

The Spaces between Us: A Spatial Analysis of Informal Segregation at a South African University

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In many contemporary societies, the potential benefits of racial integration are undermined by de facto or informal segregation. The present research focuses on this phenomenon, and its role in (re)producing group boundaries, particularly those realized spatially. A multimethod approach was employed. Naturalistic observational techniques were used to examine the seating patterns of 26 undergraduate tutorial groups across a full academic year. Results from the longitudinal study show strong patterns of racial segregation. Focus group discussions were conducted in order to explore the social practices and processes that underlie informal segregation. We argue that an implicit system of unofficial rules governs intergroup relations and shapes contact opportunities among students. The perpetuation of racially homogenous spaces—intentionally or incidentally—is proposed as both a key outcome and as a key determinant.

Social psychological contact theory states that frequent and intimate contact between members of different groups can reduce intergroup prejudice, particularly if contact occurs under specific optimal conditions (Allport, 1954). Although the positive effects of intergroup contact are well documented (see Pettigrew & Tropp, 2006, for a meta-analysis of contact research), the problem of cosmetic or “illusory” contact is rarely addressed (cf. Taylor & Moghaddam, 1994). In many contemporary societies, different groups exist side by side yet continue to eschew opportunities for contact. Dixon and Durrheim (2003) proposed a theory of

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informal segregation to explain patterns of resegregation in formally integrated settings. They define informal segregation as “a de facto system for regulating interaction between groups, a system based not on official policies of racial separation but on a panoply of “unofficial” practices that collectively operate to reproduce racial barriers” (Dixon & Durrheim, 2003, p. 2). Everyday seating behavior, as a means of reproducing racially segregated spatial patterns, is one such informal practice we seek to explore.

The Spatial Dimension of Segregation

Patterns of resegregation in formally desegregated settings have been documented in various domains including educational settings (Campbell, Kruskall, & Wallace, 1966; Schofield, 1986) and even public transport (Davis, Siebert, & Breed, 1966). More recently, Fisher and Hartmann (1995) found that the majority of Black and White students at an American university admitted to maintaining a high degree of separation, contributing to the presence of same-race cliques. Durrheim, Trotter, Manicom, and Piper (2004) report similar findings for a campus survey conducted at a South African university in which students reportedly engaged in predominantly intraracial interactions. Focus groups revealed that certain social spaces on campus were associated with specific race groups. The campus library lawn was cited as an example—it was regularly occupied by Indian students and therefore derogatorily referred to as “Bombay.” Social psychologists have as a whole, however, paid scant attention to the sociospatial dimension of intergroup contact and segregation (Dixon, 2001). The Durrheim et al. (2004) study is therefore particularly noteworthy in that it highlights the significant interconnectedness of space and intergroup relations. Furthermore, most research investigating the spatiality of intergroup relations is rooted within the domains of geography and sociology (e.g., Deutsch & Collins, 1950; Hamilton & Bishop, 1976; Massey & Denton, 1988). Notwithstanding the significance of this work, it is primarily focused on city-wide or neighborhood residential segregation, analyzing segregation at a macrospatial level with the main intention of explicating its economic, social, and political implications (Clack, Dixon, & Tredoux, 2005).

Scholars have since called for an investigation of the microecology of segregation, that is, segregation as it unfolds in so-called everyday life spaces (Dixon & Durrheim, 2003; Dixon et al., 2008; Schnell & Yoav, 2001). To this extent, the analysis of informal practices of segregation that create and uphold racial barriers in everyday life is deemed especially instructive (McCauley, Plummer, Moskaleno, & Mordkoff, 2001). Dixon, Tredoux, and Clack (2005) explain how the sociospatial organization of routine or habitual practices serve to maintain relations of the dominant and the marginalized, thereby preserving racial distance between groups. We turn now to the growing body of work that investigates these

routine social practices, and how they are used to inform the organization of intergroup relations in space.

The Microecology of Informal Segregation

Although empirical research on the microecology of segregation is limited, a number of studies have been conducted in various naturalistic settings including school cafeterias and playgrounds (McCauley et al., 2001; Schofield & Sagar, 1977; Thomas, 2005), university lecture theatres (Koen & Durrheim, 2009), open public seating areas (Tredoux, Dixon, Underwood, Nunez, & Finchilescu, 2005), shopping queues (Kaplan & Fugate, 1972), bars and nightclubs (Tredoux & Dixon, 2009), and churches (Parker, 1968). A notable example of this kind of research is Dixon and Durrheim's (2003) study of racial divisions on a desegregated beach in South Africa, which provides one of the most striking demonstrations of how the routine use of space can contribute to the reproduction of racial segregation. Conducted a decade after South African beaches were first declared "open" to all race groups, the study also highlights the remarkable resilience of segregation in formally desegregated settings. The authors developed a novel methodology using scaled maps of the beach on which to directly plot the race and seating positions of each individual beachgoer. In addition, they measured the extent of segregation between Black and White beach occupants using slightly adapted versions of segregation indices typically employed in urban geography and sociology studies on residential segregation (e.g., Darden & Kamel, 2000).

The study revealed very high levels of racial segregation on the beach. The base spatial unit in Dixon and Durrheim's (2003) study was that of the "umbrella space," the area delimited by the shadow of a beach umbrella (ubiquitous on the intensely hot midsummer African beaches they were studying), within which most beachgoers would take refuge, and arrange their personal possessions. Almost all (i.e., >99%) umbrella spaces were occupied by racially homogenous groups. This finding suggests that the umbrella microspace was used as a means of maintaining distance not only between individuals or groups unfamiliar with each other, but also between racial groups, thereby preserving group boundaries and racial segregation on the beach.

Drawing upon this research, Clack et al. (2005) observed the seating patterns of students in a cafeteria at a predominantly White university in England. Results revealed substantial ethnic segregation between White and Asian students. Moreover, an analysis of individual tables within the cafeteria indicated that the majority of students were seated in racially homogenous groups. Schrieff, Tredoux, Dixon, and Finchilescu (2005) observed a similar, if more extreme instance in the dining halls of student residences at a South African university, in an extensive set of more than 200 separate observation periods. Schrieff et al. concluded that such patterns of segregated seating amongst student diners were probably "for the most

part, patterns of friendship” (p. 4). However, Clack et al. (2005) strongly contested the notion of friendship in their research as an adequate explanation for segregation. Instead, they argued that the degree of spatial organization observed in their research required knowledge of the role of seating choice within the context of the cafeteria. (Unlike the study by Schrieff et al., the cafeteria they studied was open to a very wide range of students, and not reserved for a particular subset.) The authors concluded that seating choice served as an everyday routine practice that shaped the social organization of groups, thereby regulating interracial contact between students within a specific space.

Informal spaces are possibly more amenable to segregation simply because individuals are able to choose who they wish to interact with, without concern for official monitoring or sanctions (Zisman & Wilson, 1992). This effect may be more pronounced in social settings, such as beaches and cafeterias, where the presence of friendship groups are particularly likely. However, racial divisions in space may emerge even in more formal or structured settings such as a classroom or lecture theatre, provided that individuals are able to exercise a certain degree of choice in their use and occupation of a given space. Haber (1982) conducted a study of lecture theatres at a university in the United States and observed that, when given enough seating choice (more than one seat available for every student), dominant (White Anglo-Saxon) and marginal (Blacks and other ethnic minorities) students placed themselves more often on the spatial center and periphery of the classroom, respectively. Their particular locations were not only structured by the differential social status and broader power relations between the two groups, but simultaneously reflected students’ understandings of their “proper place” within the classroom setting. Thus, broader social relations and localized spatial configurations may be mutually reinforcing.

Collectively, these studies illustrate the “delicate choreography” of intergroup relations in space (Dixon et al., 2005, p. 5) and give credence to the persistence of segregation within everyday life spaces and its preservation through seemingly mundane activities and practices. Nonetheless, the descriptive nature of existing research limits its capacity to fully explain how and why processes of microsegregation shape intergroup relations in space. To advance our knowledge, Dixon et al. (2005) have argued that the need to understand the lived experience of intergroup contact (and segregation) within a given social space is crucial.

The Meaning of Contact

Dixon and Reicher (1997) emphasized the importance of assessing lay theories and interpretations of contact through the day-to-day talk of those who come into contact. Intergroup contact, they argue, “acquires meaning within everyday practice and argumentation as individuals try to make sense of others’ copresence” (p. 361). An instructive example of such an approach is that by Woods (2001),

who interviewed Black South African university students concerning their perceptions of interracial contact and the racial climate at the university. Investigating the phenomenon of “everyday racism,” which she defines as “the familiar, routine situations that are repeatedly experienced in daily life” (p. 97), Woods describes how Black and White students attend the same classes yet rarely make the effort to forge any kind of meaningful relationship with each other. The study revealed important insights into Black students’ lived experiences of segregation on campus. The students reported on the complex nature of race relations on campus stating that, on the surface, students from all race groups appeared to be getting along, but underlying relations were characterized by mounting racial tension. While some Black students reported having satisfactory relationships with White students, the majority experienced their White peers as racist, particularly in regard to their perceived lack of tolerance for cultural and language differences. Furthermore, although different racial groups congregated in separate areas on campus, Black students did not feel that this segregation necessarily reflected a mutual preference of White and Black students to stay away from each other. Instead, Whites were held responsible for making a special effort to maintain racial distance through the consistent use of separate social spaces.

Buttney (1999) examined White and Black students’ discursive constructions of segregation on a university campus in the United States. Members of both groups justified informal segregation through notions of cultural difference and a lack of common ground and simultaneously denied any racial implications. The denial of racism and racial segregation is prominent within the racial discourse literature (e.g., van Dijk, 1992). These conflicting responses reflect broader ambivalent attitudes expressed within the experience of a common interracial dilemma: While students typically expressed the desire for increased interracial contact, many seemed unsure how to achieve it, claiming that feelings of “being stuck in a larger pattern of intergroup distance” prevented them from seeking out intergroup contact experiences (Buttney, 1999, p. 291).

Investigating the spatiality of racial segregation at a high school in South Carolina, United States, Thomas (2005) makes a similar claim for the normative properties of racial spaces and the control that they exert on individual choice or “freedom.” She invokes Butler’s (1993, cited in Thomas, 2005) performative theory to explain how racial difference is produced and reproduced through the habituated spatial practices of Black and White girls in the school’s racially segregated lunchroom. Her interviews with some of the girls revealed an insistence on their part that segregated seating was not determined by race but as something they just “do.” Thomas rejects their attempts to “naturalize” the racial divisions in the lunchroom and, instead, argues for the limited agency of these youths whose behaviors are regularized and constrained by the “inherited normative legacy” of this racialized space (p. 1239). She explains how, through their everyday practices of sitting down in same-race groups, the girls come to accept, internalize, and

repeat the norm of segregated seating, thereby reproducing the racial spatiality of the lunchroom. In other words, racial segregation is reiterated and naturalized through the everyday seating practices in the school's lunchroom.

What is important to note from the studies we describe in this section is that informal everyday practices of segregation are informed by shared understandings about the way in which groups interact (or avoid interaction) within a given context. Thus, informal segregation should not necessarily be conceived as an outcome of prejudicial attitudes and adverse intergroup relations, but rather as a dynamic process in which different groups are continuously negotiating the meanings of shared space (Dixon, Tredoux, & Clack, 2005).

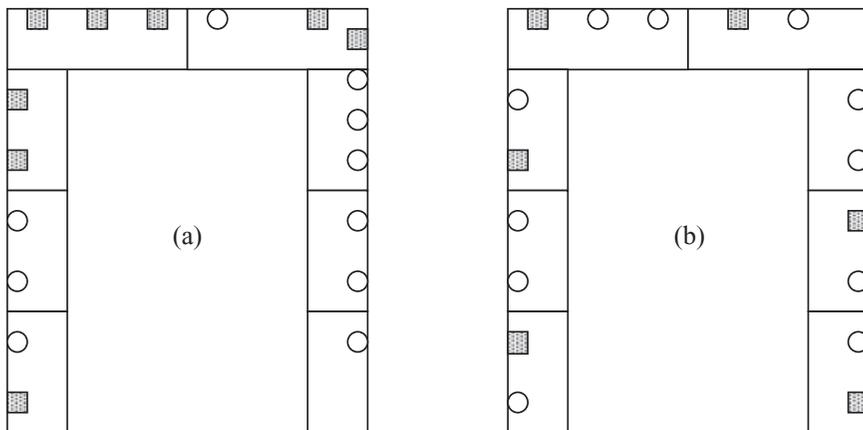
Rationale and Aims of Research

The present research seeks to expand the notion of reproduced racialized space and aims to conduct a longitudinal observational study of Black (which includes the historical minority groups of Black African and "Coloured" students as a combined minority group) and White students' seating patterns in university tutorial classrooms. We specifically wanted to study a space in which the same group of people meet repeatedly, but where preexisting friendships are unlikely to have much influence. We also chose to observe first-year students as they would have no prior experience with the tutorial environment, thus eliminating the possibility of preestablished seating norms. In addition, the classroom is a formal setting in which student interactions are more structured than in social environments, facilitating greater integration. Finally, the limited seating choice in small classrooms diminishes opportunities for segregated seating. For these reasons, we expected the classrooms in this study to be less segregated than the relatively large social settings observed in existing research on microspatial segregation. Furthermore, focus group discussions provided rich qualitative data, which enabled us to examine Black and White students' experiences of interracial contact in class, as well as to explore the underlying processes of spatial segregation.

Method

Sample

The research context is a public university in South Africa, which had a predominantly White student population at the time the study was conducted in 2005. A subset of 749 Black and White university students, enrolled in an introductory psychology course (PSY 101W), were observed in their tutorial classrooms. The racial composition of students enrolled in the course consisted of 38% and 56% Black and White students, respectively. Overall, there was a greater proportion of female (79%) than male students (21%).



Note. Squares and circles represent Black and White students, respectively. All tables could seat two to three people.

Fig. 1. Segregated (a) and integrated (b) seating patterns in tutorial 1.

Design

A multimethod design, consisting of a quantitative and qualitative component, was employed. First, a naturalistic observational study of student seating patterns in psychology tutorial classrooms was conducted. Observations were recorded for each of the eight scheduled tutorials across the academic year of 24 weeks, for each of 26 groups. Second, focus group discussions were conducted with a selection of students drawn from these tutorial groups.

Procedure

Student seating data were recorded during psychology tutorial classes. Following Dixon and Durrheim (2003), approximate sketches depicting classroom layouts were used to produce a basic “map” of each tutorial classroom (see Figure 1). Observations were recorded by tutorial facilitators (tutors), who were instructed to record each student’s race and seating position in the classroom directly onto these maps, and any uncertainties were to be noted. Tutors were allowed to choose a time they felt most appropriate for recording their observations, as long as they ensured that all students present were recorded. Typically, it took fewer than 5 minutes to record the seating patterns, so data collection was not intrusive. Students usually remained in their chosen seats from the beginning to the end of a tutorial period.

Five focus group discussions were conducted with first-year psychology students—two groups of Black students, two groups of White students, and one

group of Coloured students. Race remains a sensitive issue within the postapartheid South African context, and groups were kept racially homogenous in order to encourage participants to express their opinions in an open and forthright manner, and to reduce feelings of discomfort, anxiety, and excessive concern with political correctness or conversational politeness. The majority of participants were female students (83%), with an average of seven students per group. Discussions lasted for an average of 75 minutes, and all were recorded for later transcription. A semistructured interview schedule, focused on students' perceptions of interracial contact and segregation on campus, was designed to facilitate group discussions.

Analysis

Seating patterns were analyzed along two dimensions of spatial variation, using the evenness and exposure indices (see Massey & Denton, 1988, for a comprehensive overview of segregation indices and their computations). Evenness was measured by the dissimilarity index (D) and reflects the differential distribution of racial group members across aerial units in a given space. In the present study, areal units were defined by individual tables in classrooms. The index ranges between 0, representing *complete integration*, and 1, indicating *complete segregation*. Conceptualized as a measure of displacement, D is the minimum proportion of minority members required to change seats in order to achieve an even distribution of minority and majority groups (Massey & Denton, 1988). For example, a D of 0.67 suggests that 67% of minority students would need to be relocated in order to even out the proportional racial distribution of students within a classroom. The interaction index (${}_xP_y^*$) belongs to a family of indices used to determine the extent to which minority and majority members are physically exposed to each other by virtue of sharing a common spatial area (Massey & Denton, 1988). In a tutorial classroom, the degree of exposure can be conceptualized as the likelihood of minority and majority group students sharing the same table or desk. Essentially, the interaction index measures the potential for interaction between minority Black students and majority White students in the classroom. Values of ${}_xP_y^*$ also range between 0 and 1, but the direction of interpretation is reversed, where 0 implies complete segregation. In the context of our study, Black students made up the minority group both in terms of social status and numerical proportions. For these reasons, we were specifically interested in determining Black students' level of exposure to the White majority.

D and ${}_xP_y^*$ indices were originally developed for the analysis of segregation at a macrospatial level, such as residential organization in towns, cities, and neighborhoods (Massey & Denton, 1988). However, for the purposes of the present study, these were adapted for the measurement of racial segregation in microenvironments (see Dixon & Durrheim, 2003). The adapted indices have been used successfully to investigate racial segregation in beaches (Dixon & Durrheim, 2003)

and university cafeterias (Clack et al., 2005; Schrieff et al., 2005). SegStat, a bespoke software program, was used to obtain D and ${}_xP_y^*$ estimates (Wallbank, 2005). Single sample t tests were performed in which the observed mean D and ${}_xP_y^*$ values were tested against hypothetical values of complete integration (0 and 1, respectively).

Differences between the extent of segregation in tutorial classrooms at the beginning of the year and classrooms at the end of the year were also analyzed. Because this part of the analysis required pairs of seating observations for initial and final tutorials, only those tutorial groups for which seating patterns were recorded in either tutorial 1 or 2 at the start of the year, as well as in either tutorial 7 or 8 at the end of the year, were included in this analysis. Thus, 14 out of the total 26 tutorial groups observed were included in this analysis. Matched pairs t tests were used to test for significant differences over time.

Finally, focus group discussions were transcribed and coded. A thematic content analysis of the data was conducted and three main themes were explored: (1) The nature of interracial contact and/or segregation in tutorial classrooms and the broader campus environment; (2) perceptions of spatial segregation on campus; and (3) the "racialization" of space and the role of racially homogenous spaces as a mechanism for shaping intergroup relations on campus.

Results

Classroom Seating Patterns

A total of 119 classroom observations from 26 tutorial groups were obtained. An average of five observations was recorded for each tutorial group. Tutorial groups consisted of an average of 16 students per group, with a mean of 6 Black and 10 White students per group.

The extent of segregation in tutorial classrooms. Mean overall D and ${}_xP_y^*$ values, averaged across all observed tutorial classrooms, are presented in Table 1. The results show high and statistically significant levels of segregation in tutorial classrooms. Mean D indices ranged between 0.50 and 0.90, with a significant mean D of 0.71, $t(118) = 86.06$, $p = .0001$. Effectively, an average 71% of Black students would have to change seats within classrooms to achieve an integrated seating pattern. Mean ${}_xP_y^*$ indices ranged from 0.0 to 0.56, and the likelihood of Black students interacting with White students was significantly low, ${}_xP_y^* = 0.24$, $t(118) = 92.12$, $p = .0001$.

Although D and ${}_xP_y^*$ indices provide information regarding distributive evenness of race groups and levels of exposure in classrooms, they do not reveal the spatial formation that segregation may assume in a specific context and are therefore limited in their capacity to capture important structural elements of segregation

(Clack et al., 2005; Dixon & Durrheim, 2003). To this extent, the classroom maps used to record observations of classroom seating patterns provide a valuable visual tool for illustrating the way in which racial segregation may materialize, spatially. Examples of the spatial manifestation of racial segregation and integrated seating in two typical tutorial classrooms are depicted in Figure 1, diagrams (a) and (b), respectively. A distinct spatial pattern in Figure 1a is the clustering of racially homogenous groups of Black and White students in separate areas of the classroom. This clustering effect is less prevalent in the classroom depicted in Figure 1b where a more integrated pattern of seating can be observed.

Changes in segregation over time. The results in Table 1 indicate no significant differences between mean D indices in T1 initial tutorials ($D = 0.82$) and T2 final tutorials ($D = 0.67$, $t(13) = 2.03$, $p = .064$). Similarly, the likelihood of interracial interaction in tutorial classrooms was comparably low in the initial (${}_xP_y^* = 0.22$) and final tutorials (${}_xP_y^* = 0.24$, $t(13) = 0.46$, $p = .652$). Accordingly, the tutorial classrooms were significantly segregated in terms of evenness and exposure at the start and end of the academic year. Additional analysis was conducted using data from those tutorial groups whose seating patterns were recorded at the very first tutorial of the year. Observations of seating patterns in tutorial 1 were recorded for 24 out of the 26 groups observed. The analysis revealed significant segregation at the very first tutorial in terms of both uneven racial spread, $D = 0.76$, $t(23) = 21.80$, $p = .0001$, and low exposure to racial others, ${}_xP_y^* = 0.23$, $t(23) = 19.35$, $p = .0001$, when students belonging to the same tutorial group were hardly acquainted with each other, if at all. The finding

Table 1. Summary of Statistics for Overall, T1 and T2 D and ${}_xP_y^*$ Indices

	Valid N	Min.	Max.	Mean	SD	t	df	p
<i>D</i>								
Overall	119	0.71	0.50	0.90	0.09	86.06	118	.0001
T1	14	0.82	0.48	1.00	0.16	19.75	13	.0001
T2	14	0.67	0.19	0.91	0.20	12.32	13	.0001
^a Change in D				0.14	0.27	2.03	13	.064
${}_xP_y^*$								
Overall	119	0.24	0.00	0.56	0.13	92.12	118	.0001
T1	14	0.22	0.00	0.50	0.17	17.13	13	.0001
T2	14	0.24	0.06	0.55	0.13	21.31	13	.0001
^a Change in ${}_xP_y^*$				0.24	0.19	0.46	13	.652

Note. N is number of observations recorded for each tutorial group. Overall D and ${}_xP_y^*$ indices are averaged across all tutorial groups observed.

^aMatched pairs t test for D and ${}_xP_y^*$ at T1 (tutorial 1 or 2) and T2 (tutorial 7 or 8).

suggests that racial segregation occurred spontaneously among students who were not only unfamiliar with each other, but who were also relatively unfamiliar with what to expect from the tutorial classroom experience.

Segregation as Lived Experience: Qualitative Findings

Three main themes were explored. First, the nature of interracial contact and/or segregation in tutorial classrooms and the broader campus environment were discussed. Second, students' perceptions of spatial segregation on campus were explored. Finally, the racialization of space and the ways in which students made sense of racially homogenous spaces on campus were discussed.

Classroom contact and beyond. The majority of students identified the tutorial classroom as a space on campus where interracial interactions were most likely to occur. However, considerable racial differences in the experience of classroom interaction were reported. Black and Coloured students perceived interracial contact in classrooms as obligatory by virtue of attending the same class and typically described it as superficial and mainly focused on impersonal academic matters. This kind of "neutral" interaction made interracial contact easier and even more enjoyable. Even so, contact was often limited to the classroom environment with racial divisions being reinstated beyond classroom borders. When asked about interracial interactions in tutorials, one Black student said, "If you're in a tut [tutorial], and you're given a task to do, it's much easier to do it that way. Even if it's Black, Coloured or whatever, you will enjoy working with each other. But then when you go out there, in the real world, its like, I don't know you, you know we just did a tut [tutorial]. But those boundaries."

In contrast, White participants described interracial interaction in tutorials as problematic and disruptive, particularly when racial issues were being discussed. As a result, White students expressed a heightened sense of awareness of racial differences in tutorials, which were believed to increase racial tensions. One White student described an incident during a class discussion in which Black classmates were perceived as being aggressive and volatile toward Whites and said: "They [Black students] all just, jump out of the box and attack, you know? And you know they do have a point. But it's always like if I say 'Black tribal people are primitive,' heaven help me 'cause then all hell just breaks loose. I don't mean it in that bad way, I'm not generalizing, but some, you say something and they just, they're looking for the attack."

For White students, the classroom was experienced as a particularly threatening environment because they were frequently confronted with race-related issues in a setting in which they needed to be vigilant about appearing prejudiced toward their Black peers rather than openly expressing their opinions. Interacting in same-race groups enabled White students to avoid the tensions experienced in

interracial interactions, and to be sealed off from potentially thorny race-related matters. In a racially mixed classroom, however, these avoidance mechanisms were not possible, as one White student described,

I mean like, most of my subjects somewhere along the line have touched on the race issue, so I mean that's very topical and like that idea does come up a lot. But, in a social group, in my group [of friends], its like, White people. Yah, and there'll be Coloureds and everything around you but because it's your little world, it [conflict] doesn't happen but in a classroom situation it's different everyone's mixed. You can't make your own little worlds. So I think yah in a classroom you much more aware of it [race].

This comment is particularly striking because the notion of creating “your own little world” speaks directly to the kinds of racial enclaves that we seek to explain. In order to understand and explore the role of such racially homogenous spaces, we now turn to the second theme of our analysis.

Explaining spatial segregation: It's not about “race.” While the majority of students strongly agreed that racial segregation was present on campus, they simultaneously denied that race relations were problematic. Typically, participants argued that cultural differences and common interests were of greater importance than racial identity in interaction preferences. Despite their denial, many students displayed a striking awareness of spatial segregation among race groups on campus and observed segregation in various areas such as the library and the catering halls in student residences. A large set of steps located in the center of the campus that is both a university icon and an extremely popular outdoor social space for students (at midday the steps are especially crowded) was a particularly notable example. One White student related her observations of the racial division occurring on these steps to the rest of the group and said, “Have you noticed Jammie Stairs [sic], at about twelve o' clock? Top row, Black guys. It's just it's predominantly Black. Got your middle, predominantly White. You got the Coloureds and the Indians at the bottom. That's just like there's one stairs.”

Even so, when asked why students from different race groups occupied different spaces on campus, most participants argued it had nothing to do with race. Some explained that sitting in the same place served as a general meeting point for friends or that students simply gravitated toward a single space or area with no particular reason. Although plausible, these reasons fail to explain why same-race students consistently occupied specific areas around campus, rendering those spaces as racially homogenous over time. Further exploration revealed that racially homogenous spaces played a central role in perpetuating informal segregation on campus, through processes of “belonging” and “exclusion,” that served to reproduce racial divisions in space. Needless to say, these seemingly opposing processes are inextricably linked.

On the one hand, racially homogenous spaces offered a sense of belonging and were typically associated with a sense of security, comfort, acceptance, and

the ability to express oneself freely without being scrutinized or fearing judgment from others. To this extent, racially homogenous spaces were characterized by a collective identity, mutual interests, and supportive relationships among those with whom the space was shared. In describing why she felt drawn to the “Coloured billiards area” on campus, one Coloured participant explained that,

It’s like that kind of people that you are like sit there. That’s why. That’s why you go there, and you can be loud and you can laugh. If you like loud and out of place on the [Jammie] stairs then everybody looks at you, you have to know your place. It’s not like that there [at the billiard tables].

While the majority of participants conceded that racially homogenous spaces were not intentionally used as a means of excluding racial others from a given space, they nevertheless admitted to feeling discouraged from entering those spaces that were occupied by, or associated with, a different racial group. Many participants feared being the odd one out or being in the minority among people from other race groups. Some participants feared rejection or confrontation if they attempted to enter a racially homogenous space. In contrast to the Coloured student’s sense of belonging in the billiards area, one White participant described her feelings of exclusion that the same space evoked and stated,

When I walk past there [billiards area], they [Coloured students] look at me funny like, maybe it’s just my insecurities but they look at me like “you’re not supposed to be here.” I think yah its insecurities definitely. I mean I like playing [billiards] I really do but I’m just I’m White. I’m not allowed in.

Overall, participants seemed to struggle with the notion of a racialized space, where race and space are seemingly intertwined. Their attempts to make sense of such spaces reveal a kind of circumlocutory argument that essentially denied the occurrence of racial segregation on campus but, in effect, provides support for the racial configuration of space. The ambivalence of students surrounding this issue is highlighted in one White student’s reflections who said,

I think somehow, different groups that are separated they go to their place. It’s just human nature to go back to the same place. If you look at a lecture lots of people often sit in the same place in the lectures. There’s no reason for it. It’s just its human nature. Human nature is to go back to where you used to.

In our final theme, we explore this apparent ambivalence in greater depth and highlight the ways in which students make sense of racially homogenous spaces.

The racialization of space. The dominant view among students was that racially homogenous spaces were not “racialized” because they were neither intended to keep “racial others” out, nor so that members of a specific race could actively separate themselves from other race groups. Most students found it difficult to reconcile the emergence of racially homogenous spaces with intentional segregation, as this would reflect some kind of prejudice on their part. Instead,

racial divisions were argued to arise inadvertently within a given space, typically out of habitual behavior rather than explicit deliberation. For these reasons, such divisions could not be construed as racial segregation per se. However, not all participants agreed with this view. In discussing the purpose of racially homogenous spaces, one Black student argued,

I don't think they [Coloured students] do it intentionally. It just that they've always hung out, they were comfortable here. I'm not saying the Coloured people in the [billiards] area goes "Listen this is our Coloured area, we don't want anybody here." It's just they feel comfortable being there, they enjoy sitting around the pool table and just doing whatever.

Another Black student responded and said, "No but I think you as a first year [student] when you come here, that's the first thing you think, 'I'm Coloured, that means I have to be in [the billiards area].'"

Accordingly, spatial segregation was portrayed as something that occurred spontaneously and that was not explicitly discussed among students. To this extent, participants frequently referred to the "unspoken rules of space" concerning who belongs in which space. Furthermore, knowledge of these rules was imparted implicitly through the presence of racially homogenous spaces, as described in the analogy by the second student in the previous quote. By virtue of its tacit nature, students often alluded to an unconscious decision-making process with regard to the spaces they chose to occupy. As one Black student explained,

When I saw people sitting on Jammie [steps], you know, even when you go to the dining hall, like nobody says this side is for Whites this side is for Blacks they just happened. That's why I'm saying sometimes it's just not conscious. It's like we just know like, not that we're told. If ever there's a separate chair [in a class], then you know okay the tutor is gonna sit there. It's not that you were actually told you just know. You just know these things they just flow.

Together these findings highlight the complexities of racial segregation when it manifests in a spatial form. Participants struggled with notions of "conscious" or deliberate separation, and "unconscious" or implicit segregation. The dominant view amongst students is that racial divisions arise unintentionally within a given space, and therefore it could not be construed as racial segregation per se. Moreover, while a racially homogenous space may provide a sense of belonging for some, it simultaneously served to exclude others, regardless of whether exclusion was intended or not.

Discussion

A longitudinal study on the microecology of racial segregation in tutorial classrooms was conducted. We expected tutorial classrooms, as a formal academic space, to be less segregated than the more informal social spaces observed in previous research for two reasons. First, because in South Africa friendship groups are more likely to consist of same-race than mixed-race individuals, friendship

patterns could contribute significantly to spatial segregation. However, students are less likely to attend tutorials as part of a large group of friends as is generally the case in social settings such as cafeterias and beaches. This is because the choice of tutorial group is constrained by students' individual class schedules as well as by the number of places available in any given group. Second, seating choice itself is relatively limited in small structured spaces such as the tutorial classroom. Following Haber (1982), limited seating choice should effectively reduce the opportunities for segregation to occur.

Findings showed, however, that seating patterns in tutorial classrooms were significantly segregated on both spatial dimensions of evenness and exposure. Results for the dissimilarity index (D) reflected an uneven spread of Black and White students across tables in the classroom. Likewise, results for the interaction index (${}_xP_y^*$) indicated that the likelihood of Black minority students' exposure to White majority students in the classroom through the sharing of desks was significantly low. Overall, these findings suggest that the probability of interracial contact occurring in psychology tutorial classrooms is very low. Similarly high levels of segregation between Black and White groups were observed at a South African beach (Dixon & Durrheim, 2003) and university (Schrieff et al., 2005). Finally, the analysis revealed significant segregation over time. Classroom seating patterns were as segregated in the first two tutorial classes at the start of the year as in the final two classes at the end of the year. One explanation is that although students come into contact with one another on a regular basis during class, the contact is of an insufficient frequency and quality to encourage greater crossracial interaction amongst students. This argument is further supported by our qualitative findings.

During focus group discussions, the majority of students described contact as superficial, infrequent, and limited to the tutorial classroom. Tredoux and Finchilescu (this issue) report similar low frequency and quality of contact for university students. In our study, some group differences were observed. Black students experienced contact in class as enjoyable, albeit forced, due to the structure and reduced complexity provided by the academic focus of such interactions. In contrast, White students experienced contact in class as problematic and conflicted. They reported a heightened awareness of racial tensions in the classroom. According to Hyers and Swim (1998), and more recently Richeson and Trawalter (2005), Whites' heightened awareness of the intergroup situation is directly related to the anxiety and stress associated with their concerns of not appearing prejudiced. Similarly, when observing contact between White–American students, Stephan and Stephan (1992) noted that contact in settings that are perceived as threatening induces greater levels of anxiety and discomfort than contact that occurs in nonthreatening environments. It is likely that White students perceived the psychology tutorial classroom as a threatening environment, where race was often a topical issue. Thus, in our study, while the structured environment of

the classroom provided a supportive framework for Black students' interracial interactions, it simultaneously created anxiety for White students (Hyers & Swim, 1998). This may explain why students attempted to maintain racial distance in the classroom through seating choice.

Overall, most students agreed that the university campus was racially segregated. They were acutely aware of pervasive spatial segregation on campus and displayed a textured understanding of the campus' racially divided landscape. Durrheim et al. (2004) and Woods (2001) report similar observations of students' awareness of racially homogenous spaces on university campuses. However, such segregation was typically explained as a natural outcome of existing similarities and differences between groups, and not as a result of racial grouping per se. The need for security and comfort were highlighted as key determinants for seeking out those who are perceived as similar. While it is highly likely that perceived similarities could include racial identity, most students denied that race played an explicit role in the matter. Buttny (1999) reported similar findings for American students who accounted for segregation in terms of cultural differences and lack of common interests. Thomas (2005) explains that the "naturalization" rhetoric individuals employ enable them to distance themselves from the racial implications of segregated space, while simultaneously espousing a lack of awareness of "race" that removes any element of accountability on their part. Nevertheless, the majority of students insisted that spatial divisions were unrelated to racial boundaries between groups, arguing instead that spatial segregation arose unintentionally out of habitual behaviors rather than divisive objectives. In their opinion, the racial homogenization of space is an inadvertent and secondary consequence of more benign friendship patterns and common interests.

Yet a closer analysis of the role of racially homogenous spaces revealed that spatial segregation was neither incidental nor inconsequential. The data revealed two seemingly opposing yet complimentary processes of inclusion and exclusion that explained the pervasive presence of racially homogenous spaces on campus. Although, according to the students, the formation of racially homogenous spaces was not intended to fabricate de facto racial segregation, Black and White students often avoided (or sought out) racially homogenous spaces specifically because of their racial membership. Thus, regardless of the intended purpose of racially homogenous spaces, the resultant spatial arrangements that arise through processes of belonging and exclusion strongly reflect patterns of racial segregation. We argue that both processes of exclusion and belonging operate to effectively separate racial ingroup members from outgroup members within a given space. Racially homogenous spaces therefore serve to uphold racial boundaries between Black and White students.

More importantly, these findings suggest that, although students portrayed spatial segregation as a spontaneous event that occurred beyond their immediate level of awareness, the majority of them adhered rigidly to the prevailing

sociospatial arrangements on campus. To this extent, students frequently alluded to the unspoken rules that governed the use of space. The notion of unspoken rules in relation to segregation is also reported elsewhere (e.g., Woods, 2001). These rules serve as a sort of spatial directory or navigation system, providing information on spaces that are accessible, and to whom access is granted. More than that, the rules that govern space convey implicit messages of one's rightful place within a given setting. Knowing which social spaces to visit on campus, or which table to have a meal at in residence dining halls, plays an important part of knowing one's place and where one belongs in the overall structure of the university setting. This kind of knowledge is imparted implicitly, and is described by students as "just knowing" where their rightful places are. We argue that racially homogenous spaces are an integral feature of the implicit system governing race relations on campus. Specifically, racially homogenous spaces act as a type of social marker for students, who upon observing the racial composition of a given space, decide whether or not the space is accessible, and whether they belong in it or not.

Thomas (2005) argues that the powerful norms operating in a racialized space limits an individual's sense of agency and effectively regulates the sociospatial relations between race groups. She distinguishes between the "ordered" segregated space of the school lunchroom where students sit at the same table with the same friends each day, and the "disordered" integrated space of the playing field where behavior is less regulated and students have greater freedom of choice to interact with whomever they desired. However, it is not clear whether students in Thomas' study were able to actively choose between the segregated space of the lunchroom or the more integrated playing field. The notions of conscious choice and intentional separation were particularly problematic for the students in our study. The university campus is fairly large and there is an abundance of social spaces to choose from, including several cafeterias, coffee shops, and numerous open seating areas. The students identified several spaces that were highly segregated (e.g., the Jammie Steps and an area with billiard tables), and the majority of them contributed (knowingly or unknowingly) to the reproduction of these spaces either through avoidance or habitual occupation. While Thomas (2005) places strong emphasis on the normative influences of segregated space as suppressing individual agency, the comment made by one Black student in our study, that students new to the campus immediately searched for the place in which they belonged based on their racial identity, suggests that individuals actively seek out these normative ordered spaces in order to establish their social position vis-à-vis racial others on campus.

Likewise, the segregated seating patterns observed in the tutorial classrooms cannot easily be attributed to habitual, repetitive seating patterns where students sit with the same group of friends at the same desks in each lesson. Tutorial groups met only once a month for eight lessons between March and October. The relative infrequency of their meetings meant that students were unlikely to

develop consistent patterns of seating or attachments to a particular desk or section in class, nor was it enough time for students to build continuous friendships with classmates, especially considering the shallow nature of their interactions within this space. The fact that classrooms were significantly segregated in our study at the very first tutorial, when students were relatively unfamiliar with both the space and its occupants, provides support for the argument that, even where seating choice is limited and preestablished norms do not exist, groups will seek to reestablish and reproduce the prevailing social order through the racialization of space. Clack et al. (2005, p. 14) concur, explaining that patterns of informal segregation in a given sociospatial context require “acknowledgement of the sui generis role of [broader] intergroup perceptions and practices in shaping the organization of social space.”

We therefore argue that informal segregation produces a specific spatial arrangement of groups within a given space, and in turn, the resultant spatial arrangement reproduces boundaries that serve to further maintain the processes of informal segregation. In other words, informal segregation produces spaces that effectively “create, maintain and signify racial segregation” (Dixon et al., 2008, p. 4). Likewise, racially homogenous spaces do not only produce spatial segregation, but also serve to reproduce and maintain the segregated nature of that space. We propose the existence of a cycle of segregation, racially homogenous spaces being a key element in the production and reproduction of racial segregation.

Conclusion

Intergroup contact situations rarely occur in the ideal conditions outlined by Allport (1954). Even in desegregated contexts, opportunities for contact may be thwarted by informal practices that reproduce group boundaries. Indeed, informal segregation may have more nuanced underlying processes that may not necessarily be related to prejudice per se. Contact researchers are therefore encouraged to remain cognizant of the function of space in the (re)instatement of group boundaries in everyday intergroup encounters. Evidently, the spatial organization of students within classrooms, as well as in other learning and social spaces, plays a significant role in regulating interracial contact and effectively reduces the likelihood of interaction across racial boundaries, at least in this and similar studies in South Africa, the United Kingdom, and the United States. Interventions aimed at improving interracial contact may need to take explicit account of the spatial dimensions of contact and strive to eliminate potential spatial barriers to contact within given settings. Needless to say, this is easier said than done, particularly in social or leisure spaces where manipulating spatial boundaries may prove especially challenging. The classroom, on the other hand, may provide the ideal setting for disrupting segregated spatial arrangements and hopefully, augmenting interracial contact. Future research should include a temporal dimension that would provide a more nuanced understanding of spatial segregation evolves overtime.

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