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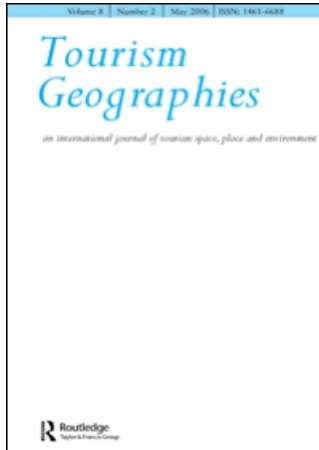
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Constructions of surfing space at Durban, South Africa

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Abstract

Surfers at Durban, South Africa, reveal a tendency to cluster in a number of different spaces off the bathing beaches. While this activity appears to function in a social environment that is at the same time companionable, competitive or exclusive, the manner in which the usually robust interaction with the material environment contributes to the construction of surfing space is not visibly evident to the outsider. A survey reveals that surfers construct surfing space out of images of a normative wave environment and practices and processes that are both sensory and social. Images of the perfect wave that describe the normative wave environment sought by surfers are acquired from surfing magazines and other media sources. Knowledge of wave shapes, winds and currents is provided by sensory-derived experience gained in the waves. Individual and group attitudes and behaviour in surfing spaces are socially constructed around issues of identity and exclusion. The path of surfing space construction is shown to link images of the perfect wave with sensory-derived knowledge of local wave conditions and socially constructed attitudes on the use of these spaces.

Keywords: surfing, construction theory, space construction, environmental knowledge, identity, South Africa

Introduction

Surfing is the art of riding a board across the face of a breaking wave. The most suitable waves for this activity are steep, smooth, high and about to break. It follows that information on the size, configuration and frequency of these waves must play an important role in the location of surfing spaces. However, many writers (e.g. Giddens 1984; Harvey 1989; Soja 1989; Lefebvre 1991; Shields 1991; Gregory 1994; Massey 1994a) have emphasized that space is determined and structured by social practices

and social processes. Notwithstanding a lack of precision as to the definition of space (Massey 1993; Simonsen 1996), there appears to be widespread agreement that space is socially produced through the practice of dominating and appropriating it. The complex symbolism that draws on signs, mythologies and images of place situates the spatial as a dimension of social life (Simonsen 1996). All this implies that the material environment should be included in an understanding of how surfing space is constructed through the mediation of social practices and social processes.

While the daily presence of surfers clustered in coherent groups off Durban's beaches in South Africa adds credence to the importance of social processes in the construction of surfing space, their relationship with the ever-changing wave environment as it conforms to wind, weather and modifications in coastal morphology is seldom considered. The limited literature on surfing provides few insights into surfer interactions with the natural environment and leans mainly towards surfer behaviour in social settings. Rutsky (1999), for example, drew attention to the manner in which surfing films of the 1950s and 1960s offered an escape from the social problems of the times. Booth (1994; 1995) showed surfing in Australia to be influenced by a range of social issues including public perceptions of a surfing culture and surfer resistance to regulation. Augustin (1998: 589) emphasized 'a changed relationship between body and nature that enhances spontaneity, imagination, and a need to be free', and drew attention to the attractive prospect of escaping institutional constraints for those who participate in *sport libre* (footloose sports) such as surfing. Correspondence in surfing magazines frequently draws attention to the social consequences of these activities by highlighting the territorial behaviour of local surfers (Wesemann 1998). Pollution impacts on surfing spaces have also been shown to arouse social responses. Ward (1996), for example, noted the actions of 'Surfers Against Sewage' as a form of oppositional pollution politics in southwest England.

Over the last few decades, the tendency to locate the material environment in a domain outside the social environment is a feature of the dualism in human geography that has existed between nature–society and space–society traditions (Hanson 1999). While the nature–society tradition,

focussed on the vertical (geography as the study of place) and constructed knowledge out of the humanistic, the interpretative and the specific . . . The tradition without nature focussed on the horizontal (geography as the study of space), and saw itself as pursuing scientific, systematic, and generalised knowledge (Hanson 1999: 135).

In recent years, however, the literature that portrays nature–society and society–space dualisms has begun to be replaced by arguments that unite nature, society and space. Willems-Braun (1997), for example, showed how social processes that shape space depend upon ways in which people

conceive of and construct nature. Bird (1987), Demeritt (1994; 1996), and Murdock (1997) have entered the debate on the inclusion of nature in the society-space orbit with the ideas of Latour (1988; 1993) and Haraway (1991) on actor-network theory featuring strongly in their discussions. According to Demeritt (1994: 163), the actor-network theorists 'provide metaphoric tools that make it possible to imagine nature as both a real material actor and a socially constructed object'.

This paper approaches the nature-society-space issue from a different perspective. To answer the question how surfers construct space, a theory is used that structures individual worldviews around four components of reality (McWhinney 1992). The nature of these reality components as they relate to the material and social environment is compared against data obtained from a survey of surfer opinions and attitudes. The survey reveals the importance of normative imagery and sensory and social processes in the construction of surfing space. Normative images of the wave environment are provided by surfing magazines that contain colour photographs of surfers demonstrating their skill on formidable waves. Particularly favoured is the image of a surfer negotiating a 'tube'. The image of these waves becomes the model that informs the notion of the perfect wave. Sensory-derived experience gained in the waves provides knowledge about wave shapes, winds and currents. The nature and coherence of a surfing identity is socially developed through adopting the attitudes, outlooks and values common to the sport. A successful ride on a formidable wave is not only a demonstration of expertise and courage, it also signals the rite of passage into a sport that is companionable, competitive and exclusive. The path of space construction is shown to link images of the perfect wave, with sensory-derived knowledge of local wave conditions and socially informed attitudes and values.

Theory

Constructivist thinking emphasizes the primacy of individuals in assigning meaning, purpose and significance to their interactions with the surrounding world. This applies to constructions of space as well as to other constructions (Moore 1979; Gale & Golledge 1982). While constructions of space are likely to differ between individuals, general agreement over the identification of spaces suggests that there is sufficient congruence to provide common ground for their effective definition and partitioning (Golledge 1978; 1981).

The operating assumption of the theory used here is that people view the world through a cultural prism constructed from their formative home, educational, religious, work and recreational environments (LeShan 1976). Because these environments tend to vary, individuals acquire different

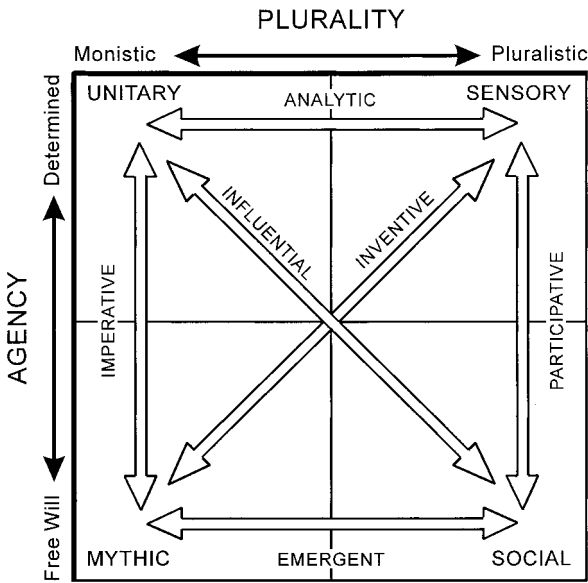


Figure 1 Dimensions of reality.

worldviews that influence their attitudes, beliefs and behaviour. McWhinney (1992) suggested that these differences could be described by reference to four components of reality located along the axes of two-dimensional space shown in Figure 1. He acknowledged that the four realities did not represent new insights but were 'a systemisation of wisdom from many centuries' that existed in medieval Europe, the Orient and the Americas (McWhinney 1997: 11). Native Americans call them the Four Winds. McWhinney (1992; 1997) has chosen to call them unitary, sensory, social and mythic realities.

Along the horizontal axis in Figure 1 the dimension of plurality distinguishes between monism, which is rooted in the notion of a single truth, to pluralism, which acknowledges a multiplicity of inputs that influence beliefs, behaviour and attitudes. Along the vertical axis the dimension of agency distinguishes between acceptances of a single truth as given, to the conviction that individuals can create their own world through employing free will. How individuals know what is real to them, how they explain events and how they influence or accept change will depend upon how their view of the world is structured within these dimensions of reality.

Unitary reality operates from a single unifying explanation located within the dimension of monism and determinism. The notion of a single truth takes many forms with familiar examples emerging from science and religion. Lengkeek (2001: 179) included metaphors that 'create a vision

of the world'. For surfers the 'perfect wave' represents this ideal and perhaps unattainable vision. It is assumed to exist, is difficult to describe, and is the source of a quest that leads surfers in search of spaces where this wave can be found.

Sensory reality, located within the dimensions of pluralism and determinism, supports the assumption that information received through the senses provides the 'facts' that sustain a belief in the reality of space and time, the material world and the distinctness of things. Cloke and Perkins (1998) and Perkins and Thorns (2001) suggested that these attributes take account of tourist activities that grapple with the challenge of nature. Surfers fall into this category as reflexive performers grappling with a material environment that is active rather than passive. Perkins and Thorns (2001: 192) saw this as 'a breaking down of the distinction between nature and society and an incorporation of nature into the performance or activity'.

Social reality is about values, human feelings, ethics, attitudes, institutions and systems. Its location within the dimensions of pluralism and free will affirms the freedom of individuals to contribute to these issues and to change them. While social reality emerges from individual awareness, it is constructed from interactions between individuals in the process of achieving consensus on social issues. These shared feelings and values become the basis for determining a reality that also informs how groups, such as surfers, acquire identity, modulate power and create symbols.

Finally, individuals who combine volition with a monistic vision of the world influence society through the conception of new ideas, inventions and creations. These 'mythics' tend to be unfettered by the constraints of contemporary beliefs. In the sport of surfing such individuals achieve distinction by pioneering new ways of riding waves, creating new boards, opening up new surfing areas or daring to ride formidable waves.

Linked together the four realities incorporate, for each individual, features that make sense of the world. This does not mean that each reality is equally influential. In constructing what is real to an individual, fundamental assumptions may draw heavily upon particular realities. This construction process is seldom free of problems, given the fluid, dynamic and changeable nature of societies. Tensions inevitably arise out of problematic interpretations that inform construction processes. The nature and direction of linkages between realities is, therefore, part of the problem-solving process when constructions occur or need to be modified. For example, attempting to reconcile data with existing theory links innate sensory reality where data are taken as given, with unitary reality where the solution is assumed to reside. The nature of the six possible linkages between realities depends, therefore, on the issue and the logic inherent in the paired realities. Complex issues usually require multiple linkages amongst relevant realities. This is shown to be the case with the construction of surfing space at Durban.

Data

The contemporary Durban seaside extends for some seven kilometres from the harbour entrance to the Mgeni River (Figure 2). In common with most successful seaside resorts, activity spaces include those for bathing, fishing, promenading, sunbathing, and surfing (Preston-Whyte 2001). Surfing spaces are broadly identified in relation to the adjacent bathing beach. These beaches extend from Addington Beach in the south to Laguna Beach in the north.

Data used to explain how surfers construct space were obtained using two approaches.

1. The observation of spaces where surfers cluster. Over a period of 23 days at 07: 00 and 17: 00 during April 2000, a count was made of the number of surfers in the surf zone along the central beachfront from Addington Beach to Battery Beach. There is no particular significance in the choice of the month of April as these beaches are surfed daily throughout the year. No count was taken north of Battery Beach because of the small number of surfers that frequent these beaches.
2. A questionnaire survey carried out in November/December 2000. Sixty surfers were randomly selected and interviewed. The sample process was stratified by beach with 10 surfers randomly selected from Addington Beach, Dairy Beach, North Beach, Bay of Plenty Beach, Snake Park Beach and Battery Beach. Table 1 shows that 85 percent of the sample population were male, 75 percent were between the ages of 16 and 25 and 63 percent had surfed from 2–5 years. Half of those selected were board surfers and the other half were bodyboarders; 70 percent were secondary or tertiary level students and all lived within 30 km of the beach, with 45 percent between 5–10 km.

The questionnaire contained closed and open-ended questions. These were designed to elicit from the respondents when and where they surfed, the reasons for selecting these spaces, the nature of the knowledge that they acquired by being part of a surfing community, and their notion of surfer identity.

Space construction

Insights provided by the survey data are used to explain how the views of the sample population can be structured around notions of unitary, sensory and social components of reality.

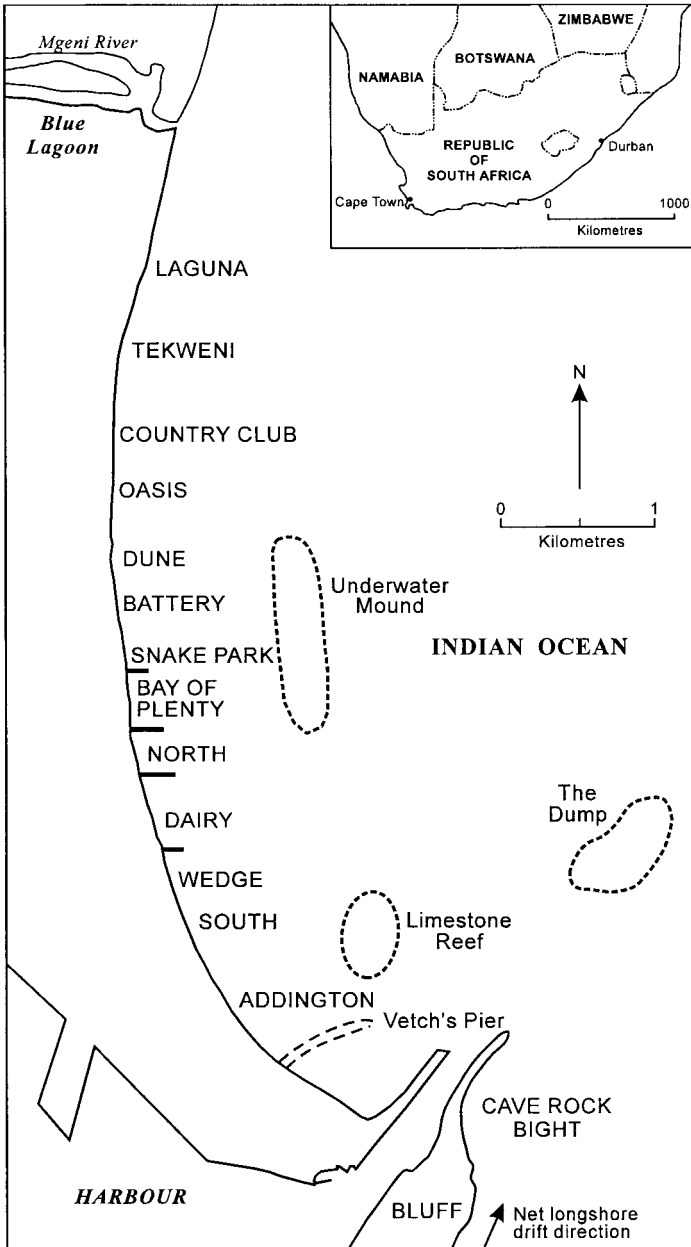


Figure 2 Durban beaches and offshore submarine features.

Table 1 Profile of sample population

	<i>Percentage of sample</i>
Sex	
Male	85
Female	15
Type	
Board surfer	47
Bodyboard surfer	53
Age (years)	
10–15	13
16–20	40
21–25	35
26–35	9
>36	3
Occupation	
Secondary level scholar	27
Tertiary level scholar	53
Blue collar	5
White collar	8
Unemployed	7
Experience (years)	
<1	9
2–5	63
6–10	23
>11	5
Residence (distance from beach; km)	
1–5	20
5–10	45
10–15	22
15–30	13

The perfect wave

The image of the perfect wave, visually confirmed and reinforced by each surfing magazine, is located in unitary reality. This image provides the model that influences surfers in their search for spaces where waves conform most closely to the ideal. The respondents showed that they understood, in varying degrees, the environmental factors that produce waves suitable for surfing. Generally recognized was the need for a long ocean fetch in which consistently strong winds generate large swell, where the water close to the shore is fairly deep and where the profile of the sea floor rises steadily towards the shore causing the ocean swell to form into steep-sided waves.

In practice, waves that conform closely to images of the ideal are unlikely to be observed or experienced consistently at specific locations along the Durban beachfront. Vagaries in weather and wind, the changing nature of the deep-sea swell attack, and storm modifications to the sandy near-shore submarine topography, mean that a variety of waves, including near-perfect wave conditions, are likely to occur over a period of time. The frequency of occurrence of waves that conform most closely to the desired model then becomes the determinant for identifying the most desirable surfing space.

Sensory-derived knowledge

Surfers acquire knowledge about waves through direct contact with them. They are therefore sensitive to anything that changes the shape and occurrence of waves when they reach the shelving beach. While changes in wind and weather cause short-term variations in wave characteristics, modifications to the beach environment have a more enduring impact on the shape of waves. The Durban beaches are notable for the manner in which the contemporary wave environment has been influenced by human agencies.

Until the early 1980s, wave erosion caused by storms led to severe modification of the beaches above and below low tide. Most noticeable was the net depletion of beach sand over time as the export of eroded sand exceeded input by the northward drift of sediment in the longshore current. This imbalance was caused by the suspension of the northward drift of littoral sediment around the Bluff promontory through the dredging of a sand trap at Cave Rock Bight (Figure 2). The purpose of the sand trap was to capture silt that otherwise would accumulate at the entrance of the harbour in its passage up the coast. The result was sand starvation of the beaches (Garland 1988).

Given the importance of Durban's beaches as a premier national tourist destination, the resolution of the problem of beach erosion became an issue of local political and economic concern. Attempted solutions to the problem of beach erosion have resulted in three separate activities, all of which impacted upon wave characteristics and the beach environment. First, sand dredged from the sand trap was dumped some 1200 m offshore to form a submarine mound parallel to the coast. The intention was to reduce wave energy on the beaches (Fitzpatrick 1973). This mound is able to generate formidable waves under large swell conditions. Second, in 1982, a beach sand-pumping scheme was completed. Dredged sand is discharged into a storage hopper north of the harbour mouth. From there sand slurry is piped to five outlets strung along the beach. The subsequent nourishment of the beach replaces eroded sand. This has resulted

in the creation of a wide expanse of sandy beach and the maintenance of a reasonably stable near-shore submarine topography. Thirdly, the three piers constructed in the 1980s to allow seaside visitors to promenade, were designed to be permeable to the northward flow of sediment in the longshore current (Garland 1988). These piers modify the wave shape in their vicinity and generate strong rip currents.

Respondents demonstrated an awareness of how the submarine mound, sand pumping scheme and piers modify the waves through their classification and naming of wave types. Many revealed detailed knowledge of the nature of these waves, particularly those that they preferred to surf. Altogether five wave types were recognized to be surfable: bowl waves, shore break waves, outside waves, mound waves, and reef waves (Figure 3).

- Bowl waves appear throughout the year. They occur under wind conditions that cause waves to approach at an angle to the piers and are best developed when the swell is about 1–2 m. They are a product of the piers. Although they occur alongside all the piers, their shape is considered to be best alongside North Beach pier. They are located towards the seaward end of the pier (half to three-quarters of the way along) and are best developed at peak high tide moving towards low tide. It is generally believed that strong rip currents that move seaward alongside the piers influence the hollowness and intensity of the bowl wave.
- Shorebreak waves occur close to the shore. They range in height between 1 and 2 m and are best developed at high tide. They have similar characteristics to the ‘bowl’ wave in that they are hollow and intense. They occur most frequently in the summer months but can be found throughout the year. They do not appear to be influenced by the piers. Generally winds should be light or absent.
- Outside waves occur seawards or in line with the end of the piers. The best conditions for this wave are produced by swell generated in the winter months by southerly winds. The waves vary in height from 1–2 m running both left and right, but predominantly right owing to the dominant southerly swell direction. They occur along the length of the beachfront but with a better shape near the piers. Compared with the previous two waves, the outside wave is less intense. However, it provides a longer ride, in some case all the way to the shore. Near low tide the ‘take off’ point near the piers is known to become extremely hollow and critical. The critical part of the wave often produces ‘tubes’.
- Mound waves are the largest waves that occur along the beachfront. They are produced by the mound created by the dumping of dredged sand and are not recommended for the fainthearted. These waves occur with the onset of disturbed weather conditions at the end of winter. The wave lacks the hollowness and shape of the outside wave and assumes a spilling break. It works best at low tide and varies in height from 2 m upwards.

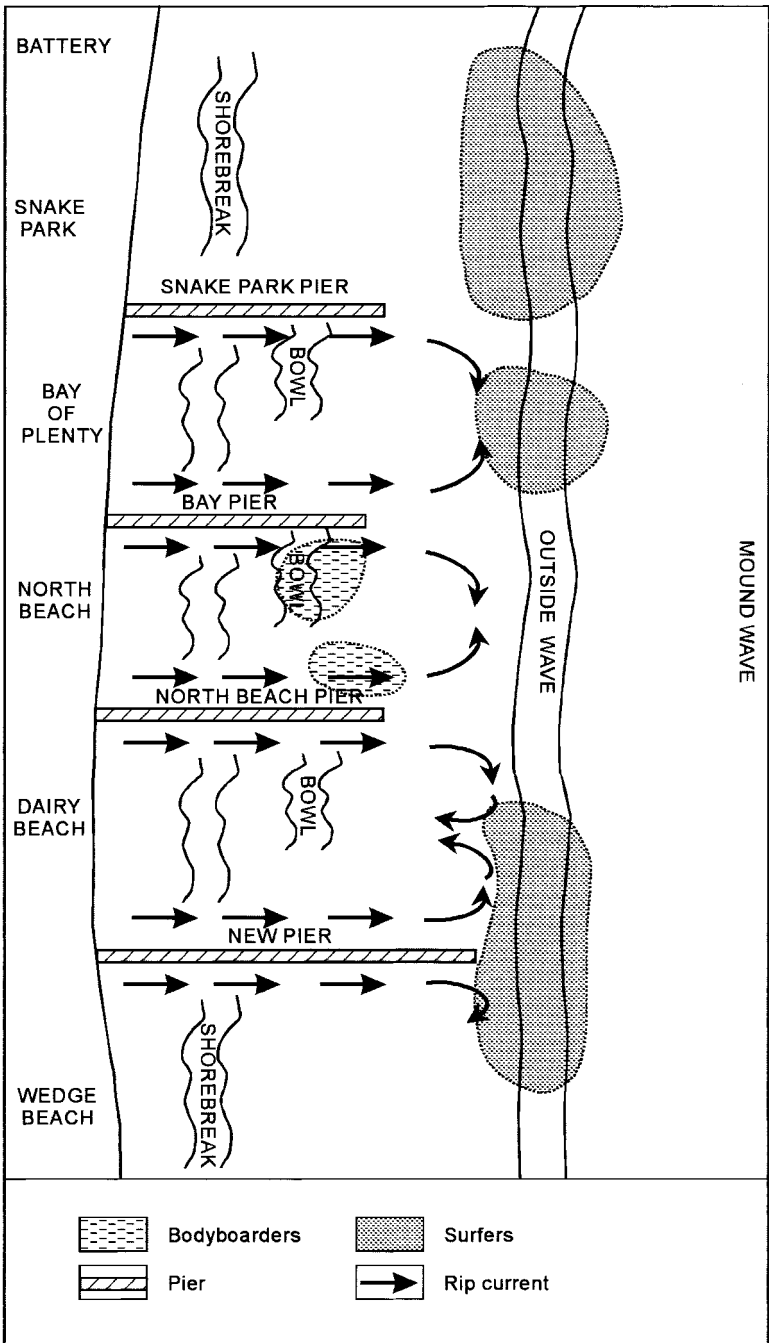


Figure 3 Surfing spaces in relation to preferred waves and pier locations.

- Reef waves occur at Limestone Reef adjacent to the submerged Vetch's Pier (Figure 2). Waves break on the reef when the swell is large, usually at the same time as the mound wave. This location is popular when the mound wave becomes too unruly. Reef waves are best developed at low tide. They are known for their hollow nature and vary in height from 1–2 m.

Given that wind direction and strength influences the shape and size of waves, respondents could be expected to show an awareness of the winds responsible for wave generation. Southerly winds were recognized to produce large swell associated with the passage of storms. Northeast winds that blow under fine weather conditions and, in summer, are strengthened by onshore sea breezes (Preston-Whyte 1969) tend to generate choppy near-shore waves. These were regarded as unfavourable for surfing. The most favourable conditions were linked with large swell and the presence of off-shore land breezes. These winds are well developed in winter, may persist for some hours after sunrise (Tyson & Preston-Whyte 1972) and effectively steepen the face of breaking waves. All respondents expressed a preference for surfing in the early morning to take advantage of these conditions.

Learning to cope with rip currents is also part of the surfer's experience. These currents commonly occur on shores that receive long swells and form when the return seaward drift of water is concentrated into a seaward-flowing current (King 1962). They are a permanent feature alongside each of the piers (Figure 3). All the respondents recognized and used these currents as a seaward conveyor if they surfed in the vicinity of the piers. The strategy is to remain in the current until carried to a position where it becomes possible to catch surfable waves. At that point surfers paddle at right angles to the current flow until they are free of its influence. Thereafter they avoid the rip because the current disturbs the shape of waves.

Given the use of rip currents as part of the surfing experience, insider knowledge of the speed and width of the current was detailed. All respondents recognized the continuous presence of rip currents on both sides of all the piers. All the explanations for these currents included the importance of wave size and the setting of the tide. With large waves and an outgoing tide the speed of the rip current was equated with a jogging runner. However, with smaller waves the speed diminishes to a slow walk. The width of the rip current was also perceived to vary between 2 and 5 m, being widest when the rip was strongest.

Socially informed behaviour

The survey showed that experience acquired through direct contact with the waves was communicated in social groups to become insider knowledge that enhanced the 'We' of a shared identity and exacerbated the

perception and definition of 'Others' as outsiders. This is little different from other sports that socialize participants (Donnelly & Young 1988; Green & Chalip 1998).

The issue of space and its control runs as a central thread through any attempt to understand how surfing space is constructed. As the politics of spatial differences raises issues of exclusion and inclusion, boundaries assume an importance by defining zones of control (Sibley 1995). A summary of survey data that sought to elicit respondent attitudes to a number of related issues is shown in Table 2. The table is based on questions that sought agreement or disagreement on whether respondents felt excluded from surfing spaces, whether surfers and bodyboarders used separate surfing spaces, whether they perceived surfing space to be scarce, whether certain spaces had special significance for them, and whether spaces were contested.

The erection of 'imaginary' boundaries is one way of attempting to reduce contact with the 'Other' while at the same time defining territorial occupation. Eighty percent of the respondents confirmed that they avoided certain spaces because of hostility they encountered by groups that claim territorial rights to these spaces (Table 2). These groups are perceived to have a strong sense of identity honed through displays of skill and knowledge in coping with formidable waves, and reinforced by their dedication and commitment to surfing.

Competence in riding waves is a prerequisite to group acceptance, but it is also necessary to know and abide by the rules of the sport. While the rules of competition surfing are stringent, recreational surfing appears to be governed by a single imperative: the person closest to the breaking part of the wave has right of way. Breaking the rule is called 'dropping in' and is committed when an individual catches a wave in front of someone who is already on it. Compliance with the rule assures conflict avoidance between individuals. However, intentional breaking of the rule by an experienced surfer can also be seen as a means of asserting power.

The sense of exclusion from certain spaces that is experienced by some surfers provides a reminder that surfer identity is a notion that is fraught with inconsistencies (Gupta & Ferguson 1992; Massey 1994b; Hall 1996; Yaeger 1996). One respondent summed up distinctions made between

Table 2 Sample population responses (%) to behavioural issues

	<i>Avoidance due to sense of exclusion?</i>	<i>Separation of spaces by surfers?</i>	<i>Scarcity of surfing space?</i>	<i>Surfing spaces are special?</i>	<i>Spaces contested by surfers?</i>
Agree	80	70	68	97	92
Disagree	20	30	32	3	8

surfers on the basis of experience and temperament: 'You've got the "grommets", the "old bullets", the "badass" locals and then the "in-betweeners", the normal guys who don't slot into a specific category'. The term 'grommet' refers to beginners of all ages while 'old bullets' includes the older generation of surfers. The 'badass' locals command respect by virtue of the time and dedication that they invest in surfing their local break. They are highly protective of their surfing space and may resort to violence to retain possession.

Surfers also differentiate by type of board used. While all ride the waves and may wish to be known as surfers, the 'stand-up' surfers jealously claim the title. Thomas (2000: 52) comments on the tension between the two groups: 'If I paddle my bodyboard out I get respect from the bodyboarders and glares from the surfers. I paddle my surfboard out and I get respect from the surfers and glares from the bodyboarders'.

The distinction between surfers and bodyboarders is, to a large extent, determined by the shape of waves that they surf. This was recognized by 70 percent of the respondents (Table 2). Bodyboarders prefer hollow, steeper breaks. Their preference is for the bowl waves that famously occur at North Beach and Dairy Beach. They also ride the big hollow outside waves that develop seawards of the piers. Surfers prefer waves that run for long distances with flatter wave faces. The long-walled outside waves that are found breaking under southwest wind conditions meet these requirements.

Territorial behaviour in surfing spaces is also linked to its perception as a scarce resource. The relatively small area used by surfers in the 7 km long shark-protected beach, leads to overcrowding. Table 3 shows that Dairy Beach and North Beach are the most frequented, followed by the Snake Park Beach and Battery Beach. Sixty-eight percent of the respondents (Table 2) expressed frustration at having to share crowded waves with others, particularly when unknown visitors diminish the surfing space. Wesemann (1998: 6) recognized the tension that accompanies the arrival of non-locals:

Sure everyone wants to protect and preserve their spot (for, let's be honest, selfish reasons). Sure it's frustrating for the 'locals' of popular breaks to be inundated for 2 to 3 weeks every year by foreign tourists. Irritating yes, but no reason to get verbally or physically aggro.

Table 3 Total surfer numbers in April 2000 at major surfing beaches

<i>Time</i>	<i>Addington Beach</i>	<i>Dairy Beach</i>	<i>North Beach</i>	<i>Bay of Plenty Beach</i>	<i>Snake Park & Battery Beach</i>
07:00	94 (7%)	405 (30%)	393 (29%)	112 (8%)	341 (26%)
17:00	234 (13%)	590 (33%)	291 (16%)	229 (13%)	462 (25%)

The attachment to surfing space was found to be widespread with 97 percent of respondents claiming a strong identification with their favourite surfing space (Table 2). These spaces were perceived to be special for a number of reasons: they were associated with good memories, they offered a sense of community and belonging and they frequently produced waves favoured by the respondent. It is, therefore, not surprising to find that 92 percent of respondents agreed that surfing spaces were contested (Table 2), with the use of prime surfing spaces dependent upon group acceptance. Dairy Beach and North Beach were regarded to be the most exclusive surfing spaces. Intruders into these spaces are likely to experience intimidation of various forms, including the threat of violence. In contrast, the surfers that frequent Addington Beach, Battery Beach and Snake Park Beach were perceived to be more tolerant of those with lower skill levels.

Construction linkages

The recognition that surfers view their sport from the combined perspective of related realities does not in itself explain how they construct space. What is needed is a way of explaining how these realities combine to inform the construction of space. The direction of movement between realities is relevant to this understanding. If the location of surfing space is regarded as a problem that requires resolution, the linkage between realities will connect the reality that the surfer takes as given with the reality where the solution is perceived to lie (McWhinney 1992).

The path of space construction begins in unitary reality (Figure 4). Here is located in the minds of surfers wave shapes that conform to the image of a perfect wave. This image, symbolized in countless surfing magazines, is a source of ongoing inspiration. As surfers acquire sensory-derived knowledge gained from surfing under many different wind and wave conditions, local wave environments are measured against the image. This triggers the desire to identify surfing spaces that compare with the perceived ideal.

If only one surfer existed the construction path would be completed when the individual identified the most suitable surfing space. However, social groups share sensory-acquired information. The path of construction now moves from sensory reality into the domain of social reality. This second stage requires participative interaction between individuals in order to agree on when and where to surf. There is also the need to reach consensus on symbols, values and rules that provide order in these spaces. The path of space construction leads back to sensory and unitary reality once consensus is reached on the location of the surfing spaces that most closely meet the perceived ideal and the rules to order them.

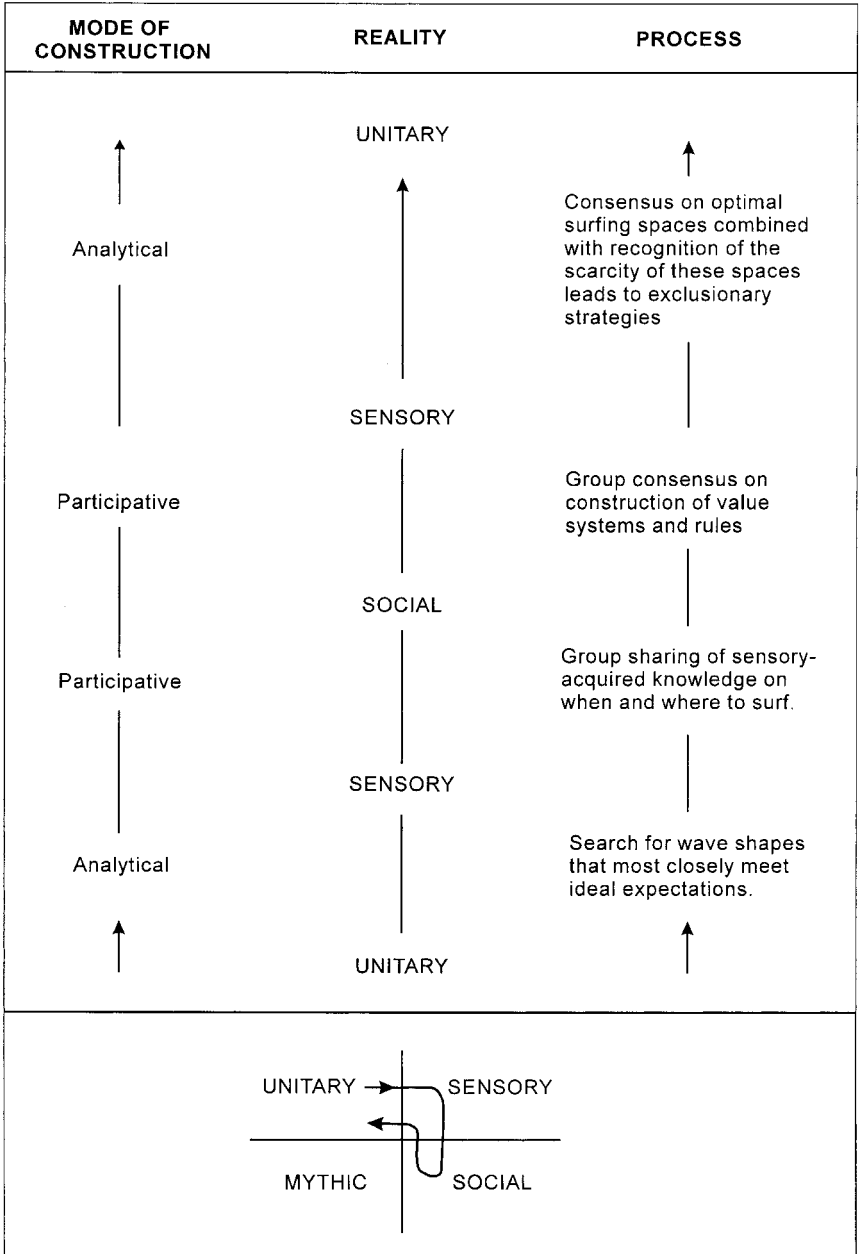


Figure 4 The path of surfing space construction.

Survey responses to reasons for the choice of surfing space revealed the connections between social and sensory realities (Figure 5). Surfers at Addington Beach usually were the less experienced. They admitted that they were attracted by perceptions of safety associated with smaller waves, and the lack of competition for surfing space. In contrast, the waves at Dairy Beach and North Beach were perceived to be large and conducive to pushing personal limits and increasing surfing skills, while the social attitudes were competitive and exclusive. The Bay of Plenty was perceived to have good wave configurations and a social attitude that was less hostile to outsiders. Moving northwards, Snake Park Beach and Battery Beach was perceived to be less crowded, socially more friendly and relaxed and with good waves.

Many of the surfers interviewed could bring to mind the names of local individuals who in the past had acquired fame in the sport. They achieved this distinction having pioneered new ways of riding waves, created new boards, opened up new surfing areas, or dared to ride formidable waves. In the theory used here these individuals would occupy the space of mythic reality. Such individuals tend to be unconstrained by the limits of existing beliefs and behaviour and become the creators of new ideas and surfing strategies that become accepted by the surfing community. However, despite the reputation of previous surfing ‘mythics’, their influence on the contemporary construction of surfing space could not be identified in the sample population.

Conclusion

The theory used here assumes that beliefs and behaviour are constructed out of four dimensions of reality defined as unitary, sensory, social and mythic. What individuals and groups take to be real is constructed out of mixes of these reality components. The application of the theory to the construction of surfing space took place in two stages. First, reality

Addington Beach	Dairy Beach	North Beach	Bay of Plenty Beach	Snake Park Beach	Bay of Plenty Beach
Safe; smaller waves; ideal to learn; no crowds	Competitive; exclusive; good waves when surf is big; sense of group identity and community	Competitive; exclusive; good waves when surf is big; sense of group identity and community	Good running outside waves; less hostile atmosphere than North and Dairy Beach; good bowl waves;	Less crowded; good bowl waves; sense of community; breaks consistently big	No crowds; friendly social climate; uncompetitive; fun waves

Figure 5 Summary of attitudes towards surfing spaces.

components applicable to the construction of surfing space were identified. Second, linkages between realities are shown to follow a path of space construction.

The reality components were shown to have a number of features.

1. Images of the perfect wave for surfing, obtained from sources such as magazines and movies, described the archetypal surfing environment. This was located in unitary reality. These images were compared against sensory-derived knowledge gained in surfing waves that occur locally.
2. Survey data revealed that sensory-derived knowledge about the shape, size, frequency and location of waves informed decisions on where and when to surf. Surfers were shown to possess a depth of understanding about local waves and currents, particularly in relation to the preferred waves for surfing. Waves named bowl, shorebreak, outside, mound and reef waves referred to the configuration and location of these preferred waves. This 'insider' knowledge included an understanding of wind and weather conditions associated with the waves, their expected wave heights, and their variation with tides. Detailed knowledge about the dimensions and strength of rip currents was also shown to exist.
3. Experience gained through direct contact with the waves was communicated to groups. This usually involves rites of passage that demand evidence of surfing skill, knowledge about waves and currents and respect for the rules governing the sport. In this way participants are socialized into a 'subculture' that is at the same time companionable, competitive and exclusive. Through the signification of suntanned bodies, sun-bleached hair, clothing styles and use of 'insider' vocabulary, surfers proclaim their affiliation to a surfer identity. Acceptance into groups takes place through a process of gradual integration. Newcomers must demonstrate dedication and commitment to the sport. Common rules and etiquette must be observed rigorously. The decision to ride a wave incorporates respecting the rights of others in the immediate vicinity.
4. While the influence of individuals who operate out of a mythic reality may be important in some situations, this was not evident in the survey population.

Surfing space cannot be constructed out of a single reality: it requires a combination of realities that are linked by problem-solving initiatives. The path of construction begins in unitary reality through the imagery of the perfect wave. The recognition of wave conditions that conform most closely to the ideal is constructed from sensory-derived knowledge acquired under local wave conditions. The path of space construction moves from sensory to social reality when this knowledge is communicated within social groups. The construction path reverses when surfing groups begin to create rules and values that apply to surfing spaces where waves are believed to conform most closely to the image of the perfect wave.

The recognition of differences in the concepts of reality and the linkages between them provides a way of explaining how individuals and groups construct the world around them. The theory structured around these concepts provides an instrument for understanding the process by which surfing space is identified, constructed and contested.

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Biographical note

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Résumé: Constructions d'espaces de surf à Durban, Afrique du Sud

Les surfers de Durban, en Afrique du Sud, ont tendance à se regrouper en mer en quelques espaces en face des plages. Alors que cette activité semble avoir lieu dans un environnement social à la fois sociable, compétitif ou exclusif, la façon dont l'interaction d'habitude robuste avec l'environnement matériel contribue à la construction de ces espaces n'est pas évidente au non-participant. Une étude révèle que les surfers construisent de tels espaces à partir d'images d'un environnement normative de vagues et de pratiques et processus qui sont à la fois sensoriels et sociaux. Les images de la vague parfaite qui créent cet environnement normatif recherché par les surfers se trouvent dans les magazines de surf et autres médias. L'expérience vécue des sens dans les vagues procure la connaissance de la forme des vagues, des vents et des courants. Les attitudes et la conduite des individus comme des groupes, dans les espaces de surf, sont construits socialement autour de questions d'identité et d'exclusion. L'évolution de la construction d'espaces de surf lie des images de la vague parfaite à la connaissance des conditions locales de formation de vagues obtenue sensoriellement et à des attitudes construites socialement sur l'utilisation de ces espaces.

Mots-clés: surf, théorie de la construction, construction d'espaces, connaissance de l'environnement, identité, Afrique du Sud

Zusammenfassung: Konstruktion des Surferraums in Durban

Die Surfer in Durban, Südafrika, zeigen eine Tendenz, sich an einer Anzahl unterschiedlicher Örtlichkeiten abseits der Badestrände zu sammeln. Während dieses Aktivitätsmuster in einer sozialen Umgebung zu funktionieren scheint, welche als gleichzeitig kameradschaftlich, wettbewerbsorientiert und exklusiv beschrieben werden kann, ist die gewöhnliche raue Auseinandersetzung mit der materiellen Umwelt und deren Beitrag zur Konstruktion des Surferraums aber einem Außenstehenden nicht offensichtlich. Eine Untersuchung enthüllt, dass Surfer ihren Raum aus Vorstellungen einer normativen Wellenumgebung sowie sensorischen wie sozialen Praktiken und Prozessen konstruieren. Vorstellungen von der perfekten Welle, welche die normative Wellenumgebung beschreiben, werden dabei aus Surfermagazinen und anderen Medienquellen entnommen. Die Kenntnis von Wellenformen, Winden und Strömungen ergibt sich aus der sensorischen Erfahrung in den Wellen. Individuelle wie gruppenweise Ansichten und Verhaltensmuster in den Surferräumen konstruieren sich sozial um Themen wie Identität und Ausschluss. Der Weg der Konstruktion des Surferraums erweist sich dabei als Verbindung des Images von der perfekten Welle mit der sensorischen Erfahrung der örtlichen Wellenbedingungen sowie sozial konstruierten Ansichten über die Nutzung dieser Räume.

Stichwörter: surfen, theorie der konstruktion, raumkonstruktion, umweltwissen, identität, Südafrika