

STREET PATTERNS IN DARTMOUTH: 1941-2006

OWEN McCABE / READING THE SUBURBS / WINTER 2011

INTRODUCTION

This paper presents findings concerning street patterns in Dartmouth, Nova Scotia from 1941 to 2006. It utilizes illustrative representations of Dartmouth's streets in 1941, 1962, 1985, and 2006 to enable understandings of not only the spatial consistencies at four distinct points in history, but also, the qualities of the streets and spaces being produced and reproduced during four periods of time: pre-1941, 1942-1962, 1963-1985, and 1986-2006. Issues of growth, diversity, and change are explored within the context of contemporary theory on streets and suburbs through the observation of the historical street patterns and periods of construction.

METHODS

To draw conclusions concerning growth, diversity, and change, a sense of the sequential historical conditions was necessary. The Halifax Regional Municipality's digital dataset from 2006 acted as a starting point. Maps of Dartmouth from 1941, 1962, and 1985 were scanned and georeferenced to the 2006 dataset. From here, streets were subtracted or shifted from the base layer to represent their historical condition. However, the results are representations subject to error on account of the HRM's dataset, the possible inaccuracy of the historical maps, and the potential flaws in the process of subtracting and shifting streets. Having said that, the representations produced are more than sufficient for study.

With the historical representations produced, a review of theory on streets and suburbs provided a basis for observation and analysis - both of which are found below.

STREETS AND SUBURBS IN THEORY

The following is a brief examination of thought concerning streets and suburbs. It provides the theoretical basis from which the findings regarding Dartmouth's streets are understood.

THE STREET: FORM AND MEANING

In the foreword to *Streets: Critical Perspectives on Public Space* (1994), the authors offered "A Tribute to Spiro Kostof" beginning with the assertion that: "streets are the primary ingredient of urban existence," their shapes and patterns providing the "structure on which to weave the complex interactions" of the built and the human (p. 1). As J.W.R Whitehead - echoing Kostof's assessment of form as a 'receptacle of meaning' - said: "each society leaves a mark on the landscape, creating forms that reflect the aspirations and problems of the day." Certainly, meaning can be interpreted from form - this paper undertakes this aim.

SUBURBAN MYTHS

The realities of suburban meaning are often obscured by myth; many authors are quick to address the prevalence and pervasiveness of this condition. The views that perceive the suburban as uniform, bland, and monotonous (Harris & Larkham, 1999), as a infinitely interchangeable generic templates (Lacroix, Luka, & Vachon, 2000), and as formless, timeless, and 'other' (Griffiths, Haklay, Jones & Vaughan 2009) persist despite their increasingly broad theoretical rejection (Ethington & McManus, 2007). This paper too, provides more evidence for the rejection of these suburban myths.

THE STUDY OF SUBURBS

In their paper "Suburbs In Transition: New Approaches to Suburban History," Ethington & McManus propose a study of suburbs that places importance on longitudinal understandings.

This is echoed by, among others, Sheer (2001) who proposes urban morphology - “the study of the physical form of cities” (p. 28) - as an approach, and, by Stanilov (2004) who asserts the need for analysis at both macro - societal processes and regional contexts - and micro - local processes of production and reproduction - scales. This paper engages, in an albeit limited way, this approach to the study of suburbs.

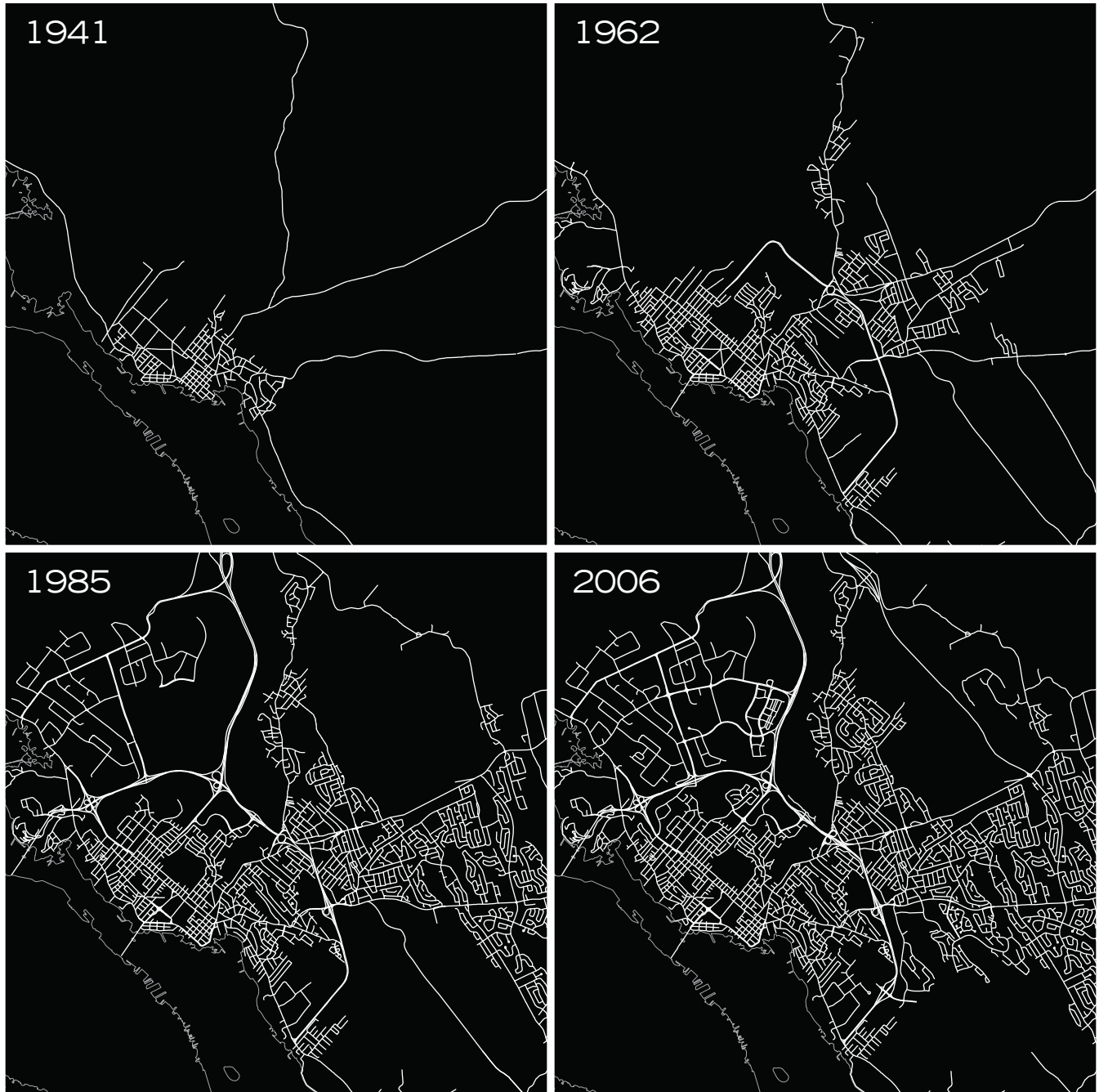
FINDINGS

The following section presents findings concerning growth, diversity, and change in Dartmouth’s street patterns from 1941 - 2006.

GROWTH

In *Streets & Patterns* (2004) Stephen Marshall speaks of the “revolution” which occurred in the second half of the twentieth century as the automobile and its infrastructures became the defining elements of city form. The impact of this change can be read on Dartmouth’s landscape: the most striking temporal pattern that appears is automobile-facilitated growth (see Figures 1 & 2 on pages 4 & 5). Fueled first by the opening of the Macdonald Bridge in 1955 and the construction of the first segment of the Circumferential Highway in the early 1960s, and, fueled further by the opening of the McKay Bridge and the second segment of the Circumferential Highway in 1970, Dartmouth sustained a high rate of growth in the post-war era and beyond. If Whitehead’s ‘mark on the landscape’ is interpreted at this regional level, the influence and meaning of the social and economic forces which produced post-war expansion can be read with clarity in the appearance and subsequent dominance of street patterns produced for automobile usage.

FIGURE 1: STREET PATTERNS - DARTMOUTH, 1941, 1962, 1985, 2006



NORTH
↑
1:1500

FIGURE 2: STREET PATTERNS - DARTMOUTH, 1941-2006



BUILT
pre-1941

BUILT
1942-1962

BUILT
1963-1985

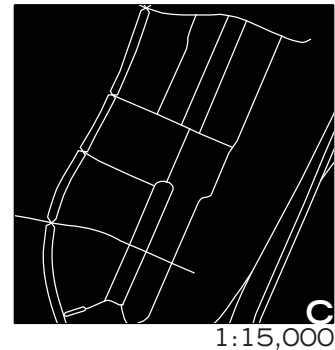
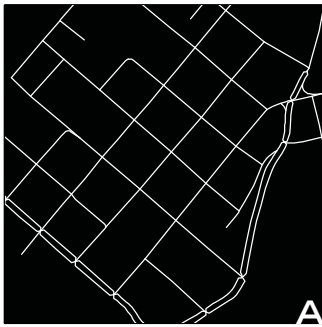
BUILT
1986-2006



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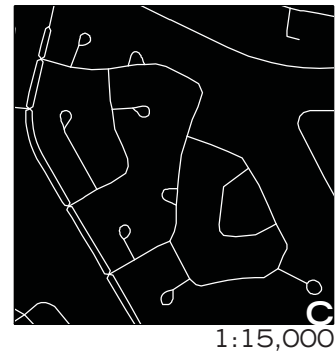
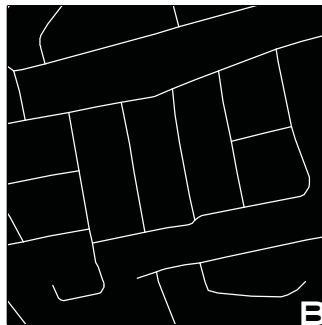
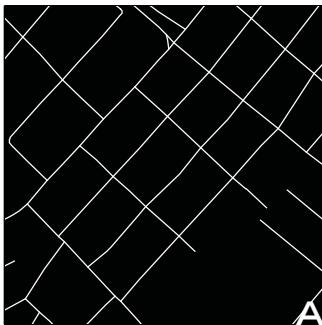
DIVERSITY

As stated previously, many city monotony as chief among suburban myths. However, street patterns in Dartmouth show diversity is dominant. Diversity related to land use - residential, industrial, commercial, and transportation - is a common mark of difference in street patterns. This diversity across Dartmouth is coupled with the diversity apparent within these categorizations themselves. For example, the diversity in the commercial configurations at Portland Street (A), Main Street (B), and Dartmouth Crossing (C) are indicative of the patterns of diversity that characterize Dartmouth as a whole.

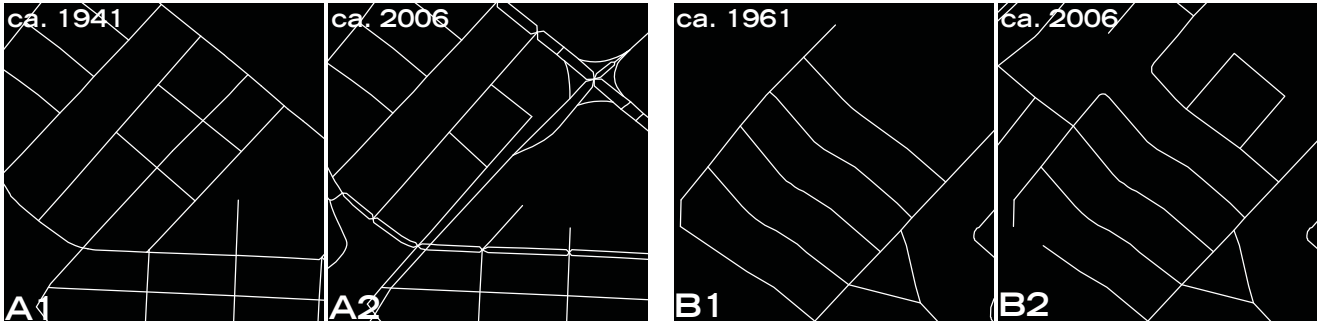


CHANGE

Change is considered in two ways here: production and reproduction. That is to say, first, change in street pattern style, and second, change in a certain street over time. In terms of changes in street pattern style, pinpointing a specific linear progression is difficult - the discussion of diversity certainly extends temporally. Having said that, looking generally at the historical development of residential street patterns in Dartmouth, one can observe a move from the grid (A), to grid-hybrids (B), to curvilinear streets and cul-de-sacs (C).



In terms of changes in a certain street over time, a few instances were found. From large-scale interventions: the imposition of the Macdonald Bridge (A1, A2) - to small-scale changes: the transformation of a corner into a fused grid cul-de-sac (B1, B2) - there is evidence of morphological shifts at the level of the street.



CONCLUSIONS

This cursory glance at Dartmouth's street patterns provides pertinent conclusions concerning growth, diversity, and change. The growth that characterizes the last 65 years of Dartmouth's street patterns is indicative of larger social, economic, and cultural meanings; the presence of diversity demonstrates the myth of uniformity; and the presence of change in both production and reproduction dispels conceptions of the suburbs as static. The fact that this study scarcely scratched the surface is cause for consideration. If diversity and change (in terms of both production and reproduction) can be seen from this short look at streets - the morphological element that Scheer (2001) asserts is in "a different temporal order from the [other] physical structures of the city" (p. 29) - then a deeper look is necessary. Studies that engage this approach in a more systematic and detailed sense could enhance our understandings of the diversity and complexity apparent in suburbs as they continue their continual process of growth and change.

REFERENCES

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Note: The maps listed above can be found in the Map Collection at the Halifax Public Library's Spring Garden location.

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