

# Mapping the Multiple Contexts of Racial Isolation: The Case of Long Street, Cape Town

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## Abstract

This article explores the idea that racial segregation is a process operating across a range of scales of social life. The focus is upon the way segregation unfolds and is (re)produced, at what can be termed the ‘micro-ecological’ scale—that is, in the everyday, interpersonal interactions between people in informal settings. To illustrate this argument, a case study is presented of relations in the night-time economy of Long Street, Cape Town. It is shown how such relations comprise micro-ecological practices of contact and isolation that occur at levels of resolution seldom captured by segregation research.

## Introduction

The topic of racial segregation continues to preoccupy social scientists, generating a prolific literature in a variety of disciplines. Most of this work has investigated race relations within the global contexts of residence, occupation or education, where segregation is often institutionally entrenched and where its role in reproducing material inequality and racial prejudice is starkly evidenced (for example, Massey and Denton, 1993; Massey and Fischer, 2003). The present article explores a central theme in the literature on

segregation. Whatever its contexts of emergence, reproduction and transformation, segregation invariably implicates notions of scale. As a system for ordering social relations, segregation materialises at varying levels of granularity in a socio-spatial system (see Reardon *et al.*, 2006). Hence, researchers wishing to understand its nature, causes and effects cannot afford to ignore questions of scale. Nor can the field as a whole develop if we prioritise research on relations at some scales to the exclusion of research on relations at other scales. In the present article, we argue that comparatively little research has

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investigated segregation at very fine levels of resolution and we contend that there are important insights to be had from studying such a ‘micro-ecology’ of segregation (see Dixon, Tredoux and Clack, 2005). To illustrate this argument, we present a case study of relations in Long Street, Cape Town, exploring patterns of contact and isolation within the network of pubs and clubs that constitute its night-time economy.

### The Question of Scale in Research on Segregation

Historically, the concept of segregation has referred to the distribution and proximity of group members in and across social spaces (for example, see Massey and Denton, 1988; Reardon and O’Sullivan, 2004). By definition, then, research on segregation entails decisions about scaling. In order to claim, for example, that the distribution of ethnic groups across a region is ‘uneven’ (and thus that levels of segregation are high), we must first define the scales of analysis at which such unevenness manifests. Not only must the boundaries of the region itself be specified, but also the nature and level of the sub-regions. A scaling decision may thus determine the kinds of knowledge we produce.

Lloyd *et al.*’s (2004) research on Protestant–Catholic divisions in Northern Ireland and Omer and Beneson’s (2002) research on Arab–Israeli divisions in Tel Aviv illustrate this idea. Lloyd *et al.* compared segregation indices for Northern Ireland calculated at various analytical scales, including a geographically weighted D (see Wong, 1993) computed at bandwidths of 5, 10, 15 and 20 km. They found that some areas of the country were relatively ‘mixed’ at a localised level, but became increasingly segregated as bandwidth expanded. Other areas, by contrast, were segregated across the full range of bandwidths. In line with popular assumptions about the social geography of

Northern Ireland, these tended to be urban centres with a long history of violence, including Derry, Portadown and Belfast. In short, the analytical scale used shaped the form and magnitude of segregation ‘discovered’ and, *a fortiori*, the inferences that could be drawn. Omer and Beneson (2002) used an imaginative combination of GIS technology, geo-referenced household data and interviews to explore Arab–Jew relations in the Yaffo area of Tel Aviv and they were thus able to compare the ‘objective’ evidence produced by local area statistics with ‘subjective’ perceptions of local boundaries. They found residents’ perceptions of the boundaries of ‘home’ and ‘neighborhood’ were often based on smaller areal units than those that conventionally feature in segregation research. By using such perceptions as an analytical tool, they were able to produce a richer—and arguably more phenomenologically valid—picture of segregation processes in Yaffo. They were also able to argue for a moderation in the widespread reliance on census data ‘pre-aggregated’ into standard areal units.

In our view, both of these studies carry a general lesson for the field. That is, they highlight the need for on-going reflexivity about the match between analytical and phenomenal scales in the study of segregation, a process that is increasingly characteristic of other fields of geographical inquiry (for example, see Lillburne *et al.*, 2004; Montello, 2001; Sheppard and McMaster, 2003). Without such reflexivity, we are in danger of producing evidence that both traduces the local morphology of segregation and fails to recognise fully its implications for ordinary peoples’ lives.

Perhaps this is the point to declare that our own perspective on segregation has been informed by a specific set of research questions. As social psychologists who have for the past decade investigated the social change in South Africa, we have attempted primarily

to understand how broader processes of geopolitical transformation shape (and are shaped by) everyday racial interactions. In so doing, we have found it instructive to study so-called micro-ecological processes of segregation—the dynamic, largely informal network of social practices through which individuals maintain racial isolation within settings where members of different race groups are physically co-present and sometimes in close proximity. Before turning to the details of our South African case study, we shall outline briefly the theoretical context of our research, which is rooted within the psychology of contact and desegregation.

### **The Contact Hypothesis and the Problem of (Re)segregation**

The ‘contact hypothesis’ is the most influential psychological perspective on how to reduce intergroup prejudice and discrimination (for a recent review, see Pettigrew and Tropp, 2006). The idea lying at its heart is simple: regular interaction between members of different communities improves their attitudes towards one another, particularly when such interaction occurs under favourable conditions. For maximum benefit, contact should involve co-operative interactions between individuals of equal status; it should be sanctioned by institutional and cultural norms; and it should involve intimate exchanges rather than fleeting or superficial encounters (Pettigrew, 1998). From this definition, it is clear that ‘contact’ is intended in this literature to mean positive interactions and there is a considerable body of evidence to support the idea that when such interactions occur they tend to reduce prejudice. Dixon, Durrheim and Tredoux (2005) have commented, however, on the potential utopianism of the contact hypothesis. In particular, the research literature has failed to acknowledge sufficiently the tenacity of segregation as a system for organising ethnic and racial relations.

Although the literatures on the contact hypothesis and racial segregation have developed in comparative isolation, they overlap in important respects. The contact literature provides justification for the idea—implicit in much work on segregation—that the socio-spatial isolation of groups exacerbates intergroup prejudice. Correspondingly, the segregation literature clarifies the role of segregation in structuring relations between members of different groups and in thereby restricting the very forms of interaction that contact researchers advocate. In short, a rapprochement of these two important traditions of research would seem to be both feasible and mutually beneficial. Indeed, we hope that the present discussion of scale will facilitate this outcome.

Segregation research on racial ‘exposure’ (or ‘interaction’) and ‘isolation’ is arguably of most direct relevance to psychological research on the contact hypothesis. Exposure indices measure the degree of potential interaction that members of group  $x$  experience with members of group  $y$  (for example, see Lieberson and Carter, 1982; McCauley *et al.*, 2001). Symmetrically, isolation indices measure the extent to which interaction occurs within the boundary of the ‘ingroup’. One purported advantage of this widely used family of segregation indices—commonly called P indices—is their capacity to access the lived experience of racial contact and isolation.

However, although they tap a dimension of segregation that is relevant to understanding everyday contact within and between groups (see McCauley *et al.*, 2001), the interpretation of P indices is often complicated by considerations of scaling. Consider, for example, the extensive body of work on the (de)segregation of schools. This work generally takes the school district as a unit of aggregation and the individual school as a sub-unit. It then uses these areal boundaries as the basis for estimating, *inter alia*, the extent of racial

exposure within a local education system. The logic here is that the higher the observed P values, the greater the likelihood that children from different racial backgrounds come into regular contact with one another in schools. We do not dispute that this approach has yielded important and valid information. As the value of  $xPy$  approaches zero, for instance, or as it approaches unity, we can be confident that members of group  $x$  are having either little day-to-day interaction with members of group  $y$ , or a lot of it. Between these extremes, however, P indices may reveal surprisingly little about the nature of actual relations in schools. Disconcertingly, they may even mask forms of segregation that are patently obvious at a finer level of resolution than 'schools in a district' creating the risk of an 'ecological fallacy' (Robinson, 1950).

To some extent, of course, this problem has been recognised both by segregation researchers and by researchers studying the contact hypothesis. For example, in a telling study in North Carolina's public school system, Clotfelter *et al.* (2002) explored relations both as a function of between-school distributions by race and, more unusually, as a function of within-school racial distributions across classrooms. Among other results, they found that the within-school segregation was relatively unimportant in elementary grades but explained a substantial amount of 'total' school segregation in later grades. They thus argued that greater attention should be paid to classroom-level segregation as

where it exists, such segregation obviously diminishes the potential for segregation inherent in school assignment plans designed to desegregated schools (Clotfelter *et al.*, 2002, p. 1466).

Janet Schofield and her colleagues have elaborated this theme in the context of educational research on the contact hypothesis (Schofield, 1986; Schofield and Sagar, 1979).

Their work suggests that official policies of educational desegregation are commonly offset by unofficial practices of isolation in school life. Outside the classroom, for example, children typically reassert racial boundaries through their use of informal spaces such as cafeterias and playgrounds, thereby limiting the extent of cross-race interaction and friendship formation. Studying these forms of segregation clearly requires researchers to trace its manifestations at a micro-ecological level; that is, within the minutiae of eating arrangements, seating adjacencies, the territoriality of playground activities and so forth. Research at this level, however, rarely appears in the literature on segregation (although, for an exception, see Greene and Mellow, 1998) and we believe that our understanding of its role in structuring race relations 'on the ground' has been impoverished as a result. To say this is not to say that the global measures of exposure, isolation and dissimilarity that dominate the segregation literature are somehow problematic or unimportant. It is merely to suggest that such measures elucidate only part of a more complex picture of socio-spatial transformation (and conservation) in historically divided societies such as South Africa.

### **An Illustrative Case Study: Interracial Contact and Segregation in a Night-time Leisure Space in Post-apartheid South Africa**

#### **Research Context and Aims**

As is well known, until comparatively recently South African society was based around a formal system of complete segregation known as 'apartheid'. *Apartheid* operated not only across a range of types of social spaces, but also across a range of scales: from the political-geographical machinations of the 'Bantustan' and migrant labour systems, to the residential zoning of the *apartheid* city,

to the micro-regulations of so-called petty *apartheid* (Christopher, 1994). In the 12 years since the collapse of the *apartheid* state, this system of segregation has been progressively dismantled. Apart from a complete repeal of the legislative basis of *apartheid*, the post-*apartheid* government has introduced new legislation aimed at the rapid correction of inequality and enforced segregation (for example, affirmative action in labour, business, sport and landownership). The extent of the change is in some respects quite incredible: schools and universities that had 100 per cent White enrolment now often have more than 80 per cent Black enrolment; nightclubs that Black people were prohibited from entering now frequently have greater than 90 per cent Black patronage; some city suburbs that were once reserved exclusively for Whites are now mostly populated by Blacks.

This is not to say that the transition has achieved harmonious integration. To the contrary, a rich body of research has shown how *apartheid* geographies—and their associated forms of racial inequality and distance—have persisted and adapted in the ‘new’ South Africa. It is not possible here to review this work in any detail; however, some key examples include Christopher’s (2001, 2005) analyses of country-wide residential segregation using national census data; the work of researchers such as Saff (1998) and Beal *et al.* (2002) on the transformation and conservation of the *apartheid* city, as well as an emerging literature on socio-spatial relations at a more localised scale (for example, Lemanski, 2006; Lemon and Clifford, 2005; Hook and Vrdoljak, 2002; Oldfield, 2004). A recurring theme in much of this research is the on-going tension between racial connection and disconnection, inclusion and exclusion, in South Africa. The transformation to post-*apartheid* society, it seems, has been marked by the creation of a panoply of new opportunities for social integration and encounter. Yet it has also seen the emergence

of a host of new forms of division, avoidance and exclusivity, as some citizens seek to preserve or re-establish what Richard Ballard (2004) calls ‘comfort zones’.

Such is the broader context of the present case study, which is part of a wider programme of research on racial contact and geopolitical change in post-*apartheid* South Africa. The research was designed to investigate changing relations in Long Street in Cape Town’s city centre and it focused on a form of social segregation for which there currently exists little data—namely, the segregation of the leisure spaces that constitute the night-time economy of urban centres (see Dodson, 2000). Who frequents the network of bars, clubs, cafés and eateries that largely define this economy? Who do they come into contact with, how and where? Who are they isolated from and what is the morphology of such isolation? Given South Africa’s recent dramatic official desegregation, can one expect to see races mixing and interacting in leisure spaces, where decisions to commingle are a matter of personal preference?

### **Changing Relations on Long Street, Cape Town**

Some further background to the project site may be helpful. Long Street, one of the city’s oldest and longest streets, runs through the heart of Cape Town. It has long had a reputation as a liberal, heterogeneous and ‘mixed’ space that somehow eluded the austere racial logic of *apartheid*. In truth, however, Long Street suffered the same history of racial exclusion and the economic and social character of the street has been dominated to a large degree by White businesses, activities and patronage. Following the enforcement of the Group Areas Act in the early 1960s, Black people lost the legal right to live on the street (or even to be present there after 18.00 hrs). Similarly, for much of the *apartheid* era, Coloured people could not in principle reside on Long Street or attend the same cinemas,

bars and restaurants as Whites. Even so, the street managed to retain a reputation as a kind of 'grey zone', a place where the normal rules of *apartheid* could be flouted. It is perhaps not surprising, then, that in the post-*apartheid* era Long Street has come to epitomise ethnic and racial diversity. In particular, its burgeoning night life is viewed as a bohemian melting-pot for a mixture of people, cultures, activities and tastes: a site, *par excellence*, of contact and integration. An Internet site that lists clubs and pubs in international cities includes the following customer reviews of a Long Street pub

As a proud Capetonian I have got to say that Joburg is surely the bar in the Mother City that proudly reflects the diversity and racial mix of our country so proudly!

It's modern, middle-class bohemia with a cool and colourful mix of people that has become the new trend this side of Africa.<sup>1</sup>

The overarching aim of our research was to explore this popular representation of the street's night life empirically by investigating patterns of integration and segregation within the network of clubs and pubs that comprise its night-time economy. The focus on 'nightlife' on the street is significant—during the daytime, Long Street is a busy centre of office and retail commerce and interactions between people are presumably conducted under constraints that flow from this. At night, however, particularly in nightclubs, people present are there principally for leisure and of their own volition. Interactions that occur are a matter of preference and segregation researchers increasingly recognise preference as a driver of segregation at multiple levels.

In the course of addressing our aim of studying patterns of interaction and segregation in Long Street nightlife, we were ultimately led to reflect on the issue of scaling in segregation research. As we visited night-time venues in the street, interviewed patrons about their experiences and conducted

preliminary censuses of patronage, we came to recognise that any map of human intimacy and isolation in Long Street would necessarily have to acknowledge and use a multiplicity of scales.

We were specifically interested in relations in the upper Long Street area, where the street's nightlife is concentrated. This subsection of the street is located between the intersections of Long and Wale Street, and Long and Orange Street, a distance of approximately 500 metres. In selecting venues for study, we set specific inclusion criteria: that the venues operated as pubs or clubs; that they were located on, and provided access from, Long Street; and, that they offered ordinary members of the public relative freedom of access, movement and association (for example, they were not private establishments and/or did not apply formal seating arrangements). Based on these criteria, eight establishments were identified for study in the first instance and we studied all of these. In a later data collection exercise, however, we added two additional establishments, which were located slightly outside (or adjacent to) the original upper Long Street Area. These establishments were included because they were described by many patrons as having a profoundly 'different' character from the clubs under study. They were also seen as viable options to visit, on foot, if one were already in Long Street. This 'behavioural proximity' seemed, on reflection, to be just as important as proximity defined in terms of street boundaries.

Before turning to the details of the study, a brief aside on our use of racial classification is necessary. As will become apparent, our research methodology involved recording the spatial location and interactions of members of different race groups within and across circumscribed regions. Among other steps, this method required us to categorise each patron either as 'White' (the main beneficiaries of Long Street's night-time economy

during the *apartheid* era) or as ‘Black’ or ‘Coloured’ (historically excluded from this economy). Our classification procedure was based on (otherwise trivial) physical markers such as skin colour. Although this methodology proved reliable and valid according to standard scientific criteria,<sup>2</sup> we recognise that the very concept of ‘race group’ is highly problematic, particularly in South Africa. As is well known, the categories ‘White’, ‘Black’, ‘Coloured’ and ‘Indian’ were legally enforced as part of *apartheid* ideology and they enabled the *apartheid* government to engineer brute segregation and inequality. The most significant legislation was repealed in 1991 (Population Registration Act Repeal Act No, 114). Nevertheless, the racial categories of the old regime continue to exercise a profound impact on everyday life in South Africa. Most state and private organisations are obliged to classify by race in order to implement policies of redress and race categories also feature prominently at the level of everyday understanding and behaviour. In using racial categories as part of the apparatus of our research, then, we do not mean to imply that such categories are somehow ‘natural’ or ‘inevitable’ or desirable (indeed, we are acutely aware that academic research is often complicit in the reproduction of the very forms of racial difference that it purports to ‘discover’). At the same time, to the extent that race categories retain a value in describing and understanding the patterning of social and economic stratification in South Africa, we feel that their use in research on segregation is justified. To deny the categories is to risk overlooking the continuing effects of the system that installed them, a system that turned places such as Long Street into an exclusively ‘White’ preserve.

### Method and Rationale

The empirical work we present here forms part of a larger project that started in 2003 and is on-going. We have collected data in several

waves using a variety of research designs. In this paper, we describe only data and methods that are directly relevant to the core theme.

**Level 1: demography of nightclubs.** In the early stages of data collection, we simply recorded the distribution of members of different race groups within and across our sample of venues. Our intention was to explore how, if at all, broad patterns of patronage shape the opportunities for racial interaction. If clubs are starkly segregated at this broad level, for example, then there could be little opportunity for interaction since patrons of different race groups would simply not frequent the same venues.

We anticipated on the basis of pilot observation that patronage of nightclubs would be variable over time and we attempted to take this into account through appropriate sampling schemes. Notably, we stratified according to weekend and weekday nights, and time of night (in 2004, we sampled over three time-periods—20.00–22.00, 22.00–24.00, 00.00–02.00 hrs; and, in 2006, over the first two of these). The order in which the clubs were observed in any particular time-period was randomised. In the first wave of data collection, we conducted observational counts in 8 clubs over a period of 18 days. Approximately 24 months later, we collected another round of data from the same clubs. This time, data were gathered over 14 days and, as described previously, we made observations in two clubs that were not part of the original study region.

In practice, research assistants collected club-level demographic data by entering clubs and recording the race, gender and approximate age of all patrons present during a given time. Given the potential for error in the construction of the maps, a reliability analysis was conducted by comparing maps constructed by two independent raters on three venues at approximately the same point in time, in the first wave of data collection.

Agreement in terms of headcounts per club was very good (a correlation of 0.97).

**Level 2: occupation of sub-areas within two particular nightclubs.** Having gathered the first wave of observations, it became clear to us that this broad scale of analysis, however, revealing in its own right, masked crucial dimensions of segregation in Long Street's night-time economy. Within some ostensibly 'mixed' clubs, for example, patrons appeared to occupy social space in a way that maintained racial distances and boundaries at a finer level of granularity.<sup>3</sup> In order to explore this process, we selected two of our eight clubs for more detailed examination and investigated relations at three increasingly finer-grained scales of analysis—namely, sub-areas within clubs; tables; and, interactional groups. These two clubs were selected for further study as they had, by reputation, comparatively high rates of patronage from all race groups.

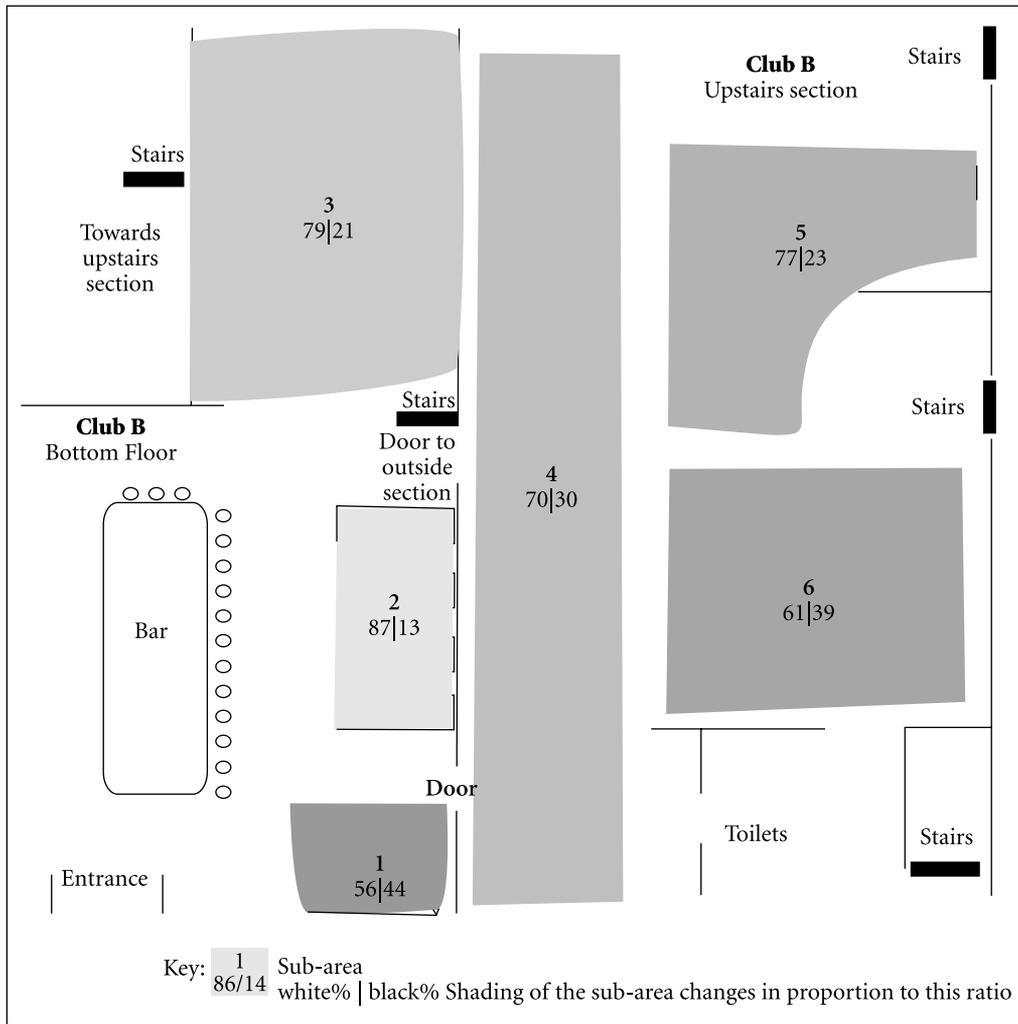
Analysis at the sectional level focused on the distribution of patrons within and across larger sub-regions of venues. These sub-regions tended to be demarcated by physical boundaries (such as steps, walls) and/or a different functionality (such as a dance space, a space for playing pool). Figures 1 and 2 show the layout and sub-sections of the two clubs as they appeared in 2004. In order to collect sub-area data, we constructed approximate maps of each club and research assistants used these as templates for recording the required information.

**Level 3: table and seating occupancy within two particular nightclubs.** A second sub-level of analysis focused on the pattern of usage of tables in clubs. Like most venues on the Street, the two nightclubs selected for further study had tables and seats available for use by patrons. We found the use of these spaces interesting precisely because tables and seats conventionally allow people to regulate their accessibility to others, enabling

or restricting the possibility for interpersonal interaction (and nurturing a sense that one is 'with' or 'not with' others). We gathered the relevant data using the maps and schedule described earlier, but this time we included a numbered set of tables in the layout maps.

**Level 4: interpersonal interactions within two particular nightclubs.** The final level of analysis focused on interactional groups, arguably the most intimate social 'spaces' in nightclubs. Within such spaces, people are not merely in close proximity or co-presence. Rather, they recognisably form an interactional unit that creates and occupies a micro-territory (whose integrity is generally noticed and respected by others). In the first wave of data collection, we did not collect sufficient information on relations at this level of analysis to permit meaningful analysis, so we only report data that were collected in 2006. As in our investigations at other levels, we are concerned primarily with the surface demography of interactions. Practical considerations meant that it was not feasible to record the qualitative details of interactions and thus we set a more modest agenda. Research assistants simply noted the race of all participants engaged in interactions by systematically gathering observations in each nightclub on a section by section basis.

Before progressing to our results, it is worth noting that the fourfold taxonomy of scales outlined here was not merely a convenient way of structuring observations. It also represented our starting-point for framing the deliberations of human actors when they place themselves in leisure spaces such as clubs. The concept of a 'repertoire cascade' is helpful here. That is, when a club patron arrives at a space such as Long Street, there is a cascade of choices to be made (either on arrival or prior to arriving)—a club must be chosen; once inside that club, decisions must then be made about which sub-section to



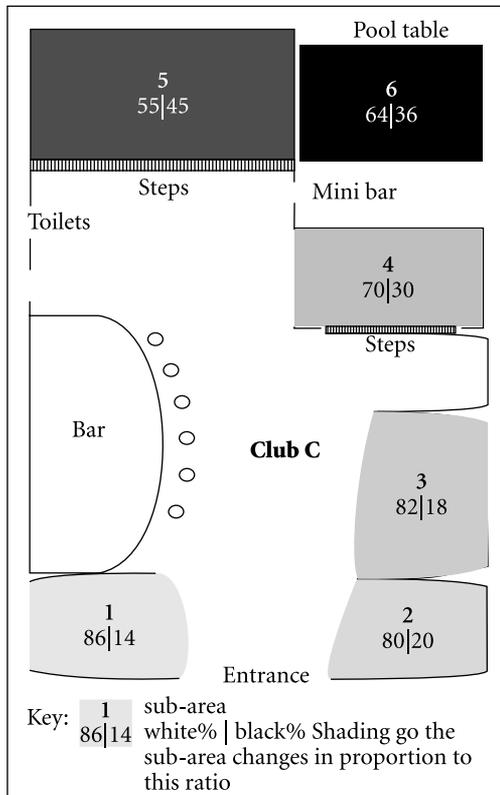
**Figure 1.** Schematic diagram of the physical layout of Club B, with 2004 demographic data per sub-area

situate oneself in, where to sit within that sub-section and with whom to interact. Some, all or none of these decisions might be racialised and, of course, choices must be always exercised within an immediate and changing context of possibilities and constraints (such as where seating is available). Choices at one level may affect relations at another and it is ultimately important to understand how and why these complex, knock-on patterns emerge. In the present analysis, however, we are concerned mostly with the description of

patterns of segregation at the different levels of the cascade.

**Results**

**Level 1: demography of nightclubs.** Observational counts of nightclub patrons revealed a similar picture in each wave of data collection. Table 1 reports occupancy of nightclubs, collapsed over weekend/weeknight and time of evening. Several things are noteworthy. First, it is clear that there are many more White people in the clubs than one would expect



**Figure 2.** Schematic diagram of the physical layout of Club C, with 2004 demographic data per sub-area

from either the total population distribution of South Africa, or of Cape Town, where the relative percentages of the groups in question are 79:9:10 and 31:48:19 respectively (Black: Coloured:White, data from the 2001 census).<sup>4</sup> Secondly, it is clear that the distribution of race groups over the clubs is unequal ( $\chi^2$  tests of independence corroborate this impression:  $\chi^2 = 424$ ,  $df = 14$ ,  $p < 0.001$ , Cramer's  $v = 0.25$  and  $\chi^2 = 1930$ ,  $df = 14$ ,  $p < 0.0001$ ,  $v = 0.4$  respectively). Finally, it also seems that the pattern of the occupancy has changed in the time-period between the two waves of data collection, specifically in terms of a decrease in the percentage of White patrons, but this is not of primary concern to us in this paper.

Unevenness of distribution across the night-clubs can be taken as evidence of segregation or separateness and this is often measured through the dissimilarity (D) and interaction ( $wP_B$ ) indices. Since we have three groups, it is possible to calculate the multigroup version of each of these indices, as well as the two-group versions (see for example, Grannis, 2002; Massey and Denton, 1988; Reardon and Firebaugh, 2002). However, given Long Street's particular history, we were interested

**Table 1.** Distribution of nightclub occupancy by race group

Venue	Wave 1 (2004)				Wave 2 (2006)			
	B per cent	C per cent	W per cent	N	B per cent	C per cent	W per cent	N
A	47	26	26	349	22	16	60	379
B	16	12	71	383	22	19	58	867
C	18	15	63	745	34	19	44	714
D	23	15	55	250	7	10	79	799
E	10	11	79	391	26	12	59	827
F	19	14	65	396	68	16	14	621
G	4	30	66	230	45	32	22	354
H	8	28	58	527	13	46	33	1392
Total	18	18	61	3271	26	23	47	5953
D	0.32, $p < 0.04$				0.37, $p < 0.001$			
$wP_{BC}$	0.33, $p < 0.001$				0.4, $p < 0.001$			

Notes: D and  $wP_{BC}$  are calculated by treating Whites as the majority group and the combination of Blacks and Coloureds as the minority group.

primarily in the segregation/integration of Whites relative to other groups, so we treat Whites as the majority group (denoted *W*) and the sum of Black and Coloured people as the minority group (denoted *BC*), and calculate only the two-group version. These are reported in Table 1, along with Monte Carlo estimates of the empirical probability of the obtained statistics, assuming random distribution to the array of clubs (see Dixon and Durrheim, 2003). These indices support the interpretation that the set of nightclubs is segregated, but the indices are also relatively low, suggesting that there is a fair degree of racial integration.

**Level 2: occupation of sub-areas.** Table 2 records the cumulative counts in the different sections within the clubs and reports associated  $\chi^2$  statistics of the test that the groups are equally distributed over the sections (they are clearly not). However, since occupancy of the spaces in question can exhibit considerable temporal variation, the aggregation over time may mask patterns of

segregation or integration. (To the extent that the cumulated counts in a particular sub-space show segregation, this must mean that the sub-space is segregated more frequently than not and that such patterns of 'racialised space' do exist in our data is important.) We therefore calculated *D* and  ${}_wP_{BC}$  for each observational instance and averaged over the instances to get an aggregate measure of segregation at this particular level of analysis within clubs. Since *D* (and probably  ${}_wP_{BC}$  too) is sensitive to population (or sample) size (see Cortese *et al.*, 1976; Voas and Williamson, 2000), we took some precautions in computing these indices (admittedly not comprehensive). Specifically, we only computed *D* indices for instances where each group had at least 10 representatives (some informal simulations suggest that the estimation accuracy of *D* is strongly correlated with sample sizes less than this), we also weighted the calculation by the total *N* in each club and we computed 95 per cent confidence intervals around statistics to give some idea of accuracy of estimate.

**Table 2.** Average occupancy of sub-areas within two nightclubs by race group

Area	Club B						Club C					
	2004			2006			2004			2006		
	<i>B &amp; C</i>	<i>W</i>	<i>N</i>	<i>B&amp;C</i>	<i>W</i>	<i>N</i>	<i>B &amp; C</i>	<i>W</i>	<i>N</i>	<i>B&amp;C</i>	<i>W</i>	<i>N</i>
1	0.44	0.56	142	0.3	0.67	223	0.14	0.86	199	0.41	0.53	86
2	0.13	0.87	148	0.38	0.62	63	0.2	0.8	316	0.62	0.32	82
3	0.21	0.79	83	0.28	0.7	80	0.18	0.82	261	0.61	0.29	68
4	0.3	0.7	81	—	—		0.3	0.7	182	0.51	0.46	54
5	0.23	0.77	333	0.41	0.59	42	0.55	0.45	242	—	—	—
6	0.39	0.61	174	0.42	0.58	154	0.64	0.36	273	0.45	0.55	86
7				—	—					0.53	0.33	36
8				0.56	0.42	151				0.79	0.21	47
9				0.47	0.48	143				0.21	0.79	24
$\chi^2$	49.5	34.2	300	18.8								
Degrees of freedom		5			6			5			6	
p		< 0.001			< 0.001			< 0.001			< 0.004	

Notes: Cell entries are relative proportions. Row numbers refer to sub-areas within clubs; note that these changed between 2004 and 2006.

For Wave 1, the average weighted D value was 0.45 (95 per cent CI = 0.39–0.51) and the average weighted  $wP_{BC}$  value 0.47 (95 per cent CI = 0.42–0.51). For Wave 2, the average weighted D value was 0.43 (95 per cent CI = 0.37–0.49), and average weighted  $wP_{BC}$  value was 0.35 (95 per cent CI = 0.28–0.42). These values suggest a higher degree of segregation at this level of analysis than at the general level of the clubs, but the direct comparison of D and  $wP_{BC}$  statistics based on a small number of cases has obvious perils. For a sense of how these indices compare with those at a more general level, consider that residential D, for Whites in the Western Cape (the province that encompasses Cape Town, and to which Cape Town contributes 64 per cent of the population), is calculated by Christopher (2005) from the 2001 census as 0.93. The D index at the club level is clearly a lot lower. In a similar vein, Sin (2002) has suggested that P indices be interpreted in the light of the percentage of the population that the reference group constitutes. If this is calculated for Whites, the relative over-representation is 29 per cent for Wave 1 and 25 per cent for Wave 2 or, put differently, more than twice what one might expect by chance (the percentage of Whites in Cape Town, as we previously indicated, is 18 per cent).

Of particular interest to us, given our concern with variations in the granularity of analysis, is that what appeared to be relatively integrated spaces at a more general level of analysis are shown to have distinct patterns of segregation at a more detailed level. This is shown by the racialisation of sub-spaces

within the nightclubs (see Figure 1 and Table 2) and (more tentatively) by the relative difference in size of the D and  $wP_{BC}$  statistics between the two levels of analysis.

**Level 3: analysis of seating patterns.** At a still more fine-grained level, Table 3 reports summary statistics across all the observational periods for a liberal measure of the racial integratedness of tables. We scored each table shared by at least two people from different race groups as ‘racially heterogeneous’ and tables which were shared by people from entirely the same race as ‘racially homogeneous’. Note that this measure does not take account of the relative racial composition of tables. It is clear from the table that the predominant seating arrangement in each of the clubs was racially exclusive.

We also calculated D and  $wP_{BC}$  statistics for each venue at each observational point in the sampling schedule (treating tables as areal units and discarding cases where fewer than 10 members of either group were present) and averaged them for each club for each of the time-periods in question. These values were very similar across the two clubs, and we therefore report them in averaged form: 2004: D = 0.78 (95 per cent CI = 0.73–0.82),  $wP_{BC}$  = 0.34 (95 per cent CI = 0.28–0.4); 2006 D = 0.74 (95 per cent CI = 0.61–0.86),  $wP_{BC}$  = 0.24 (95 per cent CI = 0.18–0.31). These values suggest considerably higher degrees of segregation than those calculated for the distribution of club patrons within sections of the clubs, or those calculated for the distribution across clubs. The value of

**Table 3.** Racially heterogeneous and homogeneous tables in two nightclubs

	Club B		Club C	
	Racially homogeneous	Racially heterogeneous	Racially homogeneous	Racially heterogeneous
2004 data	47 (25)	142 (75)	99 (30)	226 (70)
2006 data	22 (16)	113 (84)	16 (28)	41 (72)

Note: Percentages given in parentheses.

D is still not as high as that reported by Christopher (2005) for the Western Cape province, on the basis of the 2001 census ( $D = 0.93$ ). The ratio of the reported P statistics to the relative size of the White population in Cape Town varies between 1.32 and 1.87, and interpretation of the confidence intervals suggests that the P statistics computed here are all significantly higher than the relevant population ratio.

We reiterate the point, though, that these statistics are based on relatively small counts.

**Level 4: analysis of interpersonal interactions.** Cross-tabulation of interpersonal interactions by race showed that interactions between people in the nightclubs were largely mono-racial. White club patrons interacted with other White patrons 71 per cent ( $N = 256$ ) of the time and the combined Black and Coloured group interacted with members of that group 69 per cent ( $N = 219$ ) of the time. (Calculations are cumulated over nightclubs and all elements of the sampling schedule in order to increase the number of data points and thus the reliability of the estimate.) These estimates of racial homogeneity/heterogeneity are similar to those calculated for table seating patterns within clubs. However, when the Black and Coloured group is disaggregated, there is a marked difference in the proportion of mono-racial interactions: Black patrons interact with other Black patrons 52 per cent ( $N = 124$ ) of the time, and Coloured patrons interact with other Coloured patrons 78 per cent ( $N = 95$ ) of the time.

**Level 5: analysis of additional two nightclubs not in the original study space.** We have indicated that research assistants and study respondents drew our attention to two nightclubs that were relatively close to the eight we studied, but did not meet the criteria for inclusion in the study and whose demographic pattern was in stark contrast.

These clubs (I and J) did indeed turn out to be very different, both in terms of demographic character and in the unusual opening hours they observed (both opened infrequently during the week and very late at night). Club I was frequented almost exclusively by Black patrons (94 per cent;  $N = 399$ ) and Club J predominantly by Coloured patrons (81 per cent;  $N = 639$ ). Whites were almost entirely absent from both Clubs (2 per cent in Club I and 8 per cent in Club J). Thus, it is not particularly instructive to analyse the racial demography within sub-sections of the clubs or at the level of tables or interpersonal interactions. For the record, we can report that, in the case of Club J, all except two of the White patrons who were seated shared their tables with other White patrons and, in the case of Club I, all White patrons ( $N = 7$ ) who were present, and who were seated, shared tables with Black patrons.

The presence of these clubs, just beyond the margins of our original study area, is a salutary reminder of the flexible and varied nature of segregation. Clubs I and J tend to be largely mono-racial in their clientèle, even though they are located on the borderline of a space that is by reputation one of the most racially integrated in Cape Town. This finding is of course also a lesson for those interested in scale: no choice of scale is likely to show successfully the varied nature of racial integration and separation in Long Street without taking the particularities of Clubs I and J into account. How the boundaries of a study region are defined profoundly shapes the nature and extent of segregation that an analyst 'discovers' there.

## Conclusions

Summarising the importance of scale in segregation research, Stuart recently noted that

If we are concerned about how far a metropolitan area falls short of the ideal of a melting

point (is sufficiently integrated), we have to know whether the contents of that ideal “pot” really have to be completely melted into each other or have the constitution of a more or less lumpy soup, where the spatial unit of analysis constitutes the colander we use to test whether the lumpiness is too great or too little (Stuart, 2004, p 10).

Extending Stuart’s metaphor, we could describe our research as an attempt to explore the value of employing a range of colander sieve sizes when studying the impact of segregation on racial contact, some of a much narrower diameter than conventionally used. This exercise did not ultimately identify a single analytical scale as the proper or ‘best’ level at which to address this research problem. To the contrary, it suggested that segregation on Long Street materialises across several levels of granularity, each having somewhat different implications for our understanding of racial exposure and isolation.

Analysis at the ‘clubs in the street’ level, for example, told us not only that racial dispersal is uneven, but also that this unevenness results partly from a clustering of Black and Coloured patrons in two establishments, I and J. Whilst visiting these clubs, such patrons have almost no contact whatsoever with Whites, who are rarely in attendance. An explanation of this pattern would thus seem to require us to specify why patrons’ preferences for frequenting or avoiding these venues are so strongly racialised, a project that we are currently developing by means of an interview survey.

Relations at this relatively broad level of analysis, however, represent only one aspect of the morphology of relations in Long Street’s night-time economy, a theme exemplified by our analysis of the ‘microecology of segregation’ in Club C, one of Long Street’s most popular bars. Our research suggests that Club C is a racially diverse setting in which people routinely engage in forms of encounter and co-presence that would have

been difficult even to imagine during the *apartheid* era. Nevertheless, boundaries to interracial contact are maintained there through spatial practices operating within the bar itself—i.e. through the establishment of racialised front and back ‘regions’, the organisation of seating at tables and, at a finer level still, the formation of interactional groupings. Even within a space that tends to be crowded, dynamic, informal and socially diverse, then, it is possible to map systematic and recursive patterns of racial isolation.

We do not wish to privilege these micro-ecological forms of segregation in a general sense. Nevertheless, we believe that they provide an important and relatively neglected index of the extent to which broader processes of geopolitical change have ‘penetrated’ the realms of everyday interaction in South Africa. They are thus especially relevant to understanding the kinds of face-to-face encounter studied by researchers working in the tradition of the ‘contact hypothesis’. The point of contact research, after all, is to assess the nature and effects of concrete interactions between members of formerly segregated groups and this requires research that spans the continuum of scales of segregation. Global and meso-level patterns of unevenness, clustering and isolation are profoundly relevant to understanding the lived experience of racial contact. Yet, equally, we require research focused on the minutiae of ‘bodies in space–time’ (Foster, 1997) which is able to access boundary processes unfolding within the most intimate domains of everyday life.

Theorising the relations between these different scales of socio-spatial reality and specifying their role in the (re)production and transformation of segregation is a vital, if somewhat daunting, task. Concepts such as ‘spatial hierarchy’, ‘nesting’ and ‘emergence’ and even conventional distinctions such as ‘micro’, ‘meso’ and ‘macro’ are likely to prove inadequate to this task in the longer term. In some situations, for example, we may discover

that different 'levels' of segregation operate relatively autonomously and require quite different explanatory schemes. In others, we may find that such levels are mutually reinforcing and isomorphic, creating patterns of isolation that stretch all the way up and down the continuum of scale and providing an alternative way of thinking about Massey and Denton's (1989) concept of 'hyper-segregation'.

The present article has not attempted to propose a formal theory of (the scaling of) relations on Long Street, much less a general theory of how to understand the dynamics of racial contact, leisure and consumption in the post-*apartheid* city. More modestly, the article is simply an attempt to encourage a shift beyond the investigative practices that dominate the mainstream literature on segregation. In part, this shift is methodological, involving the development of procedures for studying processes at levels of resolution that rarely feature in work on segregation. In this sense, our work clearly resonates with the contributions of other researchers, who have proposed varying methodological and analytical frameworks for acknowledging, exploring or overcoming the scale dependency of segregation processes. In part, we are also encouraging a shift in how researchers orient to issues of scale in their work. We believe that scaling decisions should be envisaged as a theoretical opportunity as well as a methodological challenge. They give us the opportunity to explore the multiplicity of forms of human isolation and to reflect on the varying phenomenal levels at which it 'takes hold' within social life. In so doing, they open up new ways of understanding the nature, causes and effects of segregation.

## Notes

1. See <http://www.worldsbestbars.com/city/cape-town/joburg-cape-town.htm>.

2. The observational classification of race groups within South Africa has been tested several times, most recently in a pilot study conducted on a South African university campus. Here, observer classifications were compared with individuals' self-assigned classifications (Dijkstra, 2006) and the correspondence was found to be very high (over 95 per cent). Moreover, pilot work has also established that the kinds of classification procedures we used in our research yield consistently higher inter-rater reliabilities amongst observers (typically, over 90 per cent agreement).
3. To some extent this was prefigured by our work with colleagues in studies of interracial contact in university settings (Schrieff *et al.*, 2005; Tredoux *et al.*, 2005), where we discovered that students who shared common spaces, such as in a refectory, consistently separated, exhibiting a kind of racial territoriality.
4. See [www.statssa.gov.za/census01/html](http://www.statssa.gov.za/census01/html).

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