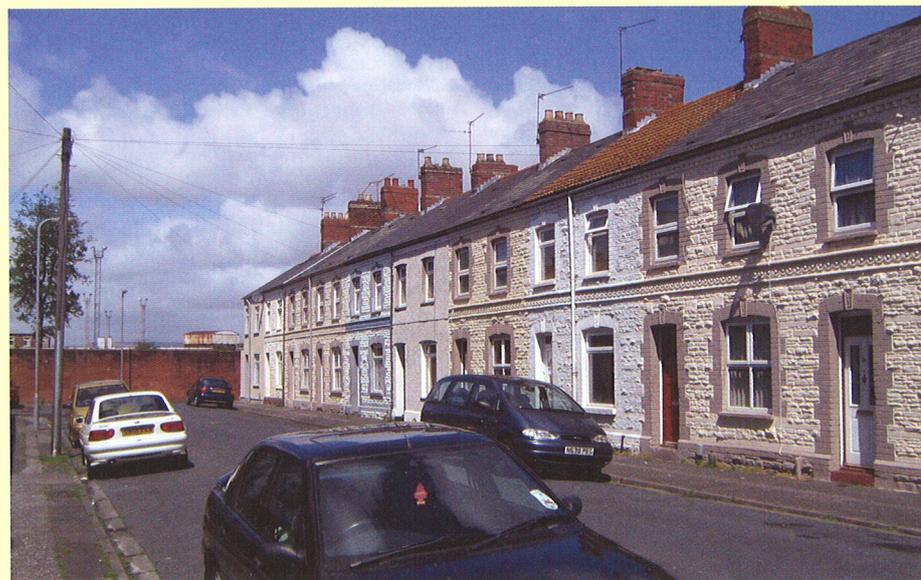


THE SOCIAL LIFE OF SOME STREETS

Mike Biddulph compares home zones and traffic calmed residential environments



INTRODUCTION

This research work funded by the Urban Design Group in 2010 is starting to highlight the extent to which home zones can promote social activity within street space. The introduction of home zones has always been motivated by a desire not only to reduce the impact of cars on residential areas, but also encourage or create space for other types of activity. Research has so far typically focused on exploring residents' responses to completed schemes, as well as also the normal assessments of traffic behaviour (Biddulph 2010). Results have found home zones to be well received and safe. Until now, however, research into such environments hasn't provided clear evidence that they are otherwise used differently from more traditional layouts.

In a study of UK 20 mph traffic calmed zones Hodgkinson and Whitehouse (1999, p. 59) concluded that traffic calming alone didn't change how streets were used, and that despite reducing vehicular speeds, stated that 'there has so far been little impact on the function of the streets in the zones.' By contrast Eubank-Ahrens (1987), in a study of two home zones in Hannover, found that the schemes allowed for a proliferation of types of play, that children gained more contact with adults (not possible in playgrounds or other isolated play facilities), that play and verbal communication expanded spatially, and involvement with the physical environment generally increased, making the streets livelier. Using new streets emerging in the UK, this research aimed to explore whether new home zones were also resulting in such changes to the patterns of street life.

THE STREETS

The Urban Design Group funded work which allowed observations of nine streets from across the UK. There is not space here to reflect on the results from all nine streets, but the results from two are particularly interesting. These streets are directly comparable being a few streets apart in an area of Cardiff. They were both originally terraced bylaw streets, but as a result of renewal efforts in the wider area, they now have similar built forms and populations, but different street designs.

Street One was recently remodelled using urban regeneration funds. As a result of community participation, this

← Street One
 ↙ Street Two proposals and before works

↓ Street Two after works
 ↓↓ Time lapse cameras in situ
 ↓↓↓ Comparing people's activities in the two streets

through street has been calmed with a series of speed tables and build-outs, tree planting and planters. The form of the street, however, retains a clear distinction between roadway and pavement, and a post-occupancy study shows that the work has been popular.

Street Two was closed off at the turn of the century when the Council built what became unpopular maisonettes at one end. The result was a bylaw street with a wall across its end. The maisonettes have since been demolished and forty six new homes have been built around a home zone style treatment, with a paved surface, tree planting and gate posts highlighting the start of the treatment. Although opened to pedestrians the street remains closed to through traffic. Critically a turning space has been retained at the point where the wall used to be. The result is a street of two halves, with one end being a traditional bylaw street and the other a form of home zone.

THE METHOD OF STUDY

The streets were both observed for a twenty four hour period using time lapse cameras mounted on lamp posts. These cameras took pictures every seven seconds. They were used because they would create a permanent record, but also because they allowed the research to remain hidden from residents who may otherwise alter their behaviour if people stood around in the street for long periods of time. The resulting films provided unparalleled evidence of how residents actually use the street spaces. From the film a period of six hours between 15.00

and 21.00 was selected for analysis in detail. This was because during this period the differences between the streets were most evident. Counts were made of activity, but importantly, coming and going from cars was not included.

THE RESULTS

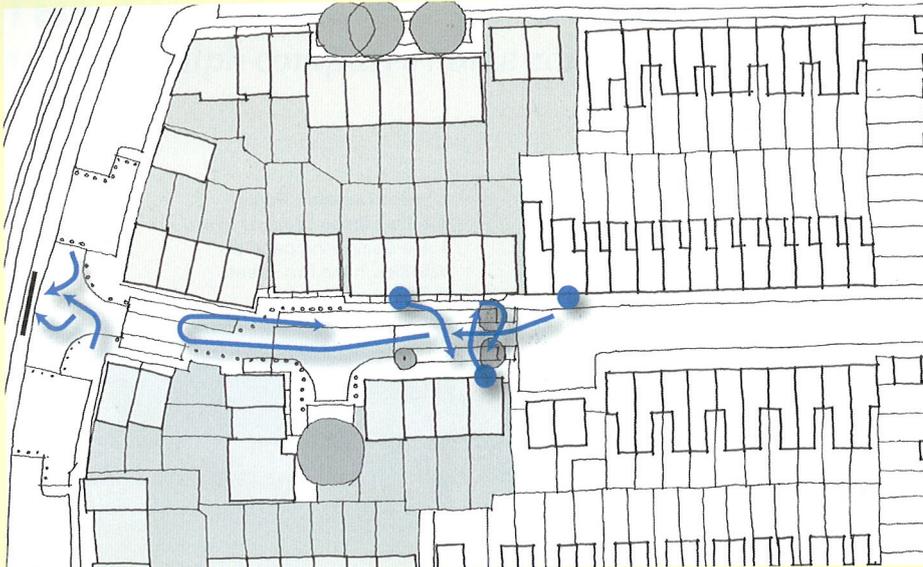
Street One, the through street, was used by 94 cars. Street Two, the home zoned street, was used by 124 cars despite not being a through street. Importantly, many of these cars used the street more intensively to manoeuvre, but many turned in the space half way down the street in front of the home zone. The table shows the number of people engaging in different types of activity and for how long they did it. Both streets had a similar number of adults passing through briefly. The home zone had more children (32 compared to 6) and teenagers (19 compared to 4) also passing through briefly, although this might reflect the position of the street in the wider network. Importantly the home zone had thirteen children who stayed in the street for longer, compared to no children in the other street. How long they stayed will be discussed later, but they were all involved in active play. The home zone had twenty adults who spent a while in the street (about three minutes) and two who stayed for longer. This compares to only seven who stayed for a while in the traffic calmed street. In the home zone adults generally hung out and talked to or observed the children playing.

The numbers only give one impression of the streets. It is also important to



reflect on for how long the streets were occupied. The charts show time lines for Streets One and Two which show when the streets were occupied. In sum the children played in the home zone for 2 hours and 41 minutes. During this time no children were seen playing in the other street. In combination with the other resident activity, the time lines confirm the intensity of street activity in the home zone. If we map where the children play, we can see that they play in the home zoned area beyond the gate posts, but critically after the car turning area. These children played with balls, bikes and scooters, but also just hung out, and used the whole width and length of the space,

	Time in the street						Necessary or optional activities						Social activity			
	Briefly		A While		Longer		Passing through		Active Playing		Hanging Out		Talking		Observing	
Street	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
Pre School Children	3	2	3	2	-	-	5	2	-	1	1	-	1	-	-	-
Children	6	32	2	-	-	13	6	32	-	13	2	13	7	13	-	13
Teenagers	4	19	2	1	-	-	4	19	-	-	2	-	6	6	-	3
Adults	100	94	7	20	-	2	99	96	-	-	8	17	20	21	-	9



← ↑ The map and photograph show play patterns
 ↙ ↘ The occupation time charts for Streets One and Two

despite the coming and going of cars using that end of the street. Adults and teenagers similarly often used the centre of the street for passing through before returning to the pavement as the environment changed.

CONCLUSIONS

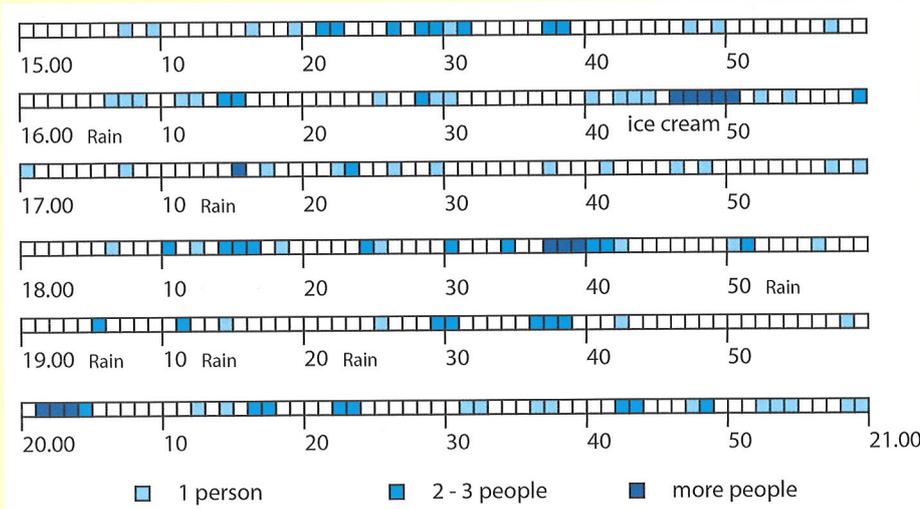
This research supports the view that home zones can result in greater intensity

of activity, and in particular children's play, when compared to merely traffic calmed streets. These streets are closely comparable in terms of form and population, with the only significant difference being the street designs. Any differences in use must therefore be largely attributable to the designs of the streets. Thirteen children played and

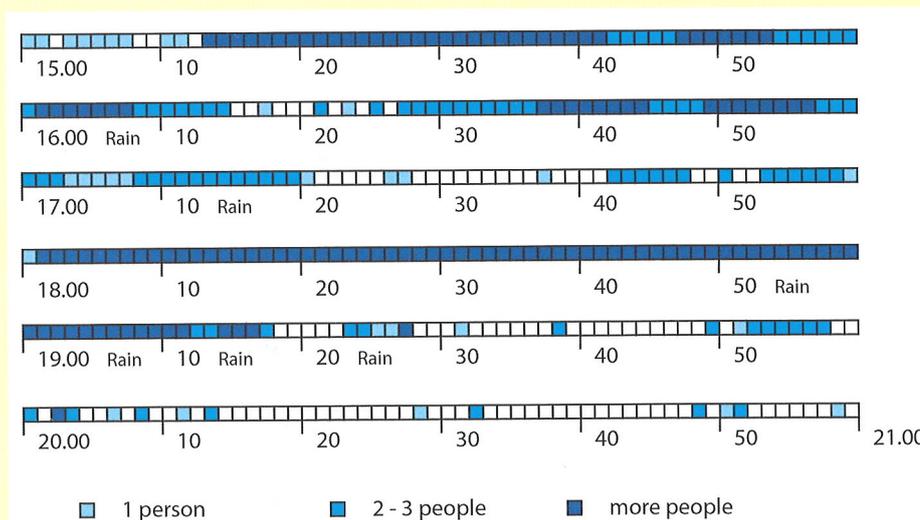
socialised in the home zone across its entire area for very long periods of time. This compares to no equivalent activity in the traffic calmed street. Children were the main beneficiaries of the treatments, although adults who were also frequently seen outside for a while engaging in forms of social activity. The design features were well interpreted by the home zone residents with children playing and hanging out across its entire area. This is despite the relatively straightforward nature of the scheme.

Additionally the activities of the children seemed to be constantly monitored due to the close relation between homes and street spaces. The turning space in the centre of the street seems also to be significant, as it protected the home zone area from incursion by many cars which otherwise were in the street. Despite being a product of an unusual history such a feature might be considered in new designs where similar forms of activity might be considered appropriate.

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Street One



Street Two