an objectification of the subjective. He discusses in Section iv the interpretation of perspective as a symbolic form by its various practitioners. There is no vacillation in Panofsky’s argument. He establishes at the outset that perspective is not veridical, he then attempts to describe the fate of a ‘veridical’ construction, and finally shows the logic of evolution to Renaissance perspective, in all its ambiguity.

Hollis never demonstrates that she understands Panofsky’s argument, having been misled by Wartovsky and her other secondary sources as to its proper interpretation. She continually interjects inappropriate arguments into her discussion—a long discussion of the division of the article into a ‘synchronic,’ mechanistic argument versus a later ‘diachronic’ one, where no such division exists; she refers to Wölfflin as the source for Panofsky on Hellenistic impressionism, when Franz Wickhoff’s Die Wiczen Gemälde (1893) is clearly the source. Hollis never mentions Kern’s articles on perspective which Panofsky cites frequently.

It is a thankless task to catalogue all the errors in this book. Apart from the horrendous writing (consider ‘speaks historicity,’ the misinterpretations, and errors concerning Panofsky, Wölfflin and Riegl, the astonishing number of quotations from secondary sources and the inability of the author to speak her own mind, Hollis makes the very error in interpretation which she accuses Panofsky of making in regard to works of art (Hauser is her source); an overreliance on philosophy. Panofsky provides much evidence of his sources in footnotes famous for their erudition and rare they are from philosophers. If Hollis had read carefully Friz Ringer’s book, The Decline of the German Mandarin, which she cites in her Bibliography, she would know of the structure of the German education system at the turn of the century. Phiiology still dominated the course of study, psychology was becoming autonomous from philosophy just as art history was becoming independent from history departments. Panofsky, by his own admission, was influenced by individuals in all these fields. Instead of portraying the real world, Hollis confounds her subject and us with a startling array of anachronistic and anachronistic parallels, as she hops from conceptual islands to conceptual islands in an archipelago of thought, surrounded by a sea of confusion.

CHANDRA MUKERJI From Graven Images: Patterns of Modern Materialism. New York, Columbia University Press, 1985, $12.00 (paper), $30.00 (cloth).

For the first time since the industrial revolution, we are in a position to look back at the receding culture of modern materialism. Computers, satellites and micro-electronics are changing our perception in the post-industrial world of an information society. While the negative effects of industrialism have made us sensitive to evolution and ecology, new technologies are introducing us to cultural frames of reference, which are radically different from the industrial patterns of modern materialism. In our so-called post-industrial world ‘modern’ is no longer contemporary, and people are beginning to disown the materialism which has led to pollution and destruction of the natural environment. Chandra Mukerji’s book, From Graven Images: Patterns of Modern Materialism, appears to be an expression of this reaction. It begins with concern for the problems of a ‘man-made’ world, and ends with the idea of using attention to their cultural origins as an antidote to the impulsive power of past assumptions.

In spite of the book’s claims and aspirations, the author appears unaware of her own identity with the patterns of cultural materialism. With economics and sociology as basic frames of reference, she is embroiled with the academic theories of a receding industrial age, and much of her book unwittingly contributes to its concepts, theories and assumptions. Writing in the shadow of figures like Karl Marx and Max Weber, she tends to ignore the alternate perspectives of other cultures and disciplines—such as cybernetics, information theory and neurology—in approaching the history of culture. The book is an enormous challenge to any writer. In claiming to be a ‘broadly synthetic work’ (dust-jacket) covering a wide range of materials and disciplines, it poses the problem or relating to a diversity of perceptions and backgrounds in its readers. From Graven Images: Patterns of Modern Materialism calls for a global grasp of five hundred years of history and a profound understanding of the major trends, shifts and transformations affecting the period’s cultural evolution. It also requires knowledge of cultures, both before and after the early modern period, in order to avoid the confusion of applying meanings to situations where they do not belong.

I was first fascinated by the prospect of examining the evolution of modern culture through its various manifestations in print. The picture of card players on the cover (Fig. 2) stimulated my imagination as an indication of print proliferating games, which embodied the dealing, speculation, exchanges, banking, profit and competition of early modern materialism. The image of cards also suggested sheet-printing as leaflets, posters, charts, newspapers, paper money, wall-paper and textiles in terms of the information flow of fashion, advertising, trade, finance, news and decoration. A glance at the table of contents increased my awareness of print as a commercial commodity, a form of investment and a source of information stimulating social change and industrialization. I thought of law books, dictionaries, encyclopaedias, catalogues, patents, copyrights, manuals and journals, and of their association with government, academies, museums, galleries, courts, shops and libraries. In contemplating the book, I was ready for a synthesis of developments establishing modern materialism in terms of its aims, values, language, concepts, style, knowledge, assumptions, structures and activities.

My expectations were unfulfilled. I soon discovered the book was more concerned with economics than with art, culture or history, and I was quickly frustrated by the lack of illustrations and basic information. I also discovered the author’s tendency to make sweeping statements of a startling nature without any apparent explanation, proof or justification. For instance, I was immediately confused by the assertion that ‘the hedonistic culture of mass consumption’ (p. 1) existed centuries before the existence of mass-media and the industrial means of mass-producing goods for the bulk of the population. In attributing mass-production to early printing presses, Chandra Mukerji appears unaware of critical mass and its relation to the history of technology. Printing became a mass-medium in the nineteenth century with the introduction of pulp paper and rotary printing.

The key to From Graven Images: Patterns of Modern Materialism appears to lie with its concept of culture. This happens to be materialistic, objective and deterministic. According to Chandra Mukerji, ‘Material culture is not located in the human mind’ (p. 15). She identifies it with meaning in material objects having the power to determine human behaviour. Carried a bit
further this could be a return to the animism of tribal societies, which saw objects as inhabited by spirits influencing the lives of humans. Having created a one-way model with power residing in the 'material culture' of objects, the author maintains that although the object 'shows the stamp of its creators and is known to people through their senses, it does not gain its autonomy through free will or the spontaneity of the subjective process' (p. 15). In spite of Chandra Mukerji's ambiguous arguments, it should be remembered that meaning - and by extension, meaning of objects - is determined by the perception of a given culture. Objects can manifest culture but not contain it, just as documents can record events but not contain them. To recognize the cultural influence of objects is one thing; but to assume that culture resides with objects rather than people is another.

Whether the author's intention is to redefine the meaning of 'culture' in general, or of 'material culture' in particular, is not clear, and whether her use of the word 'material' relates to a certain type of culture or to a certain aspect of culture is confusing. Having dismissed the organic origin of the word – which relates to cultivation – and having demolished its traditional association with the non-material world of ideas, beliefs, values and perception, the writer leaves us with the confusion of an unexplained frame of reference. Perhaps she sees no need to explain an approach, which to her, fits easily the traditional, sociocultural concept of culture. How serious Chandra Mukerji is in maintaining her position is hard to say. In selecting case studies 'to indicate how the economic changes of early capitalism were embedded in a materialistic culture' (p. 17), she adds inconsistently the 'culture' of rational calculation to the 'culture' of capital and consumer goods, thus contradicting her previous statement that 'Material culture is not located in the human mind.'

Chandra Mukerji rightly asserts that print is an essential part of a wider whole, but her weaknesses lie largely in her relation to context. For instance, she tends to ignore the essential requirement of money as an environment for the evolution of modern materialism. Its patterns evolved as a result of trade and commerce at a time when the bulk of the population lived in a relatively cashless, agrarian economy. The author misleadingly points to the frivolous purchases of pins, lace and printed pictures by an unspecified number of peasants and labourers as evidence of sixteenth-century mass consumerism. Chandra Mukerji also fails to recognize the world context of economic change, including the flood of gold and silver into Europe, the use of hard currency for the purchase of imports from India and China, and the multi-national role of East and West India companies. She also ignores the effects of war between competing nations and the dominant role of France as a cultural, political and commercial power in the seventeenth and eighteenth centuries. As a result her case histories tend to jump from one context to another with some confusing and distorting effects.

Chandra Mukerji's book could well have been a set of academic papers, from which she decided to construct arbitrarily the patterns of modern materialism. Her separate 'case studies' cover 'innovations in consumer goods,' 'development and spread of capital goods,' 'rational calculation as a pattern of thought' and 'the role of these three types of materialism in the growth of the eighteenth-century British cotton industry' (p. 17). Chandra Mukerji makes some interesting observations, and she is to be complemented for drawing attention to the role of print in breaking the strategic monopoly of information in the sixteenth century and for looking at the combination of economic, cultural and technological factors leading to the mass-production of calico in eighteenth-century Britain. However her approach ranges from vague generalizations to painstaking detail, and the arbitrary sampling of her case studies leaves the impression of an elephant constructed from the observations of five wise men blindly feeling different parts of its body.

The book lacks cohesive structure, and its approach makes it difficult to focus on the integrative patterns of early modernism. It seems strange that the concept of progress is never mentioned. The author emphasizes the importance of fashion in reference to cotton, but ignores its fundamental relationship to the concept of modernism. Interestingly enough, in the sixteenth century, the word 'modern' was associated with 'mode' or the prevailing fashion of the day. By the seventeenth century it symbolized the advances of contemporary Europe in the great debates of the Ancients and the Moderns, touching on literature, art, science, technology and knowledge. In portraying print as a commodity, Chandra Mukerji fails to recognize it as an information environment turning objects, possessions and wealth into the words, numbers and images of books, money and pictures. The early modern world is characterized not only by its materialism, but also by its transference of the material world into the abstractions of print.
This book can be praised mostly for the evocative and provocative power of its title. It suggests a wealth of illustrations and information coupled with a profound understanding of art, culture and history on a global scale over a period of five or more centuries. In relating to pre-industrial, industrial and post-industrial contexts, it strains the limits of any particular discipline or writer. The book is not a broadly synthetic work, and Chandra Mukerji would have been well-advised to clearly establish her own frames of reference in order to avoid disappointment or confusion. It is perhaps unfair to criticize the author for her theorizing, bias, omissions and distortions. Although she may present a bird's-eye view of her own nest, she raises nevertheless the challenge of an intriguing book yet to be written.

RICHARD H. HILL
Ontario College of Art


Sociologists and anthropologists step in, it would seem, where architectural historians fear to tread. Their quest is the uncertain territory of cultural, sociological and political determinants upon design: their achievement also uncertain, in part due to the chosen historiographical and linguistic formulae - quasi-sociological is perhaps the best definition - employed by a number of the contributors to this collection of essays. Both are epitomized nicely by the editor's reference in the Introduction to the 'diachronic' and 'synchronic' approaches to the evolution of certain building types. These terms are supposed to describe the concepts of analysis through time and across cultures, but rather hinder than elucidate understanding.

In this Introduction, Anthony King does acknowledge some of the disputed aspects of such responses to the history of architecture. He explains the purpose of the nine essays as the exploration of the relationship between social forms and built forms, between the society and the built environment it produces. A sojourn of five years at Delhi, confronting daily the differences between the ancient Indian city and modern Imperial capital, quickened his fascination with the cultural and sociological factors that generated the contrasted architectural reactions to the same climatic conditions. The anthropologically based writings of Amos Rapoport, notably House Form and Culture (1960), provided a new mode of addressing the subject he argues, together with the urban sociological studies of the 1970s - acknowledged to be essentially theoretical and often Marxist in bias - and historical works like Nikolaus Pevsner's History of Building Types (1976). This last, however, is judged to be preoccupied with major edifices and architects, and hence with individuality and style. Thus he sought to publish a series of essays which would not only examine the impact of social values on design but also establish 'new methodological approaches for the understanding of the built environment,' and even to suggest 'a preliminary framework for the understanding of the built environment both through time and between different cultures.' Nevertheless, in garnering contributions King decided to confine the historical perspective to modern Western industrial society, mainly British, the major exception being Amos Rapoport's temporality and geographically free-ranging 'vernacular architecture and... cultural determinants of form.'

The first essay by Andrew Scull founds the theme of the book. He seeks to interpret the design evolution of the Victorian Lunatic Asylum in terms of the changes in the social comprehension and organization of madness 'from a vague, culturally defined phenomenon into a uniquely and essentially medical problem.' The nineteenth-century predilection for categorization and systematic solution (an outgrowth of the empirical analysis and social idealism of the Enlightenment) is held to have created, then compounded, the asylum and the specialization of the psychiatry within the medical profession. The advantageous professional and convenient storage features of the capacious 'pavilion' plan hospital are similarly stressed in Adrian Forty's piece on the modern hospital in England and France. He contends that this building type was governed more by the emergence of the medical profession than by advances in medical science, not least since he considers that the Boards of Governors were as much concerned to prevent malingering as to effect cures in the patients who were generally of inferior social status. A more extreme application of paternalistic improvement through the agency of architecture is described in Heather Tomlinson's review of the 'separate system' in the contemporary British prison. Her thesis, however, is propounded with close reference to the specific design elements and less speculation about their ideological motivation.

The next two essays present a shift in geographical location and historical period. Susan Lewandowski discusses the urbanization of the Hindu temple in South India, while John Hancock argues that the apartment building in the United States has perpetuated rather than diminished social segregation. Lewandowski compares the large pre-industrial temple complex like the Minakshi Temple in Madurai, designed to accommodate the devotional path of salvation, with the compact arrangement of their modern equivalents, necessitated by economic constraints such as land prices. Where once the city revolved around the temple, now the temple is compressed by the city. To Hancock, the emphasis upon owner-occupied, single family housing in the American city has caused the apartment to be the preserve of the transient, usually poor or abnormal members of society. While this disregards the recent popular growth of condominium or other lower cost alternatives, Hancock provides an illuminating picture of distinct class graduations in the superficially classless North-American social order.

That theme, supercharged with interpretations of the legacy of capitalism and sexism, courses through the subsequent examinations of leisure housing, 'places of refreshment,' and office buildings. The first two concentrate upon Britain and the third upon the United States, with sallies into England and West Germany. King's 'A time for space and a space for time: the social production of the vacation house,' once beyond a homily on the differentiated system of social stratification, places the holiday bungalow and cottage squarely within the framework of urban, industrial societies - as much status symbol as exclusion of the Georgian villa or reflection of pantheism. The plates are especially well selected to sustain this particularized view: dipping into those journalistic resources which architectural historians seldom exploit: in an ironic anticipation of Le Corbusier's endeavour to marry aircraft design and architecture, one plate shows a conser-