THE INFLUENCE OF CHANGING MARKETING CONCEPTUALIZATIONS ON AMERICAN GASOLINE STATION DESIGN

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THE INFLUENCE OF CHANGING MARKETING CONCEPTUALIZATIONS ON AMERICAN GASOLINE STATION DESIGN

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Dedicated to Gussie and my parents, who share their lives joyously with me and my work.
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SUMMARY

...the skyline of seventeenth-century Boston should be dominated by church spires, even as twentieth-century New York is a forest of commercial towers; what more concrete way to symbolise the evolution of a nation's ethos from religion to business?¹

Christopher Tunnard
Henry Hope Reed
American Skyline

Prevalent in studies of the last twenty years, the most pervasive and ubiquitous architectural structures of the American landscape have generated interest among material culture or popular culture historians (in such fields as social geography, architectural preservation, business iconography, ethnography, and archaeology). These structures -- motels, fast food restaurants, convenience stores, gasoline stations, department stores, and other retail outlets -- are currently recognized as the conceptions of corporations to house the sale of products and services. The earliest examples of their uses at the American roadside were the popular subject matter of architectural journals of the early twentieth century. Individual architects contributed

to the introduction of these building types. Nevertheless, few early examples of their designs survived the changing conceptualizations of business. Interested scholars have explained that, over time, commercial architecture began more and more to reflect the "everyday" experiences of modern American culture. Commercial building typologies therefore, are best related through the terminology of vernacular architecture.

Gasoline station architecture is examined in this thesis for its relationship to modern American society through the influences of business concepts and practices. The study first recognizes the history of marketing thought as a twentieth-century phenomenon which included the origins of the gasoline station's design history. Scholars who have studied American business have explained that marketing is evolutionary with respect to the ability for those who produce goods and services to interpret the wants and needs of society. Hence, this study explores a possible parallel evolutionary influence on the gasoline station's structure, spacial arrangement, and image. Its design history, since 1925, is examined in the body of the thesis study in relation to three commonly understood periods of marketing history: the "Sales Conceptualization Period," 1925-1950; the "Early Marketing Period," 1950-1970; and the "Advanced Marketing Period," 1970-Present. The study methodology involves a content analysis of the National Petroleum News, an oil marketing
journal which has communicated innovative gasoline station design since the beginnings of organized retail oil marketing around 1910. Through the gasoline station's historical development from period to period, the role of the gasoline station in marketing efforts has become more significant and this significance is reflected through its changing architecture.
CHAPTER I
INTRODUCTION

Since the 1970s, commercial buildings such as gasoline stations, roadside motels, and restaurants have attracted the interest of material culture historians. These observers of the modern landscape have included architects, social (cultural) geographers, and commercial (industrial) archeologists each involved with some aspect of historic American preservation. The popularity of the subject matter grew from a desire to study "all that man had done to shape his environment"\(^1\) as well as from a larger interest in the more vernacular, anonymous, spontaneous, indigenous, or rural examples of architecture. Architectural historians in the 1960s were criticized for a lack of attention to the study of building typologies which are representative of these interests.\(^2\) Eventually, widespread attention to the past was shared by American architectural historians (through the support of national, state, and local


governments) who justified the value of the physical preservation of certain notable but outmoded examples of commercial architecture. These building typologies were typically considered outside the realm of "serious" architecture, but were found worthy of historical documentation based on their pervasiveness and their newly supported value as cultural artifacts. Collectively, historians have noted that the history of commercial architecture has marked the ethos of past American popular taste and daily life. The movement had a great impact on the preservation of buildings which were constructed fifty years prior to the 1970s (old enough for recognition by the National Register of Historic Places).

Yet, no new architectural inquiries of the gasoline station in particular have appeared, and interest in this building type seems to have lost momentum. This thesis begins from the presumption that architectural interest in retail gasoline station design has decreased because its architectural significance has developed secondary in importance to the processes of business. The architectural interest of the 1970s had helped to support the preservation of gasoline stations constructed prior to the 1930s, coinciding with the major organizational efforts of American oil retailing. Has the gasoline station become less architectural and more a process of business? How will future nominating statements read which would explain the
preservational worthiness of past examples of gasoline stations? Can the gasoline station be adequately studied in terms of vernacular architecture? Indeed, enough change has occurred in the general layout and image of the gasoline station to warrant its reexamination.

This thesis examines three of the most complete studies of the gasoline station's design history. Two histories have related the design of the gasoline station to sociology and popular culture. The third history was written from the interest of architectural preservation. While these historians noted that station design has offered nothing new and significant to architecture, they suggested that the building type had become worthy for documentation based on its cultural importance. Within the historians' documentations little attention had been focused on the factors which might have influenced the development of the gasoline station. For instance, what significant role has retail oil marketing played in the design of the station at different places and at different times? It is evident that no academic consideration has been given, since the 1970s, to the full history of the building type.

The gasoline station is a significant typology through which one can understand the processes of change in the American way of life. Its history should be understood as unique to commercial architecture since its pervasiveness and changing image were conditions of its social and economic
circumstance within a market economy. The gasoline station was a direct consequence of an emerging system of oil, automobiles, and roads. An understanding of the magnitude of the system contributes to a more complete understanding of the changes in twentieth-century American economy, society, and environment. This chapter is dedicated to the early history of gasoline stations and the events leading up to its ubiquitous spread over the American countryside by a large scale system of competitive marketing.

Oil, Automobiles, and Roads:

The economic spirit of the early twentieth century was influenced by the production, distribution, refining of oil. This spirit was heightened by new competitive concepts for the sale of abundant oil supplies. Oil and its heaviest refined product, kerosene (primarily utilized for illuminating purposes), lost market share to electricity and natural gas. The production of oil at one time was primarily in the control of the Standard Oil trust, but by 1911 the trust was dissolved. Production of oil did not decrease. Instead it increased significantly as independent refiners realized the

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3"...from the bulk stations, kerosine was distributed by tankwagons pulled by horses or mules to independent retail outlets such as grocery stores...." Reid, op. cit., p. 45.

4"By 1906, John D. Rockefeller's Standard Oil Trust covered every state and controlled 85% of the total petroleum market, according to Marvin Reid, editor, National Petroleum News, February 1984, p. 45."
growing demand for gasoline. Small "independent" businesses which had survived the trust's dominance were described as "lean and tough." Consequently, with a new freedom of competition, the production, distribution, refining, and marketing of oil became chaotic. But demand for oil's refined products was not enough to offset the supply glut. An increased promotion of gasoline was necessary. Gasoline was given a new product package in the form of a building designed and located to promote sales.

Likewise, the automobile was born, of not just oil, but oil competition. At the turn of the century the mass production concepts of the industrial revolution focused on the individuals who were the most inventive and savvy. The abundance of oil spawned the entrepreneurial interests of men like Ransom E. Olds and Henry T. Ford. Their competitiveness epitomized the race for low unit cost of automobiles through mass production; as Ford decreed, "I will build a car for the multitude." The total number of registered automobiles increased from 312,000 in 1909 to 7.5 million by 1919.

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5Even if the Standard Oil Trust had not been dissolved, some oil men contended that it would never have been able to shift its interests to the ten billion dollar industry that independent refiners had created for the automobile (Warren C. Platt, editor, National Petroleum News, January 5, 1936, p. 205).

6"The automobile's explosive growth created opportunity for other entrepreneurs--men like Dr. B.F. Goodrich and Harvey Firestone." Ibid., p. 44.
The widespread popularity of the gasoline powered automobile was justified in part by economic reasoning. Those who experienced this growth later offered legitimate explanation for the rapid increase in automobiles as a natural function of economic progress. Walter Dorwin Teague, a noted industrial designer, explained in 1940:

Functional design has advanced most rapidly in the fields where the units to be dealt with are smaller and more easily and rapidly replaced. For this reason, air and highway transportation have forged ahead while the railroads have persisted in an almost fossilized state.\(^7\)

The nations roadways are considered the third element of significance. The government's job of taxing the gasoline and building roads on which to run the cars provided the last important link to this competitive market system. The building of roads was considered an uncontrollable, environmental variable; nevertheless, businesses naturally profited as new roads expanded territories. In 1937, the editor and founder of the *National Petroleum News*,\(^8\) Warren C. Platt, reflected on the growth (overgrowth) of the oil industry, automobiles, and roads:

Bear in mind how rapidly the industry has developed, how easy it was for it to be misled as to the continuing increase in business, because not even the automobile manufacturers themselves knew at any one time just how cheaply they could make a car and what new market that lower price car would open up.


\(^8\)As the frequently used source of the thesis, the *National Petroleum News* may be abbreviated *N.P.N.*
Nor did the automobile manufacturers, any more than the oil industry, appreciate that the states collecting a few pennies of tax a gallon of gasoline could year-in-and-year-out have a billion dollars to spend every year on building roads. In ten years time that has developed far more roads than any one had any idea of and better roads than were ever known before. The good roads brought more gasoline business and that brought more car sales and they in turn fed the gasoline and the good roads "kitty."⁹

The gasoline station is a major residual byproduct of the system of oil, automobiles, and roads and should be considered as such. The competitive system of oil, automobiles, and roads was augmented by a social reasoning. Indeed, the ability for a large number of people to travel conveniently was promoted by oil companies, automobile manufacturers and others who would profit from increased automobile travel.

⁹Platt, op. cit., p. 208.
The American Roadside:

In our previous century, American designers patterned the roadside with much the same hierarchial integrity as did their progenitors of Europe. They described the human environment in terms of stable places such as house, city, and country. In contrast to that tradition of pedestrian-oriented architecture, roadside structures of the past century have evolved due to competition over products and services created for a mobile society.

Scholars of commercial retail architecture have tended to rationalize that the transformation of existing building typologies has been due to the influence of the automobile:

"...not surprisingly, the auto quickly began generating a new range of building types, including the motel [from the inter-city hotel], the fast food franchise eatery [from cafes, tea rooms, and diners], the drive-in bank, etc."  

More importantly, one should first consider that the conception, design, and images of these buildings were largely influenced by their inter-competition. The study of these typologies must take into consideration that the automobile is a subset of the system from which the processes of business have acted. The function of the automobile has not changed throughout the twentieth-century; nevertheless, automobile society continues to experience many new and an expanded range

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of building typologies and land uses. These include gasoline stations, multi-story parking garages, modern shopping malls, warehouse grocery stores, convenience stores, video stores, and commercial strips. The myoptic generalization of the influence of the automobile has tended to shield discussions in the fields of material culture and design from the importance of marketing.

Early Gasoline Stations and Antecedents:

This chapter section concerns the very first recorded gasoline stations which were developed concurrent to the forces of marketing competition. The gasoline station was invented as a means to create demand for gasoline and took physical form as an outlet for the sale of a surplus of gasoline. The first stations were believed to have been constructed during the period from 1907 to 1909.

Early perceptions of the gasoline station date back to when the automobile was new and considered a luxury item. Before the split of the Standard Oil trust and the first mechanized gasoline pumping devices (which were produced for an expanding retail market), gasoline was distributed and sold on a local level. The local livery, the general repair shop or garage, and the dry goods store would usually keep a pail of gasoline for the occasional motorist who would drive by.\textsuperscript{11}

\textsuperscript{11}The only full-length text on the architectural history of the gasoline station is credited to Vieyra: Daniel I. Vieyra, \textit{Fill 'er Up: An Architectural History of America's Gas Stations} (New York: MacMillan Publishing
Another location sometimes overlooked by historians was the refining plant or "bulk station" which sometimes sold gasoline to early motorists. It was perhaps the predecessor of the high volume, price-competitive gasoline outlet, typically represented by independent oil companies. The refining plant became a model to marketers who managed a lower cost for each gallon of fuel by the decreased overhead expense of distribution and elaborate facilities.

Another antecedent of the gasoline station was the public comfort station, which had a brief purpose (usually supported by states' departments of health) between the time of the first automobiles and the ubiquitous spread the gasoline station. Not directly related to gasoline retailing, this building typology did provide the convenience of a lobby and toilet facilities for early touring automobilists. The comfort station had almost become obsolete as oil companies increased consumer loyalty by providing for toilet convenience at stations. Gasoline stations were planned with toilet rooms and adjacent restrooms much in the same fashion as comfort stations (see Figure 1.1).

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12The station's location (on cheaper land), the service (on high volume sales), and the station image (because of low overhead) were characteristic of the type.

13Frank R. King, "Public Comfort Stations," The American City 33, December 1925, p. 613. Foeller, Schober, and Stephenson, architects of the illustrated public comfort station, were also cited as great contributors to the growth of the gasoline station in and
Historians Daniel I. Vieyra and John A. Jakle stated that the curb-side gasoline station of the 1910s and 1920s was the first widespread image of gasoline retailing. The growth of the station was slow before 1910 but by 1925 the forces of competition were eminent. By 1908 there were perhaps a dozen stations; in 1913 the Gulf Refining Co. built its first drive-in station; within two years, many other companies had followed suit. These early retail outlets were strikingly utilitarian in image when contrasted to the advancement of those that followed (see Figures 1.2, 1.3, and 1.4).


STATION FOR AUTOISTS

St. Louis Oil Company Puts in Down-Town Plant for Consumers

A new way of reaching the auto gasoline trade direct is being tried with reported success in St. Louis by the Auto Gasoline Co.

At 12th and Pine streets, St. Louis, this company has an ordinary sized lot, stripped of the old building with a small one-story brick building in one corner for an office and storehouse. The rest of the lot is covered with cinders and leveled to the roadway of the street. Behind the office are four slender tanks, 8 feet high and about 13 inches in diameter, placed upright with automatic cut-off and gauges. Each contains a different grade of gasoline. One is attached to the auto's tank, and when it is filled, the oil is automatically shut off, and the quantity run is shown on the gauge. Underneath the yard are large storage tanks, for supplying the filling tanks. The yard is large enough for a half dozen or more machines to maneuver in. It takes but a few minutes to get in, fill the tank and out again, and the operation has cost the automobile owner anywhere from 8 to 10 cents a gallon less than if he went to a garage.

Figure 1.2 First Announcement of Gasoline Service Station
Figure 1.3 Second Gasoline Station, First Photograph--Opened March 12, 1910, in St. Louis, Missouri by the Automobile Gasoline Company
Figure 1.4 "Utilitarian" -- Early Gasoline Station Devoid of the effects of Competition, Detroit, Michigan
Justification for Thesis Study:

The justification for the historical study of gasoline station design has been a phenomenon of the last generation of scholars. Historians since the 1960s have gathered research in the fields of archeology, social and cultural geography, technological history, ethnography, business iconography, and other material culture studies to try to preserve the history of the gasoline station and other commercial building typologies through their documentations. Other retail outlets have received similar attention. From the direct interests of architectural historians, since the 1970s, suggestions were made to physically preserve the gasoline station as the building type had become old enough (fifty years) to be recognized by H.A.B.S., H.A.E.R., or the National Register.\(^\text{15}\) This thesis compares prior methodologies of gasoline station research to further justify its reexamination and to seek the best methodology for its study.

Preface: Certain scholars have offered documentations which have generated interest in the gasoline station. Yet, these prior historical interpretations have yielded conflicting contextual viewpoints of representative and significant station designs. Additionally, these works which were common in the 1970s, may require reexamination as the gasoline stations layout and image have significantly changed through the 1980s.

What had driven the interests of scholars in the 1970s to study the full history of the gasoline station? Despite the differing methods and justifications for study, on what points may have their ideas been similar? Has the building type developed through any evolutionary functional or stylistic process? And finally, what architectural value may the gasoline station convey?

This chapter presents three historical documentations from architectural and other material culture, or popular culture, academians who have generated the most current interpretations of American gasoline station design. For each history, the specific justification for inquiry, the methodology of study, as well as the documented findings are presented. Within the chapter findings, these documentations are compared and contrasted for any possible contextual consistencies and differences. These prior histories are essential to the definition and development of the thesis study.
Why have historians developed interest in documenting and commenting on the history of the gasoline station? In 1978, historian Gerald David Orr, stated that a growing level of shared interest had been generated among scholars of American material society.

The past few years have been exciting ones for the student of our own material culture legacy. Exciting progress has been made in the fields of architectural history, art history, technological history, and historical and industrial archeology. Tightly defined parameters once present in these fields have been shattered and all of them are interlocking in a common effort to discover a more holistic view of culture.¹

The gasoline station was included as an integral part of the movement to define passing twentieth-century cultural history. Bruce Lohof, industrial and commercial archeologist, and Daniel I. Vieyra, architectural historian and chief preservation architect for the city of Trenton, New Jersey found the gasoline station worthy of historical documentation. In addition to the material culture fields, specifically mentioned by Orr, gasoline station design has also gained the interest of American social geography academian John A. Jakle of the University of Illinois, Urbana.

Although the scope of this thesis is limited to the gasoline station, material culture scholars through the 1950s, 1960s, and 1970s have also reciprocated interest for other American roadside retail outlet typologies and land uses

including motels, franchised eateries, and commercial strips as byproducts of our material culture society. Twentieth-century building types have often been popular targets for documentation as reflections of past American economic and social conditions. Interested scholars have provided research to measure, define, document, archive, and catalogue the many geographical, psychological (iconic, symbolic, meaningful), communal (ethnic, cultural, societal), and demographic aspects which express the ethos of a distinct cultural or collectively social condition. One primary goal of these historians has been to prove or disprove whether or not "...the generalization, based on artifact and building, is... ill conceived and off target."²

²ibid., pp. 377-386.
Prior Research

Daniel I. Vieyra:

In 1979, Daniel I. Vieyra published "Fill 'er Up," the only full length text on the gasoline station's architectural history. The gasoline station, according to Vieyra's history, has been represented by four typological influences; a chapter was provided for each -- "The Domestic," "The Fantastic," "The Respectable," and "The Functional". Vieyra sought to distinguish the preservational value of the building type;³

...the first structure built in response to the automobile, is undoubtedly the most widespread type of commercial building in America, and yet it is also the most ignored. Its very ubiquity allows the motorist to screen out its image...perhaps an examination of the gas station will transform dubious perception by the motorist into an appreciation of its imagery.⁴

Vieyra also justified his thesis for gasoline station history by stating that the building type could not be examined in a strictly chronological manner. He stated that no clear logical development in terms of the building's function could be derived, but rather a "cyclical reappearance of functional developments," as station layout only reflected simple modes of distributing gasoline.

Nor did station design evolve through a series of stylistic themes. A study which relied on these


⁴Ibid., p. xiii.
traits would become disjoined and encyclopedic destroying the fun of looking at gas stations...The gas station was rarely an architectural trend-setter.\textsuperscript{5}

Therefore station design offered no significance to architecture except as a cultural artifact.

Vieyra described the history of the building type through the 1970s; although, given the preservational nature of his examination certain types of stations were emphasized. The quaint or unique designs from before 1930 were stressed as these examples were, at the end of the 1970s, of candidate age for preservational consideration by HABS, HAER, or the National Register. The "Fantastic," "Respectable," and the "Domestic" stations represented the major design influences prior to 1930. The domestic, classical, civic, and exotic station design images declined after 1930.

Likewise, his text required a format of study which would reveal a solid division between these pre-1930 historic designs and the designs which followed. The "Functional" provided the majority of the station designs after 1930. The chapter on the "Functional" began with the prefabricated metal buildings commonly produced in the 1920s by independent building manufacturers. Functional station design according to Vieyra was explained as the celebration of the technology which was centered around the automobile. He quoted from a 1930s article of *Architectural Forum* to characterize the new

\textsuperscript{5}ibid., p. xiii.
movement in station design. "In recent years, a new type of station has made its appearance. It is clean, unassuming, and has the inestimable virtue of looking like a filling station."

"Functional" designs were recognized as significant for their ability to imitate some of the known modern architectural movements and their associated personalities. Examples include the Zig-Zag and Art Deco Moderne (which originated from the 1925 Exposition Internationale des Arts Décoratifs et Industriels Modernes in Paris), the Streamlined Moderne (which was practiced by American industrial designers Harold Van Doren and Norman Bel Geddes), the International Style (which was imported from Europe to the Museum of Modern Art in New York by Henry Russell Hitchcock and Philip Johnson in 1932), and the Wrightian-De Stijl movement. Prominently named station architects included Eldridge Spencer, William Lescaze, Richard Neutra, Bertrand Goldberg, Rudolph Schindler, and Frank Lloyd Wright. Architecturally designed "Functional" stations for the fifteen year period between the early 1960s and the writing of the book were described as architectonic in appeal. Buildings' formal expressions were accentuated above the typically recognizable and standardized fixtures of corporate signage and colors. The resultant stations of mention recalled the "Fantastic" designs of the 1920s but

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utilized materials of the day and advanced construction methods, including space frames and precast concrete.

As a parallel influence of the "Functional," Vieyra presented the works of American industrial designers, a movement which he explained grew from the Streamlined Moderne. He explained that industrial designers such as Norman Bel Geddes, who designed for Socony Vacuum Oil Company (today known as Mobil), applied their scientific principles of packaging automobiles and everyday products of convenience to the packaging of the gasoline station. Other designers mentioned were Frederick Frost for Mobil, Walter Dorwin Teague for Texaco, Raymond Loewy for Esso and later Shell, and Eliot Noyes for Mobil. Industrial designers presented station features which strived for consistancy and symbolism for a particular corporate motif.

Daniel Vieyra's final chapter, entitled "Preservation" substantiated his categorical format of gasoline station design influences. These included the "Fantastic," the "Respectable," the "Domestic," and the "Functional". Gasoline outlets designed prior to 1930 were described as whimsical, quaint, commemorative, or contextual statements which were created by individual entrepreneurs or hired architects. These served as regional or local landmarks for America's first years of motoring. Vieyra's "Functional" catagory of station design marked the decade of the 1930s as the transitional period of corporate envolvement. The first
efforts of competition were made on a corporate scale to create "consumer brand name awareness." The "Functional" station designs spanned, by Vieyra's categorization, the years since 1930 until the writing of his text. The 1930s, 1940s, and 1950s included designs which were the influence of popular individual architectural and industrial designers. Within the 1960s and 1970s, the corporate expressions of industrial designers and commercial designers were contrasted to the architectonic and somewhat neo-"Fantastic" examples which were created by some architects.

Vieyra resolved that the most obvious manner by which to physically preserve these designs in the landscape should be by their adaptive reuse. The modern preservational movement during the years predating Vieyra's text attempted to widen the spectrum of candidate historic building typologies. Vieyra stated,

...traditionally, however, preservationists have viewed the automobile and its habits as a threat to their own projects,... nonetheless, a realistic preservationist must recognize that this century's commercial architecture reflects modern culture.\footnote{Vieyra, op. cit., p. 79.}

The elements of the American built environment which have recalled "taste, technology, and culture" were said to increase in landmark value, particularly as time has passed and lifestyles have changed. The need to recognize gasoline station structures was accentuated by the visual and
statistical evidence that the total number of stations had declined by almost 10,000 each year since the early 1970s.

Sources of frequent mention in Vieyra's text have offered insight into the contextual method of his study. Journals which have focused on the development of the environmental impact and governmental pressures of gasoline station design and location were utilized from city planning journals such as *The American City* and *Planning*. Architectural magazines such as *The Architectural Forum*, *The Society of Architectural Historians*, *Pencil Points*, and *Progressive Architecture* have revealed articles of discussion from the earliest examples of the building type. Industry-specific publications also proved valuable to Vieyra including his most quoted source, *The National Petroleum News*, an oil marketers journal in publication consistently since 1909, as well as the archives of various oil companies. The notion of adaptive reuse for old stations was added within Vieyra's conclusion. A contemporary publication to "Fill'er Up," by Albert L. Kerth, *A New Life for the Abandoned Service Station* (Massapequa Park, N.Y.: A.L. Kerth, 1974), targeted the preservation influence which had grown in the 1970s.

**Bruce Lohof:**

Historian Bruce Lohof, in 1974, described the evolution in building form for the stations of one particular major oil
company for the journal, *Industrial Archaeology*. The article, entitled *The Service Station in America: The Evolution of a Vernacular Form*, recalled the democratic-technological vernacular of American everyday production which was suggested in the writings of John Kouwenhoven. Kouwenhoven's text, *Made in America*, stated that the context of American art and architecture was rooted in the vernacular tradition. Lohof utilized the archives of the Marathon Oil Company (which entered the retail market in 1933) to illustrate Kouwenhoven's premise for the programmatic processes of American design. The vernacular, machine-like "simplicity," "economy," and "flexibility" that was said to drive the production of American everyday goods was also the prescription of Marathon's station design. He described the form-giving development of the company's station prototypes "...from the hopeful but naive Metal Portable Service Station" of the 1930s "to the imperious post-war 4 Bay Standard to the latest design structure [of 1974]."

The study was arranged to relate the evolution in station form as an additive process of design which had responded primarily to the requirements of economy, simplicity, and

8 John Kouwenhoven, *Made in America* (Garden City, 1948) p. 15; ibid p. 41. "...to describe the cultural artifacts which represented the American vernacular tradition."

flexibility. Lohof explained that prior to World War II, Marathon had developed three prototypical outlets. "The Metal Portable Service Station," "Standard Service Station No. 2," and "Standard Service Station No. 3" became obsolete after the war, yet these stations were explained as the original prototypes from which all Marathon successor stations were modeled.

Each prototype was examined for compliance to the vernacular of Kouwenhoven. Inexpensive replication or standardization fulfilled the economic goal for station design. Ease of maintenance was achieved through the use of component materials and methods of construction. Economic labor-saving convenience was realized with porcelain enamel and later concrete block. Simplicity was found in gasoline station designs which, like the nineteenth century clipper ships of Donald McKay (recalled by Kouwenhoven), featured "economy of line, lightness, strength, and freedom from meaningless ornament." Finally, in terms of flexibility, each design was described as an architectural innovation. The concept of modularity created a new design program by which the station could be erected wherever an outlet was needed.

"Mechanization" and "mobility" were highlighted, alluding to the innovators of mass production, such as Eli Whitney, to justify a function and imagery of modularity in American design. Lohof was able to illustrate, by evolution, a

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10Kouwenhoven, op. cit., p. 32-33.
progression in the success of modular design form as the "4 Bay Standard" design gave way to a series of station design improvements. The theme of modularity was accentuated by the station names. The "SM" or "standard modified," and the "FM" or "facade modified" and the "RB" or the "rear bay" later generated the "FB" or "facade brow" and the "FV" or "facade vending" prototypes.

Lohof explained that the 1960s marked a change in stylistic station design. "More recent designs," of the 1960s, he explained responded to a new environmental constraint;

...oil retailers, in the attempt to stay abreast or ahead of each other, have made stylistic changes which taken en masse, constitute an industry-wide epidemic of architectural innovation... types consistent with the demands of local governments and the dictates of the marketplace.  

Marathon responded with four new prototypes which were modifications of previous years. In response to environmental pressures, stations were clad with elements which related architectural imagery to regional context and softened, contemporary stylizations. Designs included the "Colonial," the "Kettering," the "Alpine," and the "R-75" (interstate prototype). In aesthetic terms these designs were new but in structural terms he described these stations as modular adaptations of previous prototypes. For instance, the "Colonial" was really the "SM" and the "Kettering" and

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"Alpine" was really the "SM" with the service bay rotated ninety degrees, the sales room enlarged and a bay window added. The "R-75" was explained to resemble the older "FV" design.

Bruce Lohof, like Daniel Vieyra, represented a group of historians who realized a need to study all that had been done to shape the built environment. Beginning from the precepts of John Kouwenhoven in the 1950s, Lohof justified the success of Marathon gasoline station design for evolving within the production framework of the American "vernacular tradition".

Sources for Lohof's study included the archives of the Marathon Oil Company for the collection of the company's prototypical designs as well as the historical writings of the "vernacular" tradition from John Kouwenhoven. Kouwenhoven's vernacular tradition gained further attention by architectural historian John Maass in 1969. The vernacular tradition was discussed by Maass as a subject typically avoided by scholars of architectural history. The gasoline station had been tagged as, "by design seldom aesthetically pure, by intention never unique, and by custom beneath the level of cultural scrutiny," but Lohof contended that the gasoline station, like franchised eateries and tract houses, must be included

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in academic studies as their lessons are "social and historical."\textsuperscript{13}

\textbf{John A. Jakle:}

Similarly, John A. Jakle, in 1978, justified his study of the gasoline station through the building type's cultural dominance. Jakle's premise for study was based on interests in the field of social geography. He argued that the documentation of station history was merited because its "image... dominated the American public's conceptualization of gasoline retailing."\textsuperscript{14} Jakle offered a direct definition of the gasoline station: "Gasoline stations (filling stations or service stations as they have also been called) are roadside facilities specially designed to sell gasoline and other products for the automobile such as lubricants, tires and batteries." He limited the scope of his study by excluding,

...garages, car washes, grocery stores, and...every other type of sales outlet where major profits derive from activities other than selling gasoline or where gasoline sales are dependent upon a cluster of other activities.\textsuperscript{15}

His article featured a content analysis methodology of illustrations found in the \textit{National Petroleum News}.

\textsuperscript{13}Lohof, op. cit., p. 11.


\textsuperscript{15}ibid., p. 520.
Illustrations counted from volumes every tenth year, from 1920-1970, were divided into nine categories of building forms of "popularity" (see Figures 2.1 and 2.2).

Jakle's premise for the study of gasoline stations' images which have dominated the perception of the American consumer was more accurately an examination of commonly recognizable station structural forms. Station designs which were depicted from the National Petroleum News progressed from one predominating functional prototype to the next. Between

<table>
<thead>
<tr>
<th>Type</th>
<th>1920</th>
<th>1930*</th>
<th>1940</th>
<th>1950</th>
<th>1960</th>
<th>1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curbside</td>
<td>37</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Shed</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>House</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>House with canopy</td>
<td>31</td>
<td>29</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>House with bays</td>
<td>1</td>
<td>12</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Oblong box</td>
<td>0</td>
<td>3</td>
<td>54</td>
<td>57</td>
<td>63</td>
<td>62</td>
</tr>
<tr>
<td>Small box</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>19</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Small box with canopy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Canopy and booth</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Other designs</td>
<td>12</td>
<td>46</td>
<td>19</td>
<td>16</td>
<td>17</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: Author's content analysis of Volumes 12, 22, 32, 42, 52 and 62 of the National Petroleum News.

Illustrations in advertisements were not analyzed. The author was unable to obtain complete copies of Volume 22. Advertising was commonly omitted from bound periodicals during the 1930s.
the introduction of basic formal typologies, Jakle counted a significant quantity of basic station forms which included design modifications. The "Curbside" (or curbside pump) was common in the 1920s but was forced into obsolescence due to increasing municipal regulations for fire protection. The first off-street, "drive-in" gasoline stations were typically of the "Shed" type or the "House" type according to Jakle's

Figure 2.2 Gasoline Station Types Identified by an Analysis of Illustrations in National Petroleum News, 1910 through 1970
review of the journal. The "House With Canopy" and the "House With Bays," were mere modifications to the "House" but were counted as distinct typological developments in station design. The added canopy was defined as a regional adaptation which offered consumers the utilitarian convenience of protection from the sun, snow, or rain. Jakle introduced the bay as a standardized functional addition to the station as automobile service was developed to compliment the sale of gasoline as well as tires, batteries, and car accessories. These goods achieved such popular use that marketers referred to them as T.B.A. The station with service bays survived for so many years and grew to such popularity that it developed the generic name "service station," for which most Americans have habitually referred to any gasoline station type. The "Oblong Box" station design was distinguished by Jakle as the economic reply by oil companies to the American depression of the 1930s. Station designers, in the service of major oil companies utilized standardized station design for territorial expansion. The "Oblong Box" was introduced in 1930 and remained the predominate typology in the American landscape through the date of his article. The "Small Box" was introduced in the 1950s due to marketing competition. As a condition of the market in the 1950s and 1960s many independent oil marketers (localized jobbers or wholesalers and regional distributing and refining companies) recognized the ability to cut operational costs and facilities overhead
in order to cut fuel prices and to attract bargain hunting consumers away from major oil company stations. The "Small Box" symbolized the low cost, volume oriented strategy of most independent oil marketers. The "Small Box With Canopy" was a further development of the independent oil marketers throughout the country. Jakle explained that the canopy's popularity in the 1960s had developed "not so much from the protection it afforded consumers and attendants, but as a advertising gimmick."\(^{16}\) Canopy forms such as the "butterfly" design were popularized to catch the consumer's eye. The final design, the "Canopy and Booth," was said to have first appeared in the early 1970s. This station design included a large soaring prefabricated canopy which covered four or more driveways. They marked an industry-wide change in merchandising strategy whereby price competition, practiced by both major oil marketers and independent oil marketers, had replaced territorial competition. The American gasoline consumer had become more aware of price. Other designs which Jakle defined as being "novelty stations" were not included in his quantitative study as they were recognized as, "...costly experiments which did not produce the substantially higher sales which their developers anticipated."

John Jakle has utilized the popularity of station design by period to propose an evolutionary history of the most recognizable forms of the gasoline station. He concluded that

\(^{16}\)ibid., p. 534.
significant changes in building form have resulted from
industry-wide dislocations in supply, demand, and related
price of product. The "House With Canopy" prevailed until the
expansion of automobile product retailing and the introduction
of automobile repair urged the ubiquitous spread of the
standardized "Oblong Box" station design. The "Oblong Box"
prevailed until the gasoline shortage limited the station's
design to serve high volume gasoline sales.

Jakle's justification for study of gasoline station
history, like Vieyra's was preservational:

Its various forms and its various elements, whether
of good, bad, or indifferent taste, ought to be
recorded and understood as a part of our changing
American culture.\(^\text{17}\)

Nevertheless, Jakle's categorization of station design has
also estimated the percentage of stations which have best
survived the marketplace via the strategic goals of marketing.
Jakle's study has indicated that oil marketers have found
profit by strategically emulating the station designs of their
competitors. Jakle explained that other station designs did
not fulfill the economic goals of their marketers. Therefore,
one may conclude that Jakle has tended to define two
juxtaposed types of station forms. Stations which have
merited some architectural value were feared to differ from
stations which have retained (or at some previous time had
retained) some recognizable value to marketers. More simply

\(^\text{17}\)ibid., p.539.
stated, stations may be divided by designs which were typical and designs which were atypical in the landscape in different places at different times. Jakle concluded with a plea directed towards oil companies and local communities to promote the physical retention of stations which had formerly been regarded as typical in the landscape. The *National Petroleum News* was the single major source of reference in Jakle's study, from which came the quantitative analysis of station forms through the use of journal article and advertising illustrations.
Summary and Findings

The study of gasoline station design received similar support from Daniel I. Vieyra, Bruce Lohof, and John A. Jakle as it has helped to illustrate passing American culture. Clues to the gasoline station's historical significance may be gathered from the three scholars' differing fields of study. Vieyra's attention to architecture, Lohof's attention to industrial archaeology, and Jakle's study of social geography have helped to explain the gasoline station's historical context at different times in American history. Finally, only through these academic studies has the true nature of the gasoline station's preservational value been explained.

Daniel I. Vieyra demonstrated that stations designed prior to 1930 were generated by the interpretations of individual designers who borrowed from some established and identifiable architectural stylization. Vierya, who had completed the only inquiry concerning the station's architectural history, was most interested in the early station examples which most reflected architects' hopes and aspirations for modern society. When the gasoline station was first recognizable as a new and expanding building type in the 1910s and 1920s, its subject matter flourished in many architectural journals of the day. The chapters of his text illustrated the diverse assortment of "Domestic," "Respectable," "Fantastic," and "Functional" images which were
more commonly produced by individual designers who deemed them appropriate. He de-emphasised the "Functional," especially after 1950 when standardized station design became "...more generalized, less traceable to a particular design theory."\(^{18}\)

The degree of attention to gasoline station design from scholars outside the field of architecture is telling of its more recent development. In contrast to Vieyra's content and methodology of study, Bruce Lohof and John A. Jakle more clearly defined what was typical in station design after 1930. Lohof illustrated the gasoline station's industrial imagery by accentuating the vernacular qualities of its design. He explained that the development of the Marathon Oil company's prototype station designs since 1930 could only be explained as vernacular. Lohof defined simplicity, economy, and flexibility as characteristics of "everyday" American design which yielded the modular and mechanized images of the company's gasoline station. Jakle's history of the gasoline station took the form of a content analysis which identified the most typical and popular station designs which existed from 1920 until 1970.\(^{19}\) He created his methodology of study by recognizing that station design forms were largely determined through their popularity. He stated that

\(^{18}\)Vieyra, op. cit., p. 72.

\(^{19}\)However, as Jakle's study limited the range of gasoline station types (see quote at footnote 15), during the fifty year period of his study gasoline stations only accounted for forty percent of the total outlets which sold gasoline.
"prototypes were developed through experimentation in many places and then adopted almost universally across the country aided by such mechanisms of communication as industry trade journals." He regarded the National Petroleum News, which encouraged improvements in station design, as imperative to the study of the gasoline retail outlet.

Preservation:

The need to preserve representative examples of the early station designs was justified by Daniel I. Vieyra; the preservational value of more recent and typical station designs was argued by John A. Jakle. Vieyra emphasized the importance of the modern preservation movement which called for a broader range of inclusion for commercial architecture in general.

The early preservation movement concerned itself primarily with patriotic shrines and artifacts... isolated monuments rich with associative value... such as... Independence Hall or George Washington's home; however the modern preservation movement concerns itself with a wider spectrum of structures. "...a realistic preservationist must recognize that this century's commercial architecture reflects modern culture as much as older buildings typify yesteryears."20

Pre-1930 station designs were, in the 1970s, considered to be solidly part of the past. By 1979, as Vieyra was defending in his final chapter on preservation, the earliest of the examples of station design were candidate age for nomination

20 Vieyra, op. cit., p. 79.
to the National Register of Historic Places. By 1990, twenty-four of these early structures had been officially recorded on the National Register property reports. Once visible images of the American roadside, "English cottages," "Classical revival temples," "Indian tepees," and "Streamline modern" structures are now obsolete and rare. Many of them are abandoned and deteriorating, others are adaptively reused and sometimes unidentifiable as more modern facades screen their images or new adaptations alter their characteristic forms. Jakle's gasoline station history promoted the selected retention of gasoline stations typical of all past periods "of good, bad, or indifferent taste." His criteria for the evaluation of gasoline stations were based on the following questions:

What was typical in the landscape at different places at different times? What was atypical? What should be valued? What should be preserved?21

His popular culture brand of study has helped to broaden the range of candidate gasoline station structures to more current examples.

Originally a building type which was influenced by individual and distinctive design efforts, the gasoline station must now be regarded in context to the events which have caused newer vernacular design rules. As domestic, revival, and exotic designs of the past are recognized by preservational efforts, the once abundant neighborhood "oblong

21Jakle, op. cit., p. 540.
box" has become threatened for extinction. What guidelines will determine the significance of its place in time? How will nominating individuals in the future determine the importance of more current images of the station? The oil companies or subsequent gasoline station owners cannot necessarily promote selected retention of obsolete properties. Local, state and federal tax and grant incentive programs are particularly necessary to encourage the rehabilitation of significant examples of commercial architecture like the gasoline station. Such programs are dependent upon the ability to clearly define the associational value of the gasoline station. The guidelines of the National Register suggest that historic significance is most likely measurable through

"events that have made a significant contribution to the broad patterns of our history or... through the distinctive characteristics of a type, period, or method of construction,... or that represent a significant and distinguishable entity whose components may lack individual distinction...".  

Though no academic design histories of the gasoline station have been produced since these studies, and this important feature of our changing American environment still needs to be understood. Marketing as a significant influence of gasoline station design is examined in this thesis. Jakle's use of the oil marketing journal The National Petroleum News and

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22 The National Register of Historic Places is located under the U.S. Department of the Interior and the National Park Service, Washington, D.C.
his explanation of the journal's influence to the advancement of station design is contextual proof of the relevance the history of marketing as it may relate to the development of station architecture.

Prior Historical Attention to Marketing:

Marketing is the most obvious topic through which Vieyra, Lohof, and Jakle have discussed gasoline station history. Each scholar has either directly or obliquely referred to certain periodic changes in station design with descriptions of industry-wide shifts in the marketing strategies of companies within the oil industry. Although no formal definition of marketing was given by Lohof, Jakle, or Vieyra, they reported that significant innovations in station design were effected through various notable market developments. Based on their 1970's studies, they presented three transitional periods in station design which were concurrent to evolving business conditions within the retail oil industry.

Vieyra found 1930 to be a transitional time in station design, referring to the influences of corporate marketing. The decline of the "Fantastic" and the emergence of "Functional" station designs was theorized to occur because of "...the consolidation of larger oil companies, the
involvement of fewer independent marketers, and the development of modern marketing techniques."\textsuperscript{23}

Jakle explained that sales territorialization was the catalyst for the spread of the early "Curbside" and the 1920s neighborhood "House" stations as standardized station design was realized as an important advertising device. Jakle focused on the impact of the depression on station design. He used the expression "depression architecture" to describe stripped down, functional designs. Another aspect of marketing as it affects station design has been the influences of supply and demand. He explained that, eventually, demand-per-outlet for gasoline sales declined as the number of outlets within a territory increased. By the 1930s, the unified expansion and promotion of auxiliary product lines of T.B.A. with automobile service provided additional income for gasoline outlets. The widespread use of the generic "Oblong Box" station design resulted as a formal answer to the T.B.A. and service formula for merchandising which included a display room adjacent to service bays. Jakle also stated that designs reflected merchandising strategies more directly as "marketing engineer" became a new in-house position within most oil companies.

Lohof explained that Marathon Oil Company's "Metal Portable Service Station" of the 1930s was a concept born of the early strategies of territorial competition. If a

\textsuperscript{23}Vieyra, op. cit., p. 26.
particular station site were to decline in locational value, then the small portable station building could be moved, "able to follow the dictates of the marketplace." Lohof stated that general automotive service and the need for enclosed service bays had made obsolete the "Metal Portable Service Station" prototype. The two station prototypes which did include service bays were explained to be the progenitors of future designs.

The second period of change in gasoline marketing and gasoline station design occurred after World War II. Vieyra saw the 1950s as a period for which station architecture was less easily classifiable, but he did not allude to any reason of marketing. He implied that it had become an indescript architecture, designed beneath cultural scrutiny. The marketing outlet provided the most adequate place to promote an organized corporate image.

Lohof presented stations from within the second period which reflected Marathon Oil Company's goal of product diversification. Marathon incorporated changes in functional layout and form which responded to "the class and size of station one desired... and the service station hence became a variation on Ely Whitney's theme of interchangable parts." Station design progressed through modifications which included the introduction of new or reproportioned spatial layouts for service bays and T.B.A. sales rooms, the addition and

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incorporation of vending, and the inclusion of a series of simplified, easily identifiable facade designs.

Jakle argued that the 1950s were marked by "the rise of the new independents." Major oil territorialization met competition from localized and regionalized independent marketers who offered lower retail prices to target a new breed of price-conscious motorists. Competition was significant as independent oil marketers innovated price-competitive strategies and station designs reflected their mode of marketing. The "Small Box," and the "Small Box with Canopy" station designs symbolized low cost, price competition by minimizing the size of the sales rooms, storage rooms, service bays, or sometimes restrooms. Jakle noted that oil company's emulated each other for the practice of unifying marketing operations, in the 1960s and 1970s. Corporations conveyed one recognizable name, emblem, and image. For example, in the early 1970s, Esso and many of its subsidiary companies received a name change to Exxon "in an attempt by the company to unify its marketing operations." Industry-wide name, color, and logotype changes were the most simple and the most economical means by which firms could illustrate unified operations for existing conventional station sites and buildings.

A third period of change began to appear in the 1970s based upon the writings of Vieyra and Jakle. Vieyra noted an

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increase in the number of design competitions in the early 1970s which produced more experimental forms and images. Despite the experimentation of new concrete and steel forms which deviated from more typical uses of gasoline station cladding, designs were noted for resembling "...a kit of parts... assembled... according to the requirements of station size and site" and according to the possibilities for industry maturation and change. The newest station designs which both Jakle and Vierya highlighted, of the "Canopy and Booth" typology, illustrated a significant re-oriented response by major oil corporations to emphasize volume gasoline sales and meet the price-oriented marketing competition of independent marketers. The industry as a whole moved away from the concept of territorialization and toward price-competitive value and economy during an era of gasoline shortages. The gasoline station retail outlet design continues to change, motivated by profit and consumer appeal and leaves behind many obsolete artifacts which tell of the spirit of American society and the built environment.
Conclusion

Most characteristically, historians have justified the value of gasoline station documentation through its cultural significance. The building type has been respected for its illustrations of the diverse and changing nature of American popular taste and everyday life. For that reason alone the building type should continue to be documented, understood, and preserved. National Register guidelines for the evaluation and nomination of architectural and historical significance has expanded to include associated vernacular expressions which contribute to the broad patterns of our history. The broad pattern of interest suggested by Vieyra, Lohof, and Jakle has been linked to the subject of marketing. The study of the gasoline station is presented in this thesis through certain concepts understood throughout the history of marketing thought.

Station history has relied heavily on its pervasive role as cultural artifact as Vieyra, Lohof, and Jakle have suggested. Yet, do we know definitively that the gasoline station is architecturally unimportant if it is so "publicly relevant," pervasive, of institutional character, and utilitarian? Can the preservational worth be substantiated for examples of station design which have been tagged as "...more generalized, less traceable to a particular design...

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26 John Maass, op. cit., p.3.
theory?" The early gasoline station is an appropriate building type through which to understand individual efforts to design for society. Nevertheless, the history of gasoline station design should be recognized as an architecture without individual architects which has always been influenced by a market-driven vernacular development. The boosterism of the 1920s was one such mechanism by which the vernacular ideals of society has been shown to impact marketing competition and gasoline station design27. But, station architecture since the 1920s has developed as a result of marketing and marketing's assessment of society rather than through the design input of any individual architect. The gasoline station's full history is most architecturally interesting not because of its individual and unique examples, but also because of its most general, typical, vernacular, and societal images.

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CHAPTER III

THESIS METHODOLOGY DEVELOPMENT

Preface: Within this chapter, a general understanding of the history of marketing thought and practice is presented. The academia and practice of marketing is broad ranged including the conditions of economics, politics, law, technology, market structure, and society for particular industries. Nevertheless, this thesis will limit the examination of marketing to the societal conditions and concerns which are noted to have also widened its thoughts and practice. Marketing has been unique to the twentieth-century. American social evolution, as historian Robert Bartels explained, had advanced so rapidly compared to any prior civilization "that one can scarcely tell which has had more effect upon the other: changes in thinking or changes in the environment."¹ The gasoline station's dominating existence in the environment becomes an appropriate model for such thought.

Business historians and theorists have generally defined the practice of marketing through three major periods or concepts: the "Sales Concept" which lasted from 1925 until 1950, the "Early Marketing Concept" which spanned from 1950 until 1970, and the "Advanced Marketing Concept" which has existed since the 1970s. The following thesis study methodology is designed to analyze the relevance of gasoline station design to the widening social evolution of marketing.

In Chapter II, gasoline station historians related changes in design through major changes in marketing strategy;

yet, while the gasoline station's significance was supported as cultural artifact, marketing's effect on changing American culture was not formally defined nor dated as to its first conception of practice. Marketing's importance has been larger than its origin of existence. This study proposes that marketing's role and response to the consumer and consumer society, although they do not represent the whole of its subject matter, has effected gasoline station design as a non-architect, but nevertheless, like the architect, it pays regard to the social implications of its creation. Gasoline station designs did not evolve stylistically or functionally like that of the Gothic Cathedral but rather are believed to have shown evolutionary significance through marketing's increasing social awareness.
The History of Marketing

The term marketing, first used as a noun, was believed to have originated between 1906 and 1911. Historians question when the percepts of the practice of marketing began, possibly with links to ancient history. Nevertheless, along with the new term came a new concept of a practice, by 'marketing' was first meant that combination of factors which had to be taken into consideration prior to the undertaking of certain selling or promotional activities. More generally, it has been percieved as a business activity, a technical function, a practice, or a phenomenon of trade.

Marketing thought which has advanced through this century has moved out of the simple realm of academic business and economic considerations and has included the implications of a social context. The relationship between business and modern market culture evolved from the nineteenth century. The consumer, once analyzed as an "economic unit," was newly considered a "consuming unit." The "consumer's viewpoint" and the contention that consumption is the end and objective of the production of goods and services was integral to the origin of marketing thought.

The Growth of the Role of Marketing:

The growth of the role of marketing is offered as a thesis topic to relate each era of marketing development by a distinct marketing concept for the promotion of product.
In the early 1980s the work of marketing historian, Robert Bartels, showed a decade by decade analysis of the subject:

1900-1910 - The Period of Discovery
1910-1920 - The Period of Conceptualization
1920-1930 - The Period of Integration
1930-1940 - The Period of Development
1940-1950 - The Period of Reappraisal
1950-1960 - The Period of Reconception
1960-1970 - The Period of Differentiation
1970 - The Period of Socialization

This list clearly defines the origination and major divisions of marketing with elaborations and clarifications between each major concept. Fred C. Allvine has provided a practical interpretation of marketing thought which summarizes the periods of major changes in marketing conceptualizations. Figure 3.1 outlines the major changes in marketing practice:
Prior to the twentieth century, the industrial revolution in America advanced the production of goods through the mechanization of machines and labor. Within the mass-production era, factories were centralized on a massive scale, which was followed by large migrations of people from rural areas to towns and cities. Techniques were advanced in order to direct the flow of goods from producers to consumers; hence, America was during the nineteenth century established as a market economy. Retailers and wholesalers brought buyers and sellers together. Increased attention was given by
producers to work with these "channel specialists" for assistance in the selling of goods.

The Sales Concept:

The sales era began during the 1920s and lasted until the 1950s, during which time the transition from production to marketing conceptualization was made. As corporations increased production and stockpiled surpluses of goods they required an increased "demand-creation." This era was marked by deep rises in competition, and firms became promotional organizations which hired salespeople in large numbers to traverse the countryside in search of buyers. Promotional programs were designed for disposal of products at favorable prices. Commercial research and marketing engineers were created out of improving sales and higher levels of advertising.

The term "marketing" was added to other activities described as "distribution," "trade," and "commerce." During the sales period, marketing when applied to practice meant the careful consideration of tasks necessary before the employment of salesmen and advertisers. More progressive manufacturers differentiated and isolated their goods in the market by branding them. Industrial design also found its origins in the 1920s and was concerned in particular with product design, "the business of giving consumer goods an individual identity
Design itself was realized as a cheaper form of advertising than could be accomplished by salesmen. One commonly cited example of the sales era has been explained through the activities of automobile makers Ford and General Motors. Henry T. Ford who proclaimed "any color so long as its black" in the assembly line production of the "Model T" had efficiently produced a low cost automobile which reached high sales volume. Nevertheless, General Motors eventually dominated the market as the company introduced the Chevrolet line in 1923 with additional color, styling, and comfort. By the 1940s, the American Marketing Association made formal definition of marketing as: "the performance of business activities that direct the flow of goods and services from producer to consumer or user." Marketing in the sales era became an integral component of many new companies which were interested in the means to deliver the products which were already produced.

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3 The American Marketing Association, A.M.A. was formed in 1937 by two already existing groups, one of educators with organized roots back to 1915 and one of practitioners whose organization began around 1930.
The Early Marketing Concept:

The "early marketing concept" was born following World War II, when firms found the necessity for "consumer orientation" in designing products, pricing them, and promoting them to stimulate market demand. Buyer behavior affected the external considerations of the firm as organizational behavior affected the structure of the firm. The logic of the sales era for selling what the company makes was reversed and companies began to make whatever they could sell.

Twenty-five years of marketing growth following World War II were highlighted by a rising standard of living, an explosion of technology, an increased population mobility, the growth of television, and the availability of abundant energy.

Since the end of World War II, the role of marketing has included the need to react to consumers in general. Marketing thought relied more commonly on concepts from the social sciences for interpreting market behavior. Firms more often depended on the collection of "statistics" through marketing research. Statistical data were analyzed for the size of the market, industrial versus consumer purchases, geographic location of customers, differing needs and wants of customers, and the nature of the "decision-making process." "Demographics" or buyer behavior (or socio-psychological variables) largely influenced demand for each firm's

particular output. An analytical problem-solving or "functionalism" characteristic of marketing through organized behavior systems was conceived.\(^5\)

A management approach to marketing was adopted which made it the most significant determinant of a company's product planning, place or channel of distribution, pricing, and promotion. The new ability to understand (through intelligence networks) and respond to customers' wants or needs brought about a customization of product and service. McDonald's was not the original fast-food restaurant but from one store in 1954, Ray Kroc's franchise grew to 225 stores by 1960 and 1,592 in 1970. He realized that mass society would respond to efficiency of food service and low price. The McDonald's eateries' success in this era was greatly attributed to the ability to apply the fast-food formula on a large scale with a behavioral organizational structure along with attention to buyer behavior. The, "KISS," "Keep It Simple, Stupid" method of operation was formulated and practiced throughout all outlets to give unskilled employees the ability to perform efficient service. Also, considerable attention was given to the innovation of tools and facilities -- such as the french fry scooper and washable surfaces -- to further support the efficiency of its behavioral organization. Visual systems of experienced phenomena ("hamburger container

to bag to table to building to urban/suburban setting" to national television) comprised the promotional, material evidence of the McDonald's system.

Organizations that adopted the new mode of thought recognized the consumer first and then worked backward to formulate its strategies. A General Electric annual report of 1952 stated:

...The company's adoption of the marketing concept introduces the marketing man at the beginning rather than the end of the production cycle and integrates marketing into each phase of the business. Thus marketing, through its studies and research, establishes for the engineer, the designer, and the manufacturing man what the customer wants in a given product, what price he is willing to pay, and where and when it will be wanted. Marketing has the authority in product planning, production scheduling, and inventory control, as well as in the sales, distribution, and servicing of the product."

Because marketing became the main managerial part of the firm it included greater attention to social, anthropological, psychological, economic, legal, ethical, competitive, technological, and institutional environmental and uncontrollable variables. Firms spread their interests nationally with the possibility of mass merchandising.

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The Advanced Marketing Concept:

By the early 1970s, many progressive firms had adopted an "advanced marketing concept" and had devoted considerable attention to interpreting and responding to consumers' wants. The 1970s became the period of "socialization" in marketing. New social concepts influenced the internal structure of firms as well as the environmental considerations of the firm. The firm's internal organization changed based on the tendency for overcommitment to marketing. Firms also increased awareness for the challenging issues of the social environment.

A more sophisticated marketing concept was idealized with (1) a firm-wide organizational emphasis on consumers, (2) an emphasis on marketing strategy as the primary managerial focus, and (3) the development of profit through selectively meeting consumer needs.\(^8\) No longer had marketing been conceived the sole determinant of product. The product became based on a shared commitment to strategic marketing planning which included the equal management of all functional business areas (i.e. accounting, legal, finance, inventory control, etc.). Firms more selectively analyzed the possibilities of existing businesses as well as new fields to enter. Organizational conflicts became more common as companies became more sensitive to the possibilities of overcommitment to marketing. Simultaneously, companies found the necessity to respond to social issues such as race and poverty problems.

\(^8\)ibid., p. 20.
social criticism of the chemical industry, social objections to marketing, advertising wastefulness, cigarette smoking, and the overconsumption of energy. The internal and environmental social re-orientation of the firm not only influenced the design of the products offered but, in addition, influenced the creation of more specialized products and product markets. An example of the advanced concept more directly related to the oil industry is the creation of specialized "quick lube" automobile franchises and the demise of the conventional "service station" which was prevalent between 1930-1970. Lubrication service was a vital component of the service station for fifty years but eventually began to carry a bad social stigma. The "quick lube" concept adopted the once labor intensive task and gave it an image of convenience.

The history of marketing conceptualizations have been explained in evolutionary terms. The relevance of the marketing design conceptions to the origin of gasoline station design is attributable to the fact that the National Petroleum News, the first retail gasoline station, and the first use of the term marketing each originated in the first decade of this century. Over three periods of marketing conceptualizations the external consideration of consumer society and the internal structure of the firm was shown to have changed. What implications might these periods have for the social role of the gasoline station? How may have the changing social organization of the firm affected station design? The impact
of the last period of advance in American marketing was little recognized by Vieyra and Jakle. Since the 1970s and the writing of these prior histories, enough has happened to gasoline station design to warrant its re-examination. Adding to the preservational issue of the thesis, gasoline stations have decreased significantly in number through the 1970s and 1980s. Therefore, the preservational consideration of the gasoline station's history must be carried forward.
Since 1909 and the origination of the activity which considered the promotional aspects of gasoline retailing, the gasoline station's design was affected through vernacular expressions. Of the first was its convenience of location and use. A 1909 Shell Oil Company affiliate in Saint Louis, Missouri is credited with the first "drive in" station although many refining or "bulk" plants were known to supply automobile gasoline since around 1907. As knowledge and common practices spread throughout the industry concerning advancements in station design it became a vernacular architecture. Has vernacular significance in station design related to the evolutionary characteristics of marketing? Can station design development be represented through significant and distinguishable examples whose components lack individual distinction? To identify significant gasoline station design these questions must be answered; but first, an appropriate method of study is needed.

The following thesis methodology is arranged through a content analysis of the National Petroleum News oil marketing journal which is documented and categorized for reference to marketing's influence. Key elements of gasoline station design are examined for their evolutionary change in meaning.
The *National Petroleum News*:

The *National Petroleum News* oil marketing journal was founded in 1909 by Warren C. Platt. It encouraged independent oil producers by promoting open competition in protest of the monopoly dominance of the Standard Oil Trust. The majority of the articles concerned exploration, production, and refining issues. The marketing aspect of the journal appeared in following decades to provide an important price reporting service and innovations in station design as market interests began to expand nationally. Jakle emphasised that throughout the journal's history it consistently carried articles oriented to station owners and operators. In 1953, the *N.P.N.* became exclusively a marketing journal and adopted a monthly rather than weekly format. The layout of the journal often reflected the major merchandising changes of the station including the addition of a section on "T.B.A." in the 1950s which has been replaced by a section on "C-stores" in the 1980s.

A content analysis style inquiry provides an appropriate method to study the design development of the gasoline station. John A. Jakle's justifed use of *National Petroleum News* is understood and its subject matter is adopted for the study of the gasoline station as it relates to the history of marketing conceptualizations. Jakle offered an interpretation of the journals leading role as a "mechanism of communication."
Study Methodology:

A key word analysis of gasoline station design components is adopted to categorize and to substantiate the content of the journal through comparative analysis. It measures the possible relationship between changing marketing concepts and changing vernacular expressions of the employed use of design. As the entire National Petroleum News is extremely voluminous, the study is bounded by articles from every fifth year of the journal from 1925-1990. These articles have been examined for facts, opinion, and propaganda which have been most consistently used in the communication of gasoline station design advancement. While Jakle's study examined the illustrations of the journal this study examines the expressions of design through their descriptions. His analysis of illustrations in the journal also included the advertisements of manufacturers. Although outside vendors to the oil industry are considered influential, they represented an outside bias and did not necessarily predict what oil marketers eventually adopted or would adopt as practice. Therefore, advertising from outside interests are disregarded. No exclusions are made as to particular modes of gasoline marketing or types of station design.
Key Design Element Search of the National Petroleum News:


Content Selection:

Extracts from journal articles were selected for documentation only if, in the context of its subject matter, ideas expressed some perceived or conceived idea of consumer or social preference in design. Content selection was established through the ideology of those who suggested how the use of design would affect consumers or through the ideology of consumers whose opinions or suggestions were believed to affect design. Design element headings underwhich
article extracts are grouped are generally suggestive of the content of each article. The exact object of a particular topic heading is highlighted in bold print. The object's subject description is highlighted in bold print plus set apart by the use of brackets: "<<describing text>>." 

Documentation Format:

The format of each chapter documentation is as follows: The date of publication heads the beginning of each entry with the following syntax: 9/30/25 (44) means September 30, 1925 and the article title page is on page number forty-four. The title of the article begins on the same line after the date of publication and includes the author's name and other source information when available. All quoted material appears as single spaced lines of text and is indented. Transitional statements, sometimes utilized by the author of the thesis, are formatted as double spaced lines of text. Cross referencing to appendix figures, which may relate to various articles, will appear as "See Figure A.(number of figure)" and are arranged as an appendix to the thesis. The final documented form of the thesis is arranged in three chapters which correlate to the changing conceptualizations of marketing. Chapters IV, V, and VI provide a source of reference for the later comparative analysis of the most recognizable generalities between station design and evolutionary marketing concepts.
Conclusion

The evolution of the history and practice of marketing is a broad ranged subject, and its subject matter has included more and more complex issues and fields of interest through time. Marketing has made America's socio-economic circumstance unique to the rest of the world. All of commercial architecture like the gasoline station dominates the American lifestyle and scene as byproducts of marketing's influence. Station design responsibility has passed from the early entreprenuer and designer, to the corporate design department, to a highly coordinated corporate structure. But, can its architectural meaning be described in terms of such an evolution? If so, then the significance of the gasoline station is reflected through its vernacular conceptualization. Gasoline station history is believed to be appropriately measurable and definable through changing marketing assessment and response to consumers and society.
CHAPTER IV

THESIS STUDY: "NATIONAL PETROLEUM NEWS," KEY WORD SEARCH OF GASOLINE STATION DESIGN ELEMENTS, SALES CONCEPTUALIZATION PERIOD -- 1925-1945

Within this chapter, articles from the National Petroleum News are documented from the years 1925, 1930, 1935, 1940, and 1945. Within the documentation, design descriptions and expressions are highlighted which represent the vernacular character of innovative and commonly used ideas of gasoline station design. Design concepts and descriptions are analyzed in the "Findings" of this chapter for their relationships to the "Sales Conceptualization Period" in marketing, 1925-1950, as presented in Chapter III. The "Findings" of this chapter provide a basis of comparison to the other two periods of marketing for the "Results of the Study" located in Chapter VII.

Within the "Development of Thesis Methodology" located in Chapter III, the study methodology, the key design element search, the content selection, and the documentation format for Chapters IV, V, and VI are described.
9/30/25 (44) "Ohio Jobbers Get Pointers..."

...[It was suggested to jobbers to] get an architect when you plan a new station, and get <<something distinctive>>. <<A good looking station is a good advertisement>> and it's hard for an inexperienced person to make a good design.

11/11/25 (128) "Where Service Stations, Through Their <<Attractiveness>>, Are <<Assets to the Community>> in Which They Are Located"

1. An <<unusual style>> of layout and architecture is employed in this newly completed service station of the Northern Oil Co., which is located on London Road, Duluth, Minn., a highway which borders the shore of Lake Superior....

A low fence [parapet] around the top of the canopy encircles the domeshaped roof [Second Empire French] of the station. Double pillars [pilasters] at each corner of the station building, and an <<attractive>> red brick and stucco fence about the station [material], add to the <<architectural beauty>> of this station.... This station could easily be <<classed among the most attractive in the country>>.

See Figure A.1.

4, 5 and 6. Here are three service stations that have been built to <<harmonize with the homes and surroundings of Coral Gables, exclusively residential district of Miami, Fla>>.

...The <<Moorish>> tower, the long narrow slits representing windows, spiral pillars in the interior, spacious curving door-ways, and <<decorative Spanish>> grilles of wrought-iron giving a <<cloister effect>>, are in keeping with the type of <<architecture familiar in countries bordering the Mediterranean Sea>> [material].

Of buff colored stucco, trimmed with white marble, and red tile roof, is this unique and ornamental service station of the Gulf Refining Co....Spanish architecture is employed, even to the balconies at the narrow windows near the top of the towers on either side of the station...doors are...enclosed in iron fences similar to the balconies above. Lamp posts <<harmonizing>> with the station, a low
curving marble wall at the sides... <<one of the most ornate [stations] in the country>>.

...The station of the Standard Oil Co. of Kentucky.... The pillars, which are of <<uncommon style>>, give the appearance of a wall from which an arch, to form a doorway, has been cut.

See Figure A.2.

4/30/30 (105) "Tourist Camp Stations Patterned After Dutch Windmills," by E. L. Barringer, Knoxville, Iowa

A chain of service stations in this district, some with tourist camps adjoining, is patterned after the windmills <<of Holland>>.

These stations are called Dutch Mill Stations, and are operated by the Dutch Mill Service Co.... Five tourist camp stations, and five service stations, comprise the chain now.

...B.H. Shelton, president,...had the name and design copyrighted. Several stations in the middle west have been licensed to erect this type of building, but the company plans to develop its own chain.

See Figure A.3. Marketers sometimes adopted exotic forms to attract motorists traveling along tourist routes.

6/25/30 (89) "Indian Village to Grow Around Station"

...The station is operated entirely by Indian boys attending Haskell Institute at Lawrence.... Louis Weller, a full-blooded Caddo Indian,...is manager of this Indian Village service station.

...Perhaps the most <<unique>> project attempted along the lines of a tourist cabin camp is being constructed at the present time one mile north of Lawrenceville. This is being built in the form of an old-time Indian village, all the architecture of which is in true Indian style in the shape of <<Indian>> tepees.

See Figure A.4.

3/13/35 (35) "Business Spurts...When Modernized Enamel Steel Station Replaces Ugly Three-Story Building"

The station is <<conspicuous>> because of its 30-foot tower [signage]. <<Symbolic of the original drilling rig..."
of Col. Drake>>, the tower demonstrates the feature possibilities of porcelain enamel as a building material [material].

To establish brand-name awareness, some marketers utilized recognizable or commemorative forms in station design. In the case of this outlet, the company made a commemorative gesture to the history of oil production.

3/13/35 (68) "Service Station Trimmed with Glass, Gives Night-Time Illumination"

<<Striking to the eye of the customer>> is the recently modernized Gilmore Oil Co. service station in Los Angeles...Dominating the improved unit is a tall, luminous pylon, glass-sided and square, upon three sides of which are mounted letters 24 inches and 18 inches high.... Within the pylon are 150-watt bulbs and upon the top sits the company trade mark...[lighting, signage].

See Figure A.5.

Materials combined to accentuate the signage value of the station building. The pylon form was central in this design. Additionally, the signage motif was continued across the station building and canopy fascias.

6/5/35 (33) "Station Modernization Features," by John W. Thompson

The Pure Oil stations, resembling little <<English cottages>>, are distinguished by their gabled roofs, arched doors and windows... A number of new station designs are including pylons which are <<harmoniously worked into the architectural scheme>>. The chief purpose of these pylons is to carry the name or design so that it will be <<prominently displayed and recognizable at a distance>>. The pylons are normally designed with a glass panel into which are fused the identifying letters [signage, material]. Neon tubing is also used in place of the glass [lighting].
The <<dominant architectural feature>> of the new station is the circular bay, more than 30 feet high, flanked with two cantilever canopies [canopy].

See Figure A.6.
9/30/25 (44) "Ohio Jobbers Get Pointers..."

...Whether the station should have a canopy caused considerable discussion. Most of the Ohio marketers present seemed to favor the canopies... <<high enough to permit the passage of trucks...>> and [felt] that the supporting columns should be <<far enough from the station building as to not interfere with traffic under the tops [site usage]>>.

3/19/30 (103) "Greasing Equipment Takes to Cover..."

...Are canopies singing their swan song? At least the long, awkward types of several years ago seem to be, although some companies prefer to use them in <<new styles as an established trade-mark of the service station...>>.

9/24/30 (188) "Satisfying All Needs of Motorist Is Trend in Oil Merchandising," by E. L. Barringer

...highways are faster today. The old saw about 'here he comes there he goes' is a cold, hard fact that the station operator must face. This element of <<today's speed>> was considered in locating the Sandusky station [site usage]. Coming from the east the Sandusky station, by its <<high>> canopy (fifteen feet) and its sign, is <<visible>> for about two miles [signage]. From the west it <<comes into view>> after rounding a curve half a mile away.

...The canopy is...covered with red tile roof. Floodlights are being installed at the rear of the station building, directly on the tile roof [color, material, lighting].

See Figure A.7.

11/12/30 (217) "Points to Consider in Building One Stop Service Station," "By Gordon Johnston, Director of Sales, U.S. Air Compressor Co., Cleveland, Ohio

Many companies favor an overhang or canopy over the driveways and islands at front of building, as a <<protection to customers and attendants in inclement weather>>. This is largely a matter of
choice, although such construction lends itself particularly well to certain types of architecture.

3/13/35 (68) "Service Station Trimmed with Glass..."

This canopy is <<illuminated>> at the facia,... [lighting]. So designed, the canopy elements can receive removable silhouette letters for any appropriate advertising copy... [signage].

See Figure A.5.

3/13/35 (85) "Face Lifting Operation Helps Station Sales"

In remodeling all... <<obstructions were eliminated>> and one smooth service floor was made broken only by an umbrella shed over the pump island. This permits a customer to <<enter from almost any angle and to get out again>> without the need of a slide rule and compass [site usage].

See Figures A.8a,b.

3/6/40 (33) "N.P.N.'s 1940 Gallery...,"

<<Features...>> 18 x 19-ft. cantilever canopy supported by two 18-in. I-beams anchored on front pilasters and at rear with tie bolts to foundations.

See Figures A.9 and A.10.

<<Aviation Design...>> two canopies each 13 ft. wide and 32 ft. long. Centerline of pump island 11 ft. in from sidewalks...<<Unusually long>> cornice front facing on intersection.

See Figure A.11.


New developments are also reported in the past year in the type of station construction in which the canopies are supported from central upright beams. This design is claimed to permit a <<light construction>> for the station building and to provide for <<originality of design>> by the use of the upper portions of the central beams for display signs or <<purely decorative features>>.
"Service Stations for the Era of Increased Competition"

On the subject of canopies over pump islands, the virtual, almost unanimous opinion was that such <<appurtenances>> would not be included on Eastern stations but that <<they will probably be continued in the South and in the West, because custom there demands them>>.
COLOR

5/13/25 (101) "<<Fresh>> Paint and Posies Lift Jinx from Unprofitable Station," by Lawrence B. Davis, station owner

White was <<attractive to the eye>> and, when kept free from grime, <<added to the clean look of the station>>.

...Looks actually mean something to a service station, something that can be expressed in volume of business done. The accompanying story tells how a little paint and whitewash increased business... at one service station. Because white is always attractive when it is kept <<clean and spotless>> and <<hits the eye harder than perhaps any color, or color combination...>>.

See Figure A.12.

7/22/25 (32) "<<Unique>> Design <<Makes Station Attractive>>"

...The station is furnished in <<iridescent>> Portland cement, with pink and red predominating [material]. The roof is of many colored shingles, topped with an antique chimney [material]. Cornices are of old ivory, and the <<quaint>> blinds on the window are blue as are the pumps and even the rain barrels.

Red, white and blue paint made otherwise quaint station features uniquely visible. See Figure A.13.

...The ladies' powder-puff room...is one of the features of the station and is finished in mahogany and white with blue and gold hangings, <<harmonizing with the color scheme throughout the station>>.

3/19/30 (104) "The Modern Service Station"

(p. 128) ... we encounter <<light, soft>> colors in modern service station construction. The outside of the station is of light stucco and the inside walls are of white plaster [material].

(p. 136) ... A new <<softer>> and <<brighter>> color scheme was adopted this year by the Union Oil Co. of California. Its stations are being painted orange, blue and white: orange roof and foundations, 17-inch. blue band above foundation, and white body
for station, the <<effect>> being a white band between orange top and blue band [bottom]. Increased business has resulted, the company says, from the <<brighter appearance>> of the stations.

4/2/30 (90) "Sign Board Is Feature..."

...The station lot is surfaced with patented street paving material [color assumed black], selected for its <<non-glare>> and long wearing qualities, and because it affords a <<good contrast to the white building>> [material]. The building is of natural red brick, acid treated [material]. The company's colors, blue, white, and red, are used.

See Figure A.14.

5/7/30 (27) "Exclusive Right to Pump Color Schemes Upheld in Court Ruling," Cleveland, April 30

While it is generally recognized that an oil company cannot secure the exclusive use of any particular color in identifying its gasoline, the courts in New York State have recently ruled that a company does have a property right in a combination of colors on its pumps and tanks used <<in a particular design to identify its product>>.

...The Sun Oil Co. Philadelphia secured a permanent injunction restraining one of the larger jobbers in New York from using its color combination and design of blue and yellow <<in connection with the sale of blue gasoline>> in that territory.

Similar rulings marked the beginnings of the race for creative color, company identity.

2/20/35 (39) "Color Test Discloses Preferences for Blue and Purple Cans," Security Oil Co., Wichita

...The <<preference of the majority>> indicated that cans which predominated in blue or purple backgrounds with blended name colors met the greatest approval. Particularly was this true among farmers. Red was the next color and green followed in sequence of selection. Colors with the <<least appeal>> were combinations of yellow, orange and black.
Nineteen customers chose as their first selection a blue can with a rich yellow signature seal. This same can was also picked 14 times as a next choice. The can in second place portrayed action having an airplane and streamlined letters imprinted on a light background which occupied the upper half of the can. The lower half was dark with light letters. Simplicity of design seemed to have considerable effect on the selections. The Security Oil Co., on the basis of this test, has selected for its new oil cans a blue background with name and trademark in red and white letters.

Red, white and blue color combinations had begun to develop a general associational value for consumers of the retail gasoline market. Consumers favored color designs with simplicity or visual clarity.

3/13/35 (50) "Modern Design..."

...Color possibilities in enamel are unlimited with the exception of gold or silver. The hues will not fade, and their <<brilliance>> is quickly restored by application of soap and water. <<Identifying>> colors are easily adopted and because of the <<richness>> imparted thereto, the <<sales appeal>> and <<visibility>> of a station is improved... ...Stainless steel corner trim, door frames, window ledges and wall strips, <<setting off contrasting colors, heighten the modern aspect...>>[material].

See Figure A.15.

6/5/35 (33) "Station Modernization Features," by John W. Thompson

...Common brick is holding its own as a favorite building material among some of the larger oil companies. The Gulf stations, which varying somewhat in layout, cling closely to a certain color of brick and a <<general uniformity of architecture>> which group these stations <<under one common name>> [material]. The Standard Oil Co. of Indiana has for a number of years used both a red brick and a cream colored brick for its stations [material]. Socony stations of a brownish brick, enhanced by decorative wood trims around the doors and windows,
create a <<colonial impression>> that is not lost, regardless of the variations in building layouts. One oil company using concrete drives mixes lamp black with the concrete to give it a black appearance which an excellent <<contrast with the station colors>> [material].

...In Ann Arbor, Mich., is a Staebler Oil Co. porcelain enamel station that...is actually an <<effective billboard>> with its blue base, cream body, yellow canopy, and red letters [canopy, signage].

...Cities Service relies principally on its highly effective color scheme of black and white to <<unify its various station outlets>>. Regardless of the station design, these <<contrasting>> colors make each station very definitely one of <<a series which are readily recognizable>>.

Unified station appearance, achieved through color design, generated brand awareness.

6/5/35 (62) "Color in the Modern Station," by N. M. Mainpa

Industry has been a long time in adopting color. Only in very recent years has it begun to recognize its possibilities, not only as a <<beautifier>>, but as a <<sales stimulant>>. The color tides were already sweeping on us when Mr. Ford, that last bulwark of conservatism, withdrew his former ultimatum: "Any color--so long as it's black!" Ford sales were suffering.

"The initial shape and color of most machine-made articles are <<ugly>>," a famous color expert observed recently. "Nature does not err in that way. All her products are artistic and harmonious with each other. Only man, with his filling stations... strikes a discordant note!"

Recently there has been a definite trend on the part of oil companies to improve their buildings and equipment with discriminant and <<harmonious>> use of color. Some have hired color experts to solve their problems. There are, too, those who have been alive to the proper use of color for a long time, who have employed it exceedingly well and have been compensated not only in <<improved appearance>> of marketing outlets but in <<increased sales>> and <<good will>> as well.

One of the simplest and surest roads to the <<agreeable sensation>> we seek in color relations is to combine opposites. A. H. Munsell, foremost
authority on color, says in his book on the "Munsell System of Color," widely used in art work: "If properly apportioned as to amount or area, these opposite colors will balance in perfect neutrality."

These contrasting, or opposite, or complementary colors, as they are called by artists are:

Red -- Blue-green
Yellow-red -- Blue
Yellow -- Purple-blue
Green-yellow -- Purple
Green -- Red-purple

The simple hues are: red, purple, blue, green, and yellow.

Successful combinations, Munsell points out, can also be made between neighboring hues; that is, of any hue with the hue which immediately precedes or follows it on the color scale: green with green-yellow; red with yellow-red; yellow with yellow-red; and so on.

Hue may be varied indefinitely by taking it at different steps of value and at different strengths of chroma.

Color actually imperils sales or stimulates them. This is best illustrated in the case of a well known national distributor, which had a color scheme so ugly and repellent to the eye that this fact alone must have kept many people from trading at its stations. In fact, we have heard people mention this point.

...Suggestions [for modernizing old color schemes] come from H.E. Eiber, manager of the service station division of The Austin Co., Cleveland. He says, from practical experience:

"Some color combinations now in use probably are not employed to the best advantage. These same colors may be retained by toning them down to lighter tones. The lighter shades than can be used as an all-over, where a quantity of surface as in a service station building, must be covered, and the brighter or contrasting hues can be used for trim.

"Also, your color scheme, modernized, can be adapted readily for signs and station equipment. It has been found that the stronger hues are best for lettering on a light background, such as red on white, black on white, and so on, rather than the reverse."

White, in Mr. Eiber's opinion, is the best all-over color, both for exteriors and interiors. This is because white, combining all the colors in the spectrum, reflects more light, both day and night.
Color theory also supports this and all lighting <<tests prove>> that white is by far the <<greatest reflector of light>>. It has a reflecting value of 84 per cent, as compared with the next nearest value of 68.8 per cent for cream, according to tests published by the Federal Housing Administration. White has been used from <<time immemorial as a symbol of purity in religion>>. Thus our reaction to white is that it is <<clean and pure>> and we use it extensively in kitchens, bathrooms, hospitals, cooking utensils, or wherever we wish to stress cleanliness.

It's an <<"element of surprise">> when used in lubritoriums and stations and <<"shocks" the customers>>, because of its <<incongruity with oils and greases>>, thus leaving a doubly effective impression, in the opinion of Arthur S. Gray, color expert and merchandiser with the Standard Oil Co. of Ohio. All Standard's stations and lubritoriums have white interiors.

It is well to bring up here the insistence of one oil company on a green—a none too light shade at that—for interiors of its new stations and lubritoriums, for no other purpose than "to carry out the color scheme." The fallacy of such an undesirable choice is proven, not only in color theories and color properties, but in actual tests and use, since even a light shade of green has a reflecting value of only 45.2 per cent, and a dark green has a value of only 9.2 per cent. A much better choice would be a green trim on a white or off-white all-over color, thus keeping the company color scheme intact, and reaping the benefits of proper color use.

Gleaned from actual experience, Mr. Eiber's contention, therefore, is supported by research and tests. He summarizes as <<desirable>> interior or exterior all-over colors any shades ranging from white to beiges (creamy tans).

If there are two other colors in your scheme, aside from the white-to-beige all-over color, or you wish to use two others, say, red and blue, or orange and blue, the red or orange can be used in the upper part of the building, or as a band around the building, or in lettering, and the darker shade, in this case the blue, at the base.

"Always use the darker shades at the bottom," Mr. Eiber says. <<"Otherwise, you will have a top-heavy structure, with diminished visibility.">> One station, he said, had used bright blue around the upper portion of the building, in about 40 per cent of the area. The rest of the structure was a light color. The effect was top-heavy, the blue
swallowing up the rest of the building. A better plan would have been to use a narrow band of blue at the top and a wider band at the base of the same hue, or better still, of a darker hue.

It is interesting to note here, again, that color theory is borne out in actual application. Color theory classes as foreground colors red, orange, bright green, or any of the intense, vivid colors. These should be used in the upper portions of the buildings, or as trim, and not as base or all-over colors.

For base colors, Mr. Eiber suggests: black (it has its moments!), dark greens, variety of blues but not the lighter tones, and some reds. Be careful of the "fighting reds." The reds that are proper for use at the base would shade from less bright hues to the blue-reds and purples. Reds not to be used for base colors are the vermilions, crimsons and orange-reds, shading up into the lighter tones.

For trim: various shades of bright greens, orange-reds, yellows, orange, bright blues and even Navy blue in a small proportion, suntans, and browns. Best all-over colors, for both interiors and exteriors: white to creams or beiges.

In order to use color harmoniously, without clashing or swearing at each other, they must be used in proper proportions. When using a tri-color combination, it is well to devote at least half of the area to the white or light all-over color. The lower one-fourth should get the darkest shade, and the upper one-fourth the bright, contrasting color.

If desired, the contrasting or "trim" shade need not cover the whole upper one-fourth. It can be used as a band.

Good example: Standard companies, with red, white and blue colors--white for all-over, blue at base, red at top. Red is used in lettering of the company name at the top.

Another way of using color in buildings is to use two tones of one shade, plus the all-over color. This gives a neat and harmonious appearance. If green were chosen, it would be proper to use jade green, for instance, at the top, and a dark or forest green at the bottom, with white or ivory in between.

There is an infinite variety of color combinations and shades of color from which to choose, and a variety of effects to be achieved. One of the methods of using color is to use a band of <<contrasting>> color near the top of the building or the canopy band in Neon lights, as so many new stations are doing. Many use Neon in the company
name obtaining <<greater luminosity and penetration>> with this type of light [lighting]. The Sun Oil Co. has an all-white building decorated only with a narrow band of ultra-marine blue about a third of the way down from the top. This use of <<intense>> blue on white creates an <<impression you don't forget readily>> and it <<ties up well with the company's only grade of gasoline>>, Blue Sunoco. It's a clever color scheme, even in the opinion of competitor Arthur Gray, previously mentioned.

The Cities Service Oil Co. has an arresting combination of colors: white, black and green. The building is white, roof and some trim black, relieved by green. White and black, the extreme contrasts on the color scale, are <<always dramatic when used together>>. The green is <<intensified by the use of black>>, thus producing not only a <<startling effect>>, but one that <<always appears fresh and clean>>.

Color <<stirs the emotions>> in most of us in some way. We have definite reactions to it and these reactions or moods are most elementally expressed in terms of color. Thus, we "see red" or are in a "purple rage" when we are angry; we are "blue" or in "black despair" when depressed; we are "green with envy"; he who is weak and cowardly is "yellow"; and a good, righteous, square-shooting individual is described as "white."

Here are a few facts about the most important of these colors, which may help in deciding which to use and how to use them:

Colors, in scale of brightness, are: yellow, orange, green, red, cyanine blue, ultramarine, and violet. Yellow, the color of sunlight, is the brightest color in the universe.

Green, the most important color in the world.

Red, the color of battle, is intense, fierce, dominating, having greater warmth and greater visibility than any other color.

Blue, a negative energy associated with darkness, is the coldest color of all. It forms contrast to red and yellow.

A blue-violet is weak in light, therefore, a cold color. Red-violet is warmer and more intense, therefore, more plainly visible.

Brown, an every-day, practical, "earthy" color with warmth.

Gray, an atmospheric tone, a cold background color. Black-and-white, effective, impressive, eye-compelling, dramatic.
...While there are always <<individual preferences>> in color, the following are choices of men and women generally, determined by many tests:

**Masculine**
1. Blue
2. Red
3. Purple
4. Green
5. Orange
6. Yellow

**Feminine**
1. Red
2. Purple
3. Blue
4. Green
5. Orange
6. Yellow

"All pure color," M. Bernstein, reserve lecturer at Oxford University says in his "Color in Art and Daily Life," "keeps its quality best in a state of moderate illumination, the amount of change which takes place in artificial light being conditioned by the color of the illuminant [lighting].

"Generally speaking, the tints opposed to the color of the illuminant disappear---the red beams of the setting sun eliminating the green from a landscape, while the violet tones of twilight and the blue shades of night bring them forth again."

Thus, if colored lights are used, a reference to the contrasting colors mentioned earlier will indicate what colors of light not to choose.

The white or yellow electric lights used extensively at service stations prove the <<best for illumination>>, although they produce entirely different effects on color. Thus colors for stations must be chosen to show up well during both day and night hours. Blue, for instance, looks entirely different under artificial lights than it does in the bright sunshine.

The color problem in the porcelain enamel, glass and stainless steel structures <<does not seem to suffer from lack of intensity>>. In fact, color seems to be intensified during the night hours, with lights used around the station and behind the glass and enamel, producing a colorful, <<shimmering effect>>.

As for color selection in porcelain enamel, 400 different shades are available, according to Milton Gallup, sales representative of The Enamel Products Co., Cleveland, porcelain manufacturer. While most of the enamel used to far has had a glossy finish, it is now available in dull finish also. The dull finish materials come in many different designs, with contrasting stripes, linen effects, crystalline, and so on [material].

Any executive, without benefit of color experts on his staff, might do well to spend an evening in studying this fascinating subject. A good popular book on color is the one mentioned previously, by M. Bernstein, on "Color in Art and Daily Life." It
is available in libraries in principal cities. An authoritative and widely used book is the Munsell System of Color, by A. H. Munsell, available for reference mostly.

3/6/40 (33) "N.P.N.'s 1940 Gallery..."

"...Green neon tubing in back of translucent glass blocks...provides <<effective night illumination>> in combination with red neon signs [signage, material, lighting]."

See Figure A.16.
GOODS DISPLAY

5/13/25 (102) "<<Visible>> Vendor Handles Motor Oil in Original Packages," New York, May 8

A new method has been devised by the Galena Signal Oil Co. for bottling, transporting and vending lubricating oil...bottles 21 inches long...are put in a visible vendor which holds 20 tubes--this <<revolves in front of a light>>, the customer <<seeing exactly>> which oil he is buying...[lighting, material].

See Figure A.17.

2/26/30 (33) "Display Goods to Create Demand, Minnesota Jobbers Told," Minneapolis, February 21

[Jobbers were] told in convention here Feb. 19 and 20 by R. M. Ward, supervisor of lubrication sales for the Skelly Oil Co., Eldorado, Kan.... Ten fundamentals on merchandising as outlined by Mr. Ward are... 3 ...dust off the packaged goods. 4 ...Display goods at the stations and on trucks so they will be <<attractive>>. Display goods in station windows and on pump islands. Use <<chain store methods in making your customers want the goods...>>. 8. Advertise to increase local demand for your products. Use the local newspapers, direct mail pieces, follow up systems, and real roadside signs...

Chain store methods were cited in this editorial for the arrangement of goods.

12/24/30 (59) "One-Stop Service, Pump Island and Show Windows Favored for Merchandise Display," by E. L. Barringer

Some equipment manufacturers also have developed display standards for their products. One line, for instance, has a post about two feet high, with the goods hung on two sides. The packages, of course, are dummies, to eliminate thefts, and sales are made from a storage stock.

One type of permanent metal cabinet has been purchased in large quantities by one sales organization that has gone in extensively for one-stop service. This cabinet is rectangular in shape, and is bolted to the concrete...On the top
section...is a display space, <<on the level of a customer's line of vision as he sits in his auto...>>. This <<part is illuminated [lighting]>>. In the bottom section is a storage space, totally enclosed with metal [material]. The other space favored for merchandise display, the station show window, has developed rapidly in recent years [material]. The larger stations, with enclosed lubrication lifts, have included adequate show windows. The window was given the <<utility of displaying goods in addition to admitting light [lighting].>>

See Figure A.18.

...Another major company, handling a few accessories, has developed show window space in the front of its new stations, and has gone in for color to <<attract attention>> [color]. Illumination of the station is by white light, excepting two show windows on either side of the front, and these are <<lighted now by a color corresponding to one of the company's colors>> [color, lighting]. Even with the smaller type service station the display window is <<not being neglected>>. One major company, for instance, is using glass for 97 percent of the front and side areas of next year's stations [material]. <<Popularity>> of the pump island [display] and front show window merchandise displays is <<based on the numerous customer contacts made at the gasoline pumps>>. The <<display value>> inside the station buildings, in the lubrication room and the waiting rooms, probably will not be overlooked in merchandising programs.

1/16/35 (38) "Special Cabinet with Sign Sells Bottled Oil"

<<Emphasizing the sale>> of Pennsylvania grade oils in glass bottles, the United Gas Co. of Philadelphia uses a large sheet steel cabinet in its main service stations...[material]. ...the cabinet is <<large enough>>, being four and a half feet high, by three feet wide, <<to carry a large yellow and red porcelain enamel sign>> which announces the sale of oils in sealed bottles of the latest design...[signage, color]. ...the top of the cabinet provides a display space for 48 quarts, an <<imposing battery>> of <<attention-getting>> bottles. The customer <<can see the oil readily>>.
See Figure A.19.

3/13/35 (35) "Business Spurts...When Modernized...

The building office, which is approximately 23 feet long by 15 feet overall, possesses two <<large>> windows, one facing each of the courts. <<Ample display space>> is provided for tires, batteries, canned oil and other accessories. Chairs and <<comfortable>> appointments <<ease>> the customer who waits while his car is being serviced.

3/13/35 (48) "Makes Display Window of Car Lubrication Department"

That vacant lot eyesore between the building used as a service station and the one containing the tire department of the Fred Kistler Oil Co. of Coffeyville, Kan. has been eliminated and car lubrication operations made into a window display... ...The lubrication department also will be close enough to the plate glass front windows for pedestrians and passing motorists to <<see "what is going on.">> Every time a car is lubricated it will form a <<front window display...>>.

See Figure A.20. The owner borrowed from the goods display design trend to display his lubrication service.

3/13/35 (50) "Modern Design..."

...For window display space, the porcelain station offers distinct advantages. Because of its steel frame, windows can be located at will. Sohio's new units are completely belted with glass on all sides and the accessory display area <<is generous>>. Extra natural light is made possible by these windows and the white walls within... [lighting, material, color].

See Figure A.21.

6/5/35 (33) "Station Modernization Features," by John W. Thompson

<<Visual selling>> has long been considered one of the most effective sales methods. It is a type of
selling which the 5- and 10-cent stores follow religiously, with very satisfactory results. 
"...The <<distinctive>> angular show window serves both as an <<excellent display medium>> and as an <<identification mark>> of a Dixie station [material]."

9/11/35 (35) "Oil Displays Boost Sales For Two Marketers"

An investment of $1.00 for lumber, $3.00 for tin, and $17.00 for a sign painter, has succeeded in boosting A.B. Riker's oil sales 10 per cent at his station in Binghamton, N.Y. This investment went to build a lubricating oil display rack which now <<stands prominently>> in front of his station. Riker says the display is <<novel>> enough to make passing motorists stop and look at it, and that, of course, is one of the first laws of selling. He dispenses his own brand of Pennsylvania oil from the highboys at the front of the display. Directly behind these containers are four shelves, divided in the middle, making eight sections for the display of eight different brands of canned oil. Over these shelves is an arc-shaped canopy with banners painted on it, displaying the names of the brands carried, and following the individual brand color combinations. Above this canopy is another sign which reads "Change Oil Now [signage]."

See Figures A.22 and A.23.

10/2/35 (34) "Applies Chain Grocery Merchandising Ideas to Sale of Accessories"

Displaying his merchandising outside, <<where his customers can see it>>, is the principle Gordon Whitehead applies in operating a station which he owns in a residential section of Duluth. This principle he brought to the service station business from his experience gained behind the counter in a chain grocery store and in a drug store. He carries a wide line of accessories and automotive equipment and most of this, as well as his line of specialty petroleum products and his motor oils, is carried on shelves and in a display cabinet outside his station, at all times the weather permits outside selling.

See Figures A.24a,b,c.
An octagon-shaped waiting room and office is located at one corner of the building. It extends out into the drive slightly and is completely enclosed by glass walls from ceiling to floor. See Figure A.25.

Curved glass frames in lubricatorium door and at each end of large display window, accent modernistic streamlined design. Display visibility highlighted by wide horizontal window panes and use of fluorescent lighting in salesroom. See Figures A.26a,b.

Light thrown on station from within projecting light band accent "show case" design. Display window 24 ft. long, front and side of salesroom [material, lighting]. See Figures A.27a,b.

A modern show case for special emphasis on merchandising displays results from wide, high windows all the way around the outside of a projecting salesroom [material]. Inside display featured by 6 ft. shelving recessed into two salesroom walls. See Figures A.28a,b.

Bay window effect fronting the 16 ft. salesroom, provides excellent display facilities... [material]. See Figure A.11.

Shelving and racks along rear wall of lubricatorium provide attractive display storage.

Greater prominence is being given display windows as a means of increasing the number and importance of contacts between customers and merchandise.
8. "Modern design" is making effective use of overhead shelving around walls of the service bays and of racks suspended from the ceiling for combined display and storage purposes.

...In keeping with the pronounced trend to make the station's display windows more effective tools in the merchandising of extra-profit products and accessories, the display space is "shedding its cloak of obscurity" [material]. "Facing and within easy view of motorists at the pump islands, it is designed to say, in effect, "Look at me, I've got something worth seeing.""

This is being accomplished in a number of ways, but the objective is the same. One of the "most common methods" is to cut off, or round off the corner to the sales room, and move the entrance to the side near the service bays [site usage]. This makes a "continuous" display possible for almost the entire outside circumference of the sales room—in some cases upward of 25 feet.

Since "visibility" is an important factor, the windows are made as "wide as possible", obstructing corners or supporting members are refined to "narrow dimensions", or eliminated entirely at some points by use of mitred glass, cemented and clamped together [material].

Perhaps one of the most promising methods for "adding emphasis" to these display windows is by a "projection" of the sales room on one or two sides... "bay-window treatment" allows the displays to extend as much as 6 ft. beyond the regular station front.

9/26/45 (18) "Service Stations for the Era of Increased Competition..."

One of the most interesting comments in this connection was made by John Martin, general manager of the Eastern Marketing Division of Socony-Vacuum. ...

[He] predicts that there will be more glass frontage in postwar stations.

"Our experimental station will have no partitions whatsoever," Mr. Martin said. "There will be no wall between the lubritorium and the sales room. This, theoretically, is in order that the customer who comes in to have his car oiled will have his "eye attracted" by the material in the sales room and hence there will be a "greater inducement to purchase" additional goods [site usage]."

A running description of the Lion [Oil Company] plan said that "many new arrangements have been designed
for greater sales, better service and more efficient operation."
The article in the Lion Company journal pointed out that "the <<large visual front>> provided in the design converts the inside of the station into a <<business-getting>> show window. "Two- and three-bay stations are being designed with emphasis on visibility so the operator can see through the glass panels from the merchandising area to the service bays for closer control of service work [material].

10/24/45 (18) "Functional Value Featured in Shell's Model Postwar Station"

The new Shell station includes a sales space for merchandise, glass-enclosed on two sides, twice as large as the former size [material]. The company will suggest that stations carry standard automotive accessories and replacement parts, as well as cigarettes, soft drinks, candy, hardware, garden supplies, a line of small electrical appliances, toys, games and similar small merchandise -- described as of the so-called "im impulse sale" variety>>, small enough not to require installation or servicing.

See Figures A.29 and A.30.

Sales Room:
4. Center floor area treatment: Equipped with specially designed display tables for exhibiting seasonal or "impulse" merchandise.
LIGHTING

5/13/25 (133) "Correct Lighting is Both Convenience and Good Advertising," by R. J. Crandall, Engineering Department, National Lamp Works, Cleveland

...Good lighting will make your station more <<attractive>> and bring more customers and increased sales just as surely as good store and show window lighting has increased the sales of city merchants, and good factory lighting has increased the productivity in factories... It makes it possible to <<transact business at night the same as in the daytime>>, and it <<flashes attention>> to the presence of the station....

See Figures A.31a,b.

6/24/25 (120) "Illinois Station Has Sun Parlor Over Canopy"

...the station is <<well illuminated>> with 13 globes encircling the stucco-finished edges of the canopy [material, canopy].

See Figure A.32.

7/22/25 (32) "Unique Station Design..."

"...a large floodlight <<brings out the beauty of the station at night>>."

7/29/25 (57) "Finds Letter Box Is Convenience..."

"...Myriads of <<brilliant>> lights about the station make it an <<unusually bright spot at night...>>."

See Figure A.33.

9/30/25 (44) "Ohio Jobbers Get Pointers..."

"...Lights <<should>> be on standards and lamps of a type to <<throw the light to the ground>> instead of into space...."
3/19/30 (103) "Greasing Equipment Takes to Cover..."

...High-powered floodlights diffuse a <<brilliance>> incomparable with the small electric lights that formerly lined station cornice and canopy. <<Smart, graceful>> neon tube signs <<beckon>> to the motorist as they flash their message across an evening sky [signage].

3/19/30 (104) "The Modern Service Station"

(p. 109) ... <<Ornamental>> floodlights and Neon tube signs are used in a big way, making the station <<visible>> for many miles at night [signage].

See Figure A.34.

(p. 117) ... Lighting fixtures are specially designed to <<harmonize with the building>>.

See Figure A.35.

(p. 130) ... [Shell Petroleum Corp.] Canopy light globes as well as those of the standards are of the <<familiar shell design>>.

11/12/30 (217) "Points to Consider in Building One Stop Service Station," "By Gordon Johnston, Director of Sales, U.S. Air Compressor Co., Cleveland, Ohio

It is most essential that all approaches and islands be well lighted, both in the interest of the customer, pedestrian and the attendants [site usage]. Great care should be taken to obtain these lighting effects <<without glare>>.

3/13/35 (35) "Business Spurts...When Modernized..."

...Night-time illumination is <<brilliant without proving confusing>> to street traffic or customers. There is no glare; rather a <<diffused flood of light>> that <<brings out the highlights found in the porcelain enamel>> [material]. Where once the service court had only 1500 watts of light shining upon it, there are now over 3700. These radiate from eight 300-watt T lights located in groups of four on the two gasoline islands, from the pump lights and from the 600 watts which blaze atop the two air hose towers located at the edges of the court. Directed upon the immediate front of the
station is a powerful spot light which <<accentuates the emblematic tower>> [auxiliary form], bringing it to the fore <<in sharp relief>>. Adding their share to the general lighting of the entire station are the several interior fixtures which illumine window displays as well as the service departments. See Figure A.36a,b.

...<<Humans may be compared with the moth, always drawn by bright lights>>.

3/13/35 (50) "Modern Design..." Sohio stations

...High mounted flood lights, special mushroom island fixtures that <<illuminate both the pumps and the front of the station>>, and neon signatures in 12-inch letters, provide <<brilliant>> illumination [signage]. <<Display windows blaze>> under the rays of 150 watt bulbs set flush in the ceiling above. Reflected light, because of the smooth white surfaces of the walls, <<increases the degree of brilliance>> in the courts and buildings [color]. A saving in electricity charges is effected....

See Figure A.15.

6/5/35 (33) "Station Modernization Features," by John W. Thompson

Experiments with new types of lighting are being carried on continuously. One large oil company operating in the middle west, for example, is trying out at one of its stations a new type of floodlight. This light consists of a mercury arc tube set in a reflector, and around the tube is wound in a spiral a Neon tube of slightly smaller dimensions. The mercury arc lamp gives off a bluish green light and the Neon tube throws off a red light. The two colors combined flood the station drives with a <<daylight illumination>>. This station is equipped with five of these lamps, which are still in the experimental stage. While the initial cost of these units is said to be high, it is understood that they will produce four times the candlepower of the conventional type of lamp for a given wattage.
"Lighting for the Modern Station...radical changes in station design are bringing new lighting problems and a realization of the merchandising value of proper lighting to "invite" customers in and to display accessory stocks," by A.B. Winters (lighting division, Westinghouse Elect. and Mfg. Co.)

Service station architecture has gone through radical changes in the past few years, this being due to the use of the new materials and methods of construction. These new station designs have been chosen because, first, of their simplified costs; secondly, because of their "pleasing appearances" under daylight and artificial light.

[One] vision of what the station of tomorrow will look like...we find the use of local lighting to "make parts of objects stand out against the remainder of the background". The absolute elimination of all standards and poles, and in their place, the use of built-in lighting fixtures, such as in canopies over the pumps, in the display cases, in the luminous columns and in the show windows. The direct rays of these fixtures light the area immediately surrounding them, while soft diffused stray light illuminates the more distant objects. The ugliness and bothersome glare of a bare light source can be eliminated by the arrangement of such fixtures.

The service [station] of the future will have some "novel display..." by the illuminated oil tubes, from behind which small lamps and reflectors project light through a constant stream of bubbles in the oil. Further novelties...the use of luminous flashing panels bearing the company insignia, and a battery of high power searchlights that project pencil-like beams onto a fan design, thus "identifying" that particular station and "attracting" new customers [signage].

The modern service station of today is a step toward the artist's dream. The first step was to select building materials of the proper color and composition that would reflect light readily as well as maintain this reflecting quality with little effort [material]. White or cream vitreous enamel, tile, glass, or phenolic resinous products when used with polished metal or dark colored trim in the station building and concrete or other light colored materials in the driveways, lend themselves well to both daylight and night-time appearance.

A second step towards the artist's dream is the elimination of as many poles or standards as possible. Only two standards are used, one standard supports a circular disk which is lighted by two
floodlights suspended on a double arm bracket. The bracket also supports two enclosing globe floodlights which are equipped with efficient reflectors that spread an even light over the yard. The second standard merely supports two globe-type floodlights. Lights in the pumps and in the show windows add very effectively to the illuminated area such that no harsh shadows are present. The luminous tower adds materially to the picture as well as the illuminated bill boards on the walls of the adjacent buildings. These have been floodlighted from the roof of the station building. The use of Fresnel floodlights in curb stones provides a pancake of light over the yard entrances with little or no glare to passing motorists or customers entering the station yard. Another step toward the elimination of standards is the use of the pump island luminaire, a form of RIM Dome reflector surmounting a pipe at each end of the pump island. These indirect lighting units are being used quite extensively and will eventually become a part of the pump and display case fixture, possibly in a more dignified form. New design shapes of glass reflectors provide either narrow beams for concentrated areas or wide beam reflectors for wide distribution comparable to that of the open type floodlight. The discovery of oxidized aluminum as a reflector has provided a new lightweight low-cost floodlight that is comparable in efficiency with those using glass reflectors but is not a rugged as the heavier and more expensive enclosed type floodlight. The beam divergence of the aluminum reflectors makes these enclosed type floodlights ideal for service station floodlighting. Another type of enclosed floodlights is the enclosing globe or converted streetlighting luminaire. In all appearances, these units are the same as a conventional upright or pendant ornamental streetlighting luminaire in which an efficient reflector has been placed. Two lamps are used, one, a large lamp whose light output is directed onto the proper area; the other, a smaller lamp which evenly illuminates the enclosing globe and provides illumination about the ornamental standard on which it is mounted. In some cases they have been chosen to fit in with existing streetlighting designs. Going from the exterior to the interior, customers are welcomed by brightly and evenly illuminated show window displays. These displays are lighted by a group of closely spaced flush type ceiling fixtures. The built-in or flush type ceiling fixture presents a pleasing appearance as compared to
the older type of surface mounted window reflectors
or floodlights that required a long valance to
conceal them from the outside.

See Figure A.37.

A more successful gaseous light source which
promises to revolutionize all lighting is the high
intensity mercury lamp. This lamp when used in the
proper proportions with Mazda lamps has been found
to <<produce a quantity of light that approaches
that of sunlight>>. The 400-watt high intensity
mercury lamp has a lumen output equal to that of a
750-watt Mazda lamp. With the mixing of mercury and
Mazda light, <<true daylight colors are brought
out...>> [color]. Another form of efficient gaseous
light source is the Sodium Vapor lamp. Even though
the light emitted by it reveals every little detail
of surroundings, yet it has little value because the
<<light is monochromatic>> and all things appear
black, yellow or shades of yellow, and all other
colors are destroyed. For this reason, sodium vapor
lamps are not advocated for general interior or
exterior lighting but <<may be used as a novelty or
for certain displays>>.

3/6/40 (33) "N.P.N.'s 1940 Gallery..."

...Green neon tubing in back of translucent glass
blocks...provides <<effective night illumination>>
in combination with red neon signs [color, signage].

See Figure A.16.

3/6/40 (65) "More Sales Appeal," by J. N. Westsmith

9. Greater attention to station lighting inside and
out, is increasing the effectiveness of modern
building materials and the <<"show-case"
characteristics of the new window displays>> [goods
display, material].

...Oil marketers are getting away from the use of
mercury floodlighting equipment alone at stations,
because of its effect in <<distorting the color of
cars and the human complexion>>.
The <<advertising effectiveness>> offered by the
mercury light and the efficiency of this equipment
is used to advantage in combination with filament
lights. A <<predominance>> of filament light is
<<used in areas such as pump islands, air and water
towers, and building approaches>> [site usage].
10/24/45 (18)  "...Functional Value Featured in Shell's Postwar Model Station"

Illumination:
3. Salesroom: **Fluorescent lighting** on the ceiling over the windows  **<accentuates the window display>**, and similarly the use of **indirect fluorescent lights  **<illuminates and draws attention to the wall shelving display>** --general office lighting is provided by additional fluorescent ceiling fixtures.
MATERIAL

6/24/25 (120) "Illinois Station Has Sun Parlor Over Canopy"

Eight rooms and a sun parlor comprised the station operator's residence. The canopy was highlighted by stucco edges and lit by globes [canopy, lighting].

See Figure A.32.

9/16/25 (69) "Glacier Park and Belton Service Station"

[Otis H. Anderson] built his station to harmonize with the natural scenery, with all woodwork left rough and unvarnished. The back to nature idea was further carried out in the air post which has been installed to the right of the station. It formerly held forth pompously on the mountainside as a cedar tree...Additional outdoors atmosphere is obtained from moose antlers, deer and elk horns...

A tourist oriented station of that day which attracted vacationing consumers by some unique or quaint application of design.

11/11/25 (128) "Where Service Stations, Through Their Attractiveness, Are Assets to the Community in Which They Are Located"

2. 'Ye Loft,' as this recently completed service station of the Spindler Co..., Manitowoc, Wis., is known, is of the increasingly popular quaint English country house style... An unusual feature of the station is that all of the work has been done by hand. All hardware and lamps are hand-wrought and are the company's original designs, according to E. C. Spindler, president. The building is made of brick and hollow tile covered with tan colored stucco. All wood work is of oak. The building was designed by C. C. Reynolds, an architect of Manitowoc.

See Figure A.38.

3. ...interior...of 'Ye Loft'...old English architecture has been carried out on the inside of
the building. The beamed ceilings, rough finished walls, window seat of brick and old fashioned oval mirror, are all <<in harmony with the exterior of the station>>. Reed furniture with cretonne coverings is the modern note. 5 and 6. ...built to <<harmonize with the homes and surroundings of Coral Gables, exclusively residential district of Miami, Fla>>.

...<<decorative Spanish>> grilles of wrought-iron, are in keeping with the type of <<architecture familiar in countries bordering the Mediterranean Sea>>.

Of buff colored stucco, trimmed with white marble, and red tile roof, is this <<unique and ornamental>> service station of the Gulf Refining Co....<<Spanish architecture is employed...>>. Colored glass is used on the doors, which are also enclosed in iron fences similar to the balconies above,...a low curving marble wall at the sides...<<one of the most ornate [stations] in the country>>.

See Figure A.2.

3/19/30 (103) "Greasing Equipment Takes to Cover..."

<<...Architectural inspiration>> comes from many lands. <<England's countryside>> is a <<popular source>> right now, particularly in the stations of the middle west, while <<Spain>> brings her grilled window and stuccoed wall to the states where Spanish dominance was once supreme (California, Florida, Texas, and other southwestern states)...<<colonial America is not forgotten>>.

See Figure A.39. Architectural style was determined by the association of place. "Popular source" is assumed to mean: the interpretation of station developers within a give region of the country for what may be popular of style.

3/19/30 (104) "The Modern Service Station"

(p. 126) ... The [Standard Oil Company of Ohio, in Cleveland] has <<standardized>> on the <<English Tudor type of architecture>> for super stations. Effort is made to <<keep them from looking like sheds which may remind one of grease and grime>>.

See Figure A.40.
Twenty-two different types of service stations, all built around the "same theme but each one with individual characteristics" are being put up by the Humble Oil and Refining Co. in Texas. The shape of the lot and the vicinity in which the station is to be erected determine the design and architecture in each particular case. An effort is made to keep them similar without sacrificing individuality.

Roofs are of hot rolled or soft copper...The exterior walls are of hard burned common brick, stuccoed with a special Humble buff stucco. Bases of the buildings and bases of the canopies are blue hard baked tile, while the eave line of the station, the pilaster and the column caps are ornamented with faience blue, black and red ornamental tile. Humble Oil trade mark plaques of faience tile are placed over the doors of the stations. The interior walls of the "A" and "B" types are of brown paving bricks, while the floors are finished in dark green floor hardener in order to create an attractive floor and also one easy to clean [color]. Ceilings are either celotex, paneled with celotex strips, or plaster to match the stucco of the station exterior. The interiors of the "D" series stations are finished in Portland cement plaster and common brick and the finish plaster is painted instead of paving brick being used. Its other types of stations follow the general scheme of either A, "B," or "D" series. "C" series stations differ from type "D" in that they are built of wood, painted on the outside and covered with painted sheetrock. The copper roof effect is obtained by using galvanized iron painted bronze, while the ornamental tile effect is achieved by painting. H. D. Till, vice president of the Chambers Agency, Inc., Houston, says these stations cost a little more than the average service station. More money is being spent on the stations erected in the semi-residential sections of the larger cities or centrally located stations in smaller towns.... The general architectural tone is Moorish with just enough Spanish influence to give life and color to practical simplicity. The stations fit in with the general atmosphere of the southwest.
See Figure A.41.

This design offered practical simplicity and similarity without sacrificing individuality. The practice of standardization advanced in the application of materials in station design. Brand name awareness was promoted as consumers were believed to seek familiar service and familiar buildings in unfamiliar locations. The repetition of component materials, forms, and formal relationships supported the standardization of function as well as consumer recognition. As pointed out in Daniel I. Vieyra's text, "Fill 'er Up," the style was popularized by the Zig-zag modern office buildings of the 1930s -- "...mechanically applied ornamentation noted for its crisp angularity," a literal usage of a more simplified and economical, "Machine Age" ornamentation.

8/13/30 (124) "Washable Building Materials Now Used for Stations"

Along with the development of bigger and better station structures with enclosed lubrication facilities comes the use of <<washable>> building materials for sides and roofs. One of the major companies has built two stations of this type... First costs are considerably higher for washable tiles and shingles. The advantage is claimed in the low maintenance and <<upkeep>>. The materials can be washed easily, and the station <<freshened up frequently>> at low cost.

Cleanliness was an obvious social concern of gasoline station design which station developers attempted to provide and maintain through the use of particular building materials.
Driveways should be made of such material as **can be kept clean and not detract from station appearance**. Concrete has been employed for this purpose by many companies in the past with more or less satisfaction. The trend today would seem to be toward asphalt. It is **resilient under foot and oil stains do not show**.

The cheapest type of driveways is the **slag or crushed stone**.... One definite disadvantage to this type of drive way is the **excessive amount of dust** created which is not only **objectionable** to the station owner, but also **to the neighborhood property owners**.

[Types of buildings] range from the neatly designed **wood construction** **favored in certain small towns and rural localities**, to the moderately priced **brick and stucco designs** **used in cities of smaller size and suburban locations**.

See Figure A.42.

Next comes the elaborately designed super station of stone, brick or stucco. These are **located in the better residential sections and on main thoroughfares of the larger cities**.

The type of architecture and design is largely **a matter of personal taste**. It is possible to obtain some **charming results** by the use of stone, stucco, brick, wood, terra cotta or marble. The interior finish of sales and rest rooms is usually in conformity with that used in other portions of the building, although in some cases the **ladies' rest rooms are somewhat elaborately finished** in either plaster walls painted or by the use of California stucco.

3/13/35 (35) "Business Spurts...When **Modernized** Enamel Steel Station Replaces Ugly Three-Story Building"

...the business potentialities of the old unit were never fully realized...and the near-by hotel was the transient home of numerous motoring traveling salesmen. Their business was not coming to the Penn Drake station.... Symbolic of the original drilling rig of Col. Drake, the **tower demonstrates the feature possibilities** of porcelain enamel as a building material. With **glistening** white walls
trimmed in black and red, the station is "modernness itself..." [color]. One of the appealing characteristics of porcelain enamel is the ease with which soap and water will "clean" it and restore its normal "luster...".

See Figures A.36a,b. The aesthetic design of this station represented the automobile in terms of modern methods of construction and material finishes. This station represented an early example of the "Functional" in gasoline station design, as suggested by Daniel Vieyra. He commented that these designs "celebrated the technology that complimented the machine they served." The consumer associated the offer of modern service directly with the modern functional aesthetic. Porcelain enamel clad the station adding to the persuasion of modernized design.

3/13/35 (50) "<<Modern>> Design"

Enamel is "no strange product to the oil industry". For years pump housings, signs, grease gun boards, and similar equipment have been made from it [signage].

See Figure A.43.

Consequentially, the gasoline station had begun to develop its own virtuosity as a building type by accentuating its visibility. The origins for the movement toward greater visibility and the idiom of "building as sign" in station design may be linked to the use of porcelain enamel which had already proven its effectiveness as signage.

...It must be made clear that the porcelain enamel station has not been brought out as being cheaper. It costs as much as any well-built unit. Price is not used as a major selling argument, but rather
the possibilities of this type of station in
<<attracting business...>>.

See Figure A.14. Major oil marketers were less concerned
with price than projecting images which could be recognized
by consumers for being "modern".

...The material itself <<calls for modern designs
in architecture>>. Its <<purpose is defeated if
efforts to reproduce more conservative and familiar
designs are expected>>.
Though certain and <<intricate shapes>> can be
fabricated, costs are greatly increased in so doing,
and the <<appealing simplicity of straight lines>>
is lost. Those with flat surfaces should
predominate, though <<rounded corners>> are easily
achieved and <<add much to the modern effect...>>.
...An old type station may be covered with new
porcelain panels which give the station a totally
different appearance.

6/5/35 (cover) "Station Modernization Features," by John W.
Thompson

The race among oil companies to secure new station
locations is over and in its place has come a sane
program of rebuilding and modernizing existing
stations, and installing up-to-date equipment and
facilities throughout—all to serve a wider range
of motorists' needs thoroughly and expeditiously.
...Terra cotta blocks are now machine-made, bringing
this <<architecturally perfect building material>>
dero into a price bracket where it can compete with other
materials.
Glazed brick and tile offer many possibilities for
<<harmonious design>>, and glass block, although not
widely used as yet, offers many <<unique and
decorative>> design potentialities.
Galvanized copper steel is also finding favor as
siding material, due to its <<resemblance to wood
siding>> and the fact that it is portable and has
a long life of service to offer.
Probably the most <<outstanding trend>>, or
continuation of trend, in modern service station
design is the increased use of glass. Some stations
are built with an <<almost uninterrupted band of
glass>> around three sides, with door frames and
corner posts forming the only [visual] obstruction.
"Station Modernization Features," by John W. Thompson

Common brick is holding its own as a favorite building material among some of the larger oil companies. The Gulf stations, which varying somewhat in layout, cling closely to a certain color of brick and a general uniformity of architecture which group these stations under one common name. The Standard Oil Co. of Indiana has for a number of years used both a red brick and a cream colored brick for its stations. Recently this company has been doing some experimenting with terra cotta, using it as a veneer to place over existing buildings.

Both Socony-Vacuum and Pure Oil Stations are quite consistently made of brick, with each company relying on a definite style of architecture to create a uniformity that will register in the minds of the motorists. Socony stations of a brownish brick, enhanced by decorative wood trims around the doors and windows, create a colonial impression that is not lost, regardless of the variations in building layouts.[site usage]. The Pure Oil stations, resembling little English cottages, are distinguished by their gabled roofs, arched doors and windows, and arrangement of the blue and white color scheme. Many of the Pure stations are constructed of brick and then painted.

The new Sun stations, while resembling wood in construction, are in reality made of a copper steel. In fact, the entire station with the exception of the door is made of steel.

The Detroit area has just been introduced to the first service station in that district to be constructed of glass block. The glass blocks are used in the walls and tower of the structure in yellow and blue colors, giving a striking appearance in the daytime and a translucent glow from the interior light at night.[lighting, color]. Typical of the type of modernized work that oil companies are doing is the program of the Shell Petroleum Corp. of St. Louis. Shell employs a man known as a co-ordinating architect, whose duty it is to co-ordinate the station architecture of the three Shell companies in the U.S. so that there will
be a <<uniformity of appearance>> among all the Shell outlets that will make them <<readily recognizable>> to the motorist no matter in what section of the country he may be. This modernization is indicative of the trend of thought concerning the importance of uniformity from a merchandising standpoint. The Shell program is definitely not one of expansion, but rather of gradually rebuilding the existing outlets.

See Figures A.46 and A.47a,b.

[Another company] Jenney determines the type of construction of its buildings by the location of the building. That is, the design is <<made to fit in with the architectural scheme of the surrounding neighborhood>>.

See Figure A.48.

2/7/40 (26) "I'd Like to Sell 'Lube' Jobs With 1940 Equipment," by J. N. Westsmith

N.P.N staff writer who ran a station in 1934-35 tells how <<better sales arguments>> can be built around the <<modern>> equipment [materials and finishes] he finds in lubritoriums today...

See Figure A.50.

Oil marketer's stations I have visited in recent weeks offered some outstanding examples of how <<up-to-date>> equipment can really be "another salesman" in the lubritorium, if used to full advantage. Salesmen became enthused and found no difficulty in expressing strong sales arguments when they could demonstrate with an impressive piece of equipment. For the most part, these are <<impressive in appearance>>, with numerous gadgets, such as dials, switches and glass tubes, which show the customer the condition of his oil before, during and after the flushing operation.

3/6/40 (33) "N.P.N.'s 1940 Gallery Shows Styles in Modern Service Stations"

Brick in modernistic design... Interior finished with hard burned common red brick laid up with a tooled joint which is given several coats of varnish as an aid to <<cleanliness>>.
English type in glazed brick... White glazed brick walls, green glazed brick base and No. 1 smooth red-faced brick trim, metal passage doors and wood overhead doors...[color]. Featuring <<English type architecture for restricted residential areas...>>.

See Figure A.49.

3/6/40 (65) "More <<Sales Appeal>>," by J. N. Westsmith, Engineering Editor

2. Glass is finding wider use in station fronts, including the more efficiently designed display windows, overhead doors, and in the partitions between sales and service rooms.
3. Acceptance is growing for smooth surfaced building materials which once installed, even at a slightly higher initial cost, <<blend with modern design>> and do not require subsequent painting or high maintenance costs.
9. Greater attention to station lighting inside and out, is increasing the <<effectiveness>> of modern building materials and the <<"show-case">> characteristics of the new window displays [lighting, goods display].

...Up until the past year or two, the service station failed entirely to <<keep step with the advancement in the design of the automobile>>, and for that reason the next few years may see new materials. Some oil companies report they are using the new types of lacquers and synthetic enamels similar to automobile lacquers for steel exteriors of stations. "The synthetic enamel we are using at present is the closest thing on the market to a lacquer such as that used on automobile," said R. E. Kenson of Los Angeles, service station engineer of Union Oil Co. of California.

See Figure A.51. Automobile design at this time was perfecting methods of bending metal and reaching faster speeds and station design contributed to and reflected this spirit of demand-creating design.
Shell says it believes in using materials for service station construction such as **face brick**, porcelain and ceramic tile, which require no maintenance and **"keep a permanently neat, fresh appearance"**. Since 1938, ceramic tile has been standard for the stations it has built wherever potential gallonage and other local conditions warranted its higher cost. The company's standard design, however, lends itself also to other construction materials.

See Figure A.52.

The final question asked in the particular survey was whether design and materials of the future service station will be primarily utilitarian or decorative. A typical answer was given by one large oil company, whose spokesman said: "The answer, generally, to this question will be **"primarily utilitarian"**. We do believe, however, that every effort post-war will be put forth to make service stations **"more attractive to the travelling public"**.

The new station's external appearance presents **"no startling features..."** about 20 per cent larger than prewar stations, and will be of **glass and impervious material---probably enamel, ceramic tile, glass blocks, or perhaps even pressed blocks**. Design: **"Functional value rather than ornate appearance"** -- no radical departure -- existing stations can be readily modernized to follow new design and layout.

As a note about the use of impervious building materials:

This type of construction, it is believed, will contribute to **"greater durability"**, and will also make the station **"cleaner"** and easier to keep clean than ever before. Rest rooms, which are compact, have been designed with a view to removing
all hard-to-clean features.

See Figures A.29 and A.30. The strategists and designers for Shell planned for steady change in station design. An interest in newer materials for station construction was realized. But, where designers stated "no radical departure," there was also key information. Strategists realized that change needed to occur slowly, so that the image of the company -- as it was conveyed through the station building -- would not be harmed.
4/1/25 (83) "...sales agent for the Texas Co., C. E. Golding, reported an increase in sales for stations with '<<visible>> pumps.'"

See Figure A.53 for an example of a visible pump. The announcement was a positive note in favor of this pump type which allowed the customer to see the quantity and color of gas going into the vehicle.

11/12/30 (217) "Points to Consider in Building One Stop Service Station," "By Gordon Johnston, Director of Sales, U.S. Air Compressor Co., Cleveland, Ohio

... the electrically operated meter system [gasoline pump]...
... This unit is built in various types of cabinets and consists of meter, gasoline pump, motor etc. The points in favor of this type of equipment are <<speed of delivery, accuracy of delivery>> and <<attractiveness of appearance>>. Experience shows that it is possible to serve about three times as many customers with this type of equipment as with the hand operated pump.

6/5/35 (33) "Station Modernization Features," by John W. Thompson

...The new types of cash recording gasoline pumps are being included in practically all <<modernization>> programs. Pump manufacturers are designing cabinets that are <<in architectural harmony with the new stations>> so that the <<general appearance of the station layout>> is one of <<unity>> [site usage].
...The Jenney stations in the New England states are <<identified>> by the Jenney <<copper>> pump designed by them for their own use [color, material]. These pumps at a station indicate that it is a company-owned and operated station.
Pumps and Pump Islands:
1. **Height of Pumps:** 54-in. -- *permits full view of station*.
2. **Hose and Reel:** 18-ft. hose on a *concealed* reel.
3. **Dial Face:** *At eye level* -- computer type.

See Figure A.30. As more emphasis had been on the design of the gasoline station facade and goods display in the years up to 1945, the use of shorter pumps permitted a clearer view of the company's three-dimensional billboard and display "show case".
SIGNAGE

3/19/30 (104) "The Modern Service Station"

... There is <<no blatant>> advertising <<to offend home owners in the neighborhood>> and yet no motorist would mistake the installation for a home....

See Figure A.53.

4/2/30 (90) "Sign Board Is Feature of Rio Grande Station," Los Angeles

A service station that has an advertising billboard as its <<outstanding feature>> has been erected... on one of the most heavily traveled thoroughfares of Los Angeles.... It is equipped with a neon sign pointing to the station... [lighting].

See Figure A.14.

9/10/30 (98) "Public Calls 'Em 'Colonial Stations' So Beacon Changes Name," by John J. McCarthy

<<Because thousands of motorists who patronize their service stations in the New England states and New York repeatedly used the name 'Colonial' when referring to the company, directors decided to change the title of the corporation from Beacon Oil Co., Inc., to the Colonial Beacon Oil Co>>.

Changing the name and signage according to consumer opinion became advantageous for the company.

9/24/30 (188) "Satisfying All Needs of Motorist Is Trend in Oil Merchandising," by E. L. Barringer

... highways are faster today. The old saw about 'here he comes there he goes' is a cold, hard fact that the station operator must face. This element of today's speed was considered in locating the Sandusky station. Coming from the east the Sandusky station, by its high canopy (fifteen feet) and its sign, is <<visible>> for about two miles [canopy]. From the west it comes into view after rounding a curve half a mile away.
See Figure A.7.

11/12/30 (217) "Points to Consider in Building One Stop Service Station," By Gordon Johnston, Director of Sales, U.S. Air Compressor Co., Cleveland, Ohio

It is observed that practically all companies favor illuminated signs. Such signs should be conspicuously placed to attract customer attention to the station and they can also be used to advantage in advertising the brand name of gasoline and oil, or other services.

2/20/35 (39) "Color Test Discloses Preferences for Blue and Purple Cans," Security Oil Co., Wichita

Nineteen customers chose as their first selection a blue can with a rich yellow signature seal. This same can was also picked 14 times as a next choice. The can in second place portrayed action having an airplane and streamlined letters imprinted on a light background which occupied the upper half of the can. The lower half was dark with light letters. Simplicity of design seemed to have considerable effect on the selections. The can rating lowest among the 14 was crowded with printing and lacks any artistic applications. The Security Oil Co., on the basis of this test, has selected for its new oil cans a blue background with name and trademark in red and white letters.

Consumers seemed to favor package designs with simplicity and visual clarity.

3/13/35 (50) "Modern Design..."

...Enamel is no strange product to the oil industry. For years pump housings, signs, grease gun boards and similar equipment have been made from it.

See Figure A.15. Enamel material utilized for signage was adopted for station cladding increasing the sales appeal...
of the modern outlet. Its power as a sign was easily transferred from signage.

3/13/35 (68) "Service Station Trimmed with Glass, Gives Night-Time Illumination"

...<<Striking to the eye>> of the customer is the recently modernized Gilmore Oil Co. service station in Los Angeles...Dominating the improved unit is a tall, luminous pylon, glass-sided and square, upon three sides of which are mounted letters 24 inches and 18 inches high [auxiliary form]. The name is <<a bold silhouette>>, the two-foot letters fronting the main street intersection. Within the pylon are 150-watt bulbs and upon the top sits the company trade mark [lighting]. Only sufficient metal has been used in the tower to hold securely the expanse of glass.... [The fascia of the station canopy is also trimmed in glass.] So designed, the canopy elements can receive removable silhouette letters for any appropriate advertising copy [material].

See Figure A.5. Like porcelain enamel glass was also utilized as a primary signage material, especially and increasingly so in combination with backlighting which increased visibility. Additionally, the use of trimmed backlit, signage-bearing glass as cladding also heightened the modern image of the station [lighting, material].

6/5/35 (33) "Station Modernization Features," by John W. Thompson

...Today, the station itself, through its <<uniformity with other outlets in the same company, serves as a mark of identification>> for the passing motorist.

6/5/35 (96) "Marathon Station Modernized in Keeping with Civic Improvement Program," by Allen S. James

Motorists for years used that old two-story frame filling station at Twenty-third St. and Lincoln Blvd. in Oklahoma City as an <<unofficial highway marker>>.
Located directly north of the state capitol, where U.S. Highways 62 and 270 merged with U.S. Highways 66 and 77, the experienced motorist leaving Oklahoma City had learned to "turn left" at that old landmark if he wanted to get on "66" or "77."

But that old marker is gone. Hereafter a new Marathon Oil Co. super-service station will be the <<landmark>>. In one of the windows is a small neon-lighted "animated" Marathon runner [lighting].

Marketers realized that a station which by means of some unique design or location may achieve landmark value or merit as a sign in the landscape.

10/9/35 (72) "Appealing Station Gets the Transient Trade"

White Horse Service Station, located on Southwestern Boulevard between Buffalo and Silver Springs, New York, has become, in a little over a year's time, a <<landmark>> for motorists in that fast-moving vicinity. Set at the apex of a huge triangle formed by the juncture of two through highways, the station has the <<eye appeal and the power to stop whizzing travelers>>.

Another station which illustrated its merit as a visual sign in the landscape to approaching motorists. See Figures A.55a,b.

3/6/40 (33) "N.P.N.'s 1940 Gallery...,

Aviation Design ... <<Unusually long>> cornice front facing on intersection allows display of porcelain enamel strip signs advertising company's gasoline, motor oil, and lubrication service [canopy].

See Figure A.11.

3/6/40 (65) "More Sales Appeal," by J. N. Westsmith

...[Nathaniel Owings, Chicago] architect regards a service station as <<a 3-dimensional billboard>> advertising the company and its products. It should be designed, whenever practical, so that the departments front on the highway and the building
can <<attract the maximum of attention>> from passing motorists.
Mr. Owings also thinks that with many of the new highways to be built, the park or state or federal agency building the road will also control roadside buildings. In this event he believes that the oil companies will have to build stations of controlled design, to conform with the scenery or some prescribed type of architecture.
5/13/25 (101) "Fresh Paint and Posies «Lift Jinx» from Unprofitable Station," by Lawrence B. Davis, station owner

...the shrubbery surrounding the modest service station of the Associated Oil Co., San Francisco, «sets off the station» itself and «shuts out any unsightly view behind». The word "Associated" in the foreground is spelled with shrubbery [signage]. The building itself is small and compact and placed on the lot «to be least in the way of the motorists».

See Figure A.12.

7/22/25 (32) "«Unique>> Design «Makes Station Attractive>>"

...The ladies' powder-puff room...is «one of the features of the station>> and is finished in mahogany and white with blue and gold hangings, harmonizing with the color scheme throughout the station.

7/29/25 (57) "Finds Letter Box Is «Convenience>>..."

...Seven urns of plants in front of the station help to «beautify the surroundings>>. A letter box at the side of the station, near the front, is a convenience for motorists and will, no doubt, help to bring additional customers to the station.

See Figure A.33.

9/30/25 (44) "Ohio Jobbers Get Pointers on Station Construction," Youngstown, Ohio, September 26, N. A. Carlson, Ohio Petroleum Marketers' Association, Chief Engineer

...Filling station sites should have 85 to 90-foot frontages in order to make them «easily accessible>>... leading oil companies have found. ...The driveway is really «the station's showroom>> [goods display] and «should be to the front>>. The building «should be back where it would not interfere with the movement of customers' automobiles>>. Drives should be not less than 25 feet «wide>> and... gasoline dispensers should be «placed at the sides of drives>> rather than on
islands which... <<interfere with the maneuvering of automobiles>>.
Keep the middle of your drives <<open>> like you keep the middle of your streets open. Auxiliary service <<should be kept far enough from the station... so that tank trucks don't interfere with business traffic...>>
Crankcase draining pits are being placed under cover and pits are replacing racks... favoring storing motor oils in basements... The <<ground level floor could be kept neater and goods could be displayed better>> [goods display].
...As to restrooms, stations in commercial districts need only one, but two were better if the station were in a residential district or on a touring route.

10/14/25 (39) "<<Open>> Octagon-Shaped Station," Des Moines, Iowa, October 12

The new station is octagon-shaped with windows on all eight sides [material]. The station is equipped with six pumps [pumps].

This station did not offer automobile service, but rather was designed to profit as a high volume, gas only, retail outlet. The site layout was distinctly ordered for fast fueling and flow of traffic; so therefore, this design created consumer recognition for the particular business typology. Also, the building form was designed and located central to the fueling function and the task of the attendant.

11/11/25 (128) "Where Service Stations, Through Their Attractiveness, Are Assets to the Community in Which They Are Located"

2. 'Ye Loft...,' Elm trees and shrubbery will be planted later to <<beautify the surroundings>> and to <<shut out unsightly views>>.
...A small restaurant has been built on the property which will cater to tourist trade, and garden umbrellas and benches have been placed on the grounds.

See Figure A.38.
...Replacing the usual car washing facilities found at most service stations, a huge wash-bowl, 76 feet in diameter, has been installed in front of the station of F. W. Souerbry and P. A. Morley, at Hollywood, Calif....the tub is filled with water to a depth of 12 to 14 inches. A water proof apron is tied over the radiator and a waterproof cloth is wrapped about the distributor head when the car is prepared for its "bath." The operator drives the car around the bowl which cleanses the chassis thoroughly. The remainder of the work is done on a wash rack....

See Figure A.56. This ceremonial wash-bowl layout was realized as a unique means to gain consumer attention and loyalty. "One-stop" or "super-service" station layouts often emphasized one particular service. The station owners determined the needs of his local clientele and the constraints of the property to layout the site.

12/9/25 (30) "This Service Station Seeks Patronage from Migratory Motorists," by Ward K. Halbert, Bloomington, Illinois, December 7

See Figure A.57.

...Most of the two and a half acres is open for a tourists' camp ground...Close to the middle of it is the tourists' community kitchen, an open place but ample in size. The first impressive thing about it is its bigness and it is bigger than it looks from the road. There are three floors, two above ground. There are four main compartments on the ground floor, each a spacious room. Fronting on the street is a refectory, with tables for customers, soda fountain, candy and cigar counters. Next it is a kitchen where cooking is done, perishables are refrigerated, with stools and a counter also where quick lunches are served. Next to the kitchen is an accessory store. It lacks very little being a "general store." Wall shelves are laden with package lubricants, motor
perishable food stuff, such as canned goods, on the other side [goods display]. The outside door from the store room opens under the canopy where the two gasoline pumps stand and the lubricants are exhibited in racks. The extreme back compartment is a four car garage. Back of the garage on the outside is a <<well equipped>> drain pit where customers are given free crank case service. The floor of the garage is slightly lower than the floors of the other rooms, which are on the grade. Entering through the garage, tourists have access to the basement where a public bath establishment is maintained.

The bathroom is an interesting establishment. A series of compartments, each equipped with a shower... Here tourists may have shower baths in perfect privacy for 25 cents a bath, soap and towel supplied by the house.

...Mr. Johnson has worked out another <<unique>> idea at a down-town service station that is worthy of being appended to this story. The establishment covers nearly half of a city block and is called "Auto Stop Inn."

...there are too many automobiles in Bloomington at certain times of the day. The service station canopy and pumps with the adjacent accessory store stand on the corner of the block nearest to "down town." Back of that there is room for a few hundred cars to park, all under roof. It is not a big investment in an inexpensive storage house.

The two stations represented examples of a gasoline retail business type which was prevalent in locations at the edge of, or convenient to, towns and cities. Patronage was sought from traveling salesmen and tourists who needed the full service of gasoline, parking, car maintenance or repair, food, and a place to bathe and sleep.

1/1/30 (19) "Majors' Practices at Leased Stations..."

The Standard Oil Co. in the following statement related the company's prototypical retail outlet that was planned for
widespread use. The programmatic guidelines for a "lease and agency" business layout was described as follows:

In determining <<what constitutes a drive-in service station>>, the following will be observed: The premises leased must contain pumps, at least one drive, and a building suitable for storage supplies, etc., and housing an attendant. The building must be a separate unit, fully set off by partitions so that complete possession could be given to the lessee in case of forfeiture of the agency. (This definition does not include parking garage service stations unless) ...such part of the premises as is used in these operations is completely separated from the rest of the garage.

Predetermined, standardized constraints on station layout were needed for the planning of widespread retail outlet territorialization by major oil companies. Large companies accomplished centralized control of distribution, pricing, economy of materials and construction, as well as the creation of consumer "brand-name awareness" and recognition with standardization.

3/19/30 (103) "Greasing Equipment Takes to Cover in Modern Super Service Station," Cleveland, March 14

...Gone as thoroughly as the flounced and billowing hoopskirt, are yesterday's clutter of grimy, dust-covered signs, ungainly outdoor racks, rubbish barrels, cluttered dusty windows, and narrow drives that defied <<easy access...>>. <<Sweep, poise, majesty>> describe the architectural design of today's super service stations. These combined with an <<eye for speed>> and the <<practical>>, proclaim an <<efficiency>> and <<luxury>> heretofore unknown to the automobile driver.... Grease pits and rotary lifts are taking to cover. Lubritoriums or grease houses, where trained experts specialize in lubrication work, ...something the new service station wouldn't be without.

Many companies, among which are the Barnsdall Corp. and the Standard Oil Co. of New Jersey, are putting up separate structures for greasing work <<to keep
this business out of the way>> of the gasoline buyer.

See Figure A.39. The location of the service bays away from the gasoline pump islands offered functional efficiency and convenience to the motorist in "super-service" type outlets.

<<Smartness, individuality, and convenience>> are the lines along which one-stop service stations -- the <<show places>> of the oil industry -- are being built today...

...Restaurants and even tourist accommodations are encountered in some one-stop stations. An all-around <<efficiency>>, convenience, and <<attractiveness>> mark the new super service station, the supreme idea being <<to help the hurrying motorist hurry>>.

"...car washing, tire and battery service, brake testing, and minor repairing are the chief services furnished by most one-stops. Tires and accessories in varying makes and quantities are handled [goods display]."

3/19/30 (104) "The Modern Service Station"

(p. 109) ... <<Complete protection>> for the motorist from rain, cold or the hot summer sun is afforded in this newly completed, triangular-shaped, one-stop service station of the Simms Oil Co., Dallas.

See Figure A.34.

(p. 111) ... The concrete driveway extends entirely around the gasoline station giving the motorist a <<clear sweep in any direction>>...

See Figure A.58.

(p. 117) ... Air and water service units are so arranged that when not in use, the <<hose is entirely out of sight>> underground in unit patented for this purpose.

See Figure A.59.

(p. 123) Drive-Through lubrication rooms in the newest type super-service stations of the Standard
Oil Co. of Ohio have been found valuable in *speeding up service* on Saturdays and Sundays when demand for this type of service is at its height...

When all four lifts are in use waiting customers can drive into *waiting lines* and be ready to have their cars placed on the lifts in order and *without confusion*.

See Figure A.60.

(p. 129) C E. Mills Oil Co. of Syracuse, N. Y., has developed an interesting station design for residential sections where *greasing service under cover* is *desirable*.

... Foundation planting and *window boxes* add to the *attractiveness*.

(p. 130) ... The attractive planting of palms and other tropical shrubs is indicated in the accompanying photograph.

(p. 133) ... Fresh and clean as the pine forests from which most of it comes, is the attractive, colorful *rest room* in the Cities Service Oil Co.'s Colonial type service station...[color].

...The room is a long, narrow one, placed between two lubrication rooms. The idea is to *permit the woman customer to sit comfortably in clean, attractive surroundings*, and to *allow her to bring her children in* if she wishes while work is being done on her car.

See Figure A.61.

(p. 134) ... At the left, *out of the way of the pump customer*, is the greasing house. There's *plenty of driving space* at this station.

(p. 136) ... *Mental hazard for the timid driver is eliminated* at this service station of the Stoll Oil Refining Co., Louisville,... which uses two steel columns set inside the gasoline pumps to support the canopy, instead of the heavy posts formerly used, *which often tended to hide the gasoline pumps*...

See Figure A.62.
sacrificing individuality>. For instance, the "A" and "B" series stations the company is putting up are semi-octagon shaped, while the "D" series is rectangular.

Humble's designs reflected the movement toward standardization. Unified functional layouts which could be repeated independent of location or site became foremost in design. Decorative applications of materials formed a repeated machine-like imagery. The station design form and method of construction also illustrated the spirit of the machine aesthetic through the standardization of component materials.

5/14/30 (85) "Self-Service, Newest Wrinkle in Indiana's Ruffled Market," by Roger B. Stafford, Cambridge City, Indiana

...The service part of the station has been surrounded by an 8-foot concrete block wall which has been stuccoed. The station building projects an arc from the center of the wall at the rear of the service lot. Four visible dispensers with 10-gallon bowls are spotted in a line at equal distances between the station building and the sidewalk. There is a <<wide>> concrete pavement extending from the station to the sidewalk <<so customers will not have to get off the pavement to go to the window of the station to pay for their gasoline and oil, or to walk around their cars>>. Cinders cover the remainder of the service yard.

See Figure A.63.

Just back of the station building and <<concealed from view by the station and semi-circular wall>> is a small frame building for two direct driven electric rotary pumps. These pumps are controlled from within the station by the girl cashier.

See Figure A.64. The self-serve and discount pricing strategy was pioneered in the 1920s in the grocery industry. Conceptually, the gasoline marketer reasoned that the motorist
would accept the task of dispensing gasoline at a labor reduced cost for the product. The layout of the site promoted the uniqueness of the business function which required simplicity, efficiency, and ease of maneuverability as a convenience to the self-serving motorist. Competing oil companies contested the fire safety of this business strategy.

9/24/30 (188) "<<Satisfying All Needs>> of Motorist..."

A description by a rural highway truck driver of a tourist one-stop is as follows:

Sleeping quarters are provided truck drivers above the service station...the building is two stories high (sharing a roof with a fifteen foot high pump island canopy) [canopy].

See Figure A.7.

The site has 4 1/2 aces, with 1390 feet fronting the highway. <<Wide>> drives, 480 feet long, start well back from the buildings on both sides and <<make it easy for the drivers to swing in>>. Since truck traffic is heavy, the drives are of gravel. Seven thousand tons of crushed stone was laid, rolled in 9-inch layers, and dusted in [material].

The site layout (including driveway and canopy) was primarily organized to offer a wide expansive entrance on to the site for fast moving highway traffic to recognize and enter.

11/12/30 (217) "Points to Consider in Building One Stop Service Station," By Gordon Johnston, Director of Sales, U.S. Air Compressor Co., Cleveland, Ohio

Corner locations are preferable... <<building and equipment can be seen to a better advantage and from a greater distance...>>. The lot should be of such size as to allow locating of all buildings and equipment <<without crowding>> and to make some allowance for future expansion.
It is most desirable to install approaches as «wide» as possible.... Such approaches permit customers to «enter or leave station at higher speeds» and also «add materially to the general appearance of the station».

A point of paramount importance is that of arranging lubrication and other facilities «to permit easy access from gasoline dispensing units, assuming always that the majority of customers are first attracted to the station by the need of gasoline...».

Layout of building should be such as «to present to the view of customer as many of the services provided as possible».

See Figure A.65.

... whenever possible, both an outside and inside entrance to the ladies' rest rooms should be provided.

... A sufficient number of [air] stands should be «located in yard of station to permit easy accessibility from any point».

The disadvantage of pits lies in the fact that they are «difficult to keep clean>>, they are «poorly ventilated>>, they increase the «fire hazard» and set up a «resistance with women drivers who dislike to drive over a hole in the ground>>, fearing that they will miss the proper channels and drop their car into the opening.

When lifts were first introduced, there was considerable resistance due to the fear of many people that there was a possibility of falling. This resistance has been pretty well overcome.

... Lift also «permits the customer to walk under his car and see lubrication properly completed». Many customers are much interested in this angle, but would not consider entering a pit.

... It is generally conceded that lifts «possess a decided advertising value and attract the attention of passing motorists».

See Figure A.66.

Some «beautiful effects» have been obtained by the proper landscaping of service station lots. It would seem highly desirable to do this in all cases because of the «additional eye value» obtained.
12/10/30 (88)  *Sloping Lot Permits Unique Station Design*

"...a <<unique>> neighborhood sales station with washing and lubrication facilities...the designers saw an opportunity to save on building cost as well as the cost of filling [earth]...."

See Figure A.67.

1/16/35 (28)  *<<New>> Type Rotary Service Station Opens in New York City,* by John W. Thompson, New York

Staid New Yorkers who have been taking for granted that a gasoline station is a gasoline station, have discovered it can also be a merry-go-round. Automobiles drive onto it and are "<<whirled around>> an island of dispensing equipment, and in <<less time>> than it takes to cook a two-minute egg, each car is sent out into the stream of traffic completely serviced with oil, gasoline, air, and water.

The Esso Rotary Servicecenter, said to be the first revolving service station in this country, was designed by the Colonial Beacon Oil Co., an affiliate of the Standard Oil Co. of New Jersey.

See Figure A.68.

Its principal features are that it requires less land than the conventional type of service stations, it is economical to operate, it speeds up service to the motorist, it necessitates "<<no awkward backing and turning>> to get to the pumps, and it "<<keeps the motorist indoors>> while his car is being serviced.... The station itself occupies a site 41 by 75 feet, and is of <<ultra-modern>> design. The facade was the work of Raymond Loewy, a noted industrial designer, and is also a "<<radical departure from the ordinary>>.

The motorist enters this open front building and drives onto an electrically operated turntable 37 feet in diameter...

If he desires additional service, such as a lubrication job or an oil change, he is taken on the table to a "half position," which puts his car in a position to be driven to the rear of the station where this service is given. One hundred automobiles an hour can be handled on the table, according to G. L. Rosebrook, the company architect. Aside from its "<<apparent convenience and speed>>, this station is one answer to the "middle of the
block station site" question, and, consequently, an answer to the "high corner site rental" question...
This rotary servicenter, which has been granted the first patent ever given on a service station, according to the company, resulted from a long study of present-day service stations and their operation in metropolitan centers. "Increasing congestion, coupled with the growing need for service with a minimum of inconvenience and a maximum of speed...."

The profit-making possibilities of a standardized station which could be compactly located at the ground level of a downtown building was tested by this prototype. The high cost of real estate was considered against the revenue producing functional capacity of the outlet.

3/13/35 (35) "Business Spurts...When <<Modernized>>..."

...Set middlewise in a <<greatly enlarged>> concrete service court having dimensions of 130 feet along the side and 60 feet fronting on Main, the glittering 55-foot by 30-foot Penn Drake unit is a <<real surprise to those who so carefully avoided the old eyesore>>.

See Figures A.36a,b.

...Within the lubritorium, 32 feet long by 30 feet deep, is a free-wheel lift and a pit equipped with a car rocking device which has proved of considerable satisfaction to customers because of the improvement in shackle lubrication.... There was space for over 40 cars,... Two 2-way pump units stand before the new station in the same location as the old [pumps]. Side street and lubrication customers are now serviced by two additional pumps set parallel to the building about 35 feet from the curb. Approaches to them and the lube room are <<wide and level>>. There is <<no undue jarring in negotiating curb aprons>> and the court around the pumps is perfectly level.

Gasoline station site usage at this station reflected the functional requirements of service, T.B.A. sales, and gasoline dispensing as was becoming the industry's standard.
The service station building was erected some years ago on a corner of an irregularly shaped lot, behind which was the railroad right-of-way. Some 50 feet from the service station was a stucco building, later acquired by Mr. Kistler and converted into a combination tire sales and repair department. Except for a drain pit near the side of the service station, the ground between the two stations was vacant and far from attractive—not even grass grew there...

Old tank car shells have been placed at the rear of the lot, to provide additional bulk storage. Mr. Kistler also has another bulk plant some 150 to 200 yards from the station and on the other side of the tracks. None of the recently installed storage tanks are visible from the street, being "hidden" by the new back wall.

The old drain pit will be filled or covered. Its place will be taken by modern lift and lubrication equipment, placed just inside and to the right of a two-car wide doorway into the new portion of the building. "Customers driving up to the pump island can see" the lift just inside the door [goods display], and "can reach" it, if they desire, with "virtually no maneuvering".

[A smaller Sohio station] sits in the center of an 80 by 60 foot lot. Its "trim 23 by 12-foot dimensions" are "unusually neat...".

Through the five foot display windows, a customer receives a clear view of the accessories carried and the attendant, in turn, can see every corner of the service court from within the building [goods display, material]...

...The [larger] station whose dimensions are 46 by 25 feet [has a] lot...100 feet long by 88 feet deep. Two lubrication bays open onto the service court to the right of the attendant's room. Between this and the lube bays, separated by glass, is a
customers' lounge appointed modernly with chrome trim chairs and table [material usage, goods display].... **<<Compactly appointed>>** are tire racks, bulk oil tanks, battery chargers and other features for the business at hand.

The "oblong box" form was designed to most simply and economically contain the necessary functions of profit.

3/13/35 (85) "Face Lifting Operation Helps Station Sales"

A face lifting operation on a station of the Shook & Fletcher Supply Co., at Birmingham, Ala., by means of which its front was **<<remodeled to make it easier of access>>** to motorists, served to greatly stimulate business, the proprietor reported.

...The station was erected during the last building boom by a real estate promoter who knew nothing about service station merchandising...so he cluttered up the service floor with a dozen massive piers, supposedly put there to make the place look imposing, but which were eyesores, nevertheless, and handicaps to business.

See Figure A.8.

5/15/35 (81) "Lighthouse **<<Features>>** Quincy Station"

In connection with its marine terminal at Quincy, Mass., the Quincy Oil Co. maintains a filling station that smacks of the sea. The station building is in the form of a lighthouse, and a working one, too [auxiliary form].

See Figure A.69.

The lighthouse is **set back from the road**, and in between are two islands each carrying three pumps. The station is on a main highway, just outside of town. By means of its novelty and **<<wide>> entrance drives which **<<permit easy access to the pump island when traveling at high speed>>,....gallons of gasoline per day....

...The distinct novelty of the station is hidden, however. It concerns the method of storing oil. In the top of the lighthouse are four 50 gallon tank compartments, each carrying motor oil of a different viscosity.
5/29/35 (33) "Painted Brick Wall Helps Sell Light Adjustments"

Selling headlight adjustment service and headlight bulbs was stimulated at Skelly's Master Station in Pawhuska, Okla., by utilizing the brick wall adjacent to the station.

[One mechanic] accordingly put his headlight testing chart on that brick wall, where every customer who drives into the station for gasoline <<can see it>>.

...While the testing is being done the <<automobile does not block the approaches to the pump island>>.

11/13/35 (51) "Modernization of Indianapolis Station Brings 300% Business Increase," by John W. Thompson

Rest room accommodations for men and women are <<neat and modern>>. The ladies room is equipped with <<extra>> equipment such as a vanity dressing table, and a bench.

12/18/35 (48) "Old Street Car Barn Now Serves as Station and Warehouse"

The most <<unique>> service station and warehouse yet encountered by this writer is that occupied by Reed, Hynes and Quinlan, a distributor of Shell products at Hibbing, Minn. It was originally the barn, waiting room and headquarters office of the local street car company. It has to be seen to appreciate how admirably it <<serves its present purpose>>.

See Figure A.69.

The building sets back about 20 feet on each side adjoining the street. That portion at the corner was the waiting room and office quarter and, with no remodeling of the partitions, this now serves as the station display room, and, back of that, a modest office headquarters for the company and a warehouse for tire and battery stock and so on.

The other portion of the building, about 45 feet wide, and extending back the full length, some 100 feet, was the barn where the rolling stock was stored. Now, with a concrete floor and modern doors installed, this serves as the lubrication department and garage and there is also space for storing cars. A drive-on type lift has been installed.
... <<Large, open>> lubrication room, <<conveniently located>> to both pump islands, providing <<easy approach>> from both streets....

See Figure A.70.

... salesroom, with two 6-ft. windows and wide door in partition between this room and lubritorium <<permitting customer to watch service on his car>>.

... <<Distinctly functional>> design, insuring long architectural life and permitting many plan arrangements <<without loss of identity>>.

... <<Convenient>> lubrication and car washing facilities separated from sales room by glassed-in partition [material].

3/6/40 (65) "More <<Sales Appeal>>," by J. N. Westsmith (Engineering Editor)

Some important trends indicated by a study of... modern stations,
1. More care is being given to grouping and laying out facilities in the interest of <<more efficient operation -- to cut down steps, improve visibility>>, make use of otherwise waste space.
4. Service bays are wider and deeper to provide more elbow room between cars on the lift or wash rack and the increasingly important displays of equipment and merchandise.
10. Wider acceptance is given to providing for entrance to the men's restroom through the salesroom and for entrance to the outside women's room at the side of the building adjacent to display window [goods display] and away from the service bays....

See Figures A.71a,b.

Depending somewhat upon the extent to which displays are featured in the service quarters, modern design provides for an inside depth of 25.5 to 26.5 ft. and a width of 14 to 16 ft. for each bay, with the greater dimensions now generally specified. Center line of the lift is located 12 ft. in from the inside face of the front wall and is centered between the sides--7 ft. from the side wall for a 14 ft. bay and 8 ft. for a width of 16 ft.
Findings

The analysis of the *National Petroleum News* oil marketing journal in the years 1925, 1930, 1935, 1940, and 1945 reveals that the broad conception of the gasoline station was dominated by artistic applications of design for which no tangible value can be placed. Likewise, station design image and function most typically "dominated" the perception and act of the purchase of gasoline by the motoring public. Evidence of the influence of marketing concepts on the design development of the station is supported through an approximate quantitative analysis of design element descriptions. Approximately one-third of the design descriptions within this period of the journal's history are attributable to the experience of gasoline station developer(s) or marketer(s). The remaining two-thirds of the article descriptions within this period do not clearly define the reason for the use of a particular design element but do suggest some implied, intangible advertising value.¹ Examples of both the implied and justified uses of station design elements are outlined as follows:

¹Approximately 180 out of 250 examples were counted.
Examples of the Artistic Value of Station Design Elements:

A majority of the descriptions in the period between 1925 and 1945 do not justify the value of a particular design element through any particular logic. These artistic characteristics of station design suggest a certain intangible advertising or promotional value for the particular interests it serves: having either (a) visibility or a conspicuous design use, or (b) landmark value and a distinguishable and conspicuous design use, or (c) harmony with other design elements on a particular site, or (d) similarity (or standardization) of station design with other outlets in a group, or (e) contextual value to a community or locality. Examples which imply the visibility of station design elements are predominant in the journal's literature. Only a few of the total documented descriptions involve contextuality of design.

Examples of design visibility in the employment of station elements represent the majority of the article descriptions from 1925-1945. Visibility in station design is described through the use of: a "conspicuous tower" or a "striking pylon;" a "high" canopy positioned on a site "comes into view" and is "visible at today's speed;" or "central beams" of a canopy for the "display of signs or decorative features;" "color possibilities in enamel" having "brilliance," "sales appeal," "richness," and the ability to "set off contrasting colors" and "heighten the modern aspect;"
the "visible vendor" or the "visible pump" which was said to allow customers to see the color and purity of the oil or gas; a lubrication department with a "front display window;" "ceiling valances" which would "blaze in "display windows;" a pump "54-inches in height" which permitted full view of the building behind and presented a "dial face at eye level;" the service station as "3-dimensional billboard" which should "attract the maximum attention;" as well as "wide approaches" which "add materially to the general appearance of the station."

The use of designs or design features which offered some landmark value enabled a company to gain some advertising advantage for its product. Distinguishable features in the landscape during this period include the examples of use such as: a "unique" tourist station" which contained "real" "Indian tepees" or a dominant two story "circular bay;" colonial architecture made "quaint" by the application of iridescent paint; a distinctive "angular show window;" "colored stucco," "white marble," "red tile roof," "colored glass," "iron fences," combined to create an "unique" "Spanish architecture" and was said to be "one of the most ornate in the country;" a rural filling station said to be an "unoffical highway marker;" a canopy and pylon "trimmed in glass" and "illuminated at the fascia;" an "old streetcar barn" uniquely fitting the requirements of a service station's function. These examples were not only conspicuous in their design but
were unique applications of a particular use for their time.

The use of standardized design for more than one station of a group aided in the ability to isolate a particular company brand in the marketplace. Motoring consumers were made aware of a particular brand through the uses such as: a chain of "Dutch windmill" stations which dotted a tourist route; particular canopy designs which became an "established trademark of the station;" a "certain color of brick" which gave "a general uniformity" of appearance which placed a company's stations "under a common name;" as well as a variety of designs which would be "similar without sacrificing individuality."

Artistic harmony in the use of station design elements of the time had also provided a certain advertising value such as can be illustrated through the use of: "lamp posts harmonizing" with the station architecture; "pylons" described as "architecturally harmonious;" an interior color scheme which was "harmonizing to the exterior;" "blue and white" color scheme which "ties up well with color of gasoline;" "curved" framed glass display windows with "horizontal panes" which "accent modernistic streamlined design;" "globes" and light "standards" "of the familiar shell design;" lighting at window displays which "showcase" the products sold; pumps "in architectural harmony" "add to the general appearance of the station layout" giving it "unity;" as well as "trim 23 x 12 foot dimensions" described as "unusually neat," with "tire
racks," "bulk oil tanks," and "battery chargers," "compactly appointed," and "modern."

Finally, the contextual worth of an architectural design to a community or locality in which it is located represents another intangible advertising value. Examples of design contextuality from this period include the following: "conventional upright or pendant ornamental streetlighting luminaire" "fits in with the existing streetlighting designs;" "woodwork left rough" described a station on a scenic tourist highway which "harmonized with the natural scenery;" "grilles of wrought iron," "colored stucco," "marble," "colored glass," "iron fences," "red tile roof," comprised the "Spanish architecture" (Mediterranean Revival) which was said to "harmonize with the homes and surroundings of Coral Gables, exclusive residential district of Miami, Fla.;" "stucco," "hard baked" building base, "ornamental tile eave line," "pilasters," "column capitals," and a "copper roof effect," were designed to "fit in with the general atmosphere of the southwest;" as well as station designs which were noted for a "type of construction made to fit in with the architectural scheme of the surrounding neighborhood."

Examples of the Justified Uses of Station Design Elements:

Gasoline station design element descriptions which are contributed by the experience or opinion of those who marketed gasoline are characterized by one or more of the following:
having either (a) cleanliness, or (b) convenience, or (c) customary or popular appeal to customers, or (d) legal consideration, or (e) culturally scrutinized problems about the gasoline station with alternative ideas to remedy the problem, or (f) connotative associational meaning to gasoline, or (g) scientific, statistical, or experimental reasoning as a motive for the intended use of the design. Convenience represented the majority of examples which were explained in the documentation of this period.

Examples of cleanliness in station design include the use of: "washable" tiles and shingles which can be "freshened up frequently" and "asphalt" as a paving surface whereby "oil stains do not show."

Examples of convenience in station design include the use of: a "canopy" which "is high enough" and "supporting columns far enough for the passage of trucks;" an "umbrella shed" form isolated over the pump islands whereby "obstructions are eliminated;" "chairs and other appointments... comfortable, ease motorists who are waiting on service;" "lighting effects without glare" or without "proving confusing;" technological advancement such as "electrically operated meter system" which "speed" the process of dispensing gasoline; station "frontages easily accessible;" a station layout with the "driveway... to the front" and "building" to the back of the lot "where it would not interfere with the movement of customers' automobiles;" "one stop" service stations with "restaurants
and tourist accommodations" said to "convenience" and to "help the hurrying motorist hurry;" a "rest room" to "permit the woman customer to sit comfortably in clean attractive surroundings" and to "bring her children in" while her car is serviced; "steel columns" set "inside the gasoline pumps eliminates mental hazard for the timid driver."

Examples of customary use or popular appeal include the use of: canopies which provided shelter from inclement weather for which their use was "customary in the South and West" regions of the country; the adoption of a name "'Colonial' Beacon Oil Company" based upon the popular interpretation by consumers for its station designs; "popular" architectural applications which "resembling little English cottages" and was "standardized" for use by a particular company.

Two examples described legal considerations of design which included the use of: at least "pumps," "one drive," and "a building suitable for storage supplies fully set off so that complete possession could be given the lessee;" constituted the definition of a 1930 gasoline station according to the practices of "major" oil companies and proprietary use of "combinations of colors" to "identify" a company's product was upheld by court injunction.

Two of the documented descriptions include culturally scrutinized ideals about the gasoline station's design such as: people in general think the natural "color of most machine made articles is ugly," and the use of poor color design can
"imperil sales;" "slag or crushed stone" in the use of driveway paving yields an "excessive amount of dust" and is objectionable to both station operators and "to the neighborhood property owners;" the use of "mercury floodlighting equipment alone" without the combined use of filament lights "distorts the color of cars and the human complexion;" and "pits" as opposed to "lifts" for the service of cars "are difficult to keep clean, are poorly ventilated, are a fire hazard, and a resistance to women drivers who dislike to drive over a hole in the ground."

Design uses which were justifiable through a developed connotative associational meaning to the image and function of retail gasoline dispensing include: "white" "a symbol of purity in religion" was suggested to be connotative of "pure" gasoline products and "English Tudor" type architecture "standardized" to keep stations "from looking like sheds which may remind one of grease and grime;"

Design descriptions which were based upon scientific, statistical, or experimental reasoning included the use of: color preferences of "men" and "women" for "reds" and "blues;" "opposite," "contrasting," or "complementary," colors which according to color theory experts are "harmonious" with the ability to "balance in perfect neutrality;" the "reflective" value of "white" as important to "increased visibility;" and a "color" and design label "test" which considered the "preference of consumers."
In the period between 1925 and 1945 the design of the gasoline station was primarily characterised by its intangible and artistic value or worth. Two thirds of the article descriptions implied that the use of a station design element was to increase its visibility, distinctiveness, harmony, similarity, or contextuality which by assumption was employed to increase the station's advertising value. One-third of the articles made literal proof of the use of a particular design element through its cleanliness, convenience, popularity, legal interpretation, cultural scrutiny, connotative associational meaning to gasoline, or scientific, statistical, or experimental reasoning. The gasoline station between 1925 and 1945 became less of a building and, as one gasoline station architect described, became more of a "three dimensional billboard which demanded the maximum of attention." Through the application of its individual elements, station design became a device for the concept of "demand creation." The gasoline station like the traveling "salesman" traversed the countryside in competition for buyers of its surplus product.

The appropriateness of station design became a question of experience and fact. The concepts of landmark value and contextuality became decreasingly significant. The level of standardization and visibility in the design of the gasoline station was justified by promotional advantage as experienced by its owners and operators. Relative to the "Sales
Conceptualization period of 1925 to 1950, the gasoline station progressed through its first step of development toward an architecture of packaged function and image. Indications of the post war period of development in station design were given in the later part of the documentation. Articles at the end of the "Sales" period suggested that design would become more "functional" and the application of materials would become more "utilitarian." Progressive station designers of the 1940s offered that more care would be given in the "grouping and laying out facilities in the interest of more efficient operation,... to cut down steps, improve visibility,... and make use of otherwise wasted space." The gasoline station by 1950 became a "functional showcase" which reflected the prior twenty-five years of learned and justified marketing experience.
CHAPTER V

THESIS STUDY: "NATIONAL PETROLEUM NEWS," KEY WORD SEARCH
OF GASOLINE STATION DESIGN ELEMENTS
EARLY MARKETING CONCEPTUALIZATION PERIOD -- 1950-1970

Within this chapter, articles from the National Petroleum
News are documented from the years 1950, 1955, 1960, 1965, and
1970. Within the documentation, design descriptions and
expressions are highlighted which represent the vernacular
character of innovative and commonly used ideas of gasoline
station design. Design concepts and descriptions are analyzed
in the "Findings" of this chapter for their relationships to
the "Early Marketing Conceptualization Period," 1950-1970, as
presented in Chapter III. The "Findings" of this chapter
provide a basis of comparison to the other two periods of
marketing for the "Results of the Study" located in Chapter
VII.

Within the "Development of Thesis Methodology" located
in Chapter III, the study methodology, the key design element
search, the content selection, and the documentation format
for Chapters IV, V, and VI are described.
11/1/50 (17) "Multi-Pump Location and Facilities," by Paul Wollstadt, News Editor of N.P.N.

...To get back the identification they are losing by discarding canopies, one company is building a tower-like structure at multi-pumps and another is using a fin-like extension from the top of the building to the front of the property.

See Figure B.1.

2/60 (121) "Shell Oil's Newest 'Blend-In,'...Designed for use in residential area"

Tailoring the station to the site is becoming a basic precept at Shell Oil. The latest example is a ranch-type station designed to blend into slick residential localities.

3/60 (28) "Built for Unlimited Potential"

The station serves as gateway to [an industrial office and professional-building] development. Architectural features provide distinctiveness and flexibility:
--Additional hyperbolic paraboloids may be constructed as required, and will blend in with the existing structure.
...A prime consideration was design, since many other structures in the Windsor development are hyperbolic paraboloids.

See Figure B.2.

3/65 (121) "Newest for Prefabs: Foam"

Topping the Matawan station is Shell's familiar pylon and insignia. In this case, the pylon was fabricated by Koppers engineers out of treated lumber faced with brick [material, signage].
About changing the 'shoe box' station...taking a strong stand...
"We have used a mansard conversion system which, with the addition of stone fascia and the corporate logo, has been an <<effective image change>>. This system is particularly <<adaptable>> to the "shoe box" porcelain station which was built by the thousands in the '50s.

The easiest way to give an old service-station a new lease on life is to give it a <<face lift>>. That's the prescription for lagging service stations recommended by Shotmeyer Bros. Co., Mobil gasoline jobbers based in Hawthorne, N.J.
Put red brick over the porcelain enamel, slap on a Mansard type roof (<<like movie sets, it doesn't have to be a complete job>>)....

See Figures B.3a,b.
Canopies have not been widely used east of the Rockies for a number of years, but they continued to be popular west of the Rockies until very recently because of the hot sun in southern California and Arizona and Nevada, and because of the rain in Washington and Oregon.

See Figure B.4.

Few stations being planned now, even west of the Rockies, have canopies. The two principal objections to canopies seem to be (1) that they run counter to the appearance of openness which companies are trying to achieve, and (2) that supports for all types except the cantilever create hazards for the motorist.

...Some stations still are being built with canopies... In addition to providing shade from the sun and shelter from the rain, canopies have been used to help identify stations. To get back the identification they are losing by discarding canopies, one company is building a tower-like structure at multi-pumps and another is using a fin-like extension from the station building to the front of the property [auxiliary forms, signage].

See Figure B.1.

<<King-size>> canopies are displacing open-form design as the hallmark of big multipump operations in the Los Angeles basin. That's the opinion of Frank Urich, owner of Urich's Serve Yourself Stations and the man who fathered self-serves in the area.

...What have they got? Multipump operators, who are laying out up to $15,000 for the canopies, see one very special feature in a giant steel platform hovering over pump islands on slender columns. It isn't practicality. It's promotion.

...One owner's comment sums up the real reason: "You ought to see that place at night. It makes the place across the street look like it's closed."
...One new unit in the desert, reports Ray Eddins, has been built with the station building as well as the pumps under a single <<floating>> canopy. "It's not so much to keep the rain out of the operator's neck," says Eddins. "It's the <<sign effect>> and the lighting. <<If you don't notice>> a properly lighted canopied station, you shouldn't be out driving -- <<you're blind>> [lighting]."

<<"Eye appeal is the main thing,">> agrees Hugh Lacy, vice president of Urich's. Another big benefit, he points out, is the lighting... <<Deep>> cornices on the canopies give them a <<massive appearance>> and offer plenty of advertising space. Exploration of these display possibilities is only beginning [auxiliary form, lighting, signage, material].

See Figure B.5.

...Newly constructed Urich units are constructed of steel and cover three pump islands. They are 70 ft. long and 25 ft. wide with a 3 1/2 foot cornice. Four 10-inch steel columns at the ends of the outside pump islands support the canopy and provide a convenient span for large signs [signage].

..."The service station is a constantly evolving thing," says Lacy. We think the trend is toward canopies now, we don't know what it will be next, but we know you have to keep up to be successful in this business."

6/60 (129) "'A-Frame' Canopy Pulls Them in for Sun Flash"

Main object of the "flying wing," as some local marketers have dubbed it, is to <<attract>> motorist attention [signage]. It is practical, too. With the <<massive expanse, it offers protection from sun and rain>>.

See Figure B.36.

Angle of the "wing" was figured by tilting it from a 10-ft. starting point to 14 ft. at the edge of the concrete apron where each column is anchored. This <<allows ample clearance for trucks>>.

Two roof drains carry water to the street through 4-in. pipes in the columns. The canopy roof consists of 4 1/2-in. corrugated-metal deck covered with a sheet of insulation and coated with tar paper and gravel [material].
While Cities Service tests <<image-improving>> station designs in its Tulsa backyard, one of its successful multiple-station operators is hitting it big with an <<"image" station>> in a traditionally light Cities market.

...Detroit's tri-county market, a place where Cities has little strength...

...Reeve opened his leased <<"butterfly" unit>> -- "butterfly" because of the <<large, elongated>> canopy covering pump islands--on Oct. 22.

The owner commented that the initial impact of his design was to attract attention toward the canopy and pump islands to build gallonage. The canopy form was repeated in the roof of the station building. Fluorescent tube lighting was used liberally in the design of canopy undersides and building soffits. See Figure B.7.

100-ft.-long canopy,... is <<very effective in attracting>> drivers.

See Figure B.8. Canopy was sized for return on investment.

As part of an editorial concerning the use of mansard roof conversion systems to upgrade the image of the conventional service station, this marketer had this to say:

<<Attractively designed>> canopies are an <<immediate and effective addition>>. It must be remembered that island location and island equipment configurations may require modification to be adaptable to the physical size and mass of the
canopy with the necessary costs involved [site usage].

3/70 (32) "Testing a Canopy"

<<Does a driveway canopy tell anything to a motorist?>> Sohio thinks it may and since last fall has been <<evaluating the effect of a free-standing canopy on traffic patterns>>. The test canopy at this Columbus station covers the inside lanes at two parallel pump islands.

10/70 (83) "N.P.N. Special Report--Here Are the Key Trends in Station Equipment"

The use of service-station canopies is spreading out of the West and South, as <<more marketers are coming to regard them in aesthetic as well as practical terms>>. Canopy suppliers say they sense a new attitude on the part of major companies. ...Atlantic Richfield Marketing VP Charles Walsh has indicated that canopies are part of a plan to <<modernize>> older stations in its Eastern markets.

See Figure B.9.

"Majors see competition putting them up, and they want to stay even with them," says an Avenue Equipment Sales official. ...At one Humble regional office where a designer will tell you, "I like canopies but it's strictly up to marketing," the marketing rep comes on strong when he says, "We are not presently contemplating the introduction of canopies in our eight-state area."

...Another major, Citgo, with no general canopy policy[,] says it puts up a few. "It <<depends on the type of station, the neighborhood, and the type of trade>>," says the regional manager. "<<Where we have a lot of women customers, we'll put up a canopy>>."

...While canopy makers turn out a wide range of models, they say <<majors prefer individual designs that "fit in more with basic station designs.>> They have no objection and are willing to accommodate the buyer. Canopies of the wrong design, size, and shape, they add, <<"can really hide a station and do more damage than good....">> But, at the same time, manufacturers say they think some majors have learned a lesson in having outside
architects or design engineers come up with canopy design and construction.
"They wouldn't buy pre-designed units; they had to have them designed and erected by specialists, construction engineers and the like," says one maker. "And it cost them a bundle of money."

One maker who sees a trend to using canopies for lighting in the Southwest, where canopies used to be a protection-from-the-weather item, is Monitor Inc., Sherman, Texas. "Canopies in our market," says Dan Colbath, Monitor's president, "are becoming a fixture for lights more than anything else. The main function is to attract drivers at night [lighting]."

They say these are the basic materials that will continue for the foreseeable future.
...Aluminum and plastics may compete as trim. One canopy maker refers to Texaco's use of shake-type shingles of aluminum that are used to dress up older stations [material].
...Another aluminum advantage: Brighter ceiling surfaces for light reflection [material].
...But as canopies move into more north-country areas, the situation will be turned around. By putting quartz lamp and infra-red heaters under the canopies, they are being made comfort centers for motorists and attendants who are now forced to work outside in cold weather without heat.
COLOR


...Concrete island slab serves two purposes: (1) It is easy to clean and is serviceable; (2) at night its white surface <<stands out against the asphalt>> and with the aid of good island lights <<serves to focus attention of motorists on the pumps>> [lighting, material].

See Figures B.10a,b.

11/55 (37) "Co-op Marketer Starts Brand-Name Push"

...Midland Co-operatives, Inc., is changing its tune. The Minneapolis firm is beaming a broad advertising program at selling something, specifically brand-name products. The complete program...includes a schedule of new brand names, new packaging, <<new>> color schemes and symbols, and increased attention to training of co-operative employees in service to patrons and in modern merchandising [signage]. Service station signs will carry the "Midland Products" legend in white on a book-shaped red background [signage]. Bulk trucks and transports are red-based white tanks with the Midland markings in what the company calls "oily green." Door panels bear local <<identification>> -- the retailer's name in black on a white open-book background.

See Figure B.11.

1/60 (107) "Object: <<Instant Identification>>, Speedway Petroleum's New Standardized Station Uses Luminescent Facade"

Speedway felt the first five stations had a <<"starchy" look, needed more contrast>>. Sundberg-Ferrar, industrial designers, were retained to correct this. S-F made two key changes: (1) the flat surface of the sign was vee-ed to a horizontal highpoint carrying a blue line, <<to perk up the daytime appearance>>; (2) the Speedway name was subordinated to the "79" trademark, in red numerals inside a blue ringed oval <<to provide contrast>> [material, signage].
...Restroom appeal hangs on color. <<Company wives were polled informally on the shade of blue they preferred>>.

10/60 (89) "Designs Sell Product and Company"

Designers find colors a challenge in dealing with oil packaging. Most admit that red, white, and blue are <<best simply because they have been used so long that the consumer automatically associates them with oil>>.

Generally, they agree that white is a <<good color>>. <<"It stands for quality and purity.">> They argue that cleanliness is not a major problem since the oil is sold quickly.

Metallic colors are <<used increasingly for premium>> oils. Metal cans offer an advantage here when the plate shows through the lithography [material, signage].

See Figures B.13 and B.14. Material, signage logotype, and color combined to form an identifying graphic image.

1/65 (110) "New Design Builds Image and Big Business, Cities Service Multiple-Station Dealer Sam Reeve is Hitting It Big with "<<'Image'>> Station in a Light Cities Market"

...For <<comfort and an esthetic touch>>, the station has a wall-to-wall yellow-carpeted waiting room equipped with TV, air-conditioning, red and black leather furniture, and three bouquets of flowers.

6/65 (98) "Cities Shuffle Names in ID Change"

Add Citgo, a red-white-and-blue color scheme, Citgo Premium gasoline, Tipcomene, and Citgo Extra Range motor oil...

...Delete Cities Service (as a brand name), a green-and-white color scheme, the expanding circle and delta, and Cities Service Milemaster gasoline.

See Figure B.15.

...Citgo's color scheme becomes red, white, and blue, replacing Cities's green and white. The new emblem <<"is better suited to today's marketing
conditions and for the foreseeable future." It's also expected to enhance <<identification>>, since green and white <<tends to blend in with surrounding conditions>> and is <<not clearly visible at night,...>>

Trimark, a raised three-tone red triangle, is the new brand symbol... used against a controlled white background...above blue block lettering with the brand name [signage].

The gasoline station's design image was updated and modernized as a objective of market orientation and consumer appeal.

1/70 (62) "Arco's New Look in Final Tests"

Atlantic Richfield's new blue-and-white ARCO emblem is going up this month on some 300 stations in six different cities [signage]. These will be the final market tests, says Atlantic Richfield, before the word is given <<to begin applying what the company calls its "New Look">> to its more than 24,000 stations in July.

See Figure B.16. With attention to buyer behavior the company adopted a slow method to introduce the new color scheme along with the new sign image.

...Atlantic Richfield faced a problem in deciding on its new color scheme. [Prior company images, including:] signs and colors of each of the three station-types in the company were distinctly different: Atlantic was red, white, and blue; Richfield was blue and yellow; and Sinclair was red, white, and green. "We wanted a good, <<hard-hitting color combination,>> says Atlantic Richfield marketing vice president Charles Walsh. The company settled on a basic white and blue, with red thrown in for balance. Letters are in a clean, trim Helvetica type face. The curb sign...is blue, with white ARCO letters and a red diamond-shaped "spark" (the company's new symbol) [signage].

<<..."The idea is to minimize visual pollution at the service station -- we want to be the least hostile atmosphere in the community">>.
Mr. T-Texas Jobber 'King' Is a Mystery Man to Many

The small building is a <<neat>> white structure trimmed in red. There is a "Shamrock" pole sign near always white curbs, and the pumps carry Shamrock identification [signage]. Extensive use is made of pole light standards and the poles have <<barbershop>> red and white stripes.

See Figure B.17. Pole striping connoted a low-price volume-oriented competitive image which could be distinguished by motorists from major oil images.

North Carolina's Self-Serve King Shouts 'Ole!'

"I was in the men's room of a friend's house. I saw this poster of Mexico on the wall. I said to myself, 'Ole, that's it.' I grabbed the phone and called a patent attorney [signage]. "Ole" is in foot-high black letters on Egerton's pumps. There is a black bull above the letters. The background is orange. The design has a <<fiesta-like appeal>>.

See Figure B.18.

Standard combinations of orange and black, which in prior years have been avoided by many larger companies, were adopted by small independent marketers who desired that the station design would reflect price-competitive images.

Getty's New Image Arrives Throughout East

...Getty's <<new look>> makes the marketer <<unique>> in several ways. Besides the <<premium-only concept>>, there is a new color scheme. Buildings are beige, brown and white, and graphics are red and orange. "We wanted to get away from the red-white-and-blue that every other service station seems to have,"...and observers can't deny that Getty accomplished that objective.

See Figure B.19.
...The Getty name appears on station ID signs with the "G" in red and the rest of the name in orange on a white background [signage].

Getty Oil went against the typical bright primary colors utilizing a less abrupt combination of beige, brown, and white to attempt a softer design image for its buildings. The company retained the use of bold colors with its logotype for contrast.
GOODS DISPLAY

3/1/50 (39) "T.B.A. Merchandiser Flexibility Provides Maximum Display"

Here is a <<novelty>> in the way of a display fixture. It is located at Jack Worth's Atlantic station at the corner of Tamiami Trail and Miami Ave., Miami, Fla. It has five points of special interest:
1. <<Unusual>> design
2. Mobility
3. Flexibility -- <<prominence>> can be given to any section as desired
4. Provides accepted 7-ft. ceiling for merchandising display
5. Incorporates regular illumination for night display, plus floodlights for special features [lighting]

See Figure B.20.

3/29/50 (cover) "Maximum <<Sales Appeal>> Sought in Station Designs"

Trend in service station construction and design is to produce an outlet which will be a <<functional showcase>> rather than a mere dispensing point for petroleum products needed by motorists.

See Figure B.21.

Three basic principles dominate the planning of modern stations:
1. Make the station attractive so the car owner will want to look.
2. Use glass liberally but wisely so that when the driver looks he can see quickly the services and products available [material].
3. Provide proper and sufficient facilities to satisfy the car owner's needs once he's in the station.


...co-ordinated with station design is a definite trend toward the use of more effective lighting and
more liberal use of glass wherever practical...
 [material, lighting].
 Special attention is given to salesroom lighting, which will draw customer attention. This is part of the over-all plan to develop the entire salesroom as <<a display unit rather than to concentrate display in the windows>>.

See Figure B.22.

..."a merchandising tool which is <<attractive>> and <<practical>>.

...For the operator, the two points -- <<functionalism>> and <<customer appeal...>>.
...The trend in station design generally is toward developing the sales room as a display unit and away from "bargain store" displays in windows.
...Special attention has been devoted to installing the most effective and most attractive type of shelving in the sales room. This program is two-fold in purpose:
1. Better display, both inside and from the outside looking in.
2. <<Promotes better housekeeping>>.
New shelving has been designed for flexibility, thus permitting standard shelving to be used in almost any type station.

5/24/50 (32) "T.B.A. at Self-Serves," by Frank Breese, N.P.N. Special Correspondent

Self-serves do have a <<natural display advantage>>, since the <<broad expanse enables a dealer to place his wares in plain view, easily visible from the pump islands>>. Moreover, self-serves, being a 24-hour operation, keep their outdoor displays up all the time.


...Tires are probably the most popular self-serve article after gasoline and motor oil.

2/60 (28) "How Design Lures Night Drivers, Regulations Keep Gulf from Using Big Signs, But at Night a <<Unique Design>> Turns the Station Itself into an Illuminating Sign"

Gulf's slick new station at New York's International Airport offers some sound lessons in new design, as well as in how to overcome problems encountered in building on a closely regulated site.... Designer
of the station is Edward Stone, prominent architect of the Brussels World's Fair.

—Bays which open from the rear and which <<can be viewed through a huge>> "picture window" in the station office [material].

See Figures B.25a,b. Designers often were challenged by city planning authorities. The architect's design was a response which placed the goods display and sales office across the station front and the service bays at the rear.

5/60 (132) "Esso Tests Venders, Vending Units Have Been Installed at Five North Carolina Stations"

Esso has opened <<custom-styled>>, vending-machine installations at five high-traffic stations in Charlotte, N.C. The idea is <<to find out what vending machines motorist[s] want at service stations>>.

See Figure B.26.

Each installation consists of a battery of eight venders housed in a <<modernistic>> prefabricated unit. The machines dispense soft drinks, coffee, ice cream, cigarettes, candy, and cookies. Most are equipped with built-in changers. Esso is conducting the test with Vendo Co., Chicago, manufacturer of the venders.

<<"We hope," said Esso, "to learn whether this type of installation will give motorists better service, and whether motorists prefer it to the somewhat hit-or-miss methods of using vending equipment that most dealers have employed in the past.">>

"Practically every service station has some vending equipment. Perhaps through <<unified installation>>, dealers will be able to improve their revenues and profits. That at least is the objective."

Sales revenue developed outside of the interests of T.B.A. and automobile service. The standardized form of the scissored roof was intended to create a modern, unified, and pervasive image.
"Sorry, No more Teddy Bears"—Billups Eastern's Big Change

After years of selling everything you could think of, Billups Eastern stations are shifting to a <<streamlined, simplified>> TBA line. It features fewer but faster-moving items, fewer prices, better display and control. Think of a Billups station and you think of foxtails, teddy bears, straw hats, roller skates, all piled in bins and leaping out at you from overhanging mirrors. ...Now a subsidiary of Hess Oil & Chemical, Billups Eastern is cleaning house. Its 30-year-old TBA program has been streamlined to stress car-related items and play down non-car items.

See Figures B.27a,b.

-- Display is being <<sharpened up>>.
...Cutback on merchandise--The old line of more than 450 items, many of them non-automotive, has been cut way back to 79.
... <<Streamlined>> display -- Merchandise bins, topped by mirrors to give a double-image effect, have been given the axe. They've been replaced by wall pegboard and shelves. Two 12-foot pegboard sections and a 4-ft. center display for specials are mounted against the rear wall of the station building. TBA items are displayed in groups of six. ..."TBA sales are no longer going downhill because of obsolescence...Sales are up substantially. We think our new approach, and <<cleaning up>> for a <<better, crisper display>>, had a lot to do with it."

"Weather permitting,...' [the owner] wants personnel outside on the islands. He wants his displays outside and wide open. 'I don't mind a little stealing if we can get that <<open-for-fast-business appearance>>.'"
... <<Convenience store tie-ins have been tested>>.
... We used the portable type units. They did a fair business but generated more trouble than they were worth, we felt.
[A typical] unit has a convenience merchandise bend built in as part of the station building. It has a companion bay on the opposite side which currently stocks items often found in discount stores.
...The convenience grocery bend is heavy on milk and a few basic items.

In addition to outside display, the self-service marketer also discovered that profit could be derived from inside point of purchase sales.

...One executive told N.P.N. that the industry can learn much in the way of station lighting from the effective use to which the theater puts various lighting effects. There is a <<tendency to soften>> lighting generally to make it <<more attractive and yet maintain peak working efficiency of personnel>>. Some experimentation with filters on lights has been and still is being carried on. Special attention is given to salesroom lighting, which <<will draw customer attention>>. This is part of the over-all plan to develop the entire sales room as a display unit rather than to concentrate display in the windows. ...[One] company favors spotlights on island stands which concentrate on station building itself. Inside, good fluorescent lights serve to <<set off the sales and lube rooms effectively>> and give the operator a "good merchandising tool."

4/12/50 (38) "Station Lighting Is Profitable Investment for Oil Marketers Seeking More Night Volume," by Charles Boyd Jr., N.P.N. Staff Writer

...The information was obtained primarily from manufacturers of lighting equipment, and from oil company engineers. ...Proper lighting can bring more business to a service station. It <<attracts new business and helps bring old customers back to those stations who want after-dark business>>. ...Some basic laws of good business management can be applied to determine if new lighting equipment is needed. ...At least four points shall be considered:
1. Relationship of good lighting to sales;
2. Economics—that is, will improved lighting add enough sales to make it economically attractive;
3. Selecting the proper lights in the individual station;
...One manufacturer has set up three levels of illumination for different types of stations and locations. One provides a high level of illumination <<to make a station stand out above existing background illumination>> and required
footcandles are 25 for pump area, seven for apron area.
A second [level of lighting] is for <<stations which must stand out, yet do not have the intense competition met with on a high level plan>>. It provides 15 footcandles for pump area, five for apron area.
A third [level of lighting] is intended primarily for the smaller economy class of <<station not confronted with competition from other stations in the immediate vicinity or with distracting street lighting and sign lighting>>. For the pump area 10 footcandles are required, for apron area two footcandles.

See Figures B.28 and B.29a,b,c.

Interior lighting is being accomplished more and more by the use of fluorescents and spotlights, particularly in the saleroom which has become the showplace of the modern station. <<Modern>> fluorescent fixtures also are being installed in restrooms, as the white light helps give the <<impression of cleanliness>> [color].
A statement by Mr. Hinton in Shell Progress sums up what good lighting will do. He says: <<"Light pulls people>>. With the possible exception of cocktail lounges, this is a fact to tie to: of two places of business, side by side, <<the one with the brighter lights will get the bigger crowd of buyers and lookers>>. Nowhere is this truer than in the highly competitive business of service station retailing.'
King-size canopies are displacing open-form design as the hallmark of big multipump operations in the Los Angeles Basin. 

"You never have to carry a flashlight in one of those stations," [one owner] explains. "The light is reflected and diffused under the canopy, and you can see everything under the hood...

[canopy]."

See Figure B.5.

The new design is <<in keeping with the idea of making a huge brand sign of the station...>> [signage]. Speedway's development was sparked three years ago by a Standard Oil Co. (Ohio) experiment.

See Figure B.12.

A new type of consumer fixture, designed as an <<architectural component of the station building>>, has made its appearance on some of Gulf's recent stations.

See Figures B.31a,b.

A porcelain-enamel housing forms an integral part of the roof overhang [material]. Done in Gulf orange, the fixture also serves as a <<color feature band>> around the top of the station [color]. The face of the station is lighted by a single row of Super-Hi 1500-milliampere, rapid-start fluorescent tubes. Extruded-aluminum reflectors control the <<uniform distribution of light from top to bottom of the building wall>>.

The new lighting system was designed under the direction of Bernard Wagner, Gulf's equipment manager. Westinghouse built the whole package for Gulf, including the porcelain-enamel housing, at its Vicksburg, Miss., plant.

Lighting design was stressed at the consumer side of the site.
Cities operations people worked out the station. "There's a little bit of everyone in it," Reeve says, but the engineering came from Tulsa. "Some thought he was putting too much" [lighting] into this station; but Reeve persuaded Cities headquarters marketers that something like this "was needed to give Cities impact in Detroit."

See Figure B.7.

Lighting men say fluorescent lights are on the way out and new high-intensity lamps are going to take over service-station lighting. The new high-intensity-discharge lamps can be either mercury-vapor or metal-halide additive.

...Though most suppliers refer to "mercury-vapor" lamps, Oscar Phillips Co.'s VP of Sales, Jack Switzer, says the correct term is "deluxe white mercury vapor." He adds, "The older mercury-vapor lamps had poor color rendition." "

See Figure B.32c.

...Yards, drives: Mercury-vapor or halide will take over from fluorescent units. Compco's Zagel says the new units are smaller in size than fluorescent fixtures, 4 sq. ft. as against 16 sq. ft. They don't look so bulky nor "are they ugly looking."

See Figure B.9.

...High-Rise ID signs: Interior-lit fluorescents at most interstate-type stations will give way to opaque porcelain signs illuminated from the ground. Lamps will be mercury-vapor and then halides, mainly because of spotting ability. ...Those who contend that [lighting] intensity levels seem to be dropping somewhat say oil companies are now more selective in how they use the intensities. "They want to highlight the features of new ranch or colonial stations." They want lighting to be more aesthetic; they're using the...
"light stroke rather than the broad brush," says a fixture marketer. Where others say low-levels can blind drivers, Westphal counters with, "Just as airport runway lights guide a pilot in, so do our low [ground] levels guide a driver into a station."

... "A more subdued lighting system approach, especially in residential station designs, will provide maximum corporate identity, providing a warm quality and dependability climate..." The old, antiquated pole-mounted fluorescent area-lighting systems do not integrate aesthetically with the modern design stations, and become the focal point of attention, completely distracting from the new modern aesthetic design or corporate identity."

See Figures B.32a,b.

While most lighting-fixture makers don't see much of a future in low-level lights, here's what a major-company man says: "The high, intensely bright overhead light has been a bone of contention with traffic and police officers for years. On the edge of or near a residential area, so much light bleeds off the property. With low-level, low-intensity lighting, you illuminate only the curb cut and the driveway."
In accordance with this rather general policy of constructing an "attractive yet functional" merchandising tool economically, there is a growing trend among oil companies to "standardize" as much as possible on design and construction for stations. In almost every instance, however, there are "exceptions to this standardization theme".

Compare Figure B.33 with Figures B.34 and B.35.

...[At] various sites in many companies' marketing areas...stations are given special treatment, foregoing standardization in favor of what might be termed "glamorization". This is usually done for one of two reasons--sometimes both. First, the station may be "in a neighborhood which requires a design to fit in with the atmosphere of surrounding architecture". Second, the station is strategically situated so that the company feels the outlet serves a twofold purpose: "1--being attractive enough to draw customers in a highly competitive area; 2--at the same time show some return--as intangible as it may be--advertising-wise". The latter point is subject to considerable controversy among many oil company service station men.

...Generally porcelain enamel finish is favored over other types, point being made that such a finish will amortize itself over a six-year period as compared with a structure which must be painted each year in order to "maintain an attractive appearance".

Trend here, as with most oil companies, is to make the entire station a merchandising unit. In addition to expansive glass areas in the sales room, station plans call for lube room doors to have more glass, thus giving entire building a "more open look."

See Figure B.33.

...Trend is toward porcelain enamel finish on stations in "large cities" and stucco finish in "smaller towns".
"Chrome Puts Sparkle in Ohio Oil Station"

Aluminum store-framed windows helped to accent the integrated bright look of the station equipment.

Ohio Oil Co. has its eye on chrome -- <<a top customer-appeal feature in many fields for years>>. ...The station <<equipment has been dressed up>> in chrome <<for public view as an experiment in attractiveness>> -- and an expensive one at that. But, say officials, "should the chrome hold up and prove economical as well as a substitute for paint, it might turn out to be a progressive step in station design."

See Figures B.36 and B.37a,b,c,d.

"Object: Instant Identification, Speedway Petroleum's New Standardized Station Uses Luminescent Facade"

Speedway built five pilot stations in 1957, modified the design to hammer out bugs, and has built 17 of the new-type stations to date. The new design is in keeping with the idea of making <<a huge brand sign of the station...>>. Speedway's development was sparked three years ago by a Standard Oil Co. (Ohio) experiment. At the time, Sohio was satisfied with the costs involved in luminescent stations but was having mechanical difficulties, particularly with cracking in the plastic facade. Servicing lights was also a problem [signage, lighting].

See Figure B.12.

<<...Visibility and cleanliness>> are stressed by extensive use of glass walls and glass bay doors. ...Easy maintenance is provided by gray-blue ceramic-brick facing on sides and back walls.

"How Design Lures Night Drivers, Regulations Keep Gulf from Using Big Signs, But at Night a <<Unique Design>> Turns the Station Itself into an Illuminating Sign"

Gulf's <<slick>> new station at New York's International Airport offers some sound lessons in new design, as well as in how to overcome problems
encountered in building on a closely regulated site.
Designer of the station is Edward Stone, prominent architect of the Brussels World's Fair. Some of his innovations at the airport station are:
-- **Latticework walls** on all four sides of the station, each lighted from within to offer a **striking nighttime appearance** [lighting].
-- Interior gardens lighted by large, transparent plastic domes in the ceiling.

See Figure B.25a,b. An example of a unique case in station material design, a departure from the standard.

2/60 (121) "Shell Oil's Newest **'Blend-In'**...Design for Use in Residential Area"

Tailor the station to the site is becoming a basic precept at Shell Oil. The latest example is a **ranch-type** station designed to **blend into slick residential localities**.

The softer more domestified cladding (replacing porcelain enamel) allowed for the economical conversion of the station image as opposed to costly demolition and reconstruction of the company's large number of profitable neighborhood locations. See Figure B.38.

3/60 (132) "Now It's Plastic for Prefab Stations"

A rival for the all-porcelain prefab station, long unchallenged, is on the scene at Bridgeville, Del. A **high-gloss weatherable surface** for the building is provided by two kinds of exterior skins applied to panel cores of corrugated aluminum.

See Figure B.39.

One form of panel skin is made from Du Pont's "Lucite" acrylic sirup and fiber-glass reinforcement. Such reinforced acrylic panels, Du Pont claims, give high strength for their light weight, plus good **gloss retention** and **resistance to color fading**. An alternate skin used on some portions of the building consists of aluminum sheet coated with
"Lucite" acrylic lacquer. For such acrylic surfaces, Du Pont claims <<color stability>> for at least 10 years, with excellent gloss and impact strength.

Roof panels use a <<factory finish>> based on Du Pont's "Hypalon" synthetic rubber, estimated to have a life expectancy of 20 years.

...Savings of $350 to $600 a year are claimed in painting maintenance costs.

11/60 (123) "Jobber Station Is At Home in Suburbs"

The long, low style of this new Mobil station is <<designed to blend with the surrounding community—a residential suburb of Memphis, Tenn.>>, solid with <<houses in the $15,000-$20,000 range>> [site usage].

See Figures B.40a,b,c.

3/65 (121) "Newest for Prefabs: Foam"

"Foamed-up styrene—sometimes combined with cement—is a promising new material for prefab stations. Shell Oil says it offers a chance to build <<distinctive>> stations at a savings of $1,500 per unit.

...Its system utilizes factory-cut wall and roof panels developed by Koppers Co. Inc.

See Figure B.41.

...The panels are sandwich structures, known as Dialite, fabricated on a core of low-density polystyrene foam. The air-infused core can be faced with a variety of materials at the factory, including plywood, sheetrock and asbestos board. The Dialite panel has been used widely for giant freezers and cold-storage warehouses. Shell says the beauty of it is its light weight, its ease of handling, its insulating and fire-resistant qualities...[The panels] can be readily sawed, nailed or bolted.

...Once footings have been poured, a complete service station can be set up in five days, Shell says.

...Just as significant, the company says, the new materials <<will permit Shell to build to its own designs, in keeping with local architectural styles>>. The first Shell station built of Dialite panels is at Matawan, N.J.
...The walls are made of 3-in. Dialite panels, four feet wide and 10 or 12 feet high. The interior is painted, and the exterior partially painted and partially faced with special "Miami" brick made of broken whitish rock. The panels are fastened to a frame of laminated-wood beams. These, in turn, are supported by 5 x 5 steel columns. The laminated beams, a product of another Koppers division, consist of layers of 2 x 6, dried and treated in the factory and then glued together. They form beams that are reported to be much stronger than solid wood, and far more resistant to decay and rotting under high-humidity conditions. M. H. Deutzman, project engineer for Shell, expects them to last the life of the building.

...The beams require no paint and <<are decorative>>. They <<make a color contrast with the white walls and columns>> [color].

...a modification of the styrene sandwich panel, developed by Koppers with the encouragement of Shell's operations people...known as Dycon, consists of an aggregate of foamed styrene, cement and other materials. It is claimed to be stronger than Dialite and to offer greater protection against fire. Whereas the old panels offered "no-flame-spread" fire resistance, the new ones will be fully fireproof.

...They will require thinner layers of facing materials. The wall panels, for example, will not use sheetrock. The sandwich will consist of a thick cement-styrene core faced on either side by asbestos board. Plans call for topping [another station's] roof with Tedlar sheeting over a layer of asbestos felt. Tedlar is one of Dupont's newest fluoride materials, available in various thicknesses and colors.

...Another possibility that Shell is exploring is the use of laminated timber in large panel sections for roofs. One plan calls for building out of tongue-and-grooved planks beveled at the bottom edges. The end effect would be a pattern of <<decorative>> grooves on a maintenance-free ceiling. It fits into Shell's program for exploring new materials to build <<more appealing and economical stations>>.

5/70 (60) "'Mr. Up' Looks Like a Lucrative Tie-in Idea"

...The <<appearance is substantial and modern>>.

The exterior on the station level is slumpstone; on the restaurant level it's slumpstone, cement, and
glass. Roofing is tile, giving the *appearance of shingles*.
From the oil-company point of view, the structure *looks fancier than most but still like a service station*.

See Figure B.42. The station/restaurant relied mostly on materials to create the appropriate image and atmosphere. The tie-in of a restaurant with a gasoline station was believed socially suspect; and hence, the use of soft rusticated stone was thought to be an appropriate facade screen.

6/70 (82) "Atlantic Richfield Tries to Build Something Different in Colonials"

You can say goodbye to most of Atlantic Richfield's porcelain-enamel two-bay and three-bay outlets in the East. Arco's *Colonial look* in stations will replace the older outlets. It's all part of a three-year program already underway to replace Arco's 15-year-old and older controlled or lessee-run outlets with updated, *better looking*, even bigger stations. *"It will do a lot for the people in the neighborhood of these older stations, a lot for the dealer, and will help our image a great deal."

...Where land isn't available or where zoning and adjustment boards say Arco can't tear down and start over again, the stations will be *modernized* with the Colonial look. "We'll rework the roof lines and the facade, put up real brick over the existing stations to give it a Colonial look," Walsh says.

See Figure B.43.

...Expect to see some use of colored crushed stone (white and dun colors) and movable brick planters. ...Arco will use new materials in its Colonial station replacement and remodeling program. "We expect to make these stations easier for the dealers to maintain," says Walsh. Already mentioned easy-maintenance items are red brick facing (no painting)....
Other items include aluminum or fiberglass siding (again no painting), aluminum undersides for structural components, fiberglass cupolas with spires of the same material (spires will be illuminated at night), and <<slate-like>> tile for flooring in the dealer's showroom.

10/70 (83) "N.P.N. Special Project--Here Are the Key Trends in Station Equipment"

...Just a few years ago, marketers built stations as they always had. Cinder block, porcelain enamel, real brick put on by real masons. Then the cost of everything started to soar. Then the new building materials bandwagon started to roll.
...Several factors have lowered the appeal that porcelain enamel used to have with marketers, however. One factor is the image program. An engineer for a major company marketing in the Southeast says: "Companies go through very radical color changes from time to time, and I think anyone who has ever gone through a color change with porcelain wishes he hadn't."
...Marketers are now opting for painted steel... Paint is something you can work with when a company changes colors. Steel also lends itself to pre-engineering and pre-fabrication.
...Fiber glass--in two days, one carpenter and his assistant had re-walled the outlet to <<offer a new image>>. They were new to the material but it didn't take them long. They cut the sheets of fiber glass to fit and then pop-riveted them onto the porcelain enamel. The fabricators of fiber glass say that [simulating] <<bricks and redwood shingles and cedar-shake shingles are old hat...>>. Fiber glass has versatility. It can be <<molded into any number of applicable shapes for a service station>>.

See Figures B.44a,b.

...Gilbarco is said to be working on a self-cleaning rest room. "Now we are building a full-scale fiber glass unit," says McCrory.
...Rohm & Haas makes and sells--to such fabricators as sign manufacturers--plastic building materials.
...Rohm & Haas's idea is to use new building material to carry out a <<total identification..."
Plexiglass canopies with embedded graphics [signage, canopy].
6/70 (90) "New Equipment, Self Serve Gasoline"

Turn an industrial designer loose and he's apt to come up with <<something new>> in gasoline-dispensing modules.
Look at the unit Southland Corp. developed for its 7-11 convenience-food stores, where self-serve gasoline is part of the product line.
It's complete with two dispensers (remote controlled for each grade), how-to-use instructions, squawk boxes to relay orders to remote attendants, brand ID sign, island light, plus a canopy of sorts [lighting, signage, canopy].

See Figure B.45.

...And since it is porcelainized, maintenance is limited to washing now and then [material].

10/70 (83) "N.P.N. Special Report--Here Are the Key Trends in Station Equipment"

...U.S. pump makers have been edging toward pumpless islands slowly by <<compacting their units>>. The first endeavor was in the so-called mailbox-type pump...

See Figure B.46.

...a new Sohio station in downtown Cleveland may serve as a model of what could be coming.
The two-island station features dispensers without pedestals. They are attached to canopy supports. It also has electrically operated hose retrievers, and credit-card imprinters that <<fold out of sight>> when the station closes [site usage].
...The <<idea>> behind the station, says Charles Gardner of Sohio's development staff, <<"is to try to clean up the island.">>
...If you can get rid of pumps at islands, why not get rid of islands, too? That's the approach of Tokyo Tatsuno Co. Ltd., of Japan, with its nonspace system--the newer name is space-fill system--wherein hose reels hang from the canopy while readouts are grouped in front of the station office [canopy, site usage].

See Figure B.47.
...Tatsuno introduced the overhead pumps in 1965, and the idea clicked. Within a few years almost all of the new stations being built in land-scarce Japan were equipped with the new Space-Fill system (known as the Non-Space system within Japan).

The pumpless island trend was aided by the increased use of pump covering canopies.
SIGNAGE

5/24/50 (32) "T.B.A. at Self-Serves," by Frank Breese, N.P.N. Special Correspondent

...Tires are probably the most popular self-serve article after gasoline and motor oil.
...Those who do have a brisk business in tires usually have them prominently displayed with bold, eye-stopping signs.

See Figure B.48. Independent oil marketers were synonymous with self-service. Their bold and sometimes purposely crude signage was said to convey an impression of economy to motorists. See Figure B.24.

11/1/50 (17) "Multi-Pump Location and Facilities," by Paul Wollstadt, News Editor of N.P.N.

Everyone believes that A-1, 100% lighting and signs that will draw the motorist into the station are essential at a multi-pump, but no one claims to have solved these problems yet. There is a great deal of experimenting with both lighting and signs. At one station the principal sign has been moved three times in six months. Another company is seeking to determine the importance of a big and expensive sign by putting such a sign (costing over $10,000) at one experimental station and using only a normal-sized sign at another.

The big problem with signs at multi-pumps is placing them so that the motorist can see them in time to get into the station, even though he may be traveling 40, 50 or even 60 miles per hour.

See Figures B.4 and B.5.

11/55 (37) "Co-op Marketer Starts Brand-Name Push"

...Midland Co-operatives, Inc., Minneapolis...a farm supply co-op has decided to sell products by a specific brand name, "like the majors do." With the stepped-up advertising campaign, Midland believes it will be easier to build sales on a named-product basis than on the basis of the co-op idea.
The complete program... includes a schedule of new brand names, new packaging, new color schemes and symbols, and increased attention to training of cooperative employees in service to patrons and in <<modern merchandising>>.

See Figure B.11.

11/55 (40) "California Is Off Again As...Multipumps Revive the Canopy," by Richard R. Elwell, West Coast Editor

King-size canopies are displacing open-form design as the hallmark of big multipump operations in the Los Angeles basin [canopy]. It isn't practicality. It's <<promotion>>. "It's the <<sign effect>> and the lighting. If you don't notice a properly lighted canopied station, you shouldn't be out driving -- <<you're blind>> [lighting]."

"Eye appeal is the main thing," agrees Hugh Lacy, vice president of Urich's. Another big benefit, he points out, is the lighting... Deep cornices on the canopies give them a <<massive appearance>> and offer <<plenty of advertising space>>. Exploration of these display possibilities is only beginning [lighting, material].

Four 10-inch steel columns at the ends of the outside pump islands support the canopy and provide a convenient span for large signs [canopy].

See Figure B.5.

1/60 (107) "Object: Instant Identification, Speedway Petroleum's New Standardized Station Uses Luminescent Facade"

<<Instant brand identification>> -- at 40 mph, day or night -- is the target of Speedway Petroleum Co.'s new standardized station design. Key feature: an interior-lighted plexiglas facade that spreads the name "Speedway 79" the length of the station [lighting, material].

See Figure B.12.

...The new design is in keeping with the idea of <<making a huge brand sign of the station>>. Speedway's development was sparked three years ago by a Standard Oil Co. (Ohio) experiment. At the time, Sohio was satisfied with the costs involved in luminescent stations.
...But Speedway felt the first five stations had a "starchy" look, needed more contrast. Sundberg-Ferrar, industrial designers, were retained to correct this. S-F made two key changes: (1) the flat surface of the sign was vee-ed to a horizontal highpoint carrying a blue line, <<to perk up the daytime appearance>>; (2) the Speedway name was subordinated to the "79" trademark, in red numerals inside a blue ringed oval <<to provide contrast>> [color].

2/60 (28) "How Design Lures Night Drivers, Regulations Keep Gulf from Using Big Signs, But at Night a Unique Design Turns the Station Itself into an Illuminating Sign"

...Rigid regulation by the Port of New York Authority has restricted signs at the station; even a small sign for the pumps must be cleared. The result is that two small signs signal the driver. They're hung from the standard curved lampposts spotted along the highways forking around the station.

See Figures B.49a,b.

Except for this sign, the station must rely on its own <<design to snare drivers>>. The front of the station has the blue letters G-U-L-F on the latticework [material]. Spotlights and the <<lighting behind the walls help make the name stand out>> [lighting].

See Figures B.25b.

8/60 (118) "Shell Alters Brand Signs"

Shell's new <<"controlled background">> sign has now been installed at 300 of the company's 20,000 stations. Designed by Raymond Loewy Associates after four years of research and tests, the <<new>> square sign <<replaces the familiar>> silhouette in use for 46 years.

See Figure B.50.

Two major reasons are given for the <<change>>: The old sign had a <<tendency to blend into some backgrounds>>, making it <<hard to spot>>; the old sign had in some instances been <<confused with a similarly shaped competitor's>>.
Then <<new>> sign consists of two acrylic plastic sheets in a square aluminum frame [material]. Fluorescent lights illuminate it from within [lighting]. The background is bright red, edged with white, while bright yellow is retained for the scallop shell [color].

Changes in colors, logotype, graphics, signage, and other identification marks homogenized the image of the company.

10/60 (89) "Designs Sell Product--and Company"

"Who needs an expensive or fancy-looking can for motor oil? The motorist doesn't see it. He just drives in and says 'put in a quart of oil!'" This is one marketer's comment. But major companies continue to redesign their motor-oil packages, many for <<consumer appeal>>.
The professional designers are quick to answer: "I agree that the customer is not influenced greatly by the design of the can. But it's part of the <<corporate identity>>. Everything in the station <<reflects the image of the company>>. The package is an integral part of this image," says Charles E. Finsilver, vice president of Lippincott and Margulies, industrial designers.
A Raymond Lowey spokesman says: <<"The package is part of the station design. And simple labeling is not good enough.">>
The phrase "corporate identity" is a key expression in the vocabulary of today's designers of oil packages. The trend is toward a <<bright, attractive package>> which <<ties in directly with everything from station paint-job to attendant's uniform>>.
"Oil-industry packaging isn't competitive like food packaging," admits a designer. But the package should <<appeal to the attendant and to the purchasing agent--both conditioned by consumer design>>. It <<must be attractive in the mass displays>> used in every station. It <<must be attractive to be pictured in an ad or merchandised properly>>.
Lippincott and Margulies, now working on design programs for four different majors, points to its Phillips <<"new look">> as an example of how they feel a good motor-oil can should look.
...Says Lowey, "Our new Shell design is <<brighter>>. It is <<simpler>> so that it <<avoids a cluttered look in mass displays>>. And it <<blends with the over-all design program>>."
See Figures B.13 and B.14.

...Many new package designs reflect <<a strong feminine appeal>>. Is this a deliberate effort to influence women buyers? No, say designers, the new designs are <<directed at the consumer in general. But women account for the larger part of the public, so it's natural that their tastes would affect design standards>>.

12/60 (115) "Why Stations Are Objectionable," Allen Fonoroff, Cleveland City Planning Commission, American Petroleum Institute Meeting, Houston

Emotion and attitude are very definite factors in evaluating property values. Therefore it's not surprising for <<irate neighboring residents to complain of a depreciation in their property values>> because of the proximity of a service station.

...These two words <<[esthetic nuisance]>> sum up what in my experience underlies the arguments and prejudices associated with service stations. I have observed that many new stations have the appearance of an <<activated billboard>>. They have developed into <<a tremendous grab for the motorist's attention>>.

The distinctive design of service stations should <<minimize the need for large and garish signs>> and other garish features that may disfigure a neighborhood. <<Tasteful design and general appearance should represent a certain intangible value>>, if not in terms of dollars, then certainly in terms of <<good will>>.

Thus from an esthetic point of view the service station presents <<special land-use problems different from most other retail uses that affect the general well-being of the community>>. This clearly justifies regulations designed to limit the number of stations in any given area.

...I would urge that the oil industry take the initiative in bringing together members of the planning profession through the American Society of Planning Officials and the American Institute of Planning, and its own experts in an attempt to create development standards.

...During a question-and-answer session, a member asked if it is not true that all retailing draws traffic. Fonoroff said that <<other retailing draws people, while stations draw only cars>>.
6/65 (98) "Cities Shuffles Names in ID <<Change>>"

Add Citgo, a red-white-and-blue color scheme, Citgo Premium gasoline, Tipcomene, and Citgo Extra Range motor oil [color].
Delete Cities Service (as a brand name), a green-and-white color scheme, the expanding circle and delta, and Cities Service Milemaster gasoline.

See Figure B.15.

...<<Citgo>> (Cit, for Cities Service; <<go, for "power, energy, and progressive nature">>) becomes the new brand name, replacing Cities Service.
...Trimark, a raised three-tone red triangle, is the new brand symbol, replacing the expanding circle and delta design.
...Other brand names Cities reportedly considered: Citco, Cisco, Citex.

Cities changed its name to Citgo to develop an image more consistent with major producers and marketers of gasoline.

1/70 (62) "Arco's New Look in Final Tests"

These will be the <<final market tests>>, says Atlantic Richfield, before the word is given to begin applying what the company calls its <<"New Look">> to its more than 24,000 stations in July.
...It's a cardboard-and-metal 6-ft. cutout of a uniformed attendant hoisting an ARCO sign on his shoulders, mounting a ladder to place the sign on the station's main sign pole. Once the ARCO sign is officially in place, the little man appears lowering an Atlantic, Richfield, or Sinclair sign on his shoulders. The cardboard man is left in place lowering the old sign <<until the company feels (through market studies) that the public has accepted the new name and logo>>.
...The tests in...six city areas will be the first television exposure for the ARCO New Look.
...<<We want to appear a clean, fresh new marketer. The philosophy behind the New Look...>>.

See Figure B.16.
...A "SIGMOR" sign sits on top of [the building]. There is a "Shamrock" pole sign near always white curbs, and the pumps carry Shamrock identification. Pennants between the light poles.

See Figure B.17. Independent price-competitive images depended greatly on signage for consumer identification.

8/70 (52) "Mobil Aims to Cut Signs, Boost Sales"

Mobil is moving to clean up its station's promotional displays and replace them with an ordered system of "planned merchandise."

See Figures B.51a,b,c.

It's another step in Mobil's continuing drive to bring its graphics and merchandising methods up to what the company calls "the look of today."

Mobil overhauled its graphics several years ago and has been refurbishing old stations and building new ones to fit a cleaner, less-cluttered mold.

...Mobil bases its plan on the workings of the human eye. It cites research findings about the eye which were only recently available. New equipment has made it possible to study exactly how the human eye responds to visual stimulations such as service-station displays. Because 87% of all impressions that influence the motorist are visual, says Mobil, the eyes are the broadest avenue to motorists' minds and hearts.

The eye does not take in a scene in one gulp. Rather, it jumps quickly from one point of interest to another. Thus, the more there is to see, the more that is skipped because of the limited amount of time available for observation. Mobil's aim is to have a limited number of key visual elements apparent at each station. Each element will then get its fair share of attention, the company figures.

...To implement the new graphic system, Mobil has developed new equipment for its stations. These include exterior yard message sleeves which can easily be installed for special promotions, and island message unit inserts for the same purpose. Mobil is, as expected, proud of its ID sign, which it feels registers quickly and meaningfully with
Continental Oil Co. is the latest oil company to upgrade its corporate graphics, following such others as Mobil, Arco, Signal, and Getty, to name a few.

See Figures B.52, B.16, and B.19.

Conoco began in August a program to change over all company graphics over an 18-month period. Key to the change is what the company calls its red-and-white symbol. Conoco has replaced its old triangle, which was a combination of the red triangle of the Marland Oil Co., with which Conoco merged in 1929, and the name Conoco.

The "capsule" shape is unique, says Russ Sandgren, of Sandgren & Murtha, specialists in the corporate-identity business and commissioned by Conoco to handle the design. It is distinctive and offers a visual change of pace," he said.
See Figure B.53. A reaction to market competition commonly referred to by marketers as "me-tooism" was reflected through the emulation of image expressing graphics.

11/70 (66) "New Materials Help Marketers to Keep Banners <<Neat and Trim>>"

Trends developed in the past several years are helping to <<solve>> some of the problems point-of-sale banners have caused oil marketers with their <<annoying habit of falling down, tearing, curling, and fading -- a frequent source of visual pollution at service stations>> [material].

See Figure B.54.
In this article large service stations (eight pumps or more) with high gallonage potential are discussed. Marketing operations executives are keeping abreast of new developments in high potential gallonage stations and review them in their over-all station construction and design planning.

...In the case of the self-serve, marketers say it is quite possible (a few said inevitable) that stations of the future may incorporate some of the better physical features of this type of outlet.

...a study made recently on the West Coast by an oil marketing equipment manufacturer.

...Main purpose of the survey...was to study innovations in service station design or pattern and their probable effects on future service station designs.

...The survey indicates that the general feelings exists, on the West Coast at least, that the "U" design has advantages over the conventional corner station. The term "U" design derives from the path taken by the automobile. With pump islands at right angles to the street, the driver enters in direct line with the service position and leaves by making a "U" turn to return to the street.

See Figure B.55.

<<...Many motorists will pass a conventional station with two islands when two cars are already in the station>>. The pattern of the self-serve has been to put the investment in a multiplicity of service islands and dispensing pumps rather than elaborate building. The <<passing motorist instinctively feels that with such an expanse of equipment he can get in and out in a hurry>>. The very layout itself is <<inviting>>. Self-serve stations have proven really <<effective>> whether located in the middle of the block or on the corner. Since corner real estate is usually more expensive, the added space demanded by this pattern need must result in greater expense than if a mid-block location is used.

Some experienced men in the oil industry expressed the opinion (again, at least on the West Coast) that the "pattern" evolved in the self-serve has
outmoded the conventional station.

The new experimentation in site layout came as a result of an unsatisfied niche in the market. In a bold move to gain market share in their region, Western independent marketers offered the convenience of high-volume with competitive prices. The site layout became a significant weapon in this competition. These facilities were large and impressive in scale of operation and easily recognized as functionally convenient. Consumers readily associated the offer of functional convenience with price convenience. These station layouts were so new, unique in organization, and impressive to consumers that conventional station layouts were at risk of obsolescence.


See Figure B.56. The larger-outlet trend was considered to have nationwide significance, growing out of the West; but, marketers complained that many states and municipalities in the East had old laws which prohibited this development. Self-service gasoline dispensing was also banned in many states.

Economic trends leading to larger service stations have brought about many problems with the laws of the city, county and state governments. ...There are several reasons for the laws that have a tendency to slow up economic trends:
1. Many of the laws regulating storage capacity, transport deliveries, and curb cuts were written 25 or 30 years ago. They are grossly outmoded today. 2. In many cases, these laws were encouraged by many Independent jobbers and integrated company officials
to protect their 15 or 20-year-old methods of doing business and to discourage competition.

3. Curb cuts have been limited by many cities due to displacing of parking meters and consequent loss of income.

...Basically, the plan called for a "perpendicular" station layout, with pump islands so placed that cars are fueled at right angles to the line of the street.

Some of the obvious advantages are:
1. The approaches in and out are perpendicular to line of traffic.
2. Perpendicular line of traffic <<gives maximum vision to approaching auto and pedestrian traffic>>.
3. There is <<absolute freedom of movement of cars on the concourse>> (station drive area) itself. It is <<virtually impossible to block a car at any island>>.
4. Complete traffic control on the concourse means safe approach and discharge through line of traffic on station.
5. <<Safety is promoted>> for company personnel with one fixed line of traffic to watch and <<no confused criss-crossing>> of the concourse.
6. A greater number of curb cuts <<promotes entrance>> to the station from the heavy traffic <<from both directions>>.
7. This method is particularly important when the station is not located on a corner—in other words, when there is no secondary street.
8. For the perpendicular islands to work, it is necessary that they be matched with curb cuts, because distribution to the concourse from one curb cut is impossible.
9. It is <<possible to serve the public faster>> and to get motorists through the station faster, which in turn <<prevents a traffic jam>> from the cars attempting to enter from the street.
10. The multiple approach makes it possible for a large-scale operation which follows the trend toward fewer stations, each doing larger volume. This trend is caused by the increased number of cars on the road, by traffic congestion, and by some station's real estate becoming more valuable for other purposes than for service stations.
11. The total distance of the curb width plus the safety island should be a direct increment of the reasonable spacing of the pump islands.
12. In no case is it necessary for a car to move in any direction other than forward.
13. The islands are so placed with reference to the sidewalk that it is impossible for a car to enter
or leave at any angle -- cars are automatically guided perpendicular to the island's approach.
14. It permits perfect visual control from the station to all islands.
15. It *permits longer parking at the pump island* for a number of the customers in and out of the station, without forcing the customer to drive off on the street or sidewalk and park while he is transacting his business.

The conventional "parallel" layout, with station islands parallel to the line of the street, has the following disadvantages:
1. The major point--access--is possible only by driving at a flat angle over the sidewalks.
2. One car in the line-up completely blocks the entire drive for that side of the particular row of pumps.
3. Movement on the concourse itself is complicated and very conducive to accidents involving customer cars as well as injury to personnel.
4. A partially filled concourse, at the island nearest the station, blocks the vision and control of islands beyond and toward the street.
5. Egress from the station is extremely hazardous. The nearest approach to a perpendicular is about 30 degrees, which means that half of the traffic is completely out of the line of vision.
6. In many instances it is necessary for a car to back up to get in or out of the service station.
7. Finally, if a traffic line is blocked, it is an invitation for a blocked car on the outer line to drive down the sidewalk to get out.

I believe [as well as most consumers] it is common knowledge that the operators of a station which has a lubritorium attempt to make this primarily labor-selling type of business first in importance. Gasoline sales become a secondary service.

...The large integrated companies are handicapped because of their size. It will cost them millions of dollars even to begin making some of these changes. And I would venture to say it would take them at least ten years, if they started immediately, before they could be any important factor in marketing under this new trend.

8/23/50 (cover) "Conventional Turns Multi-Pump to *<<Meet Challenge from Invading 'Big station'>>*

Conventional station turned multi-pump--here is Faber's service station, operated by an established dealer on New Jersey Route 17 in Paramus, N.J. Until June of this year it had four gasoline pumps.
When a 24-pump, low-price station opened almost directly across the highway, Faber's met the challenge by adding eight pumps to the original four—and increased volume "substantially."

See Figure B.57.

Picture shows that six of Faber's 12 pumps are at a 30-degree angle to the highway, limited space preventing right angle installation.

10/18/50 (19) "Most Major Companies Planning Multi-Pumps: Reduction in Operating Cost Spurs Actions," by Paul Wollstadt, News Editor of N.P.N.

No longer is the multi-pump confined to private brand marketing. Practically every major oil company either has built or is in some stage of planning experimental multi-pump stations.

...Generally, the majors are not considering self-serve multi-pumps but just larger stations of new design. Two of them, however, are seriously studying the possibility of having self-service eventually at some outlets.

..."Price competition is compelling every marketer to look at every item of cost." In a location where there is big potential gallonage, the multi-pump provides opportunities for reduction in the cost per gallon of building the station, of operating it and of making deliveries to it. Moreover, "the large, open, easy-to-drive-into station seems to have a growing appeal to the public in this era of mass merchandising."

See Figure B.58. A short history of the development of the multi-pump merchandising concept was iterated in the following passages:

...Neither the self-serve station nor the multi-pump station is anything new. Hoosier-Petroleum Co., which now operates as "Hoosier Pete" of Indianapolis, operated a self-serve station at Cambridge City, Ind., 20 years ago.

See Figures A.63 and A.64.

At 1801 Madison St. in Indianapolis is a five-island multi-pump with the islands vertical to the street, which Russel S. and Phil T. Williams of Gaseteria opened in 1928. This Gaseteria station makes no
claim of being the first multi-pump, but it is a significant milestone because out of it grew the highly successful and exceedingly well-managed Gaseteria chain, the operations of which have been studied by hundreds of oil men from companies of all sizes. Many of the multi-pumps being built today bear a strong resemblance to even this first of the...stations. (Despite its name, Gaseteria has never been a self-serve operation. These stations give super-service.)

...A multi-pump, bigger than all save a very few of those now being built, has been operating at Bountiful, Utah, near Salt Lake City for 10 years. It is Slim Olson's Service Station with 32 pumps and such a vast expanse of frontage that a motorist can drive into it at 60 miles per hour and stop at the first pump island.

...On the West Coast, John W. Craig on May 31, 1941, opened the first of what is now a chain of 18 multi-pump stations, including a beauty on Wilshire Blvd., in Los Angeles. The Craig stations, like the Williams group and a number of others in the Midwest, give super-service.

The East Coast got its first self-serve when R. D. Pickett opened his station at Portsmouth, Va., in December of 1948. Then came the Rein Motors station at Paramus, N.J., which opened two years ago, converted to self-serve in January, 1949, but subsequently was compelled by a newly passed New Jersey law to have attendants dispense gasoline.

Then a year ago the multi-pump hit the East Coast in a big way when Houston Petroleum launched its Save Way at Linden, N.J., doing a half million gallons a month.

Important as they are, the developments just outlined probably give way in the history of multi-pump development to what happened at 2340 South Atlantic Blvd. in East Los Angeles in May of 1947. It was there and then that George (Frank) Urich opened his first self-serve station, and the first on the West Coast.

The Urich station was immensely successful. Before the end of 1947, there were seven self-serves operating in California with an average gallonage of 275,000 per month. By the end of 1948, there were about 40 self-serves, averaging better than 150,000 gallons a month.

...The situation was this. If a major company leased a service station property, the lease was good at any bank to borrow money to remodel a station or build a new one. But a lease from an Independent made little impression with the bankers. As a result, Independent suppliers (1) had leased
comparatively few good conventional outlets since the war and therefore had few commitments when the self-serve came and (2) seeking outlets for their gasoline, they early took a chance on self-serve. 

...One fellow put it this way: "Maybe the multi-pump trend is nothing more than the industry's concept of facilities catching up with the growth of demand." Today's multi-pumps <<probably aren't any bigger in relation to the gasoline demand of today than were key stations of 10, 20 or 30 years ago in relation to the demand when they were built>>.

See Figures B.59 and B.60.

11/1/50 (17) "Multi-Pump Location and Facilities," by Paul Wollstadt, News Editor of N.P.N.

...Among the general comments on frontage needed was that of a company which believes that the main <<determining factor is the speed>> of the traffic. <<The faster the traffic, the more frontage needed>>.

...A point on which there is considerable difference of opinion is whether pump islands should be parallel to the main thoroughfare, vertical to it or at a 45 or 60 degree angle.

...two companies are so anxious to study first-hand the various island arrangements that they are building experimental stations with islands that can be changed from vertical to parallel or angle at small expense.

A majority of the companies is planning some place for the attendants at the pump islands. The companies doing this feel that it is important to a station covering a big expanse to have the attendant -- whether at a full-serve, part-serve or self-serve station -- in a spot where he can quickly get to the car.

In colder or rainy climates, shelters are being built [canopy]. In the warm areas, such as Southern California, the spot for the attendant may be nothing more than a beach-type umbrella.

See Figure B.61.

The idea is that there should be two-way visibility. 

...One company plans to have a cash box at each island.... The front of a car driving in will be near the attendant and the cash box while the gasoline tank will be near the pumps.

In these layouts, the objective is to keep the office building as small as possible so as to
The appearance of openness and maneuverability on the site advantageously accentuated the profit-making focus of the multi-pump operation. The station layout was distinctly recognizable by consumers as an efficient high volume type of gasoline business.

..."People are in more of a hurry than ever". One major executive told N.P.N. that in his opinion, multi-pumps "cannot give faster service than conventioanaals, but that most motorists think they can". Another said that multi-pumps "appeal to drivers "who think they are in a hurry.""

See Figures B.29a,b.

10/55 (113) "Marine Camp Station Blazes New Trails"

...California experiment in "supermarket" operation uses some special twists.
...The station...of Texaco's Los Angeles division --features separation of the pump islands, oil check, TBA sales, lube and wash operations, and a "supermarket" traffic pattern that "allows the customer to get everything he wants and pay for it on the way out".

See Figures B.62a,b,c.

...Two lube bays, a wash bay and a TBA sales room are in a building in one corner of the 200 x 300-ft. lot, opposite the entrance.

See Figure B.62b.

All sales are recorded on a slip given each customer as he drives in. Payment is made at cashiers' windows set "like toll plazas" across the exit driveway.

See Figure B.62c.

...Texaco is studying it as an experiment in marketing.
...Many of the station's features may find a place in conventional dealer operations. Separation of
pumps from the oil check, for example, would be useful in a high-volume location.

...Of particular importance is the location and orientation of the pumps in a long diagonal line across the entrance...this may be the solution to traffic problems for stations along limited access highways. The design <<permits cars to enter and spread out without backing up traffic at the entrance>>.

11/55 (40) "California Is Off Again as...Multipumps Revive the Canopy," by Richard R. Elwell, West Coast Editor

King-size canopies are displacing open-form design as the <<hallmark of big multipump operators>> in the Los Angeles Basin [canopy]. That's the opinion of Frank Urich, owner of Urich's Serve Yourself Stations and the man who fathered self-serves in the area.

See Figure B.5. The bigness of station was accentuated by the canopy covered pump islands. Promotional attention was concentrated at the pump islands accentuating the profit making focus of the high volume, low price competitor. The canopy proved to be a unique representative form.

...In most new constructions the trend is to single line of parallel pump islands completely covered by the canopy. Maximum truck height in California is 13 ft. 6 in., and canopies generally stand higher than 14 ft. to allow clearance. Some have supports at each island, some bridge island with unsupported spans.

...Today multipump units are commonly built either with canopy or with provision for one later....

1/60 (107) "Object: Instant Identification, Speedway Petroleum's New Standardized Station Uses Luminescent Facade"

The partition between office and bays is eliminated, to <<"force" cleanliness>> and <<make the station one vast showcase>>.
Tailoring the station to the site is becoming a basic precept at Shell Oil....

..."Customer comfort" is a prime consideration. A covered walk along one side of the salesroom leads to extra-large restrooms. A covered patio on the far side of the building offers a lounge area for customers whose cars are being washed, greased, or repaired.

A large parking lot is spotted in the rear of the station.

The station can be enlarged by adding more service or wash station bays at the rear of the building.

See Figure B.40. The station design was merely a cost effective domestified adaptation to the company's existing "conventional" porcelain-clad prototypical design.

Newest service station flying American Petrofina's flag has a pneumatic-tube system for handling credit card sales and work orders.

...When a car pulls up to the gas pumps the attendant takes the credit card and sends it by pneumatic tube to a central cashier. The amount of the charges is relayed by a speaker system. The "cashier can return the card and sales slip in less time than it takes to replace the gas cap," says Fina.

Fina, a large independent oil marketer, offered convenience of speedy fueling to motorists while also cutting additional time and labor overhead.

It can be done--you can relocate a station complete with floor slab intact and all equipment in place,
without closing shop. Standard of Ohio has proved it.

...The move went off as planned, although it took eight weeks instead of the estimated five. Island services were never interrupted. Other station services were stopped only the last two days. The reason for <<revamping>> the station layout was to <<bring its appearance up to par with more-modern competing stations in the vicinity>>.

..."We have designed this location to make maximum use of the driveway space by having shorter islands and more of them," says Preston. "I believe it's worth nothing that <<the need is for the appearance of open space, not necessarily a lot of actual footage>>. I've seen locations with quite limited footage but with an open appearance, and they have no problem."

"In multi pump locations, however, <<we've learned from experience -- though we can't tell you exactly why -- most customers will pull to the pump closest to the office. That's just fine. But most people won't pull around the first car>>.

Many conventional stations remained at risk of obsolescence due to an appearance of limited maneuverability.

6/65 (88) "Repair Centers: Will They Alter Marketing Patterns?

Keep your eyes on the repair-center market. It's growing. Not dynamically yet, but some marketers think there's a trend in the making.

See Figure B.63.

Eleven single gasoline pumps on four islands will be stationed around the center. There will be a chain-drag automatic car wash, which is <<expected to attract most of the customers>>.

7/65 (98) "'Sorry, No More Teddy Bear'--Billups Eastern's Big Change"

...Relocate stations on present site, where possible. Where stations are parallel to the highway, they'll be moved to the far end of the property, then <<angled so the driver gets a better view of the interior TBA display>> [goods display]. New prefab designs, with plenty of glass area, are being tested [material].
See Figure B.27b.

...Relocate islands, where possible, and where stations are shifted. Parallel-to-the-road islands are out. Angled islands -- either 60 deg. or 90 deg. -- will go in. From angled islands, <<drivers will get a better view of TBA merchandise>>. Single long islands will be replaced by two or three separate ones.

See Figure B.64.

10/65 (102) "Car Washing: Self Service--Why It's Hot, What Guidelines Are Emerging"

...What's Coin-Op: The basic ingredient of a spray wash are pressure, water, soap, and heat. Balanced properly, a variety of systems can do an acceptable job.

...The simplest consist of 55-gal. drum, pump, hot water, nozzle, and coin acceptor. Some are stationary or portable cabinets that can be used in service-station bays or outside with a drain.

...But the <<commonest>> and fastest growing variety is the bay type. <<Most popular number of bays>> is four, but numbers range from one to eight...It's strictly do-it-yourself. These installations usually also have vacuum cleaners...and paper towels. Some have coin changers or vending machines or both. A few have spray wax...

As for land, you'll need roughly 100 x 100 ft. for a four-bay wash. Minimum frontage is about 75 ft. Figure bay width of at least 17 ft., and don't skimp. Depending on the nature of adjoining land, add space for coming and going. The more depth the better. <<Customers need room for drying their cars, and they don't like to back up or jockey around>>.

If the coin-op is next to a service station, customers can utilize some of the driveway and parking space, but <<be careful of blocking the pump approaches>>.

...<<Coin-op is now an established method of doing business. People have accepted it>>, and that's a big plus.

Car washing became a widespread viable means by which
independent gasoline station operators could gain extra revenue from extra space on, or adjacent to, their station lots.

10/65 (107) "Car Washing: ... Ways to Tackle It"

...The wash unit is supported by six double pumps. Four are located under the building's canopy to handle wash customers who are also buying gasoline. The other two pumps are on an island at one end of the property. They're designed to serve the motorist who doesn't want his car washed or wants to apply gasoline purchase to a future wash.

..."We want our customers to get into the habit of trading with us at this location in all types of weather."

1/70 (31) "Self-service Station Features Pneumatic Tubes, No Restrooms," by Mark Emond, N.P.N. Staff Writer

A new self-service station in Vallejo, Calif., is the first of its kind in several respects:
- It's completely automated, with pneumatic tubes going from islands to cashier's office.
-- It's the first self-service station built by Jimmy's, Ontario, Calif., a chain of private-brand stations.
-- A self-contained cashier's office is equipped with restroom for employees only.
The station is called "Jimmy's Zip Service." It has three islands, each with two pump pedestals and a free-standing canopy. Pneumatic sending and receiving tubes plus an intercom on each island permit two-way transactions between pumps and cashier's office.

...Air and water are provided in back of the property, and the only motor oil available is in vending machines [goods display].

In order to cut costs, price competitive marketers streamlined conventional, attendant-related services in order to keep gasoline prices to a minimum.
...The Turners aren't too stuck on corner locations. If other things are favorable, they might hit the middle of an artery. Their design, <<wide-open>> pump islands laid out parallel with the street for <<fast and easy in and out>>, requires a minimum frontage of 150 ft. [They] prefer at least 200-ft. frontage.

See Figure B.17.

...Behind the pump islands there is a small office building usually flanked by billboards [auxiliary form]...[also a typical site has] several open, spray-type, coin-op wash units. It also has a ramp where customers may change their own oil. ...Convenience store tie-ins have been tested. ...We used the portable type units....

The convenience stores success depended on its coexistence with the self-service type of gasoline retail layout. The consumer's task of purchasing gasoline included the necessity to enter the convenience store. Inside, store items which had proven to create high demand were located near point-of-purchase. The convenience store tie-in to gasoline retailing may be traced back to the remote-controlled gasoline-dispensing system. See N.P.N. article dated April 1965, page 106, entitled "What is Supertron?"

6/70 (30) "Self-service Gasoline, Dry Cleaning Tie-in..."

A tie-in between self-service gasoline and drive-in dry cleaning seems to be catching old in San Diego. Called "Pit Stop," a chain of such tie-ins has sprung up in about a year and a half. ...<<"Why dry cleaning? Gassing up and dropping off are two social pains>>. Now take care of gas and cleaning once a week. Save time; save money!--with discount prices!

...A typical installation has two islands of self-service pumps at one side of the property and a dry-cleaning store at the other. Traffic generally
flows in a one-way circle starting at the pump islands, but <<a customer can drive in directly to the dry-cleaning store if he wishes>>. Gilbarco remote-control units are operated post-pay only. The motorist may speak to the office by intercom, and pays at the store as he drives out. The <<cleaner is identified by its own sign>>, "Drive-Thru Speed-Way Cleaners" [signage].

Independent marketers searched for tie-in forms of merchandising which would compliment the motorist's chore of buying gasoline. Goods or services were offered by the strategy of combining "social pains."

6/70 (60) "A Car Wash Pioneer Is Still Innovating"

An acknowledged pioneer in the car-wash/gasoline business is Constan Inc. of Columbia, S.C. Its dual-lane facility at Gervais Street in Columbia is considered the largest car wash in the East.

See Figure B.65.

...All of the company's operations have Hanna hydraulic, direct-drive equipment. Constan's <<experience has shown one clear-cut characteristic of its market: Its customers prefer full-service facilities to exterior-only>>. The company's fourth and newest car wash was opened in 1968 as a compact exterior wash. However, it has now been <<modified to give customers a choice of full-service or exterior only. Constan reports that roughly 70% of its unit's customers are choosing full-service.>>

6/70 (82) "Atlantic Richfield Tries to Build Something Different in Colonials"

"I'm high on the program," says Charles A. Walsh Jr., marketing VP of Arco's products division. ...Walsh feels that this design <<[the colonial] has become too stereotyped>>. "You either have the bays to the left or to the right of the showroom," he says.

See Figure B.43. Arco's strategists believed that the
company's conventional stations were facing obsolescence due to a fixed functional layout.

"We'll have some with front-facing bays, with bays on either side, and with bays to the rear," Walsh says.

...There will also be emphasis on side islands. "What we're trying to do," Walsh explains, "is to <<get away from the mass-produced look, even with our Colonials>>."

...The new stations will have proper landscaping, too. But <<nothing too exotic... some of the plants will be plastic>>.

..."What we're really looking for," Walsh says, "is a new way to build restrooms and a new way of cleaning them." If R & D could come up with a way of doing it by pushing buttons, Walsh says he would buy it.
Findings

The analysis of the *National Petroleum News* oil marketing journal in the years 1950, 1955, 1960, 1965, and 1970 reveals that the broad concept of gasoline station design became equally attributable to the experiential understandings as to the more artistic ideas of station developers. Similarly, the station became an equitable part of the decision making process of the goals and objectives of a particular company. The station's design image and function was conceived to exactly fit rather than "dominate" the perception and act of the purchase of gasoline by the motoring public. Evidence of the influence of marketing concepts on the design development of the station within this period of the journal's history is supported through an approximate quantitative analysis of design element descriptions. About one-half of the design descriptions are attributable to the literal opinion or experience of the gasoline station developer(s) or marketer(s). The other half of the article descriptions are represented by the implied artistic value of particular design elements.¹ Examples of both the implied and justified applications of design are outlined as follows:

¹Approximately 100 out of 185 design element descriptions were counted.
Examples of the Artistic Value of Station Design Elements:

One-half of the described examples of station design elements between 1950 and 1970 are characterized by intangible advertising or promotional values: having either (a) visibility or a conspicuous design use, or (b) landmark value and a distinguishable and conspicuous design use, or (c) harmony with other design elements on a particular site, or (d) similarity (or standardization) of station design with other outlets in a group, or (e) contextual value to a community or locality. Visibility represents the majority of the "intangible" value applications of design.

Examples of visibility as an implied artistic use of station design elements represented almost one-half of the article descriptions between 1950-1970. It was equally conveyed through the design of the canopy, color, lighting, materials, signage, and the layout of the site. Visibility in station design is described through the use of: a "giant steel platform" which was described as a special feature that "made the place across the street look like its closed;" a "blue line" combined with "red numerals" placed "in a blue ringed oval" was said to "perk up the daytime appearance" and provide "instant identification" to the facade of a station;" "bays" which "can be viewed through a huge picture window in the station office;" "custom styled vending machines;" lighting based on the presumption that "the one with the brighter lights will get the bigger crowd of buyers and lookers;" "a
"new" sign with a "controlled background" replaced an old "silhouette" (Shell) design which had "a tendency to blend into some backgrounds;" and a "perpendicular" station pump "layout" which "gives maximum vision to approaching auto and pedestrian traffic."

Only one example of landmark value was found in the documentation of this period: a "hyperbolic paraboloid" concrete shell roof form said to be a "distinctive" application station construction.

The use of standardized design for more than one station of a group aided in the ability to isolate a particular company brand in the marketplace. Motoring consumers were made aware of a particular brand through uses such as: a "familiar pylon and insignia;" canopies used at all company stations which "fit in more with the basic station designs;" a "mansard conversion system" which was "adaptable" to any "shoe box porcelain station;" the use of a "porcelain enamel finish" on all stations in "larger cities" and a similar design with a "stucco finish" in "smaller towns;" the creation of a "new look" at "24,000" of a company's newly acquired stations; and the design of a "cylindrical motif" unique in "style" to a certain company.

Artistic harmony in the use of station design elements of the time had also provided a certain advertising value such as can be illustrated through the use of: the design of a service station as a "functional showcase;" lighting which was
designed as an "architectural component of the station building" included a customized "porcelain enamel housing" under the eave of the station building and canopy and created "a uniform distribution of light from top to bottom of the building wall;" a "luminescent plastic facade which made a huge brand sign of the station;" and the design of promotional displays and motor oil packages which tie in "with everything from the station paint job to the attendant's uniform."

Within the context of the documentation it was often difficult to ascertain whether a design feature which was harmonious was unique to a particular location.

Finally, the contextual worth of an architectural design to a community or locality in which it is located represents another intangible advertising value. Examples of design contextuality from this period include all of the following: "exceptions to the standardization theme" for the design of stations located "in a neighborhood which requires a design to fit in with the atmosphere of the surrounding neighborhood" were described by the term "glamortization," "being attractive enough to draw customers in a highly competitive area;" a "ranch type" service station which was said to "blend into slick residential localities;" and the use of "foamed-up styrene factory-cut wall and roof panels" which "permit" a company to "build its own designs," in keeping with "local architectural styles."
Examples of the Justified Uses of Station Design Elements:

Gasoline station design element descriptions which are contributed by the experience or opinion of those who marketed gasoline are characterized by one or more of the following: having either (a) cleanliness, or (b) convenience, or (c) customary or popular appeal to customers, or (d) legal consideration, or (e) culturally scrutinized problems about the gasoline station with alternative ideas to remedy the problem, or (f) connotative associational meaning to gasoline, or (g) scientific, statistical, or experimental reasoning as the explained motive for the intended attribute of the design.

Examples of cleanliness in station design include the use of: "wall pegboard displays and shelves" used instead of "merchandising bins" to "sharpen," "streamline," and "clean up" the station sales room; "interior lighting" of rest rooms using "fluorescents and spotlights" to give a "modern" "impression of cleanliness;" porcelain enamel finish which "maintains an attractive appearance;" as well as "plastic" to clad the station which provides maintainable finish and also "gloss retention" and "resistance to color fading."

Examples of convenience in station design include the use of: a "yellow-carpeted" waiting room with "red and black leather furniture" provided a "comfort and an esthetic touch;" "an increased number of curb cuts" which "promotes entrance... from both directions" making it possible to "serve the public faster;" an increased number of pump islands which "permits
longer parking at the pump island;" a "supermarket traffic pattern which "allows the customer to get everything he wants and pay for it on the way out;" and a "pneumatic-tube system" with a "central cashier" and a speaker system described to "speed-'em-up" whereby the "cashier can return the sales slip in less time than it takes to replace the gas cap."

Examples of customary use or popular appeal include the use of: canopies "popular west of the rockies;" a "canopy policy" that states "where we have a lot of women customers we'll put up a canopy;" "company wives polled informally on the shade of blue they preferred" for the stations restrooms; "chrome," "a top consumer-appeal feature in many fields for years."

Two examples described legal considerations of design including: the lack of "local laws" which support the increased number and length of curb cuts required by larger gasoline stations and the use of "high, intensely bright overhead lights" as a "bone of contention with traffic and police officers for years" as light "bleeds off of the property."

Several of the documented descriptions include culturally scrutinized ideals about the gasoline station's design such as: "objections to canopies" in that they "run counter to the appearance of "openess" and "all types except the cantilever create hazards for the motorists;" the "colonial has become too stereotyped" which supported the idea to "get away from
the "mass produced look" of "bays to the left or bays to the right;" objection to neighborhood service stations which act as "an activated billboard" and a "tremendous grab for the motorist's attention" because "irate neighboring residents... complain of the depreciation of their property values."

Design uses which were justifiable through a developed connotative associational meaning to the image and function of retail gasoline dispensing include uses such as: "king size" canopies which were recognized as the "hallmark" of "multi-pump" price-competitive marketers in the Los Angeles basin of California in the 1950s; the use of "crude signage" to convey the idea of "cheap gasoline;" "red, white, and blue" "best simply because they have been used so long that the consumer automatically associates them with oil;" "white" a "good" color "stands for quality and purity;" the use of a "black and orange color scheme" of "a fiesta like appeal" gave secondary meaning to the price-competitive image of a chain of independent gasoline stations; and "buildings of beige, brown, and white" colors with contrasting signs of "red and orange" colors gave a "look" which supported the sale of a "premium-only" concept.

Design descriptions which were based upon scientific, statistical, or experimental reasoning included the use of: experimentation which tested the question, "does a driveway canopy tell anything to a motorist?" and "prefabricated vending machine units" tested "to learn whether this type of
unified installation will give motorists better service;" recognition that motor oil package design "should appeal the consumer in general" but with the added idea that "women account for the larger part of the public, so it's natural that their tastes would affect design standards."

In the period between 1950 and 1970 the design of the gasoline station was characterized by both its artistic value and its experiential application of use. One-half of the article descriptions implied that the use of a station design element was to increase its visibility, distinctiveness, harmony, similarity, or contextuality which by assumption was employed to increase the station's advertising value. The remaining half of the articles made literal proof of the use of a particular design element through its cleanliness, convenience, popularity, legal interpretation, cultural scrutiny, connotative associational meaning to gasoline, or scientific, statistical, or experimental reasoning. The gasoline station between 1950 and 1970 became a facility which was more custom packaged for the technical and consumer-driven requirements of design for an organizational mode of marketing gasoline.

As the role of marketing in the managerial decision making process and organizational structure of the firm became more significant, the gasoline station's design became more reflective of the particular goals of the firm. Increased
attention to buyer behavioral characteristics provided justifications for new approaches to the design of the gasoline station. Within this period the "porcelain enamel oblong box" came to its ultimate "functional showcase" form; simultaneously, the rise of the new independent, price-competitive mode of retailing was realized. Typical station designs reflected either the goal of a "quality" product and service image or a "price-competitive" gasoline image and, through the application of its individual elements, station design became a device for "consumer orientation" in the marketing of gasoline. "Appeals," "looks," and "corporate identity programs" were employed to illustrate the goal of the company and to accentuate a particular conceptual orientation through a particular image. Design was foremost in the creation of a "cheap gas" appeal or a "premium-only concept." The gasoline station had become conceived as an equitable part of the total image of the product and service offered to the public. Considerable attention was given to the design of "bold" eye catching signs and "butterfly" canopies as well as the use of "real brick," "colored crushed stone," "brick planters," and "fiberglass" molded into "cupolas" and "redwood shingles."

The social ideas of the "Consumerism" movement of the late 1950s and early 1960s added to the vernacular expressions of station design by including the topics of "aesthetic nuisance" and "visual pollution." Designers backtracked to
satisfy these new social concerns. They repackaged existing porcelain enamel "oblong box" service stations with applications such as the "ranch style" and "mansard" roof forms. Also the use of signage was cleaned and sharpened up through such uses as "simplified" "controlled background" signage and an ordered system of "planned" merchandising "placards," "banners" and "pump-top signs."

The gasoline station during the period from 1950-1970 reflected the concepts of the "Early Marketing Period." Station design became a tool by which oil companies packaged images and functions which would be worthy of the company name. In fact, by the end of the period more progressive companies were beginning to recognize various "over commitments" which were being made in the design of its architectural package. Also, the gasoline station continued to reflect even greater levels of social awareness to issues such as conservation of energy. Just as the "Sales" era made its transition over the duration of World War II, the "Early Marketing" era ended in relation to the mid-1970's "Middle East Oil Crisis" and the gasoline station began to reflect a heightened level of awareness about its role in a social and economic sensitive environment.
CHAPTER VI

THESIS STUDY: "NATIONAL PETROLEUM NEWS," KEY WORD SEARCH OF GASOLINE STATION DESIGN ELEMENTS, ADVANCED MARKETING CONCEPTUALIZATION PERIOD -- 1975-1990

Within this chapter, articles from the *National Petroleum News* are documented from the years 1975, 1980, 1985, and 1990. Within the documentation, design descriptions and expressions are highlighted which represent the vernacular character of innovative and commonly used ideas of gasoline station design. Design concepts and descriptions are analyzed in the "Findings" of this chapter for their relationships to the "Advanced Marketing Conceptualization Period," 1970-Present, as presented in Chapter III. The "Findings" of this chapter provide a basis of comparison to the other two periods of marketing for the "Results of the Study" located in Chapter VII.

Within the "Development of Thesis Methodology" located in Chapter III, the study methodology, the key design element search, the content selection, and the documentation format for Chapters IV, V, and VI are described.
AUXILIARY FORMS

7/75 (36) "Marketing in a Recession -- Station Rehabilitation Programs Stress Self-Service"

Amoco Oil Co. plans to remodel 152 stations this year and rebuild 12. *Depending on the location*, stations will get a charcoal gray aluminum shake mansard roof and colonial detailing or a contemporary look. Where the contemporary design blends in better with the neighborhood, aggregate panels...are used instead of the mansard roof [material].

...Sun Oil Co. plans to *modernize* between 100 and 120 stations to its contemporary design. It includes a mansard roof of a 5-ft.-wide band of yellow shingles....

See Figure C.1. The mansard roof form became widely utilized for its ability to facilitate consumer recognition. Figure C.2 illustrates Gulf's use of the form. The mansard roof form was justified as both "modern" and "colonial".

12/90 (85) "Do-It-Yourself Approach Pays Off in Small Town Markets," by Steve Dwyer, Staff Reporter

...Most Kwik Trip stores *exude a "general store" or country-style atmosphere* both inside and out. Store structures, which conform to prototypes of either 2,200 or 2,500-sq.ft., *feature* a combination brick and wooden frame with a pitched roof that *somewhat gives the appearance of an A-frame chalet*.

See Figure C.3.
CANOPY

2/75 (14) "J.O.C. Tries <<New Look>> at U.S. Outlet," by Cornelius Brodersen, N.P.N. Staff Writer

Designed by Arthur S. Katz, station architect, they were built on the site.
...Station <<layout is typically private-brand>>, with islands angled toward the street and with a 6 x 8 ft. kiosk (from ParKing) for attendants on the wider center isle [site usage].
...With canopies square to the island, the edges of canopies <<present a saw-tooth arrangement>> to passing traffic instead of a monotonous straight line.

See Figure C.4. Private-brand type stations featured canopy designs and images which were uniquely identifiable.

9/80 (60) "Giant's Jim Acridge Flying High in Tough But Tempting Phoenix:

"The second unit we built in 1970 had the <<world's largest canopy>>. It was 139 ft. long and 72 ft. wide. [People] took one look at it and said at least if we couldn't sell any gas, we could go into the hay business.
"But we pumped the gas and our <<big>> canopies had a purpose. We wanted to <<get customers in out of the elements>> and <<make it pleasant for them to pump their own gas>>."

See Figure C.5.

10/80 (75) "How Checker Oil Co. Brought a Unified Look to Its Station," by Merrill O'Brien, Merchandising Editor

A new layout to consolidate all the gasoline pumps into <<one traffic pattern for easy access>> and to utilize the canopy as <<a major unifying symbol for all stations...>>. Where stations did not have canopies, new ones were added at a separate cost of between $7,000 and $13,000.

See Figures C.6a,b.
... Commercial cardlocks are expanding much faster than public unattended stations at this time, and continued growth, at least in the short term, seems assured. There are many reasons why commercial customers would rather leave their fueling to marketers.

... Canopies are becoming a <<hallmark>> of the cardlocks in some areas to <<provide shelter from the weather>>.

See Figure C.7.
Atlantic Richfield has embarked on a bold program to develop marketing innovations designed to improve the return in retail marketing.

...With a special department called "commercial development," the unit has its own analysts, marketers, artists, architects, engineers, and other personnel.

<<..."If it looks like a service station selling food, people may wonder if they're going to have a mechanic in there serving up bread. It has got to be a food store selling gasoline.">>

...The colors are <<completely different from Arco's [blue and white, with red]>> -- orange and yellow on driftwood white. The design has been very <<successful in making both businesses compatible>>. There's an orange and yellow sunshade over the store windows.

See Figure C.8.

10/80 (75) "How Checker Oil Co. Brought a <<Unified Look>> to Its Station," by Merrill O'Brien, Merchandising Editor

--A <<consistent family of paint colors>> (three blues--dark, medium, and light--white, and red) for buildings, fencing, signage."

See Figures C.6a,b.

9/85 (44) "Newcomer Arnold Speeds Ahead with Big-Buck 'Cadillac' C-Store," by Dan Larson, Staff Reporter

The store was designed to draw people inside and make their shopping quick and easy, Arnold says. He even researched the colors that make up the interior walls and logo design. Earthtone shades of yellow, orange and deep brown were chosen for their <<beneficial effect on a customer's mood, appetite and sense of well being>>, he says, <<citing psychological studies done in retail establishments>>.
... Texaco plans call for investing millions in new and upgraded retail facilities. The company's well established "System 2000" stations will share its bounty on a selective basis.... [New station] contemporary design features... all facilities accented with the company's historic red and black colors.

See Figure C.10.

Kerr-McGee Refining Corp. is entering a new age of C-store design and merchandising with the introduction of a new concept the company calls "MAX" stores.

The stores... exteriors will be embossed in patriotic red, white, and blue colors with a prominent red and white checkerboard logo,...[signage]

Jim Mitchell, Mitchell & Associates, Irving, Texas... has won numerous awards for its design and graphics programs,... Mitchell says environmental graphics and themes indigenous to an area are catching on,... With environmental graphics, Mitchell... draws from a color palette that has different shades and hues corresponding to the particular region of the country}. Mitchell says kelly and mint greens are popular in the East because the sky tends to be turquoise}. Lighter colors are used often to contrast the grey, barren landscape during the winter}. In the Midwest, Mitchell employs more deep green because of the rich green colors of the Midwestern forests}. In the West, the preferences are brown, in keeping with the color of the [western] desert and mountain ranges}. Some other popular colors in the west}, which Mitchell refers to as an "intense environment," are hot pink and neon green.

There are also certain taboo colors that ethnic groups find offensive}, says Mitchell. "These certain colors represent death and bad luck
for their cultures, and its best to steer clear of them>,” explains Mitchell.

12/90 (35) "Emro: A Tiger in the Midwest"

... The company's merchandising philosophy is "flexible and experimental," one Emro marketing exec says. Stores feature a few wrinkles that are rather uncommon in the C-store business. For example, many stores feature gray, neutral background colors to <<highlight product offerings>>.
GOODS DISPLAY

6/75 (58) "This Year, Selling Prices Are Right Down Close to Cost"

The trend to specialized tire stores in the oil industry has gathered strength since it was first reported in detail in N.P.N., but there is still no one kind of operation that can be singled out as typical.

Illustrative of the process are remarks made by D. R. Lind, Sun Oil manager of advertising and marketing services, at an American Marketing Assn. seminar in Tulsa in April.

"As a bit of conjecture," Lind said, "possibly we should treat automotive sales service as the primary function of the traditional service station and gasoline as secondary...

"There will be a continued growth in the specialty shops: such as, tire stores, muffler shops, brake stores, and tuneup shops.

"... <<We are presently testing some of these concepts with and without gasoline>>. [site usage]"

See Figures C.11 and C.12. The variety of specialty goods and services such as tires, mufflers, brakes, tuneup or oil change was believed to be location dependent. The possibility for the separation of gasoline sales from automobile service was suggested.

7/75 (36) "Marketing in a Recession--Station Rehabilitation Programs Stress Self-Service"

The emphasis is on self-service in most service-<<station rehabilitation and remodeling>> plans this year, with a limited number of convenience food items an added attraction in many cases.

Sometimes outlets are rebuilt from the ground up, sometimes the bays are taken off when converting to self-service. Most of the self-serves will offer only gasoline and cigarettes.

... Arco has an <<experimental program to develop>> ancillary businesses at certain retail outlets; some are automotive stores, snack bars, fast-food counters, food markets, film processing, and travel centers.
Stations were most commonly rehabilitated utilizing existing service bays as convenience store space.

9/75 (31) "Exclusive Insight into Sideline Ventures: Arco's Rx for Better Retail Return"

Atlantic Richfield has embarked on a bold program to develop marketing innovations designed to improve the return in retail marketing.

...with a special department called "commercial development," the unit has its own analysts, marketers, artists, architects, engineers, and other personnel.

...The department has come up with several ancillary businesses designed to work with gasoline retailing.

...All are adjuncts of self-service gasoline marketing [site usage].

The ancillary businesses currently <<under test>> are: food mart, minimart, discount auto supply store, fast snack store, film processing, and "fast stop." The latter is a short-line convenience food store handling discount health and beauty aids.

...The ancillary businesses will supplement conventional service stations, which will remain dominant [site usage].

...Arco's new program goes back about five years, when the company tried to make up its mind about what marketing would be like in the future. Arco hired the Arthur D. Little Co. to make <<a study of consumer trends>>.

...From that study and our experience we came to the conclusion <<there's always going to be a substantial demand for conventional service stations. There are also going to be a lot of people who want to buy gasoline in conjunction with their other purchases>>.

Arco's quest for "specialization" in merchandising had produced prototypical retail outlets which attempted to target consumer needs. Research into consumer needs helped to change the gasoline product mix. The conventional goods display and lubritorium bay were made obsolete by the sale of an inventory of convenience store products. See Figure C.8.
12/75 (52) "Sun Tests 'Home Centers'"

Sun Oil Co. has opened four "home centers" at service stations as an experiment in the Harrisburg, Pa., area. 
..."This is not a promotion to sell gasoline," says Jack Lyster, home center product manager. "It's a new idea to help motorists save time and energy with one-stop shopping."

1/80 (44) "Chicken and Donuts Boost Fast-Food Sales of C-Stores"

<<With a third of the American consumer's dollar being spent on food prepared away from home now,>> more and more jobbers are becoming interested in adding [fast-food] at convenience stores. At one C-store chain, Jr. Food Mart Stores, fast food now totals 55% of the sales volume excluding gasoline. ...Blair calls the Jr. Food Marts being built now "a new kind of store." Though they are the same size--64 by 35 ft., amounting to 2,240 sq. ft.--room for the fast food has been made by cutting back on some of the slower items and duplications. All of the fast food is sold for "carry out": there are no plans for adding "eat in" facilities.

See Figures C.13a,b.

3/80 (66) "Fast Food: What to Consider Before Adding It to Your Store," by Merrill O'Brien, Merchandising Editor

Gerald Lewis, chairman of Creative Designs International, Inc., said that too many times in C-stores the fast-food section is not clearly defined for the customer. He suggested <<uncluttering>> stores and <<doing away with the "information overload">> (simplicity and cleaner designs, signage, logos). People tend to think that layout is the only way to create traffic patterns, but you can change the traffic pattern of a store with design. A fast-food area should be <<warm and appetizing>> looking and <<not have the sterile feeling>> of a hospital operating room, he said [color, material.}
1/85 (42) "While Other Marketers Retrench, Broach Oil Makes $36-Million Plans," by Marvin Reid, Editor

Kenneth Broach admits that Broach Stations (this name is in the process of being changed to Zip'N) doesn't have that good of a handle yet on shrinkage control in its company-operated C-stores. But this is being worked on and a good inventory control system is expected to be in place shortly.

...The facilities will <<vary in size and makeup,>> depending on whether they are <<located "in-town" or on Interstate highways>>.

A "town store," says Broach, will likely have 2,400-sq.-ft. of store and fast food space, plus two multiple-pump fuel dispensers or 12 hoses [pumps]. It will be expected to put its main <<emphasis on inside sales>>.

An Interstate unit likely will have a store ranging in size from 1,200 to 1,600-sq.-ft. It would have four MPD's or 24 hoses, plus perhaps two diesel pump dispensers [pumps].

3/85 (24) "Chevron Rebuilds Gain Momentum," by Mark Emond

Approximately 3,000 of Chevron USA's 12,000 service stations are slated for major overhauls in a gigantic retail restructuring program that started in 1984 and will span several years.

<<...Marketing research has shown that customers perceive Chevron as a full-service gasoline marketer which provides quality products at conveniently located stations, but doesn't offer facilities for quick, easy gasoline purchases.>>

The Retail Restructuring Program will actually <<change>> that <<image>>, as we reach the <<growing market of self-serve customers who are seeking an alternative to historic buying practices and who want to buy competitively priced products swiftly and easily>>.

See Figure C.14.

On the mix of station types, Haines explains, "As far as where we'll be four or five years from how, we're probably heavy on the mini-mart type, without service bays, but that's because of the nature of the property we chose to develop first."

<<A special team makes a review of each station, analyzing historic and long-term potential gasoline sales. Depending on location and business potential, the team proposes what type of facilities to build on the site.>>

3/85 (46) "Pilot Lands in 13 States with Plans for More <<First-Class>> 'Fuel Centers'"

...Pilot began a new strategy five years ago...it began building large self-serve diesel and gasoline "fuel centers" on Interstate highways. Simultaneously, it began moving heavily into convenience food stores, including fast foods.

See Figures C.15 and C.16.

...new units that have been built recently have the company's "Food Mart" stores, and most include fast-food delis. Future ones will reflect an even greater <<commitment to store sales>>.

...Overall, Pilot's total of 106 stations are comprised of 46 with full-size C-stores, 15 with "island market" stores, 29 with "mini" C-stores, eight Interstate-type fuel centers which have C-stores and fast-food "delis," and eight "gasoline-only" units. <<...The company is beginning to test out a few bakery items and will continue to add fast foods>>. It has no intention, however, of becoming "a complete C-store, like a 7-Eleven...it wants to gear the stores <<for "people who are in a hurry.">> "...They are first-class marketers," says a large independent chain retailer. "Their outlets are <<bright, fresh, clean, well-maintained>>. When you see this, <<you know there is quality management behind them.">>

...The chain is <<constantly being updated and modernized to keep up with changing market trends and to retain that "fresh, modern" image which some competitors admire>>. As outlets age and lose volume, they are considered surplus and sold off and more new and modern facilities are built.

...Projecting <<a low-price image>> is a big part of Pilot's game plan.

See Figure 73. The concept of communicated image remained important to the design of the outlet. Pilot desired
to produce a low-price but modern and clean image as this marketer believed that consumers desired low price with the associated assurance that the gasoline would be of good quality. The high-gloss materials (perhaps painted aluminum) connoted an image of modern quality as they were similar to materials which most commonly clad major oil company stations. The use of a different range of colors and thin striped graphics were distinct and turned developed a low-price image.

6/85 (51) "Food-N-Fuel's Store Growth Pattern Turns on Company-Op/Franchise Mix," by Dan Larson, Staff Reporter

Inside the store...the company's <<emphasis on cleanliness and order is evident>>. The cashier's counter is at the right of the door with the three main grocery islands on the left. Advertised specials that appear in local free shopper papers have signs and are <<prominently displayed>> [signage]. A sandwich cooler, microwave oven and fountain drink dispenser are in the right rear corner next to a produce display case. The 11-door beverage and dairy cooler lines the rear wall and a five-door frozen foods case takes up much of the wall opposite the cashier. Most <<immediately noticeable>> inside the store is that labels on all shelf merchandise, as well as the coolers, have been fronted and faced, giving the <<impression of an orderly, well stocked store>> [signage]. Company supervisors visit each store on a regular but unscheduled basis.

See Figures C.41a,b.

7/85 (46) "Convenience Stores--Fast Foods Remain Growth Area, But Pitfalls Abound for Newcomers," by Dan Larson, Staff Reporter

Much of the <<evidence points to the customer wanting>> fast foods at C-stores. The National Assn. of Convenience Stores says fast foods account for <<about 10% of all inside sales at the average C-store>>. Some smaller marketers report their fast food operations account for 35% of inside sales.
Recent government figures point to a steady growth in real personal income in the past few years. Most economists agree that a growth in income usually translates into a growth in spending in all areas, but particularly on meals prepared outside the home.

The big fast food chains...also had to raise their prices, which means the oil jobber's C-store is now in the running for the customers' food dollar. And, the C-store has the <<advantage of being able to tailor its menu to the tastes of the local market>>.

See Figures C.17a,b,c.

Following a rather slow start, deli sales really took off for [one owner] when he moved the deli case from next to a wall to the register counter. <<"Customers have to be able to see the case,>> and moving it was the best thing we could have done," he said.

A key to hot meal service is the sit-down dining area...The chain opted for tables and chairs, rather than booths, because they allow more flexibility and the area is <<easier to keep clean>>.

<<...Customers' fast food purchases increasingly are planned rather than on impulse. "Our own studies show that almost three-fourths of customers come in to get something to drink. But we're also seeing more and more people coming in to get a quick sandwich or snack.>>

Mitchell, of Programmed Interiors, said that the deli <<should stand on its own not only from a bookkeeping standpoint, but in relation to the rest of the store.>> "The operator should view the deli as an area of the store to be leased out to someone else," he said. "In other words, it should have its <<own identity and decor and not appear as if it's just another part of the store>> [material, color]. If the deli is done right, it can bring in people who normally don't shop in C-stores."

Arnold's...C-store includes...

--A 16-door walk-in cooler with three refrigerator coils, rather than two, to insure that beer and soda stay cold.
--A double-duty oven costing about $2,000 for baking cookies in the morning and homemade pizza in the evening.
An electronic point-of-sale terminal for credit and debit card verification.

Arnold's Roadrunner C-store is laid out in a modified "V" shape. See Figure C.18.

Fast food seating for up to 25 customers plus displays for 12-packs of soft drinks are in the smaller left arm, while grocery gondolas and cooler displays make up the larger right arm. A pair of cash registers are at the point of the "V" in the front of the store. The fast food cooler, fountain and slush drink machines and a microwave oven are in the back. A food preparation area for pizza and cookie baking is in the middle.

1/90 (42) "Acquisition-Minded Harken Targets Rural Sunbelt Markets," By Donald M. Smith, Senior Editor

...At most of the retail outlets, perhaps 75% of the total, Harken handles only the gasoline side of the business, supplying the pumps, tanks, canopies, fuel, etc., at convenience stores or similar facilities operated by local businessmen... "In rural areas, we prefer to have the local people involved with the stores, with Harken only involved in the gasoline,..." "in rural markets" the convenience store "is the gathering place for local people and the operator has a better feel for what his customers want."

3/90 (26) "NCS Regroups, Develops New Marketing Strategies to Revitalize Operations," by Donald M. Smith, Senior Editor

...Its a fundamental shift in philosophy, Van Horn explains, a transition from being essentially an operating company to a marketing company, "a company that is customer-driven or sensitive to what customers are buying today as opposed to an operating mode where every week you simply replenish merchandise that customers are buying less and less frequently." This transition has transformed... store size and product offerings... [including] repositioning of the company's store base into its primary <metropolitan markets> such as Houston and San Antonio.

[The company made] a <radical shift> in product mix with the introduction of new food and
merchandise offerings designed to <<appeal to a broader customer base and exploit growing consumer preferences for health and nutrition products>>. [The physical adaptation includes] a shift to <<new, larger and more expensive>> convenience stores in prime urban locations, designed to boost both gasoline and inside sales...

[The president and CEO], Van Horn says NCS has returned to the view that it is in the convenience business and <<"convenience has a premium value in today's busy world.">>

"We felt we needed a store that was much more competitive with the majors on the gasoline side and much bigger inside in order to offer a broader array of merchandise and <<widen our customer base...>>. <<particularly women and professionals, than its traditional blue-collar customer base>>.

Van Horn said that NCS is <<tailoring its new merchandise mix to the demographics of the local neighborhood>> the store serves. In a Hispanic neighborhood, for example, the store may offer a variety of ethnic food products and Mexican candies. According to NCS, one Houston store in an upper income area now <<features>> a wide assortment of <<"upscale labels,">> including Contandina pasta sauces, Pepperidge Farm cookies, Evian water, plus an entire section devoted to dieter products.

...Van Horn refers to <<a recent public opinion survey by the National Assn. of Convenience Stores showing that 34% of the respondents did not like the product offerings in C-stores...>>. ... we want to take a leadership role and get away from the image of a junk food store.

See Figure C.19. The product dominated the image of the store.

7/90 (38) "How Jobber Uses Dual Brands to Stand Ground with Majors," by Angel Abcede, Contributing Correspondent

...[Jobber, Jim Shepherd of Albuquerque, N.M.] operates very <<traditional mid-sized>> C-stores, generally 1,200 to 1,400-sq.ft. The stores stock the <<average>> snack, refrigerated beverages and health and beauty items. The C-stores are <<clean>>, well kept facilities that <<meet supplier image standards>>. ...even inside the store, image is the <<key to drawing customers>>, Shepherd believes.

See Figures C.32 and C.33.
8/90 (39) "Scrappy Jobber Hangs Tough in Fierce St. Louis Market," by Steve Dwyer, Staff Reporter

... Bi-Rite employees pride themselves on providing <<personalized customer service>>. And most of the time that means <<learning and then catering to the buying habits of their customers>>.

... [The company president, Denise] Loeffler has been known to incorporate certain wrinkles or innovations at her C-stores to <<appeal>> to people. ... <<at the recommendation of several customers>>, Loeffler sought out a doughnut supplier and began stocking <<fresh>> bakery goods.

9/90 (21) "Alabama Petroleum Marketers Tighten Grip on Smaller Cities," by Angel Abcede

...Budding communities outside the target areas of most major oil companies may be the future of leading-edge marketers, [Jim McGuire of McGuire Oil Co.] says. "If a marketer can move [into these growing neighborhoods], he can get firmly established in a place that's really going to take off in the future," he says.

...[Tom] Campbell [of C-store Concepts] outlined a series of <<demographic studies>> a jobber should undertake before investing in fast foods, be it chicken, ice cream or pizza. The studies included <<one, two and three-mile radius population studies, field work to determine the amount of competition and analysis of daytime and residential populations>>.

... Secondly, Campbell said <<implementing the right program for a particular location>> is important.

...Don Robinson's [Robinson's Minute Stop] merchandising mix includes self-service drinks, hot dogs, mirrors with etchings of Elvis and 3-ft. ceramic Donald Ducks. The mix may sound a little odd, but Minute Stop's <<"we'll try anything" philosophy>> has turned into some very healthy profits. ... <<"You've got to be able to change,">> Robinson says.

9/90 (56) "How Small Town America Made Casey's a Big Name," by J. Richard Shaner, Executive Editor

Casey's General Stores, Inc., a fair-sized chain of grocery stores and gasoline stations, unabashedly says it owes its existence to the natural phenomena of the Midwest, the great abundance of small towns
with wide open spaces in between.... [A lack of major oil competition is effected.]
The basic units are roughly 2,200-sq.ft. The newer ones are about 6 ft. longer, adding 200-sq.ft. to provide room for an office and facilities for the handicapped. Even though shelf, bin, and display space are <<tight>>,... <<they carry several hundred more items than their counterparts in other chains>>. <<They sell anything that a customer in a small town might want>>, from hair curlers to shotgun ammunition and garden tools. Their fast foods are enormously successful. They sell pizza pies by the millions,...

Hot foods, fast foods and other items in the food chain <<make up 24% of the inside sales at the average Casey's store>>. All sorts of sandwiches, chicken and baked goods are the standard fare. Pork tenderloin is being tested now in 20 or so stores. ...

Because Casey's stores are <<family stores, there are no video games or adult magazines>>.

... Casey's,... dotes on small towns and thrives on its appeal to small town consumers.... Casey's is <<heartland America personified and proud of it>>. In addition, company executives say, "This is one of the major reasons why Casey's is <<different from the conventional run of C-stores. We're small town and love it; we cater to our small town customers and they love it; and we have no plans to change our modus operandi, ever.>>"

See Figure C.20.

10/90 (42) "Will the Mideast Crisis Hurt Texaco's Rebirth?"
by Peggy Smedley, Editor in Chief

...In December 1988, Star Enterprise, the joint venture with Saudi Arabian Oil Co. was formed. Star Enterprise now refines, markets and distributes Texaco-branded products in 26 East and Gulf Coast states and the District of Columbia. Star Marts, which are replacing the company's more generic "Food Marts" are typically 1,000-sq.ft. units, but some are as large as 1,500-sq.ft.

... a completely new internal and external graphics and a merchandising program <<targeted to local needs and tastes>> form the centerpiece of the company's C-store strategy [signage]. Texaco is striving <<to break away from the "cookie-cutter" mold that characterizes most major company chains [signage].>>

One of the key ingredients to the success of stores is the stocking of the <<"right products" for a
given area>>, <<featuring brand leaders and best-sellers>> that are competitively priced. Other <<highlights>> include new services such as automatic teller machines or even check cashing services.

See Figure C.21.

10/90 (116) "The Name of the Game is Convenience," by Coney Elliott, vice president, Solutions Inc. San Angelo, Texas

... Convenience should be considered in every phase of operations. . . . . . . . stores, should be planned and designed for <<convenience>>.
Do the aisle widths allow for convenient shopping? Is the product on the shelves <<visible>> and <<accessible>> to customers? . . . Is the product <<positioned at the correct height>> for the ever-increasing number of female shoppers that retailers should try to attract?
Is there <<enough>> room at the checkout area? Or is the store so overmerchandised that customers don't know where to place their products for ringing up and bagging?

11/90 (30) "Kerr-McGee Reaches New C-Store Plateau with MAX Store Design"

Kerr-McGee Refining Corp. is entering a new age of C-store design and merchandising with the introduction of a new concept the company calls "MAX" stores.
... When the work is complete, customers will be exposed to <<state-of-the-art>> facilities featuring separate checkout registers for merchandise and gasoline patrons, a deli area with convection oven, a 14-ft. coffee bar, a 16-head fountain and a 14-door cooler.

11/90 (40) "How High-Profile Independent Anchors Business With C-stores, Quick Lubes," by Angel Abcede, Contributing Correspondent

... [Second-generation marketer William "Bill" Kent Midland, Texas] has broadened the company's commitment to new trends, building sharp-looking 2,000-sq.ft. to 2,500-sq.ft. "Kent Kwik" C-stores and adjacent three-bay quick lubes.
... Mostly all tear-downs and re-builds, Kent's locations are <<well-stocked, spit-and-polish>>
Many stores offer self-serve fountain drinks and fast food with sit-down eating areas.

"We don't believe (success in fast food) can be duplicated everywhere," Kent says. "Certain market characteristics, like heavy industrial and commercial areas, lend themselves to a fast food appeal."

On the other hand, Kent says he has not enjoyed such success at locations surrounded by fast food operations.

See Figure C.22.
A canopy made of three interlocking square sections <<featuring>> a back-lit Road-runner logo and 18 mercury vapor floodlamps facing down. The effect is to provide <<an oasis of light in the rural Illinois darkness>> [canopy, signage].

See Figure C.18.
MATERIAL

2/75 (14) "J.O.C. Tries <<New Look>> at U.S. Outlet," by Cornelius Brodersen, N.P.N. Staff Writer

--Wide use of fiber glass in canopies of pyramid design, as fencing along the rear property line of the triangular plot, and as covering for the cinder-block building [canopy]. Fiber glass...makes the station maintenance-free as to painting....

See Figure C.4. Fiberglass was a simple, economical, and flexible material from which a small marketer could invent his own design image.

6/75 (14) "Rehab Cuts Upkeep, Lifts Volume," by Joe Link, N.P.N. Staff Writer

Shield Oil, Wichita, Kan., Fina jobbership [station rehabilitation], ...the end result is that what was once a station of cement block and wood with a flat roof now has sand-black brick facing on three sides and a mansard roof. Vinyl tile on a cement floor in the salesroom was replaced with clay tile one-half-inch thick "for <<durability and appearance,...>>. We also redid the restroom walls, tearing out the plasterboard walls and replacing them with plastic coated paneling," the marketer adds. "The new walls are easier to keep <<clean>> and they do not need to be painted." Old station windows were replaced with aluminum frames and a stainless steel casing on the inside "for easier maintenance." The inside casing had been wood.

See Figure C.23.

7/75 (36) "Marketing in a Recession--Station Rehabilitation Programs Stress Self-Service"

Amoco Oil Co. plans to remodel 152 stations this year and rebuild 12. Depending on the location, stations will get a charcoal gray aluminum shake mansard roof [auxiliary form] and <<colonial detailing>> or a contemporary look. Below the mansard roof most of the wall area outside will be
covered with a dark red thin clay brick mounted on composition panels.

<<Where the contemporary design blends in better with the neighborhood>>, aggregate panels made of crushed stone mounted on panels with resin are used instead of the mansard roof.

...Sun Oil Co. plans to modernize between 100 and 120 stations to its <<contemporary design>>. It includes a mansard roof [auxiliary forms] of a 5-ft.-wide band of yellow shingles with "Sunoco" across the middle with interior-lighted letters, and below that a 2-ft. wide blue band of porcelain or plastic material on the building [color, lighting]. The building itself is refaced with <<imitation>> white brick, a cast brick of cement and plaster.

See Figure C.1.

5/80 (49) "Private Brander Fitzgerald: Each New Outlet Will Have C-Store Items," by Merrill O'Brien, Southeast Editor

Fitzgerald has <<"always believed in having good-looking stations.">> When he built his first private-brand station back in 1958, he hired an architect to design it. A Fitzgerald outlet won the award for the best designed station given by the Georgia Independent Oil Men's Assn. in 1971. "I think I was the first one around here to brick up the poles supporting the canopy," he says. Trash containers are built into the brick columns at his stations [canopy]. He has seen a number of his ideas copied by others, including the dark brown Taylor wire-cut brick and black mortar combination he uses at his outlets [color].

See Figure C.24.

9/80 (60) "Giant's Jim Acridge Flying High in Tough But Tempting Phoenix"

Concrete paving rather than asphalt has been used up to now and the buildings <<feature...>> Mexican tile...

Acridge admits that when he built his first pumper, he wanted it to have <<"a bit more cheesecake">> than an earlier one built by Wyman Sheppard, another Arizona independent, in Phoenix.

See Figures C.5 and C.25.
...[One owner of Food-N-Fuel] said he learned early on in the C-store business that while it may be less expensive to convert a service station into a C-store, a new building...is preferred. A conversion is usually too small to operate efficiently as a C-store and tends to carry a negative image, even after it's converted, he said.

The latest Food-N-Fuel outlet to open, located in suburban Minneapolis...[is] designed according to the company's own specifications and is a good example of how future Food-N-Fuel stores will look... [His] chief rule for any retail outlet: <<neatness counts>>.

...The exterior is <<clean>> face brick with wood shingle mansard and the building <<fits in well with the rest of the Food-N-Fuel-owned shopping strip>>.

See Figure C.26. C-stores which were located in suburban neighborhoods carried softer images and local appeal in the service of offering food.

Mitchell, of Programmed Interiors, said that the <<deli should stand on its own not only from a bookkeeping standpoint, but in relation to the rest of the store>>.

...Go for quality because the C-store's now competing with the fast food chains and it had better look the part. The <<visual appearance should reflect the quality of the food>>. The food service area should have its own color scheme, tile covered walls or a canopy to really set it apart from the rest of the store, Mitchell said [color, canopy].

See Figures C.17b,c.

...Bi-Rite employees pride themselves on providing personalized customer service. And most of the time
that means learning and then catering to the buying habits of their customers. 
"You won't get chrome and glass from us -- you're going to get first rate service and a lot of other personal intangibles," says [president, Denise] Loeffler. "We're not the majors; we can't offer specials and incentives. But I'm convinced there is a real place, a real need, for marketers like us."

12/90 (85) "Do-It-Yourself Approach Pays Off in Small Town Markets," by Steve Dwyer, Staff Reporter

...Most Kwik Trip stores exude a "general store" or country-style atmosphere both inside and out. Store structures, which conform to prototypes of either 2,200 or 2,500-sq.ft., feature a combination brick and wooden frame with a pitched roof that somewhat gives the appearance of an A-frame chalet.

See Figure C.3.
...The facilities will vary in size and makeup, depending on whether they are located in-town or on Interstate highways. A "town store," says Broach, will likely have 2,400-sq.-ft. of store and fast food space, plus two multiple-pump fuel dispensers or 12 hoses. It will be expected to put its main emphasis on inside sales [goods display]. An Interstate unit likely will have a store ranging in size from 1,200 to 1,600-sq.-ft. It would have four MPD's or 24 hoses, plus perhaps two diesel pump dispensers [goods display].

The emphasis of marketing and design was focused on the retail profit return of the station. The retail return was figured based on volume of gasoline sold for a particular locality with this prototypical business; likewise, the size of the convenience store was matched to the number of gasoline pumps.

4/90 (28) "New Equipment, Innovation Characterize POS Development

...Mobil found several benefits for the consumer with the new customer-activated terminals (CATS). Customers find the pumps speedy and convenient since they don't have to go into the kiosk or convenience store and wait in line to pay, sometimes saving as much as two or three minutes, the spokesman says. Customers with children in the car, find convenience in not having to leave the vehicle or take the children into the store with them, he adds...

See Figure C.27a,b.
One aspect of the [Clean Air Act] will mandate a much wider implementation of Stage II vapor recovery equipment at retail gasoline outlets around the country. Potentially, stations in as many as 101 "nonattainment" areas -- those that do not meet federal ozone standards -- could be affected.

... Consumer acceptance of the Stage II systems has also been poor.

Ominously, ... motorists [particularly elderly and handicapped] add that, given the choice, they prefer purchasing gasoline at stations that do not have the nozzles ...

See Figure C.28.
...When Gulf Oil decided to discontinue branded service-station marketing in much of the Far West at the end of 1973, Red Triangle Oil of Fresno, Calif., was forced to convert to a private brand. "The change has been beneficial to us," says jobber Joel Hohenshelt, son of founder and president Arnold Hohenshelt. "It gives us flexibility we didn't have before." Gulf continues to supply the jobbership.
The changeover came during the worst months of the gasoline shortage, giving Red Triangle a big break. "People bought from us regardless of what name was on the station," explains Joel. "They had time to adjust to our new name...."
...Red Triangle's <<new>> brand sign consists of a red triangle, tilted eight degrees off the vertical, framed in white on an orange background [color]. On some signs, the triangle is surrounded by a charcoal ring. The main word on the signs is <<Gas>> in white capital letters [color].

See Figures C.29a,b. Signage graphics were close to the original standardized Gulf signage.

"People remember you as an Arco service station. They don't notice it's a store. Something has to call it to their attention".
..."So we came up with a distinctive design that disassociates the store building from the gasoline operations...>>. The corner pole sign <<says "Food Mart.">> The only Arco identification is at the islands and it is <<low-profile>>.

See Figure C.8. Signage hierarchy disassociated the image of the food store from the gasoline pumps. With the success of the food store tie-in to consumer gasoline purchases, the foodstore was accentuated by a large corner sign.
To **capture the attention of customers**, C-stores need a **distinctive** logo to **identify** the fast food offered on menus, on the front of the store buildings, and on pole signs, Reynolds said. The **identification with fast food** is probably the most critical element of success," he said.

**How Checker Oil Company Brought a **Unified Look** to Its Stations**

How do you take a collection of 250 gasoline outlets of various sizes and shapes, many of which were acquired from other companies over the years, and turn them into **a chain with a consistent identity...?**

See Figures C.9 and C.62a.b.

**C-Store Briefs—Donut-Gasoline Outfit Bakes-up Redesign for Expansion Drive South**

Dawn Donut Systems, a Flint, Mich.-based pioneer in gasoline/donut shop marketing, has unveiled a store prototype which it hopes will lead its expansion drive south.

Gary Hurand, Dawn Donuts president, said the unit was designed to give the stores a **unique visual identity** and to provide "**as pleasant an environment as possible."**

See Figure C.30.

Prior to the new store design, Dawn Donuts stores lacked uniformity and visual impact, Hurand said. The new design—accented by a **broad band of cedar panels ringing the shop** [material], interrupted by a **yellow sunrise arch at the doorway** -- will be incorporated into all new stores and eventually extended to older stores under an ongoing remodeling program, he said.

**Newcomer Arnold Speeds Ahead with Big-Buck 'Cadillac' C-Store,** by Dan Larson, Staff Reporter.

A canopy made up of three interlocking square sections, featuring a **back-lit Roadrunner logo** and 18 mercury vapor floodlamps facing down. The effect
is to provide <<an oasis of light>> in the rural Illinois darkness [lighting, canopy].

See Figure C.18.

...Arnold says he chose a name for his store only after he'd settled on the store's design and color scheme. He says he wanted a name with an <<institutional" ring>> to it that also lent itself to some type of <<easily recognizable character>>. He settled on Roadrunner because it's <<easy to remember, conveys an image of quickness essential to a C-store, and appeals to children>>. The Roadrunner character and name is also <<easily adapted to inside store promotions>>, such as Arnold's special 32 oz. plastic glass which customers get free when they fill it with fountain soft drinks.

11/85 (54) "Ron Hall's Big Plans for 7-Eleven/Citgo," by Marvin Reid, Editor-in-Chief

...Hall seems quite confident that, with Citgo as an <<efficient low-cost player>> at the refining end, the plans to merge the <<brand strengths>> of 7-Eleven and Citgo at retail will meet the long-term financial expectations of Southland.

The "mix" of products offered by marketers was an important part of competition, more than one-half of the country's convenience stores were known to sell gasoline by 1985. The success of the brand name combination was dependent on each individual company's ability to retain consumer loyalty.

1/90 (25) "Citgo Unveils New Image, Equipment, Insurance Plans"

Citgo says it has revamped its <<"highly successful" brand image allowance programs>> for 1990. ...As described by the company, there are four basic image programs of three years' duration, each calling for <<standardized specifications>> for gasoline islands and canopies, <<but allowing marketers to maintain their retail identity on stations or stores>>.
Under the program, distributors will qualify for a 1¢/gal. rebate over the next three years on new ground-up or completely razed and rebuilt facilities at locations doing a minimum of 75,000-gal./mo. For new or rebuilt gasoline islands and canopies, the allowance is 0.75¢/gal. at minimum 75,000-gal./mo. locations. At 50,000-gal. and 30,000-gal. stations, respectively, distributors will qualify for 0.5¢/gal. and 0.25¢/gal. rebates for new or rebuilt islands and canopies. The company also says it will continue its three-year 2¢/gal. incentives for <<new Quik Mart>> [C-store] construction. The deal includes building, gasoline islands and canopies all built to Citgo specifications at qualifying locations doing 75,000-gal./mo...

According to Citgo officials, the <<image program>> includes dispensing equipment, consoles, car washes, canopies and building retrofit kits, safes and an interior graphics package...

See Figure C.31. Citgo awarded various retail marketers incentives for upgrading station construction to the most current standardized company image. The gasoline island and canopy design form and cladding were the main components with which consumers would identify. Retail identity other than the gasoline end of the outlet was left to the station owners to decide. Awarding of the incentives were based on the success of the individual outlet measured in gallons/month.

1/90 (42) "Acquisition-Minded Harken Targets Rural Sunbelt Markets," By Donald M. Smith, Senior Editor

Four years ago, [Harken Energy Corp.] a small but ambitious oil and gas production company... following a series of rapid-fire acquisitions -- firmly <<established a new image as a fast-growing, multi-faceted energy company>>....

...Harken Marketing Co., marketing subsidiary for Harkin Energy, has launched a major modernization program at its E-Z Serve gasoline outlets. Re-imaging includes new graphics, canopy and pump wraps and internally-lit signage... <<Modernization>> has been completed at about 70 stations, with 150-200 still to be worked on...
In areas where it does not have high concentrations of its own brand, Harken prefers to market through major brands like Shell, Conoco, Texaco and Chevron. "We market under the best flag to fly in a given area," says Harken president Mike Faulkner.

See Figure C.33.

"Truckstop" is becoming a misnomer. The trade still uses the term in its own talk, but the face presented to the driving public is that of a "travel center" or "travel plaza" or "travel stop."... The core of the business is the trucker, of course, but unless the so-called truckstop attracts and satisfies the rest of the traveling public, it can't expect to develop the income necessary to justify the huge costs and expenses of the third generation truckstop... [Pilot has] a fast-food restaurant, sometimes with a national name brand like Dairy Queen, Arby's or something like that...

See Figure C.34.

A Daystop is a motel catering to the budget market. The name is no accident. In announcing the Daystop concept, the company said one of the target locations for the lodges are established fuel and food-service facilities...[Prototype Daystops] are designed to compete with Motel 6, Sleep Inns, Super 8, and Microtel -- in other words, inexpensive places to stay... On 13 acres, the McStop has a big McDonald's restaurant, a 65-room Daystop, and independent truck sation with a convenience store, and a retail shopping center with six shops. Each is an independent business...

[Jobber, Jim Shepherd of Albuquerque, N.M.] slick new stations incorporate the highest degree of image standards... Shepherd's Chevron
stations, for instance, have the "majors' updated [graphics] look" with "bright" white and blue canopies, pumps and signage [color]. "Every location I've invested in image standards has seen increases in volume,... Besides you get all the money back in rebates anyway."

... the station image and pull of the car wash helped keep volumes up.

8/90 (21) "Ecol Challenges Town Sign Rule"

... An Ecol station in Madison, Miss., may face $34,000 in fines because its 40-foot price [sign] is too "high", "according to local officials and news reports. "Madison doesn't want anything that will detract from the city, [Denson Robinson, director of public works] says, "We want the city to be a nice, desirable place to live in."

All other stations in the area -- Amoco, Delta Express, Jitney Jungle and Texaco -- have been in compliance,... "Ecol is the only one that refuses to comply."

In a federal suit against the city, Emro Marketing which owns the location, says the ruling unfairly restricts trade since "most of its business comes from motorists passing through."

9/90 (21) "Alabama Petroleum Marketers Tighten Grip on Smaller Cities," by Angel Abcede

Finally, executing the fast food program like a professional is of utmost importance. "Customers aren't satisfied" anymore with handwritten signs. "They expect more," Campbell said, adding that "customers compare fast food service at C-stores with the quick, clean, professional service they get at fast food restaurants" [goods display].

9/90 (22) "BP Set to Ax Gulf in South," by Angel Abcede

...The transition, part of a $300-million plan to "upgrade its stations nationwide", fostered a "hybrid" station "featuring" BP's "vivid", dark green canopies and pump islands encircling the orange and blue Gulf logo on main street posting sign.

"It was a logistical matter," says a BP spokesperson of the hybrid locations, which have been around here for more than a year. "You can't just change to BP overnight. Its very confusing to customers."
BP upgraded the locations while maintaining the Gulf identity.
... This fall, the main identification signs will be changed to BP, signaling the end of Gulf in the Southeast.
...BP's <<revamp>> makes an <<impressive statement>>. The <<bold>>, green-banded canopies are <<accented>> by <<matching self-service and full-service islands>> [color, site usage].

10/90 (42) "Will the Mideast Crisis Hurt Texaco's Rebirth?" by Peggy Smedley, Editor in Chief

...In December 1988, Star Enterprise, the joint venture with Saudi Arabian Oil Co. was formed. Star Enterprise now refines, markets and distributes Texaco-branded products in 26 East and Gulf Coast states and the District of Columbia.
... Texaco plans call for investing millions in new and upgraded retail facilities. The company's <<well established>> "System 2000" stations will share its bounty on a selective basis.

See Figure C.10.

... Star Mart is Texaco's <<new>> trademark convenience store, a name that is <<popping up>> -- along with a <<new>> internal and external graphics package -- at stations throughout the system. Star Marts,... are <<replacing the company's more generic "Food Marts">>.
...The Star Mart, company officials note, represents the <<cutting edge>> of Texaco's strategy of quickly positioning the company as a leader in C-store retailing. "We're aiming to be the McDonald's of the C-store industry," boasts a Texaco official, reflecting the marketing department's grand scale ambitions for its C-store operations.>>
Texaco also had an image problem with its food marts,... [Gene McGraw, general manager of marketing says]. "But our customer research indicated that the customer did not recognize us as a C-store marketer. We didn't have an image as a C-store marketer."
A <<distinctive new>> name, <<combining Texaco's venerable "Star" image along with "Mart,">> a completely new internal and external graphics....

See Figure C.21.
Casey's... uses its own <<familiar>> yellow and red logo on the pumps and structures <<to identify>> it as its own [color].

See Figure C.20.

Kerr-McGee Refining Corp. is entering a new age of C-store design and merchandising with the introduction of a new concept the company calls "MAX" stores.

... the exteriors will be embossed in patriotic red, white, and blue colors with a <<prominent>> red and white checkerboard logo,... [lighting, color].

Jim Mitchell, Mitchell & Associates, Irving, Texas whose firm has won numerous awards for its design and graphics programs, says the use of symbols is "so abstract it can't be explained. <<Customers don't even know this is occurring because it's so subliminal and scientific. But the end result is customers feel more comfortable and stay longer.">> For instance, <<upper demographic groups gravitate>> toward circular symbols because they represent unlimited, infinite possibilities.... <<Lower demographic groups favor>> square symbols because a square has confined, limited borders to which lower class people supposedly can relate, Mitchell notes.

... He says that because of their geometric associations, <<engineers, scientists and mathematicians gravitate toward>> triangles. Mitchell cites his newly developed Kerr-McGee's MAX stores as an example of infusing multi-symbols into one store. Mitchell says the MAX store logo was done in free form crayon to <<appeal to lower demographic groups>>. In other parts of the store, he infused designs that would be embraced by the more sophisticated customer.

<<"We made it attractive to the upper end, and at the same time it isn't outclassing the lower end," says Mitchell. "People are looking at the building...">>
but, each demographic group is seeing different parts of it."

11/90 (40) "How High-Profile Independent Anchors Business With C-stores, Quick Lubes," by Angel Abcede, Contributing Correspondent

Second-generation marketer William "Bill" Kent [Midland, Texas], epitomizes the new breed of bold, risk-taking independents. He has adapted quickly to convenience-store and quick lube trends and has secured a strong competitive stance in his trading area by employing experienced people and implementing <<tough>> image standards.

... Kent's locations are... spit-and-polish convenience stores, with <<bold>> yellow signage, canopies and multi-hose islands [color].

See Figure C.3.

... Kent recently turned all of his Kent Lubication Centers into franchised AvisLube locations, a chain started by the national car rental firm. <<"The idea is to go to a nationally-recognized name (like Avis) in order to expand into areas where people might not know the Kent name,">> Kent says.

See Figure C.35.
We felt that the primary petroleum part was <<mostly underinvested>> and that the secondary part, the bays and the building, <<were overinvested>>.

<<People remember you as an Arco station. They don't notice it's a store>>.

So we came up with a <<distinctive design--that disassociates the store building from the gasoline operation>>.

Food mart--monthly gross food sales target is $20,000.

Minimart--scaled-down version of food mart.

Auto supply--this concept grew out of experience Arco obtained in its Clean Air Caravan, a program for testing automotive engine emissions. <<Many people said they bought automotive items at discount stores. That got us thinking about auto stores catering to the do-it-yourself trade>>.

Fast snack--these are for travelers and are all planned for interstate locations.

Food service consists of a vending area with about 10 machines, some for hot food. A sitdown space is provided to eat.

Fast stop--Upper Darby, Pa. This is the newest concept, representing a combination of a short food line and health and beauty items. Foods are milk, bread, ice cream, cold cuts, soup, cereal, crackers, cookies, cigarettes, coffee, etc.; other merchandise are razors, toothbrushes, shampoo, deodorants, etc.

Film processing--This business started out in Docutel self-service cashier booths to provide additional income. It works in some locations, doesn't in others. <<A profile is being developed to screen out unlikely locations>>.

See Figure C.8.
x 8 ft. kiosk... for attendants on the wider center isle.

See Figure C.4.

4/80 (48) "Photo Processing: Profitable Way to Diversify, but Competition is Growing," by Merrill O'Brien, Merchandising Editor

The photo-processing business often appeals to gasoline marketers when they begin thinking of getting extra payout of their retail real estate investments.

...Thomas N. Allen, president of East Coast Oil Corp., Richmond, Va., thinks «a marketer should have "an unusual approach" if he wants to get in this business now».

...The «majority» are kiosks situated on East Coast station property. "Most independents have larger lots at their stations,....

See Figure C.36.

..."We've carved out a niche for ourselves with one-day service," he says.

8/80 (53) "Newest Wrinkle: A Laundry Tie-in," by Merrill O'Brien, Southeast Editor

Marketers continued to search for means to increase revenue. Some added simple lease-type spaces on the same property. This space could be filled with whatever sideline would potentially profit the "consumer want mix" of the particular location and time.

"Building a coin-operated self-service laundry with rental revenue amounting to a 29% return on investment can help pay out an adjacent convenience store with limited market potential as well as generate business for the store."

Products and services which facilitated consumers "social pains" and daily chores continued to aid the marketers.
A more sophisticated version of a highway canteen with gasoline pumps, the Forward Plaza concept combines a double restaurant, bar, C-store/impulse shop, and beer and wine outlet under one roof with a 12-hose, split-island gasoline operation in the driveway.

See Figure C.37.

The 150 ft. x 100 ft. building rests on a 700 ft. x 300 ft. lot (the biggest plaza) and offers <<ample parking for even the bulkiest campers>>. Once inside, <<travelers have a choice>> of a full-serve restaurant (capacity of 98) with a varied menu or a self-service buffet room (capacity of 118). Both dining rooms are served by a glassed-in bar in the middle. No drinks are served at the bar itself. To get to restrooms or out one of the front doors, patrons must walk through a combination C-store/impulse shop with beer and wine cases [goods display].

...Buttrick candidly says that <<there are no more "plazas" in Forward Corp.'s future as far as he can see now "because they're just too expensive.">>

...some marketers believe the big self-serve pumper craze is over for non-major gasoline marketers.

...40-year-old James E. Acridge of Giant Industries, Inc.,...sees a need to trim construction expenses while adding extra revenue-producing "tie-ins" to counter the soaring costs.

...he talks of the need to "start cutting some corners" on the company's pumper construction costs.

...As Acridge admits of that day and time, "we were price-aggressive." But he also adds that he and other independents who began building the big, expensive self-serve units <<were seeking to improve their image>>.

<<"You have to remember that back then, the independent still had a bad name,">> he says. "We were still <<trying to live down an image of having poor-quality gasoline>>. I wanted a very <<sophisticated-looking, eye-appealing station that customers would identify with quality>>."
...Giant stations at present, typically, have from 22 to 24 pumps at wide-spaced pump islands and often have very large, gabled canopies. Some are situated on lots as large as 200 ft. by 275 ft., with the average size perhaps 200 by 200 ft. The smallest-size lot considered would be 150 ft. by 150 ft., says Giant's executive vice president Al Moore, because "we can't fit our type of station on anything smaller than that."

See Figure C.5.

...Some units have adjacent buildings for tire stores or the offroad vehicle centers. Those that can accommodate them have or will get the large kiosk Goodies convenience stores [goods display]...."We piped in soft music under those big canopies and put up high retaining walls <<for those who might be embarrassed about their friends seeing them at a self-service station>>. We spaced our pumps out so the <<customers could get in and out without delay>>."

See Figure C.25.

11/80 (49) "Quick Lubes: Fantastic Growth Ahead?"

...Mobil Oil has rolled out its "Express Lube" program to 225 stations nationwide, after testing the operation at some 60 locations. However, the Mobil program, which requires no conversions or renovation, uses existing service bays rather than drive-through facilities and is more a promotional effort to grab extra oil-change business and related sales for dealers. Motorists are offered 15-minute oil changes for a $5.95 minimum and, once inside the lube bay, are offered higher quality oil and other items which bring higher prices.

...Mobil's successful test of the <<fast>> lubrication concept at its retail gasoline sites offers <<evidence that the two operations together are a viable combination. But some in the quick lube field remain unconvinced.>>

For other major oil company quick-lube prototypes, see Figures C.38a,b. Many marketers remained convinced that the conventional automobile service site layout carried a social
stigma and was often not profitable when combined with gasoline sales.

2/85 (21) "Everything is Up to Date in Oklahoma City..."

While many marketers take the gradual approach to gasoline station automation, a suburban Oklahoma City, Okla., marketer has taken it a step further by automating his convenience store.

See Figure C.39.

Marvin Jirous opened his Quickway gasoline/C-store outlet last March in Edmond, Okla. ...The self-serve gasoline unit has 32 hoses, and the store has 600 grocery items.

<<"When you go to a C-store, you get out of the car, find the item, pay for it, unlock the car...it's all very time consuming," says Jirous. He says that his Quickway speeds the process>>.

...The 1,600-sq.-ft. store, situated on a 22,000-sq.-ft. lot, features eight drive-in stalls covered by brightly colored nylon canopies. Motorists pulling into one of the stalls choose from a list of four motor fuel grades and 600 grocery items before pressing a speaker button to notify one or two employees of their selection.

...The motorist deposits the money and awaits the groceries and change on the same conveyor.

..."We do miss out on a lot of impulse purchases, but this really cuts down on shoplifting," says Jirous. He plans to open a second Quickway this spring in Oklahoma City.

The loss of impulse buying was an evident problem with this type of business. The image and layout of the station resembled the early concept of drive-in restaurant but a conveyor saved the labor expense of the carhop.

3/85 (24) "Chevron Rebuilds Gain Momentum," by Mark Emond

Approximately 3,000 of Chevron USA's 12,000 service stations are slated for major overhauls in a <<gigantic>> retail restructuring program that started in 1984 and will span several years.

...Many of the remaining 9,000 stations may receive smaller-scale renovations and improvements. A
limited number of new stations will be built in <<growth areas>>.
This is a big turnaround for Chevron, which like most other major oil companies made hardly any retail investments in the 1970s. <<Like many of its major competitors>>, Chevron is now trying to transform its retail network <<to fit consumer tastes that have changed radically in the past decade>> [goods display].
The name of this game is volume. Chevron's new approach recognizes that the <<gasoline market today, very much unlike a decade ago, is roughly 80% self-serve and 70% cash>>.

See Figure C.14. Consumers had become increasingly loyal to the convenience of self service/C-store type outlets. Chevron was one of the latest major oil corporations to convert to this new retail arrangement, pressured by the competitive dictates of marketing.

3/85 (46) "Pilot Lands in 13 States with Plans for More <<First-Class>> 'Fuel Centers'"

...Pilot began a new strategy five years ago... it began building <<large>> self-serve diesel and gasoline "fuel centers" on Interstate highways. Simultaneously, it began moving heavily into convenience food stores, including fast foods. As a result, its sales have been soaring the past five years, putting the company in that small, elite group of marketers known as super-jobbers.

...Pilot started out as a full-service gasoline marketer. It had switched pretty much to self-service by the early 1970s and had begun to dabble in small C-stores when the first supply shortage hit [goods display].

See Figure C.15.

...Pilot likes to put the units it is currently building on 200-ft.-by-150-ft. minimum sites. On these, it puts from four to six multiple pump dispensers beneath giant canopies which cost from $27,000 to $30,000 each [canopy, pumps]. The stores underneath [the canopy] are usually 40-ft.-by-60-ft. Some of its "Food Mart" store buildings, though, now run as large as 3,000 sq. ft. to accommodate full-size deli operations.
"It has no intention, however, of becoming "a complete C-store, like a 7-Eleven...it wants to gear the stores for "people who are in a hurry.""

6/85 (47) "Majors Exploiting Draw of Carwash, as Indies Milk Stand-Alone Profits"

While not an eye-popping trend, carwash units are re-emerging in some regions as a strong tie-in for sagging gasoline outlets—both as free washes that draw extra gasoline sales and as innovative carwashes that pay out on their own.

...Some majors are giving away carwashes, but some "little guys" are making money.

See Figure C.40.

...Because of land costs and lot sizes, tunnel washes like those operated by Sohio may eventually disappear from well-developed areas, according to Gus R. Trantham, executive director of the Chicago-based International Carwash Assn. "The early washes were on prime pieces of land, but we're just running out of space."

...Sohio's [marketing spokesperson] says that the company's "gas"-only units with separate tunnels measure 200 by 400 ft. and "are cramped". "We really need 300 by 400 [ft.]." The company's units which feature 70-sq.-ft. kiosks out of which fast-moving grocery items are sold, measure 125 by 250 ft.

6/85 (51) "Food-N-Fuel's Store Growth Pattern Turns on Company-Op/Franchise Mix," by Dan Larson, Staff Reporter

Company-owned stores sometimes contain another twist. Small Food-N-Fuel-owned-and-developed shopping strips, usually a C-store and three or four retail shops,... provide a good return on a real estate investment through lease arrangements. One such Food-N-Fuel-owned development was recently completed, and [the owner] said he is considering others.

See Figure C.26.

...The latest Food-N-Fuel outlet to open, located in suburban Minneapolis, is a 2,400-sq.-ft. C-store with twin four-hose gasoline pumps out front...The single pump island is parallel with the store.
Although the store does not offer deli foods, it was designed with the necessary plumbing and electrical connections in place. "We wanted the ability to add fast food or a deli here if we thought it was justified," according to [the] general manager.

See Figures C.41a,b.

...[he] said the company recently purchased a $45,000 photo processing machine and has started one-hour photo processing at 10 Minneapolis stores. Other stores feature dry cleaning or fresh donuts.

"We'll try just about anything," Thelen said. "The market is always changing, and we want to keep the ability to change with it. That's one of the most important parts of this business."

The strip shopping store space continued to be a lucrative means by which an independent marketer could develop or lease to tie-in auxiliary businesses.

11/85 (54) "Ron Hall's Big Plans for 7-Eleven/Citgo," by Marvin Reid, Editor-in-Chief

Two years ago when The Southland Corp. acquired the Cities Service oil refining and marketing properties from Occidental Petroleum, there was considerable speculation as to whether the company had made a wise move.

See Figure C.42.

...After starting out slowly 10 to 15 years earlier putting in self-serve pumps here and there at its vast chain of 7-Eleven convenience stores, it quickly became the nation's largest independent gasoline retailer. Its retail gasoline sales last year totaled almost 2-billion gal.

...Hall says that Southland, in developing new retail sites, still looks first for a good convenience store site. Then, it considers whether to put in one gasoline island and "do 40,000 to 50,000 gal./month" or put in "the full deal and do 75,000 to 100,000 gal."
The site combined the layouts and images of two already brand-name retail businesses. The size and capacity of the gasoline side of the business at a particular location was said to be dependent upon the projected consumer demand.

2/90 (15) "Bulletproof C-Store Enclosures Gain Favor With Midwest Jobbers, by Steve Dwyer

Increasing attention is being focused on C-store crime and many marketers are investigating methods to counteract the problem...

<<Perhaps because Illinois experienced four homicides at C-stores in the past year alone,...>>

Some questions still loom: <<Will something like this put C-store cashiers out of touch with their customers? Will it affect sales at checkout lines? Will there be a stigma attached because of the crime implications?>>

The positive qualities of the system outweigh the negatives, according to Kristy Salahi, director of marketing for Plan Corp., which has been designing and installing C-store prototypes for major oil companies for 15 years.

...among the positives... to give cashiers complete visibility throughout the store without compromising safety,... At the risk of appearing to ominous or foreboding, The Plan Corp. made it <<paramount to make sure the enclosure was aesthetic>>.

"It is very <<clean looking>>. It does not have the bars that would make it look like you're in jail. <<It should give both the customer and the cashier piece of mind,...>> [material].

...[One] Amoco leasee dealer,... has seen inside sales jump $3,000/mo...

...before his system was installed, the point-of-sale for gasoline was a window slot where customers paid their ticket outside. [The station] was an 18-hour operation because he didn't want the one cashier he had on duty to be exposed to any riff raff.

The window slot concept motivated... a 24-hour operation [goods display].

Our sales are better late at night, and <<during the day, we can slide the windows open,... [allowing] cashiers to develop a rapport with customers>>.

But one rural marketer... is not eager to greet the concept.... [He] says security enclosures would call attention to crime and scare away potential employees.
"I just can't see a mother letting her daughter go to work at a store that has one of these security enclosures because of the implications it carries on crime....

See Figure C.43.

3/90 (32) "How Oil Companies Are Now Rethinking Auto Service, TBA, BY Mark Emond, Contributing Correspondent

...Self-service has sometimes become no-service. The Alaska oil spill has intensified the industry's alienation from the public. "Put service back into stations," is one oil company's watchword. Convenience store chains are struggling in many parts of the country. Market saturation is taking away expansion opportunity for many C-store chains and oil companies.

...senior vice president of retail marketing for BP America... [Hugh Hanna]... told jobbers at a convention in Reno, Nev.: "It is high time to rethink our business. We must start by going back to the basics.... <<There is a void out there in getting reasonable service for your car...>>. We're back starting to build three and four bay stations."

...He said BP America has done a lot of <<survey>> work lately and the <<result is clearly that people want someone to tell them what's wrong with their car and fix it -- price is the fourth or fifth thing they're interested in>>.

[Sun Refining and Marketing Co. commented:] "We own some of the best real estate in America and most <<customers still prefer to buy from a retailer they have confidence in and is convenient to their home or work location>>."

...Shell has looked hard at the economics of building bay stations again, with negative conclusions so far. Negative factors are the heavy investments needed in complicated equipment and the training of mechanics. "It's difficult today and it's going to become more difficult,... The labor pool is shrinking at a time when we'd like it to be greater."

..."there's always going to be a market at service stations," based on <<convenience>> and also on the fact that as cars get older they are less inclined to be taken to car dealerships for service.

Unocal continues totally committed to island service and automobile service in the West, cultivating <<what [Unocal] considers a niche in which it is all alone>>.
Unocal has built about 70 "super stations," with **four to six bays on an acre of land**, during the past few years... Some have **car washes**.
The company is building six prototype "super stations" throughout the west, with new graphics, signage and lighting [signage, lighting].

See Figure C.44.

3/90 (36) "Consultants Explore the Viability Of Traditional Service Stations," by Bob Freudenberger

...The service station still has major advantages over its competitors, such as location, reputation for quality products, island traffic, extended hours of operation, brand name recognition [signage],... one-stop car care, personal attention and solid capital foundation to enable capital growth...
...Gasoline sales, as noted, are quite often subsidizing unprofitable service bays, which contradict oil company fuel marketing strategies by squeezing margins...
...The future of the service station as we know it is in jeopardy, yet neither the oil companies nor their dealers seem to realize it.
...The key, say the consultants, is a realistic strategy that considers dealers' abilities and the demographics of the location. "A 'portfolio' approach often makes the most sense—that is, <<tailoring the business use, whether automotive or otherwise, to the conditions prevailing at each particular location>>. We examine possible alternative conventional bay strategies and <<throw out those we consider unrealistic, too complicated and potentially harmful to gasoline sales and the company name. Then, we combine various services into what we believe are viable business entities that will also enhance gallonage sold...>>".

5/90 (30) "Why Truckstop Boom is Spreading Nationally," by Mark Emond, Contributing Correspondent

...Independent truckstop operators are increasingly losing business to keep his facility up-to-date. The truckstop owner who wants to expand his chain must expect to plunge several million dollars into each new facility...
..."Keep your options open." He adds, "The truckstop industry clearly belongs to the operators with plenty of street savvy."...
...An illustration of how <<diverse>> a truckstop can be, The Trucker's Friend lists 69 [possible] facilities and services. Some stations have nearly all of these, some just a few. The list includes patrolled and overnight parking, motel, deli, restaurant, convenience store, truckers/travel store, shopping center, men's and ladies' showers, TV/driver's lounge, laundry, barber shop, beauty shop, brokers offices, Federal Express/UPS boxes, public fax, three kinds of scales, seven kinds of repairs (including CB radio), mechanical and tire services, wrecker, truck wash, check and fuel-card acceptance, permit services, credit card and trading stamps...[goods display].

...But there are stripped-down "pumpers" put there, too. The first of these were simply two pumps sitting alongside a two-bay station. Other pumpers were diesel-only self-serves that often developed high galonages. Many of these are now gone, or have begun to evolve into service-type truckstops...

...But as <<people required more and more service>>, the trend is toward bigger and bigger locations...

<<The trucker is very demanding>>. The trucker's customer is very demanding."...

...Trucking companies are telling us more and more that they want paved parking lots, the security of lighted parking, and other conveniences. <<You have more women drivers. "They're abandoning those older places like rats leaving a ship...".>>

...Unocal's 340-truck-stop chain makes it No. 1 in the industry...

...The minimum facility standards required for all locations are 50 paved and striped truck parking places (minimum 65 ft. long), 75-seat restaurant, 500-sq. ft. trucker store, one private shower for every 100,000 gal. of diesel fuel sold a month, and one enclosed service bay...

...BP Oil got into the trucktop chain business by acquiring Truckstops of America (TA) from Ryder in 1985. It's now an operating company of BP Oil Co., a subsidiary of BP America, Cleveland, with 39 truckstops...

...These are meant to be <<top-drawer>> travel centers <<in the league with some of the biggest>> now being built. For example, the larger class of new TA construction, with a minimum of 16 acres of land, a separate fuel building, with total enclosed space of 29,100 sq.ft.,....

The <<smaller classification>> of new construction, with a minimum of 12 acres of land, no separate fuel building, but enclosed space of 18,700 sq.ft.,...
Flying J has four prototype truckstop designs depending on the market. A typical property is 10-20 acres.

See Figure C.45.

Daystops is an example. Days Inns, the parent, has more than a thousand lodges in the United States, all franchises. There are Days Inns, Days Hotels, Days Suites, and more recently Daystops.

"The parking lot has a lot of problems: cleaning it, snow removal, drug selling, prostitution. The station doesn't make any money off of it."

Prototype Daystops have 60 rooms, but they can be larger or smaller than that. Their economy stems from the small space they occupy, just 0.85 acre. Daystops are designed to compete with Motel 6, Sleep Inns, Super 8, and Microtel -- in other words, inexpensive places to stay.

[One operator] considers McDonald's an excellent restaurant, attractive to drivers as well as the public, but he doesn't think it will make much impact in the fueling business. The fueling end of a McStop is usually a little pumper run by a local jobber...

A Pilot Travel Center is built on 5 acres, compared with 15 of a full-facility truckstop.

"We have 8 lanes for fueling diesel, also positions to fuel 8 cars simultaneously out front, a 6,000-sq.ft. building, which has a convenience store, a travel store catering to the over-the-road driver (jeans, boots, that kind of stuff), and a shower complex with 4 or 5 showers....

"We made a decision we wanted to be able to handle the trucking companies on a nationwide basis,...." We're certainly not there now, but we're working to be there."

7/90 (28) "With Only One 'Boss' Again, Citgo Is Aiming At the '90s," by J. Richard Shaner, Executive Editor

Citgo's branded distributors have accepted the company's new "Century Image" store design introduced in 1988. More than 80% of them have adopted the new look...

Citgo has a plush, architecturally stylish C-Store/gasoline complex in Broken Arrow, Okla., just a handful of miles from its corporate headquarters in Tulsa...

See Figure C.46a.
...Company-owned and operated, the Boken Arrow location is being <<run as a model facility for both the company and others to learn from>>. The complex houses the <<traditional>> canopy, two island, 12 hoses, service bays, an 1,800-sq.ft. C-store and a car wash...

See Figure C.46b.

7/90 (35) "How Space Age Technology Makes POS Transactions <<Faster and Less Expensive>>," by Angel Abcede, Contributing Correspondent

...The major oil companies' demand for faster, cheaper electronic transactions has ignited a new frenzy of point-of-sale (POS) research and development, leading to such ideas as installing POS devices right into the pump and transferring funds through high-tech satellite beams. The talk may sound futuristic, but what the majors need is both clear and immediate: the ability <<to quickly and conveniently authorize credit>>, <<accomodate the growing number of commercial fleet clients and debit a customer's bank account -- all at a reasonable price>>.

"Our number one <<focus is customer satisfaction. If you can reduce checkout time from 15-20 seconds to two seconds>>, customers appreciate that," says a Diamond Shamrock executive...

...Satellite hookups may make POS transactions cheaper and faster....

See Figure C.27a,b.

...The recent introduction of a "universal" gasoline credit card by Petrocredit Corp., in Reston, Va., has brought up the <<question of brand loyalty and the credit card's pull on a customer>>. Kenneth Polle of Petrocredit says <<location is the number one factor in people's decisions on where to fill up, and that the average credit card user has two or three major proprietary cards>>.

8/90 (27) "Dealer Says Yep, T'other Says Nope, T'aunt Our Piece Of Cake"

For Ed Gillespie, of U-Fill'er-Up, Greensboro, N.C., unattended self service is not only old hat, it's the way to go to keep ahead of the game in the '90s. ...It's all <<a very simple process...>>.
See Figure C.47.

The motorist simply chooses his pump, inserts his credit card and takes his gasoline. When the card comes out he's off and away. At the end of the month we give him a statement listing time of purchase, date, place, vehicle and driver's I.D.'s, etc., etc., etc. ... The other side of the coin was very obvious in Temple, Texas, ...

...[Says Roy Strasburger, vice president of Fuel Distributors, Inc.] ..."we looked at it real hard and figured the majors would be in it sooner or later and that we simply could not compete. "During our experimental stage we had about five unattended self serves. But our C-stores and stations are 24-hour operations and card locks don't help them at all. "We want customers to come in and buy both gasoline and groceries, not slip in and out unseeing and unseen."

8/90 (39) "Scrappy Jobber Hangs Tough in Fierce St. Louis Market," by Steve Dwyer, Staff Reporter

... Loeffler has been known to incorporate certain wrinkles or innovations at her C-stores to <<appeal>> to people. At one station that has a high volume of truck traffic,... she changed the configurations of the islands to <<improve access, increase the flow of traffic and reduce the waiting period>>.

9/90 (22) " BP Set to Ax Gulf in South," by Angel Abcede

A selection of soft drinks and snacks are available at the clean, well-lit kiosks [lighting]. The building also houses an office, service bays and a roll-over car wash, all <<compartmentalized>> into a <<neatly designed package>>.

10/90 (42) "Will the Mideast Crisis Hurt Texaco's Rebirth?" by Peggy Smedley, Editor in Chief

...Texaco Inc., has maneuvered itself out of bankruptcy protection and into the saddle once again as a major force in the oil industry. ...

...In December 1988, Star Enterprise, the joint venture with Saudi Arabian Oil Co. was formed. Star Enterprise now refines, markets and distributes Texaco-branded products in 26 East and Gulf Coast
states and the District of Columbia. This joint venture produced a lot of sorely needed cash flow for Texaco.

... Texaco plans call for investing millions in new and upgraded retail facilities. The company's "System 2000" stations will share its bounty on a selective basis. These facilities, generally built since 1980, have a C-store under a canopy and a car wash [signage]. ... [New station] <<contemporary design features>> <<wide protective>> canopies [canopy], car washes and "Star Mart" convenience stores, ....

See Figure C.21.

Texaco and Star Enterprise are testing a new quick lube design. The new Star Lube locations will be glass atrium enclosed one-bay units attached to the main building... The units are designed so that <<the vehicle can be serviced without the customer leaving the car>>.

10/90 (116) "The Name of the Game is Convenience," by Coney Elliott, vice president, Solutions Inc. San Angelo, Texas

... Convenience should be considered in every phase of operations. The focus should be on convenience as a marketing tool. Site plans,... should be planned and designed for <<convenience>>.

... Another neglected convenience consideration is parking. <<Adequate convenient>> parking must be allocated <<to accommodate the C-store customer, as well as the gasoline customer>>.

11/90 (30) "Kerr-McGee Reaches New C-Store Plateau with MAX Store Design"

The Houston-based company has introduced two new store and fueling designs that are expected to boost sales, says Clark Johnson, vice president of marketing for [Kerr-McGee].

"Through the MAX design, we'll try and convince the food-only customers that the MAX stores have as much convenience as anybody," says Johnson. "We're getting away from the island marketer theory that is <<good for gasoline and poor for merchandise>>. <<The merchandise customer feels awkward about entering an island marketer. There is nothing to guide him inside.">>
... [Jim] Mitchell, who owns Jim Mitchell & Associates [Irving, Texas based designer], has proposed that Kerr-McGee modify its 500-sq.ft. "Funnel" store, of which there are 13 located in Oklahoma City and Des Moines, Iowa. In the funnel concept, gasoline customers fill up their tanks and purchase merchandise from outside the store, placing and paying for their order at the funnel window. ... Mitchell's proposal calls for a two-way communication system between clerk-and-customer to allow the gasoline patrons to make fast food and grocery orders while they fill their tank.... ... Mitchell says the concept is <<most effective for women who shop with small children; for elderly or disabled customers who find it difficult to leave their cars; and for customers wary about leaving their cars at night>>.

11/90 (34) "Unattended Gasoline Stations: Are They Coming Along or Not?" by Mark Emond, Contributing Correspondent

... Commercial cardlocks are expanding much faster than public unattended stations at this time, and continued growth, at least in the short term, seems assured. There are many reasons why commercial customers would rather leave their fueling to marketers.

... The main impetus in the growth of the commercial cardlocks is the increasing unwillingness of fleets to cope with the mounting environmental risks of running their own fueling stations....

In most cases, cardlocks and public unattended stations occupy different kinds of locations and <<appeal to a different consumer base>>.

... There is a mixture of the two at some stations, but catering to both kinds of customers is not developing as a preferred method of operation. Quite the contrary, many card lock marketers are deliberately avoiding the public.

... [Robert M. Renkes, executive vice president of the Petroleum Equipment Institute], believes C-stores and public unattended stations are working at odds. He explains, "Fifteen years ago or so, before we had all of these convenience stores, I thought it would make more sense not to have an attendant there. But now you need an attendant there to make money on groceries.

[Pacific Pride president Bruce Douglas] admits it would be easy to open the [commercial cardlock] network to the public, but he says, <<"We truly don't believe the commercial business mixes with retail. There's a blue collar ethic among truck

drivers. They're respectful to each other, but they don't want to wait for teenagers and housewives."

... A cardlock marketer disagrees. "That's an untested theory. I don't find it so," says Larry Renslow of Automated Fuels, San Jose, Calif. "...I tested it for 12 months in my own units and decided it was going to work."

... Some marketers mix the customer bases, but at segregated islands. They operate cardlocks and unattended stations independently on the same site.

11/90 (40) "How High-Profile Independent Anchors Business With C-stores, Quick Lubes," by Angel Abcede, Contributing Correspondent

Second-generation marketer William "Bill" Kent [Midland, Texas], epitomizes the new breed of bold, risk-taking independents. He has adapted quickly to convenience-store and quick lube trends...

... [Kent] has broadened the company's commitment to new trends, building sharp-looking 2,000-sq.ft. to 2,500-sq.ft. "Kent Kwik" C-stores and adjacent three-bay quick lubes.

... Mostly all tear-downs and re-builds,... Kent's locations feature... convenience stores,... canopies and multi-hose islands.

... Kent has moved aggressively into the quick lube field. His quick lube facilities, connected to the C-stores, feature "tidy" bay areas and "plush", atrium-enclosed waiting rooms [material].

12/90 (16) "C-store Operator's Fiscal 'Health' Improving with Pharmacy Center," by Steve Dwyer

... Speeandeemart Convenience Stores, Portsmouth, Ohio, opened a new store near Cincinnati in October 1989 that "features" a pharmacy center designed to bulk up overall store revenues.

... In addition to the new pharmacy at one store, all Speeandeemarts have 3,400-sq.ft. C-stores with fast food/deli counters, gasoline islands and full service car washes.

... Rutman explains the decision to incorporate a pharmacy into Speedmart's retail merchandising strategy was "supported by company research indicating such facilities would make a valuable contribution to the store's marketing appeal". He says early returns show that the pharmacy is competing well against both traditional pharmacies and the larger grocery-pharmacy chains.
... <<The drug store and car wash customers are similar, in that they are middle age to older. The logistics are right, too. The time it takes to fill a prescription is the same amount of time it takes to get your car washed and get a quick sandwich.>>" The main building that houses each C-store, deli and pharmacy is connected with a "Magic Center" car wash, a full serve, soft cloth/brush combination. While waiting for their cars to be washed, <<customers also have easy access to any convenience or pharmacy items they might need>> through a rear entrance to the store.

12/90 (35) "Emro: A Tiger in the Midwest"

... At some of the newer, larger [Emro] outlets, the store <<sits smack dab in the middle>> of a <<typically big>> lot and is flanked by gasoline islands on either side. For <<customer convenience and to speed up traffic into and out of the store>>, there are two side entrances with checkout counters at each entrance.

12/90 (105) "The Only Design Rule That Counts," Gerald Lewis, Chairman of the Board and CEO of CDI Designs, Inc.

...As an expert in store planning and design, I am expected to know the rules to be followed in making successful retail stores. Which colors are best? Do certain colors have special significance [color]? Are end checkouts better than island checkouts? How big should a store be [site usage]? How important is a gasoline canopy? Should it be connected to the store [canopy]? Is head-in parking vital? Are intersection sites always better than mid-block sites? Is in-store food preparation better than commisary preparation [goods display]? Sound familiar? You probably have asked these questions a hundred times. But, at the risk of flowing my credibility, I have to admit that I don't know the answers to any of them. I used to think I did, but now I don't believe there are any hard and fast rules in these areas.

...For example, one very successful operator builds outlets with no head-in parking and without connected gasoline canopies. This chain consistently generates gasoline and retail volumes away above industry norms, despite being located in very cold and snowy areas. Also, while it is commonly accepted that intersection sites are better than mid-block sites, this same operator seeks the
latter so the traffic will not back up from intersections and block access to its stores and pumps.

... First, they seem to have several characteristic in common:
- They are leaders not copiers.
- They know what they are doing and have <<clear objectives and strategies>>.
- They develop a <<unique positioning and express it>> in their store plan and design [all].
- They operate their stores in a way that executes their strategies.

Second, and most important, they are <<committed to make it work>>.

Commitment -- therein lies the secret. I believe it is the only inviolable rule. For example, labor-intensive foodservice items, such as baked goods or fried chicken, can either produce outstanding profits or large losses.

... Others who have visited these successful operations and tried to "clone" them without understanding the underlying commitment have failed miserably.
Findings

The analysis of the *National Petroleum News* oil marketing journal in the years 1975, 1980, 1985, and 1990 reveals that the broad design concept for gasoline stations became, through the years, significantly attributable to the experiential understandings of station developers. The station became a more modular entity, capable of being changed to satisfy marketers' increasing analytical sensitivity to business opportunities. The station's design image and function was conceived as more of an ephemeral package than a permanent and over-customized building type. Evidence of the influence of marketing concepts on the design of stations within this period of the journal's history is also supported through an approximate quantitative analysis of design element descriptions. About two-thirds of the design descriptions are attributable to the justifiable experience of the gasoline station developers or marketers. The remaining one-third of the descriptions in the articles examined are represented by the implied artistic value of particular design elements.¹ Examples of both the implied and justified applications of design are outlined as follows:

¹Approximately 50 out of 155 articles were counted.
Examples of the Artistic Value of Station Design Elements:

One-third of the described examples of station design elements between 1975 and 1990 are characterized by intangible advertising or promotional values: having either (a) visibility or a conspicuous design use, versus (b) landmark value and a distinguishable and conspicuous design use, or (c) harmony with other design elements on a particular site, or (d) similarity (or standardization) of station design with other outlets in a group, or (e) contextual value to a community or locality. Examples of visibility and standardization as implied artistic values to station design represent a less significant amount of the total article descriptions between 1975-1990.

Visibility in station design is described through the use of: a "fiberglass" "mansard roof" form which was said to "modernize" the look of the building; a "grey" "neutral background" color used on the cabinet work of a convenience store "to highlight product offerings;" a "canopy with a back-lit logo and 18 mercury vapor flood lamps facing down" was said to "provide an oasis of light in the rural... darkness;" a "red and white checkerboard logo" described as "prominent;" and a "large" "truckstop" lot with many services offered.

No examples of landmark value were found in the documentation of this period.

The use of standardized design for more than one station of a group aided in the ability to isolate a particular
company brand in the marketplace. Motoring consumers were made aware of a particular brand through uses such as: a "canopy" located on a company's station lots to suggest a certain "traffic pattern" as "a major unifying symbol for all stations;" "dark brown 'Taylor' wire-cut brick and black mortar combination" to cover the poles supporting the canopy because the owner "always believed in having good looking stations;" "250 gasoline outlets, a chain with a "consistent identity" was achieved through the addition of color graphics; a "white and blue" color scheme which clad "canopies, pumps, signage" with the "majors' updated look" and "the highest degree of image standards;" and "C-store dispensing equipment, consoles, car washes, canopies, building retrofit kits, safes, and an interior graphics package" as part of a "Quick Mart" "image program;" and company stations which "typically have" a "C-store under a canopy and a car wash."

Only one example of artistic harmony was found which suggested that station design elements were exclusive to a particular location and not necessarily standardized for use at other locations: "face brick" and a "wood shingle mansard roof" was adopted because it "fits in well with the rest" of the company-owned "shopping strip."

Finally, only one example was found which considered the contextual worth of an architectural design to a community or locality in which it is located: "aluminum shake" mansard "roof forms" with "colonial detailing" along with "thin clay
brick mounted on composition panels" were used in certain
residential locations, and "aggregate panels made of crushed
stone mounted on panels with resin" were used "where the
colonial design blends in better with the neighborhood."

Examples of the Justified Uses of Station Design Elements:

Gasoline station design element descriptions which are
contributed by the experience or opinion of those who marketed
gasoline are characterized by one or more of the following:
having either (a) cleanliness, or (b) convenience, or (c)
customary or popular appeal to customers, or (d) legal
consideration, or (e) culturally scrutinized problems about
the gasoline station with alternative solutions to remedy the
problem, or (f) connotative associational meaning to gasoline,
or (g) scientific, statistical, or experimental reasoning as
the explained motive for the intended attribute of the design.

Examples of cleanliness in station design include the use
of: the "uncluttering" of "C-stores" and "fast-food" stores
"doing away with the information overload;" a store where the
"emphasis on cleanliness and order is evident;" "clay" tile
which has "durability and appearance;" "plastic coated
paneling" which is "clean;" "face brick" and "wood shingles"
adapted for use because they are "clean" and "neatness
counts;" and "quick lube" "bays" with atrium enclosed waiting
rooms which are "tidy" and "plush."
Examples of convenience in station design include the use of: "canopies" which help to "get customers in and out of the elements" and "make it pleasant for them to pump their own gas;" goods which are "prominently displayed" giving "the impression of an orderly, well stocked store;" "enough room" at the "checkout counter;" a gasoline station restaurant with "ample parking for even the bulkiest of campers;" "consumer activated terminals" for credit card purchases at the pump is "speedy" and "convenient" to where customers "don't have to go into the kiosk or convenience store and wait in line" and customers "with children in the car find convenience;" "configurations" of the islands which "improve access" and "increase the flow of traffic and reduce the waiting period;" and a "store" placed "smack dab in the middle of a "typically big" lot which includes "two side entrances with checkout counters at each entrance" to "speed up traffic into and out of the store."

Examples of customary use or popular appeal in the documentation include the use of: "red, white, and blue" because it is "patriotic;" the inclusion of a bakery goods counter because of the "appeal" of "baked goods" "to the buying habits" of customers; the use of a "roadrunner logo" to "appeal to children" and which is "easily adapted to inside store promotions;" and the idea that "store size and product offerings" reflects a "company that is 'customer-driven' or sensitive to what the customers are buying today as opposed
to an operating mode where every week you simply replenish merchandise that customers are buying less frequently"

The documented descriptions which included culturally scrutinized ideals about the gasoline station's design included: the idea about a convenience store that "if it looks like a service station selling food, people may wonder if they are going to have a mechanic in there serving up bread,... its got to be a food store selling gasoline" and required the application of signage and colors which would be "successful in making both businesses compatible;" the poor "consumer acceptance" for "Stage II gasoline dispensing nozzles" whereby customers were said to "prefer purchasing gasoline at stations that do not have the... nozzles;" the introduction of an "automated convenience store" as a solution to the "time consuming" task "when you go to a C-store, get out of the car, find the item, pay for it and unlock the car;" and the problems associated with a "truckstop" "parking lot," possibly including prostitution and drugs, and recognition that "you have more women" truckdrivers as well as non-commercial consumers which are abandoning "older" truckstops "like rats leaving a ship."

Design uses which were justifiable through a developed connotative associational meaning to the image and function of retail gasoline dispensing were significant in number within this period and include the uses of: a "Mexican tile" "feature" which offered a "bit more cheesecake;" "self-serve
diesel and gasoline fuel centers on Interstate highways" with "convenience food stores, fast foods and a full-size deli" designed "for people who are in a hurry;" the marketer's quote- "you won't get chrome and glass from us, ... you're going to get first rate service and a lot of other personal intangibles;" "the design and layout of convenience stores which reflected the marketer's understanding that customers generally consider "convenience" "a premium value in today's busy world;" the idea that, in order to design a "cadillac" convenience store, one needs to have a "walk-in cooler, a double-duty oven, an electronic point of sale terminal, fast food seating, displays, grocery gondolas, cooler displays, fountain and slush drink machines, a microwave oven, and a food preparation area;" and the combined "brand strengths" of established marketing interests.

Two examples of the design element discriptions expressed the legal concerns for: "Stage II vapor recovery nozzles" and tanks for fuel dispensing which are required by law in certain municipalities for which fuel emissions and other causes of poor air quality are known problems and a "forty-foot" price sign which "according to local officials" was too "high" was appealed in court because "most of" the company's business at the station, by proof of accounting, came "from motorists passing through."

Design descriptions which were based upon scientific, statistical, or experimental reasoning were primarily focused
on the station site and the station product offerings, such as the use of: a "study of consumer trends" which discovered that "there's always going to be a substantial demand for conventional service stations;" a "retail restructuring program" for which "a special team makes a review of each station analyzing historic and long term potential gasoline sales;" and "evidence" which "points to the customer wanting fast foods at C-stores" and the knowledge that "government figures point to a steady growth in real personal income which translates to a growth in spending,... particularly on meals prepared outside of the home."

In the period between 1975 and 1990 the design of the gasoline station was primarily characterized by marketers' experiential application of its use. One-third of the article descriptions implied that the use of a station design element was to increase its visibility, similarity, or contextuality which, by assumption, was employed to increase the station's advertising value. Roughly, two-thirds of the articles made literal justification for the use of a particular design element through its cleanliness, convenience, popularity, legal interpretation, cultural scrutiny, connotative associational meaning to gasoline, or scientific, statistical, or experimental reasoning. The gasoline station's image and function between 1975 and 1990 became less significant than, and subservient to, the products and services it supported.

Within the documentation of this time period marketers
gave a considerable amount of attention to the consumer market. The amount of attention that was given to the experimentation of the product offered to consumers was evidence of the changing role of gasoline station architecture. To be competitive, marketers found the need to quickly interpret and respond to consumers' wants.

The intangible descriptions of station design within the documentation were primarily focused on the signage characteristics of station architecture. The design elements as a whole, including the canopy, pumps, and building, were graphically clad with honest, package-making design graphics. "Graphics," "brand image programs" and "image standards" became the most common vernacular topics in station design. No examples of landmark value were mentioned within the documentation; rather, station design became conceived as a hallmark for which some connotative meaning of genuineness could be conveyed. Such expressions as "quality" or "price value" were conveyed by the application of more simplified claddings. For example, "price competitive" marketers began to defend images of having "cheap gas" through the manipulation of colors and materials.

The gasoline station's design began to reflect a new attitude about change. Increased analytical understandings about consumers were being reflected through the usage of the site and the usage of the goods display. Station architecture became more stripped-down through the elimination of all
except that which was necessary to "feature" the product or service. The gondolas, coolers, shelving, and food machinery reflected the fixed image of the station as the use of the elements suggest an increased tentativeness of design.

The gasoline station during the period from 1975-1990 reflected the concepts of the "Advanced Marketing Period." Within this period, the newest concepts for the "socialization" of marketing allowed the design of the gasoline station to become fitted to the ever-improving requirements of a mobile society. The gasoline station is as ephemeral as the possibility that gasoline may become a commodity of the past. Modularity and flexibility in station layout has become a programmatic design requirement. Design must be sensitive to possibility of design obsolescence to meet the needs of a society which is increasingly sensitive to business. Appropriately, the station's package design characteristics are more honest and fitting to its formula.
Preface: Based on the content analysis of the "National Petroleum News," the "Findings" of Chapters IV, V, and VI have indicated that American gasoline station design has developed relative to the organizational strategies of firms which have competed in the American gasoline market. "National Petroleum News" data provides evidence, in design descriptions and illustrations, that station design has evolved through three periods of development due to the changing programmatic considerations for the station's use. The following "Results of the Study" elaborates upon those "Findings" of Chapters IV, V, and VI to show how one period of station design has transitioned into the next. Through a comparison of the three periods of development, certain topics are evident in the journal's literature which confirm that gasoline station design has played an increasingly integral role within the decision-making concepts of the oil industry.
Results of the Study

Industry-wide transitions in the application of gasoline station architectural elements have occurred relative in time to the marketing reconceptualizations of the "Sales Period," the "Early Marketing Period," and the "Advanced Marketing Period." In reference to the National Petroleum News documentation, three major topics demonstrate that these transitions are symptomatic of a rapid evolution of design experiences, reasoning, and applications of architectural design features, not a revolution of any singular design inspiration. First, the primary source of influence upon gasoline station design has shown a three-part development which relates to the organizational restructuring of firms within the oil industry. Through the N.P.N., various personalities have been recognized for their roles as station designer. References in the material of the journal to design influence include the gasoline consuming public, as consumer preference has impacted the marketing of gasoline. Additionally, the changing language of N.P.N. staff writers provides proof of the station's evolution. Secondly, analysis of the journal documentation shows periods of increased experimentation in station design, remodeling or modernization to occur as a result of increased levels of competition. These periods are indicative of the reconceptualizations of marketing and the growing value of gasoline station design to marketing efforts. Lastly, the individual components of
station design which have acquired a level of value, either artistically intangible or justifiable so as to yield some return on investment, have transitioned in intended meaning and use from one period to the next. Data indicates that the artistic applications of station design have developed, through repetitive use, exploitable, associational or connotative meanings. The considerations in the documentation of station design utility, such as through simplicity, economy, and flexibility, are symptomatic of the increasing modularity and changeability of station function and image.

The history of the gasoline station as a design typology should not be studied without an academic approach to analysis which includes the history of marketing. Recalling the general definition of marketing presented in Chapter III, those combinations of factors which are considered prior to the undertaking of certain selling or promotional activities have increasingly included station design. A key-word method of analysis proves useful in describing and illustrating the common elements of design which become evidence of the plastic, easily changeable nature of station architecture. The most commonly cited design elements -- auxiliary form, canopy, color, goods display, lighting, materials, pumps, signage, and site usage -- reveal the gasoline station's evolution through their implementation, testing, improvement, and reintroduction to the marketplace.
The Source of Influence on Gasoline Station Design:

The data of the *N.P.N.* indicates that the responsible sources for originating gasoline station designs have varied throughout the three periods of marketing. The journal has revealed to whom influential sources of station design are creditable and to what extent, in oil company activities, design influence was considered relevant to the programming of business functions.

The responsibility for station design, as reported in the *N.P.N.* for the years 1925, 1930, 1935, 1940, and 1945, was attributed to station owners or operators, individual professionals involved with the innovation of station design, large organized companies, and the common practices of the industry as a whole. Unique to the earliest years of this period's documentation, journal articles frequently related the ideas of individuals, including station owners and operators, who offered their individual interpretive artistic or architectural design expressions and solutions [reference auxiliary forms, 4/30/30 (105), 6/25/30 (89); color, 5/13/25 (101); canopy, 9/24/30 (188), 3/13/35 (85); goods display, 1/16/35 (38), 3/13/35 (48), 9/11/35 (35), 10/2/35 (34); lighting, 7/29/25 (57); material, 6/24/25 (120), 9/16/25 (69); signage, 9/24/30 (188), 3/13/35 (68); and site usage, 5/13/25 (101), 11/25/25 (92) 12/9/25 (30), 3/19/30 (104), 5/14/30 (85), 9/24/30 (188), 11/12/30 (217), 3/13/35 (48), 3/13/35 (85), 12/18/35 (48)]. Throughout the period, experienced and
educated professionals, such as industry engineers, architects, a color expert, sales experts, etc., were cited for their creative designs and design ideas [reference auxiliary form, 9/30/25 (44); canopy, 9/30/25 (44), 11/12/30 (217); color, 6/5/35 (62); goods display, 2/26/30 (33), 12/24/30 (59); lighting, 5/13/25 (133), 9/30/25 (44), 11/12/30 (217), 6/5/35 (69); material, 11/11/25 (128), 11/12/30 (217), 2/7/40 (26); pump, 4/1/25 (83), 11/12/30 (217); signage 11/12/30 (217), 3/6/40 (65); and site usage, 9/30/25 (44), 1/16/35 (28)]. As early as 1930, articles began to cite the claims of the larger, more organized companies which employed either outside design consultants or deferred to their own in-house designers [reference color, 3/19/30 (104), 6/5/35 (33); goods display, 12/24/30 (59), 9/26/45 (18), 10/24/45 (18); lighting, 3/19/30 (104), 6/5/35 (33), 10/24/45 (18); material, 3/19/30 (104), 4/2/30 (130), 6/5/35 (33), 3/6/40 (72), 9/26/45 (18), 10/24/45 (18); pumps 10/24/45 (18); signage, 9/10/30 (98); and site usage, 1/1/30 (19), 3/19/30 (104), 4/2/30 (130), 3/13/35 (50)]. Also, journal articles occasionally reported on the most common design practices of the industry as a whole [reference canopy, 9/30/25 (44), 3/19/30 (103); and color, 3/6/40 (65), 9/26/45 (18); goods display, 6/5/35 (33), 3/6/40 (65); lighting, 3/6/40 (65); material 3/19/30 (103), 8/13/30 (124), 3/13/35 (50), 3/6/40 (65); pumps, 6/5/35 (33); signage, 3/13/35 (50), 6/5/35 (33); and site usage, 3/19/30 (103), 3/19/30 (104), 3/6/40 (65)].
In the years 1950, 1955, 1960, 1965, 1970, *N.P.N.* articles show that the management of the more progressive oil companies emphasized marketing first and foremost among their decision-making commitments to gasoline sales. Gasoline station design emerged as the product of organizational efforts to market gasoline. A fewer number of the total design descriptions featured the input of individual station owners or operators than in the prior "Sales Period" in marketing [reference goods display 3/1/50 (39); signage 5/70 (82)]. Also, fewer of the journal's discussions featured the more general industry-wide practices of design [reference auxiliary forms, 11/1/50 (17), 7/70 (25); canopy 11/1/50 (17); goods display 3/29/50 (cover), 3/29/50 (26); lighting, 3/29/50 (26); material, 3/29/50 (26); signage, 11/70 (66)]. In place of the industry-wide discussions, which were typical of the first period of documentation, journal descriptions began to focus on what various factions of marketing were attempting, "collectively," through the use of station design. Discussions featured those developments which were common to companies engaged in price-competitive strategies, such as "jobbers" (gasoline wholesalers) or "unbranded" independent marketers [reference canopy, 11/55 (40), 6/60 (129), 2/65 (61); color, 5/70 (82), 6/70 (64); goods display, 5/24/50 (32), 5/70 (82); lighting, 11/55 (40); signage, 5/24/50 (32), 11/1/50 (17), 11/55 (40); and site usage, 4/5/50 (35), 6/28/50 (54), 11/55 (40), 10/60 (108), 7/65 (98), 10/65 (102), 1/70
or companies which were envolved in 
"quality-orientated" strategies of marketing such as "major" oil companies, "branded" dealers associated with major oil companies, and emerging large independent oil companies. The design influences of these large marketing organizations were commonly referenced in the journal to the work or vision of "oil company engineers" or outside manufacturing consultants

between 1970 and 1990, station design became more attributable to the goals and objectives of oil companies. All gasoline marketers, large and small, began to realize that their large commitments to consumers were often too contrived and fixed. Through the descriptions of the N.P.N., station
design reflected a new competitive effort by marketers to create, and experiment with, individual and selective sales goals. Fewer articles were devoted to what was typical of a group of marketers' particular modes of gasoline marketing. Unique to the articles of this period of journal issues, were the considerations of marketing research consulting organizations which generated statistical analyses (such as buyer behavior and demographic characteristics of consumers) and expanded the variety of station design influences [reference color, 11/90 (30), goods display, 3/80 (66), 7/85 (46), 10/90 (116); material, 7/85 (46); signage 3/80 (66), 11/90 (30); and site usage, 2/90 (15), 3/90 (36), 10/90 (116)]. Journal articles which discussed industry-wide efforts to affect station development, emphasized the diversification of the functional modes of gasoline distribution rather than discuss any new applications of station design [reference canopy, 11/90 (34); goods display, 6/75 (58); signage, 5/90 (30); and site usage, 5/90 (30)]. Diversification in design input is also evidenced through the introduction of convenience store and car wash businesses in addition to those of fast food and motel chains (which have been marketed for years along with the gasoline retailing business) [reference, goods display, 1/80 (44), 9/90 (56); signage, 3/85 (56), 11/85 (54), signage, 5/90 (30), 9/90 (56); and site usage, 11/85 (54), 5/90 (30), 12/90 (16)]. With respect to the larger oil companies ("majors" and large
independents), no collective tendencies specific to design
are noted in the documentation; rather, the tendencies to
perform a common retail practice are mentioned. The larger
companies endeavored to "exploit the draw of the car wash" on
the site or to offer convenience items that would "fit
customers tastes that have changed radically in the past
decade" [reference goods display, 7/75 (36), 3/85 (24); and
site usage, 3/85 (24), 6/85 (47), 7/90 (35)]. Most articles
featured the station design efforts of a particular company
without comparison to its competitors. Design personnel
within these firms have included, as one company offered
[reference color, 9/75 (31)], "analysts, architects,
engineers, and others" who worked together. Marketing
research included a firm's employees or outside research
consultants [reference auxiliary forms, 7/75 (36); color, 9/75
(31), 10/90 (42); goods display, 9/75 (31), 12/75 (52), 10/90
(42); material, 7/75 (36); pumps, 4/90 (28); signage, 9/75
(31), 11/85 (54), 1/90 (25), 9/90 (22), 10/90 (42); and site
usage, 9/75 (31), 11/80 (49), 11/85 (54), 3/90 (32), 7/90
(28), 9/90 (22), 10/90 (42)]. The tactics of the major oil
company-associated "branded" dealers and "jobbers" also
influenced the rapid developments in the industry. Through
their experimental contributions to station design and
development, these marketers envisioned and practiced means
to "tie-in" on the same site with "major" oil companies'
gasoline pump islands with their own supporting retail "profit
centers" [reference goods display, 7/90 (38), 6/75 (14); signage, 4/75 (21), 3/85 (56), 1/90 (42), 7/90 (38); and site usage, 9/80 (58), and 8/90 (27). The majority of articles in this period of history highlighted the efforts of "unbranded" independent oil marketers [reference auxiliary forms, 12/90 (85); canopy, 2/75 (14), 9/80 (60), 10/80 (75), 11/90 (34); color, 10/80 (75), 9/85 (44), 11/90 (30), 12/90 (35); goods display, 1/80 (44), 1/85 (42), 3/85 (46), 6/85 (51), 9/85 (44), 1/90 (42), 3/90 (26), 8/90 (39), 9/90 (21), 9/90 (56), 11/90 (30), 11/90 (40); lighting, 9/85 (44); material, 2/75 (14), 5/80 (49), 9/80 (60), 6/85 (51), 8/90 (39), 12/90 (85); pumps, 1/85 (42); signage, 10/80 (75), 9/85 (44), 8/90 (21), 9/90 (21), 9/90 (56), 11/90 (30), 11/90 (40)]. Only two articles suggested the collective practices of these marketers and neither were with respect to the specifics of station design. Rather, these articles revealed possibilities for the addition of photo processing and carwashing facilities to station sites [reference site usage, 4/80 (48) and 6/85 (47)].

Also relevant to the responsibility of design is the journal documentation of an emerging regard by station developers for consumer characteristics such as buying habits, demographics, and preferences. The effect of consumer preference was noted in the earliest years of the study but only in respect to the more artistic applications of station design as conveyed through the station's color and signage
The 1950–1970 period of journal analysis shows an increased attention by station developers to popular opinion and appeal. Station design was influenced by the general interpretations of consumer buying habits and beliefs [reference canopy, 11/1/50 (17), 11/55 (40), 2/65 (61), 3/70 (32), 10/70 (83); color, 3/29/50 (26), 10/60 (89), 6/70 (64), 7/70 (59); goods display, 5/60 (132), 5/70 (82), 4/60 (179); lighting, 11/1/50 (17); material, 3/29/50 (26), 3/55 (82); signage, 11/1/50 (17), 10/60 (89), 1/70 (62); and site usage, 4/5/50 (35), 6/28/50 (54), 10/18/50 (19), 11/1/50 (17), 10/55 (113), 2/60 (121), 10/60 (108), 6/70 (30)]. Station design was also influenced by consumers' negative feedback, including the issues of "aesthetic nuisance" and "visual pollution" [reference color, 1/70 (62), 7/70 (59); goods display, 7/65 (98); lighting 10/70 (83); material, 2/60 (28), 2/60 (121), 11/60 (123), 3/65 (121), 6/70 (82); pumps, 10/70 (83); signage, 8/60 (118), 10/60 (89), 12/60 (115), 8/70 (52), 11/70 (66); and site usage, 6/70 (82)]. In the latter period of study, data indicated that companies found the need to be less intuitive and more analytical in order to respond to a greater variety of business opportunities. Descriptions of station design began to reflect the commitment to the interpretation of consumer needs and consumer opinion through statistical facts [reference canopy 3/70 (32); color, 9/75 (31), 11/90 (30); 9/85 (44); most of goods display, signage
Also, the changing language of the *National Petroleum News* is suggestive of the evolving conceptualizations of marketing and changes to station design. Descriptions of station design, in those issues of the journal at the early part of the "Sales Period" (in the 1920s and early 1930s), tended to be elaborate [reference auxiliary forms, 11/11/25 (128)], flowery [reference site usage, 3/19/30 (103)], or fantastic [reference site usage 11/25/25 (92)]. Other descriptions were suggestive of the deep pride on the part of station operators as interpreted by *N.P.N.* journalists [reference auxiliary forms, 6/25/30 (89)]. Toward the end of the period (in the years 1940 and 1945) there was a noticeable drop in the number of articles related to station design. The journal concentrated its efforts on reporting the events of World War II which related to the industry. By the 1950s, the descriptions of gasoline station design were less intuitive and more factual on the part of the journal staff writers. The descriptions of station design were more carefully worded so as to not misrepresent the company's intentions [reference material, 3/29/50 (26)]. The journal began to include articles of editorial style which reflected the feedback of the general public [reference signage, 12/60 (115)]. In the *N.P.N.* articles since 1970, journal commentary has focused on
station design which has been more analytical and programmatic than intuitive and spontaneous [reference goods display, all articles from 1975 until 1990; color, 11/90 (30); material 8/90 (39); signage 9/75 (31); and site usage 6/85 (51), 2/90 (15)].

The Competitive Forces of Gasoline Station Design:

The evolution of station design is also reflected through periods of the N.P.N.'s documentation for which the subject of competition has increased. The periods of marketing reconceptualization are indicated in the journal's documentation through increased levels of gasoline station remodeling, modernization, and experimentation of site, buildings, and communicated image. The most abundant amount of material to suggest such periodic changes in design is introduced following the years of analysis of 1925, 1950, and 1970.

Articles in the years 1930 and 1935 focused upon "modern design" and "modernization" of existing gasoline station sites and buildings as well as the first progressive efforts to territorialize and standardize (isolate a company's brand name and image) through station design. The description of a "lease and agency" type of layout characterized the increased competition at the beginnings of the "Sales Period". The requirements for a "drive-in service station," according to the Standard Oil Company [reference site usage, 1/1/30 (19)],
included the standard components of building and pumps which would be necessary for all stations located throughout a territory. The race to secure valuable station locations was matched by a race to present goods and services to motorists in an appropriate and efficient way [reference goods display, 2/26/30 (33), 6/5/35 (33)]. Heightened competition was reflected through efficient layout of facilities as well as applications of design which would stress a modernistic "sales appeal." Station design received much attention as a means to compete for the motorist's attention, particularly through design that was "recognizable at a distance" and capable of "stopping whizzing motors" [reference auxiliary forms, 6/5/35 (33); canopy, 9/24/30 (188); color, 3/13/35 (50), 6/5/35 (33); material, 8/13/30 (124); pumps, 6/5/35 (33); signage, 9/24/30 (188), 3/13/35 (68), 6/5/35 (33); and site usage, 11/12/30 (217)]. Communication to the motorist was also revealed through journal articles which described the most "modern" aspects of station design. The "modernization" of station design became a surrogate indication to gasoline consumers of the offer of "quality" products and services [reference auxiliary form, 3/13/35 (35); canopy, 3/13/35 (85); color, 3/13/35 (50), 6/5/35 (62); goods display, 3/13/35 (35), 6/5/35 (33), 11/13/35 (51); material, 3/13/35 (35), 3/13/35 (50); signage, 3/13/35 (50), 3/13/35 (68); and site usage, 3/13/35 (50)]. Modern design also accentuated the display of goods through more efficient placement of sales items. Competition
for display visibility was enhanced also through the introduction of large areas of glass permitted by the use of light steel framing [goods display, 3/13/35 (48), 3/13/35 (50)]. The adoption of light steel framing also encouraged experimentation with new station cladding materials. These innovations had the further advantages of increased washability, or cleanliness, durability, and fostered the ease of station construction [reference material, 8/13/30 (124), 11/12/30 (217), 3/13/35 (50), 6/5/35 (33)]. An increase in experimentation with station layout revealed an emphasis on the attributes of design which would best convenience motorists [lighting, 11/12/30 (217); pumps, 11/12/30 (217); site usage, 3/19/30 (103), 3/19/30 (104), 5/14/30 (85), 1/16/35 (28), 3/13/35 (35), 3/13/35 (85)]. Station design descriptions within the journal in the years 1940 and 1945 merely revealed further refinements of the above design practices. One article at the end of the period, "Service Stations of the Era of Increased Competition," was predictive of a new post-war mode of station design which would come in response to a forecasted increase in demand for gasoline [reference canopy, goods display, and materials, 9/26/45 (18)]. It was suggested that the current trend in station design would be continued and accentuated through an increased attention to "the travelling public."

In the twenty-five years following 1930, gasoline station design accentuated the "quality" aspects of the sale of goods
and services. By 1950, articles in the journal began to report on the widespread practice (growing out of the West) of "price-competitive" modes of retailing which challenged the prevailing trend of "quality." Likewise, innovations in gasoline station design were inspired through the notion of an increasing demand for gasoline. The "multi-pump" type of retail gasoline distributing operation, cited in several 1950 and 1955 issues of the journal, accentuated the sale of gasoline on a volume basis by providing more pumps, reducing the cost-per-gallon for operating the outlet, and hence, allowing the sale of gasoline at lower price. Simultaneously, marketers began to experiment more widely with "self-service" gasoline dispensing which reduced the cost of labor as an additional means to reduce the cost-per-gallon of gasoline sold. No radical changes in design were introduced along with "price-competitive" stations, but rather, journal articles described how the canopy, goods display, lighting, signage, and site layout were accentuated as a means to communicate better convenience and lower price of operation to gasoline buying consumers. The "multi-pump" (eight or more pumps) became contrasted to the "conventional" type of station layout which typically featured two to four pumps and tended to focus on the sale of T.B.A. and automobile service rather than gasoline. In comparison, the "multi-pump" gave the "appearance of bigness" through its canopy, signage, and its "broad expanse" of site in order to focus the motorist's
attention on the pump island [reference canopy, 11/1/50 (17), 11/55 (40); goods display, 5/24/50 (32); lighting, 11/1/50 (17), 11/55 (40); signage, 11/1/50 (17), 11/55 (40); and site usage, 4/5/50 (35), 6/28/50 (54), 11/1/50 (17)]. The multipump's design features provided such a competitive advantage that many marketers of "conventional" stations located near to the new stations quickly responded by emulating some of their design characteristics [reference auxiliary forms, 11/1/50 (17); goods display, 5/60 (132); signage, 1/60 (107), 8/60 (118); and site usage, 8/23/50 (cover), 10/18/50 (19), 10/55 (113), 10/60 (140)]. As price-competition grew, companies which competed through a "quality-oriented" mode of gasoline sales further stressed the functional and image communicating characteristics of their station designs [reference color, 11/55 (37); goods display, 3/29/50 (26); lighting, 4/12/50 (38) 4/60 (179); material, 3/55 (82), 1/60 (107), 2/60 (121), 3/60 (132); signage, 11/55 (37), 10/60 (89); and site usage, 1/60 (121), 2/60 (121)]. In the 1970 issue of the N.P.N., a new phase of station remodeling was indicated as common practice throughout the oil industry [reference auxiliary forms, 1/70 (36), 7/70 (25); material, 6/70 (82); and site usage, 6/70 (82)]. Station designers began to search for quick and cost effective means to upgrade existing properties. Changing the image of existing station properties through material or painted graphics became common practice [reference color, 5/70 (82), 6/70 (64); and material,
General experimentations in the station site were featured through the concept of "cleaning up the pump island" [reference pumps 6/70 (90), 10/70 (83)] and through the evaluation of the effects of the canopy by a wide range of marketers [reference canopy, 1/70 (36), 3/70 (32), 10/70 (83)]. Foremost, journal articles began to profile the experimentations of individual oil companies for new product and service offerings, or "tie-ins" to gasoline sales [reference goods display, 5/70 (82) and site usage, 5/70 (82), 6/70 (30)].

By 1975, station "rehabilitation," or adaptive reuse, became a commonly quoted theme of gasoline station journal articles. The transition toward the "Advanced Marketing Period" was visible through the "rehabilitation" of "conventional" station properties in the 1970s primarily based upon large-scale quests by competing marketers for new profit-making "tie-ins" to self-service gasoline dispensing. Through the journal's documentation, the gasoline station's image and function was most evidently linked to a pursuit of knowledge about the characteristics and habits of gasoline consumers (among other combinations of factors which were considered in addition to promotional activities in order to expand business opportunities) [reference auxiliary form, 7/75 (36); color, 9/75 (31); goods display, 6/75 (58), 7/75 (36), 9/75 (31), 12/75 (52), 1/80 (44); material, 7/75 (36); signage, 9/75 (31); and site usage, 9/75 (31), 4/80 (48), 8/80]
The articles of the N.P.N. in 1980, 1985, and 1990 have reported a relatively large amount of new station design. Articles have generally featured case study examples of design in the areas of "goods display" and "site usage" as marketers have concentrated their experimentation and innovation on products and services.

The Interpretation of Value in Gasoline Station Design:

The evolution of station design according to changing marketing conceptualizations is reflected through the articles of the National Petroleum News in a third respect. Within the documentation data, the relative value, tangible or intangible, of particular gasoline station design applications show evidence of a transition through the three periods suggested by the study. In this section of the "Results of the Study" the development of the gasoline station's site is demonstrated through the topic of value. The N.P.N. documentation indicates that the tangible values of station design, such as those incorporated through the considerations of simplicity, economy, flexibility, cleanliness, durability, ease of construction, and convenience of use, are shown to affect the configuration of the station's site as a transitional consequence. In addition, the journal's data indicates (as documented in canopy, color, signage, and site usage) that the layout of the site was also influenced by certain artistic applications which have been adopted in
station design practice as motivated through some acquired exploitation, connotation, or associational architectural meaning.

The general design and layout of the gasoline station site has transitioned with respect to certain tangible values. During the 1925-1945 period of journal documentation, the stations spatial layout was derived from the requirements of ease of access and maneuvering for an automobile, efficiency of operation, proximity of profit-making elements (pumps to sales window to lubritorium), simplicity of spatial form, and demand for no wasted space [reference site usage, 3/13/35 (50), 3/6/40 (33), 3/6/40 (65)]. Through these design considerations, the station's building and site layout progressed toward a more perfect relationship of form and space.

During the 1950-1970 period of documentation, few requirements were cited which changed the station building's functional mold. Two spatial configurations were noted to evolve out of this period of station design based upon the relative profit-making objectives of a company. Extreme examples of these objectives were suggested through the journal documentation. "Quality-oriented" companies attempted to focus the consumer's attention toward the station building through the manipulation of the sales room and lube bays, and newer, "price-competitive" companies emphasized the pump island. The spatial arrangement of the "conventional" station
building became more fixed. Two additions to the arrangement of the "conventional" noted in the journal were primarily psychological "quality-oriented" associational objectives: the elimination of the partition between the office and lube bay to increase the sales appeal of both operations and the addition of waiting rooms and patios to convenience motorists who might wait on service [reference site usage, 1/60 (107), 2/60 (121), 10/60 (140), 7/65 (98)]. On the contrary, the "price-competitive" outlet included the use of large expansive driveway spaces, small out-of-the-way buildings, eight or more pump islands, and often incorporated huge soaring canopies to concentrate motorists' attention toward the pump island. Journal articles defined the connotative meaning of these "large, open, easy-to-drive-into" station sites and suggested their ability to express "volume-oriented-savings" to motorists [reference canopy, 11/55 (40), 6/60 (129); and site usage, 4/5/50 (35), 10/18/50 (19), 10/60 (140)]. These stations exploited the idea that "people are in more of a hurry than ever" or that people "think they are in a hurry" and suggested that the "appearance of open space" was needed, "not necessarily a lot of actual footage" [reference site usage, 11/1/50 (17), 10/60 (140)].

During the period between 1970 and 1990, the configuration of the station site became further divided and characteristic of a variety of possible business opportunities or "tie-ins" to gasoline. Flexibility of business
opportunities (motivated by increased sensitivities to consumer's needs) translated into a flexibility of site and layout [reference site usage, 5/70 (82), 6/70 (30)]. Rather than focusing the attention of motorists exclusively toward a particular profitable aspect of the site (to the possible detriment of another), the focus of motorists' attention was directed toward individual, but equitable (in image, accessibility, convenience, etc.), profit centers [reference site usage, 4/80 (48), 8/80 (53)]. The "convenience store," "food store," or "island marketer," were the most quoted forms of "tie-ins" to gasoline sales. Station configurations were often qualified by the degree of designed individuality versus equitability of the various "profit centers" on the site. The documentation suggested that station designs differed in respect to how companies marketed -- through either "a gasoline station selling convenience goods" or "a convenience store selling gasoline" architectural image [reference color, 9/75 (31); signage, 9/75 (31), 10/90 (42), 11/90 (30); and site usage, 9/75 (31), 3/85 (46), 10/90 (116), 11/90 (30), 12/90 (16)]. The location of the gasoline station's site features became "compartmentalized," as a part of the rationale to divide the station's individual "profit centers." As presented in the documentation, a typical configuration of the gasoline station, including separate pump islands, "C-store," "car wash" and/or "quick lube," has been devised on the site as component pieces reflecting the possibility for
the design obsolescence of any one particular structure. The gasoline stations site has evolved in direct consequence to the characteristics and habits of oil marketing.

The *National Petroleum News* content analysis which has been generated through this thesis study has suggested that gasoline station design history since 1930 has evolved according to the periodic reconceptualizations of business. A general understanding of the transitional nature of this evolution has been generated through three topics: the source of design influence, when design reflected the competitive motivations and experimentations of those who influenced designed, and how the value of design was interpreted through the motivations of those who designed.

The ability to change and adapt to market influences from one period to the next has marked the progressive development of the oil industry's companies as well as the evolution of the gasoline station's architecture.
Because of the gasoline station's pervasive image in modern American society, its architectural expression has affected the nation's broad patterns of periodic social development. Clues to the reciprocal relationship of architecture and society have been described by scholars and historians representing areas outside the field of design. The most consistently reported aspect of influence on station design offered by historians was that of its social relevance, particularly in reference to marketing.\(^1\) As indicated through published historical research in the 1970s from a social geographer, an industrial archaeologist, and an architectural preservationist, the gasoline station's architectural history has developed in two parts, divided around 1930 when the organized efforts of corporate marketing began to more heavily influence station design. The architecture of early station design was best explained through the text of preservationist Daniel Vieyra who traced the particular design theories (domestic, exotic, and fantastic) which influenced gasoline station designers. Vieyra pointed out that the corporate oil industry increased its control on the design of the station

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and noted that its architecture became less traceable to any particular design theory. The gasoline station's design after 1930 was best explained through the studies of Bruce Lohof and John Jakle who realized that its most typical examples were also the most relevant to modern history. Their works provide an increased level of understanding about what was typical and what was atypical at different places and at different times. Without these studies, the ability to appreciate the station's more recent imagery would be diminished. Because of them, this thesis was realized.

These prior studies were representative of the spirit of the 1970s in that their contexts and preservational justifications reflected the "sensitivity" of the time to the American everyday situation of oil, automobiles, and roads. As they wrote, the popular conception of the service station (for which they tagged the "oblong box") was decreasing in number by approximately 10,000 stations per year.

From the historical documentations of these prior historians it was rationalized that the design history of the gasoline station has been more than a two-part history. Rather, their histories have suggested that station architecture has evolved, since 1930, through broadening social awareness and expanding possibilities for social progress. Research into the history of marketing thought has revealed an expanding awareness to the complex issues of society. Hence, the history of the gasoline station was
reasoned to parallel the history of marketing thought in terms of this social reasoning. This thesis study has investigated the nature of corporate marketing and formulated a method of study to interpret gasoline station architecture since 1930.

The *National Petroleum News*, a widely distributed source of reference for innovative gasoline station design development since 1907, was adopted as the source for thesis study. The selection of the journal proved reasonable because, through its frequency of reporting, sufficient information was available for a content analysis of station design. The five-year increment of content analysis was sufficient for the development of data revealing the descriptive developments of station design history. Through reporting the most progressive station design solutions, the concepts and practices of marketing were shown to be transformed into vernacular expressions and molded into the programmatic guidelines of station design. The *N.P.N.* has consistently motivated the competition of oil marketing through its ability to give relevant information. Station design emulation, an important competitive strategy of marketing, has been greatly influenced through the journal's reporting. Also, through the reporting of trends and developments in the industry, innovative marketers have gained the ability to discover alternative niches in the oil market.

This study has provided a new level of understanding about the history of gasoline station architecture; yet, the
study scope and methodology may be applied to the study of other building typologies. The generalized findings which have been reflected through marketings influence on gasoline station design could be considered in comparison and in contrast to other examples of commercial architecture and in lesser respect to the development of non-commercial typologies. Has American marketing had such widespread impact on our lives that it may perhaps circuitously effect the designs "we" produce? For example, one could analyze the extent to which architectural journals of the twentieth century have given rise to the practice of design emulation? Has the "mechanism of communication" of these journals encouraged American architecture to become more responsive to change; is it more simplistic, economical and flexible or more vernacular through the communication of design in the modern architectural profession? And if so, do the vernacular influences of other architectural typologies suggest a progression or evolution in concept as does the gasoline station? The preservational and architectural nominations of gasoline stations constructed after 1925 may be better supported if the findings of this thesis are tested in relation to other commercial and non-commercial buildings. How do other building typologies parallel the "broad patterns of American history?"

It is possible to study the gasoline station as an architectural package, but one also must consider the station
as a structure (or group of structures) that must respond to
the context of its location. The evolution of gasoline
station design fits the criteria for the design of product
packaging; wherein "...we massage objects of necessity, into
pleasing, easy, and cheap-to-produce forms."\(^2\) The vernacular
"we," meaning who designed and the particular influence of
their design, is key to the ability to read this type of
architecture. Like a package it will continue to evolve
because of changing expectations of the product it supports.
The architecture of the gasoline station has evolved through
its societal role. Consider the findings of this study to the
words of K. Lonberg-Holm, who in 1930 professed:

> The architectural merit, i.e., the plastic value of
a community, depends on the easily perceived
differentiation between the basic functions... The
home, the school, the city hall, and the filling
station should be clearly recognized... a clearly
formulated program and rational use of material,
form and color."\(^3\)

Since 1930, the gasoline station has experienced a rapid
development devoid of the significant influences of individual
architects. The station's evolutionary history is suggestive
of an architectural lesson to society which can only be
interpreted with regard to the competitive practices of
marketing. Its value to society is most appropriate when its

\(^2\)From Alan Balfour, "On the Characterics and Beliefs of
the Architect," unpublished seminar paper, (Georgia Institute
of Technology, 1987).

\(^3\)K. Lonberg-Holm, "The Gasoline Filling Station,"
Architectural Record 67(6), June 1930, pp. 563-564.
product and service are clearly featured and easily adapted to progress (see Figure 7.1).

Figure 7.1 A Late 1920s Gasoline Station Design which, as described by K. Lonberg-Holm, reflected a clear understanding of the vernacular, "light, easily erected structures,... rational use of materials,... a good solution of the specific problem--far surpassing any superficial 'architectural styling'."
Appendices


"Figure(s)" "A.(reference number)" "design element description; "month/day/year (page number)" description"
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Indian Village
To Grow
Around Station

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The Modern Service Station

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Permanent Signs That Sell!
And Their Brilliance Never Fades

Flat against the wall or hanging over the door, in racks on the sidewalk—wherever you find filling station space in range of “buying vision” you find Balto Porcelain Enamel Signs, selling gasoline and oil for companies who realize that a permanent investment pays.

The vivid coloring of Balto Signs, the glass-like surface of unequalled brilliancy, burns the story of your products into the vision of the passing motorist. He stops and buys; and that is why nearly a hundred of the largest oil companies in the country, for the last link in their selling program, use Balto Signs.

Porcelain, fused into heavy sheet steel at white heat, wears year after year, with undimmed lustre, Balto Signs sell your product. And over the years they cost less than any other signs.

Call our New York or Baltimore office today.

THE BALTIMORE ENAMEL & NOVELTY CO.
Permanent Advertising Signs
New York, 200 Fifth Avenue
Mt. Winans, Baltimore

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V IS I B L E   P U M P S

—leader in HOSE END CONTROL with its sales of LARGER GALLONAGE

One Model
Three Types
Three Sizes

Hayes Equipment Manufacturing Co.

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This Service Station Seeks Patronage

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Self Service

Newest Wrinkle in Indiana's Ruffled Market

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WHERE YOUR
Large Storage Buying Full Transport Loads — Cash On The Barrel
Distributing Expenses Laughing Gas Was
60 Per Eq. At Distributors' Prices Less Expenditure. And Profits
Because Our Customers Laughed At Those With
Laughing Gas & Its Price Pias—Tell Your
Management
Farmer
For The Same Gas Under Other Brands

(Not Tell Us Thanks A Million

\$\$\$

Your Policy For Over 20 Years
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NEW: Modular displays group products in sets of six on wall pegboard, let manager make quick visual check.

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"Mr. Up" restaurant was built on top of Shell station as experiment for planned nationwide restaurant chain—Tustin, California.
The chairman was impressed. Swooping in on one of his key markets, he had been given a tour. He liked what he had seen.

"Nice stations," he said to his marketers. "But that brick colonial brick isn't cheap. What corners did you have to cut to stay in budget?"

"Didn't cut any, chief," said his marketing manager. "That's not real brick, it's fiber glass. Comes in sheets like wallboard.

"In real brick that station would have cost $3,000 more than it did."

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Figures B.44a,b Materials 10/70 (83) "Space age" materials touted for low cost and high image
Figure B.45  Pumps 6/70 (90) Dispenser prototype for two gasoline grades, 7-Eleven convenience stores, Southland

Figure B.46  Pumps 10/70 (83) Mailbox pump--dispensers mounted thirty inches off the ground--Sohio, Cleveland, Ohio.

Figure B.47  Pumps 10/70 (83) Japanese entrepreneur aspired but failed to sell his overhead-mounted dispensers--fire safety was the alleged problem. Hiyoshi Tatsuno
Figure B.48 Signage 5/24/50 (32) Tires were probably the most popular item after gasoline and motor oil at self-service stations. With 24-hour service, the station lot was utilized for this display.
Figures B.49a,b  Signage  2/60 (28) Port of New York Authority's regulations for signage limited what Gulf Oil Co. could design.

Figure B.50  Signage  8/60 (118) Industrial designer Raymond Loewy improved graphic color and appearance of signage as part of Shell Oil Company's corporate identity.
Figures B.51a,b,c Signage 8/70 (52) Ordered system of planned merchandising utilized flexible site signage—Mobil Oil Company
Figure B.52 Signage 10/70 (83) Mobil used fluorescent facade lighting and round island fixtures to bolster its "Pegasus" look—design of Eliot Noyes
The "capsule" shape is unique, says Russ Sandgren, of Sandgren & Murtha, specialists in the corporate-identity business and commissioned by Conoco to handle the design. It is "distinctive and offers a visual change of pace," he said.

Figure B.53 Signage 10/70 (54) Conoco emulated the brand name change of other firms.

Figure B.54 Signage 11/70 (66) New materials and methods of fastening displays help to keep point of purchase signage from being "visual pollution."
Figure B.55 Site Usage 4/5/50 (35) Multi-pump station with control tower. While gasoline was dispensed by attendants, the driver could perform vacuuming, windshield cleaning, radiator filling, etc.—Houston Petroleum Co., Linden, NJ
Figure B.56 Site Usage 6/28/50 (54) Perpendicular service station layout eliminated the need for cars to enter or leave station at a flat angle over sidewalk.
Figure B.57 Site Usage 8/23/50 (cover) This conventional station turned to multi-pump to meet challenge from invading big stations in the area.

Figure B.58 Site Usage 10/18/50 (19) Private brand, multi-pump, one-stop, self-service station switched to full service—Tide Water Associated, Pasadena, California.
Figure B.59 Site Usage 10/18/50 (19) Twin multi-pump stations on each side of highway. Pumps placed at 45 degree angle to the arterial—Redwood Stations, Richardson Bay, CA

Figure B.60 Site Usage 10/18/50 (19) Cashier’s booth located central to two groups of pumps at self-service station—El Cerrito, California
Figure B.61 Site Usage 11/1/50 (17) Umbrella under which woman cashiers sit near pump islands; cashier with arm in air signaling lube man to check oil in car; air, water available; car on lift for lubrication
SPACIOUS pump area at station cuts back-up of traffic. To speed service, only gasoline is sold at the islands.

CANOPIED service stop provides water and battery check, windshield cleaning, motor oil fills and oil change.

PAYMENT is made at cashiers' booths strung across exit driveway. All purchases are recorded on a single slip.

Figures B.62a,b,c Site Usage 10/55 (113) "Supermarket" site usage was tested by Texaco—Los Angeles, California
Figure B.63  Site Usage 6/65 (88)  Chain drag automatic customers expected to attract most of the customers
Figure B.64  Site Usage 7/65 (98)  Relocated stations and islands on site to accentuate T.B.A. display
Figure B.65 Site Usage 6/70 (60) Dual lane fueling and car wash facility--operating on the premise that consumers preferred full service car wash, pioneer in field built largest in the East--Constan, Columbia, South Carolina
Appendix C
N.P.N. Illustrations 1950-1970
Pages C-1 Through C-33
Figure C.1 Auxiliary Forms 7/75 (36) Station rehabilitations for Sunoco and Amoco Oil Companies subdued contemporary designs where this style blends in better with the neighborhood, mansard applied

Figure C.2 Auxiliary Forms 7/75 (36) Gulf Stations also converted to self-service; mansard applied
Figure C.3  Auxiliary Forms  12/90 (85) Small town marketer presented "general store or country-style appearance" on store building located behind on the lot from a more modern imaged canopy
Figure C.4 Canopy 2/75 (14) Translucent fiberglass in canopy roofs
Figure C.5 Canopy 9/80 (60) Typical Giant pumper is immediately identifiable by huge, freestanding canopy
Checker Oil Company bought 250 stations and converted them cheaply, using unified graphics. Repair bays were converted into "Chek-Marts." Company also converted to self-service, adopting a new layout which consolidated all the gasoline pumps into one traffic pattern.
Figure C.7 Canopy 11/90 (34) "Hallmark" of commercial cardlock facilities
New Look at Arco

Atlantic Richfield's move to develop ancillary businesses at certain retail outlets (NPN—May p9) is now in the field-test stage. Included in the mix are convenience stores, auto discount outlets, and food snack operations, all with self-serve.

Two of Arco's test units are located in Allentown, Pa. Auto discount store (top left) was converted from conventional station to carry items geared to do-it-yourselfers (top right). Convenience outlet (left) is a new structure, with $15,000 to $20,000 in grocery inventory (right) and two self-serve islands (below). (For more on Arco's new marketing directions, see next month's NPN.)

Figure C.8 Color 9/75 (31) Arco tested marketing mix -- Allentown Pennsylvania
Figure C.9 Color 10/80 (75) Canopy conceptualized as major unifying symbol at Cheker Oil outlets. Stations, many of which were acquired from other companies, formerly had a variety of signage.
Figure C.10  Color 10/90 (42) Texaco's "historic" red and black colors
Figure C.11 Goods Display 6/75 (58) Renewed interest in tire sales made use of tire racks in sales room and in front of lube bays—Texaco, Los Angeles, California

Figure C.12 Goods Display 6/75 (58) Tire store was created by enclosing the underside of less profitable canopy—Union Oil of California, Los Angeles
Figures C.13a,b  Goods Display  1/80 (44)  Junior Food Mart added fast food to its stores by cutting duplications and slow moving convenience items
Choosing to restructure retail properties and to shed full-service image, Chevron U.S.A. overhauled 12,000 service stations; substituted profit centers—"mini-marts," "maxi-marts," "island marketers."

"...projecting a low price image is a big part of Pilot's game plan"
Figure C.16 Goods Display 3/85 (46) Pilot had no intention of being a complete C-store—instead promoted items "for people who are in a hurry"—Knoxville, Tennessee
Figures C.17a, b, c Goods Display 7/85 (46) C-store and fast food—constant promotion, inside and out. Seating was added to accommodate deli fast food customers. Fast-food operation within C-store was designed with a separate, distinct image from rest of store—S & S Petroleum, Union Oil jobber, Lincolnshire, Illinois
Figure C.18 Goods Display 9/85 (44) Backlit Roadrunner logo and eighteen mercury vapor floodlamps
Figure C.19 Goods Display 3/90 (26) Rather than an operational, marketer took "consumer-driven and sensitive" viewpoint to design store size and product offerings
Figure C.20  Goods Display 9/90 (56) Casey's "tight" design for display space considers anything a customer in a small town might want.

Figure C.21  Goods Display 10/90 (42) Trying to break away from the cookie-cutter mold that characterizes most major chains Texaco introduced the "Star Mart," image C-store.
Figure C.22 Goods Display 11/90 (40) Offering at C-stores included self-serve fountain drinks and fast food with sit down eating areas depending on certain market characteristics
Figure C.23 Materials 6/75 (14) Clay tile extra for its durability and appearance—Fina jobber, Thomas McLernon, Wichita, KS

Figure C.24 Materials 5/80 (49) The canopy was given a large cornice and store building a similar but smaller cornice. The fascia panel replaced the mansard roof form
Figure C.25 Materials 9/80 (60) Giant created small under-canopy C-stores called "Goodies," Mexican tile added "a bit more cheesecake"-- Giant Industries, Inc., Phoenix, Arizona Figure C.26 Materials 6/85 (51) Food-N-Fuel's C-store prototype was 2,400-sq.ft. prototype with space for three retail tenants, the exterior was clean face brick with wood shingle mansard
Satellite hookups may make POS transactions cheaper and faster. Today's technology can already send a credit verification from the gasoline station to a transmission point (where information is turned into television waves) and sent via satellite to a bank's file for authorization, and then back again.

Figure C.27a,b Pumps 4/90 (28) Speedy, customers with children in the car conveienced
Figure C.28 Pumps 8/90 (34) Stage II pump nozzles said to have negative consumer acceptance
Figures C.29a,b Signage 4/75 (21) In its transition from Gulf Oil jobber to private-brand marketing, Red Triangle's new brand sign retained familiar Gulf orange/white colors, but substituted red triangle for blue Gulf logo.
Figure C.30 Signage 3/85 (56) Dawn Donut Systems prototype design for gasoline tie-in--Flint, Michigan
Figure C.31 Signage 1/90 (25) "Highly successful" brand image allowance program
Figure C.32 Signage 1/90 (42) New graphics, canopy, pump wraps, and internally-lit signage

Figure C.33 Signage 1/90 (42) "We market under the best flag to fly in a given area"
Figure C.34 Signage 5/90 (30) Pilot, combining brand images with a national recognized chain
Figure C.35 Signage 11/90 (40) "High-profile" independent used a national name "Avis" to add a quick lube service
Figure C.36 Site usage 4/80 (48) As most independents have had larger lots, film processing helped real estate pay out--East Coast Oil Corporation, Richmond, Virginia

Figure C.37 Site usage 9/80 (58) "Forward Plaza," located on major tourist routes, consisted of split island pumper under huge canopy, dining areas and C-store/impulse shop--Standish, Michigan
Figures C.38a,b  Site Usage 11/80 (49) "Quick Lube" phenomenon created specialized field for car service competitors of oil companies to get away from the stigma or the psychological deficit of the gasoline service station. Figure C.39 Site Usage 2/85 (21) Conveyor-driven store Quickway gasoline/C-store, Edmond, Oklahoma
Figure C.40 Site Usage 6/85 (47) Tie-ins have been common—40% of Texaco’s System 2000 outlets used both washes and C-stores. Each profit centers stood on its own but was integrated in design for economy, simplicity, and flexibility.
Neatness counts at Food-N-Fuel. Everything is clean and in order both inside and out.

Figure C.41a,b Site Usage 6/85 (51) Food-N-Fuel wanted the ability to change if it was justified.
Figure C.42  Site Usage  11/85 (56)  Combined brand-image strength—Citgo and 7-Eleven—full scale C-stores; the number of pumps was determined by locational analysis—Southland Corporation
Figure C.43 Site Usage 2/90 (15) Security enclosure said to be unobtrusive, and not convey the image of crime.

Figure C.44 Site Usage 3/90 (32) Unocal considers car service to be a niche in the market.
Figure C.45 Site Usage 5/90 (30) Truckstops said to be cleaning up their images by catering to a wider spectrum of the traveling public
Figure C.46a,b Site Usage 7/90 (28) "Plush, architecturally stylish" C-store/gasoline complex with a "traditional" canopy, two island, 12 hoses, service bays, an 1,800-ft. C-store and a car wash
Figure C.47 Site Usage 8/90 (27) Unattended self service, described as "a very simple process"
Bibliography


"Service Station is Hung from Masts to Minimize Foundations and Costs, Bertrand Goldberg Station" *Architectural Forum*, 84(3) (March 1946):115.


