, is that we should be very cautious of drawing any conclu-

Date	District	Postcode	Type	Area (sqft)	Rent	Period		
£pa	**£/sqftpa**							
1968		E1	Workshop		12	pw	624	
	Shoreditch High St			French-pl	factory/warehouse		2000	475
475	0.2375							
		W1	light industrial/stock rooms					
	Leytonstone	E11	warehouse/dist'n depot		1200	pa	1200	
1971		N19	Light Industrial		1500	pa	1500	
	Barking Rd	N13	Light Industrial	2K–40K	10/-			
	Hornsey Rd	N19		5600	2800	pa	2800	1.4
		N1		700	640	pa	640	0.32
		N1	Printing Works	600	28	pw	1456	0.728
		N19	Light Industrial		30	pw	1560	
	Camberwell		Factory	3500	2500	pa	2500	1.25
		SE10	Factory	500	12	pw	624	0.312
		N19		1400	30	pw	1560	0.78
1974		N1	Workshop	500	25	pw	1300	0.65
	Aldgate	E1	Clothing Factory	1750	750	pa	750	0.375
	Harrow Rd		Warehousing	4250	4750	pa	4750	2.375
1977	*?*	SE1	Light Industrial	2200	2600	pa	2600	1.3
1980	West Kensington		Light Industrial	2520	2000	pa	2000	1
	Chalk Farm		Light Industrial	3000	2750	pa	2750	1.375
1983	Wandsworth			200-500				1.5
		SE4	Workshops					2.5
		WC1	£21 per week (floor area not given)					
1986	Two columns, predominantly East End							
1989	Classified Advertisements for Industrial Property not present.							

The classified advertisement industrial property columns of the Evening Standard were scanned for January 1968 through to January 1998 at three yearly intervals (ie the same years as the maps of studios), but by the late 1980s there is an almost complete dearth of useful information on this.

Generally, and as can be seen from this table (which lists the most "complete" advertisements) the available information is thin, and there is very little consistency either in the way it is presented or in the prices. Furthermore, it is probably reasonable to assume that industrial properties advertised in the Evening Standard were not derelict, unlike many of the properties taken on by artists: it is worth remembering that artists tended to take on property which no one else wanted.

When contacted by telephone, the London Boroughs of Tower Hamlets and Hackney were unable to provide figures for industrial property in their boroughs.

Table 5.1 Industrial Property to Let, 1968–1998

sions from these rental figures: for the time being at least, we must take the artists at their word; they moved to the East End because of its plentiful supply of cheap space.

Even so, we can say this much. The East End in which we are interested, the *artists'* East End, was no longer a real part of the UK industrial property markets; and the investment figures from the mid-1980s onward no longer reflect the East End's fortunes, as they would have done during its final years. By 1988, the last of the docks had been closed and derelict for seven years, the Isle of Dogs was by now a huge building site, and in a very literal way, the "old East End"—in the Docklands at least—was being erased. Rates of return on industrial property have little to offer by way of help with our analysis at this point, although we can observe that during the 1990s they have, compared to retail and office returns, been "less consistent" (ibid:35).

So from 1974 to 1980 we have a pattern consistent with our two IF–THEN hypotheses set out above, which suggests that, in view of the steady rise in rates of return on industrial property during this period, we would expect the rate of in-migration to decrease. And with that in mind, I shall first close this chapter, and then return to the narrative history in the next.

5.4 Discussion

At first blush it seems ironic indeed that at a time of such political and cultural turbulence, the agglomeration of artists in East London should experience a pronounced lull in its growth: but, numerically at least, such was the case in the years between 1975 and 1980.

However, I do not believe that we should be overly surprised by such a lull. For as long as the artists had space, and could afford the rents, they were relatively secure. What they had to concentrate on was getting their work to a wider audience, and somehow earning a living out of that if they possibly could; nonetheless then, as now, the majority of artists had to work part-time to support their artistic practice. The place from which they generated that art—their studio—is of secondary importance in that respect, in the same way that an office is selected primarily to enable the efficient procurement of a job at a reasonable price. So survival remained as a primary motivator in getting cheap studio space for people whose funds were limited. Indeed, anecdotal evidence from the many artists I have spoken to over the last five years suggests that in this respect, the standard of living, and the way of life, for the average artist has changed little in the last three decades.

We know that the demand from artists for studio space existed, and we know that artists had by now decided to set up galleries. Art itself seemed to be reasonably healthy, albeit insofar as it was happening, and it had plenty to react to in the outside world. And the number of art students was increasing steadily too: from just below 11,000 in 1975 to 14,000 in 1978 (see Appendix Three).

The half-dozen or so years from 1975 to 1981 then, were really a hiatus in the continuing evolution of the East End artists' agglomeration. But they were also notable for the attempts to explore different sets of possibilities for carrying out artistic practice from a base which for the

time being at least, and despite the agitated circumstances, was, and would continue to be, reasonably stable.

SIX

CONSOLIDATION, 1981–1985

6.1 Focus Resumed

There is a sense in which this short chapter simultaneously forms a postscript to the last and a prologue to the next: it describes the end of the hiatus of the previous few years and, incircumstances—perhaps coincidental—which reflect to a remarkable degree Margaret Thatcher's claimed distrust of centralised power structures, it marks a point at which Acme and SPACE became "the establishment", and smaller, "independent" studios became the norm for new studios. The growth of those small independent studios in the late 1980s and early 1990s is the subject of the next chapter. In this chapter, we see the centre of gravity of London's contemporary art scene shifting decisively to the East End, at a time when Britain's cultural institutions were getting a major overhaul from the new Conservative administration.

The turmoil at a social and political level which had wracked most of the 1970s gave way in the 1980s under Thatcher to a renewed sense of direction, albeit one that many people did not agree with. The gap left by the decline of the post-war consensus during the 1970s became, by the end of that decade, a "pathological" national condition according to the ex-Chancellor of the Exchequer Nigel Lawson (Hewison, 1995:209). Thatcher's approach, in essence, was not to try to reinvigorate that consensus, but to accept the economic trends—in particular the decline of industry—and to set about the business of rebuilding a post-industrial society on the basis of a new "enterprise culture" (Hall, 1998:888 et seq; Hewison, 1995:209–210).

Simultaneously, a new (specifically Anglocentric) consensus would be built around "themes of law and order, the traditional family and patriotism" as opposed to the previous "permissive society" (Hewison, 1995:211). However the economy became "the focus of national anxiety", signalling a shift in the status of the individual from citizen to consumer (ibid:212), a shift which would greatly affect the East End artists' agglomeration in the 1990s as

the "lifestyle" became a buyable commodity through the goods associated with it.

For Hewison, the new order of this "Thatcherite revolution" was only possible because the old order had collapsed irrevocably in the 1970s (ibid:219). As David Harvey (1989) has pointed out, communications technology and ever-decreasing transport costs made the world smaller and smaller, and enabled a true global economy which transcended national boundaries. Such large markets need large advertising campaigns, and the advertising agency Saatchi and Saatchi, founded by two brothers (one of whom, Charles Saatchi, would become Britain's leading art collector of the 1990s) in 1970, had by the mid-80s became the world's largest. A decade later, however, after a steady decline in the agency's fortunes, Maurice Saatchi was dismissed as Chairman, and the two brothers sold their shares in the company (ibid:220).

Saatchi and Saatchi had been responsible for the Conservative Party's advertising campaigns, and this elision of the commercial and the political was reflected in the way in which the new administration dealt with the arts. A constant critic of the Reithian ethic, Thatcher felt that choice, not quality was the paramount consideration in broadcasting, and she set about ending the BBC-ITV duopoly, and releasing the BBC of its—in her view—paternalistic high-mindedness through the appointment of more commercially orientated chairmen (ibid:232–236).

The Arts Council fared little better: unfocused at the turn of the decade, it was criticised both for being too progressive, and for ignoring the avant garde. Expectations of the Arts Council had been raised while the Conservatives were in Opposition—they had called for the arts budget to be doubled—but the realities of government hit hard, and within a year of the Conservatives taking office, they had cut the Arts Council's budget by one million pounds (ibid:246). Taken by surprise at the severity and suddenness of the cuts, the Arts Council panicked and withdrew funding without warning from forty-one companies, prompting accusations of arrogance (ibid).

Nor was the Arts Council immune to political pressures, and the appointment in 1982 of William Rees-Mogg as Chairman confirmed the Government's interventionist approach (ibid:248). The Arts Council's approach during the Thatcher years would strictly be one of "value for money".

Unlike the BBC and the Arts Council, the Greater London Council was able to both voice and articulate its opposition to the government's approach to culture. Although its 1981 election manifesto barely mentioned the arts, the decline in industry and the associated working-class vote meant that a new "post-industrial" constituency had to be wooed. Thus it was that "black British, Asians, middle-class people working in the public sector, and the small but articulate pressure groups of gays and lesbians" were targeted, through an "alternative form of mobilisation and communication" which centred around culture (ibid:236).

The GLC thus broadened the definition of the arts "to include photography, video, electronic music and community radio", handed out grants and organised festivals. They had discovered something which had perhaps passed Margaret Thatcher by: to quote Tony Banks, the chairman of the Arts and Recreation Committee, "We could …use the arts as a medium for a political message" (ibid).

6.2 Consolidation 1981–1985

Political messages were not, however, at the heart of the East End artists' agglomeration; survival remained the top priority. Acme returned to the East End in 1981, moving its offices to Bethnal Green and closing the Acme Gallery and returning it to the GLC for demolition in the same year, prompting art critic Waldumar Januszczak to comment in *The Guardian* that "it wasn't always easy to understand what the Acme Gallery was trying to say but it was usually worth trying to find out. The Acme was very much a gallery of the seventies, a gallery devoted to extremes, a rallying point for the avant garde. And now that the last Acme exhibition has begun, we can confidently say that the seventies are officially over" (quoted in Acme 1995:15).

It was at this point that the centre of gravity of London's artists became firmly established in the East End, particularly with the foundation by members of the Butler's Wharf group of Chisenhale Studios and Gallery, and Acme's shift shortly afterwards into light industrial property, and their virtual abandonment of short-life housing, along with their departure from Covent Garden for a new headquarters in Bethnal Green.

Butler's Wharf, though, was not the only riverside studio block to succumb to the property developers; Fawe Street Studios was founded in 1984 by Ken Oliver and others after they had been evicted from Metropolitan Wharf. Far from being rebels, or from making political statements, this "first generation" of East End artists simply wanted to settle down and get some stability into their lives.

Ken Oliver:

> This [Metropolitan Wharf] was great and it was cheap, but most areas when artists go in, they can get a bit trendy so that people think that er, "oh it looks like Soho or Montmartre in Paris" and they said "we're going to turn them in to apartments" so we then started looking elsewhere. But we didn't want to rent. A lot of the artists were getting on a bit to be honest, and didn't think, the idea of finding somewhere where you've got to put all the work in and then it gets given back to the landlord again, we didn't really want to do. So we drove round and found this block, which was completely derelict…
>
> This was in… '84. Ten years on from that [the establishment of Metropolitan Wharf Studios]. We sort of found it. I mean, superb space, you know, big spaces, superb building, very like Wapping I suppose in a way, similar feel, and we'd got used to that. The bloke who owned it wanted rid of it. He was an estate agent in South Ken, and he didn't particularly want to hang on to it, so we got it very cheaply. There was ten of us got together and tried to scrape a bit of money to buy the block, and before we agreed to buy it, we said we wanted change of use from industrial to half live half work space, which in '84 was quite difficult to get. So we applied for that before we actually agreed to buy it. The guy who was selling it said "well I'll give you six months to get, you know rustle the money up and to get all the planning consents". He was quite interested in the art in some ways. His son worked at Sotheby's, and he was very generous in a way because we wouldn't have bought this building if we couldn't have got change of use. The artists who were buying wanted, as

> a co-operative, live-work spaces, so if we hadn't got that it wouldn't have been possible.
>
> (Fawe Street Studios, 1998:interview)

Fawe Street Studios was one of the first attempts by artists to turn industrial property into live-work space; the complex was originally a pet-food factory (Fawe Street Studios, 1998: interview): internally it houses airy studios and flats, has a large central yard and is also home to a fine art foundry. It still retains an industrial "feel", which to an extent belies its actual use.

By the mid-1980s, Acme too were beginning to broaden their portfolio. Besides taking on short-life housing from Hackney as well as Tower Hamlets and the GLC, they had also started to take on light industrial spaces: forty-six studios were established with Arts Council funding in a rambling and redundant 19th century brush factory in Bethnal Green between Bonner Road and Robinson Road in 1981; a 1920s Players cigarette factory became Orsman Road Studios in 1983, housing 28 studios, and in the same year twelve studios were established five minutes' walk from Bonner Road Studios on Old Ford Road, in late 19th century houses overlooking Victoria Park and the Grand Union Canal (Acme, 1995:16). The landlords for Bonner Road and Old Ford Studios were the Crown Estate Commissioners, while Research Engineers Ltd. were the landlords at Orsman Road (ibid). Meanwhile, what was perhaps the most ambitious "independent" initiative to date was being instigated roughly a kilometre south of Bethnal Green, in an area better known for its political and seafaring history.

Cable Street Studios, at the eastern-most end of a street made famous in the 1930s for its eponymous running battle between Oswald Mosely's fascists and the police—itself commemorated in the Cable Street Mural—was, like Fawe Street Studios, started in 1984 by artists who had previously been in Wapping.

The Cable Street Studios complex was impressive: a Victorian sweet factory originally, with a large and imposing gated entrance, surmounted by a clock tower, leading to a broad courtyard. The building is in London stock bricks, in what might loosely be termed a "Victorian municipal style", reminiscent of the factory in Roald Dahl's novel *Charlie and the Chocolate Factory*. Inside it was subdivided into over 150 studios, reached through long white corridors with fire doors, and staircases half open to the elements. The studio spaces themselves did not feel particularly spacious, although they were well-lit and dry. One wing of the complex housed a small café where artists could meet and talk, but it was quiet and empty when I visited mid-morning. The main complex also housed two gallery spaces, and leading off the cobbled yard was a large shed with half its roof missing, full of junk, open to the wind and rain.

Ex-director, Michael Cubey:

> Three artists, Mike Deakin, Keith Patrick (who started Contemporary Artists' Magazine) and Martin Lilley who had previously been in Met [ie Metropolitan] Wharf, I think, he came here in 1984 and leased I think it was the second and third floors, might have just been one floor originally, I'm not sure. There were about 50 studios which were originally let on an *ad hoc* basis—artists coming in and saying "oh we'd like", stretching out their

> arms, "this much space". Martin was a carpenter, he helped do a lot of the conversions. Speaking to some of the people who remember it, it was always a much more commercial enterprise than say SPACE.
>
> The landlords were the present landlords, a property company called Liberty Investments, basically two Indian brothers. They own the freehold. The problems that Keith and Patrick and Martin ran into, hadn't accounted for—rates—they hadn't accounted for the fact that… that's all they wanted, to raise the rents. So they had to raise the rent to artists, so they lost about 50 percent of the artists. The landlords then, they sort of disbanded themselves and the landlords kept Mike Deakin on as studio manager. They thought if the studios were converted they may as well keep them occupied. So he was paid to run the studios, so in that sense it's quite different from a lot of artist-run studios.
>
> (Cable Street Studios, 1999:interview)

Cable Street Studios, as we saw above, started with about 50 artists, and by the mid-1990s was one of the two largest studio blocks in London. It was unusual because its commercial basis meant that it could not respond as sensitively to the needs of artists as pure "artist-lead" initiatives. This is most notable in the early battles which the artists had with the landlords to keep rents affordable. It seems, though, that the landlords learned the going market levels for studios quickly enough, since after the shaky start, Cable Street Studios grew to be the largest independent studio block in London, and the second largest block of all, housing 150 artists: it closed late in 2000, and the complex was put on the market for five million pounds (Michael Cubey, personal communication, March 29th 2001)

The largest though, was established by Acme in 1985 in the old Yardley cosmetics factory set back from Carpenters Road at the edge of Stratford Marsh, and like Cable Street, it housed some fifty artists in its early years. The conversion from factory to studios was a major undertaking, and was funded by the Arts Council and an Industrial Development Grant from the London Borough of Newham (Acme, 1995:16).

In 1983 Acme established the Showroom which, like Chisenhale Gallery, had its origins in the needs of artists in adjacent studios who wished to to exhibit their work—this time the Acme Studios at Bonner Road—and Acme at this time did not have a gallery space. The Showroom was hired out to artists who wished to create their own exhibitions (Acme, 1995:16). Situated in the heart of a predominantly residential area, opposite the local primary school, the Showroom continues, at the time of writing, to hold exhibitions on a regular basis.

SPACE also embarked on a steady process of acquisition. In 1981 Milbourne Street and Belsham Street Studios, both near London Fields, were added to their portfolio, and followed in 1982 by Richmond House Studios, overlooking London Fields, in 1983 by Brittania Works just east of Victoria Park near Stratford, and two more studio blocks, Winkley Street in Bethnal Green and Victor House, again near London Fields, in 1984 and 1985 respectively.

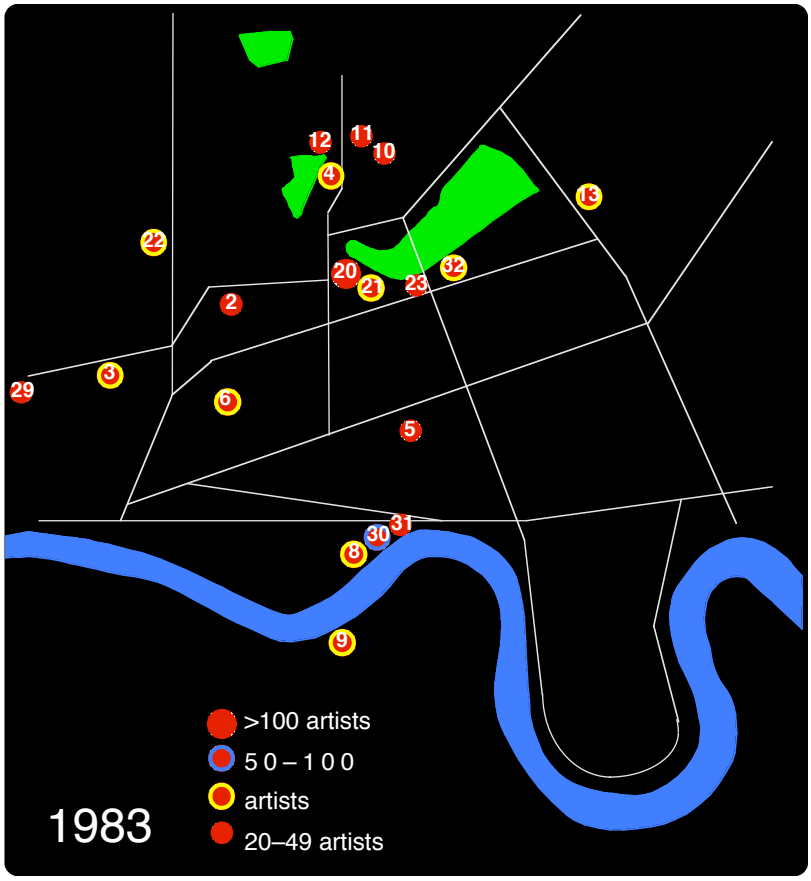
The Whitechapel Gallery closed for refurbishment from 1983 to 1985, taking the opportunity to review and strengthen its community education programmes (Whitechapel, 1995).

6.3 Discussion

By 1985 the hiatus which had beset the growth in the local artists' population appeared to be well and truly over; there were over 500 artists in the East End, with concentrations around London Fields, the western end of Victoria Park in Bethnal Green, and at the eastern-most tip of Wapping (figures 6.1–6.3).

1985 was also the year in which the GLC was abolished—it formally ceased to exist in April 1986—but its arts policies and grants over the previous five years had given a much needed fillip to many of London's art institutions. The Royal Festival Hall had embarked on an enormously successful "open foyer" policy and boosted attendance at concerts as a consequence, and both the National Theatre and the English National Opera had escaped the cuts which they had feared (Hewison, 1995:239).

This is not the place to launch a discussion of the GLC's arts legacy to London, but two things stand out. First, in giving the arts a social context, rather than operating a more individualistic Thatcherite policy, they gave voices to groups which had not previously been listened to (Hewison, 1995:242). Second, they can be seen with hindsight to have played a central role in enabling the East End artists' agglomeration to happen, not least through their tacit encouragement of both Acme and SPACE. But by the time of the GLC's abolition, the East End artists' agglomeration was about to enter its fourth phase; that is the subject of the next chapter.



1–16, SPACE Studios. 2. Columbia Rd.; 3. 45/47 Tabernacle St.; 4. Martello St.; 5. 71 Stepney Grn; 6. Old St. Patrick's Ch.; 8. New Crane & Metropolitan Wharves; 9. Bombay Whf.; 10. Milbourne St.; 11. Belsham St.; 12. Richmond Hse.; 13. Brittania Wks.; *20-28, Acme.* 20. Various Short Life Housing - Acme HQ shown; size reflects no. of houses; 21.Bonner/Robinson Rd.; 22. - Orsman Rd.; 23. Old Ford Studios; *28-71, Independent.* 29. Barbican Arts Grp.; 30. New Crane Whf.; 31. Metropolitan Whf.; 32. Chisenhale Studios;

Figure 6.2
Map of Studios, 1983

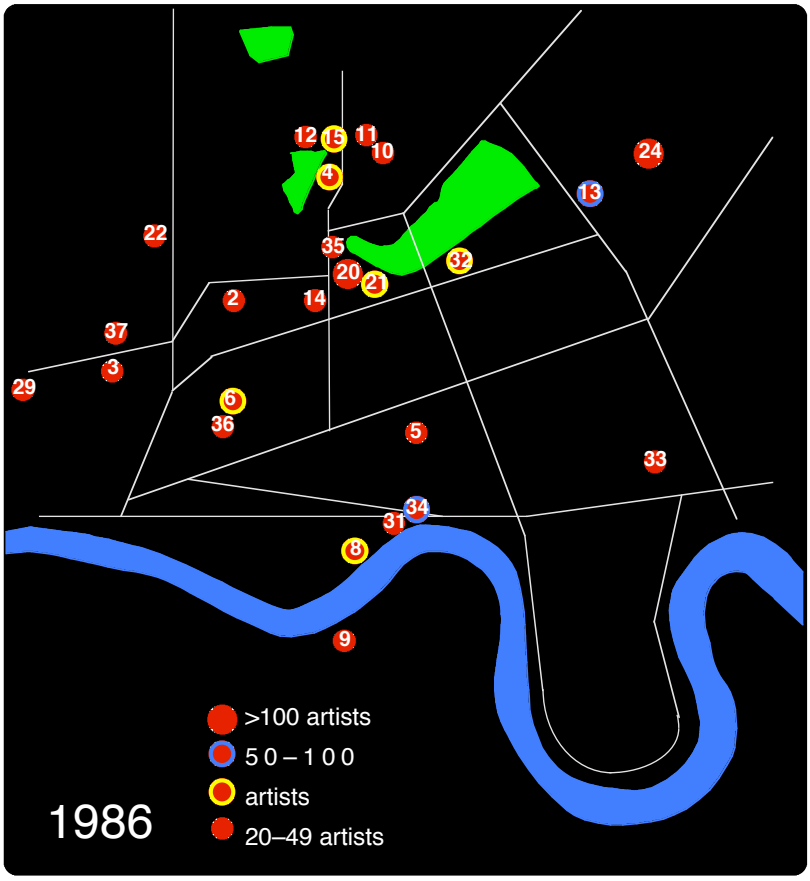


Figure 6.3
Map of Studios, 1986

1–16, SPACE Studios. 2. Columbia Rd.; 3. 45/47 Tabernacle St.; 4. Martello St.; 5. 71 Stepney Grn; 6. Old St. Patrick's Ch.; 7. 124-130 Tabernacle St.; 8. New Crane & Metropolitan Wharves; 9. Bombay Whf.; 10. Milbourne St.; 11. Belsham St.; 12. Richmond Hse.; 13. Brittania Wks.; 14. Winkley St.; 15. Victor Hse.; *20-28, Acme.* 20. Various Short Life Housing - Acme HQ shown; size reflects no. of houses; 21.Bonner/Robinson Rd.; 22. - Orsman Rd.; 23. Old Ford Studios; 24. Carpenters Rd.; *28-71, Independent.* 29. Barbican Arts Grp.; 31. Metropolitan Whf.; 32. Chisenhale Studios; 33. Fawe St.; 34. Cable St.; 35. Vyner St.; 36. Hanbury St.; 37. New Hoxton Workshops

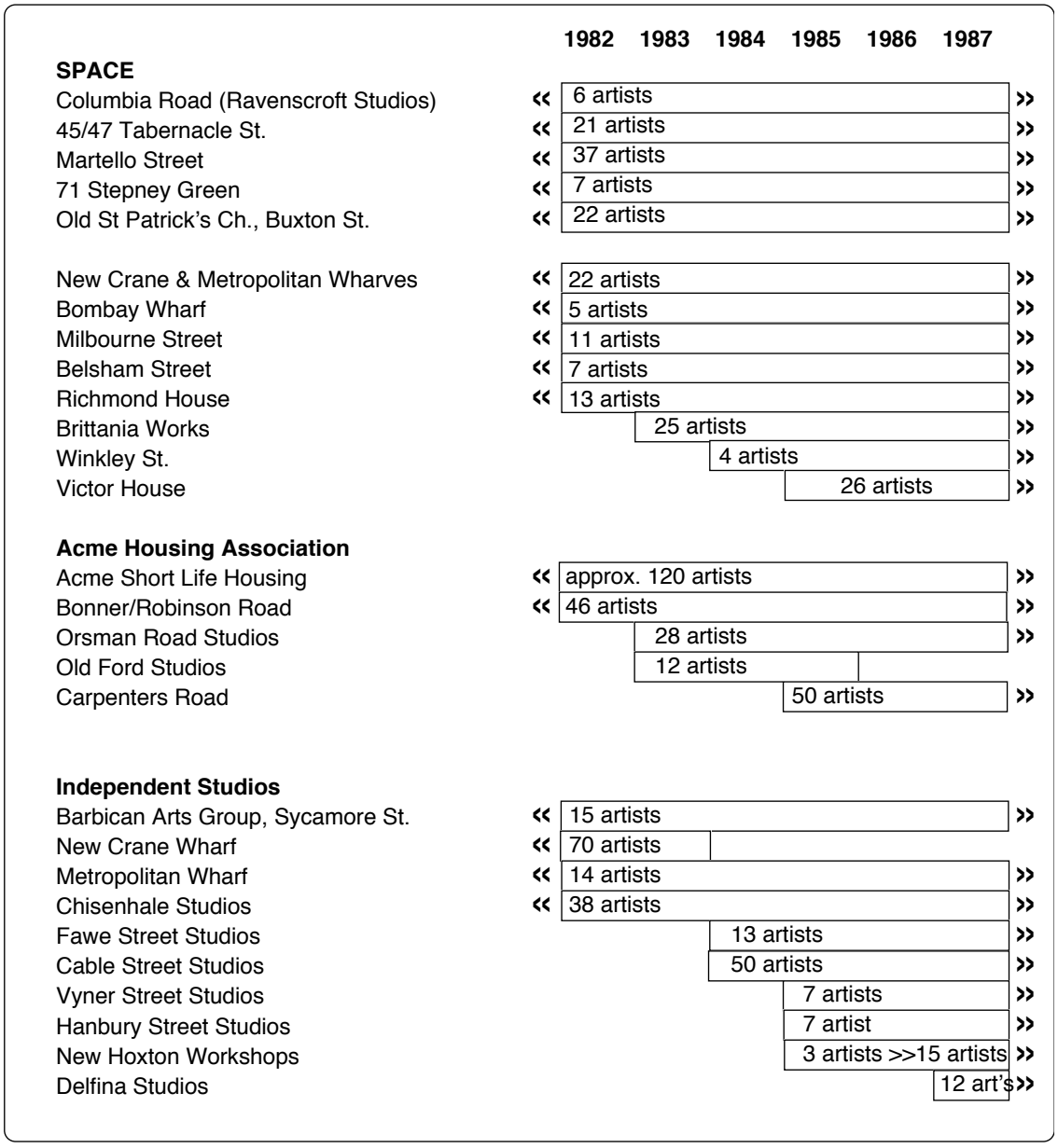


Figure 6.1 Studios in the East End, 1982–1987

SEVEN

THE RISE OF THE SMALL INDEPENDENTS, 1986–1998

7.1 The Glory of the Garden[1]

The abolition of the GLC and the other Metropolitan City Councils in 1986 gave rise to genuine fears of damage to arts organisations, but these were allayed by the introduction of "challenge funding", whereby the local authority would have to match any sum granted by the Arts Council. And despite the burgeoning demand for the arts in the 1980s, many arts organisations found it increasingly hard to make ends meet (Hewison, 1995:247) The Arts Council's 1984 Annual Report, *The Glory of the Garden* (a reference to Rudyard Kipling's doggerel observation that gardens need nurturing) set out its intention to encourage the arts in the regions through the transfer to them of six million pounds, but the outcome was rather different: five million pounds were cut from regional companies, and its metropolitan responsibilities actually increased, as did the number of revenue clients (ibid:254–255). In 1983, it had 156 clients, and in 1989, 140; its intention had been to reduce the number of revenue clients to 94 (ibid:255).

However the idea behind *The Glory of the Garden*—that the Arts Council needed to devolve at least some of its clients to the regions—lived on, and a 1989 review of the relationship between the Arts Council and the Regional Arts Associations concluded that the Council should be responsible for "national companies" while the RAAs would be replaced by a reduced number of Regional Arts Boards with local responsibilities (ibid:261). The new order came into effect in 1994, by which time the Arts Councils of Scotland and Wales, previously subcommittees of the Arts Council of Great Britain, were funded directly by the Welsh and Scottish Offices, and the Arts Council of Great Britain had become the Arts Council of England (ibid, 262–264).

[1] The title of the Arts Council's 1984 Annual Report.

7.2 More Studios, and Galleries Too

However, the shenanigans which rocked the Arts Council did little to stifle the continuing growth of the East End artists' agglomeration. The mid-to-late 1980s saw the profile of the East End sharpen with the establishment of three independent galleries in the more traditional commercial "West End" mould. Interim Art was founded by Maureen Paley in 1984 and is situated, unusually, in a terraced Victorian house in Hackney (Paley, 1998). It started in Beck Road, a street which is gradually passing into the realms of legend by dint of the fact that all the houses in it were at one time administered by Acme, and are now owned by artists (Archer, 2001). The Lamont Gallery was established by Andrew Lamont in 1986, while Flowers East was set up by Matthew Flowers in 1988 in London Fields (Glaister, 1996). "We came here for cheap rent and very big spaces, and we liked the idea of a big community of artists" (Matthew Flowers, quoted ibid), although, as we shall see in the next section, the extent of that "community" remains moot.

That a new generation of artists was establishing itself in the East End was most readily and famously apparent in the 1988 exhibition *Freeze*, organised by a group of graduates from Goldsmith's College—subsequently to be bestowed with the epithet "Young British Artists"—which included artists such as Tracey Emin, Damien Hirst and Sarah Lucas. Critics Matthew Collings (1997) and Richard Shone (1997), while acknowledging its importance, argue that claims for its professionalism, and for the quality of the art itself, were perhaps overblown. Nonetheless, "Freeze" did mark the flowering of Goldsmith College's reinvention of itself as an art school in the 1980s under the guidance of tutors such as Michael Craig-Martin and Jon Thompson (Shone, 1997:18), but other "Young British Artists" of that generation, who really became known at the Royal Academy's *Sensation* exhibition in 1997, did not come from Goldsmiths College: Jake and Dinos Chapman and Tracy Emin graduated from the Royal College of Art; Matthew Dalzeil and Louise Scullion from the Glasgow School of Art; Rachel Whiteread and Douglas Gordon were at the Slade. Even so, Judith Bumpus pointed out in 1997 that "over three-quarters of those 17 *Freeze* artists are still stocking the major shows" (Bumpus, 1997).

But *Freeze* also highlighted the emergence of a new generation of young artists who were prepared, in the words of Robin Klassnik (1998:interview) to "hunt in packs and show in packs", and who possessed a growing awareness of the cultural impact of their work both within and beyond the art world (Sladen, 1997:39). It seems probable that this increasing confidence should also have impacted upon the East End artists' agglomeration.

It is certainly the case that from the middle of the 1980s, the number of artists in independent studios began to rise steadily and inexorably. For artists leaving college at this time, SPACE and Acme were traditional organisations who, to an extent at least, represented the "Establishment", and from this point onwards, the majority of new studio blocks have had less than twenty artists, and frequently fewer than ten.

The earliest of these were Vyner Street Studios immediately west of Victoria Park and Hanbury Street Studios in Spitalfields, each housing seven artists, and New Hoxton Workshops

in Shoreditch which originally had just three. Graham Bignell, the co-founder of New Hoxton Workshops wanted to find space to pursue craft-based work, and initially set up studios in New North Road in Shoreditch.

Graham Bignell:

> In 1985 I was working for Hackney Council as a paper conservator, which doesn't fall into any of the remits of places like SPACE or any of the artists' studios, so it was much more craft based. I had a studio in Mare Street originally, and then, I was keen to find a place that had a possibility of extending the craft side of things as well as having artists' studios benches. I'd had problems getting on waiting lists and things like that. With my contacts in Hackney I was able to find this building in New North Road which was an old funeral directors. A fairly big building, about 2500 square feet, very run down. The back of the building had been knocked down. …[we] had an agreement with the Trust that owned the building which was one of the protected buildings of Hackney, so the people that built the site next to it destroyed part of it but weren't allowed to knock the rest of it down, so from there we signed a 2 year lease, and then we moved in with a few other artists in 1985. No help from any one.
>
> …All the maintenance was down to us as well. Because it was a peppercorn rent it was OK, but we were worried about the 2 year aspect. It took us 6 months to do the place up, but in the end we were there for 10 years. That studio's still running, and it's almost at the end of its life now—three artists left in there, and looking to sell the building.
>
> (Standpoint Studios, 1998:interview)

The New Hoxton Workshops project was completely craft-led: the finance for the conversion of the building, the fitting out and the installation of electrical and plumbing services was also carried out by Bignell and his colleagues (Standpoint Studios, 1998:interview). Again, the combination of a self-help "can-do" mentality and the requisite skills coupled with low, or in this case minimal, rents gave artists the opportunity to pursue their work: with New Hoxton Workshops, the low rent was crucial, pushing the project over to the right side of the feasibility threshold.

In fact, the problems of maintenance, and the poor condition of many of the buildings which eventually became studio blocks, are an increasingly familiar story, but they highlight a point worth repeating: the buildings which were colonised by artists were those which no one else would consider occupying; simply, the artists had the need, the knowledge, and crucially, the will, to make something of these places. Nonetheless the artists still had their creativity, patience and in some cases even their credulity stretched by the conditions with which they had to deal, an issue neatly summed up by Adrian Hemming and Adam Gray co-founders and directors of the now defunct Angel Studios in Islington:

> AG The way we did that [Angel Studios], it was very low budget, studios were very cheap, much too cheap actually. …it was a crummy building. The basement!

AH The basement where the rats used to pop up from the sewers!

AG We didn't know this. When we turned it into studios, we didn't know it was going to flood. All the old sewers, it just became a nightmare. …Somebody would come in in the morning and find there were about four inches of water and waste and horrible things floating around, so [someone] would get called. We called them though it was the landlord's responsibility. Charging God knows what, they'd shove all these rods down, and about two hours later they'd say, "well we've no idea what's down there". They never solved the problem, they just had no idea what all these pipes were doing, and so we couldn't believe, we just thought we don't want to use this space, but all the people in the basement wanted to stay there, and just accept that this was how it was! That it'd kind of flood every now and again. They all left the studio at night, and put their work up on trestles. Absolutely bizarre, but the rent was incredibly cheap. There was no natural light, dark and miserable. The rest of the studios were much better.

But when we started it, rather than build all the walls, we drew chalk lines on the floor: "That's your space, you build your own wall".

AH Which is really not the right way to do it.

AG Not the right way at all. Because people first of all can't build walls…

AH And nothing conforms to fire regulations. We were quite desperate at Angel, because I mean it was a nightmare. If a fire had started it would have been horrendous.

The costs of fire-protection are a necessary but heavy burden that for obvious reasons of health and safety must be met. Kwai Lau of Red Door Studios recalled in 1998 that "a couple of years ago we had problems with fire regulations, so we had to [spend] about £2500 on putting [in] the fire alarm. But I think it's worth it really". This acceptance of the fact that artists' studios must work within such regulatory frameworks is perhaps symptomatic of an increasing drive to consolidation amongst East End artists' studios: Red Door Studios, of whom more later, closed in 2000. With the best will in the world, such initiatives may not last for ever.

But despite the effort and perseverance which had to be put into transforming these often squalid buildings into workable studios, and locations which were often remote in terms of both distance from central London and ease of access by public transport, new studio blocks continued to proliferate as artists continued to move to the East End.

Delfina Studios Trust was founded in 1987 on the top floor of Maryland Works, a 19th century three-storey brick clothing clothing factory tucked away off the beaten track in Stratford, five minutes walk from Maryland overground railway station: it granted residencies to artists and sculptors.

Artist Lucy Lefeuvre:

> Well, originally the deal was that a woman called Delfina Canales who'd set up a foundation which provided free studio space for artists through application. I joined it after it had been in existence about four years. When I started it was 1990. The space was about eight, nine studios for painters, and three, four sculptors. And I suppose the general sort of application would be from artists in so-called mid-career, ie several years out of art school and what it provided was a free, or rent-free space. She also acted as a sort of sponsor—would buy work from us as well. So that was what brought a lot of people to the area, rather than that they particularly would have chosen it, myself included, and then you find yourself sort of staying within the area because it's cheap, basically, and the only place that offers that sort of studio space.
>
> (Maryland Studios, 1999:interview)

Unusual in that the Trust was the brainchild of the philanthropic and art loving owner of an (eponymous) Italian clothing company, Delfina Studios subsequently generated "spin-offs" not only in the form of Maryland Studios but also Stratford Studios and Wharf Studios. The Delfina Trust itself moved in 1994 to its current premises in Bermondsey, and Maryland Works now houses only Maryland Studios. Lefeuvre's story once again makes the point that artists are in the East End primarily because it is cheap, and because it offers decent studio spaces.

1989 saw the foundation of six new studio blocks including new, larger premises comprising twenty-two studios in light industrial property at Hertford Road, near de Beauvoir Town in Islington for the Barbican Arts Group: they had previously occupied studios at the northernmost edge of the City in Sycamore Street, near the Barbican from which they originally derived their name. Pixley Street Studios had seventeen artists in a 19th century warehouse in Bow, while the cluster of studio blocks and galleries around London Fields was further augmented by MT Studios housing five artists. What would, five years later be a cluster of studios around Hoxton was added to by Rufus Street Studios, housing nine artists.

Hemming and Gray of Angel Studios had by this time become embroiled in a traumatic, costly and ultimately unsuccessful legal battle with their landlords in an effort not to be evicted, and they decided to cut their already considerable losses and look elsewhere. Even so, the search for landlord with whom they could do business was not an easy one. Their experience highlights some of the problems which arise for artists when confronted with a landlord who wishes to let a property in poor condition, and who tries to insert onerous clauses in the lease to secure the repair of the building at the tenants' expense.

Hemming and Gray had had enough of Angel Studios and wanted to get out. Their initial search brought them to a building in Carysfort Road near Stoke Newington, and they entered into protracted negotiations with the landlord, who wanted to impose an onerous "full repairing lease" on them. Such a lease obliges the tenant to make repairs which return the building to an "as new" standard rather than to an "as found" standard, and as Hemming recalled, such re-

quirements can be catastrophic for the tenant:

Adrian Hemming:

> That's how Globe Studios went, down in, Hoxton way. They got caught a cropper with that same clause in their lease, and the landlords turned round and told them they more or less had to replace the façade of the building to their specifications. And legally, yes, that's what you had to do.

Eventually, the negotiations at Carysfort Road simply collapsed because of this sticking point, and Hemming and Gray started to look elsewhere, although the Carysfort Road premises were subsequently let out to artists, the landlord having "learnt from us that it was a waste of time arguing" (Southgate Studios, 1998: interview).

The remaining artists in Angel Studios "all moved on. Some are still, one of them is working in Barbican Studios. They just all moved on, found other places to go to, got married, settled down! Gave up being artists" (Southgate Studios, 1999:interview).

Gray and Hemming, though, did not give up being artists, and although their own attempts to set up a studio block at Carysfort Road fell through, they had at least gone some way to opening the door for the group of artists who eventually established the studios there. More importantly, they felt that they had learned enough from their efforts at Angel Studios to run a studio successfully.

> AH We were probably building up to having to rejig the whole place [Angel Studios] anyway. Here [Southgate Studios], because we've taken advice from architects and people, and we've also had the structural engineer in and also the local fire brigade, we *know* that we've hit the fire regulations OK and we have a fire corridor and all the studios open off the fire corridor. It's a bit like Barbican Studios. It's more or less the same set-up.
>
> …You have a fire corridor. We run the studios, at the moment they're run as a non-profit making company limited by guarantee, which we've always felt was very important, but our bank manager thinks we're mad.
>
> …We've never been able to set up as a charity, it's very difficult, very very difficult. The old days of anybody just being able to claim themselves as a charity seem to have gone. We've found it very difficult.
>
> …We do [have to pay full business rates]. Even though we're non-profit making, the local council is so strapped for cash, we've applied several times to the local council, because they can make exceptions, but they won't make an exception, so we just pay full rates now.
>
> (Southgate Studios, 1999:interview)

Although Southgate Studios has a ten year lease, which both Hemming and Gray expected to be able to renew, they were frustrated by the fact that to be genuinely secure, they would, ideally, buy the building. The problem was that their landlord was not willing to sell, and this was com-

pounded by their dealings with their bank.

> AH About three years ago, before banks changed their lending ideas, our bank manager was very supportive of us buying the premises, and we probably could have worked something out with them, but they just won't sell, which is a shame, because we could have bought the building, we could have done a lot more.
>
> AG We set the place up because the banks were being very understanding. We had this business at Angel, which was clearly a viable business.
>
> AH …It's quite complex, but we are two separate entities. On our side we are landlords, because we rent space to artists, and then privately we are artists. So our business is a letting business.
>
> AG …Because we'd done that for three and a half years and could show that [we could] find 60 people on a regular basis to keep the place running healthily, when we came here and needed capital because we'd basically lost it all in court, we suddenly found ourselves in a bit of a position with that, the bank was quite understanding, albeit at a, in a self-interested sort of way, interest being the operative word. It was quite difficult. We lent some of our own money into the business, struggled to get it all set up…
>
> AH We wouldn't get the same help now from the bank, that's for sure, because their lending policies have just totally changed, which is a great shame.
>
> (Southgate Studios, 1999:interview)

This is a classic illustration of the potentially frustrating financial hurdles which artists can face when trying to establish a studio block from scratch rather than simply hiring a space in an existing studio block. Hemming and Gray's view is that the centralisation of banking has much to do with this change of affairs, not least because the esoteric and often insecure nature of professional artistic practice is not catered for by the necessarily impersonal approach which such centralisation entails: "Central lending and ticks and crosses and you don't have a bank manager unless you, or unless your company are personally earning in excess of £500 thousand a year or something, which we don't. …And everything now has to go through central lending. And they don't have a clue as to what we do, what our business is, what we do or anything" (Adrian Hemming/Southgate Studios, 1999:interview).

Nonetheless, although most studio blocks were simply established with survival in mind, there were exceptions. The Florence Trust, founded in 1990, has its own distinct philosophical basis which owes less to a basic need to survive, and has more in common with Kandinsky's (1914) search for the "spiritual" in art.

Rob Macintosh, Director:

> The Trust was started over nine years ago in this premises, this building, but it was the idea of one guy, a guy called Patrick Hamilton who was a self-taught artist and had been living and working in Florence Italy for a number of years. On his return, he wanted somewhere to work, and his thoughts originally were somewhere to live and work. [He] had various connections with the churches in the area, …knew the state of the churches in this area in terms of congregations falling, and knew the history of this church. It was a redundant church, it had been redundant for fifteen years, was completely boarded up, had no roofs on the transcept and went on a sort of pilgrimage himself to get occupancy of it. That's what it was. It was a redundant church. It's not a deconsecrated church, the church still owns it. The Trust has seven years renewable leases with them. So he started it with a conviction and a belief that artists should be inspired by their surroundings and should have contact with one another. That creativity was, is in some essence a spiritual thing—this is his beliefs—and that he could see them coming together and sort of harmonising. Artists coming together, being spiritual in a spiritual place of great kind of value, great tradition, and architecturally and all that. He was sort of inspired by it.
>
> So they got the building and it received almost three quarters of a million pounds worth of grant funded assistance to rebuild it. It had no roof, it had no floor, the basic structure of it was unstable. And then artists would start to come here for up to two months. Very short, concentrated periods of time where they would work on their practice and work with others. It's changed since then. The principle's still there. It's not a kind of continuous studio group, but there is change and they're here for a short period of time. The spaces are subsidised and the artists apply and are, through a vigorous selection process, awarded a residency at Florence Trust. Whereas before the need was what got you in. You wanted to be here, you wanted respite from your own studio, you wanted contact with others. The selection has changed in that and the quality of artists has changed.
>
> (Florence Trust, 1999:interview)

In that it has such a strong philosophical basis, the Florence Trust is perhaps unique in the East End, although the hurdle of having to deal with a building in poor condition is familiar enough. But whether the studio was set up for reasons of philosophical preference, at Florence Trust, survival, as at Acme and SPACE, or philanthropy, as at Delfina Studios, the fact was that the East End had a lot of artists and a lot of studios. And on 4th December 1990, *The Independent* lit the (metaphorical) blue touch paper: "London's East End" it reported, "has the biggest concentration of artists in Europe" (Alberge, 1997:27).

7.3 The Media (Finally) Notices

In fact, a year earlier, *The Independent* had carried a feature on the East End Open Studios event, and the writer had claimed that the 26 studios which would open their doors to the public

"represent only a small proportion of the thousands of artists who live and work in London's East End" (Duffin, 1989). Duffin had also organised the Open Studios event, and as we saw in chapter one, her claim for the total number of artists in the East End was probably wide of the mark. Nonetheless, the media myth was up and running, and while we cannot gauge the extent to which the media—here I refer primarily to printed media—has driven the growth of the East End artists' agglomeration, it would seem counter-intuitive to assume that it has not affected it in some way.

But until the mid-1990s, the media took little notice of the burgeoning population of artists on its doorstep. The first three issues of the *Guardian's* quarterly *Art for Sale* magazine, published in April, July and November 1992, incidentally the year of a Whitechapel Open Studios event, make no mention at all of the East End's population of artists: such mentions of places as there are centre around the traditional gallery districts of Mayfair (Guardian, 1992a; Guardian 1992b; Guardian, 1992c).

By 1995, the "biggest concentration" statistic had reached the Financial Times, which reported that in "Hackney, east London, there is the biggest concentration of such [struggling] artists in Europe" (Thorncroft, 1995b), a statement which is plain wrong: the majority of the East End's artists (although not craftspeople, perhaps) are in Tower Hamlets, not Hackney. Other articles (Packer, 1995; Thorncroft, 1995a) in the *Financial Times* refer to the East End in passing: it is simply where an interesting gallery show happens to be. In both cases, the venues are the same: Flowers East and Paton Gallery, galleries in the West End mould.

The Whitechapel Open Studios did not take place in 1995, but it did in 1996, and it is in the coverage of it in the *Guardian*, the *Times* and the *Daily Telegraph* (Glaister, 1996; Walters, 1996; Pile, 1996) that we finally see high profile acknowledgement of the phenomenon, presenting the East End artists' agglomeration as a new Paris Left Bank. Glaister's article was the first to be published, occupying most of page three of the Wednesday July 10th edition. The *Times* and the *Daily Telegraph* followed on Saturday 13th July, carrying broadly similar articles: the *Times* even included a coloured map of the East End, pointing out where the studios were.

By September 1997, the Guardian was declaring that Shoreditch was fashionable in its "Style" section (Pretlove, 1997), and in November of that year, Hugh Pearman argued that "Remaking the inner cities is easy. Push the button marked Arts, and the money pours in." (Pearman, 1997). The example with which Pearman chose to illustrate his article was Hoxton. Fifteen months later, in 1999 London Fashion Week *Time Out* magazine carried an article titled "The hip 100" (Time Out, 1999). The East End, it seemed, had come of age as a fashionable, trendy place: of the "favourite 100 London faces and places" listed, Hoxton was second behind the supermodel Kate Moss. The Truman Brewery in Brick Lane came fourth, the Dragon Bar, near Old Street came eighth, the Hoxton Bar and Kitchen came 12th, while Chapman Fine ART, a gallery run by the Chapman brothers, and Brick Lane and Spitalfields Market were 18th and 19th respectively (ibid).

What we see as we go through the 1990s is a gradual shift in media coverage of the East

End as an artists' quarter: in the first half of the decade, it was simply a place where art could be seen. By the end of the decade, it had become a trendy, bohemian sort of place if magazines such as *Time Out* are to be believed. In fact, the more recent media coverage has centred on the two places closest to the City, Spitalfields and Shoreditch, and the image presented is of a newly vibrant, central location. This too, is only partially true. Brick Lane, which along with Hoxton Square has been an epicentre of the new "artistic" East End, has been a vibrant cosmopolitan street at least since the early 1980s (when this writer first visited), although Hoxton Square and parts of Shoreditch have become more gentrified during that period. Significantly, the "regeneration" of Brick Lane is very much a white western phenomenon: the new shops are run and populated by young and fashionable westerners, not the local Bangladeshis; curry houses and cafés face each other across the street without seeming to meet halfway; shops full of chairs by Charles Eames and other well-known western designers spill their wares onto the pavement, but there is no cultural reference to the mostly Bangladeshi locality. It is almost as if Brick Lane only became interesting when the media noticed it, and of course that is not quite the case, although the more lively aspect of the northern half of Brick Lane has certainly coincided with the heightened media profile of the area.

Within the time frame of this project, however—and this remains a matter of speculation—it seems likely that the media had little or no influence on the growth of the East End artists' agglomeration: by the time they noticed, it was nearly three decades old. Rather, the media had picked up on a phenomenon that had been "bubbling under" for years, and which the property markets had already begun to exploit. The number of artists had already stopped rising exponentially, and was levelling off as studios closed down in the light of rising property prices, which themselves were no doubt fuelled by media-driven demand. Paradoxically, it may well be the case that media coverage has hastened the demise of the East End artists agglomeration, rather than encouraged it, although that same media attention, catalysed by artists, has also spurred the regeneration of the Brick Lane-Hoxton Square-Old Street axis.

7.4 After the Media[2]

The heightened media profile of the East End—or parts of it—is perhaps symptomatic of a more general absorption of contemporary art into the cultural mainstream. But the media coverage of the East End artists' agglomeration reached its apotheosis with the BBC2 documentary *The New East Enders* (2001) although it comes as little surprise that this focused on the celebrities: the voracious appetite for fame observed in the younger generation of artists by Andrew Lambirth in 1997 was clearly being satisfied (Lambirth, 1997).

From the outside, then, the new-found fashionableness of the East End gives the impres-

[2] Parts of this section were written in May 2001. In deference to historical continuity it drifts beyond the project's "cut-off date" of 1998, and the upshot of *this* is that in places it risks being less strongly grounded than previous sections. I have therefore endeavoured to be diligent in differentiating between empirical and anecdotal evidence.

sion of a thriving artistic community: the truth is actually more prosaic. As we saw above, the media's interest in the East End artists' phenomenon increased in the late 1990s, but the reality is that the East End "arts scene" portrayed by BBC2 is probably not one that many artists would recognise, driven as it apparently was by the pervasive cult of celebrity[3]. Equally, most East End galleries have come into existence since 1998, the end-point of this research, and few of those galleries were more than eighteen months old at the time of writing. In fact, the movement of high profile dealers such as Jay Jopling to the East End is atypical (Enid Lawson Gallery, interview:2001[4]) and a glance through the "Art Dealers" section of the Yellow Pages reveals the majority of dealers to be based in West London.

Before closing the history of the studios, I want to digress (very) briefly to speculate further on the way in which art has been publicly perceived. There is evidence to suggest that attitudes to the visual arts have changed over the last five years or so. According to Richard Ingram at the Enid Lawson Gallery, there has been a shift in the demography of art buyers from middle-aged buyers in their 50s and 60s to younger buyers in their late 20s and 30s. Ingrams attributes this change to the fact that, unlike the antique art market, "the [contemporary] art market has blossomed in the last ten years" (ibid). Ingrams was also of the view that the "Affordable Art Market" held annually in Battersea Park has done much to make contemporary art more accessible to the artistic "lay-public", and so opened up new markets of young, childless professional couples[5] with high disposable incomes (ibid). But this is really an area for further research, and although the contemporary art market might be thriving, it may well be the case, as we saw in the previous section, that the East End artists' agglomeration has already passed its zenith.

One studio which has closed down since the fieldwork for this project was carried out is Red Door Studios, situated at the north end of Mare Street in Hackney, in what used to be Hackney Police Station, and housing five artists.

In many respects it was a typical East End studio block. A narrow, slightly shambolic staircase directly in front of the red front door for which the studios were named. To the left of the cramped entrance hall, a studio about 12 feet square, with the high windows covered by thin paper to give an even light. A painting, abstract, was in progress when I visited, lying on the floor, dominating the space. My informant's studio was up the stairs, past a small landing with coffee mugs and kettle on a small table, through a doorway which bisected the landing, and up to the second floor, then into the studio. Again, the large windows had thin paper across them, but only the lower half. Through the top half of the window, the steeple of St John's church could be glimpsed through the churchyard trees.

The studio had bare floorboards of pine, splattered with paint. The studio was spacious, maybe 25 feet long and 12 feet wide—it had once been divided into two spaces, but the other artist left the block. Paintings were stacked up against the walls, and along part of the window wall was a workbench, crammed with artist's paraphernalia. I sat on an old low settee placed

[3] This is strictly my opinion, but it is a point worth making: it highlights the gap between the celebrity and non-celebrity artist.
[4] An informal telephone interview was conducted on May 18th 2001.
[5] The so called DINKIES: Dual Income No Kids.

beneath a window, next to the workbench. On an old chair opposite, telling me about the the studios' history, sat my informant, co-founder and director, Kwai Lau. She had graduated from the Royal Academy in 1992, was looking for a studio, and had been told of the studios on Mare Street:

> KL I came and had a look at it, and basically it was completely… it was very dark. There were three people in it, and there were two of them who leased, er the leaseholders as it were were textile designers, but they didn't really know what to do with it.
>
> My first impression was, when I had a look around it, they didn't do very much work, and there were still three or four spaces left. I was interested so I moved in here, which is the second floor, the whole building's three floors, so I got a space here to share with one other person. Slowly I built up a…[pause] did a lot of the decoration, because they didn't do anything.
>
> …Downstairs was a dump basically. They dumped everything and they didn't bother to clear it out, and they didn't bother to look round for artists or whatever, so I came in and I noticed there were like two or three spaces left, so I told a few of my fellow students. So now when we were there, '92, there were three of my fellow students here, including me, and slowly we got things moving, and it became like a working atmosphere really. When I came, there was no working atmosphere, it was really dark, the corridor to the rear had no lighting, it was just really grim, you know. Then we found out that the girls who were in charge were making money out of us, and they kept saying the reason why they wanted to make money off us was that it was covering the month when they couldn't find anyone, but they could easily find anyone.
>
> …it wasn't advertised, it was just word of mouth really, from a college friend. So they got fed up with us, and left. The two textile girls left and one guy left, so I took charge, and we pay the rent for the whole building—we just split it into five or six.
>
> (Red Door Studios, 1998:interview)

However, despite the nuisance of making the buildings workable, the very nature of these places, and the freedom which such shabbiness offers to someone wishing to reconfigure a space unhindered, is something which the artists appeared to appreciate when interviewed. And it also became apparent during interviews that at least some artists do enjoy being in the East End. Kwai Lau:

> I think… the nicest thing about Hackney—this area, the East End, particularly this area because I know this area so well—is I can just walk out with my painting clothes and people don't care. If you do that in Bond Street or Soho, they think you're a tramp, or posing or something, and er… But I also notice there's a lot of artists walking about, which is really nice. You're thinking "ah!" …It's nice. (Red Door Studios, 1998:interview).

As we saw in the previous section, however, the "East End" about which Kwai Lau was talking is not that most commonly referred to in the media, and in this respect perhaps the most celebrated and best known studios are those which, until 1998, occupied Spitalfields Market, immediately east of the City. Like Covent Garden Market, Spitalfields Market was originally a fruit and vegetable market, and it was only with the eastward expansion of the City, and the redevelopment of Liverpool Street Station and the associated Broadgate development in the late 1980s that its role as a market was threatened. It ceased to be a fruit and vegetable market in the mid-1980s, and was the subject of a major redevelopment proposal by architects MacCormac, Jamieson and Pritchard in the late 1980s (Architects' Journal, 1991). The construction on Bishopsgate of a new office building for LIFFE[6] sealed its fate: the Northern half of the market, built in the 1950s, would be demolished, the southern 19th and early 20th century half would be retained.

Perhaps unsurprisingly, it became something of a cause célèbre. Within easy walking distance of the Whitechapel Gallery, Liverpool Street Station and Brick Lane—which of course lies at the heart of the Bangladeshi community—it is ideal for expansion, and in events sharply sharply resonant of the controversy which buffeted Covent Garden Market in the 1970s, the redevelopment of Spitalfields Market attracted media attention in the early 1990s, although that was to do with architecture and planning rather than art; artists were simply the first beneficiaries of its closure.

Studio manager, Ellie Sice:

> ES We started in 1992. We were the brainchild of Martin Burroughs, and he had to raise the funds to open these studios and eventually there were seventy studios with about a hundred artists, with different media. We had musicians, video makers, voiceover, they're doing every kind of the modern kind of art. Sculptors and painters, performance artists, mythological artists, we had practically every field of art in the studios.
>
> …It was a charitable organisation; we were registered as a charity.
>
> (Spitalfields Art Trust, 1999:interview)

The buildings also housed a new "market " of craft stalls, second-hand books and records, food vendors, clothes stalls and restaurants; in the centre there was a small opera space, and the northern-most end was set aside for sports. The market was and remains home to "The Spitz" bar and the Commercial Gallery.

Now[7] empty of artists, although the craft market remains, Spitalfields Market clearly illustrates the way in which artists can be a convenient "holding option" for property which would otherwise be redundant, giving the landlord a small income and someone to look after the building. When set alongside the story of St. Katharine's Dock and SPACE, the story of Spitalfields is, in some respects at least, a classic example of history repeating itself, and we have in a sense come full circle: it is time to sum up.

[6] The London International Finance and Futures Exchange
[7] May 2001

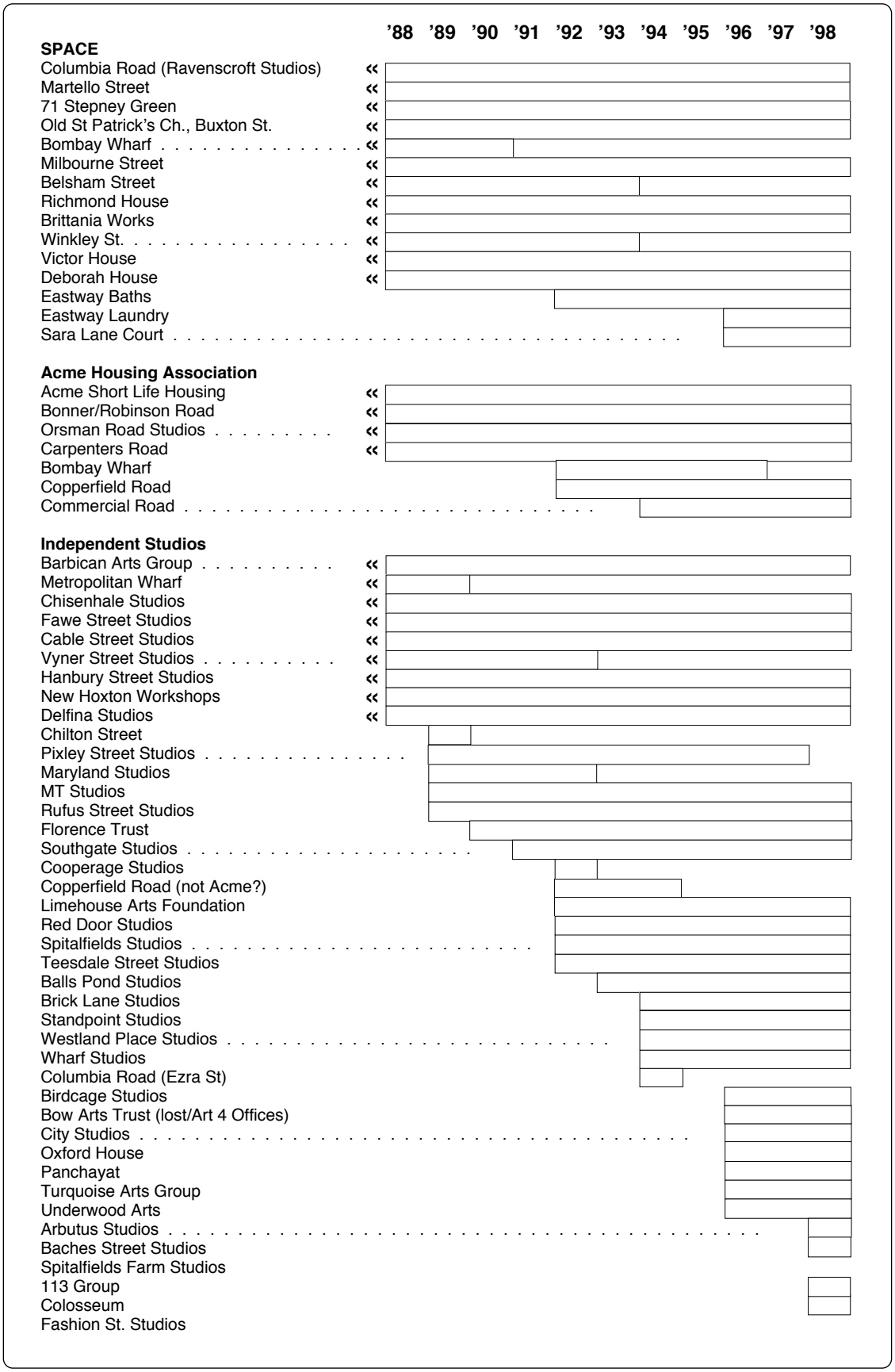


Figure 7.1 Studios in the East End, 1988 - 1998

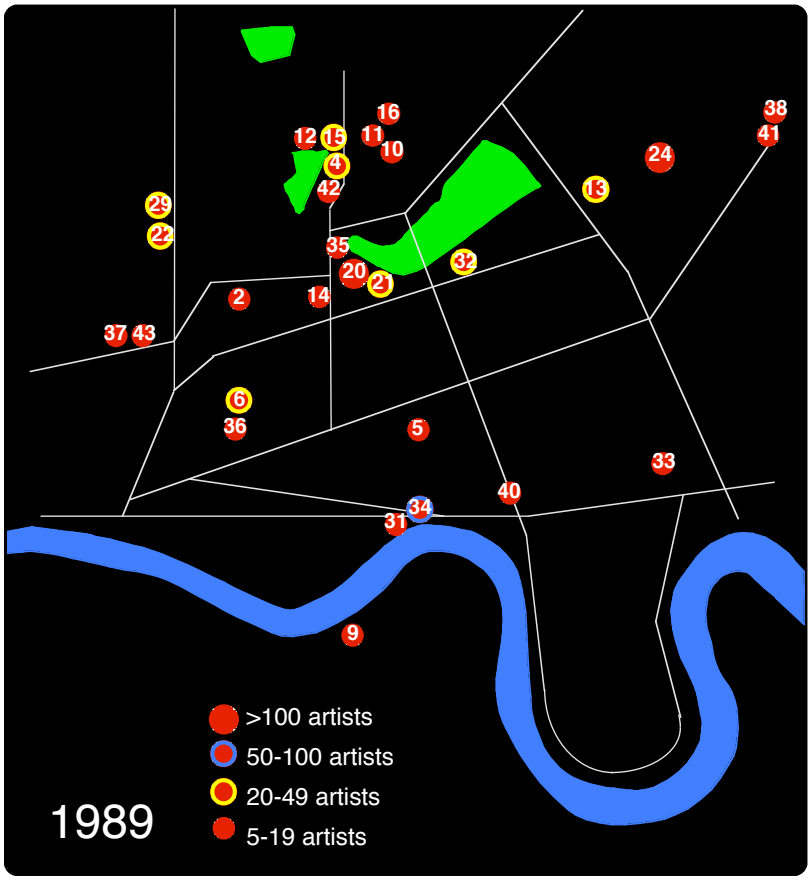
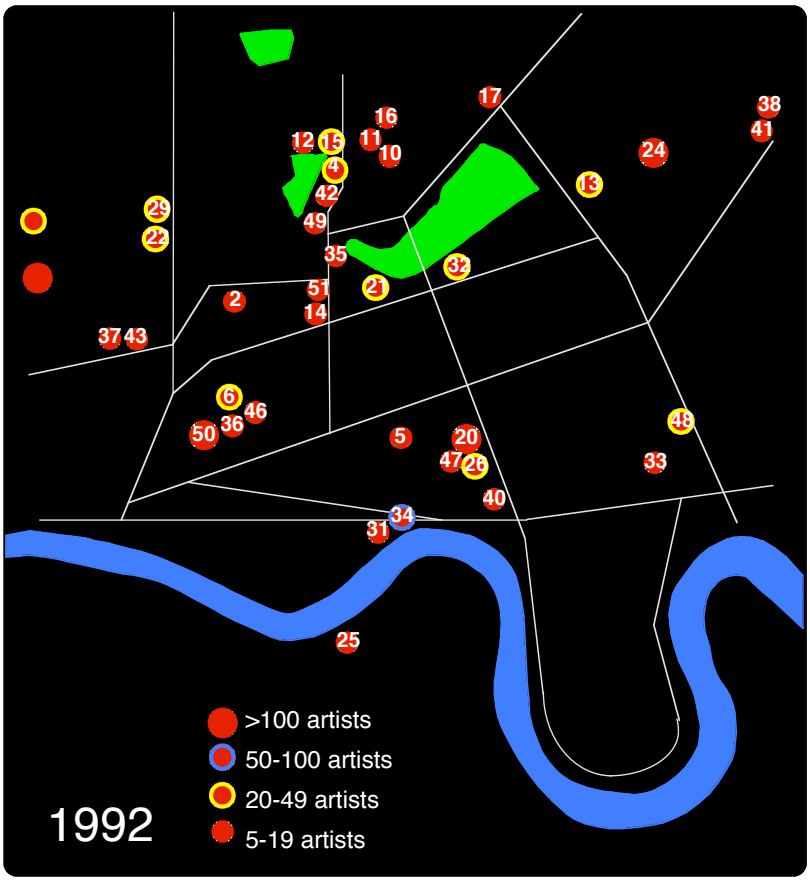


Figure 7.2
Map of Studios, 1989

Figure 7.3
Map of Studios, 1992

1-16, SPACE Studios. 2. Ravenscroft Studios; 4. Martello St.; 5. 71 Stepney Grn; 6. Old St. Patrick's Ch.; 9. Bombay Whf.; 10. Milbourne St.; 11. Belsham St.; 12. Richmond Hse.; 13. Brittania Wks.; 14. Winkley St.; 15. Victor Hse.; 16. Deborah Hse.; 17. Eastway Baths; *20-28, Acme.* 20. Various Short Life Housing - Acme HQ shown; size reflects no. of houses; 21.Bonner/Robinson Rd.; 22. Orsman Rd.; 23. Old Ford Studios; 24. Carpenters Rd.; 25. Bombay Whf. (acquired from SPACE, 1992); 26. Copperfield Rd.; 27. Commercial Rd.; *28-71, Independent.* 29. Barbican Arts Grp.; 32. Chisenhale Studios; 33. Fawe St.; 34. Cable St.; 35. Vyner St.; 36. Hanbury St.; 37. New Hoxton Workshops; 38. Delfina Studios; 39. Chilton St.; 40. Pixley St.; 41. Maryland Studios; 42. MT Studios; 43. Rufus St.; 44. Florence Trust; 45; Southgate Studios; 46. Cooperage Studios; 47. Copperfield Rd.; 48. Limehouse Arts Foundation; 49. Red Door Studios; 50. Spitalfields Studios; 51. Teesdale St.



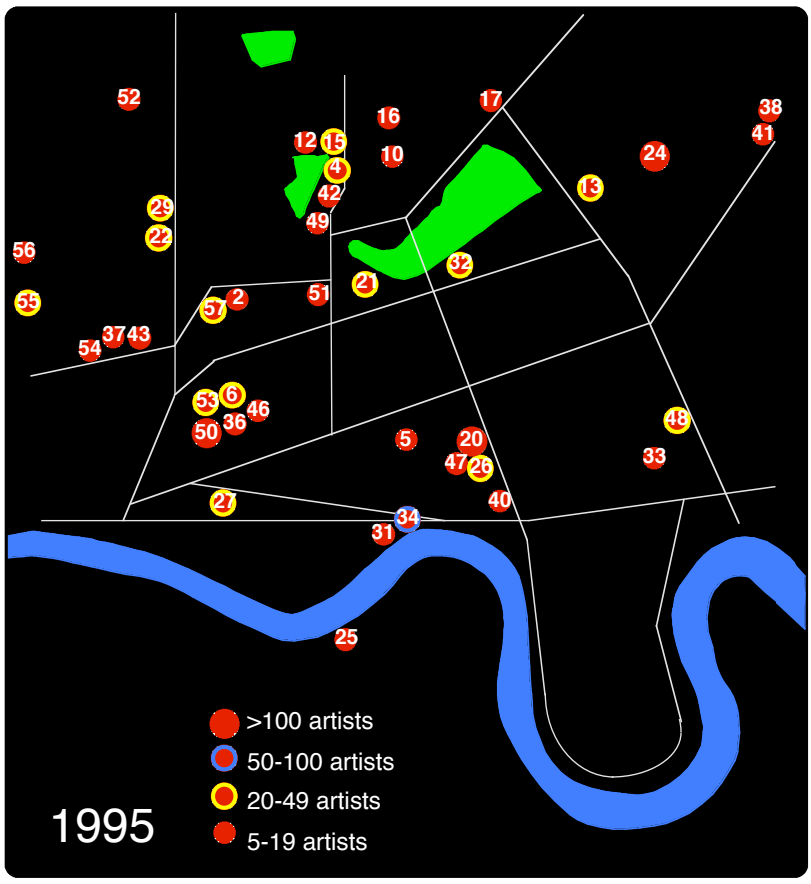
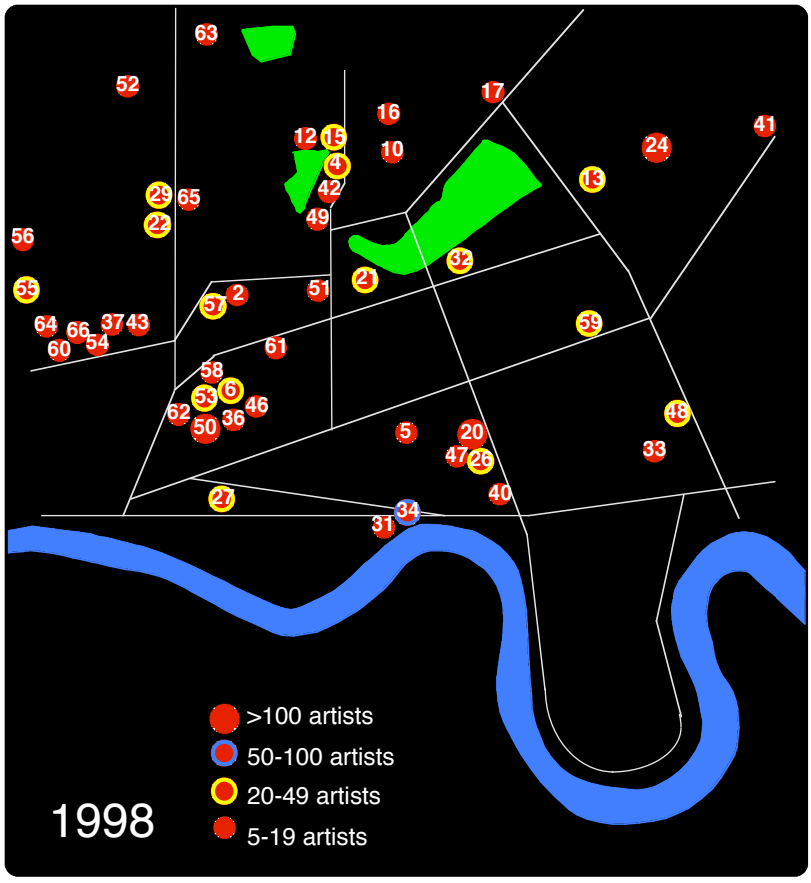


Figure 7.4
Map of Studios, 1995

Figure 7.5
Map of Studios, 1998

1-16, SPACE Studios. 2. Ravenscroft Studios; 4. Martello St.; 5. 71 Stepney Grn; 6. Old St. Patrick's Ch.; 10. Milbourne St.; 12. Richmond Hse.; 13. Brittania Wks.; 15. Victor Hse.; 16. Deborah Hse.; 17. Eastway Baths; *20-28, Acme.* 20. Various Short Life Housing - Acme HQ shown; size reflects no. of houses; 21.Bonner/Robinson Rd.; 22. - Orsman Rd.; 24. Carpenters Rd.; 26. Copperfield Rd.; 27. Commercial Rd.; *28-71, Independent.* 29. Barbican Arts Grp.; 32. Chisenhale Studios; 33. Fawe St.; 34. Cable St.; 36. Hanbury St.; 37. New Hoxton Workshops; 39. Chilton St.; 40. Pixley St.; 41. Maryland Studios; 42. MT Studios; 43. Rufus St.; 44. Florence Trust; 45; Southgate Studios; 46. Cooperage Studios; 47. Copperfield Rd.; 48. Limehouse Arts Foundation; 49. Red Door Studios; 50. Spitalfields Studios; 51. Teesdale St.; 52. Balls Pond Studios; 53. Brick Lane; 54. Standpoint Studios; 55. Westland Pl.; 56. Wharf Studios; 57. Columbia Rd.; 58. Birdcage Studios; 59. Bow Arts Trust; 60. City Studios; 61. Oxford Hse.; 62. Panchayat; 63. Turquoise Arts Grp.; 64. Underwood Arts; 65. Arbutus Studios; 66. Baches St.



7.5 Discussion, 1968–1998

7.5.1 Seventy Studios in Five Phases…

The three decades which separate the initiatives at St. Katharine's Dock and Spitalfields Market have been the time frame within which the East End of London has made the change from an industrial to a post-industrial district. There can be little doubt that London's artists have benefited from those changes, even with the irony that the very fluidity which such changes create also serves to make the artists' positions less secure.

We now know the story of the artists' East End well enough to be able to start asking questions about how and why certain things happened the way they did, and we can now tease out the patterns which will help us to develop a theoretical model in the next two chapters. This section describes the phases through which the East End artists' agglomeration has passed; the next explores the economics and sociology of the East End artists' agglomeration.

The chronology of the East End artists' agglomeration can be divided into five phases, marking different aspects of its historical evolution. These phases also reflect the geographical growth of artists' studios in the East End. The first three phases are very approximate analogues of Lundgren's (1995) genesis, coalescence and dissemination.

The first phase is one of initial concentration near the river in the late 1960s and very early 1970s. Running from 1968 to 1971, the first phase coincides more-or-less with the life of the match shed at St. Katharine's Dock as an artists' studio block. In effect, it is in this phase that the East End artists' agglomeration has its origins, and, to shamelessly deploy a biological metaphor, it is the equivalent of living creatures climbing out of the primordial slime[8]. Unable to do much except survive, these creatures consolidate what they have, developing slowly and building a firm foundation from which to grow more strongly. The same was true of the artists who started SPACE. The initial goal, once the idea was launched, was simply one of making it happen, and ensuring that it would be successful, which of course it was. After the early rapid growth in the number of artists in St. Katharine's Docks, numbers stayed more-or-less constant until 1971, when SPACE had to hand the premises back to the GLC and find alternative accommodation. But there were now enough artists, and enough ideas, for the system to diversify, signalling a shift to the second phase.

The second phase lasted from around 1972 to 1975, and is marked by dispersal, mainly to Stepney, Shoreditch and Bow, and by a variety of different approaches to running studios. Much of this explosive diversity can be attributed to two factors. First, the influence of the property markets on an area in the throes of a shift from an industrial to a post-industrial economy, and second the nature of the property itself.

The means of acquiring the required property varied depending on the type of property, and the landlord's requirements. Thus SPACE were required to relinquish their squatters' rights and start a company to gain access to ex-PLA property; Acme set up a housing association to get access to short-life housing that they could use as living and working accommodation; inde-

[8] *Pace* artists: this is intended as an analogy, not a simile.

pendent studios most often simply leased the building from the landlord, even if they were run on the basis of varied ideologies, ranging from having a place to work (most common) to achieving some sort of spiritual state through art (least common).

In settling in Shoreditch and Hoxton, the new studio blocks were locating themselves in the heart of what was, sixty years ago, the hub of London's furniture industry. We saw in chapter three that the industry in the East End tended to be light industry, and so the premises themselves were of a scale ideally suited to the production of artworks. Had the dominant industries in the East End been heavy—steel-mills or oil refineries for example—then the East End would probably not have so many artists working there.

The third phase, from 1975 to 1985 is notable for the fact that its first five years were characterised by a dramatic slowdown in the number of artists moving in to the East End. The number of artists stayed more or less static, and we can offer two tentative reasons why this was the case. First is that the property markets at the time mitigated against the establishment of new studio blocks in the light industrial property required. Second, the artists themselves, having "found their feet", simply got on with their work, and channelled their creative energies into art rather than survival strategies. Both seem to be reasonably plausible explanations, and it is certainly the case that some of the art which emerged at this time was quite extreme, most famously perhaps in the performances and conceptual works of COUM Transmissions who were based in SPACE studios in Martello Street, the studio block from which Robin Klassnik established Matt's Gallery. And as well as the new galleries such as Matt's which began to emerge, SPACE organised the first of the Open Studios events, and the rise of community art enabled the Whitechapel Gallery to raise its profile in this area of artistic practice.

But by the early 1980s, new studio blocks were being set up, not only by Acme and SPACE, but also by groups of artists acting independently of these organisations, and the end of this dearth of new studio blocks was marked by the establishment of Chisenhale Studios. Again, most of these studio blocks were not near the river, but farther north in Shoreditch, Bow, Stratford, Bethnal Green and Hackney.

The fourth phase simply continued where the third phase had left off. The beginning of the 1980s had seen the recommencement of the the in-migration of artists, as Acme and SPACE had continued to expand their portfolios, and new studio blocks were set up, notably Chisenhale Studios and Cable Street Studios. But from the mid-1980s, most of the new studio blocks were quite small. Acme and SPACE were by now a part of the "establishment", and the artists setting up these new studio blocks wanted to remain independent, and to be somewhere sufficiently compact that some form of "working atmosphere" could be fostered.

Phase five has not happened yet. Most of the available evidence for this last phase is based on speculation from interviewees in the light of rising property prices in pockets of the East End such as Hoxton and Bow, and we shall return to this topic in the conclusions, when we are better equipped to speculate about future developments. However, we can offer the tentative hypothesis that it looks likely to take the form of a further dispersal of artists from the "inner" East End of Tower Hamlets and Hackney, to the outer boroughs of North and East London,

combined with a consolidation of relatively few artists' studios in the inner East End—Spitalfields and Shoreditch.

At this point an invidious question arises, and it is one to which the East End's artists are particularly sensitive: have artists driven the regeneration of the East End? More specifically, did artists contribute by their presence and image to the successful regeneration of St. Katharine's Dock, Wapping and Butlers Wharf in the late 1960s and 1970s, or even Spitalfields in the 1990s?

In the case of St. Katharine's Dock, the artists were permitted to occupy the buildings while a competition for their refurbishment was decided: St. Katharine's would have been regenerated whether the artists were there or not. In Wapping's case, by the late 1980s the newly deregulated City was looking to expand anyway, and the LDDC was nearing its first decade of existence: again, the regeneration would have happened anyway, artists or no. Butler's Wharf also fell within the LDDC boundary: again, it would have been regenerated anyway. The story repeats with Spitalfields Market: the encroachment of the City hastened its demise, and that encroachment was in train before artists moved there.

With the exception of the Brick Lane-Hoxton Square-Old Street axis, where artists were the catalyst for the heightened media profile and subsequent (partial) regeneration of that area, the evidence is at best circumstantial; the presence of artists in a run down area will not *necessarily* trigger its regeneration. The four examples given above are all edge of City locations, and consequently prime candidates for City expansion. De Beauvoir Town was gentrified in the 1970s, despite there never having been an artists' studio there. The environs of Maryland Studios remain defiantly down-trodden: the studios have been there for nearly a decade-and-a-half. To be sure, in all cases artists have been forced to move on and set up shop elsewhere, and they have the skills and needs to do so successfully. And as we saw in section 7.3, the role of the media must not be underestimated, for it is they who declare an area or district fashionable, and so legitimise it as such.

Parallels have been drawn between the gentrification of Manhattan's Lower East Side—a tale recounted in Sharon Zukin's book *Loft Living*—and the gentrification of the East End, notably in *The Artist in the Changing City* (BAAA, 1993). This is misguided, for the simple reason that London's geography is not like Manhattan's. London's structure might be likened to the solar system—a central core comprising the West End and the City, about which other centres revolve: Manhattan is the equivalent of the central core itself. The obsolete factories on the Lower East Side were in city centre locations, those in the East End either in edge of City locations, or plain isolated on out-of-the-way industrial estates: in short, the East End is more dispersed and less central than the Lower East Side. But in both cases artists were some of the early beneficiaries of industry's misfortune, and it seems likely that as the East End recovers from its demise as an industrial district, property prices will rise again, and artists will have to move elsewhere as rents become prohibitively high.

Indeed we have seen something similar in the Docklands, whose regeneration has meant that there are now few studio blocks located there, despite the large number of warehouses. In

fact, most of the studios are north of the recently regenerated Docklands in the cheap areas. Interestingly, the boundary between studio clusters and the Docklands more-or-less coincides with the northern boundary of the LDDC's jurisdiction, and it is reasonable to conclude that the regeneration of the Docklands has done little to benefit the East End's artistic agglomeration. Had that boundary been farther north, the studio clusters would perhaps also be farther north.

7.5.2 …and Two Thousand Artists

Ready access to cheap studio space is one half of the equation: the other half of course, is the artists themselves. The "Coldstream Report" had precipitated an enormous growth in the number of artists graduating from the UK's art schools by the 1970s (see Appendix 3 for figures), wherein lay a steady stream of demand, from graduates from London's art schools and beyond.

But it was the case then, and remains so now, that the majority of artists do not make their living solely from their work as practitioners, and those who have dealers are a minority. A few teach, most have other part time work which finances their practice. The "average" artist in 2001 probably does not enjoy a greater standard of living than the artist of 1971: if she has a student loan to pay off, it may even be worse.

The point though, is to make art with which the artist is satisfied: the original aim of Acme, and one of the principle aims of SPACE, was survival, to enable the artists to continue making art. In that respect, perhaps, artists are really working for themselves and technically, that has to be true: the majority are after all self-employed. But although it lies outside the strict remit of this thesis (which is primarily a history of the studios rather than an analysis of artists' working and living conditions), the question of who provides the part-time work on which so many artists depend still deserves an answer. Here we can only hazard the guess, based on anecdotal evidence, that it is London's burgeoning service industries that have unwittingly supported the growth of the East End artists' agglomeration, particularly during the 1990s when the growth in the number of artists in the East End was at its steepest. Such work—in cafés, bars and restaurants, for example—provides just the flexibility which an artist might be expected to need.

Impetus for the development of the East End artists' agglomeration also lay in the changing relationships between artists, art dealers and galleries, but only to a limited extent. So in the 1960s, the collapse of the contemporary markets precipitated SPACE in a very direct way (Sedgely's dealer went out of business), and the move to the East End of galleries such as those belonging to Angela Flowers or Graham Paton no doubt lent credibility to the East End as an "artistic quarter". But the galleries followed the artists, and primarily for reasons of finance in Paton's case (Paton, interview:1998). Anecdotal evidence suggests that Charles Saatchi makes weekly trawls around the East End's studios, searching for new talent, and such stories, whether they are strictly true or not, serve to perpetuate the legend.

Overall though, it seems unlikely that patronage was a driver of the growth of the East End artists' agglomeration, and the evidence from the interviews does not suggest that this was

the case. More likely, patronage was a "benign circumstance", not unlike the general context of fluidity in that respect.

Studios need money too, and if at an individual level the tendency has been for artists to get relatively little support, that has not been the case with studios. Support here has come most often in the form of co-operative and sympathetic landlords, be they local authorities or private landlords. The GLC gave tacit support to both SPACE and Acme, and none of the respondents reported problems with their landlords [9], although this was probably a reflection of the artists' tendency to be "good tenants" combined with otherwise unlettable or unsaleable property. Nonetheless, anecdotal evidence gathered since 1998 suggests that once a studio block becomes viable in the property market, its role as a studio block will come to an abrupt end.

One respondent (Southgate Studios) said that a major problem was getting banks to understand the needs of small studio blocks, and suggested furthermore that local authorities could exercise their discretionary right to waive business rates for studio blocks; however they accepted that this probably would not happen, given the financial constraints faced by East End boroughs.

7.5.3 Closing Remarks

A thumbnail sketch of the history of the East End artists' agglomeration comes out something like this. An edge of city location—the East End—loses its traditional role as the heart of London's industry at a time when increasing numbers of artists are graduating from art schools and the contemporary art market is in a state of collapse. Local authorities and other landlords are prepared to utilise artists as a "holding option" for the large stocks of obsolete property—both residential and light industrial—they now possess, and the artists, in need of studio and often living accommodation, bring their creative skills to bear to "create something from nothing". In many cases, the artists have known each other since their college days.

For two-and-a-half decades, this scenario plays itself out over and over again, and the number of artists in the East End rises exponentially, until by the end of the 1990s there are over two thousand artists in an area of roughly eight square miles, working in often remote, cold and lonely studios. The East End, or Shoreditch and Hoxton at least, has also become fashionable, and property prices are rising again, pricing artists out of the market.

What is sad is that posterity risks forgetting them. Butler's Wharf now has one of those ubiquitous blue plaques, which gives a brief, history of the complex: first it was spice warehouses, and then it became restaurants and shops, we are told. The artists and musicians who were there for a decade are simply not mentioned.

But further speculation on these issues must wait until the concluding chapter, and for the time being we shall have to be content with the observations set out here. What is clear is that patterns exist and certain common threads run through the phases and tie them together. All of the artists who set up studios or galleries were responding to their own immediate needs. Even

[9] Evictions notwithstanding, and once terms were agreed.

those such as Peter Sedgely, who co-founded SPACE and envisaged an artists' community, were responding to their own immediate context. The *prima facie* evidence suggests that this phenomenon was not steered by any one person or organisation. Equally, we have been told by those involved that information travelled by word of mouth—the ubiquitous "grapevine": informal networks in other words. Spin-offs were commonplace (figure 7.6 overleaf).

But questions still arise. How informal were the networks? Can a phenomenon such as this just "grow" of its own accord. Is there a "hidden order" which we should be seeking? Clearly, it is time to look at these threads and patterns more systematically.

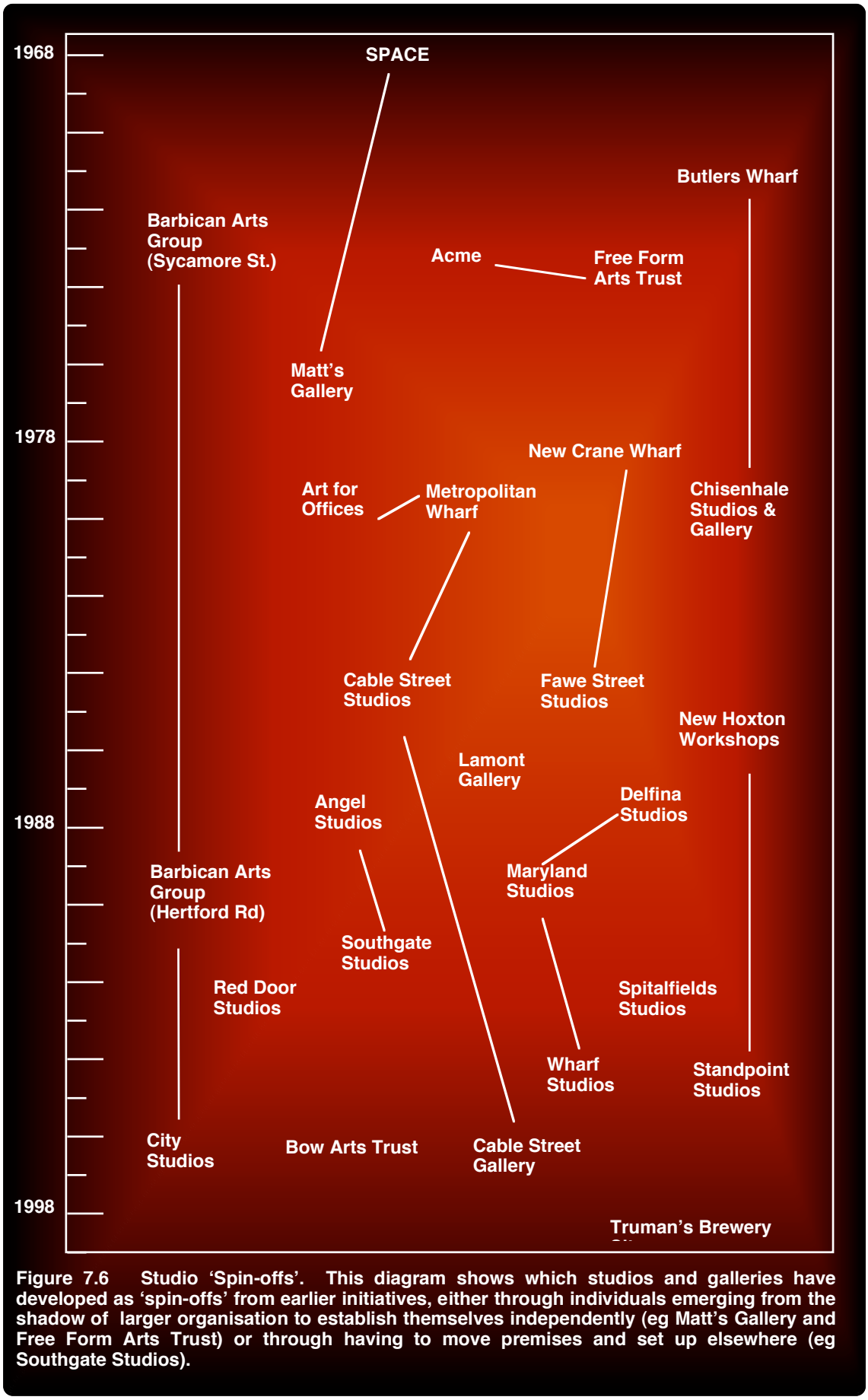


Figure 7.6 Studio 'Spin-offs'. This diagram shows which studios and galleries have developed as 'spin-offs' from earlier initiatives, either through individuals emerging from the shadow of larger organisation to establish themselves independently (eg Matt's Gallery and Free Form Arts Trust) or through having to move premises and set up elsewhere (eg Southgate Studios).

EIGHT

"THERE *AREN'T* ANY NETWORKS!"[1]

Nature is not an intrinsic harmony of clearly defined units. Nature exists in multiple levels, interacting with fuzziness at their borders. We cannot even formulate an unambiguous definition of "individual" at the single level of organic bodies—as Armillaria *mats and aphid clones demonstrate. Furthermore, in Darwinian terms, legitimate individuals exist and operate at several levels of a genealogical hierarchy—genes and species, as well as organisms. But what a fascination when this maelstrom of differing individuals builds its meshwork of interaction to produce life's history of Darwinian evolution.*

Stephen Jay Gould, "A Humungous Fungus Among Us", 1996

8.1 About this Chapter

Stephen Jay Gould unwittingly got closer to the truth than the studio manager whose exclamation forms the title of this chapter: but in the sense of there being only weak social networks at a formal level, our respondent got it about right; in the pages that follow, we shall find out why.

We now have a pretty good idea of the way in which the East End artists' agglomeration has evolved over the last thirty years or so, and we saw at the end of the previous chapter that it is equally apparent that the evolutionary mechanism relied heavily on social networks of one sort or another to oil its wheels.

In this chapter we shall explore those social networks more systematically: primarily this will be through the technique of formal social network analysis, but I shall also briefly explore some of the ways in which organisational networks have been theorised. This is the subject of section 8.2. Section 8.3 explains how the social network analysis was approached, sets out how the sample frame was chosen, while section 8.4 introduces the basic terms and concepts of social network analysis. Section 8.5 describes the pilot study which was carried out in order to assess the methodological approach and the application of social network analysis techniques. In

[1] This was one respondents's slightly outraged response to my question on social network involvement.

throwing light upon the artistic networks, the pilot study strongly suggested two things: a less detailed approach to measuring the precise nature of relationships between individual actors, and the introduction of a wider range of social network analysis tools with a view to developing a better understanding of the overall structure of the networks. The way in which this latter path was pursued, and the findings which it uncovered, are set out in section 8.6. Section 8.7 summarises the chapter, highlighting the main points which we shall take into chapter nine, where a theoretical model of the East End artists' agglomeration is developed.

8.2 Network Analysis and Network Theory

This chapter is primarily to do with the mathematical technique of formal social network analysis: it is not an exploration of network theory, but simply the application of a particular measurement technique to a particular problem. Here nonetheless, we shall touch very briefly on the way in which social networks have been theorised.

Social network analysis—the focus of this chapter—has its origins in the 1930s, with the development of sociometry—the study of inter-personal relationships in social groups—and the invention of the sociogram, a graphical depiction of those relationships. Recognition of the usefulness of such devices spurred the further development of analytical techniques which became increasingly mathematical during the 1940s and 1950s. These developments drove and were in turn driven by theoretical considerations, through which further insights into the dynamics of social groups were sought. The three mathematical cornerstones of social network analysis are graph theory, statistical and probability theory and algebraic models, which between them offer a "precise way to define important social concepts, a theoretical alternative to the assumption of independent social actors, and a framework for testing theories about structured social relationships" (Wasserman & Faust, 1997:10–17). Crucially, Wasserman and Faust observe in the final section of their book that

> a great deal of work remains [in] integrating network concepts and measures into more general social and behavioral science research. Although *network* is a catchphrase in many disciplines (from "network" to "network corporations") the precise (and correct) use of network measures has not fully diffused to these areas.
>
> (ibid:733)

They attribute this partly to "institutional and intellectual barriers between disciplines" and partly to a perception that social network analysis is overly technical.(ibid). But their observation highlights a rift which might be caricatured as the American pragmatist versus the European theorist: not surprisingly, there are overlaps; and of course there are gaps in the one which the other fills.

The debates are a decade old now, but some of the points raised remain pertinent. In his

introduction to the edited volume *Networks and Organizations* (Norhia and Eccles, 1992), Norhia pointed out that despite having a long history (as we saw above) the notion of the network had become fashionable in the early 1990s (ibid:3). *Networks and Organizations* represented "the state of knowledge about networks as applied to organizations" (ibid:viii), and presented both theoretical and empirical work: the general proposition of the volume was that "networks are as much process as structure" (ibid:7). It is perhaps felicitous for this thesis that one chapter, DiMaggio's, dealt with the foundation in the late 1920s of the Museum of Modern Art (MoMA) in New York (DiMaggio, 1992).

DiMaggio's argument is a simple one: in order to establish MoMA in the face of indifference or even hostility to contemporary art, the wealthy female triad behind the idea had to enlist the support of both wealthy and influential patrons. To do this, they "sought legitimacy in the academic community and the institutional art-museum community" (ibid:129). DiMaggio's "central insight" from this short study—the actual history of MoMA is described with a brevity that borders on the begrudging—is that "social structures… should be characterized on the basis of social relations rather than cultural factors" (ibid:120), an insight which intuitively seems sensible enough, and which is reflected in the approach to social network analysis adopted in this chapter. However it is worth making the point that the polarisation implicit in DiMaggio's assertion is *not* reflected herein: social relations need placing in context, and cultural factors therefore need to be taken into account, a view which would doubtless come as little surprise to the proverbial "man on the Clapham omnibus". We shall return to this theme shortly.

An example of the European approach (with a strongly Swedish perspective) is the notion of the "industrial network", presented as "a new view of reality" by Axelsson and Easton in the same year (Axelsson & Easton, 1992). Simply, this argued for a network-based approach to understanding industrial organisations. For Easton (1992:25), this notion was a new paradigm in the making[2], the consequence of which was strong disagreement about what drives the changes in a network: arguments varied from no mechanism at all to the view that resources and structures are consumed to arrest the process of entropy; networks do not tend towards an optimum efficiency configuration; or resource distribution may tend toward some sort of equilibrium (ibid).

These problems were perhaps compounded by Axelsson's observation in the same edited volume that there was confusion over how to define a network: he offered three possibilities:

- a number of loosely connected organisations which are linked by one or a number of bonds or social relationships;
- the total pattern of relationships within a group of organisations acting in order to achieve common goals;
- sets of two or more connected exchange relationships.

(Axelsson, 1992:243)

[2] Such claims occasion suspicion: time is perhaps a more reliable judge than a particular idea's originator of whether it represents a paradigm shift. Compare Norhia and Eccles's (1992) point that this was a newly fashionable but old idea.

The third definition was preferred by Axelsson and Easton. However, it is also the closest to that used in formal social network analysis, and it is in examples such as this that the rift posited above becomes obvious; and it does, as Wasserman and Faust claimed it would, appear to stem from a simple lack of curiosity. Social network analysis does of course offer an unambiguous definition of a network (and indeed did at the time) simply because, being a mathematical tool, it has to. The notion that "complex behaviour can result from the interplay of relatively simply defined exchange relationships" was not new in 1992: complexity theory, by then a decade old, argues exactly that, as we shall see in the next chapter. Finally, the confusion over what drives the changes in a network had also been addressed, but from the European side of the Atlantic, specifically Paris.

Bruno Latour (1979, 1987) introduced Actor Network Theory (ANT) to explore the way in which some scientific ideas are accepted, and some are not. Latour (1997) claims that it "…has very little to do with the study of social networks", but rather that it "aims at accounting for the very essence of societies and natures [sic]. …Social networks will of course be included in the description but they will have no privilege or prominence" (ibid). Ironically perhaps, Latour adds that he found few of their (ie social network analysts') tools "reusable" (ibid), a sentiment which this chapter clearly does not share; in fairness, though, the phrase "network analysis" means different things to different people, as we have just seen.

The original concept of ANT was that scientists, in order to get their ideas accepted by the scientific community and indeed the world, rely upon, interact with and mediate their laboratory and its equipment, their colleagues, funding bodies, journals, the media at a more general level and so forth. Latour calls this process a "black box", meaning that the niceties of doing research are generally hidden from the public, who are led to believe that "science" is an objective, logical and linear process, rather than the often politically driven and iterative process that it actually is (Latour, 1987). Latour argues that all of the things through which this process is mediated form shifting networks of actors and/or "actants"—the inanimate objects which are included in the networks and are acted upon.

Indeed, similar ideas can be found elsewhere. Bijker (1997) notes that the uptake of certain technological innovations—the safety bicycle for example—needed the right socio-economic context as well as the necessary technological advances. Becker (1982), Zukin (1982) and Bourdieu (1993), all argue that (successful) art is as much a product of its context as of the artist. Thus to make a (successful) painting, an artist needs materials, space in which to work and at the very least someone in a position of influence to buy the painting, or to champion it and encourage others to buy it. Bourdieu calls this the "the field of cultural production"—which resides in a "field of power"—and Becker refers to "art worlds" (Bourdieu, 1993:38; Becker, 1982). Like Latour's work, these descriptions are attempts to lift the lid on the mysterious "black box" of production and to look inside: the rather obvious point is that there is more to science than the scientific genius, more to art than the brilliant and charismatic artist.

These ideas, however, were not new either to art or to science when they were published. Palaeontologist Stephen Jay Gould, acutely aware of the social context of scientific practice,

had pointed out in the mid 1970s that "[p]eople… assume that each [scientific] statement arises from the 'data' actually presented, rather than the social conditions that truly inspired it" (Gould, 1977:243). The artist John Baldessari had also realised this in terms of art in his 1971 work *Art History*. Beneath a photograph of the pyramids of Egypt runs the caption:

> A young artist had just finished art school. He asked his instructor what he should do next. "Go to New York," the instructor replied, "and take slides of your work around to all the galleries and ask them if they will exhibit your work." Which the artist did.
>
> He went to gallery after gallery with his slides. Each director picked up his slides one by one, held each up to the light the better to see it, and squinted his eyes as he looked. "You're too provincial an artist," they all said. "You are not in the mainstream." "We're looking for Art History."
>
> He tried. He moved to New York. He painted tirelessly, seldom sleeping. He went to museum and gallery openings, studio parties and artists' bars. He talked to every person having anything to do with art; travelled and thought and read constantly about art. He collapsed.
>
> He took his slides around to galleries a second time. "Ah," the gallery directors said this time, "finally you are historical."
>
> Moral: historical mispronounced sounds like hysterical.
>
> (Lynton, 1989:338)

Going still farther back in time, we might refer to the lectures of Hippolyte Taine, who painstakingly elaborated the social, racial and cultural characteristics and contexts which underpinned the art of ancient Greece, and Italy and the Netherlands in the 16th century (Taine, 1889).

ANT, then, is a way of looking at the world. Social network analysis is a way of measuring it. But Murdoch (1997:745) observed that "nature and society are *collective* effects, that is they emerge from the construction and consolidation of networks". This is interesting, because here, ANT is hinting more or less explicitly at a dynamic which links social network analysis and the theoretical focus of the next chapter—complexity theory—and that is the notion of emergence: the appearance in a system of properties that cannot be predicted simply by looking at its constituent parts in isolation. We shall explore emergence more closely in chapter nine.

We shall revisit some of the theories outlined above in the closing section: here, though, social network analysis is used strictly as a methodological tool; as Wasserman and Faust (1997:11) put it, to "provide formal statements about social properties and processes". The intention is not to apply theories of networks to the qualitative findings, although that would be perfectly feasible, and the social network analysis points down a particular theoretical avenue: that is the subject of the next chapter. But for the time being, we continue with social network analysis, and here, the theory—or rather working hypothesis—to be tested is that offered up as

one of the closing questions of the last chapter: "How informal were the networks?"

8.3 General Approach and Sample Frame

8.3.1 General Approach

Recall from chapter two (section 2.4.1) that preliminary, informal enquiries were carried out with a view to "getting a feel" for the project and the subject matter. These enquiries were extended at a more formal level through a pilot study of the envisaged methodology which would be used in the social network analysis. The procurement of the pilot study is described fully in section 8.5, but its findings can usefully be summed up here.

It quickly became apparent that formal analysis of the social networks as they were three decades ago would be problematic and time-consuming at best. So too would be an analysis which attempted to trace the evolutionary dynamic of the social networks over that time, fascinating though that would be. Lundgren (1995) provides an interesting example of how such a study might be carried out in his own exploration of the way in which the networks within the Swedish image processing industry changed and evolved between 1975 and 1989. But what we can do here is look at a more formal level at the social networks as they now are, and by combining that information with both the historical and current qualitative evidence, attempt to tease out any patterns and processes which can further our understanding of the underlying dynamics. However, as we shall see in the next section, the pilot study highlighted the difficulty of studying social networks at the level of individual agents. It was therefore decided to examine the social networks which exist at a more formal, organisational level. In other words, an "actor" might be a local authority, a studio block, or an independent arts organisation, rather than an individual artist. Two indicators were developed which would provide information of sufficient detail to be useful, but not be so narrow as to be unrealistic. They are:

- actors which appear to be significant in some way;
- groups of organisations within the network which appear to be more cohesive relative to the network as a whole.

The insights into the nature and structure of the networks which the answers to such questions might offer are in themselves interesting and this chapter deals with the application of formal social network analysis to the relevant data gathered in the course of fieldwork. But these insights will also prove useful in chapter nine when we try to develop a theoretical model for the underlying dynamics of the historical development of the East End arts scene.

8.3.2 Sample Frame for Social Networks

If the sample frame from which social network models for artists are constructed is generated from a simple random sample, then the networks described, if they emerged at all, would tell us little other than the fact that some artists talk to other artists. And yet the very act of trying to

measure social networks among artists carries the assumption that artists talk to one another. To be sure, we could establish reasons why these particular artists talk and interact with the people in their network, but there would be little systematic basis for the findings.

For the purposes of mapping the social networks then, a random sample of artists in the East End would have to be the basis for a "snowball" sample, as described by Goodman (1961). Here, each of a random sample of actors *s* is asked to name *k* other actors. The actors in the first random sample—stage one—would each be asked to name, for example, the five actors with whom they "have the closest professional relationships" (stage two). Each of the five actors named who do not themselves appear in the stage one sample would then be asked to name further actors to generate a stage three sample (Goodman, 1961). This process is then repeated for as many stages as necessary to generate the required social network models.

There are two major problems with this approach of taking a random sample of individual artists. First, we would merely build up a small picture of the social networks of a small percentage of individual artists, without knowing for sure whether they are truly representative of the situation in the East End. Second, a stage one sample of ten percent of artists would encompass 150 people. Clearly, to develop a model of a social network, we would need at least two stages, and probably three to generate anything like a representative picture. If each stage one actor named five other actors for the stage two sample, even if some of those stage two actors could be discounted by dint of their being in stage one already, we still need to carry out over four hundred interviews. If we carried the process through to a third stage, then it is not unrealistic to estimate a total approaching something like 2000 actors.

A graphic representation of a 2000-actor network would undoubtedly be impressive. It would also be all but incomprehensible to any but the most patient and determined reader. And such a large sample size would also overstretch the resources—and patience—of a solitary researcher. Clearly, for all that snowball sampling is a useful technique, particularly for establishing further contacts, we need to find a more focused way of choosing our sample.

Each of the forty "independent" studio blocks is administered by a working artist. If each of the "independent" studio blocks is interviewed, it follows that not only has each of the blocks been interviewed in its capacity as an "arts organisation", but the forty artists who serve as administrators for the studio block have also been interviewed. A similar approach was adopted by Galaskiewicz (1979) who, in his study of the exchange networks of a medium-sized town in the United States, chose to interview the highest ranking executive officers of his selected organisations (Galaskiewicz, 1979:45). However, although the highest ranking officer may be best placed to give an overview of an organisations function and strategy, Galaskiewicz notes the criticism of Laumann et al. (1978), who point out that a corporate actor is composed of individuals who have, in effect, their own loyalties and agendas (ibid:46). The difficulty then is in separating the "corporate agenda" from the "individual agenda".

It quickly became apparent during this study—and this is a question addressed in further detail in the pilot study in chapter eight—that the division between corporate and individual networks would need to be addressed. The view of those being interviewed was that the significant

artistic networks, the ones that they could relate to, were those which function at an individual level rather than a corporate level. In other words, the studio as such may not be part of a network even if the individuals are a part of a network and it is generally known that they come from a particular studio.

Even so, for the purposes of this study, the sample frame described above is reasonable: the "independent" studio blocks are in general sufficiently small for the administrator to know everyone in them; the administrators are themselves working artists who carry out their administrative responsibilities in their spare time. What this means is that the interviewee can give information from the point of view of the organisation, which might for instance be interested in building up links with say the local authority's education department, and from the several points of view of the individual artists within a block. Some individual artists may wish to be involved in highly collaborative educational projects, while other individuals may prefer to work in relative isolation, producing work for exhibition and sale. The studio administrator is in a position to represent both these positions, since in representing a studio block, they are also representing the artists within it. The problem of separating the "corporate" and "individual" agendas was thus solved by making specific reference to both in the interview.

The picture which emerged from the interviews suggested that the social networks are "nested"; networks within networks within networks. As we noted above, formal mapping of the social networks at an individual level would be problematic, so the formal analysis has been of the social networks at a corporate, or organisational level. However, before we move to the analysis itself, we must introduce the methodology which makes such an analysis possible.

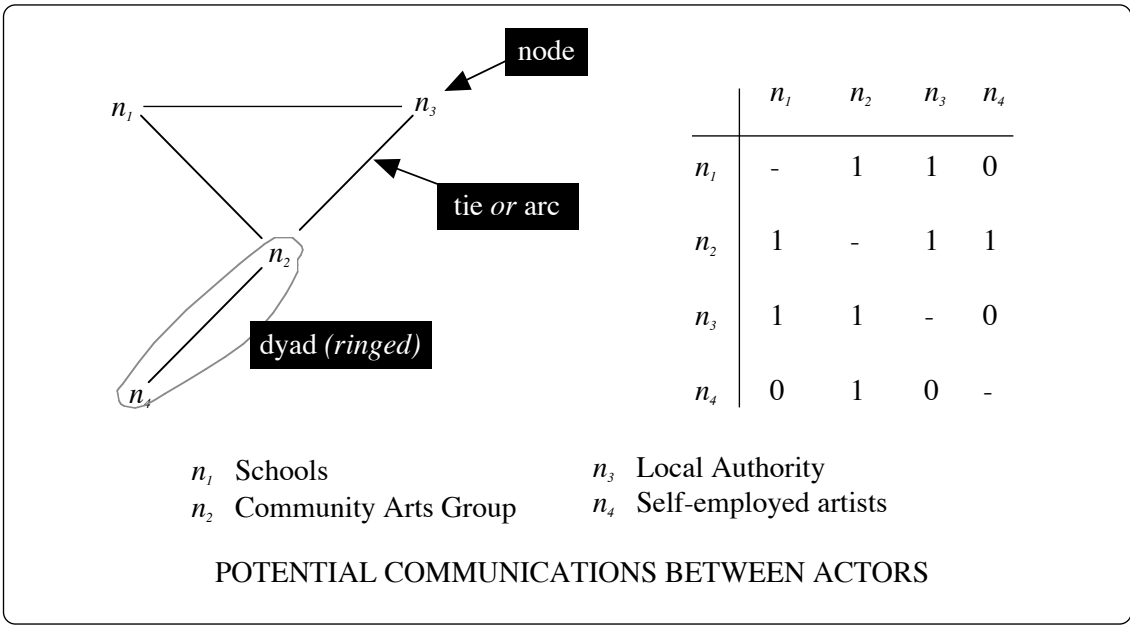
8.4 A Brief Introduction to Social Network Analysis[3]

8.4.1 Basic Terms and Concepts

Social Network Analysis provides a relatively simple way of understanding a range of more or less complex relationships between people, organisations and so forth, known as *actors*. Relationships between pairs of actors can be be clearly defined, and by analysing a series of these relationships, and then representing them either graphically—when actors are referred to as *nodes*—or in the form of a matrix, the mechanics of a network can be understood and explained (Wasserman & Faust, 1997).

Actors need not be capable of acting on their own volition, in the sense that an actor could comprise people in a group, companies or nation states (ibid:17). A group of actors is known as a network and a group of actors of the same type—self-employed artists for example—is known as a *one-mode network* (ibid). A *two-mode network* might be the relationship between artists and art dealers, while multi-mode networks also exist, although social network methods for such complicated structures are rare (ibid:35).

[3] Also see Appendix Two.



	n_1	n_2	n_3	n_4
n_1	-	1	1	0
n_2	1	-	1	1
n_3	1	1	-	0
n_4	0	1	0	-

Figure 8.1 Representation of a Network using Graph and Matrix.

Social *ties* link actors to one another, and these can take on a variety of different guises; friendship, business relationships, club membership, physical connections such as a road or a bridge, or kinship for example (ibid:18). A collection of ties, for example friendships, is called a *relation* (ibid:20). A relational tie can either be *directional* or *non-directional*, and either *dichotomous* or *valued* (ibid:44). A directional tie exists where an artist sells paintings *to* a dealer, and that dealer buys paintings *from* an artist, while a non-directional exists where an artist shares a studio with another artist. A dichotomous tie either does or does not exist—for example our artist either does or does not sell paintings to a particular dealer. A valued relation somehow quantifies the relation, either in terms of strength, intensity or frequency of the tie between the actors (ibid:45). The number of paintings sold to a dealer each year is an example of a valued relation. So too is how much that dealer likes each of their artists' work.

The basic unit of social network analysis is the *dyad*—two actors linked by a tie, or ties (ibid). The *triad*, consisting of three actors and the associated ties is also used. This is more complex. For example, actor *i* is linked to actor *j*, and actor *j* is linked to actor *k*. Actor *k* is in turn linked to *i* via *j* (ibid:19). A collection of dyads, all interlinked, is known as a sub-group, and the collection of all actors with ties to be measured is known as the *group* (ibid:20). The "*social network* consists of a finite set of actors and the relation or relations defined on them" (ibid:20). So without further ado, let us take a look at an example such a network.

8.4.2 The General Structure of the Network

The model in figure 8.1 above is hypothetical, but serves to demonstrate how combinations of dyads can be be put together to form a network. The *graph* is a *simple graph* since it has only

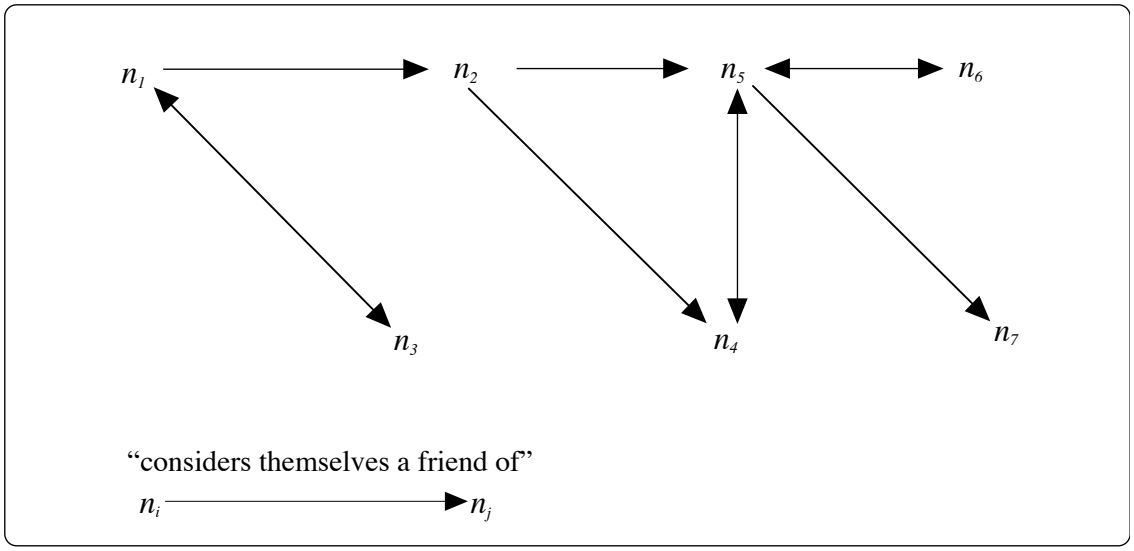


Figure 8.2. Example of a Directed Graph or Digraph

one line between each pair of nodes. Each node either is, or is not linked to another, so each relation is dichotomous—the actors either do or do not communicate with each other. Each relation is also non-directional, since communication is assumed here to be a two-way process.

The shortest path between two nodes is the *geodesic* and the longest of these is two (ties). The matrix expresses the same network mathematically rather than graphically. A tie is indicated by a 1, no tie by a 0. The matrix in figure 8.1 is symmetrical, which shows that the linkages are non-directional. Each form of representation has advantages and disadvantages. The graph has the virtues of being relatively easy to read, even if the information it presents is relatively complex. The significant actors can be identified with relative ease, even if the reader has only minimal, or no knowledge of social network analysis. The graph forms a useful base for attempts at predicting the effects of changes to the network: questions such as "supposing you introduced this actor to that actor?" can be asked simply by drawing a line on the graph, and the change in the overall balance of the network can immediately be grasped at a qualitative level, even if further calculation is required to interrogate any quantitative changes. For this reason, graphs rather than matrices are used to present the findings of the social network analysis in this chapter.

In this illustrative example, node n_2, Community Arts Group, appears to play a pivotal role in the model. It is the only node connected to all the others, and serves as a "communications short-cut". Such a node—a *cutpoint*—is critical in communications networks. Without n_2, the graph has two separate components between which no communication is possible. Artists (n_4) would be isolated—there would in effect be two networks.

Figure 8.2 above is a *directed graph*, or *digraph*. This example shows which actors "consider themselves a friend of" other actors and has either one or two *arcs* between each pair of nodes; the first arc shows whether n_i considers n_j a friend, while the second shows whether n_j considers n_i a friend. Arcs are expressed as arrows which indicate the direction of the relation.

Dyads can be either *mutual*, indicated by a double-headed arrow, *asymmetric*, indicated by a single-headed arrow, or *null*, indicated by no arc. Thus (n_1, n_2) is asymmetric, (n_4, n_5) is mutual and (n_2, n_3) is null. Note that n_2 is also a cutpoint in this graph. A node is said to be either *adjacent to* a node if it terminates there, or *adjacent from* another node if it originates at that node. Thus in figure 8.2 n_5 is adjacent to n_7 and adjacent from n_2.

We can examine the basic structure of the social network for both graphs and digraphs in a number of ways. We can measure the *density* Δ of the network—the number of linkages present compared with the maximum possible—and this will quantify the overall "connectedness" of the network. Crudely, a low density would indicate that those in the social network have little contact with others in the network, while a high density would indicate the opposite.

The *nodal degree* d_{ni} in a graph measures the number of linkages any one actor has with other actors. The linkages can be either valued or unvalued; if they are valued, then a separate figure is assigned to each node for the total *value* v_{ni} of its linkages.

Nodal degree of directed graphs is measured in terms of nodal *indegree* $d_I(ni)$ which measures the total number of nodes adjacent to n_i and nodal outdegree $d_O(ni)$ which measures the total number of nodes adjacent from n_i. Measures of indegree and outdegree are useful means of gauging the popularity or significance of actors to other actors in the network. Linkages in directed graphs can, like those in undirected graphs, be valued. Note that the values for indegree and outdegree need not be the same. Thus in the example of figure 8.2, an actor with a large indegree, say n_5 is one who is considered by many others to be a friend, and an actor with a large outdegree, say n_2, is one who considers themselves to have many friends. Note that indegree and outdegree need not coincide. The actor's view of how many friends they have may well differ from the others' views of how many friends that actor has, and here it can readily be seen that such information is potentially very sensitive.

Wasserman and Faust (1997:128) note that it is possible to derive four distinct types of node in a directed graph which prove useful in describing the roles of particular nodes in a network:

- *Isolate* if $d_O(ni) = d_O(ni) = 0$
- *Transmitter* if $d_I(ni) = 0$ and $d_O(ni) > 0$
- *Receiver* if $d_I(ni) > 0$ and $d_O(ni) = 0$
- *Ordinary* if $d_I(ni) > 0$ and $d_O(ni) > 0$

These node types are discussed in more detail in Appendix Two, *Social Network Analysis*.

8.5 The Pilot Study

8.5.1 Introduction

Recall that informal, preliminary enquiries, described in chapter 2 (section 2.4.1) had suggested

that the artistic networks were likely to be complex, and with that thought in mind it was decided to carry out a pilot study of the proposed social analysis techniques. This would focus on five organisations which those early enquiries and desktop research had suggested were historically significant actors within the East End arts networks, and which had therefore been interviewed early on in the course of fieldwork. As we have seen, these five actors are in fact a part of a much larger phenomenon, but in utilising them as the basis for the pilot study useful insights were gained into the structure and dynamics of the artistic networks, and the analytical techniques could thus be modified accordingly. The pilot study had the primary effect of suggesting a less detailed, but more wide-ranging approach to the social network analysis, better able to accommodate the dynamic nature of the social networks, and from this two "indicators" were generated, noted in section 8.2, through which the techniques described in that chapter were chosen. We shall return to those techniques and indicators in section 8.6.

First, though, we set out the protocol for the pilot study and describe its findings. We then explore the strengths and weaknesses of the adopted approach and explain how these were addressed in subsequent research.

8.5.2 Pilot Study: Protocol and Findings

The initial purpose of the pilot study was to test the quantitative data which had already been gathered during the course of fieldwork, and to confirm or otherwise the suitability for this project of both that data and the envisaged social network analysis techniques. Recall that the possibility of doing effective social network analysis at individual agent level had been discounted as being impractical. The initial aim had therefore been to collect and analyse data about the networking activities of "actors"—that is arts organisations, local authorities, studio blocks and galleries—but at a relatively fine-grained level. Since data for both qualitative and quantitative analysis was collected in the same interviews, it was necessary to carry out such a pilot at an early stage in the project. To that end, five of the actors who had been interviewed early on in the course of fieldwork were utilised. They were:

- SPACE, the first artist-led organisation to provide studio space in warehouses in the East End;
- Acme, the first artist-led organisation to provide live-work space for artists;
- Chisenhale Studios, one of the first "independent" artists' studios in the East End;
- Free Form Arts Trust, the first community-oriented arts organisation in the East End;
- London Borough of Tower Hamlets's Arts and Leisure Officer.

These organisations were chosen for the following reasons:

- The artists' groups are original "pioneer" East End studios;
- The artists' groups can provide first hand historical evidence of the origins of the East

End in its putative role as a "creative milieu";
- Tower Hamlets (along with Hackney) has a strong interest in what the borough can gain from the East End's artists, and were therefore seen as able to provide a broader overview of the significance of this phenomenon;
- Since the groups are all long-established, they were perceived to be useful starting points from which to generate a snowball sample.

The aim in choosing these informants was therefore two-fold. First it was hoped to establish the historical origins of East London's strong geographical concentration of artists. Second, it was hoped that the informants, being of key significance in the East End, would prove a useful starting point from which to generate a snowball sample, although in the end this sampling option was not pursued, and the information gathered was used at a more general level.

For the purposes of social network analysis, the five respondents were asked to value linkages with other actors on a scale of nought to five, which may be formalised as follows:

0 Unaware of existence of that organisation, or, if aware, negligible contact, and no perceived need to initiate a relationship;
1 Aware of existence of organisation, having minimal contact, but no working relationship as such;
2 Positive working relationship, but intermittent or sporadic contact, probably not long-established, but felt to have the potential to develop;
3 As 2 but: contact is regular but infrequent. Relationship has developed from stage 2, and is perceived as an integral part of the organisation's longer-term programme of activities;
4 As 3 but: contact is now frequent; the relationship has been relatively long-established;
5 As 4 but: professional relationship sufficiently strong to have a significant social element.

A total of six data sets were collated for the five respondents. The first set of data comprises statistics for the entire group, while the remaining five sets comprise data for each of the respondents. The five respondents between them named a further six actors, generating a network of eleven actors. For this pilot study linkages, which are of course valued, were also deemed to be non-directional since this was judged to be more appropriate to the measurement of professional relationships (figure 8.3 overleaf).

The first data set thus functioned as a baseline against which statistics for each of the individual respondents could be measured. This set also told us something about the pilot network itself, although even at this early stage in the research, it became apparent that this data needed to be read with considerable circumspection.

The first point is that the majority of actors within the pilot network were those named by the respondents, rather than respondents themselves, and the pilot network was therefore the network *as perceived by the five respondents*. Thus the other actors in the pilot network are those who are perceived to be significant from a particular respondent's point of view. Each of

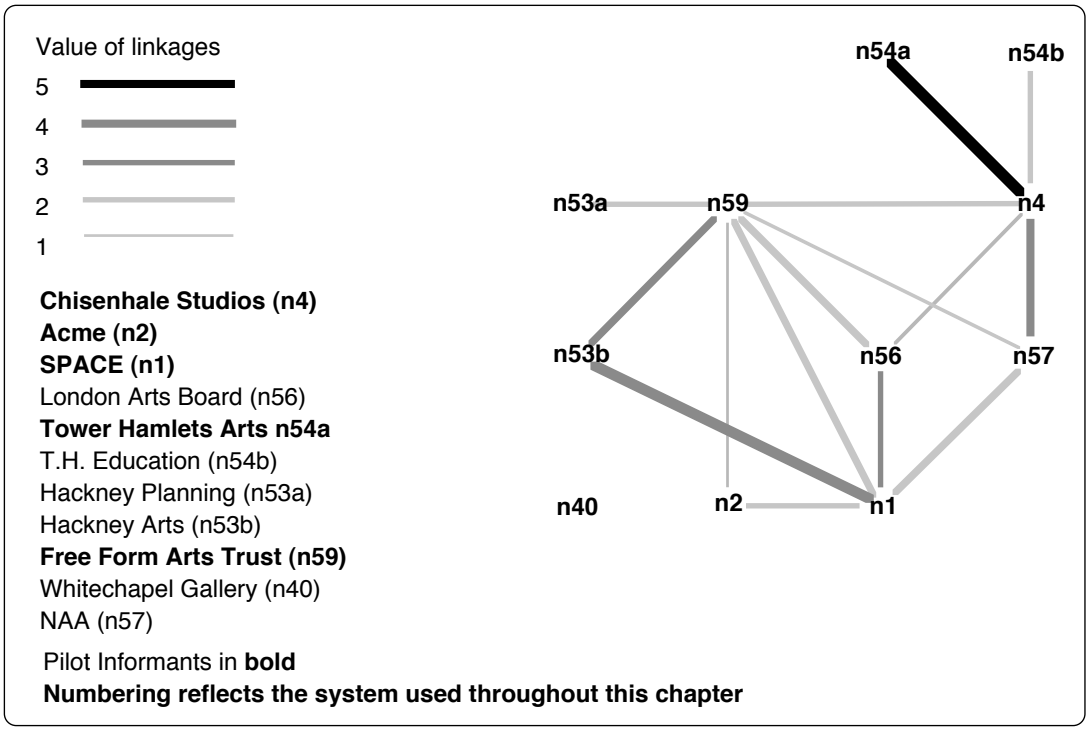


Figure 8.3 Network for Pilot Study

the respondent's networks are, in effect, combined to provide an overall picture. So the borough of Hackney for example, which was not interviewed as a part of the pilot study, appears in the pilot network, but any figures which we attribute to Hackney—nodal degree for example—cannot be meaningfully interpreted without the introduction of a directional element into the analysis, and this is a point we shall examine more fully in the next section, which explores how the findings of the pilot study were addressed.

Equally significant is the fact that this analysis considers links between *organisations*. Thus Acme Housing Association appears from the pilot analysis to be relatively small and insignificant within the pilot network, and in terms of its direct relevance to those other respondents, that may well be true. However, we know that Acme is actually the largest provider of studio space in London—and also in Britain (Acme, 1995)—and further, and more importantly, that it also provides a substantial proportion of studio space in the East End. In terms of the East End arts scene then, Acme is highly significant, and the dichotomy between what the pilot study tells us, and what the historical facts tell us is addressed later in this chapter.

It is also important to note that the linkages between actors are those which were perceived by the respondents to exist at the time of the interview. Thus what may have been a potentially strong linkage on the day of the interview—because a collaborative proposal for funding has been entered into, for example—may cease to exist if the source of the funding dries up unexpectedly, or if the application is unsuccessful. Thus the social networks which exist are subject to constant change, and an analysis of this type is at best a snapshot of the network at a given point in time. Again, this is an issue which is addressed in the next section.

However, the results from the pilot study, although of limited value in terms of formal analysis of the networks, offered insights into the structure and dynamics of the networks, alluded to above, which have proved useful in terms of formulating a revised strategy by which the social network analysis could be carried out at a less detailed but more realistic level. We shall therefore turn our attention to the findings of the pilot study before continuing the discussion of its findings and implications.

Baseline statistics of nodal degree and linkage value were used in the pilot study with a view to gaining an insight into the overall structure of the pilot network. This was a test of how effectively data gathered in the field could be probed through social network analysis techniques. Participation in events such as the Whitechapel Open Studios, which can also be explored using social network analysis techniques, was not studied at this stage since accurate data can be gathered from documentary sources. The basic statistics of the group of eleven actors, *N*, are therefore as follows:

Total nodes in network, $g(N) = 11$
Total linkages in network, $L(N) = 15$
Total value of all linkages, $V(N) = 37$

Modal Split for nodal degree

$d_{ni} = 0$: modal split = 1
$d_{ni} = 1$: modal split = 3
$d_{ni} = 2$: modal split = 2
$d_{ni} = 3$: modal split = 2
$d_{ni} = 4$: modal split = 0
$d_{ni} = 5$: modal split = 2
$d_{ni} = 6$: modal split = 0
$d_{ni} = 7$: modal split = 1

Mean Nodal Degree $\bar{d}_{(N)} = 2.73$

where $\bar{d} = \frac{\sum_{i=1}^{g} d(n_i)}{g}$ (8.1)

which may be simplified: $\bar{d} = \frac{2L}{g}$

Variance of Mean Nodal Degree, $S_D^2 = 4.62$

where $S_D^2 = \frac{\sum_{i=1}^{g} (d_{ni} - \bar{d})^2}{g}$ (8.2)

Mean value of all linkages $\overline{V}_L = 2.467$

where $\overline{V}_L = \frac{V}{L}$ (8.3)

Variance of all values $S^2_{V_L} = 22.62$

where $S^2_{V_L} = \frac{\sum_{i=1}^{L}(v_{ni} - \overline{V}_L)^2}{L}$ (8.4)

Density of the graph $\Delta = 0.336$

where the density of a valued graph, Δ is the average value attached to the lines of the graph.

where $\Delta = \frac{\sum v_k}{g(g-1)}$ (8.5)

and $0 \leq \Delta \leq 1$

The figures from the pilot study, as we noted above provide a rough "base map" of the network which we can utilise to set out a a more refined strategy for social network analysis.

First, the pilot network has a density $\Delta = 0.336$ and it is not therefore very dense: there are considerably fewer and weaker linkages than the maximum possible. Second, the variance of mean nodal degree, $S^2_{V_L} = 4.62$ is high relative to the mean nodal degree $\overline{d}_{(N)} = 2.73$. In other words, nodal degree is highly dispersed from the mean nodal degree. A glance at the modal split above tells us that this high variance is not altogether surprising since there is no "typical" number of linkages for the organisations. The base statistics for each of the respondents are:

Chisenhale Studios:	nodal degree, $d_{(n1)} = 5$;	value, $v_{(n1)} = 14$;	mean value, $\bar{v} = 2.80$
Acme Housing Association:	nodal degree, $d_{(n1)} = 2$;	value, $v_{(n1)} = 4$;	mean value, $\bar{v} = 2.00$
SPACE Studios:	nodal degree, $d_{(n1)} = 5$;	value, $v_{(n1)} = 14$;	mean value, $\bar{v} = 2.80$
L.B. Tower Hamlets:	nodal degree, $d_{(n1)} = 1$;	value, $v_{(n1)} = 2$;	mean value, $\bar{v} = 2.00$
Free Form Arts Trust:	nodal degree, $d_{(n1)} = 7$;	value, $v_{(n1)} = 14$;	mean value, $\bar{v} = 2.00$

The base figures for the five respondents—nodal degree, value and mean value—give useful insights into what might be expected of each of the actors in terms of their networking habits at an organisational level, and it is constructive to compare the figures from the pilot network with qualitative evidence from the interviews.

The values for nodal degree and mean value for Chisenhale Studios are greater than those for the pilot network, which tells us that Chisenhale Studios has more and stronger links than average with other organisations within the pilot network. This quantitative evidence is re-

flected in the fact that Chisenhale Studios has always had a philosophy of pursuing community and educational projects. Acme, by contrast has values for both nodal degree and mean value which are below their respective means. This would tend to suggest a below average involvement in the pilot network, and these figures are reflected in Acme's deliberately "isolationist" approach to networking. SPACE has high nodal degree and value, which suggests that they work relatively hard at developing and keeping contacts. However, many of their linkages with other organisations vary in strength and frequency depending upon whether they were involved in many, smaller arts projects, rather than being involved in the organisational network described here. Tower Hamlets, like Acme, has figures below the respective means, but it is in fact involved in several smaller, short term projects, rather than being involved in the organisational pilot network described here. Free Form Arts Trust has a high figure for nodal degree and value, but mean value is below the network mean. This reflects the fact that Free Form is run in the same way as a commercial practice, and has a large number of relatively weak linkages with clients.

8.5.3 Pilot Study: Discussion

What is immediately clear from the pilot study is that the figures, taken in isolation, give us bare facts and little else. So we can state with reasonable confidence that the pilot network is not very dense, and the number of linkages which any actor has is likely to differ from the average of 2.73. Further, there seems to be a reasonably clear correlation between what the qualitative data tells us about an actor's involvement in the pilot network, and the mathematical data pertaining to that actor. Clearly then, even at this comparatively simple level, we can gather useful insights about the nature of the networks in terms of structure and density, and these insights can be given greater depth when combined with qualitative data.

However, the weaknesses in the approach described above must not be overlooked, and they are not always readily apparent. The first and major problem is that interviewees rapidly got bored with the line of questioning outlined above, and were often loath to ascribe a numerical figure to a relationship the outcome of which was unsure, particularly if it was in the early stages and would therefore score low on the system set out above. This problem was compounded by the fact that in telling the "story" of how their organisation came into being, people and organisations might be mentioned along the way, and returning to these relationships in the interview, when they had already been described, could be irritating for the interviewee. This response from Adrian Hemming of Southgate Studios is typical:

> NG How would you see yourselves as fitting in to any professional networks that you perceive to exist?
>
> AH Well I would say me personally, informally, totally informally. I mean most things seem to happen by serendipity, it's just accidental.

(Southgate Studios, 1999:interview)

The consequence of this was that the interviewee would try to skip over this section, with a view to discussing topics which had not already been covered, leaving the interviewer with the choice of persisting with the social network analysis, and risking irritating the interviewee, or finding a more workable approach to gathering the data which would not prove antagonistic to the interviewee. The latter course of action was chosen, on the simple grounds that the researcher should not antagonise informants.

The second problem is that even if informants painstakingly and diligently value the strength of a relationship on a numerical scale, such an analysis, if it is to reflect accurately the network which existed at that time, has to be carried out within a very small time frame. The fieldwork, as we saw in chapter two, was carried out over a period of roughly twenty months, whereas the "short-timespan" strategy would have to be procured over only a few weeks or a month, during which all the interviews would have to be carried out. While such a strategy would be workable in a single organisation, such as a company, arranging thirty interviews with thirty different arts organisations, all to take place in the space of a month, was not seen as a feasible approach, particularly as many of the interviews had to fit around artists' work schedules.

The third problem also pertains to time and detail. Even if the problems set out above were overcome, the resulting model of the social networks, while very detailed, would be accurate only for that particular point in time. Such a model would also appear to be more accurate than it really is—the equivalent of measuring the height of a forest to the nearest millimetre. Thus such an approach is most appropriate for a time-series study, perhaps over many years, such as Lundgren's study of the evolution of the networks within the Swedish image processing industry from the mid-1970s to the late 1980s (Lundgren, 1995). The aim in this project however was to gather information which could tell us more about how the the East End artists' agglomeration evolved, rather than trying to establish "who is friends with whom, and how close are they?" So in order to develop a more resilient model which was less "time-dependent", it was decided to abandon the overly detailed approach to the social network analysis of the pilot study in favour of one which was more exploratory. This would be better able to accommodate inconsistencies from interview to interview, and allow the interviewee to speak more freely and naturally about the linkages that they have with other organisations, but retain the usefulness of the pilot approach in terms of describing the structure of the network. We shall now turn our attention to this approach.

8.6 Artistic Networks—In Search of a Structure

8.6.1 Introduction

We noted above two indicators which were developed to circumvent the problems which became apparent in the course of the pilot study, and by which the social networks could therefore be analysed. They were:

- actors which are significant in some way;
- groups of organisations within the network which appear to be more cohesive relative to the network as a whole;

In this section we shall apply the techniques of social network analysis set out in chapter five to each of the indicators in turn.

First though, we shall turn our attention to the graph of the social networks in figures 8.4 to 8.8 (pp.145–149). This shows all of the actors which were still in existence in mid-1998 and which might be considered a part of the East End agglomeration of artists. The nodes enumerated with white lettering represent the actors interviewed. Also shown are the foundation dates—the oldest at the centre—for these actors, and the three types of relations which are the subject of this analysis. All are directional, and they are colour-coded thus:

- The red relations indicate that the two actors have an active working relationship at a formal organisational level. Thus the borough of Tower Hamlets, for example, is collaborating with ViA (described in chapter two). These relations are directional, but always in both directions. Thus if *a* collaborates with *b* then *b* collaborates with *a*.

- The blue relations indicate that actor *a* nominated or referred to actor *b* when asked with whom they had a formal linkage. This therefore reflects the nominator's view of the nature of their professional relations with other organisations.

- The green relation indicates that actor *b* is in some way supported by actor *a*, for example through being funded by them, or say by dint of the fact that *a* is *b*'s landlord.

Between them, these three sets of relations offer the possibility of quantitative exploration of the social networks, although as we noted above, a purely quantitative account must be read with due circumspection, and with qualitative findings in mind. The reader should also keep in mind the fact that these networks are at one "level": within them can be found smaller networks, which we shall discuss and concptualise as "sub-groups", and the networks presented will form part of larger networks. The connections with the larger networks are not explored here, but in qualitative terms form the social context for the project, which has been explored in previous chapters. The reader will doubtless have spotted the fact that this notion of embeddedness resonates with the theories of Bourdieu, Becker, Bijker and DiMaggio, discussed above; but it also chimes with the notion of self-similarity across scales, or fractal properties, and this we shall explore in the next chapter. Let us return to the analysis: in the first instance we shall

examine the whole network—that is treat the three different relations as if they are

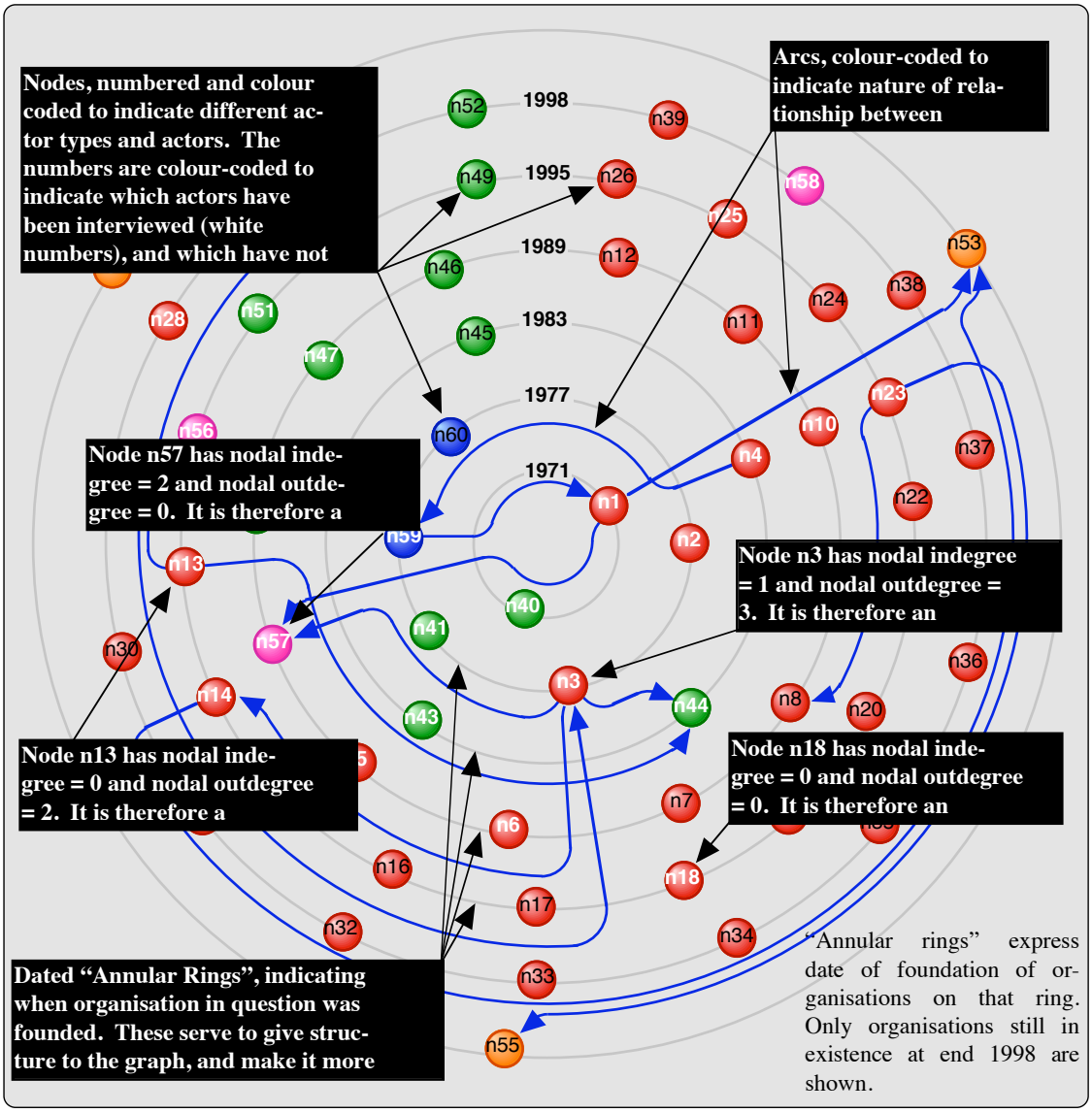
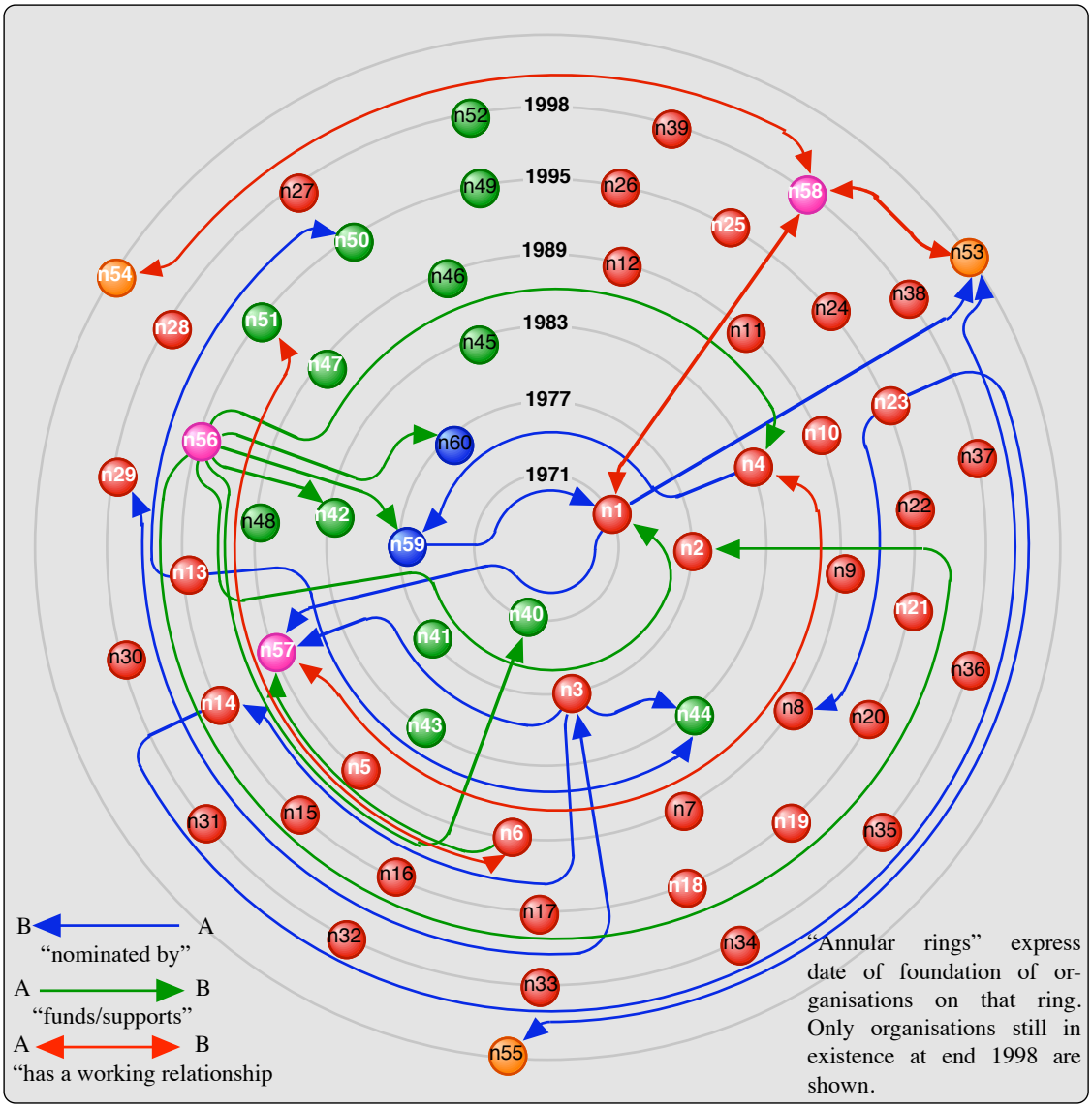


Figure 8.4 An Illustrative Digraph

Figures 8.4 to 8.8 (this page and pages 146 to 149 following). Circular digraphs showing respectively, an illustrative digraph, all relations, red relations, green relations and blue relations amongst actors.

The graphics used in these diagrams were derived from graphical representations of the internet in *Scientific American*, June 1999 (Chakrabarti et al., 1999:51)



Studio Blocks

SPACE Studios (n1); *Acme HQ (n2)*; *Barbican Arts Group (n3)*; *Chisenhale Studios (n4)*; *Fawe Street Studios (n5)*; *Cable Street Studios (n6)*; Hanbury Street Studios (n7); *[New Hoxton Workshops] (n8)*; Pixley Street Studios (n9); *Maryland Studios (n10)*; MT Studios (n11); Rufus Street Studios (n12); *Florence Trust (n13)*; *Southgate Studios (n14)*; Cooperage Studios (n15); Copperfield Road Studios (n16); Limehouse Arts Foundation (n17); *Red Door Studios (n18)*; *Spitalfields Studios (n19)*; Teesdale Street Studios (n20); *Balls Pond Studios (n21)*; Brick Lane Studios (n22); *Standpoint Studios (n23)*; Westland Place (n24); *Wharf Studios (n25)*; Columbia Road Studios (n26); Birdcage Studios (n27); *Bow Arts Trust (n28)*; *City Studios (n29)*; Oxford House (n30); Panchayat (n31); Turquoise Arts Group (n32); Underwood Arts (n33); Arbutus Studios (n34); Baches Street Studios (n35); Spitalfields Farm Studios (n36); 113 Group (n37); Colos-

Art Galleries

Whitechapel Art Gallery (1896) (n40); *Camerawork Gallery (n41)*; *Matt's Gallery (n42)*; *Art for Offices (n43)*; *Chisenhale Gallery (n44)*; The Showroom Gallery (n45); Interim Art (n46); *Lamont Gallery (n47)*; Flowers East (n48); *[Commercial Gallery (n49)]*; *Paton Gallery (n50)*; *Cable Street Gallery (n51)*; The Approach Gallery

Local Authorities

LB Hackney (n53); *LB Tower Hamlets (n54)*; Dalston City Partnership (n55)

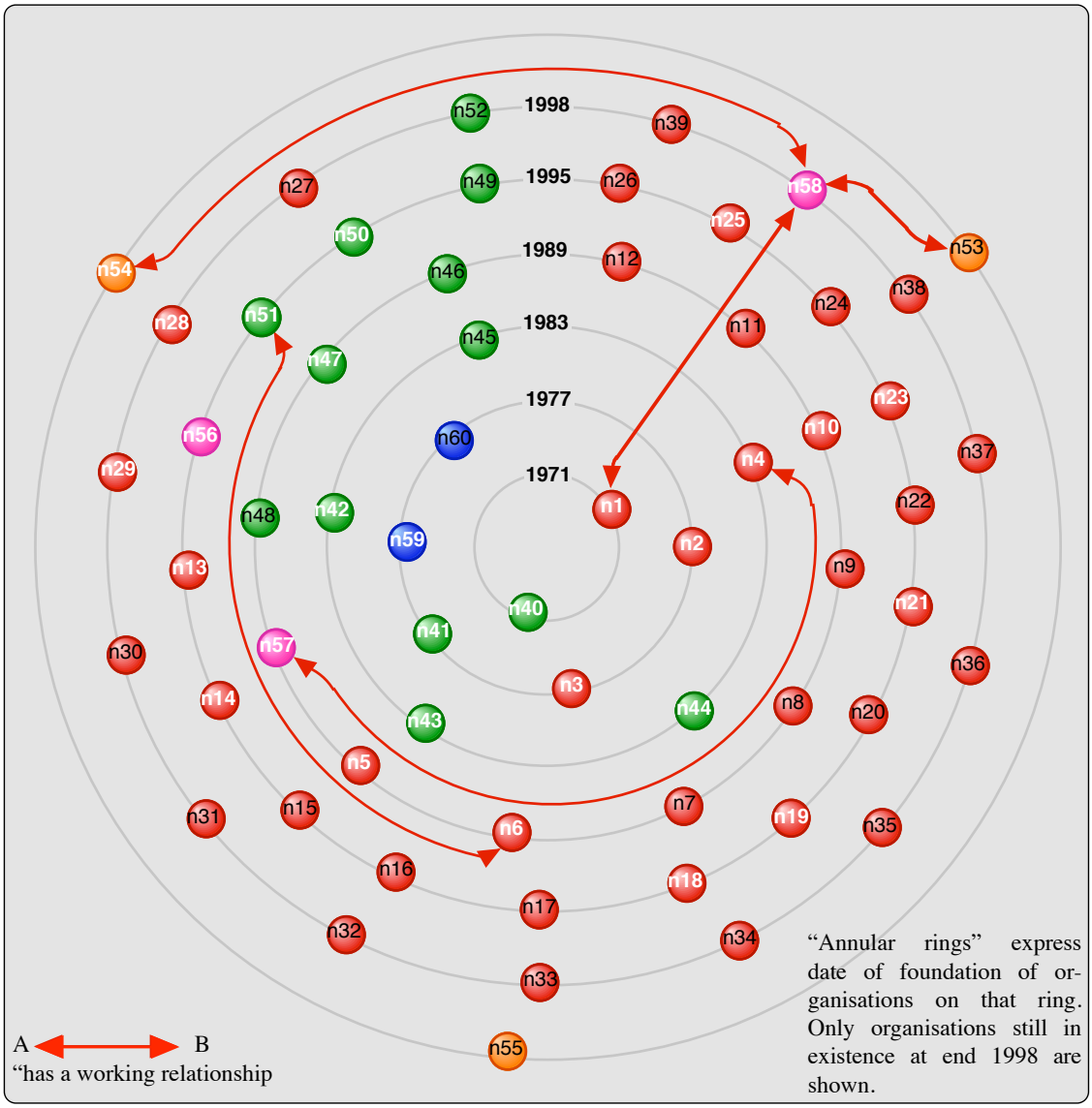
Artists' Representative Organisations

London Arts Board (n56); *National Artists Association (n57)*; *ViA (n58)*

Independent Arts Consultancies

Free Form Arts Trust (n59)
Art of Change (n60)

Actors which have been interviewed are italicised in the legend, and assigned white numbers in the digraph



Studio Blocks

SPACE Studios (n1); *Acme HQ (n2)*; *Barbican Arts Group (n3)*; *Chisenhale Studios (n4)*; *Fawe Street Studios (n5)*; *Cable Street Studios (n6)*; Hanbury Street Studios (n7); *[New Hoxton Workshops] (n8)*; Pixley Street Studios (n9); *Maryland Studios (n10)*; MT Studios (n11); Rufus Street Studios (n12); *Florence Trust (n13)*; *Southgate Studios (n14)*; Cooperage Studios (n15); Copperfield Road Studios (n16); Limehouse Arts Foundation (n17); *Red Door Studios (n18)*; *Spitalfields Studios (n19)*; Teesdale Street Studios (n20); *Balls Pond Studios (n21)*; Brick Lane Studios (n22); *Standpoint Studios (n23)*; Westland Place (n24); *Wharf Studios (n25)*; Columbia Road Studios (n26); Birdcage Studios (n27); *Bow Arts Trust (n28)*; *City Studios (n29)*; Oxford House (n30); Panchayat (n31); Turquoise Arts Group (n32); Underwood Arts (n33); Arbutus Studios (n34); Baches Street Studios (n35); Spitalfields Farm Studios (n36); 113 Group (n37); Colos-

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Local Authorities

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Artists' Representative Organisations

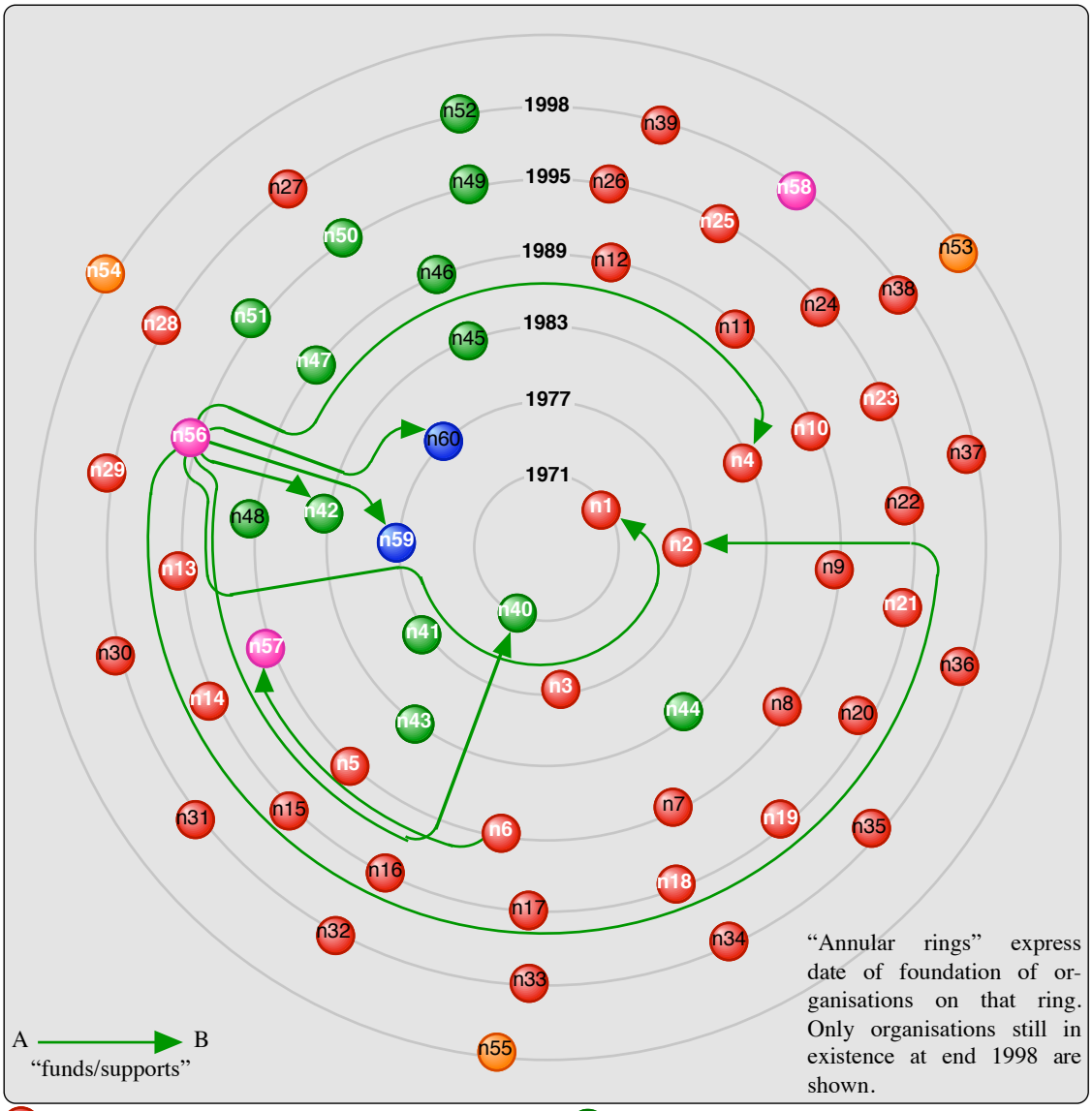
London Arts Board (n56); *National Artists Association (n57)*: *ViA (n58)*

Independent Arts Consultancies

Free Form Arts Trust (n59)

Art of Change (n60)

Actors which have been interviewed are italicised in the legend, and assigned white numbers in the digraph



Studio Blocks

SPACE Studios (n1); *Acme HQ (n2)*; *Barbican Arts Group (n3)*; *Chisenhale Studios (n4)*; *Fawe Street Studios (n5)*; *Cable Street Studios (n6)*; Hanbury Street Studios (n7); *[New Hoxton Workshops] (n8)*; Pixley Street Studios (n9); *Maryland Studios (n10)*; MT Studios (n11); Rufus Street Studios (n12); *Florence Trust (n13)*; *Southgate Studios (n14)*; Cooperage Studios (n15); Copperfield Road Studios (n16); Limehouse Arts Foundation (n17); *Red Door Studios (n18)*; *Spitalfields Studios (n19)*; Teesdale Street Studios (n20); *Balls Pond Studios (n21)*; Brick Lane Studios (n22); *Standpoint Studios (n23)*; Westland Place (n24); *Wharf Studios (n25)*; Columbia Road Studios (n26); Birdcage Studios (n27); *Bow Arts Trust (n28)*; *City Studios (n29)*; Oxford House (n30); Panchayat (n31); Turquoise Arts Group (n32); Underwood Arts (n33); Arbutus Studios (n34); Baches Street Studios (n35); Spitalfields Farm Studios (n36); 113 Group (n37); Colos-

Art Galleries

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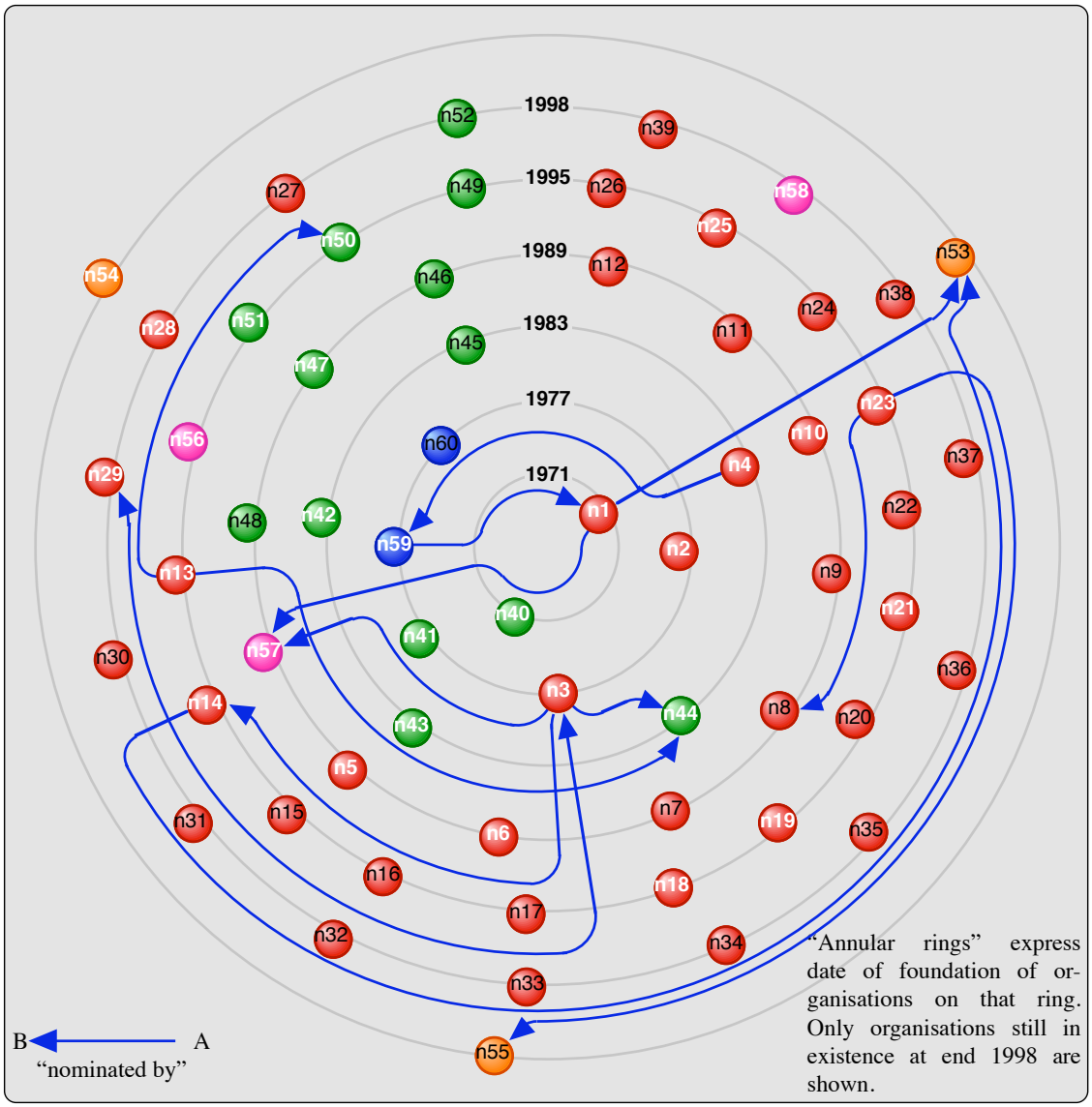
Actors which have been interviewed are italicised in the legend, and assigned white numbers in the digraph



"Annular rings" express date of foundation of organisations on that ring. Only organisations still in existence at end 1998 are shown.

Studio Blocks

SPACE Studios (n1); *Acme HQ (n2)*; *Barbican Arts Group (n3)*; *Chisenhale Studios (n4)*; *Fawe Street Studios (n5)*; *Cable Street Studios (n6)*; Hanbury Street Studios (n7); *[New Hoxton Workshops] (n8)*; Pixley Street Studios (n9); *Maryland Studios (n10)*; MT Studios (n11); Rufus Street Studios (n12); *Florence Trust (n13)*; *Southgate Studios (n14)*; Cooperage Studios (n15); Copperfield Road Studios (n16); Limehouse Arts Foundation (n17); *Red Door Studios (n18)*; *Spitalfields Studios (n19)*; Teesdale Street Studios (n20); *Balls Pond Studios (n21)*; Brick Lane Studios (n22); *Standpoint Studios (n23)*; Westland Place (n24); *Wharf Studios (n25)*; Columbia Road Studios (n26); Birdcage Studios (n27); *Bow Arts Trust (n28)*; *City Studios (n29)*; Oxford House (n30); Panchayat (n31); Turquoise Arts Group (n32); Underwood Arts (n33); Arbutus Studios (n34); Baches Street Studios (n35); Spitalfields Farm Studios (n36); 113 Group (n37); Colos-

Art Galleries

Whitechapel Art Gallery (1896) (n40); *Camerawork Gallery (n41)*; *Matt's Gallery (n42)*; *Art for Offices (n43)*; *Chisenhale Gallery (n44)*; The Showroom Gallery (n45); Interim Art (n46); *Lamont Gallery (n47)*; Flowers East (n48); *[Commercial Gallery (n49)]*; *Paton Gallery (n50)*; *Cable Street Gallery (n51)*; The Approach Gallery

Local Authorities

LB Hackney (n53); *LB Tower Hamlets (n54)*; Dalston City Partnership (n55)

Artists' Representative Organisations

London Arts Board (n56); *National Artists Association (n57)*; *ViA (n58)*

Independent Arts Consultancies

Free Form Arts Trust (n59)

Art of Change (n60)

Actors which have been interviewed are italicised in the legend, and assigned white numbers in the digraph

baseline statistics may be summed up as follows.

Total nodes in network,	g(*N*) = 34
Total linkages in network,	L(*N*) = 33

Modal Split for nodal Indegree	$d_I = 0$: 13
	$d_I = 1$: 13
	$d_I = 2$: 5
	$d_I = 3$: 2
	$d_I = 4$: 1

Modal Split for nodal Outdegree	$d_o = 0$: 18
	$d_o = 1$: 9
	$d_o = 2$: 4
	$d_o = 3$: 3
	$d_o = 4$: 0
	$d_o = 5$: 0
	$d_o = 6$: 0
	$d_o = 7$: 1

Mean Nodal Indegree	$\bar{d}_I = 0.971$
Mean Nodal Outdegree	$\bar{d}_O = 0.971$

where $\bar{d}_I = \dfrac{\sum_{i=1}^{g} d_I(n_i)}{g}$

and $\bar{d}_O = \dfrac{\sum_{i=1}^{g} d_O(n_i)}{g}$

which may be simplified: $\bar{d}_I = \bar{d}_O = \dfrac{L}{g}$ (8.6)

Variance of Mean Nodal Indegree, $S^2_{D_I} = 1.210$

where $S^2_{D_I} = \dfrac{\sum_{i=1}^{g} (d_I(ni) - \bar{d}_I)^2}{g}$ (8.7)

Variance of Mean Nodal Outdegree, $S^2_{D_O} = 2.090$

where $S^2_{D_O} = \dfrac{\sum_{i=1}^{g}(d_O(ni) - \bar{d}_O)^2}{g}$ (8.8)

Density of the graph $\Delta = 0.059$

where the density Δ is the proportion of arcs present in the digraph.

where $\Delta = \dfrac{L}{g(g-1)}$ (8.9)

where $0 \leq \Delta \leq 1$.

What do these figures tell us? First, with a mean indegree $\bar{d}_I$ = mean outdegree $\bar{d}_O = 0.971$ and a density $\Delta = 0.059$ the network is clearly highly dispersed. The average distance from an actor *i* to the actors in its influence range is just 1.908, which suggests that the network is not highly connected. The variance for mean nodal indegree $S^2_{D_I} = 1.210$ and the variance of mean nodal outdegree, $S^2_{D_O} = 2.090$, and once again, this suggests that the network is fragmented. It is already apparent that at an organisational level, the artistic network as it existed in mid-1998 comprised actors which had only limited professional relationships with one another, and which were limited in the number of actors with whom they "networked". But some actors do emerge as "significant" in some way, and it those actors to whom we shall now turn our attention.

8.6.2 Actors which are "significant" in some way

The title of this section is deliberately vague. Our search here is for actors which might be deemed to be "significant" in terms of how connected they are to the rest of the network, but as we shall see in our trawl through the figures, "significant" can have more than one meaning when used within the context of formal social network analysis. We shall look at the network as a whole, rather than in terms of each of the three relations we have measured, since we are trying to establish which actors, if any, are significant for the whole inter-organisational network.

Recall that in a directed network, individual actors can be placed in one of four categories. They are:

- *Isolate* if $d_O(ni) = d_O(ni) = 0$
- *Transmitter* if $d_I(ni) = 0$ and $d_O(ni) > 0$
- *Receiver* if $d_I(ni) > 0$ and $d_O(ni) = 0$
- *Ordinary* if $d_I(ni) > 0$ and $d_O(ni) > 0$

In table 8.1 below, each of the actors in the network is assigned to a particular category. Note that ten of the actors (29%) are Isolates—they have no linkages at an organisational level with

any other organisations. Fourteen of the actors in the network (41%) are Ordinaries, that is they have both positive indegree and outdegree. Of the remaining actors, three (9%) are Transmitters and seven (21%) are Receivers. We can therefore disregard the isolates, since these actors are effectively outside the organisational network, and seek patterns amongst the remaining actors.

We shall therefore look at the connected network which results when the isolates have been omitted. The first step is to review the baseline statistics of the graph with the expectation that the fact that the graph is now connected will be reflected in the new set of figures. Thus the baseline statistics for the connected graph are as follows (equation reference numbers given in brackets).

Total nodes in connected network,	$g(N_c) = 24$
Total linkages in network,	$L(N_c) = 33$
Modal Split for nodal indegree	$d_I = 0$: 0
	$d_I = 1$: 13
	$d_I = 2$: 5
	$d_I = 3$: 2
	$d_I = 4$: 1
Modal Split for nodal Outdegree	$d_O = 0$: 0
	$d_O = 1$: 9
	$d_O = 2$: 4
	$d_O = 3$: 3
	$d_O = 4$: 0
	$d_O = 5$: 0
	$d_O = 6$: 0
	$d_O = 7$: 1

Notice that modal split will be unchanged except for the fact that there are now zero nodes for

Isolates	**Transmitters**	**Receivers**	**Ordinary**
Maryland Studios	Florence Trust	New Hoxton Workshops	SPACE
Red Door Studios	Standpoint Studios	Whitechapel Art Gallery	Acme
Spitalfields Studios	London Arts Board	Matt's Gallery	Barbican Arts Group
Balls Pond Studios		Chisenhale Gallery	Chisenhale Studios
Wharf Studios		Paton Gallery	Fawe Street Studios
Bow Arts Trust		Dalston City Partnership	Cable Street Studios
		Art of Change	Southgate Studios
Camerawork Gallery			City Studios
Art for Offices			
Lamont Gallery			Cable Street Gallery
Commercial Gallery			L.B. Hackney
			L.B. Tower Hamlets
			National Artists' Ass'n
			Vision in Art
			Free Form Arts Trust

Table 8.1 Isolates, Transmitters, Receivers and Ordinaries for the Artists' Network

Table 8.1 Isolates, Transmitters, Receivers and Ordinaries for the Artists' Network

whom nodal degree is zero.

Mean Nodal Indegree	$\overline{d}_I = 1.348$		
Mean Nodal Outdegree	$\overline{d}_O = 1.348$		(from eq. 8.6)
Variance of Mean Nodal Indegree,	$S^2_{D_I} = 0.976$	(from eq. 8.7)	
Variance of Mean Nodal Outdegree,	$S^2_{D_O} = 2.439$	(from eq. 8.8)	
Density of the graph	$\Delta = 0.120$	(from eq.8.9)	

Note that although the variance of mean nodal indegree, $S^2_{D_I} = 0.976$, is less than the mean nodal degree, the variance of mean nodal outdegree, $S^2_{D_O} = 2.439$ is considerably higher than the mean nodal degree. This is partly due to the fact the London Arts Board has a nodal outdegree of 7 by virtue of the fact that it is the primary public funding body for East End arts organisations. In the pilot study, we found that the figures generated through social network analysis had to be interpreted in the light of the qualitative evidence in order to make sense, and as we proceed with this quantitative analysis, we shall see that this remains the case. In other words, anomalies will arise in the network analysis which can only be explained by looking at the broader picture, and through reference to qualitative evidence. The reasons for this will be explored in the discussion which concludes this chapter, but for the time being, we continue with social network analysis.

We now turn our attention to the average distance $\overline{R}_i$ from actor *i* to those actors which are reachable from actor *i*. This relation, which summarises an actor's "influence range", may be expressed

$$\overline{R}_i = \sum_{i=1}^{g} d(n_i, n_j) / J_i \quad (8.10)$$

where J_i is the "number of actors within the influence range of actor *i*" (Wasserman & Faust, 1997:200).

The mean value of influence range $\overline{R}_i = 1.908$. The actors listed below have an influence range greater than the mean. Values for actor indegree and outdegree are also noted.

Barbican Arts Group	$\overline{R}_{n3} = 2.200$	$d_I(n3) = 1$	$d_O(n3) = 3$
Cable Street Studios	$\overline{R}_{n6} = 2.200$	$d_I(n6) = 1$	$d_O(n6) = 2$
Cable Street Gallery	$\overline{R}_{n51} = 3.000$	$d_I(n51) = 1$	$d_O(n51) = 1$
L.B. Hackney	$\overline{R}_{n53} = 2.833$	$d_I(n53) = 2$	$d_O(n53) = 1$
L.B. Tower Hamlets	$\overline{R}_{n54} = 2.833$	$d_I(n54) = 1$	$d_O(n54) = 1$
National Artists' Association	$\overline{R}_{n57} = 3.167$	$d_I(n57) = 4$	$d_O(n57) = 1$

Free Form Arts Trust $\overline{R}_{n59} = 2.167$ $d_I(n59) = 2$ $d_O(n59) = 1$

We note first that the three of the four actors with the highest nodal degree, SPACE $(d_{n3} = 6)$, Vision in Art $(d_{n58} = 6)$ and the London Arts Board $(d_{n57} = 7)$ are absent from this list, and this is therefore an opportune moment at which to address the question of what we mean by "significant".

First it is worth reiterating the point that social network analysis is the primary quantitative tool in our search for an understanding of the dynamics driving the growth, or evolution of the East End artists' agglomeration. And in terms of social network analysis, we can argue that an actor is "significant" for any particular mathematical definition, say nodal degree, or influence range.

Thus in terms of "influence range" the four most significant actors are the National Artists' Association, Cable Street Gallery and the boroughs of Hackney and Tower Hamlets. However in terms of nodal degree, the four "most significant" actors, that is those with the highest nodal degree, are SPACE, Vision in Art, London Arts Board and National Artists' Association.

We can extend the latter index by looking at the figures for actor degree centrality. The degree centrality index C_D for a graph is a measure of the extent to which any particular actor is more significant in terms of nodal degree than any other. The degree centrality index $C_D = 0.0088$. As C_D tends to zero, so the graph becomes more regular, and is dominated less and less by any one actor. Thus for C_D=0 the graph is completely regular, and no actor is dominant, and if C_D=1, then there is one central actor with whom all other actors interact. The low figure for our graph therefore serves to confirm the findings in the last section that the graph is dispersed. And the four actors with the highest degree centrality index are not surprisingly also those with the highest nodal degree: SPACE, Vision in Art, London Arts Board and National Artists' Association.

On the one hand then, we have an index for "influence range" which suggests that the National Artists' Association, Cable Street Gallery and the boroughs of Hackney and Tower Hamlets are the four "most significant" actors in the network. On the other hand, in terms of degree centrality, the four "most significant" actors are SPACE, Vision in Art, London Arts Board and National Artists' Association (again). And we can add that the largest single provider of studio space in the East End, Acme Housing Association, does not figure at all. Clearly, this is a conflict in need of a resolution.

The first step in resolving this conflict then, is to point out that historical significance is not the same as significance in terms of a social network, particularly at an inter-organisational level. Thus the fact that Acme is not significant in terms of inter-organisational social networks means only that, and nothing more.

Secondly, we should remind ourselves that although we are exploring the inter-organisational social networks with a view to seeking clues as to the dynamics driving the growth of the East End arts scene, the results of our exploration may simply suggest that we should be looking elsewhere. In other words the dynamics of growth are not necessarily to be found in the way

in which arts organisations interact with one another.

Thirdly, as we have noted before, the qualitative evidence we have to hand has an important role to play in the interpretation of the mathematical findings. And with those thoughts in mind, we shall return to that interpretation.

In fact, we should not be terribly nonplussed by the findings thus far. Of the seven actors who appear as "significant" in our indices, there are two local authorities (Hackney and Tower Hamlets), one major funding body (London Arts Board), the National Artists' Association, one organisation established with the specific intention of creating an artists' network (ViA), London's oldest studio organisation (SPACE) and a relatively new gallery (Cable Street Gallery). This last is the only real surprise in this group, since historically and artistically it is one of the less significant or influential galleries in the East End, but closer inspection of the graph reveals this to be a "statistical blip", whereby an actor can score highly on this index by being connected to relatively few actors by relatively long paths.

Of the other six, we would expect all except SPACE to pursue formal networking linkages as a part of their day to day activities, and indeed this is the case. SPACE also pursue inter-organisational networking activities as a matter of policy, and it is worth adding that Vision in Art, established with the intention of setting up a formal artists' network for the East End, has working relationships with the two boroughs and SPACE.

It is therefore reasonable to argue that in terms of the East End's inter-organisational social networks, the National Artists' Association, the boroughs of Hackney and Tower Hamlets, SPACE, Vision in Art, and the London Arts Board *are* significant relative to the network as a whole. But, and this is important, the network as a whole is dispersed and regular. If we briefly adopt the metaphor of a landscape, then we can say that from here it appears to be pretty much flat, with the occasional small hill. Perhaps it is time to look at it from a different vantage point.

8.6.3 Cohesive Subgroups in the Network

The inter-organisational network, as we have seen in the previous two sections, is regular and somewhat dispersed. Thus seeking groups of actors which can be described as being in some way more cohesive than the network as a whole might appear to be rather futile. However, we have already covered much of the ground necessary for an understanding of this aspect of the network, and we can pick up where we left off in the last section, with the proviso that we shall be measuring relations in terms of each of the three different types, that is "is funded or supported by" (green); "has a working relationship with" (red) and "was nominated by" (blue).

Sub-groups in a graph can provide useful clues in attempts to understand the interactions between sets of networks. This is particularly the case as the networks become increasingly complicated. We shall use the concept of *n*-cliques (explained in Appendix Two) for n=2.
Thus, applying equation A2.1, we have:

$d(i,j) \leq 2$ for all $n_i n_j \in N_s$ (from eq.A2.1)

There are four kinds of *n*-clique, each increasingly strict in its definition. Thus for *n*=2:

> A *weakly-connected 2-clique* is a subgraph in which all nodes are weakly *2*-connected, and there are no additional nodes that are also weakly *2*-connected to all nodes in the subgraph.
>
> A *unilaterally connected 2-clique* is a subgraph in which all nodes are unilaterally *2*-connected, and there are no additional nodes that are also unilaterally *2*-connected to all nodes in the subgraph.
>
> A *strongly-connected 2-clique* is a subgraph in which all nodes are strongly *2*-connected, and there are no additional nodes that are also strongly *2*-connected to all nodes in the subgraph.
>
> A *recursively connected 2-clique* is a subgraph in which all nodes are recursively *2*-connected, and there are no additional nodes that are also recursively *2*-connected to all nodes in the subgraph.
>
> (Peay (1980:390-391), quoted in Wasserman & Faust, 1997:276)

We shall look at the 2-cliques for each of the three measured relations. Thus from the graph of the inter-organisational networks for "has a working relationship with", we can derive just one weakly connected 2-clique:

- n1, n53, n54, n58.

Note that this 2-clique is also unilaterally, strongly and recursively connected.

For the relation "is funded or supported by" there is one weakly connected 2-clique and no unilaterally, strongly or recursively connected 2-cliques:

- n56, n1, n2, n4, n40, n42, n59, n60

Node n56 is the London Arts Board, and funds the remaining nodes in the network. Thus n56 is a cutpoint, but note also that n56 is maximally central to this graph.

For the relation, "was nominated by", there are seven weakly connected 2-cliques:

- n1, n3, n14, n53, n57
- n1, n4, n59

- n1, n53, n57, n59
- n3, n13, n44
- n3, n14, n29, n44, n57
- n13, n44, n50
- n8, n23, n55

The paucity of 2-cliques which are not weakly connected serves to underpin the tentative conclusions we drew in the last section that the inter-organisational networks are not very cohesive. Again, n58, Vision in Art surfaces as a significant actor, to the extent that it is a cutpoint in the graph for the relation "has a working relationship with". And it is worth reiterating the point that ViA's "high profile" should come as little surprise given that it is the only organisation which has as its remit the establishment of a formal East End artists' network. Even so, at the time of fieldwork, ViA was not long enough established to garner any nominations in terms of the blue relation, except from those with whom it already had a working relationship.

Overall therefore, the picture remains the same—a fragmented inter-organisational network, showing few signs of cohesiveness, in which many of the actors are isolated from the other actors.

8.7 Discussion

The original aim of carrying out social network analysis was to gain insights into the dynamics of the East End arts scene, and insofar as we are now better informed as to what those dynamics are, and importantly, what they are not, we have done what we set out to do.

The rub, of course, is that those dynamics are not dependent on inter-organisational networks, and we might add that the historical evidence which we have reviewed in the previous four chapters suggests that they never have been. This means that as we turn our thoughts to the search for a theoretical model of the East End arts scene we shall have to look elsewhere, and that is precisely what we shall be doing the next chapter: but prior to that we must tie up the loose ends in this chapter.

The historical and social contexts have been dealt with in previous chapters, and insofar as individual artists exploited their pre-existing social networks to gather information, we can argue that at an individual level at least, an artist's social network was embedded in larger networks. No great surprise perhaps, yet it resonates with both the theories proffered by Taine, Bourdieu, Becker and DiMaggio at the beginning of this chapter, and with the notion of self-similarity across scales which can be found in the subject of the next chapter, complexity theory. But what of the networks among studio organisations?

First, the inter-organisational networks are loose and fragmented, or even, as some informants have argued, effectively non-existent outside of the "gallery circuit". Second, the one formal networking organisation which exists, ViA, was set up as a response to this lack of formal

networks, and is perhaps symbolic of a general "will to consolidation" which currently pervades much of the East End arts scene, not least because of the threat posed by rising property prices. This is an issue which will be discussed in chapter ten. Third, if we want to generate a theoretical model of the underlying historical dynamics of the East End arts scene, we should not look to the formal inter-organisational networks for answers, because that is not where we shall find them. And if we cannot find the answers at the level of *formal* inter-organisational networks, it would seem that we have just one other place to look: we must shift our gaze back to the shifting sands of the rather more arbitrary *informal* networks that exist amongst individuals. But how can we be sure?

In fact the signposts are not all of the "no entry" variety: there is a small, well-hidden signpost to where we should go next, and it comes, ironically enough, from studies of science and not art. It is the concept of emergence. Recall from section 8.2 that Actor Network Theory argues that "society" and "nature" are the products of the network, not the other way around. The ANT concept of "nature" we shall put to one side, but the concept of "society" *emerging* from the network is interesting and useful. In short, it conceptualises a social system as comprising individual agents pursuing particular ends, interacting with others to do so, and generating the emergent property called "society". In the next chapter I shall argue much the same point about the artists' agglomeration in East London. It did not just happen. It evolved.

NINE

THE EVOLUTION OF A PHENOMENON

In general, one may say that geographic differences are primordial, while social differentiations, including those derived from urban association, are emergent: one is foundation, the other pinnacle. Merely by examining the geographic base one cannot tell what the social emergent will be; for, precisely because it is *an emergent, precisely because it necessarily contains elements from other geographic regions and other cultures and other layers of historic experience, it is a new configuration, not given in the geographic complex itself.*

Lewis Mumford, 1938, *The Culture of Cities*

9.1 Introduction

If chapter four was where the story really opened, then this, the penultimate chapter, is where it begins to draw to a close. We now know the story of how the East End came to have so much empty industrial space, and we have heard, often from the protagonists themselves, how the East End has in the last three decades become "home" to more than half of London's artists. In the previous chapter, we attempted, unsuccessfully, to find clues amongst the organisational networks which might prove adequate to the task of contributing to a theoretical model. What we actually found was that social network analysis supported the qualitative evidence that the evolution of the East End artists' agglomeration has very much been a "grass roots" phenomenon: to draw on an observation of Actor Network Theory, we might argue that the phenomenon has emerged from the networks.

Throughout the research process, an exploration of potentially useful concepts from the natural sciences has been pursued, and it was in the course of this pursuit that James Gleick's 1987 book *Chaos* was read. The ideas contained therein resonated in a small way with what appeared to be happening in the "East End artists' agglomeration", but Mitchell Waldrop's 1993 book *Complexity* resonated far more strongly, and the concepts contained in that book fitted the

findings from this project too well to be ignored, even if initially at an apparently superficial level.

In this chapter, I hope to show that the fit of these concepts is in fact far from superficial. Rather, I think complexity theory is a way of conceptualising the evolution of urban systems, such as the one we are looking at, which is both intuitively appealing and which is a genuine advance on existing theoretical approaches. And crucially, it is a conceptualisation which is intrinsically dynamic: it does not say about a system "this is how it is" but "this is how it changes, and how it gets to be what it is now". For all that, no claims are made that it is authoritative, or even right. It is, however, persuasive.

There are four more sections in this chapter. Section 9.2 examines the few theories of the "creative milieu", en route briefly taking in the "innovative milieu". Section 9.3 introduces complexity theory, and examines the sparse literature which has attempted to analyse the social sciences in terms of complexity theory. As we shall see, empirical work which has been carried out in this context is limited in scope and coverage. In each of these two sections, the different theoretical approaches are summarised in tabular form. Section 9.4 conceptualises the East End artists' agglomeration in terms of complexity theory and argues that it can reasonably be described as a "complex adaptive system". Section 9.5 summarises the chapter, and offers a simple algorithm for the evolution of the East London artists' agglomeration by way of a "concluding hypothesis", before looking forward to the final chapter of the thesis.

9.2 The "Creative Milieu": a Theoretical Overview

Our starting point is Sharon Zukin's classic 1982 study of the gentrification of an ex-industrial area, *Loft Living*, in which she analysed the conversion of Manhattan's light industrial property first to artists' studios, then to increasingly expensive dwellings in the 1970s and early 1980s. Zukin concluded that the gentrification of these areas was a potent combination of the needs of capital and politics, both of which wanted to reclaim the city centre from light industry.

Artists, she found, "had displaced small manufacturers, distributors, jobbers and wholesalers" before they in turn had been displaced by wealthier non-artist residents (Zukin, 1982:5). The important point that we can draw from Zukin's work, though, is that the decline of manufacturing industry was undoubtedly to the benefit of artists, whose status had changed immeasurably since the second World War as artists moved in from the margins of society and "art moved into a central position in the cultural symbolism of an increasingly materialistic world" (ibid:82). The physical infrastructure required by artists was consequently championed in the 1960s by "an upper-class group of patrons of the arts and patrician politicians, who wanted to promote artists and protect old buildings, and a middle class group of urban homeowners—including artists—who wanted to protect their neighbourhoods" (ibid:112). It was the success of these two constituencies, argues Zukin, which paved the way for the property developers. As we have already seen, this is not a model which fits the East End as a whole: the case of Spital-

fields Market is probably the closest which London has to Manhattan's SoHo experience described in *Loft Living*.

We can find an alternative starting point in our search for a theory though. It is a phenomenon which was explored by Castells and Hall, who sought to draw general lessons from the high-technology industrial concentrations typified by Silicon Valley (Castells & Hall, 1994:225), and by Saxenian (1994), who endeavoured to compare the high technology industrial concentrations in Silicon Valley and Boston. Castells and Hall called this the "innovative milieu, …a place where synergy operates effectively to generate constant innovation, on the basis of a social organisation specific to the production complex located in that place". However, although Castells and Hall were looking at technology-led regeneration, rather than "culture-led" regeneration, some of their conclusions are of relevance to the East End, not least because they looked beyond the institutions themselves to the broader context within which they were operating. First, and importantly, they found no general formula by which successful technopoles could be contrived. Second, argued Castells and Hall, social networks are an essential "element in the generation of technological innovation, and the backbone of social organisation of any innovative milieu" (ibid:234). Third, "technopoles are not built in a day" (ibid:236). Note that all three of these observations fit the East End comfortably. The agglomeration was not contrived, it relied to a considerable extent on informal social contacts, and it evolved over three decades. But what of those who have looked at creatively innovative milieux, rather than technologically innovative milieux?

Our first stop is again Peter Hall, clearly intrigued by these sorts of places. In his introduction to *Cities in Civilization* (1998) he asks why cities have "Golden Ages", brief epochs, perhaps lasting a few decades at most, when a city's cultural and intellectual life blossoms to give it a world wide influence, and legacies which may last for centuries. Hall's first finding is a frustrating one: creativity itself tends to be dealt with "almost exclusively in terms of the individual personality" (Hall, 1998:10). Few studies, it seems, probe the social context of creativity.

The three major 20th century attempts to conceptualise society's condition—Marxist Theory, Modernity and Post-Modernity—fail to provide concrete answers. For Marxists, modernity was merely the "cultural expression of capitalism", while for Theodor Adorno, it was "a state of mind, characterised by a restless desire for novelty… [whose] quintessence was the cinema… [which] made any form of contemplation impossible" (ibid). Post-modernity too proves inadequate to the task of setting out precisely why an area should become a creative milieu, not least because it is "infuriatingly aspatial" (Hall, 1998:14). *(section removed in final version)*

Hall argues that art and culture "flourish in a special kind of city: one at the economic forefront, that consequently draws in talents, that is prepared to try new kinds of social relationships and new intellectual concepts". Creative cities, in Hall's view, are not comfortable places, but places of "great social and intellectual turbulence… a place where outsiders can enter and feel the state of ambiguity: they must neither be excluded from opportunity, neither must they be so warmly embraced that the creative drive is lost… Conservative, stable societies will not prove creative; but neither will societies in which all order, all points of reference, have disap-

peared" (ibid:286). Here perhaps, in Hall's implicit reference to a certain amount of disorder in the system, is the first sign that complexity theory might have something to contribute to our understanding of such phenomena.

But there is another theory, predating Hall's work, which seems particularly appropriate to the East End. Gunnar Törnqvist, in his paper *Creativity and the Renewal of Regional Life*, focused on whether there might be "certain common denominators discernible among such places as have witnessed a flurry of creative activity in the past" (Törnqvist, 1983:91).

The problem for Törnqvist is that there are few studies of creative milieux, and those few that do exist tend to be historical studies; perhaps unsurprising, since it is often posterity which decides whether or not a particular area was unusually creative at a particular time (ibid:93). The questions then are the nature of the circumstances which result in a creative milieu, and whether or not they can be planned (ibid).

Törnqvist found his answers through studies of sites, both planned and unplanned, such as Silicon Valley and Sophia Antipolis. He also drew on literature from geography, business economics and information research, using his findings as the foundations for his hypotheses (ibid). He found that despite the proliferation of telecommunications, there was still a strong need for personal interaction and face-to-face meetings, not least because telecommunications tended to be used for routine information, whereas strategic communications, negotiations, reconnaissance and planning demand personal contact (ibid:95). And personal contact, of course, requires "simultaneity in time and space" (ibid:97).

So Törnqvist suggested that creativity could be seen as a kind of synergy, and argued that a creative milieu requires four basic preconditions, which he lists hierarchically. The first, and most basic, is *information*, "synonymous with elucidation and intelligence, transmitted directly between people, or by way of different media" (ibid). Second, *knowledge*, the storage of information, either in people or by other means. This is the process by which "new information is linked with previous experience" (ibid). Third, *competence*, which supposes the ability to employ relevant knowledge—which itself "presupposes a link with an environment"—in pursuit of a particular aim or purpose (ibid). The notion of linkages, as we saw in the last chapter, is an important one, and it is worth recalling that the significant linkages turned out to be those which happened at an individual rather than an organisational level. The competence described is then broken down into sub-categories: "instrument-specific", "sector-specific" and "region-specific" (ibid:98). The first implies a link between a person and the tools of their trade, the second an understanding of a particular line of trade, while the third "implies a connection with the resources of certain localities and regions…" (ibid). Interestingly, Törnqvist finds that "the best examples are not supplied by mass-producing large-scale industry but by crafts and small industries, where the professional skills of good craftsmen play an important part" (ibid:99). Törnqvist adds that "it is likely that the quality—or, rather, the originality—of the competencies existing in a milieu is more important than the quantity" (ibid:103).

In light of this observation, it comes as little surprise that the fourth, final and most important precondition is *creativity*. Founded on the three previous preconditions, creativity "requires

a capacity for sifting information and combining knowledge and pieces of information in such a way that something new is created" (ibid). This, for Törnqvist, is the root of a creative milieu's synergy, since although much of the process of creating something new takes place within the individual, people look to their surroundings to trigger thought and ideas, and to stimulate the imagination (ibid:100). And surroundings comprise both objects and, importantly, people.

Andersson (1997) notes that "very few systematic studies of macro-social conditions of creativity do exist", and although he makes no reference to Törnqvist's 1983 study, he reports findings substantially similar to Törnqvist's in a 1985 study of his own (Andersson, 1985). His study does not add anything new to Törnqvist's findings, but does serve to confirm them.

Hippolyte Taine, a lecturer at the École des Beaux Arts in Paris in the 19th century, devoted three chapters of his gargantuan *Philosophy of Art* to the "milieu" (Taine, 1865). Taine, influenced perhaps by Charles Darwin's recent notion of Natural Selection (*The Origin of Species* had been published six years earlier) sets out by drawing an analogy with circumstances necessary for an orange tree to grow: it is not just the seed that is needed, but the right circumstances too; good soil, favourable weather conditions and so forth. This is the case for any species: certain species will flourish in certain conditions, while others may perish (ibid:82–84).

Taine's point is that it is the same for people: "in general we may conceive moral temperature as *making a selection* among different species of talent, allowing this or that species to develope itself, to the exclusion more or less complete of others" (ibid:86, original emphasis and spelling). This moral temperature comprises the broad "social and intellectual influences of a community" (ibid:85).

Strictly, it is not the moral temperature which creates the artists, but certain artists who, already present, flourish in the moral temperature which allows certain kinds of talent to develop. This is a point which remains implicit in Törnqvist's theory, and Hall's "social and intellectual turbulence" is perhaps an integral part of the moral temperature to which Taine refers.

Garnsey (1998) has attempted to combine complexity theory with a systems analysis approach in an effort to elaborate on the evolutionary dynamics of high-technology industrial milieux. She argues that such milieux are aperiodic and unpredictable, since being sensitive to initial conditions, they are prone to both internal and external perturbations. Her point is that this is not a problem: it is to be expected (Garnsey, 1998:372). Allen has noted that there is a need to explore spatial systems from an evolutionary standpoint (Allen, 1997), and in earlier work argues that in the face of atypical disruptions to a social system there exists "an 'evolutionary drive' that selects for populations with the *ability to learn*, rather than for populations with *optimal behaviour*" (Allen, 1993:101, emphasis in original).

What, then, can we draw by way of general conclusions from these various theoretical strands? Overwhelmingly, as we see in table 9.1 overleaf, these theories argue that such places share certain characteristics. They are disordered, unstable, unpredictable and aperiodic. Heavily reliant on social networks, synergy and personal interaction, they tend to exhibit evolutionary behaviour. The ability to learn is essential. Crucially, these theoretical models are relevant to the East End. The East End satisfies Törnqvist's four preconditions, and it is somewhat disor-

Table 9.1 THEORIES OF 'CREATIVE MILIEUX'

Author/year	*Topic*	*Thesis*
Taine/1865	The 'Creative Milieu'	A place has a 'moral temperature' in which certain types of art and artist will flourish, and others will not.
Törnqvist/1983	The 'Creative Milieu'	Creative milieu rely on social networks, and have four basic preconditions: information, knowledge, competence, creativity.
Andersson/1985	The 'Creative Milieu'	Notes that few studies of creative milieux exist. Confirms Törnqvist's findings in his own work.
Zukin/1988	Gentrification in New York	Gentrification in SoHo was a result of a combination of the needs of capital and politics.
Castells & Hall/1994	The 'Innovative Milieu'	Innovative milieux cannot easily be contrived. The successful ones, eg Silicon Valley, have grown organically, and were heavily reliant on social networks.
Saxenian 1994	The 'innovative Milieu' at Silicon Valley & Route 128	Adaptiveness is important to the survival of 'industrial systems'. 'Spatial clustering alone does not create mutually beneficial interdependencies'.
Hall/1998	Cities' 'Golden Ages'	Creative cities are often turbulent, uncomfortable places, in which outsiders are neither excluded nor warmly embraced.
Garnsey/1998	High-technology milieux	Combines complexity theory & systems analysis, and argues that HT milieux are unpredictable and aperiodic.

dered, as Hall predicts such an area might be. It has demonstrably been able to acquire and use knowledge. Hippolyte Taine argued over a century-and-a-half ago for the notion of a "moral temperature" that allows certain artists to blossom, and we can extend this to the more general notion that particular ideas will flourish in particular circumstances: we have indeed seen that the East End artists' agglomeration needed the fluid context of industrial collapse to prosper. Garnsey argues that such a system is of its nature unpredictable. And chaos and complexity theory deal precisely with such apparently disordered, unpredictable systems.

9.3 About Complexity Theory

9.3.1 Life at the Edge of Chaos

This is where we put the artistic networks of the East End, and indeed social science, to one side and make a foray into the territory of the natural sciences, wherein we shall explore theories which have developed through the study of physics, hydrodynamics, computing, artificial intelligence and, importantly, evolutionary biology. As we have seen above, current theoretical models are limited in number and, *pace* Hall and Törnqvist, do not adequately deal with the internal dynamics of the processes with which we are dealing. And as we saw in the last chapter, social network analysis is simply too static to be much use in that respect.

In this section then, I want to introduce Complexity Theory, a theoretical approach which is hardly mature in the field of natural science, and which has barely reached infancy as far as the social sciences are concerned.

9.3.2 A Brief Introduction to Complexity Theory

The science of Complexity has emerged in the last ten years from the shadow of the science of Deterministic Chaos, popularised in Gleick's (1988) book of the same name. Chaos Theory and Complexity Theory, however are not the same, but they share some theoretical common ground. Chaos Theory is perhaps best known through the colourful graphic representations of complicated mathematical formulae known as fractals, but these are only a small part of the theory. In essence, chaos theory argues that in certain systems which appear to behave in a disordered and random fashion—a turbulent river for example—there exists an underlying order and stability. It is important to note that such a system, although termed 'chaotic', is not *truly* chaotic, but *deterministically* chaotic—the behaviour will remain within more-or-less fixed boundaries, even if it is unpredictable within those boundaries. And it is the behaviour within those boundaries which is of interest (Bird, 1997:144). Thus in the turbulent river, there exist whirlpools and vortices which appear to remain steady and fixed in an otherwise chaotic environment. Weather systems seem to be both ordered but at the same time unpredictable. When a tap is opened to allow only a gentle flow of water, that flow is smooth and constant. If the tap is opened further, the flow becomes turbulent. The first is an ordered state, which can be expressed in relatively simple linear equations which, plotted onto a graph, will produce a straight line. The second is a chaotic state, and can only be expressed in terms of complicated, non-linear equations, which, if plotted on a graph, will generate a curve rather than a straight line. Such chaotic systems are called, strictly, *non-linear dynamic* systems.

The transition from the ordered state to the chaotic state is relatively sudden, not gradual, with a clear demarcation between the two states. This change from one state to another is known as a *bifurcation*, and may be triggered by a small change in the initial state of the system, a condition known as *sensitivity to initial conditions*, or the "Butterfly Effect", so-called because a butterfly flapping its wings on one side of the world may eventually change the weather systems on the other side.

Thus, for a given system which is self-organised, such as a weather system, there is an equilibrium position which depends on a variety of parameters. Suppose that one of these is a

control parameter. A small change in this control parameter may mean that the system is pushed farther and farther from equilibrium, and so stability decreases until the bifurcation point is reached. The system then has two "choices" of state, of which either one or both could be stable (Prigogine & Stengers, 1984:160). If we then push each of these two systems to their respective bifurcation points, we induce further bifurcations, and we now have four "choices". If we repeat this process, we can eventually push the system into the chaotic state (ibid:167).

This boundary is analogous to a phase-transition in physics. Water in its liquid state, for example, is characterised by the fact that all of its molecules are moving about randomly and chaotically—as a medium it is unstable. However, when it is frozen, the molecules become stationary to form a stable medium, ice. The point at which water turns to ice—the point of phase-transition—combines these two properties of order and chaos. The medium is part solid, part liquid, not completely stable, not completely chaotic. It is on this boundary between order and chaos that the sciences of Complexity, which aim to gain an understanding of the underlying patterns and regularities of a wide variety of real-world phenomena such as economies, the development of societies, or genetic behaviour, have concentrated (Holland, 1995:4).

Such phenomena may be grouped under the general heading of *complex adaptive systems*, and for Holland, the conferring of a generic term upon such systems suggests that they are governed by general principles (ibid). Like the chaotic systems we described above, complex adaptive systems exhibit nonlinearity and sensitive dependence on initial conditions, and this means that generating predictive theories for such systems is problematic—we can no longer simply extrapolate current trends to generate predictions. Holland argues that we should therefore "make cross-disciplinary comparisons of complex adaptive systems in hopes of extracting common characteristics" (ibid:6). Holland suggests that there are "seven basics"—"four properties and three mechanisms which are common to all *cas* [complex adaptive systems]" (ibid:10). The four properties are *aggregation*, whereby a system can be broken down in to different categories to render it more comprehensible, a process which Byrne (1998) refers to as "nesting"; *nonlinearity*, described above; *flows*, which may be flows of goods or knowledge, and may be conceptualised in terms of nodes and linkages, a notion familiar from social network analysis; finally, *diversity*, for example diversity of species within an ecosystem, or types of wholesalers and retailers in an urban economy. The point is that "diversity is neither accidental nor random" (Holland, 1995:27). Rather, it is dependent upon its context, and that context can be thought of as a collection of niches, each of which is suited to a particular type of agent. If for any reason that agent ceases to exist, leaving the niche empty, the system will generate adaptations which will result in a new agent filling that niche. We can expect a similar response when a new niche emerges (ibid:28).

The three mechanisms are first *tagging*, which expedites the formation of aggregates by enabling agents to select, or ignore, other agents which may prove beneficial to them, thus facilitating the continuing survival of the system; second *internal models*, which are generated internally by complex adaptive systems and enable the anticipation of consequences which may arise from changes in structure or context (ibid:31–33); third *building blocks*, which also con-

tribute to the generation of internal models by offering a limited number of components—the building blocks—from which a large number of models can be be constructed.

Holland's "seven basics" will provide us with a useful set of tools when we develop a theoretical model of the evolution of the East End artists' agglomeration. Their usefulness in this project however, *pace* Holland, is as a purely conceptual tool rather than as "building blocks" for the computer-based and mathematically oriented models around which his book is centred. In fact, the last of the "seven basics"—building blocks—might be interpreted as reductionist, but when we discuss complex adaptive systems we must still look at the individual components and the interactions between them, even if we accept that a holistic view is also necessary for a more complete understanding of such systems.

Gell-Mann (1994:19) notes that complex adaptive systems "have a tendency to generate other such systems. For example, biological evolution may lead to an 'instinctive' solution to a problem faced by an organism, but it may also produce enough intelligence for an organism to solve a similar problem by learning". Gell-Mann's graphical conceptualisation of a complex adaptive system is reproduced below.

This is useful in helping us to understand and locate Holland's "seven basics" within the

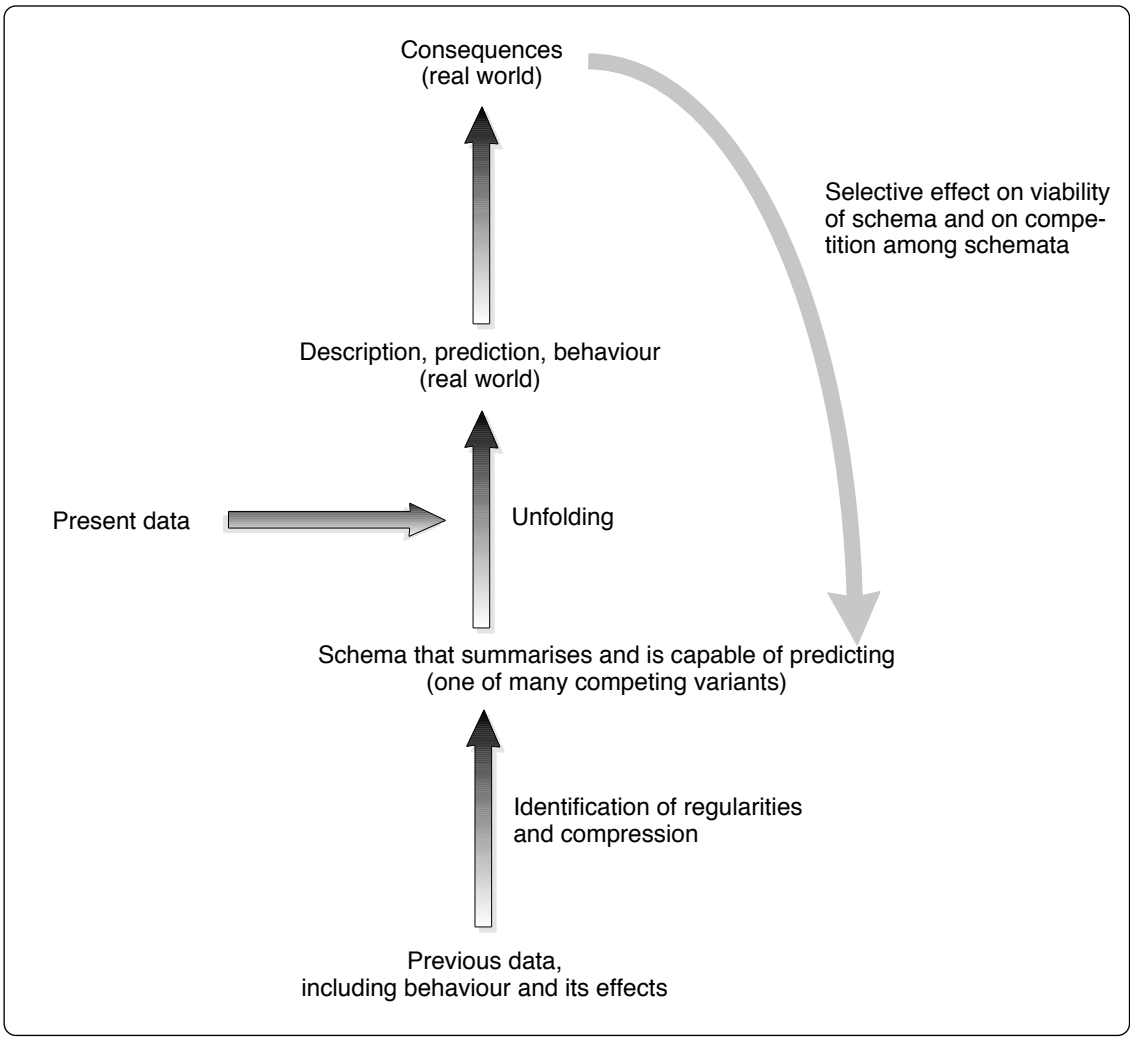


Figure 9.1 How a complex adaptive system works (Gell-Mann, 1994:19)

notion of a complex adaptive system. Holland's aggregation, tagging, internal models, flows and building blocks have their analogues in Gell-Mann's description, prediction, behaviour. Holland's nonlinearity is reflected in the notions of present data, unfolding, and in the curved positive feedback arrow, while diversity is reflected in Gell-Mann's notion of schema and competing variants.

But if complex adaptive systems have certain general properties, are there places, or contexts in which we are more likely to find them? We noted above that the change from a stable system to a chaotic system is marked by a sudden change of state, a phase transition, and that it is on this point that those studying complexity have focused.

In fact the notion of complexity in a system occurring at what is analogous to a phase-transition in matter has been explored by two American scientists working independently of one another, Stephen Wolfram and Chris Langton. Wolfram and Langton both made extensive use of computer simulations in their explorations of artificial life to extend this concept. Wolfram's findings through his studies of *cellular automata*—simple forms of artificial life generated within a computer—led him to argue that there are four "Universality Classes" which can be applied to complex systems (Waldrop, 1992:225).

I. Doomsday [sic] rules—a very stable system in which everything would die out within one or two generations;
II. the initial pattern of living and dead cells coalesces into a "set of static blobs and perhaps a few other blobs that would sit… periodically oscillating… [giving] a general impression of frozen stagnation and death" (ibid);
III. the cells would flicker and change chaotically, never settling down;
IV. the cells never settled completely, but would grow, split apart and propagate.

Chris Langton, who had reached similar conclusions to Wolfram, argued that Class IV was a point of phase transition, a state in which the basic parameters governing the evolutionary behaviour of the cellular automata could provide "enough stability to store information and enough fluidity to send signals over arbitrary distances" (ibid:232). Langton called the phase transition, "complexity" or "the edge of Chaos". The argument can be summarised thus (ibid:228):

Wolfram's Universality Classes:
I > II > 'IV' > III
Order > "Complexity" > Chaos

The concepts introduced above will help us in the development of a theoretical model of the East End artists' agglomeration, so we shall summarise briefly before moving on. Complex systems, be they economies, collections of cells working together as an organism, nation states sharing political alliances, or networks of professionals working towards a common end, all

share certain characteristics.

They all consist of independent agents interacting with one another in a variety of different ways, such that the "very richness of these interactions allows the system as a whole to undergo *spontaneous self-organisation*" (Waldrop, 1992:11). So "people trying to satisfy their material needs unconsciously organise themselves into an economy though myriad individual acts of buying and selling. …flying birds adapt to the actions of their neighbours, unconsciously organising themselves into a flock" (ibid). The networks consist of "agents" acting in parallel, but the control of these networks is highly dispersed, and the networks exhibit many levels of organisation (Holland, 1995:12).

These complex systems, capable of self-organisation themselves, are also *adaptive*, that is capable of adjusting to their surroundings to their own benefit, rather than responding passively with no "thought" for themselves. They can constantly revise and rearrange their building blocks through experience, and they can anticipate the future (ibid:36). The marketplace, for example, "responds to changing tastes and lifestyles" (Waldrop, 1993:145). And these building blocks—coherent, self reinforcing clusters—can form new building blocks for subsequent evolutionary stages of the system (Holland, 1995:36). They have many niches, which are waiting to be filled by an "agent", while new niches open up, creating new opportunities. These complex systems are thus dynamic, ever-changing, unpredictable, but they appear nonetheless to possess an underlying sense of order (Gell-Mann, 1994:20).

Kauffman (1995)—like Gell-Mann a member of the Santa Fe Institute—argues that evolution tends to drive successful systems to this boundary between order and chaos, where the balance between stability and fluidity allows for the development of life.

Kauffman adopts the concept of adaptive topography, originally conceived in the 1930s by Fisher and developed in Wright's theory of adaptive topography (Ridley, 1996:215). Fisher's model (overleaf) argues that there exists a relation between a character and its fitness, such that at the peak the organism is the best adapted of any similar forms. Mutations, which occur randomly, are as likely to go "up" as to go "down" the fitness peak, but as we can see from the diagram, a large mutation is likely to miss it all together. Thus smaller mutations are likely to be "selectively advantageous": most evolutionary change is through small mutations (ibid).

Wright argued that adaptive topographies would themselves shift as competing species moved about upon them, changing the fitness topography for those other species as well (ibid). Kauffman (1995) also argues for the notion of co-evolution within a "fitness landscape", with peaks and troughs. Thus species adapt to each other's adaptations—a frog might develop a longer tongue to catch flies, while the fly evolves a more efficient escape mechanism to avoid the frog, which in turn develops a faster tongue (Waldrop, 1993:310). And so the process continues. As each species evolves, it changes not only its own fitness landscape (climbs toward a peak), and but also that of other species (which descend into a trough). In Waldrop's (1993) book *Complexity*, Kauffman articulates this idea more clearly in interview with Waldrop than he does in his own *At Home in the Universe* (Kauffman, 1995), so we shall break with accepted

academic practice, and cite Kauffman as cited in Waldrop (1993). Thus:

> "If we're deep in the ordered regime, then everybody is at a peak of fitness and we're all mutually consistent—but these are lousy peaks...
>
> 'Conversely, if we're deep in the chaotic regime, then every time I change I screw you up, and vice versa. We never get to the peaks, because you keep kicking me off and I keep kicking you off, and it's like Sisyphus trying to roll the rock uphill. Therefore, my overall fitness tends to be pretty low, and so does yours". [Waldrop continues] In organizational terms, it's as if the lines of command in a firm are so screwed up that nobody has the slightest idea what they're supposed to do—and half the time they are working at cross-purposes anyway. Either way, it obviously pays for individual agents to tighten up their couplings a bit, so that they can begin to adapt to what other agents are doing. The chaotic system will become a little more stable, says Kauffman, the aggregate fitness will go up, and once again, the ecosystem as a whole will move a bit closer to the edge of chaos.
>
> Somewhere in between the ordered and chaotic regimes, of course, the aggregate fitness has to reach a maximum. …It turns out that the maximum fitness is occurring right at the phase transition. So the crux is, as if by an invisible hand, all the players change their landscape, each to its own advantage, and the whole system co-evolves to the edge of chaos. (Waldrop, 1993:313, passages in quotation marks from Waldrop's interview with Stuart

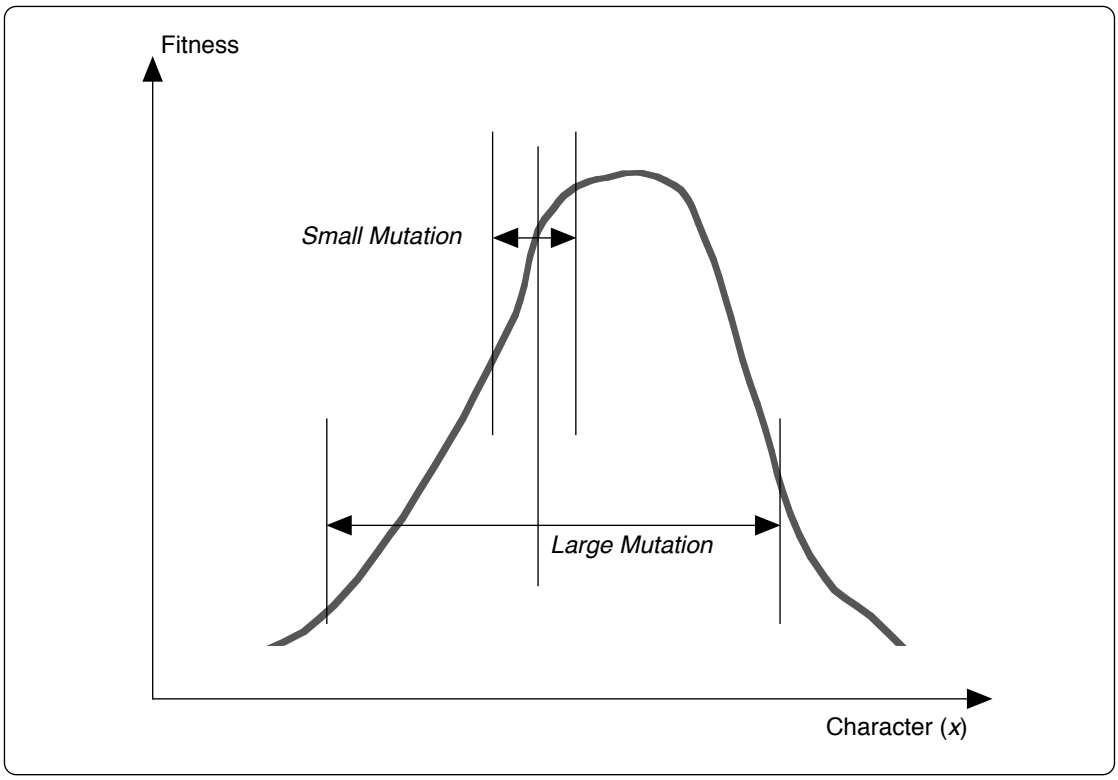


Figure 9.2 *A general model of adaptation.* For some trait (*x*), the fitness of an individual has an optimum at a certain value of x, and declines away from that point, creating a hill of fitness value. A mutation that changes the value of *x* also changes its bearer's fitness. (Graph and caption from Ridley, 1996:182)

Table 9.2 APPROACHES TO THE STUDY OF COMPLEX ADAPTIVE SYSTEMS

Author	*Approach*	*Focus*	*Relevant Key Concept*
Wolfram	Taxonomic	Cellular Automata	Universality Classes
Langton	Taxonomic	Cellular Automata Classes	'Edge of Chaos'
Gell-Mann	Dynamic	Complex Adaptive Systems	Feedback Loop
Arthur	Dynamics	Economic Systems	Increasing Returns
Prigogine & Stengers	Self-organised Systems	Bifurcation	Bifurcation
Bak	Dynamic	Complex Adaptive Systems	Self-organised criticality
Kauffman	Dynamic/Modelling	Evolutionary Behaviour	Fitness Landscapes
Holland	Modelling	Complex Adaptive Systems	Seven 'Building Blocks'

Kauffman).

Clearly, the species in such an evolutionary mechanism must be robust enough to withstand changes which may not be for the better, and which come at random. So the genetic structure of an organism must not be so "compressed"—that is efficiently assembled, with the minimum of redundant information in the genome—that the slightest change will stop it from functioning (Kauffman, 1995:151–153). Kauffman adopts the analogy of the computer program, which gets progressively more fragile and brittle as the code, which of course ultimately comprises 1s and 0s, contains less and less redundant information. Thus if a program needs 1000 digits to work, but actually contains a million digits, removing one digit may not make much different to its functioning—the program has a high level of redundancy, but is highly resilient, and therefore amenable to change. The same program with no redundancy needs all of its digits intact—one change will bring the program down (ibid). Organisms which have evolved do in fact show high levels of redundancy within the genome, and Kauffman argues persuasively that systems which have evolved necessarily contain high levels of redundancy in order to survive.

In jumping across the gap between the natural sciences and the social sciences, we have acquired a collection of useful tools with which we shall shape our conceptualisation of the evolution of the East End artists' agglomeration (table 9.2). However, there are bridges between complexity theory and the social sciences, and it is perhaps time to explore them.

9.3.3 Complexity Theory and the Social Sciences

What then, can the concepts behind chaotic and complex systems tell us about the artistic networks in the East End? First of all, it is worth making the point that these concepts are of limited use at a strictly quantitative level. The social sciences are notoriously intractable in terms of predictive and mathematical modelling, largely by dint of the fact that they are inherently non-linear, and therefore intrinsically unpredictable (Kiel & Elliott, 1996:2), and Ruelle argues that although chaos theory has often been successfully applied, there are also many situations where it has not (Ruelle, 1997). Admittedly, this is in strictly mathematical terms. Ruelle's diagram, reproduced overleaf, "indicates the position of dynamical systems pertaining to various areas of science with respect to uncertainty in the basic equations and complication of the dynamics.

Only below the uppermost curved line may we say that we have a satisfactory understanding of the dynamics, and useful applications of the ideas of chaos" (ibid). What the diagram makes clear is that the social sciences—and that is where this study lies—are too complicated to be understood or explained through mathematics alone. Paradoxically perhaps, neoclassical economics has relied heavily on mathematical modelling, but the acceptance in the early 1980s that "year after year economic theorists continue to produce scores of mathematical models… …without being able to advance, in any perceptible way, a systematic understanding of the structure and the operations of a real economic system" (Leontief, 1982, quoted in Hodgson, 1993:5) combined with increasing interest in non-linear dynamical systems and economics's mathematical tradition to make it the first social science to be explored in terms of both evolutionary theory and complexity theory. Hodgson (1993) put evolutionary economics in an historical context, and edited collections such as *Nonlinear Dynamics and Evolutionary Economics* (Day & Chen, 1993) attempted to develop the mathematical modelling of such systems.

Social network analysis aside, there is no substantive mathematical modelling in this project, but this does not preclude the use of the concepts of chaos and complexity as effective tools in the understanding of social systems such as the East End artists' agglomeration, even if we cannot explain them through formal mathematical language. In fact the title for this section is stolen from David Byrne's 1998 book of the same name. Of the few texts—actually three—which deal directly with the application of chaos and complexity theory to the social sciences (as opposed to economics), Byrne's is at the time of writing the most complete exploration of the topic, albeit from a strongly epistemological point of view. And although the main

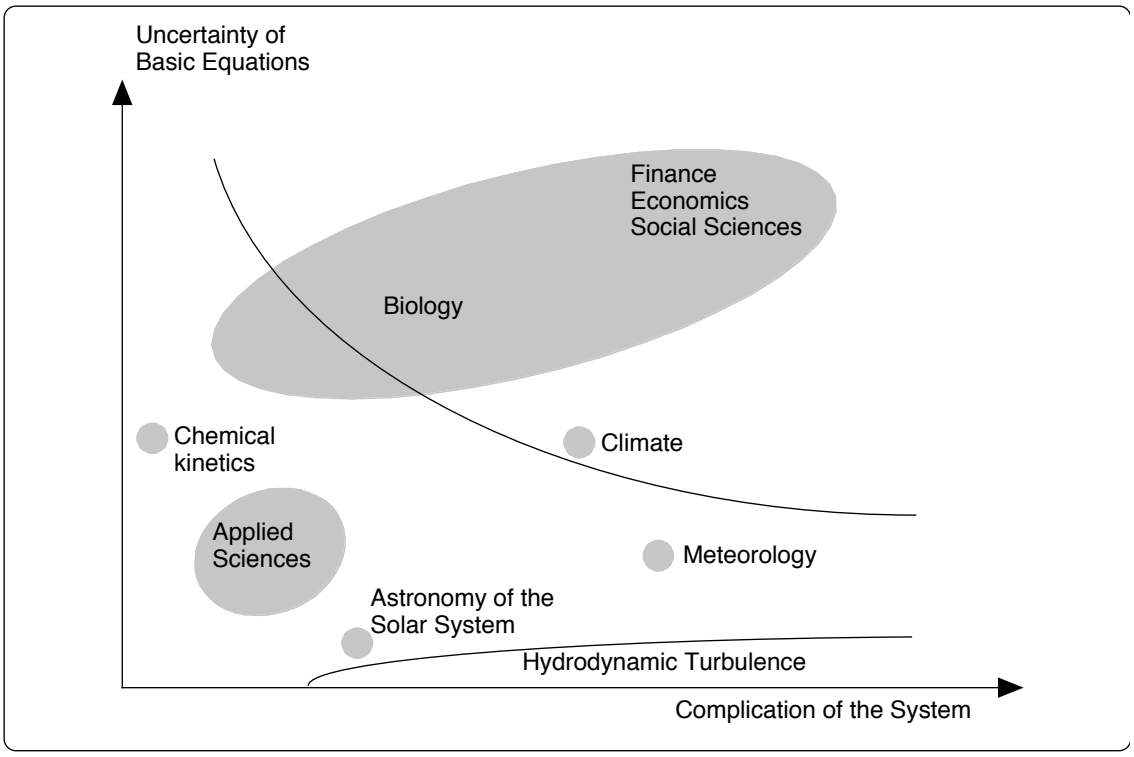


Figure 9.3 Ruelle's Limits of Predictability (Ruelle, 1997)

focus of this project is empirical rather than epistemological there are still useful lessons to be learned here. Byrne is less willing than Ruelle to accept that the inherent unpredictability of social systems limits the usefulness of complexity theory in the social sciences. Rather, he argues that there are two approaches, the weak and the strong. The weak approach is primarily taxonomic—our understanding of social systems is enhanced by knowing that they are chaotic, but we not necessarily in a position to predict outcomes (Byrne, 1998:41). The strong position, by contrast, is more optimistic in its outlook. Thus we know that a system will reach a bifurcation point, and that there are axiomatically two possible outcomes, one of which is better than the other. We may, argues Byrne, be able to nudge the system towards the better of the two (ibid). An example of "exploiting" the chaotic nature of a system was given by Ian Stewart in New Scientist magazine (Stewart, 1999), and although it is to do with spaceships rather than social systems, it makes its point well. The story goes like this.

About ten years ago, a group of NASA engineers decided that they wanted to recycle one of their satellites which was drifting aimlessly in space. Its fuel supply was far too low to propel it the millions of kilometres into the desired new orbit, which would enable it to gather information about a comet which was flying into the inner solar system. However, the NASA engineers saw that by exploiting the Butterfly Effect they could still use the spacecraft. It was simply a case of getting the butterfly to make the right flap at the right time, to get the response they desired from the satellite. They chose to exploit the gravitational pull of three objects in space, the satellite itself, the earth and the moon, to set the spacecraft on a chaotic orbit. Such an orbit is fundamentally unpredictable, but there are neutral points in the orbit, where no one body has a greater gravitational influence on the spacecraft than the others. Here, a slight nudge in the form of a short, carefully calculated blast from the depleted fuel stocks will have a big effect, enabling the space craft to be flown repeatedly past the desired observation point, at which time data could be collected. Thus was the theory that comets are large dirty snowballs confirmed, with a satellite that should by rights have been out to pasture.

The point here of course is that we are not helpless in the face of chaotic or complex adaptive systems, but we do need to treat them differently. Harvey and Reed (1996) are also concerned with limits of predictability, and they argue that there are different levels of ontological complexity in social systems, and that appropriate strategies for modelling particular social systems must therefore be adopted (Harvey & Reed, 1996:307). Their point is that predictability is not a property that a system either does or does not have, but is a property which a system possesses to a limited and effectively finite extent.

Reed and Harvey, who adopt as their theoretical foundation Bhaskar's notion of scientific realism, a position endorsed and adopted by Byrne (1998), argue that social systems are a subset of *dissipative systems,* a concept which has its origins in thermodynamics (Reed & Harvey, 1996:302). Dissipative systems are natural systems characterised by the fact that they exhibit negative entropy as well as positive entropy. In other words they can dissipate positive entropy to their environment, and channel their negative entropy into the development over time of an increasingly complex internal structure (ibid). In short, they can evolve. A "dissipative social

system" then is:

> an inherently historical entity whose evolution is driven as much by internal instability as by external perturbation. Moreover, the grounding of dissipative social systems in nature and in the dynamics of deterministic chaos demands a materialist interpretation of dissipative social systems not unlike that developed by critical Marxism.
>
> Despite their commonalities, however, there are important differences separating dissipative social systems from their physically constituted counterparts. Most of these differences hinge on the fact that societies and their institutional activities are constructed by the collective action of human beings, and, thus, are profoundly influenced by the way in which humans subjectively define themselves and their actions. This fundamental difference has already been expressed in Bhaskar's critical naturalist paradigm, for when he describes society and its functions he underscores the 'wild card' nature of human beings and their innovative abilities. This same exceptionality has long been recognized in dissipative systems theory, and can be neatly inserted into the paradigm advocated by Prigogine and the Brussels School (Reed & Harvey, 1996:306).

As we have seen in the previous section, Holland (1995), Kauffman (1995), and Gell-Mann (1994) would all recognise in a "dissipative social system" what they define as a complex adaptive system, and this *does* of course allow for human agency. This disparity in terminology may simply be a function of the vagaries of getting a book published, for although Kiel and Elliott's collection, in which Reed and Harvey are published, has a publication date of 1996, none of the sources mentioned above is referred to in it. We shall therefore stay with the more common term of complex adaptive system in this project, and briefly turn our attention to the ways in which chaos and complexity theory have been used in social science.

Initial attempts to apply chaos theory to social systems, such as those described in Kiel and Elliott (1996) were of a taxonomical nature (table 9.3 overleaf). Thus Richards (1996:89–116) argued that the "aggregation of individual preferences into group choices" is chaotic, while Brown (1996:119–137) seeks to demonstrate that the political process is itself nonlinear. Berry and Kim (1996: 215–236) analyse economic "long waves" from the late 18th to the late 20th centuries, and find that such "long waves" are constrained by limit cycles. Dendrinos (1996:237–269) argues that cities can be viewed as "spatial chaotic attractors". In other words, many social systems can be described as chaotic, although modelling them mathematically proves quite problematic, as Ruelle, ironically perhaps, predicts it will be.

Attempts to apply complexity theory to social systems are less limited in scope. Thus Alisch et al (1997) modelled the dynamics of children's friendships making extensive use of mathematical tools. Dissatisfied with existing models, which they saw as too static, they argued that "the process of friendship can be modelled as a change in commitment and described by a vector with three components: intensity[1] [sic], exclusivity, and intensiveness" (Alisch et al,

[1] The word "intensity" may well be a typographic error. Subsequent text refers not to "intensity" but "intimacy". The reader is referred to the original text for an in-depth mathematical description.

Table 9.3 CHAOS & COMPLEXITY THEORY IN THE SOCIAL SCIENCES

Author/year	*Approach*	*Focus*
Hodgson/1993	Discursive/historical	Evolutionary Theory & Economics
Day & Chen/1994	Mathematical	Non-linear dynamics & evolutionary economics
Batty & Longley/1994	Taxonomic	Fractal Nature of Cites
Batty & Xie/1996	Taxonomic	Fractal Dimension of Cities
Harvey & Reed/1996	Ontological	Limits of Predictability
Reed & Harvey/1996	Taxonomic	Dissipative Systems
Kiel & Elliott/1996	Taxonomic	Chaos in Social Systems
Xie & Batty/1997	Taxonomic	Modelling Urban Growth with CA
Ruelle/1997	Taxonomic	Limits of Predictability
Eve, Horsfall& Lee/1998	Taxonomic	Complexity in Social Systems
Byrne/1998	Epistemological	Complexity and Social Sciences
Batty & Xie/1999	Taxonomic	Self-organised Criticality and Urban Form

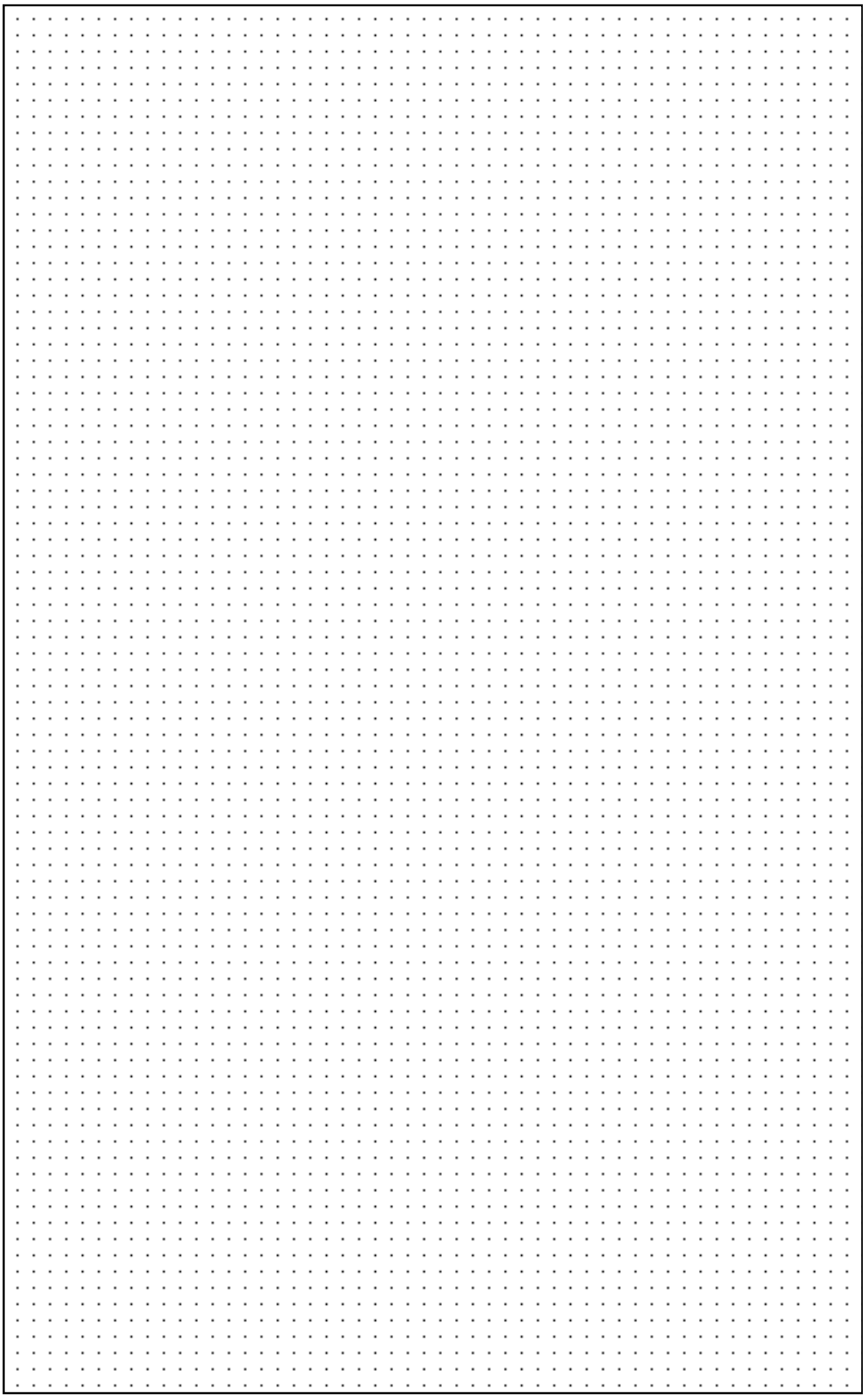
1997:174). Horsfall and Maret (1997:182–196) measured the changes in the domestic division of labour from 1974 to 1978 and argue that "chaos and complexity theories provide a larger and more fruitful framework for analyzing the domestic division of labor than the current change-limited methodologies and theories" (ibid:196). Dooley et al (1997:243–268) studied the rates for adolescent childbearing Texas from 1964 to 1990 and their conclusions regarding chaos theory are equivocal to say the least—their data *may* be chaotic, the system *may* be sensitive to initial conditions, the fractal dimension of the data *may* change over time (Dooley et al, 1997:265). Here then, we find no analogues for the evolution of a social system in an urban context, although we do at least find a general acceptance of the assertion that complexity theory is better able to deal with the dynamics of such systems.

There has been more focused study of the evolution of the urban context itself, that is of the physical form of the city, and how it changes over time (Batty and Longley,1994). Xie and Batty (1997) and Batty & Xie (1999; 1996) argue with the use of empirical data that the physical form of cities, and the way in which that form has evolved, may be described using concepts of fractal dimension (Batty & Xie, 1996), cellular automata (Xie & Batty, 1997), and most recently self-organised criticality (Batty & Xie, 1999). Examples of both cellular automata and Batty and Longley's simulations may be found in the figures overleaf. These models however, do not address the evolutionary nature of the social systems which exist within that urban form, and this is clearly a gap in the work that attempts to apply complexity theory to the social sciences. The next section is an attempt to fill that gap.

9.4 The Evolution of a Phenomenon

9.4.1 Introduction

We saw above in arguments from Ruelle (1997) and Reed and Harvey (1996) that social systems lie somewhat beyond the possibilities of predictive mathematical modelling. Here, I shall



explore the hypothesis that the basic tenets of complexity theory which we discussed above can function as powerful tools of conceptualisation which will extend our understanding of the way in which the East End artists' agglomeration has evolved over the last three decades. A less refined version of this hypothesis may be found in Green (1999), appended to this thesis.

We know from chapter four that the East End artists' agglomeration has grown "from the ground up", that it has been an artist-led phenomenon driven by individuals responding to their own personal circumstances, and seeking to fulfil their professional needs within a certain context. In chapter eight we learned that the social networks at an organisational level are rather less significant than the networks which exist at an individual level, and that it is at this level that we should look if we wish to get glimpses of the underlying dynamics of this phenomenon.

If we define the East End artists' agglomeration as a system, then, we can propose five "indicators" for its being a complex adaptive system. They are phase transition or an "edge of chaos" urban context, non-linearity, sensitive dependence upon initial conditions, adaptiveness and emergence. We shall go through these one by one, testing each to establish whether the observations fit the hypothesis. We shall then examine the evidence in terms of Holland's "seven basics". Next, we develop the theory further through the concept of fitness landscapes, and then propose a theory comprising a simple set of rules and corresponding set of assumptions, which, it is argued, will generate the behaviour observed in the system.

9.4.2 Is the there evidence for a Phase Transition?

At the time when artists started to move in to the East End, the area was going through an unprecedented shift in its economic base. Recall that the process of industrial decentralisation which had its origins in the 1930s had accelerated dramatically by the 1950s and '60s. A concurrent decline in the volume of trade handled in the docks began slowly, but from 1967 when St. Katharine's Docks closed, accelerated with brutal rapidity. So it was that in barely twenty years, over two centuries of industrial activity simply ground to a halt as western economies shifted abruptly from an industrial to a post-industrial base. London's docks all closed in just fourteen years, from 1967 to 1981. Employment in London collapsed from 4.3 million in 1961 to 3.5 million in 1989, and of these job losses 800,000 were in manufacturing. Unemployment, meanwhile soared from 40,000 in the mid 1960s to 400,000 two decades later (Hall, 1998:889).

Violent structural change of this nature would be described in chaos theory as a bifurcation, and as we saw in section 9.3, such bifurcations in a system mark the point of a phase transition. It is reasonable therefore, to argue that the East End was undergoing the urban equivalent of a local phase transition, from industrial district to post-industrial district. And, as Kauffman (1995) notes, this is where we would expect a complex adaptive system to evolve.

9.4.3 Does the system demonstrate Non-linearity?

Non-linearity is evident in two respects. First, the growth in the number of artists has been ex-

ponential, and this demonstrates the existence of positive feedback in the system. One interviewee remarked of the East End art scene that "it feeds on itself", and this is most readily apparent in the way in which the awareness that there are many artists in the East End has encouraged other other artists to seek local studio space. This point featured strongly in interviews.

This notion of "increasing returns" was noted by Arthur (1990), who argued that certain technologies, or systems, could become "locked in", in a self-reinforcing cycle. The artists' agglomeration in the East End is an example of such behaviour.

The second way in which non-linearity manifests itself lies in the fact that the East End artists' agglomeration has no "independent variables". All variables—that is the artists, local authorities, galleries and so forth—are interdependent. Thus a fieldworker who is studying the artists' social networks may well act as a linkage themselves, simply by drawing one person's attention to someone else who shares the same interests: this is a classic example of the act of measurement changing the thing which is being measured. This is also an example of a small perturbation having an unpredictable effect on the system as a whole, and this leads us to the next indicator, sensitive dependence on initial conditions.

9.4.4 Does the system show Sensitive Dependence on Initial Conditions?

The origins of the East End artists' agglomeration, as we saw in chapter four, are remarkably mundane, and relied considerably upon contingency. SPACE has its origins in the fact that its two founder members, already toying with the idea of setting up an "artists' community", wandered home past a derelict, empty St. Katharine's Dock after spending the evening with friends.

The seven graduate artists from Reading University who came to London in need of both living and working space had to follow a different route. SPACE provided only workspace, so was not an option. But the GLC's housing policy at the time was, as we saw in chapter three, quite shambolic, so the artists were able to set up Acme Housing Association in Bow. The result was that in only a few years, there were streets of ex-shortlife housing in the East End populated entirely by artists.

So the two initiatives of SPACE and Acme, both of which were experimental and small scale to begin with, rapidly grew as the hitherto untapped demand from artists was met. Two-and-a-half decades later, the East End had become the heart of the British art scene, with more than half of London's artists working there, and home to the two largest providers of studio space in the country. This is an outcome which is out of all proportion to its origins, and in that respect it is a good example of the Butterfly Effect being played out in an urban context.

Furthermore, as we noted above in section 9.4.3, the system is also subject to constant perturbations through interactions of individual agents. Some of these perturbations may make little difference to the overall functioning of the system, while others may irrevocably alter the system's trajectory. The fieldworker studying the networks is again an example of this.

9.4.5 Is the system Adaptive?

We can take the hypothesis further still. Each of these artistic networks can also be conceptualised as a living organism, with "limbs" and "minds". Each "mind" consists of a small close-knit network of people who are gathering information from both within and outwith the network, processing this information and using it to generate ideas, which are then turned into reality via the "limbs"—artists and schools for example. The limbs might also function as contributors to the mind, and vice versa. The organism is thus capable of learning, of spontaneous self-organisation, of adapting to its surroundings and of growing, by shedding "dead wood"—those who lose interest in projects, or who leave the area—and by taking on new people who wish to become involved.

This hypothesis, that the system is adaptive, is also demonstrated in the way that as property markets have changed, artists have adapted. So Acme moved from short-life housing to light industrial property in the late 1970s and early 1980s. And as SPACE and Acme came to be perceived as part of the establishment by younger artists, new "independent studios" were set up by new generations of artists, unconsciously using and contributing to the mechanisms described above, and colonising other parts of East London which had readily available cheap property which could be turned into studios.

9.4.6 Is the system Emergent?

If we accept the hypotheses that the artistic networks in the East End can be conceptualised as having the properties of non-linearity, sensitive dependence upon initial conditions and adaptiveness in their dynamics, it would be reasonable to expect the artistic networks to display emergent properties, and indeed this turns out to be the case. We have seen that they can learn, grow and adapt. It thus seems reasonable to conclude that the artistic networks in London's East End, in terms of our five indicators at least, may reasonably be conceptualised as a complex adaptive system, evolving to suit its environment.

We shall now turn our attention to the conceptualisation of Holland (1995), and examine the evidence in the light of these ideas.

9.4.7 Holland's "Seven Basics"

Recall from section 9.3 that Holland (1994) proposed "seven basics" which form the component parts of a complex adaptive system: aggregation; nonlinearity; flows; diversity; tagging; internal models and building blocks. These are more subtle differentiations, and reflect Holland's concern with the development of computer-based models of complex adaptive systems. As before, we shall take each indicator in turn.

Aggregation comprises first the breaking down of the system into different categories, and second the differentiation between different levels of aggregation. Thus in our system we have artists, galleries, local authorities and so forth. These are the different agents within the

system, but they form other "meta-agents": studio blocks or social sub-networks for example. The second category of aggregation comprises social networks at different levels, from those comprising individual agents to those consisting of national bodies. These are nested—networks within networks within networks—and we recognise here the fractal property of self-similarity across scales.

Flows may be conceptualised in terms of nodes and linkages, a concept which we recognise from social network analysis. The flows in the East End artists' agglomeration comprise two things: knowledge and art.

Diversity describes the variety of different agents in the system, each of which has a "niche" to which it has adapted. Thus artists—almost literally—fill the niche provided by empty warehouses and factories, dealers fill the niche provided by the art markets and so forth.

Tagging, in a social system such as the one we are examining, happens automatically. Thus "artist", "dealer", "local authority" are all tags referring to types of agent.

The notion of *internal models* refers to the system's capacity to acquire information and act upon it, and in that respect is a reference to the system's adaptive nature. As we saw in section 9.4.5, the East End artists' agglomeration has this capacity to adapt, and to anticipate outcomes.

Building blocks assist in the construction of internal models. Thus the internal model which comprises a piece of knowledge about the whereabouts of empty studios in the East End might be constructed of building blocks which include the contact names and addresses for those studios, the locations of those studios, the approximate rent of those studios, the sources of information, and the destinations (ie artists) for that information. These building blocks can be assembled in different ways, to generate a variety of internal models, which may be characterised by having different flows from one another.

Nonlinearity, as we saw in section 9.4.3, is also a characteristic of the artistic networks.

Thus we again see that the East End artists' agglomeration fits this conceptual framework quite comfortably, and there is no need either to distort the facts to make them fit the theory—which would be disingenuous anyway—or to modify the theory to make it fit the facts, not least because the theory is actually rather general.

But that is its beauty, and it is a point to which we shall return when we come to summarise. Next though, we shall narrow our focus somewhat, and explore the evolutionary nature of the system in terms of fitness landscapes.

9.4.8 Fitness Landscapes

The concept of the fitness landscape is not especially easy to apply, but it does seem to be a potentially useful concept. First, we look at the example of St. Katharine's Dock, and see how it might be applied descriptively to our situation. We then develop a more formal, general model.

In the St. Katharine's Dock scenario, a hundred or so artists moved in to an area which was run down, and derelict. The fitness landscape is favourable to the artists, who can climb

relatively easily to a peak. Up to this point however, the fitness landscape has been relatively unfavourable to property developers, for whom a derelict area is a difficult marketing proposition. But the artists have improved the fitness landscape for the property developers, since the area is now imbued with an artistic focus, and the property developers move in, raising rents and altering the fitness landscape to such an extent that the artists can no longer survive in the area. So the artists leave, handing the area entirely over to the property developer. We can explore this at a more formal level with the help of Stuart Kauffman's (1995) evolutionary hypercube.

This 4-dimensional hypercube (figure 9.6 overleaf) takes Kauffman's model of a fitness landscape and attempts to apply it to the evolutionary "conflict" between property developers, shown in red, and artists, shown in blue, in East London. Here, the numbers 1 to 16 represent progressively higher points in the landscape, and the height of a particular point on the fitness landscape will be dependent on and reflective of a number of factors, for instance distance from the city centre, proximity to public transport and other facilities and so forth.

Three basic rules apply. First, the system is path dependent. Thus it is possible only to climb higher, a "ratchet effect" reflecting the fact that newly gentrified areas rarely move "down-market" once they have moved "up-market". Second, the first actor to reach a point takes control of it and can use it to climb to a higher point. Third, those points on the landscape retained by either property developers or artists are those from which no further progress is possible. These represent local fitness peaks.

In this model, property developers start lower down the fitness landscape than do artists, since historically it has been artists who have paved the way for others to follow. In this respect, the initial fitness landscape, which in reality will probably comprise a cheap and run-down ex-industrial location with a poor reputation, is better suited to artists than property developers. Thus property developers start from 1, artists from 5. Each arrow represents a step up the fitness landscape, and is numbered to denote the number of steps of each actor from their respective origins. Arrows may therefore be considered to mark the passage and direction of time

Thus artists make rapid progress in their first three generations, but climb through a relatively small part of the landscape to the lowest of the local fitness peaks, 13. Property developers, by contrast, are better equipped to deal with different aspects of the landscape—changes in the markets, media coverage making an area fashionable for example—and so are able to climb the fitness landscape relatively quickly, encroaching frequently on territory first "colonised" by artists, and winning three out of the four local peaks, 14, 15, 16.

More formally, we can argue that the topography of the fitness landscape is a function of the local "rent gap", which was described in chapter three. So the rent gap, $g = r_{\max} - r$ where $r_{\max}$ is the rent achievable for the "highest and best use" and r is the rent achievable at that time.

The fitness of an actor in this system is a function of the rent they can afford, and the marginal utility they get from paying that rent. So actor fitness, $w = R \bullet u_m$ where R is the rent payable and u_m is the marginal utility (a figure between say 0 and 1) on that rent.

We combine these two equations to get the fitness F_i of a particular actor to a specific lo-

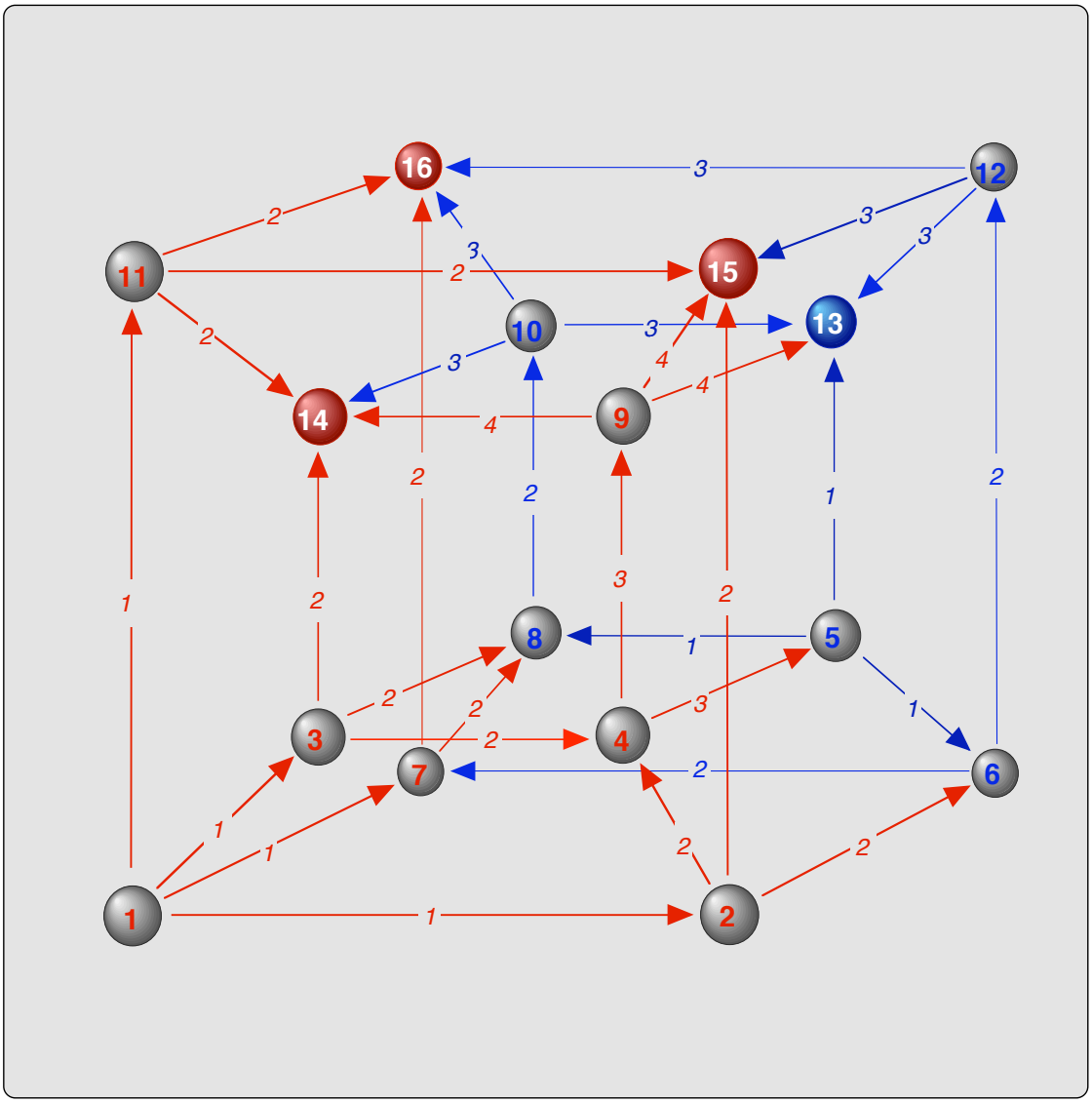


Figure 9.6 4-dimensional Boolean hypercube representing the interdependent fitness landscapes of property developers (red) and artists (blue). The numbered spheres, 1–16, represent points on the fitness landscape, 1 lowest, 16 highest. Developers start at the lowest point on the fitness landscape, 1, while artists start off farther up, at 5. The arrows mark the passage and direction of time, and are numbered to denote the number of steps in time each actor is from its point of origin. There are three rules: it is possible to move only from a lower to a higher numbered sphere; the first actor to reach a point "claims" it, and can use it to climb to a higher position; points retained by either artists or developers are those from which no further progress is possible. These retained points number four in our example. Note that three are red, and one is blue, and property developers retain the three highest fitness peaks. Thus as the evolutionary dynamic plays itself out, the system settles down to an equilibrium position from which no further evolution is possible without external influences disturbing the system.

The fitness landscape presented here has four-dimensions—thus each sphere is connected to four other spheres. A larger fitness landscape may have more dimensions, and would take the form of increasingly complex polyhedra, nested one within the other.

cality, which may be defined as $F_l = w/g$.

An example. An old factory in an undesirable area is available for rent. Suppose that the rent achievable for its highest and best use is £20 per square foot, and that the actual rent achievable at present is just £5 per square foot. The rent gap is thus £15. A group of artists seeking studio space can afford £5 per square foot, are pretty desperate for a place to work, and so do not mind too much if the area is insalubrious. In other words, the marginal utility for artists is high. We shall assign it the value of 1. Thus the actor fitness of artists, w_a is 1*5=5. For property developers, the situation is different. Although they can afford the going rent (and more), they do not want to develop in a run down area with a poor reputation. The marginal utility for developers is therefore low, say 0.1, and the actor fitness of property developers, w_{pd} is 0.1*5=0.5. From these figures we can derive the topography of the fitness landscape of artists and developers simply by dividing these figures by the rent gap, *g*, as in the equation above. If we were to derive a graph whose *x* and *z* axes enclose a map of a particular area, we could calculate local heights and draw a 3-dimensional map of the actual "fitness landscape".

Although rudimentary, these models serve as a useful "first stab" at developing a formal conceptualisation of the evolutionary dynamic of the East End artists' agglomeration. They enable us to go beyond general contextual descriptions and, as we shall see in the next section, to pinpoint the key drivers of the dynamics. But of course the question arises: if the system is one whose outcomes we cannot predict, even though we have an understanding of the underlying dynamic driving that unpredictability, then where do we go from here? That is a question which we shall leave for the next, and final chapter. First though, we must work out where have got to.

9.5 Discussion

The key question here is the extent to which these findings are reflected in the theories set out above, and it is reasonable to argue that the theories do indeed fit the facts. First, let us return once again to Törnqvist, and his four preconditions for a creative milieu: information, knowledge, competence and creativity. In the foundation of SPACE, Acme and indeed all the other studios, all of these qualities are readily apparent. Both Hall and Törnqvist have argued that a creative milieu is unstable, chaotic even. We know from its history that the East End in the late 1960s and early 1970s was structurally turbulent, and so too was the art world.

Complexity theory offers a more systematic conceptualisation of these dynamics, and we can show from empirical study that the artistic networks in London's East End exhibit all the properties of a complex adaptive system. In itself, that should come as no great surprise. Indeed it would be somewhat astonishing to find a social system which was not a complex adaptive system. Given these conceptual tools then, how should we describe the evolution of the East End artists' agglomeration?

The artistic networks in the East End appear to comprise an evolving complex adaptive system which has inhabited localised fitness landscapes for as long as they were favourable,

seeking out and moving to others when the local fitness landscape becomes unfavourable. Indeed, some studios are now purchasing rather than renting property, effectively seeking to control their own fitness landscape with a view to making it less prone to the actions of others, that is to make it less "rubbery".

The different artists' studios and organisations, then, have developed independently, responding to their own immediate needs, growing in number and coming eventually to be a part of something bigger, a proto-artistic community. Such a process is inherently messy, or even inefficient. But, as Kauffman (1995) has argued, if systems are to evolve, they must have a high degree of "redundancy" built in, and the East End artists' agglomeration exhibits such properties. This was a point recognised by the founders of Acme, Jonathan Harvey and David Panton:

> JH The development of artists' studios has been incredibly *ad hoc*. It's not been the result of any kind of planning by the funding system or indeed as a result of very much money from the funding system at all. It very much has been artists alone…
>
> NG Would you say that the fact that the network has developed on an *ad hoc* basis was one of its strengths?
>
> JH I think it probably *is* one of its strengths, but there can be an enormous wastage of resources along the way.
>
> (Acme, 1997:interview)

So we know that although the artists networks arose from fluid circumstances which lay largely outside the control of the local policy makers, and have grown and evolved to suit the prevailing economic and political conditions of the time, they do nonetheless exhibit certain dynamic properties which we can describe at relatively formal level. In other words, the networks are not beyond our comprehension if we bring the right intellectual tools to bear.

Thus while it is true enough that conventional theory can bring us somewhat closer to an understanding, it is to complexity theory that we must look if we wish to find the key to this system, and probably others like it. Through this theory, a messy, *ad hoc*, constantly shifting system such as the East End artists' agglomeration can be conceptualised in terms of just five basic concepts—phase transition or an "edge of chaos" urban context; non-linearity; sensitive dependence upon initial conditions; adaptiveness and emergence—and the evolutionary dynamic of the system is encapsulated therein. However, we can offer the hypothesis that these concepts are the consequences of three still simpler rules which rest upon six basic assumptions, set out below.

Basic rules which generate the system's behaviour:

i. artists will seek out and occupy cheap workspace;
ii. artists will attempt to be near other artists;

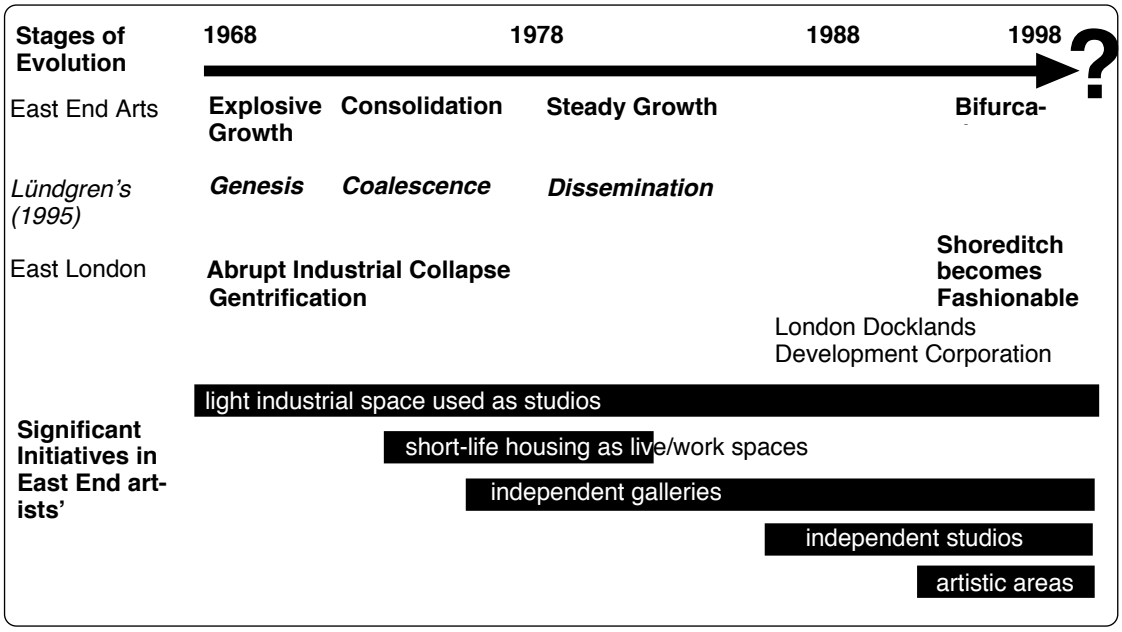


Figure 9.7 The Four Stages of Evolution

iii. artists will join an existing studio (Probability>0.5);
OR
start up a new studio block (Probability<0.5).

Assumptions upon which the basic rules rest:

i. agents carry information;
ii. new agents join the system;
iii. information is transferred between agents;
iv. agents create knowledge from information;
v. agents leave the system;
vi. agents act on the basis of their knowledge at the time.

It therefore follows that:

- agents can bring information into the system;
- information is disseminated throughout the system;
- knowledge is created within the system;
- the system as a whole can act on the basis of the knowledge it possesses, thus generating emergent behaviour.

From these basic rules, the typical behaviour of the system is generated, and the resulting evolutionary dynamic is expressed in the simple diagram above (figure 9.7). Note that the process is linear rather than cyclical—this is a one-way process, as we observed in the discussion of fitness landscapes. If we think about how the concepts of the fitness landscape tie in with these basic rules, we shall observe that the first of the basic rules states that artists will seek out and

occupy cheap studio space. Thus as their own studio space becomes unaffordable, they will move elsewhere, generating the dynamic described graphically in the 4-dimensional hypercube in figure 9.6, and contributing to the regeneration of areas such as Shoreditch, where we see the "fight for territory" being played out at the time of writing (November 1999).

The stages of evolution for the East End artists' agglomeration are compared in figure 9.7 with Lündgren's stages of evolution for the Swedish image processing industry, and we find interesting parallels. Structurally, the two phenomena—the East End artists' agglomeration and Swedish image processing—have followed similar evolutionary paths (note that Lündgren's stages do not coincide in time with the East End's), although Lündgren's use of the word "dissemination" is rather confusing—probably he means "diffusion" or "dispersal".

The stages of evolution are also set against points in the East End's history, and it can be seen that as the East End has become more settled, so too has the East End artists' agglomeration. Here then, we can see that the evolution of the East End artists' agglomeration has been intimately linked with the evolution of the East End itself. In other words, and this is no intellectual bombshell, but a point worth making nonetheless, the East End artists' agglomeration has not been independent of its surroundings but, as the basic rules set out above suggest, a result of agents acting independently in response to their circumstances: and being an emergent phenomenon, the East End artists' agglomeration as a whole has no "sense of direction", or "aims" or "objectives", even if the individuals comprising it do.

However, the context is changing, and the recent rises in property prices in areas such as Shoreditch and Bow are once again threatening the stability of the East End artists' agglomeration, which in turn is pushing the system farther from equilibrium than it has been for the last decade and a half. The possibility of bifurcation arises, and new and as yet unpredictable trajectories for the continuing growth of the artists' agglomeration in the East End become possible, while others become les likely. And so it is that we move from the historical to the speculative; that must mean it is time to conclude.

TEN

CONCLUSIONS: FROM FACTORIES TO FINE ART AND BEYOND

There are places I'll remember
All my life, though some have changed.
Some for ever, not for better.
Some have gone, and some remain

All these places had their moments
With lovers and friends, I still can recall.
Some are dead and some are living,
In my life, I've loved them all.

John Lennon & Paul McCartney, "In My Life", 1965

10.1 The Chase Nears its End

Several hares have been set running in the course of this dissertation, and it is now time to trap those we can, and to work out ways of keeping track of those that still elude us. The hares we can trap number two: the findings in response to the research objective set out in chapter one, and the broader theoretical context of this project's findings. These comprise the subject matter for the next section.

The hares which remain elusive are more numerous, and inevitably, we have spotted others in our travels which we must now flush out, even if we cannot trap them. They are the problems of predicting future outcomes for a system which I have argued is unpredictable, and broader questions which arise from the way in which the research objective was pursued. These are discussed in sections 10.3 and 10.4. The last section of this chapter simply asks "what next for East London's artists?"

10.2 What Did We Just Find Out?

The research objective—"To map and describe the development of visual artists' studio organisations in the East End"—was simple enough, and what actually happened is not so very difficult to understand either. We saw in chapter three that the decentralisation of industry, which had its origins before the second Word War, was encouraged in Abercrombie and Forshaw's 1943 County of London Plan: and during the 1960s and '70s it came to be driven by the deindustrialisation of western cities at the hands of an increasingly global economy driven by footloose capital, leaving swathes of empty light-industrial property in the East End. Unable to let such property to commercial tenants, landlords found that artists were willing to rent such property. Furthermore, the GLC's housing policies were shambolic, and the GLC itself was happy enough to offload short-life housing to artists who could make something of it.

In chapters four to seven, we learned that the "Coldstream Report" had by the late 1960s contributed to burgeoning numbers of graduating artists, who were subject to an increasingly insecure existence in a turbulent art world, needed cheap workspace, and in a classic case of supply meeting demand, found it in the old furniture factories, warehouses and other light-industrial properties which were to be found either by the River Thames, or in Shoreditch, Hackney, Whitechapel, Bethnal Green and Bow. The Arts Council, forever in the public eye negotiating the delicate line between politics and art, nevertheless contributed financially to organisations such as SPACE and Acme. So too did others: the Gulbenkian Foundation, for example, and not least the property owners who let out their buildings at cheap rents. Again, supply met demand.

The whole context for these changes and initiatives was one of fluidity. Faced with structural changes with which they were simply unfamiliar—the sudden transition from an industrial to a substantially post-industrial district—local authorities did not stifle the artists' initiatives. They did, after all, offer the possibility that that transition might be rendered less painful, if only by virtue of the fact that buildings continued to be occupied, and their localities thus rendered less desolate.

The studios also clustered: in old industrial buildings around London Fields, west of Hoxton Square, at Spitalfields; in Acme houses along the new M11 route and in Beck Road. Perhaps not surprisingly, it was these clusters that the media latched on to, and the two nearest the City, at Spitalfields and Hoxton, became fashionable in the late 1990s. London Fields is better known for the fact that Graham Paton and Angela Flowers have galleries there: a destination for the cognoscenti. But many studios remain in defiantly unfashionable places: Maryland; Dalston; the edge of Bow: off the Tube Map, conceptually inaccessible. If these places become gentrified, it will not be because of the studios. We can conceive of these clusters as "hotspots", and this "Galaxy of East End studios" is illustrated in figure 10.1 overleaf by way of a closing map.

The problems faced by artists need revisiting too, for although they undoubtedly benefited from the industrial malaise in the East End, they had to work hard to realise those benefits. The buildings were often derelict, and in the case of the short-life housing favoured by Acme in

their early days, earmarked for demolition as part of slum-clearance programmes. Thus considerable time and effort had to be invested in the conversion of these properties to studios.

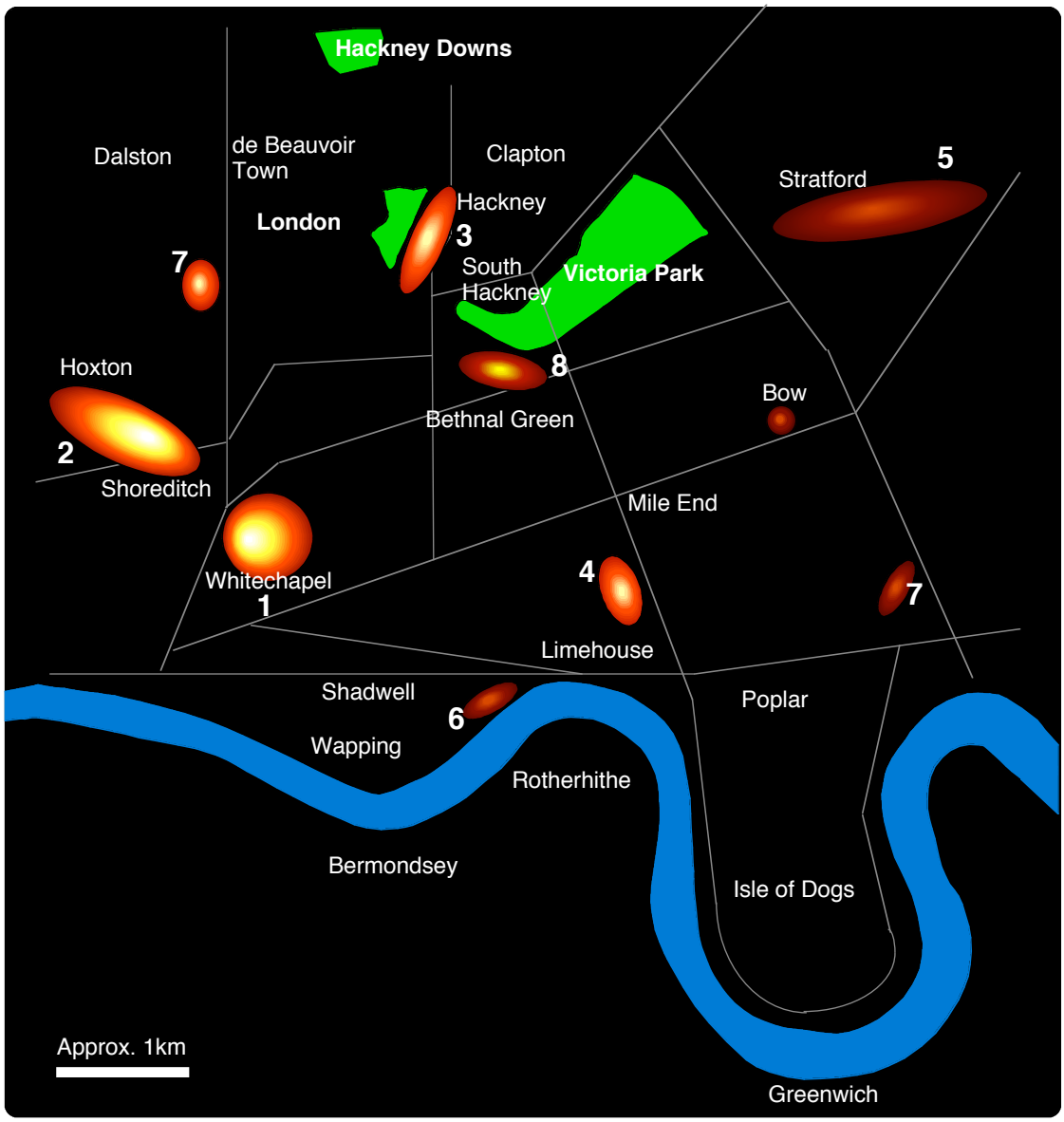


Figure 10.1 Indicative Map showing studio "hotspots" in the East End, 1998. (brighter spots are larger and denser clusters)

1/2. The Whitechapel-Spitalfields-Shoreditch axis.
Spitalfields was the subject of gentrification in the 1980s, and in the 1990s media attention focused on its burgeoning arts scene, contributing further to its success.

3. London Fields
Angela Flowers established an East End branch of her (West End) gallery in 1988, near to Martello Street Studios, establishing this as an East End destination for those interested in contemporary art. Studios have clustered here since the early 1980s.

4. Copperfield Road
Location of Acme Headquarters, Matt's Gallery and Copperfield Road Studios. As with London Fields, the presence of a respected gallery makes this a destination.

5. Stratford/Maryland
A dispersed group of relatively large studios, including the largest Acme studio block, Carpenter's Road (now close

6. Wapping Wall
The only remaining studios in Wapping, which has now been gentrified.

7. Isolated and small clusters
These illustrate the dispersed nature of the East End artists' agglomeration.

8. *Bethnal Green/Bow*
Bonner Road Studios and the Showroom, both run by Acme. Chisenhale Studios and Gallery, the first "independent" East End studios. Chisenhale Gallery maintains a reputation at the cutting edge.

Nor were the studios necessarily secure: once use as artists' studios ceased to be the most profitable option, the artists would have to move on as the landlords realised the full market value of their assets; we can see this in the slow but sure process of decentralisation of artists' studios, as the East End gradually recovers from the loss of its industrial role, and starts carving out new niches for itself. In short, the East End's industrial loss was the practising artists' gain: but only in the right circumstances.

"The right circumstances" for artists were, fundamentally, circumstances of fluidity: the mechanism by which those circumstances were exploited was the social network. But as we saw in chapter eight, the networks among organisations are loose and fragmented: some informants argued that outside of the "gallery circuit" they do not exist in any meaningful sense. However the evidence from the interviews demonstrated time and again that the networks which proved to be significant were those which existed at an informal level, those which are often colloquially referred to as the "grapevine". Through these networks, the information was exchanged and the knowledge created which enabled the East End artists' agglomeration to evolve.

The growth of the East End artists' agglomeration has thus been organic, driven by individual artists responding to individual needs, but in the process generating a social system. This is the concept of "emergence", the notion that a social system will generate properties which could not be predicted by looking at the individual agents in isolation. And in chapter nine, I used ideas from complexity theory, the natural sciences, and evolutionary biology to argue the case that the dynamics within the local artists' population are those of a self-organising evolutionary system. The local artists' population was not contrived by a higher authority. The context of course is a shared one, and the similar responses to it have meant that the local artists' population appears to function, and can reasonably be conceptualised as functioning, as a single system, adapting to its surroundings, learning and growing. In terms of complexity theory, this is known as a complex adaptive system.

In short, we can describe the East End artists' agglomeration as a complex system which has evolved in the "edge of chaos" environment which comprised an area of London where the global shift from an industrial to a post-industrial society played itself out at a local level.

10.3 Reflections on the Research Process

Before considering areas of *further* research (in the next section) I want to discuss briefly some of the problems which I came up against while pursuing *this* research, and which anyone wanting to probe certain themes farther than I have here might wish to avoid.

To start with, there are the basic practical problems: the studio on whose answerphone several messages have been left, but which still does not call back, and which eventually has to be written off as a potential informant. The same is true of would-be interviewees who say yes, they would love to be interviewed, and please call back later to arrange a time when they are

less busy. Of course, the interview never takes place. Most frustrating of all were the gallery owners (or their assistants), who would decline to be interviewed due to "lack of time", although they crop up frequently enough giving quotes to journalists in a process which Bruno Latour would no doubt recognise: prising the "black box" open is not always easy.

The almost complete lack of literature on the East End artists' agglomeration might be seen as either a problem, or a merciful blessing: a problem if one feels trepidation at the thought of navigating uncharted waters; a relief if one craves the new horizons that such a prospect promises. Fundamentally, it means that intellectual risks can be taken, new theories constructed from bits of old ones; the intellectual equivalent of the inventor creating new machines from old in the garden shed. True, the inventor's contraption may seem a bit like one of Heath Robinson's, and perhaps similar observations might be made about some of the ideas which have been presented herein.

Combining ethnography, narrative history, social network analysis, theories of creative milieux and complexity theory may seem like just such a "Heath Robinson" approach, and perhaps an unnecessary one when there are theoretical approaches such as that proffered by the "new economic geography" or the "new institutionalism" which appear, on the face of it, to fit the facts adequately. The problem is that once the veneer of superficiality has been scraped away, they do not fit at all: their institutional emphasis makes them quite unsuitable for a social system whose main agents are individual artists, as we saw in chapter one. And this where the problem of a lack of relevant literature falls into sharp relief: large chunks of infuriatingly *irrelevant* literature have to be ploughed through to get at the truth; they must be read, or at least skimmed, digested, discussed, and ultimately dismissed, but included nonetheless to satisfy the inquiring mind which is drawn to the perfectly reasonable, but wrong, conclusion that a superficial appeal is a genuine connection.

So in the end, we must plump for the "Heath Robinson" theory: inelegant it may be, but it possesses the undoubted virtue that it works. The question becomes one of improvement, not invention. In this thesis, I think, the whole is clearly the sum of its parts (figure 10.2 overleaf). A few of the connections could usefully be refined: the nature of the informal networks which have been deduced, but not analysed, needs a closer look. And while the concept of emergence can link social network analysis to complexity theory via actor network theory, by far the better approach would be to cut out the "middle man" and generate high quality data sets for the social networks which would enable the construction of a decent time series: then, the question of whether the social system does genuinely emerge from the networks could finally be answered. This, though, takes us into the realms of further research, and that means it is time to move to the next section.

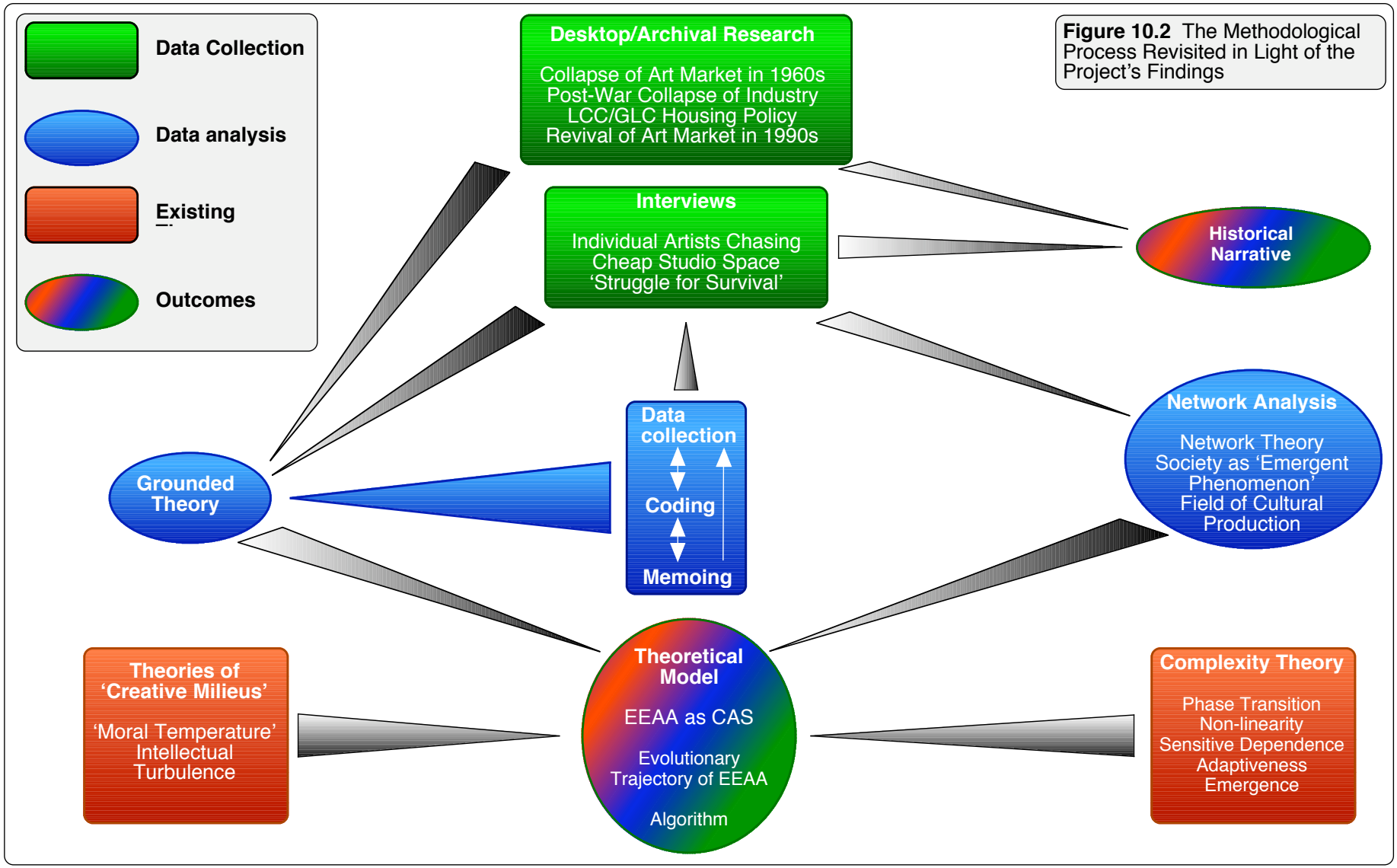


Figure 10.2 The Methodological Process Revisited in Light of the Project's Findings

10.4 Areas of Further Research

This thesis started with the assertion that it is not art history, and to the extent that the East End artists' agglomeration has been treated as "just another urban social system" that assertion remains true. Nonetheless, questions about the art history of the East End will no doubt have arisen in the reader's mind, and will almost certainly—and deliberately—not have been answered.

In particular, I have been careful to steer clear of making any judgements on the quality of art being produced, for example, and the type of art produced has not been explored in depth. All the artists interviewed for this project are painters, and a trek around the East End for an Open Studios event reveals the majority of the work to be painting, and generally not on an enormous scale; probably this is for the simple reason that big paintings are expensive to produce, and a more difficult domestic proposition, so harder to sell. Art projects such as the shop on Bethnal Green Road run by Tracey Emin and Sarah Lucas are the exception, not the rule. The art produced in the East End, then, is a topic that merits further exploration.

Figures for the art market itself are extremely difficult to pin down. Although the Enid Lawson Gallery observed that the contemporary art market has flourished in the latter half of the 1990s, the global nature of the contemporary art market makes the disaggregation of figures for London a near impossible task. Informal interviews[1] with Sotheby's, Phillips and Bonham's drew similar responses: following sale prices for similar pieces by named artists over time is the best way of tracing the ups and downs of the market. Equally, turnover is not necessarily an indicator (Sotheby's, 2001:interview; Phillips, 2001:interview; Bonham's, 2001:interview). Is the sale of one piece for £100,000 by an established "star" the equivalent of the sale of one hundred pieces by unknown artists for the £100,000 in terms of market size? A report for the British Art Market Federation explores the implications of VAT harmonisation in the EU (Market Tracking International, 1997), but Phillips's Head of Impressionism and Modern Art, James Ulph, knew of no reports which cover London's contemporary art market (Phillips, interview:2001). Indeed, Ulph suggested that such a report would have to be specially commissioned (ibid).

The socio-economic context in which that art was produced is also one for the art historians with a sociological bent: we have seen that the number of artists has increased, and in this project have accepted that as a simple contextual fact. Originally artists' numbers rose because of the "Coldstream Report", which encouraged greater participation in further and higher arts education, but are graduates in fine art more likely to continue as artists than they were, say, twenty-five years ago? Did the notions of the 1980s "designer lifestyle", or the 1990s "creative/café lifestyle" make a career in art more attractive? Michael Craig-Martin, an artist and teacher at Goldsmiths' College, surmised in a 1996 newspaper article about the East End artists agglomeration that the death of the "job for life" and the concomitant decline in job security encouraged an "if I'm going to be insecure anyway, I might as well be insecure doing something I enjoy" attitude (Glaister, 1996). Again, this is something which has been skirted around in this project, but which might repay a closer look.

[1] Informal interviews were carried out by telephone on May 25th 2001.

In a somewhat pointed aside, Kate Malone of Balls Pond Studios, now closed but which was a ceramicists' studios, observed that crafts people tend to be supportive of one another, and that ceramicists tend to be female. Was there a connection? she wondered (Balls Pond Studios, 1999: interview). Answering such a question would doubtless shed considerable light on the sociology of craft production.

The role of policy, too, has had short shrift in this thesis: the argument which has run through it is that policy's role in the evolution of the East End artists' agglomeration has been that of a largely passive enabler, not stifling initiatives, and contributing in a small way to their nurturing: as we have seen, the East End's artists' agglomeration was a product of circumstance, not policy. Furthermore, its evolutionary trajectory is inherently unpredictable.

Nonetheless, the fact that the role of policy is limited does not make it redundant. In chapter nine, we learned how NASA scientists exploited the chaotic orbit of a spaceship whose fuel supply had run low, and by "nudging" the spaceship at carefully chosen moments with what fuel remained, they were able to maintain it in a stable orbit. Equally, policy's role with a system such as the East End artists' agglomeration must be one of careful nurture through relatively low-key, but well-considered interventions, and at opportune moments[2]
. Understanding how such a policy approach actually works however, will need detailed study of the way in which policy is generated and implemented; it will also require close observation over time of the way in which particular outcomes evolve (or not).

The role of independent arts patrons, such as the Gulbenkian Foundation, will also repay a closer look. Indeed, Paul DiMaggio found in the late 1980s that independent arts foundations had received scant attention from researchers in the Unites States (DiMaggio, 1986): the reader will be aware that this thesis does little to remedy that situation on this side of the Atlantic.

And so we arrive at an anomaly. This project has attempted to model at a relatively systematic, albeit qualitative level the evolutionary dynamic of a social system. But the point of modelling systems is not only to understand, it is to understand well enough to be able to predict. That way lies the hope that the mistakes of yesterday will not be repeated tomorrow. But when we are looking at cities, which are, after all, multi-agent systems comprised of the most complex natural organism there is, asking for predictive models is a tall order: to all practical intents and purposes, it is technically impossible. True, economists have attempted to predict the behaviour of financial markets on the basis of rational human beings making rational decisions, but not with great success: indeed, the field of evolutionary economics was a direct response to this failure.

The big question, it seems to me, is developing a predictive model which can accurately mimic the contingent elements of human existence, and which can accurately simulate the emergent properties which social systems invariably exhibit. Paradoxically, we can predict that social systems will behave unpredictably, but separating internal factors—John Lennon meeting Paul McCartney and getting on with him well enough to start a band called the Beatles—from

[2] See Landry, 2000 and Landry and Bianchini, 1995 for examples of policy being applied creatively to nurture projects which less imaginative people would have dismissed, or not conceived of.

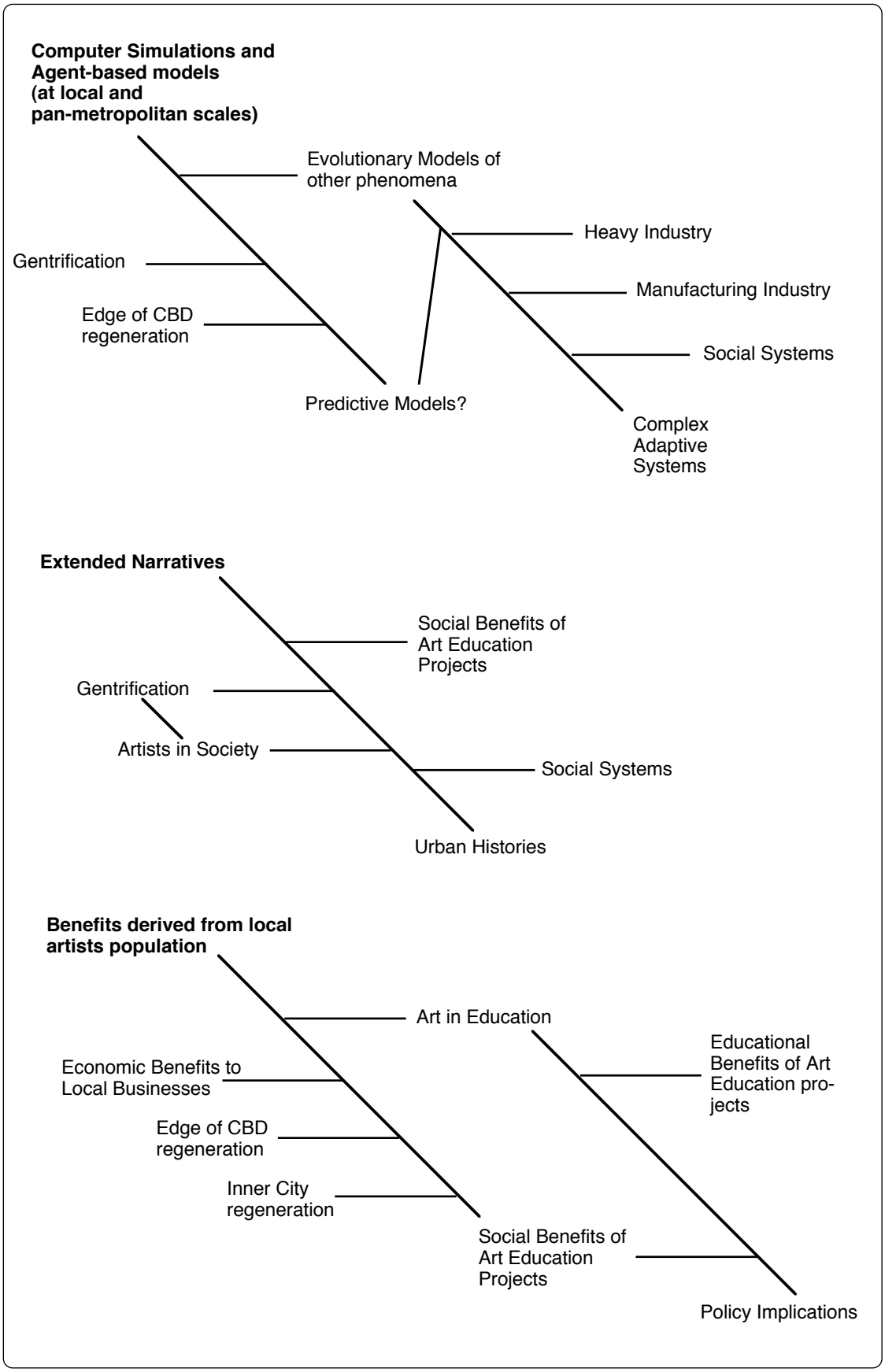


Figure 10.3 Areas for Further Research

external factors—in the Beatles' case the rise of skiffle and previously untapped demand for the kind of music the Beatles played—is no easy task.

In chapter nine, we drew on complexity theory to propose a simple formal model for deriving fitness landscapes in terms of the rent gap, and computer-based geographical information systems (GIS) would certainly have much to contribute to such a modelling process. But this is only a part of the jigsaw. The nature of the jigsaw is such that we must, in the end, turn to computers if we wish to generate models of urban social systems which are sufficiently complex to be realistic. Agent-based simulations such as that developed by John Casti and his colleagues (Casti, 1999) are one way forward, but even then, modelling the evolution of a fluid social system within the general context of a turbulent urban context will probably continue to rely heavily on qualitative insights for understanding. The algorithm proposed at the end of chapter nine could certainly form the basis for such an agent-based model, and developing such a model is one "area of further research" which the author is keen to pursue.

There is one other "area of further research" that I want to suggest, and I think from the East End's point of view, it is perhaps the most important: it is the way in which the local artists' population has benefited the area. Such projects would concern themselves more with the educational, social and perhaps environmental benefits—such as those described by Suzi Gablik (1992) in *The Re-enchantment of Art*—than the economic benefits. I have argued elsewhere that artists need to use the possibility of the increased social and cultural capital which they can offer as levers to ensure their own survival (cited in Raimes and Ryan, 2000): given the impoverished state of most artists, then, the most useful research will probably not concentrate on the economic benefits which artists bring to an area, since in many cases these will be minimal.

The social and educational benefits of art education have been documented by psychologists such as Gardner (1990), were recognised by Samuel Barnett in the 19th century, and have been perpetuated in the work of the Whitechapel Gallery, which was of course founded by Barnett. So in the end, and we need more research to find this out, the expansion of such programmes, and the benefits they can bring to people, may well prove to be the most significant legacy of Bridget Riley's and Peter Sedgely's walk home past St. Katharine's Docks over thirty years ago.

10.5 Conclusions: From Factories to Fine Art and Beyond

> Interviewer Do you think there's an artists' community in the East End?
>
> Artist There are plenty of artists, but I don't think there's a community. I think the communities are just within studio groups. Even big groups like say Carpenters Road; they're not communities. Carpenters Road doesn't seem to me to act as a community. There are 60 separate artists who have an Open Studio now and again. Well, I think in a way that describes how the artists community of the East End works. We're separate units. Together we form an enormous body. But I'm not too sure there's a community because, where does this community meet and interact, whatever? Once again I don't think it's done on a group basis, it's individuals interacting with each other that form a network which makes that community.
>
> Magnus Irvin, City Studios, 1998

Things may be about to change. In chapter two we noted the establishment of ViA (with which the author was actively involved), an organisation dedicated to the establishment of a formal artists' network in the East End, and at the end of chapter seven we noted that the East End arts scene appears to be on the threshold of a new phase, as areas such as Spitalfields and Shoreditch become more fashionable and consequently more expensive. In chapter eight we saw how the strongest sub-network involved ViA, the two local authorities of Tower Hamlets and Hackney and the National Artists' Association.

Perhaps such a move is to be expected. As we saw in chapters four to seven, the artists' networks, such as they are, have evolved at an informal level over the last three decades, but as the context becomes less fluid, and as property prices rise, studio blocks are now seeking a more secure existence which will leave them less prone to the vagaries of the property markets (Wilson, 2001). The growth of the ViA initiative over the last eighteen months or so, and the active support offered by the local authorities. suggests two things: first, security for artists is an increasingly pressing issue; second, local authorities are now prepared to support the East End arts scene actively, rather than tacitly as they have in the past. In March 2001, the Museum of London's exhibition *Creative Quarters* explored the art world in London from the seventeenth to the twenty-first centuries: the East End featured prominently (cf Wedd et al, 2001)

Attempting to predict the outcomes of these changes is fraught, but worth a try. Probably we will see an East End arts scene with two components. In the centre, around the newly fashionable and gentrified areas of Shoreditch and Spitalfields, we shall see a high profile, consumer-oriented "artists' quarter" with a few studios owned by successful artists, and with other studios being occupied by better paid "creative professionals" such as graphic designers, crafts people and so forth. This central area, not dissimilar to what currently exists in these areas, will have cafés, boutiques, shops, and restaurants, and will be small, but have a high media profile. Surrounding this will be an artists' "hinterland", similar to the majority of the existing

artists' East End, but more widely dispersed, and with more studios situated farther from the centre. The central "core" will be more secure and more consumer-oriented, but less dynamic, while the surrounding belt of artists to the north-east, east and south-east will rely more and more on electronic mail and the internet for communication, and for gathering and disseminating information. This process will be slow at first, but will gather speed and momentum as these means of communication become more widely accepted and more readily available via libraries and indeed through resources and organisations such as the National Artists' Association and ViA. The artists themselves will no doubt adapt to their new circumstances, creating something out of nothing: they have after all successfully done so for the last three decades. I see no reason for that to change.

REFERENCES

References are divided into two sections; first, bibliographic references; second, references to personal interviews.

Bibliographic References

Acme, 1995, *ACME Studios for Artists*, London, Acme Housing Association Ltd..

Acme, 1998, "The History of Artists in the East End"—Reseach Project Development Brief (unpublished).

Agar, M., 1980, *The Professional Stranger*, New York, London, Academic Press.

Alberge, D., 1990, "At the Sharp East End—London's East End has the biggest concentration of artists in Europe", p.27 in *The Independent*, December 4th 1990, London, Independent.

Alisch, L.-M., Azizighabari and Bergfeldt, M., 1997, "Dynamics of Children's Friendships" 1997 in Eve, R.A., Horsfall, S., & Lee, M.E. (eds), 1997, *Chaos, Complexity and Sociology—Myths, Models and Theories*, London, Sage Publications Ltd.

Allen, P., 1993, "Evolution: Persistent Ignorance from Continual Learning" in Day, R. & Chen, P., 1993, *Nonlinear Dynamics and Evolutionary Economics*, Oxford, Oxford University Press.

Andersson Å.E. & Sahlin, N.E., (eds), 1997, *The Complexity of Creativity*, Dordrecht, Boston, London, Kluwer Academic Publishers.

Andersson, Å.E., 1985, *Kreativitet: StorStadens Framtid*, [Creativity: Cities of the Future] Stockholm, Prisma (written in Swedish, not read by the author. Author's translation of title).

APT, 1990, *Ten: Chisenhale Studios Tenth Anniversary Catalogue*, London, Arts Place Trust/Chisenhale Studios.

Archer, M., 2001, *Artists in East London (1969–2000)*, London, Acme Studios.

Architects' Journal, 1991, "Capital Ideas", special edition, 11th and 18th December 2001, London.

Arthur, B.W., 1990, "Positive Feedbacks in the Economy" in *Scientific American*, February 1990, pp.92-99, New York, Scientific American Inc..

Axelsson, B. & Easton, G. (eds.), 1992, *Industrial Networks—A New View of Reality*, London and New York, Routledge.

Baker, A., 2000, *Other Educated Persons—Art and Artists in the East End*, multimedia web-based project, http://vads.ahds.ac.uk/vads_catalogue/oep/index.htm

Ball, R. & Pratt, A.C.(eds), 1994, *Industrial Property: Policy and economic developmen*t, London, Routledge.

Batty, M., & Longley, P., 1994, *Fractal Cities*, London, Academic Press

Batty, M. & Xie, Y., 1996, "Preliminary evidence for a theory of a fractal city" in *Environment and Planning A*, vol.28, pp.1745–1762, London, Pion.

Batty, M. & Xie, Y., 1999, "Self-organized Criticality and Urban Development", in *Discrete Dynamics in Nature and Society*, (author's proof copy), Amsterdam, OPA (Overseas Publishers Association).

Beauregard, R., 1986, "The chaos and complexity of gentrification", in Smith, N. & Williams, P. (eds), 1986a, *Gentrification of the City*, London, Unwin Hyman Ltd..

Bentley, J., 1997, *East of the City—the London Docklands Story,* London, Pavilion Books Ltd.

Berry, B.J.L. & Kim, H., 1996, "Long Waves 1790–1990: Intermittency, Chaos and Control" in Kiel, L.D. & Elliott, E.W. (eds), 1996, *Chaos theory in the social sciences: foundations and applications*, Michigan, University of Michigan Press.

Bijker, W., 1997, *Of Bicycles, Bakelites and Bulbs—Toward a Theory of Sociotechnical Change*, Cambridge, Massachusets, The MIT Press.

Bird, R.J., 1997, "Chaos and Social Reality: an emergent perspective" in Eve, R.A., Horsfall, S., & Lee, M.E. (eds), 1997, *Chaos, Complexity and Sociology—Myths, Models and Theories*, London, Sage Publications Ltd.

Brown, T., 1996, "Nonlinear Politics" in Kiel, L.D. & Elliott, E.W. (eds), 1996, *Chaos theory in the social sciences: foundations and applications*, Michigan, University of Michigan Press.

Brownill, S., 1990, *Developing London's Docklands—another great planning disaster?*, London, Paul Chapman Publishing Ltd..

Bumpus, J., 1997, "The First Question is 'Why?'" pp. 46–47 in *Royal Academy Magazine*, No.56, Autumn 1997,London, Royal Academy.

Butler, T., 1996, "People Like Us" in Butler, T., & Rustin, M. (eds) 1996, *Rising in the East—the regeneration of East London*, London, Lawrence & Wishart.

Butler, T., & Rustin, M. (eds) 1996, *Rising in the East—the regeneration of East London*, London, Lawrence & Wishart.

Byrne, D., 1998, *Complexity Theory and the Social Sciences*, London, Routledge.

Castells, M., 1996, *The Rise of the Network Society*, Oxford, Blackwell.

Castells, M. & Hall, P., 1994, *Technopoles of the World*, London, Routledge.

Casti, J., 1999, "Firm Forecast" in *New Scientist*, 24th April 1999, pp.42–46, London, Reed Business Information.

Chakrabarti, S., Dom, B., Kumar, S.R., Raghavan, P., Rajagopolan, S., Tomkins, A., Kleinberg, J.M., & Gibson, D., 1998, "Hypersearching the Web" in *Scientific American*, June 1999, pp.44–52, New York, Scientific American Inc..

Coldstream, W., (chairman) 1960, *Final Report of the National Advisory Council on Art Education 1960*, London, HMSO.

Cox, J., 1994, *London's East End—life and traditions*, London Weidenfeld & Nicolson.

Davies, A., 1990, *The East End Nobody Knows*, London, Macmillan.

Day, R. & Chen, P. (eds) 1993, *Nonlinear Dynamics and Evolutionary Economics*, Oxford, Oxford University Press.

Dendrinos, D.S., 1996, "Cities as Spatial Chaotic Attractors" in Kiel, L.D. & Elliott, E.W. (eds), 1996, *Chaos theory in the social sciences: foundations and applications*, Michigan, University of Michigan Press.

DiMaggio, P.J., 1986, "Support for the Arts from Independent Foundations" in DiMaggio, P.J. (ed), 1986, *Nonprofit Enterprise in the Arts—Studies in Mission and Constraint*, New York & Oxford, Oxford University Press.

DiMaggio, P.J., 1992, "Nadel's Paradox Revisited: Relational and Cultural Aspects of Organizational Structure" in Norhia, N. & Eccles, R.G. (eds), 1992, *Networks and Organizations: structure, form and action*, Boston Massachusets, Harvard Business School Press.

Docklands Forum, 1995, *Docklands Forum 20th Anniversary Publication*, London, Docklands Forum.

Dooley, K., Hamilton, P., Cherri, M., West, B., and Fisher, P., 1997, "Chaotic Behaviour in Society:

Adolescent Childbearing in Texas, 1964–1990" in Eve, R.A., Horsfall, S., & Lee, M.E. (eds), 1997, *Chaos, Complexity and Sociology—Myths, Models and Theories*, London, Sage Publications Ltd.

Duffin, D., 1989, "Open Studios in the East End", p.28 in *The Independent*, London.

Education Statistics for the United Kingdom, 1982, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1983, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1984, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1985, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1986, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1987, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1988, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1989, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1990, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1991, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1992, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1993, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1994, Volume 3, London, HMSO.

Education Statistics for the United Kingdom, 1995, Volume 3, London, HMSO.

Eve, R.A., Horsfall, S., & Lee, M.E. (eds), 1997, *Chaos, Complexity and Sociology—Myths, Models and Theories*, London, Sage Publications Ltd.

Fainstein, S., Gordon, I., & Harloe, M., 1992, *Divided Cities*, Oxford, Blackwell.

Fainstein, S. & Harloe, M., 1992, "London and New York in the contemporary world" in Fainstein, S., Gordon, I., & Harloe, M., 1992, *Divided Cities*, Oxford, Blackwell.

Farrell, J., 1990, "The German Community in 19th Century East London" in *The East London Record* No.13, 1990, pp.2–8, Journal of the East London History Society.

Forshaw, J.H., & Abercrombie, P., 1943, *County of London Plan*, London, Macmillan & Co. (out of print).

Freeman, C., 1995, "Formal Scientific and Technical Institutions in the National System of Innovation", in Lundvall, B.-Å., (ed), 1995, *National Systems of Innovation—Towards a Theory of Innovation and Interactive Learning*, London and New York, Pinter.

Gablik, S., 1992, *The Re-enchantment of Art*, London, Thames and Hudson.

Galaskeiwicz, J., 1979, *Exchange Networks and Community Politics*, London, Sage Publications.

Gardner, H., 1990, *Art education and human development*, Santa Monica, California, J. Paul Getty Trust.

Gell-Mann, M., 1994, *The Quark and the Jaguar: adventures in the simple and the complex*, London, Little, Brown and Company.

Gelsing, L., 1995, "Innovation and the development of industrial networks" in Lundvall, B.-Å., (ed.), 1995, *National Systems of Innovation—Towards a Theory of Innovation and Interactive Learning*, London and New York, Pinter.

Glaister, D., 1996, "Artists create Left bank in the East of London", Article in *The Guardian*, July 10th 1996, London, The Guardian.

Glaser, B. & Strauss, A.L., 1967, *The Discovery of Grounded Theory*, Chicago, Aldine Publishing Co.

Glass, R., 1964, *London: Aspects of Change*, London, Centre for Urban Studies/MacGibbon and Kee.

Gleick, J., 1988, *Chaos—making a new science*, London, Penguin.

Goodman, L.A., 1961, "Snowball Sampling" in *Annals of Mathematical Statistics* 32, pp.148-170.

Gould, S.J., 1977, "Racist Arguments and IQ" in *Ever Since Darwin*, London, Penguin Books.

Gould, S.J., 1996, "A Humongous Fungus Among Us" in *Dinosaur in a Haystack*, London, Jonathan Cape.

Green, N., 1998, *Art, Culture and Complexity in London's East End,* Paper presented at City & Culture '98 Conference, Stockholm.

Green, N., 1999, "Art and Complexity in London's East End", in *Complexity* vol.4, no.6, July/August 1999, pp.14–21, New York, John Wiley/Santa Fe Institute.

Guardian, 1992a, *Art for Sale*, April 1992, London, The Guardian.

Guardian, 1992b, *Art for Sale*, July 1992, London, The Guardian.

Guardian, 1992c, *Art for Sale*, November 1992, London, The Guardian.

Hackney, London Borough of, 1995, *Public Art Strategy, Executive Strategy*, London, London Borough of Hackney.

Hall, P. G., 1962, *The Industries of London since 1861*, London, Hutchinson and Co..

Hall, P., 1963, *London 2000*, London, Faber and Faber.

Hall, P., 1988, *Cities of Tomorrow*, Oxford, Blackwell.

Hall, P., 1998, *Cities in Civilization—Culture, Innovation & Urban Order*, London, Wiedenfeld & Nicolson.

Harvey, D.L. & Reed, M., 1996, "Social Science as the Study of Complex Systems" in Kiel, L.D. & Elliott, E.W. (eds), 1996, *Chaos theory in the social sciences: foundations/applications*, Michigan, University of Michigan Press.

Hewison, R., 1986, *Too Much: art and society in the sixties: 1960–1975*, London, Methuen London Ltd..

Hewison, R., 1995, *Culture and Consensus—England, art and politics since 1940*, London, Methuen.

Holland, J.H., 1995, *Hidden Order: how adaptation builds complexity*, Reading Massachusetts, Helix Books.

Honey, S., Heron, P. & Jackson, C., 1997, *Career Paths of Visual Artists*, London, Arts Council of England.

Horsfall, S. and Maret, E., 1997 "Short-Term Changes in the Domestic Division of Labor: Intimations of Complexity" in Eve, R.A., Horsfall, S., & Lee, M.E. (eds), 1997, *Chaos, Complexity and Sociology—Myths, Models and Theories*, London, Sage Publications Ltd.

Jacobs, J., 1977, *Stateville: The Penitentiary in Mass Society*, Chicago, University of Chicago Press.

Kandinsky, W., 1914, *Über das Geistige in der Kunst,* published in a new English edition as *Concerning the Spiritual in Art*, 1977, New York, Dover Publications, Inc..

Kauffman, S., 1995, *At Home in the Universe: the search for the laws of complexity*, London, Penguin Books.

Kiel, L.D. & Elliott, E.W. (eds), 1996, *Chaos theory in the social sciences: foundations and applications*, Michigan, University of Michigan Press.

Kudielka, R., 1992, *Bridget Riley, Paintings 1982–1992*, Nürnberg, Verlag für Kunst Nürnberg & London, South Bank Centre.

Lambirth, R., 1997, "Eat Up" pp. 48–49 in *Royal Academy Magazine*, No.56, Autumn 1997,London, Royal Academy.

Landry, C., 2000, *The Creative City*, London, Earthscan Publications.

Landry, C. & Bianchini, F., 1995, *The Creative City,* London, Demos/Comedia.

Latour, B., 1987, *Science in Action: how to follow scientists and engineers through society*, Milton Keynes, Open University Press.

Latour, B., 1997, in Finn Olsen "Om aktor-netvaerksteroi. Nogle fa afklaringer og mere end nogle fa forvikinger", *Philsophia*, (Danish philosophy journal), vol. 25, n°3 et 4, pp. 47-64. [translation at http://www.keele.ac.uk]

Latour, B. & Woolgar, S., 1986, *Laboratory Life: the construction of scientific facts*, Princeton, Princeton University Press.

Lennon, J. & McCartney, P., 1965, "In My Life", from *Rubber Soul*, side 2, track 4, London, Parlophone Records.

Lewin, R. & Regine, B., 1998, "Mastering the Game", *New Scientist*, 26th September 1998, pp.39–42, London, Reed Business Information.

London Arts Board, 1996, *The Arts and Cultural Industries in the London Economy*, London, London Arts Board.

London County Council, 1951, *Administrative County of London Development Plan 1951, Analysis,* London, LCC (out of print).

Lorenz, K.B., 1950, *The Comparative Method in Studying Innate Behaviour Patterns*, Symposia for the Society of Experimental Biology 4:221–268.

Lundgren, A., 1995, *Technological innovation and network evolution*, London & New York, Routledge.

Lundvall, B.-Å., (ed.), 1995, *National Systems of Innovation—Towards a Theory of Innovation and Interactive Learning*, London and New York, Pinter.

Lynton, N., 1989, *The Story of Modern Art*, (2nd edition), Oxford, Phaidon.

MacRitchie, L., 1996, "AIR and SPACE" in *Art Monthly*, London.

Market Tracking International, 1997, *The British Art Market 1997—A Study of the Value of the Art and Antique Market in Britain and the Implications of EU Harmonisation of Import VAT and Artist Resale Rights*, London, British Art Market Federation.

Miles, M., 1989, *Art for Public Places*, Winchester, UK, Winchester Press.

Mills, M., 1995, "Docklands Forum—the first 20 years" in *Docklands Forum*, 1995.

Moye, A., 1979, *The LCC's Reconstruction of Stepney and Poplar 1945-1965*, Planning Studies No. 5, Polytechnic of Central London, School of Environment Planning Unit, London, PCL.

Mumford, L., 1938, *The Culture of Cities*, New York, Secker & Warburg.

Munby, D.L., 1951, *Industry and Planning in Stepney*, London, Oxford University Press.

Murdoch, J., 1997, "Inhuman/nonhuman/human: actor-network theory and the prospects for a nondualistic and symmetrical perspective on nature and society" in *Environment and Planning D*, vol. 15, pp.731–756, London, Pion Ltd..

Norhia, N. & Eccles, R.G. (eds), 1992, *Networks and Organizations: structure, form and action*, Boston Massachusets, Harvard Business School Press.

O'Brien, J. & Feist, A., 1995, *Employment in the arts and cultural industries: an analysis of the 1991 census*, London, Arts Council of England.

Packer, W., "Artists experience their 24 hours of fame", in the *Financial Times*, July 18th 1995, London, Financial Times.

Paley, M., 1998, *Information sheet for Interim Art Gallery*, London, Interim Art Gallery.

Pearman, H., 1997, "Revival tactics", in *The Sunday Times* (Architecture section), 16th November 1997, London, Times Newspapers.

Pile, S., 1996, "Left Bank, East End", article in *The Daily Telegraph*, 20th July 1996, London, The Daily Telegraph.

Powell, W. & DiMaggio, P.J., (eds), 1991, *The New Institutionalism in Organisational Analysis*, Chicago and London, The University of Chicago Press.

Poynter, G., 1996, "Manufacturing in East London" in Butler, T., & Rustin, M. (eds), 1996, *Rising in the East—the regeneration of East London*, London, Lawrence & Wishart.

Pratt, A.C., 1997a, "The Emerging Shape and Form of Innovation Networks" in Simmie, J. (ed), 1997, *Innovation, Networks and Learning Regions?*, London, Jessica Kingsley Publishers Ltd..

Pratt, A.C., 1997b, *The Cultural Industries Sector: its definition and character from secondary sources on employment and trade, Britain 1984–91*, July 1997, Research Papers in Environmental and Spatial Analysis No.41, Department of Geography and Environment, London School of Economics.

Pretlove, J., 1997, "East side story" in the *Guardian* (Style section), September 3rd 1997, London, the Guardian.

Prigogine, I. & Stengers, I., 1984, *Order out of Chaos: man's New Dialogue with Nature*, London, Heinemann.

Pudney, J., 1975, *London's Docklands*, London, Thames & Hudson.

Raimes A. & Ryan, A., 2000, *Regeneration and the Premises Crises (finding the space for art)*, report of "Your Forum" conference, 19th July 2000, London, Vision in Art.

Reed, M & Harvey, D.L., 1996, '"Social science as the study of complex systems" in Kiel, L.D. & Elliott, E.W. (eds), 1996, *Chaos theory in the social sciences: foundations and applications*, Michigan, University of Michigan Press.

Richards, D., 1996, "From Individuals to Groups: The Aggregation of Votes and Chaotic Dynamics" in Kiel, L.D. & Elliott, E.W. (eds), 1996, *Chaos theory in the social sciences: foundations and applications*, Michigan, University of Michigan Press.

RICS, 1999, *The UK Property Cycle—a History from 1921 to 1997*, London, Royal Institution of Chartered Surveyors.

Ridley, M., 1996, *Evolution*, (2nd ed.), Oxford, Blackwell.

Robinson, G.M., 1998, *Methods and Techniques in Human Geography*, Chichester, John Wiley & Sons.

Ruelle, D., 1997, "Chaos, Predictability and Idealization in Physics", in *Complexity*, vol.3, no.1, September/October 1997, pp.26–28, New York, John Wiley and Co..

Santa Fe Institute, 1997, *Santa Fe Institute's Internet Site*, http://www.santafe.edu.

Saxenian, A., 1994, *Regional Advantage*, Cambridge Mass., Harvard Press

Savitch, H., 1988, *Post-Industrial Cities: Politics and Planning in New York, Paris and London*, Princeton University Press, Chichester.

Schmandt, H.J., & Bloomberg, W., (eds), 1969, *The Quality of Urban Life,* Vol 3 Urban Affairs Annual Review, Beverly Hills CA, Sage Publications Inc.

Sex Pistols, 1976, *Anarchy in the UK*, London, EMI Records.

Sheppard, H., 1997, "London Docklands—we're talking about my regeneration" in *Planning*, June 13th 1997, London, Planning Publications Ltd.

Shone, R., 1997, *Sensation: Young British Artists from the Saatchi Collection*, London, Royal Academy/Thames and Hudson.

Simmie, J. (ed.), 1997, *Innovation, Networks and Learning Regions?*, London, Jessica Kingsley Publishers Ltd..

Singh, J.V., Tucker, D.J., & Meinhard, A.G., 1991, "Institutional Change and Ecological Dynamics" in Powell, W. & DiMaggio, P.J., (eds), 1991, *The New Institutionalism in Organisational Analysis*, Chicago and London, The University of Chicago Press.

Sladen, M., 1997, "Brit Pack" pp. 39–45 in *Royal Academy Magazine*, No.56, Autumn 1997,London, Royal Academy.

Smith, N., 1986, "Gentrification, the frontier, and the restructuring of urban space" pp.15–34 in Smith & Williams (eds), 1986a, *Gentrification of the City*,. London, Unwin Hyman Ltd..

Smith, N. & Williams, P. (ed.), 1986a, *Gentrification of the City*, London, Unwin Hyman Ltd..

Smith, N. & Williams, P. (eds), 1986b, "Alternatives to orthodoxy: invitation to a debate" in Smith, N. & Williams, P. (eds.), 1986a, *Gentrification of the City*, London, Unwin Hyman Ltd..

Sorensen, E., 1996, "The LDDC at 15 Years Old", seminar given at University College London, 26th November 1996 (unpublished).

SPACE, 1970, Film in which the founding artists of SPACE are shown working, and talk about St. Katharine's Dock, London, SPACE. (shown at the "Creative Quarters" exhibition, Museum of London, London, March 2001).

SPACE, 1975, "Directory of Artists, Space Open Studios, London, 1975", London, SPACE.

SPACE/Acme, 1975, "Help Yourself to Studio Space", London, SPACE/Acme.

Stangos, N. (ed.), 1981, *Concepts of Modern Art*, (revised edition), London, Thames & Hudson.

Stewart, I., 1998, "Pulling Power", in *New Scientist*, 28th November 1998, No. 2162, pp.38–41, London, Reed Business Information.

Strauss, A.L., 1987, *Qualitative Analysis for Social Scientists*, Cambridge, Cambridge University Press.

Sykes, J.B. (ed.), 1982, *The Concise Oxford Dictionary of Current English* (7th edition), Oxford, Clarendon Press.

Statistics of Educatation, 1964, Volume 3, London, HMSO.

Statistics of Educatation, 1965, Volume 3, London, HMSO.

Statistics of Educatation, 1966, Volume 3, London, HMSO.

Statistics of Educatation, 1967, Volume 3, London, HMSO.

Statistics of Educatation, 1968, Volume 3, London, HMSO.

Statistics of Educatation, 1969, Volume 3, London, HMSO.

Statistics of Educatation, 1970, Volume 3, London, HMSO.

Statistics of Educatation, 1971, Volume 3, London, HMSO.

Statistics of Educatation, 1972, Volume 3, London, HMSO.

Statistics of Educatation, 1973, Volume 3, London, HMSO.

Statistics of Educatation, 1974, Volume 3, London, HMSO.

Statistics of Educatation, 1975, Volume 3, London, HMSO.

Statistics of Educatation, 1976, Volume 3, London, HMSO.

Statistics of Educatation, 1977, Volume 3, London, HMSO.

Statistics of Educatation, 1978, Volume 3, London, HMSO.

Taine, H., 1889, *Lectures in Art*, 2nd series, (translator not stated), New York, Henry Holt and Co..

Taine, H., 1865, *Philosophie de l'Art*, (revised by HT, translated from the French by JD), London, H. Baillière.

Tennant, N., 1998, *London's Future Housing Provision: meeting the capital's housing requirements up to 2016*, Unpublished MPhil thesis, London, University College London.

Thorncroft, A., 1995a, "Now for something completely different—please", in the *Financial Times*, April 7th 1995, London, Financial Times.

Thorncroft, A., 1995b, "How to Spend It", in the *Financial Times*, September 9th 1995, London, Financial Times.

Törnqvist, G., 1983, "Creativity and the Renewal of Regional Life", in Buttimer, A. (ed), *Creativity and Context: A Seminar Report* (Lund Studies in Geography, Series B. Human Geography, No. 50), 91–112. Lund: Gleerup.

Tower Hamlets, 1996, *Tower Hamlets Art Directory 1996*, London Borough of Tower Hamlets

Urban Cultures Ltd, 1994, *Prospects and Planning Requirements of the Creative Industries in London*, London, London Planning Advisory Committee.

Waddell, H., 1989, *London Art and Artists Guide*, (5th edition), London, A & C Black.

Waddell, H., 1993, *London Art and Artists Guide*, (6th edition), London, London Art and Artists Guide.

Waldrop, M., 1992, *Complexity—the emerging science at the edge of order and chaos,* London, Penguin.

Walters, G., 1996, "State of the Art", article in *The Times* magazine, 20th July 1996, London, The Times.

Ward, R., 1995, "Docklands Redevelopment—Dream or Disaster?", in Docklands Forum, 1995, *Docklands Forum 20th Anniversary Publication*, London, Docklands Forum.

Wasserman, S. & Faust, K., 1997, *Social Network Analysis—methods and applications*, Cambridge, Cambridge University Press.

Wedd, K. with Peltz, L, & Ross, C., 2001, *Creative Quarters—The Art World in London from 1700 to 2000*, Museum of london exhibition catalogue, London, Museum of London.

Weinreb, B. & Hibbert, C., (eds.) 1983, *The London Encyclopaedia*, London, Macmillan.

Whitechapel Art Gallery, 1990, *Open Studios Catalogue*, London, Whitechapel Art Gallery.

Whitechapel Art Gallery, 1992, *Open Studios Catalogue*, London, Whitechapel Art Gallery.

Whitechapel Art Gallery, 1994, *Open Studios Catalogue*, London, Whitechapel Art Gallery.

Whitechapel Art Gallery, 1996, *Open Studios Catalogue*, London, Whitechapel Art Gallery.

Whitechapel Art Gallery, 1998, *Open Studios Catalogue*, London, Whitechapel Art Gallery.

White chapel Art Gallery, 1995, *I Can Do That!*, London, Whitechapel Art Gallery

Whyte, W.F., 1984, *Learning from the field: a guide from experience*, London, SAGE PublicationsLtd.

Williams, P. & Smith, N., 1986, "From 'renaissance' to restructuring: the dynamics of contemporary urban redevelopment" in Smith, N. & Williams, P. (eds), 1986a, *Gentrification of the City*, London, Unwin Hyman Ltd..

Wilson, A., 2001, "Wanted: Studio Space", pp.8–12 in *Art Monthly*, May 2001, No.246, London, Brittania Art Publications Ltd..

Wolcott, H.F., 1982, "Differing styles of on-site research, or, 'If it isn't ethnography, what is it?'", in *The Review Journal of Philosophy and Social Science*, 7(1&2), 154–159.

Wolcott, H.F., 1995, *The Art of Fieldwork*, London, SAGE Publications.

Xie, Y. & Batty, M., 1997, "Automata-Based Exploration of Emergent Urban Form" in *Geographical Systems*, Vol.4, pp.83–102, Amsterdam, OPA (Overseas Publishers Association).

Young, K., 1977, *Implementing an Urban Strategy: the case of public housing in metropolitan London*, Canterbury, Urban and Regional Studies Unit, University of Kent.

Young, K. & Kramer, J., 1978, *Strategy and Conflict in Metropolitan Housing—Suburbia versus the Greater London Council 1965–75*, London, Heinemann.

Young, K., & Mills, L., 1980, *Public Policy Research: a review of qualitative methods*, University of Bristol, School for Advanced Urban Studies.

Young, M and Willmott, P., 1962, *Family and Kinship in East London*, (revised edition), London, Penguin.

Zukin, S., 1982, *Loft Living: culture and capital in urban change*, New York, John Hopkins University Press.

References to Interviews *(all interviews were face-to-face and tape recorded unless otherwise stated).*

Studios

Acme Housing Association, November 1997
Jonathan Harvey, David Panton (Founders, Directors)
Balls Pond Studios, March 1999 (not taped)
Kate Malone (Founder/Director)
Barbican Arts Group, March, 1998
Mark Wainwright (Studio Manager)
Bow Arts Trust, April 1998
Marcel Baettig (Director), Ruth Catlow (Education Officer)
Cable Street Studios, March 1999
Michael Cubey (Director)
Chisenhale Studios, December 1997
Helen Ridge (Studio Manager)
Maurice Agis, August 1998
Co-Founder, Butlers Wharf Studios & Chisenhale Studios
City Studios, November 1998
Magnus Irvin (Founder/Director)
Fawe Street Studios, February 1998
Ken Oliver (Co-founder)
Florence Trust, February 1999
Rob Macintosh (Studio Manager)
Maryland Studios, March 1999
Lucy Lefeuvre (Artist)
Red Door Studios, July 1998
Kwai Lau (Co-founder/Administrator)
Southgate Studio, February 1999
Adrian Hemming/Adam Gray (Co-founders/directors)
SPACE Studios, December 1997
Martin Frost (ex-Director), Fiona Furness (Studio Manager)
SPACE Studios, 1999 (informal interview, not taped)
Charlotte Robinson, (Director)
Bridget Riley, March 1998 (interview not taped, transcript checked by Bridget Riley)
Co-Founder, SPACE Studios
Standpoint Studios, March 1998
Graham Bignell (Founder, Director)
Wharf Studios, March 1999
Rob Olin/Cecilia Vargas (Co-founders)

Local Authorities

L. B. of Tower Hamlets, November 1997
Brian Oakaby (Arts Officer)

Galleries

Art for Offices, July 1998
Andrew Hutchinson (Founder/Director)
Cable Street Gallery, March 1999
Michael Cubey (Founder/Director)
Camerawork Gallery, March 1999
Joe Harper (Director)
Chisenhale Gallery, February 1999
Sue Jones (Gallery Manager)
Enid Lawson Gallery, May 2001 (informal tlelphone interview)
Richard Ingrams
Lamont Gallery, July 1998
Katherine Shearn (Gallery Manager)

Matt's Gallery, August 1998
Robin Klassnik (Founder/Director)
Graham Paton Gallery, July 1998 (telephone interview)
Graham Paton (Director)
Whitechapel Art Gallery, August 1998
Catherine Lampert (Director)

Independent Arts Organisations
Free Form Arts Trust, December 1997
Martin Goodrich (Founder/Director)
National Artists' Association, February 1999
Ann Jones
Vision in Art (various, 1997–2000: involved with organisation, so continuous contact)
Aileen Ryan (Founder/Director)

Auction Houses
Bonham's, May 2001 (informal telephone interview)
Emily Gray, Administrator of Modern Pictures
Phillips, May 2001 (informal telephone interview)
James Ulph, Head of Impressionism and Modern Art
Sotheby's, May 2001 (informal telephone interview)
Lisa Furnell, Office Manager, Contemporary Art Department

APPENDIX ONE
QUESTIONNAIRES

Questionnaire for Studio Organisations

1. History and Philosophy of the Organisation. Can you tell me about the history of the organisation, and the underlying philosophies which inform its aims and objectives?

2. Structure and Administration of the Organisation. Can you tell me about the structure and administration of your organisation?

Number of studios; number of artists; tenure times; rental values; management of the organisation; does the organisation have charitable status; if so, on what basis?

3. Linkages with other organisations. For each organisation with which you have linkages, please enumerate the the strength of the linkage according to the following scale, and then describe the nature of that organisation?

> **0** Unaware of existence of that organisation, or, if aware, negligible contact, and no perceived need to initiate a relationship;
>
> **1** Aware of existence of organisation, minimal contact, but no working relationship as such;
>
> **2** Positive working relationship, but intermittent or sporadic contact, probably not long-established, but felt to have the potential to develop;
>
> **3** As 2 but: contact is regular but infrequent. Relationship has developed from stage 2, and is perceived as an integral part of the organisation's longer-term programme of activities;
>
> **4** As 3 but: contact is now frequent; the relationship has been relatively long-established;
>
> **5** As 4 but: the professional relationship is of sufficient strength to have a significant social element.

Other organisations includes studio blocks/groups; local authorities; schools; funding bodies; artists' associations.

4. General. What is your prognosis for the arts scene in the East End over the next five to ten years?

Is there anything you would like to add?

Questionnaire for Art Galleries/Dealers

Name
Do you wish to remain anonymous? Y/N

For how long have you been established at this address?
Where (if anywhere) were you based before?
Why did you open up in this area?
Do you live in the East End? If so, where?
What, if anything, makes the East End special for you?
Why do you think so many artists live in the East End?
Do the artists you represent live and work locally?

When did you start to deal in art?
Did you start with contemporary art?
As far as sales go, do you find buyers are from the local area, or elsewhere?
Do serious collectors visit the East End?
What range do your prices cover?
Do you frame and mount pictures and photographs, posters etc.?

Do you know of places e.g. pub,s cafes, where artists or dealers meet one another? Where?
How often do you go there? (days per week).
Roughly how many artists do you know? 0-5; 5-10; 10-20; >20.
Roughly how many dealers do you know? 0-5; 5-10; 10-20; >20.

Are you involved in any schemes with schools, community projects etc.?
Could you tell me about them?
What do gain from involvement in such schemes?
For how long have you been involved in such schemes?
Do you think there has been any benefit to the local community derived from the East End's artistic community?
What do you think locals think of the artists and galleries?
Do you think that artists and art dealers are welcomed by the local community?
Do you think that the local authority has a role to play in the visual arts?
Y: Can you describe that role?
No: Why not?

Is there anything you would like to add?

APPENDIX TWO
Social Network Analysis

A2.1 Introduction

Social network analysis has its origins in the 1930s, with the development of sociometry—the study of inter-personal relationships in social groups—and the invention of the sociogram—a graphical depiction of those relationships. Recognition of the usefulness of such devices spurred the further development of analytical techniques which became increasingly mathematical during the 1940s and 1950s. These developments drove and were in turn driven by theoretical considerations, through which further insights into the dynamics of social groups were sought. The three mathematical cornerstones of social network theory are graph theory, statistical and probability theory and algebraic models, which between them offer a "precise way to define important social concepts, a theoretical alternative to the assumption of independent social actors, and a framework for testing theories about structured social relationships" (Wasserman & Faust, 1997:10–17). This appendix describes social network analysis through the use of illustrative examples drawn from the East End such as the networks amongst artists. These examples will, through their familiarity, be easier to understand when discussed in terms of reality rather than illustrative examples. This appendix describes just the basic concepts. Technical terms are *italicised* when first used, but not subsequently.

A2.2 Basic Terms and Concepts

Social Network Analysis provides a relatively simple way of understanding a range of more or less complex relationships between people, organisations and so forth, known as *actors*. Relationships between pairs of actors can be be clearly defined, and by analysing a series of these relationships, and then representing them either graphically—when actors are referred to as *nodes*—or in the form of a matrix, the mechanics of a network can be understood and explained (Wasserman & Faust, 1997).

Actors need not be capable of acting on their own volition, in the sense that an actor could comprise people in a group, companies or nation states (ibid:17). A group of actors is known as a network and a group of actors of the same type—self-employed artists for example—is known as a *one-mode network* (ibid). A *two-mode network* might be the relationship between artists and art dealers, while multi-mode networks also exist, although social network methods for such complicated structures are rare (ibid:35).

Social *ties* link actors to one another, and these can take on a variety of different guises; friendship, business relationships, club membership, physical connections such as a road or a bridge, or kinship for example (ibid:18). A collection of ties, for example friendships, is called a *relation* (ibid:20). A relational tie can either be *directional* or *non-directional*, and either *dichotomous* or *valued* (ibid:44). A directional tie exists where an artist sells paintings *to* a dealer, and that dealer buys paintings *from* an artist, while a non-directional exists where an artist

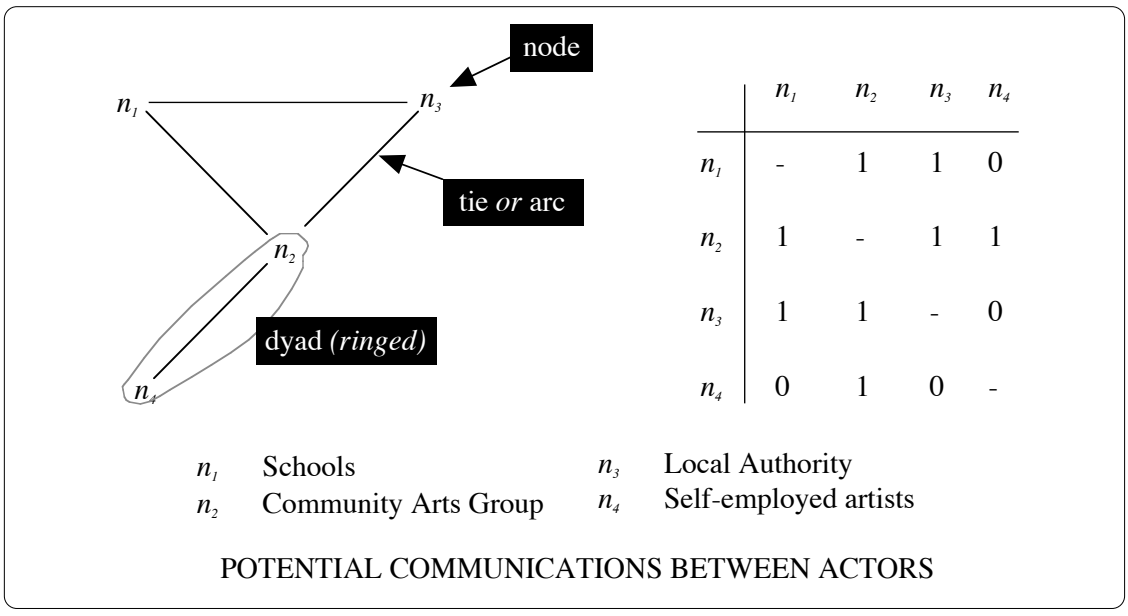
shares a studio with another artist. A dichotomous tie either does, or does not exist—for example our artist either does or does not sell paintings to a particular dealer. A valued relation somehow quantifies the relation, either in terms of strength, intensity or frequency of the tie between the actors (ibid:45). The number of paintings sold to a dealer each year is an example of a valued relation. So too is how much that dealer likes each of their artists' work.

The basic unit of social network analysis is the *dyad*—two actors linked by a tie, or ties (ibid). The *triad*, consisting of three actors and the associated ties is also used. This is more complex. For example, actor *i* is linked to actor *j*, and actor *j* is linked to actor *k*. Actor *k* is in turn linked to *i* via *j* (ibid:19). A collection of dyads, all interlinked, is known as a sub-group, and the collection of all actors with ties to be measured is known as the *group* (ibid:20). The "*social network* consists of a finite set of actors and the relation or relations defined on them" (ibid:20).

A2.3 The General Structure of the Network

The model in figure A2.1 below is hypothetical, but serves to demonstrate how combinations of dyads can be be put together to form a network. The *graph* is a *simple graph* since it has only one line between each pair of nodes. Each node either is, or is not linked to another, so each relation is dichotomous—the actors either do, or do not communicate with each other. Each relation is also non-directional, since communication is assumed here to be a two-way process.

The shortest path between two nodes is the *geodesic* and the longest of these is two (ties). The matrix expresses the same network mathematically rather than graphically. A tie is indicated by a 1, no tie by a 0. The matrix in figure A2.1 is symmetrical, which shows that the linkages are non-directional. Each form of representation has advantages and disadvantages. The graph has the virtues of being relatively easy to read, even if the information it presents is rela-



	n_1	n_2	n_3	n_4
n_1	-	1	1	0
n_2	1	-	1	1
n_3	1	1	-	0
n_4	0	1	0	-

Figure A2.1 Representation of a Network using Graph and Matrix.

tively complex. The significant actors can be identified with relative ease, even if the reader has only minimal, or no knowledge of social network analysis. The graph forms a useful base for attempts at predicting the effects of changes to the network—questions such as "supposing you introduced this actor to that actor?" can be asked simply by drawing a line on the graph, and the change in the overall balance of the network can immediately be grasped at a qualitative level, even if further calculation is required to interrogate any quantitative changes. For this reason, graphs rather than matrices are used to present the findings of the social network analysis in the next chapter.

In this illustrative example, node n_2, Community Arts Group, appears to play a pivotal role in the model. It is the only node connected to all the others, and serves as a "communications short-cut". Such a node—a *cutpoint*—is critical in communications networks. Without n_2, the graph has two separate components between which no communication is possible. Artists (n_4) would be isolated—there would in effect be two networks.

Figure A2.2 below is a *directed graph*, or *digraph*. This example shows which actors "consider themselves a friend of" other actors and has either one or two *arcs* between each pair of nodes; the first arc shows whether n_x considers n_y a friend, while the second shows whether n_y considers n_x a friend. Arcs are expressed as arrows which indicate the direction of the relation. Dyads can be either *mutual*, indicated by a double-headed arrow, *asymmetric*, indicated by a single-headed arrow, or *null*, indicated by no arc. Thus (n_1, n_2) is asymmetric, (n_4, n_5) is mutual and (n_2, n_3) is null. Note that n_2 is also a cutpoint in this graph. A node is said to be either *adjacent to* a node if it terminates there, or *adjacent from* another node if it originates at that node. Thus in figure A2.2 n_5 is adjacent to n_7 and adjacent from n_2.

We can examine the basic structure of the social network for both graphs and digraphs in a number of ways. We can measure the *density* Δ of the network—the number of linkages present compared with the maximum possible—and this will quantify the overall "connectedness" of the network. Crudely, a low density would indicate that those in the social network have little contact with others in the network, while a high density would indicate the opposite.

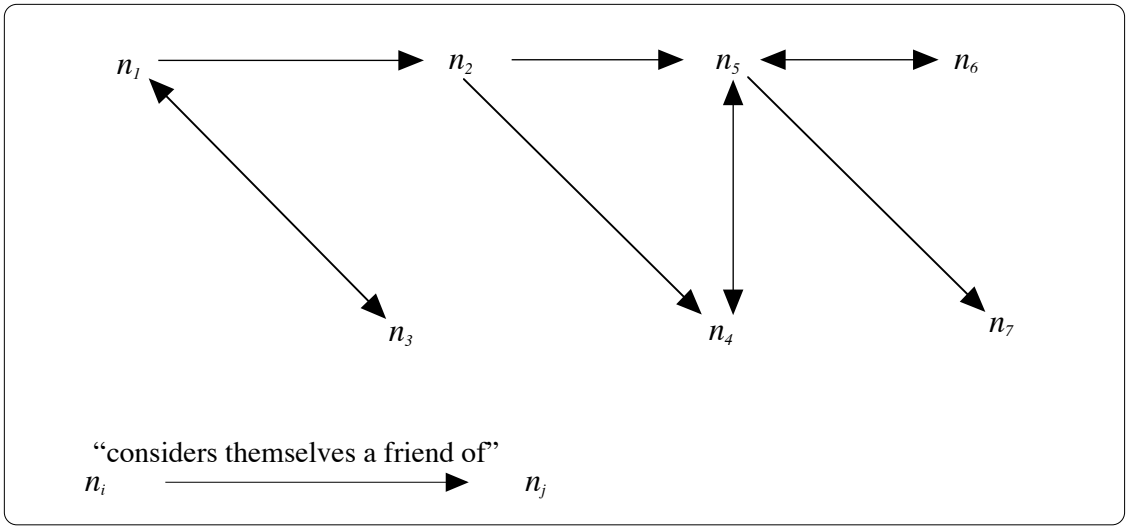


Figure A2.2. Example of a Directed Graph or Digraph

The *nodal degree* d_{ni} in a graph measures the number of linkages any one actor has with other actors. The linkages can be either valued or unvalued: if they are valued, then a separate figure is assigned to each node for the total *value* v_{ni} of its linkages.

Nodal degree of directed graphs is measured in terms of nodal *indegree* $d_I(ni)$ which measures the total number of nodes adjacent to n_i and nodal outdegree $d_O(ni)$ which measures the total number of nodes adjacent from n_i. Measures of indegree and outdegree are useful means of gauging the popularity or significance of actors to other actors in the network. Linkages in directed graphs can, like those in undirected graphs, be valued. Note that the values for indegree and outdegree need not be the same. Thus in the example of figure A2.2, an actor with a large indegree, say n_5 is one who is considered by many others to be a friend, and an actor with a large outdegree, say n_2, is one who considers themselves to have many friends. Note that indegree and outdegree need not coincide. The actor's view of how many friends they have may well differ from the others' views of how many friends that actor has, and here it can readily be seen that such information is potentially very sensitive.

Wasserman and Faust (1997:128) note that it is possible to derive four distinct types of node in a directed graph which prove useful in describing the roles of particular nodes in a network:

- *Isolate* if $d_O(ni) = d_O(ni) = 0$
- *Transmitter* if $d_I(ni) = 0$ and $d_O(ni) > 0$
- *Receiver* if $d_I(ni) > 0$ and $d_O(ni) = 0$
- *Ordinary* if $d_I(ni) > 0$ and $d_O(ni) > 0$

A2.4 Cohesive Sub-groups within a Network

The graph in figure A2.1 can be broken down to form *sub-groups*, as shown in A2.3 overleaf, so the effects of removing n_1 schools and n_3 local authorities from the graph can be seen. In this illustrative case, the removal of n_1 schools from the network makes little difference to the structure of the remainder of the network, nor does the removal of n_3 the local authority. However, as we saw above, the removal of n_2 community arts groups would make a difference since it this this node which links self-employed artists to schools and the local authority. In this way, we can begin to see the relative importance of different actors. This notion of *centrality* is discussed further in section A2.5, but in this section we explore ways in which we can define sub-groups within the network.

As the networks under examination become more complex, the sub-graphs within a graph become important tools for understanding how particular sets of actors interact. Next, we shall look at cohesive sub-groups within a network comprising directional relations.

One approach is to measure only those ties which are reciprocated. In effect this makes the sociomatrix symmetrical (ibid:275). But as we shall see in the next chapter, this results in a sparse graph which does not yield either a full or true picture, so we shall turn to methods which

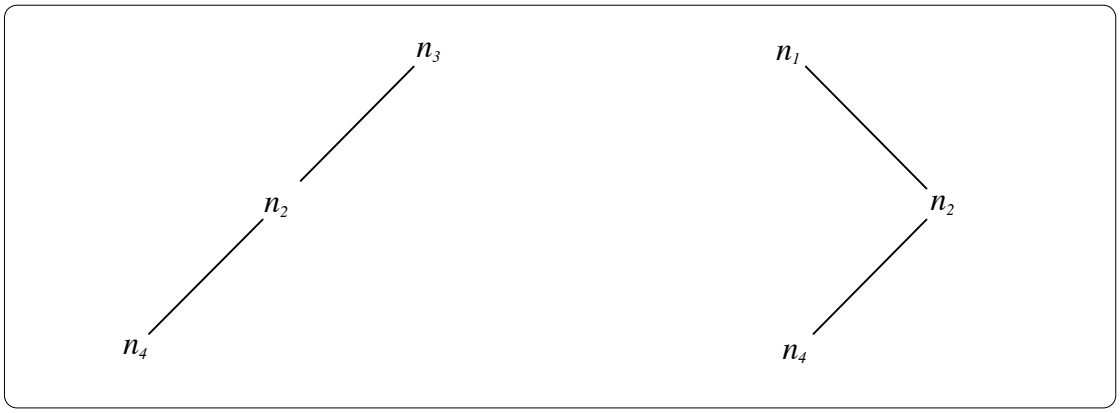


Figure A2.3. Sub-groups of fig. A2.1.

extend the notion of cohesive sub-groups to cover directed graphs.

Peay (1980:390–391, quoted ibid) offers four increasingly strict definitions of ways in which two nodes *i*, *j* can be connected, such that any pair of nodes which is *n-connected* is separated by *n* arcs. Thus two nodes connected in terms of a stricter definition will also be connected in terms of the weaker definitions. So two nodes are:

> *Weakly n-connected* if they are joined by a *semipath* of length *n* or less;
>
> *Unilaterally n-connected* if they are joined by a *path* of length *n* or less from *i* to *j*, or a path of length *n* or less from *j* to *i*;
>
> *Strongly n-connected* if there is a *path* of length *n* or less from *i* to *j*, and a path of length *n* from *j* to *i*; the path from *i* to *j* may be contain different nodes and arcs than the path from *j* to *i*;
>
> *Recursively n-connected* if they are strongly *n*-connected, and the path from *i* to *j* uses the same nodes and arcs as the path from *j* to *i*.
>
> (ibid)

These four types of connectivity can form the basis for four types of cohesive subgroup within a directed network. These cohesive subgroups are called *n-cliques*—"a maximal subgraph in which the largest geodesic distance between any two nodes is no greater than *n*". Formally, an n-clique is a subgraph with node set N_s, such that

$$d(i,j) \leq n \text{ for all } n_i, n_j \in N_s \tag{A2.1}$$

and there are no additional nodes that are also distance *n* or less from all nodes in the subgraph (ibid:258). The four types of *n*-clique which, like the four definitions of connectivity for di-

rected graphs, become increasingly strict, can be described thus:

> A *weakly-connected n-clique* is a subgraph in which all nodes are weakly *n*-connected, and there are no additional nodes that are also weakly *n*-connected to all nodes in the subgraph.
>
> A *unilaterally connected n-clique* is a subgraph in which all nodes are unilaterally *n*-connected, and there are no additional nodes that are also unilaterally *n*-connected to all nodes in the subgraph.
>
> A *strongly-connected n-clique* is a subgraph in which all nodes are strongly *n*-connected, and there are no additional nodes that are also strongly *n*-connected to all nodes in the subgraph.
>
> A *recursively connected n-clique* is a subgraph in which all nodes are recursively *n*-connected, and there are no additional nodes that are also recursively *n*-connected to all nodes in the subgraph.
>
> (ibid:276)

We can use the example of the directed graph in figure A2.2 to illustrate the different types of cohesive subgroup in directed graphs. We shall generate lists of 2-cliques—cliques in which the maximum number of arcs between any pair of nodes is two—for each of the four categories.

There are two weakly connected 2-cliques (n_1, n_2, n_3) and (n_2, n_4, n_5, n_6, n_7) and five unilaterally connected 2-cliques (n_1, n_2, n_3), (n_1, n_2, n_5), (n_2, n_4, n_5), (n_2, n_5, n_6) and(n_4, n_5, n_6), but no strongly or recursively connected 2-cliques, illustrated in figures A2.4 and .A2.5 overleaf. This indicates that the network is not very cohesive.

A2.5 Centrality and Prestige within a Network

The identification of actors which are in some way "important" or "significant" is a key use of social network analysis (Wasserman & Faust, 1997:169). In this section we shall explore the ways in which actors' centrality and prestige within a directed network can be measured. Wasserman and Faust (1997:202) recommend that just two centrality indices are used when studying directed networks, those for *degree* and *closeness*. Each will be looked at in turn.

Actor-level indices for centrality established for *degree* are measured in terms of choices made, that is the *outdegree* of each actor. The degrees in a graph can be summarised in this general formula:

$$C_D = \frac{\sum_{i=1}^{g}[C_D(n^*) - C_D(n_i)]}{\left[(g-1)(g-2)\right]} \qquad \text{(A2.2)}$$

where C_D is the degree centrality index for the graph, $C_D(n^*)$ is the maximum value of the par-

ticular actor degree centrality index and $C_D(n_i)$ is the actor-level degree centrality index.

Equation A2.2 generates a figure between 0 and 1. The minimum value of 0 indicates that the graph is *regular*, that is all degrees are equal. In other words there is no actor which is more significant in terms of nodal degree than any other (ibid:180). The maximum value of 1 indicates that "one actor chooses all other *g*-1 actors, and the other actors interact only with this one, central actor" (ibid). This index therefore also gauges the dispersal of the indices, making the comparison between each actor index and the maximum value (ibid).

This can be augmented by calculating the variance of the degrees S_D^2 of the actor degree indices. This group-level index of centrality reflects the view that "centralization is synonymous with the *dispersion* or heterogeneity of an actor index" and "attains its minimum value of 0 when all degrees are equal or when the graph is regular" (ibid:180–181).

$$S_D^2 = \left[\sum_{i}^{g} (C_D(n_i) - \overline{C}_D)^2 \right] / g$$

The mean degree $\overline{C}_D = \sum_{i=1}^{g} C_D(n_i) / g$ (A2.4)

This can be divided by g-1 which serves two functions. First, this standardises the mean degree. Second, the average degree divided by (g-1) is precisely equivalent to the density of the graph Δ, where the average degree equals

$$\sum_{i=1}^{g} C_D(n_i) / g(g-1) = \Delta \quad \text{(A2.5)}$$

The density, which varies between 0 for an empty graph and 1 for a complete graph, can be used to measure the cohesion, or "close knittedness" of a graph (ibid). However, such measures can be misleading, since, if actor degree remains constant, network density decreases as the size of the graph increases (ibid:182). In this project, we shall be dealing with just one network and one graph, so this is not a problem with which we shall need to deal.

The measurement of centrality on *closeness* examines how close a particular actor is to the other actors in the network. In both nondirectional and directional graphs, actor centrality can also be calculated in terms of the average closeness of one actor to all the other actors in the network. Simply, this can be expressed as the inverse of the mean distance to all other actors in the network (ibid:185, 200):

$$C'_C(n_i) = \frac{g-1}{\left[\sum_{j=1}^{g} d(n_i, n_j)\right]}$$

$$= (g-1) C_C(n_i) \quad \text{(A2.6)}$$

A directed graph must be strongly connected for this index to work. If the digraph is not strongly connected, then some $\{d(n_i,n_j)\}$ will be infinity, rendering equation A2.6 undefined (ibid:200).

This problem is alleviated in this project thus. Actors which are isolates are not figured into the graph which means that it is connected. This still leaves the problem of dealing with a graph which is not strongly connected. Here, each of the arcs between any pair of actors is assigned a value, 1 if the relation is recursive, 0.5 if the relation is unilateral. This means that equation A2.6 can be applied without any of its terms being undefined. However, the price for developing a workable closeness index for each actor is that the direction of the relation is ignored. This problem is, to an extent at least, diminished by the fact that we have figures for indegree and outdegree for each actor, and can therefore compare these figures with the relevant closeness indices.

A2.6 Glossary of Basic Terms

Basic Terms

Actors	People, organisations, events etc which have relationships with one another.
Tie	Link between actors
Network	A group of actors.
Mode	Type of actors in network. A one-mode network has one type of actor, a two-mode network two types of actor etc.
Relation	A collection of ties. These can be directional (*a* likes *b*) or non-directional (*a* and *b* are siblings). They can also be dichotomous (the tie either does or does not exist), or valued (*a* likes *b* much or not much).
Dyad	Two actors linked by a tie.
Triad	Three actors linked by a tie.

Graph Theory

Node	Representation of an actor in a graph.
Arc	Representation of a tie in a graph.
Graph	Graphic representation of a social network.
Geodesic	The shortest path between two nodes, measured by number of ties.
Digraph	(Or directed graph). Graph in which relationships are directional. Dyads can be mutual (a tie in both directions), asymmetric (a tie in one direction) or null (no ties).
Cutpoint	A node which, if removed, would split a single graph into two separate graphs.

Notation

$g(N)$	Total number of nodes in a network.
$L(N)$	Total number of linkages in a network.
d_{ni}	Nodal degree. The number of linkages any one actor has with other actors.
v_{ni}	In a valued graph, the total value of the linkages pertaining to a particular node.
$d_I(ni)$	Indegree. The number of linkages *adjacent to* (terminating at) node *i*
$d_O(ni)$	Outdegree. The number of linkages *adjacent from* (originating from) node *i*.
Δ	Density of a network. The number of linkages present divided by the maximum number of linkages.
$\overline{C}_D$	Mean actor degree centrality index.
S_D^2	Variance of actor degree centrality indices.
$C_c(n_i)$	Actor-level closeness centrality index.

$C_D(n_i)$ Actor-level degree centrality index.

$C'_C(n_i)$ Inverse of mean distance to all other actors in the network.

C_D Degree centrality index of a graph. A measure of the extent to which any actor is more significant in terms of nodal degree than any other actor.

$\overline{R}_i$ Average distance from actor i to actors reachable from actor i. An actor's "influence range".

J_i Number of actors within the influence range of actor i.

Appendix Three – Enrolments in Arts Courses, 1963–1995[1]

Date[2]	Dip. A.D[3] [4]	*Fine Art*	*Graphic Design*	*3 D Art*
Nov. 1963, part 2, p.18	1405	*680*	*365*	*180*
Nov. 1964, part 2, p.58	3182	*1518*	*743*	*476*
Nov. 1965, part 2, p.64	5036	*2302*	*1207*	*768*
Nov. 1966, part 3, p.23	5912	*2559*	*1402*	*1012*
Nov. 1967, part 3, p.25	6205	*2686*	*1424*	*1132*
Nov. 1968, part 3, p.29	6616	*2890*	*1497*	*1234*
Nov. 1969, part 3, p.31	6932	*2941*	*1624*	*1343*
Nov. 1970, part 3, p.35	7320	*3201*	*1677*	*1367*
Nov. 1971, part 3, p.73	7104	*3029*	*1671*	*1327*
Nov. 1972, part 3, p.78	7640	*3375*	*1770*	*1421*
Nov. 1973, part 3, p.46	8218	*3657*	*1888*	*1461*
Art and Design[5]				
Nov. 1974, part 3, p.49	10800			
Nov. 1975, part 3, p.29	11974			
Nov. 1976, part 3, p.31	12944			
Nov.1978, part 3, p.33[6]	14024			
Music, Drama, Art and Design[7]				
1979/80, part 3, p.29 [8]	26600			
1981/82, part 3. p.29	41400			
1982/83, part 3, p.35	40900			
1983/84, part 3, p.33	43500			
1984/85, part 3, p.33	46000			
1985/86, part 3, p.33	34400[9]			
1986/87, part 3, p.34	48500			
1987/88, part 3, p.34	50300			
Creative Arts[10]				
1988/89, part 3, p.32	46800			
1989/90, part 3, p.32	50200			
1990/91, part 3, p.58	54800			
1991/92, part 3, p.58	64600			
1992/93, part 3, p.50	54600			
1993/94, part 3, p.62	74800			
1994/95, part 3, p.65	90600			

Note

As these tables show, statistics for the numbers of people studying fine art over the last three or so decades are inconsistent, becoming increasingly aggregated over time.

Figures are presented for the number of students enrolled on the course listed at the beginning of a particular academic year (ie October to September).

Statistics for the country as a whole have been garnered in preference to those from just the London colleges. Art colleges have never been the sole preserve of London, even if London is the strongest magnet for their progeny.

What these figures show above all else is that the arts as a subject became increasingly popular during the latter half of the 20th century: why that is the case is not for this thesis. Perhaps it is tied in with the culture of celebrity which has waxed since the 1960s, and which is itself based primarily in the arts?

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[1] See note in box.

[2] For the years 1963 to 1978, references are to *Statistics of Education* (usually published the following year). For the years 1979 to 1994, references are to *Education Statistics for the United Kingdom* typically published in the year or two following the measurement year).

[3] This covers the years 1963 to 1973, and students enrolled for full time and part time Diplomas in Art and Design in England and Wales. The first three years are the first years of the new Diploma and Art and Design proposed by the "Coldstream Report" – the rapid growth in numbers indicates increasing numbers as successive years of the course are filled.

[4] The Diploma in Art had Design was broken down for statististical purposes into "Fine Art", "Graphic Design", "Three Dimensional Art" and "Textiles and Fashion". The first three are the most relevant to this thesis. The reader requiring figures for "Textiles and Fashion" can derive these by adding the figures for the first three specialisations,and subtracting the sum from the total.

[5] After 1973, the published figures refer to "Category 10, Art and Design", which covers Dip AD or degree equivalent in both the new polytechnics and the universities. These are not disaggregated

[6] Figures for 1977 could not be found, and appear to have been omitted.

[7] From 1979, category 10 covers "Music, drama, art and design". Published figures within the category are not disaggregated.

[8] Figures for 1979/80 to 1988/89 cover home and overseas students.

[9] Figure double-checked for accuracy.

[10] Subject Category number changed to "Category 14, Creative Arts". From the academic year 1992/93, this category described simply as "Creative Arts". The published figures are not disaggregated.