

THE AHMEDABADI POL HOUSE:
COURTYARD STRATEGIES IN A HOT-DRY/HOT-HUMID CLIMATE

M. Susan Ubbelohde
Department of Architecture
University of Minnesota
Minneapolis, Mn 55455

George Loisos
Minnesota Building Research Center
University of Minnesota
Minneapolis, MN 55455

ABSTRACT

The building stock of the dense center of Ahmedabad, India is comprised primarily of the pol house, a house type built for more than 300 years in this city. The houses are two to four stories in height with a small court open to the sky and party walls on either side. This paper discusses the thermal behavior, occupancy patterns and "operation" of a typical pol house through the seasonal cycles of hot-dry, hot-humid, and temperate-dry which characterize Ahmedabad.

1. INTRODUCTION

The city of Ahmedabad is located at 23.5° NL, inland from the Arabian Sea in the Indian state of the Gujarat (see Fig. 1). The seventh largest city in India, Ahmedabad was founded in 1411 by Ahmed Shah. The old city sits on the east bank of the Sabarmati River

and was surrounded by city walls in the late 16th century (see Fig. 2). Following communal riots in 1714, and continuing through the civil disorder of the 18th century, the houses built in the city were organized in dense neighborhoods consisting of a set of dead end streets entered through a single gateway¹. The residents of each neighborhood tended to belong to not only the same religion, but also the same caste or occupation group. The gate into the neighborhood could be closed for security and each house had capacity to store its own water and grains. These neighborhoods are called "pols" after the Sanskrit *pratoli* meaning gate or entry² and the houses in such neighborhoods are popularly known as "pol houses". The old city of Ahmedabad houses all religions and Hindus, Muslims and Jains all live in pol houses.

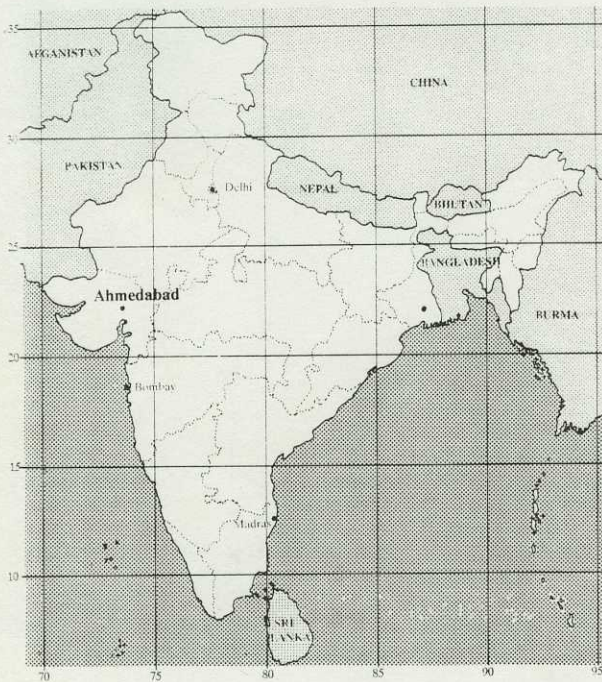


Fig. 1 Map of India.

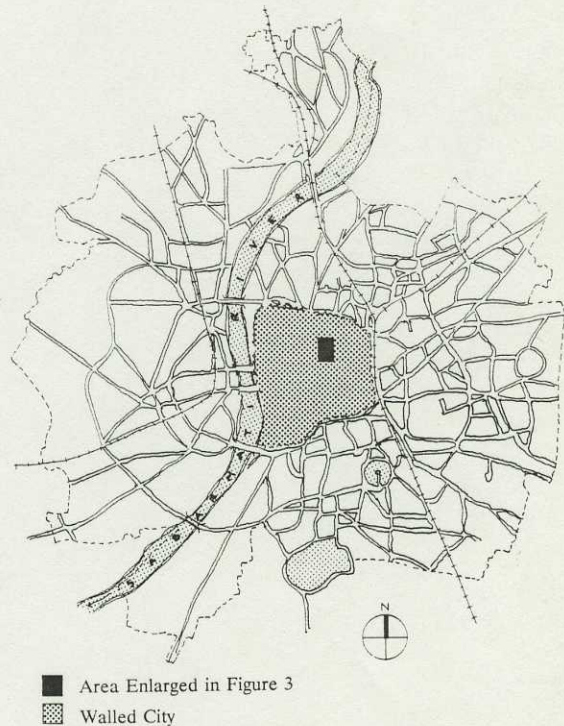


Fig. 2 Map of Ahmedabad.

