

1993

PG&E from brown to blue : a study of logo color, contrast, and design

Susan Deslaurier Olofson
San Jose State University

Follow this and additional works at: https://scholarworks.sjsu.edu/etd_theses

Recommended Citation

Olofson, Susan Deslaurier, "PG&E from brown to blue : a study of logo color, contrast, and design" (1993). *Master's Theses*. 638.
DOI: <https://doi.org/10.31979/etd.s87d-bqhs>
https://scholarworks.sjsu.edu/etd_theses/638

This Thesis is brought to you for free and open access by the Master's Theses and Graduate Research at SJSU ScholarWorks. It has been accepted for inclusion in Master's Theses by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

U·M·I

University Microfilms International
A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313:761-4700 800:521-0600

Order Number 1354153

PG&E from brown to blue: A study of logo color, contrast, and design

Olofson, Susan Deslaurier, M.S.

San Jose State University, 1993

U·M·I

300 N. Zeeb Rd.
Ann Arbor, MI 48106

PG&E FROM BROWN TO BLUE:
A STUDY OF LOGO COLOR, CONTRAST, AND DESIGN

A Thesis

Presented to

The Faculty of the School of Journalism and Mass Communications
San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Susan Deslaurier Olofson

August, 1993

APPROVED FOR THE SCHOOL OF
JOURNALISM AND MASS COMMUNICATIONS

Dennis L. Wilcox

Dr. Dennis L. Wilcox

William Tillinghast

Dr. William Tillinghast

Laurie Mason

Dr. Laurie Mason

APPROVED FOR THE UNIVERSITY

Serena G. Stanford

ABSTRACT

PG&E FROM BROWN TO BLUE: A STUDY OF LOGO COLOR, CONTRAST, AND DESIGN

by Susan Deslaurier Olofson

This thesis examines the effects of color, contrast, and design as implemented in the 1988 PG&E logo change. This study sought to test how logo design and color affect the image of the company represented. An experiment testing public perception of PG&E based on elements of the old and new logos is presented. San Jose State University students examined logo variations and completed a questionnaire regarding attributes that PG&E desired for its image. Support was found for: (1) the concept that logo design and color affect the perception of a company, (2) the relationship between elements of a logo and attributes, and (3) the hypothesis that the new logo more strongly represented PG&E's expectations than did the old. Viewers of the new logo perceived PG&E as a more dependable, modern, reliable, powerful, strong, progressive, friendly provider of quality service that takes advantage of new technology.

ACKNOWLEDGEMENTS

I wish to thank Dr. Dennis Wilcox and Dr. William Tillinghast for their dedicated advisement throughout this thesis project. My special appreciation is extended to Dr. Laurie Mason, without whose editorial, statistical, and motivational expertise this work would not have been completed.

Also, I wish to thank my parents, whose example of ambition and hard work has laid the foundation for any success I enjoy. Finally, my husband, Erik, and our daughters, Lauren and Lindsay, are greatly appreciated for providing confidence and daily encouragement in helping me obtain this important milestone in my life.

TABLE OF CONTENTS

LIST OF TABLES.....	vi
LIST OF FIGURES.....	viii
I INTRODUCTION.....	1
II. LITERATURE REVIEW.....	2
Corporate Image and Corporate Identity.....	2
PG&E's Story.....	8
Change 1: Design.....	15
Change 2: Color.....	16
Change 3: Contrast.....	19
III. RESEARCH METHODOLOGY.....	21
Sample Frame.....	21
Measuring Variables.....	23
Predictions.....	24
IV. RESULTS.....	27
IV. CONCLUSIONS & SUMMARY.....	54
References.....	61
Appendices.....	62
Appendix A: Logo Samples.....	62
Appendix B: Questionnaire Cover Letter.....	64
Appendix C: Questionnaire.....	65

LIST OF TABLES

Table 1. Design of PG&E logo as it effects viewer perception: Results of ANOVA analysis of variation in logo elements.....	28
Table 2. Dependability as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements.....	30
Table 3. Quality Service as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements.....	31
Table 4. Cost Consciousness as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	32
Table 5. Efficiency as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	33
Table 6. Power as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	35
Table 7. Strength as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	36
Table 8. Caring for Customers as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	37
Table 9. Friendliness as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	38
Table 10. Favorability overall as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	40
Table 11. Color of PG&E logo as it effects viewer perception: Results of ANOVA analysis of variation in logo elements	41
Table 12. Modernness as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	43
Table 13. Reliability as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	44
Table 14. Progressiveness as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	46

Table 15. Innovativeness as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	48
Table 16. Taking advantage of new technology as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	49
Table 17. Competence as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements	51
Table 18. Contrast of PG&E logo as it effects viewer perception: Results of ANOVA analysis of variation in logo elements.....	52

LIST OF FIGURES

Figure 1: The Monogram.....	7
Figure 2: The Seal.....	7
Figure 3: The Monoseal.....	8
Figure 4: PG&E logo as example of Monoseal.....	12
Figure 5: Modern color associations that correspond to PG&E's desired attributes.....	18
Figure 6: Sample Frame Demographics.....	22
Figure 7: Expected and unexpected results of viewer perceptions of PG&E based on logo design, color, and contrast.....	55
Figure 8: Composite of attributes expressed by elements of logo design, color, and contrast.....	59

CHAPTER I

INTRODUCTION

This thesis examines the 1988 PG&E logo change. Specifically, how changes in color, contrast, and design altered public perception of the utility company. It has been five years since PG&E implemented its new corporate logo. How successful has it been and why? What theories, and ideas support the choices made in designing the new logo? Has it been successful in creating an identity from which the desired image is perceived? Does the logo change in particular affect the public perception of the company it represents? There are testable questions to determine whether PG&E is perceived in its desired image, and what effect logo color and design has on these perceptions.

The literature discusses the many facets of corporate image and identity, particularly logo, which will be presented in this thesis. Discussion of logo in general will lead to comments about the PG&E logo in particular. An experiment, which examines the effects of PG&E's corporate identity changes will then be presented. This will be an exploratory descriptive experiment of color and design of corporate logo, and what is projected.

CHAPTER II

LITERATURE REVIEW

Corporate Image and Corporate Identity

For the purposes of this study, it is important to establish the meanings of corporate image and corporate identity. A corporation's *image* is what is perceived by its various audiences -- how it appears to outsiders such as the financial community, or to potential consumers of its products or services. Image is as much a gauge for assessing the company's health as is return on equity, profit margin, or earnings per share. A corporation's *identity* is used to shape those perceptions. Identity must be designed to optimize a corporation's image because business, in its concern to improve its performance, must use every available tool to assess strengths and weaknesses, to compete, and to prevail in the competitive world (Chajet & Schactman, 1991). Understanding the difference between the concepts of corporate image and corporate identity is the first step toward closing the gap between what a company creates as its identity and what is actually perceived as its image.

Corporate image is developed through contact with the company, and by interpretation of information about the firm. These impressions can be obtained through the company's products and services, buildings, advertising, and business dealings. These impressions are collected in the minds of employees, bankers, consumers, the press, government officials, and present and potential stockholders, and are organized into a picture of what the firm is like (Napoles, 1988).

Image is constantly changing as new information and changing business trends are introduced. This information is also subject to the interpretation of the observer's own value framework. For example, the fact that a company is growing and has expanded its

staff from nine to sixty-five employees in two years will tell one person that the company is prospering; to another, this same information might indicate that it is an impersonal organization, or that it is growing too fast to handle any new business (Napoles, 1988).

Healthy corporate images elicit a strong emotional response that increases in direct proportion to the length of time that a particular image has been in use. Once a positive image is established, it is supported by those inside and outside the company. Appearance of power and a sense of experience, confidence, and tradition are other important characteristics. Consumers want to feel the power and strength of a corporation through association with its products or services. Customers want to feel that they are dealing with an organization that is stable and reliable when they are buying its services or investing in the company. When a company has established these characteristics, it has a greater advantage over a company without such an image when it comes to takeover bids, tenders, or environmental issues, as it can stand on its past achievements (Napoles, 1988).

Corporate identity, on the other hand, is a symbol that reflects the way in which the company *wants* to be perceived. It is intended to reflect what the company considers to be the ideal situation and can be created, whereas image is an impression held by outsiders and is earned (Napoles, 1988). Sometimes a company's image may be at odds with its image. To align desired identity with image, a corporation must first recognize if an identity problem exists, and then create a suitable identity to express its desired image. When identity is an honest reflection the company's attributes and identity and image are aligned, the company is perceived realistically, and in the way it wishes to be perceived.

A company's corporate identity is expressed in every area, including its products and services, the way it communicates, its buildings and facilities, and the way it deals with the outside world. Corporate identity can inspire loyalty, shape decisions, aid recognition, and attract customers. It is vital to effective employee recruitment and to the way people

work together inside a company. It is also directly related to profitability. A corporation's identity, if it is perceived negatively, can work against even the best marketing innovations and strategic initiatives (Olins, 1990).

The role and nature of corporate identity systems change with the times. What has worked for sixty years may not be effective in today's world. According to Ackerman (1990), we can expect identity in the 1990's to provide a tool for structuring an image that creates a consistent reputation internationally as well as a commitment by management to stay the course in building long-term value for customers and shareholders. Identity will be an essential means of creating value which is delivered by employees, recognized by customers, and funded by investors for whom return on investment is the bottom line (Ackerman, 1990).

Effective corporate identities use symbolism to strengthen simple associations, which are fundamental to a good brand-package-symbol identification combination. The Mercedes Benz star makes a brief, simple, and unmistakable statement of quality. A substantial portion of a symbol's power lies in its ability to trigger a response to a company. An entire program is built around the identification symbol. If a symbol such as a logo is effective, a consumer need only think of the industry, service, or product involved, and the company's logo will come to mind. Corporate symbolism is almost exclusively a promotional tool -- active rather than passive. Advertising campaigns usually last a season, but identity is more permanent and should last twenty years or more (Selame, 1975).

Successful identities have two important qualities: suggestiveness and recall. When a potential customer wants to buy a product and a particular company's brand name comes to mind, this is *suggestion*. When this same individual comes into contact with the logo and relates it back to the company it represents, this is *recall*. An effective corporate

identity triggers both of these responses without frequent or expensive adjustments (Napoles, 1988).

Every corporation has an image that it communicates in many ways to its various publics through its identity. A corporation, in fact, cannot avoid sending out daily messages about itself, its people, and its products. These messages are generated in several ways. The physical environment of a corporation including offices, plants, trucks, signs, etc. are three-dimensional embodiments of a corporation which is, after all, only an idea -- a fictional being that exists by virtue of saying it does. Most people form the most lasting perceptions of corporations in their role as consumer of the products and services of the company. Messages also are generated from the graphic design of everything a corporation uses to make a statement about itself from its letterhead to its advertising and packaging. Studies indicate that well-managed, successful corporations tend to have superior graphics in all their printed materials from annual reports to parts packaging, as well as in their documentary films and television advertising. Less successful companies betray their plight with old-fashioned, shoddy graphics. So graphics is one area where a quality image reflects actual quality (Tolley, 1988).

A change in corporate identity often heralds a significant change in the long-term strategy of a company, or in the nature of the company itself. Changes can be articulated and reflected in the main elements of corporate identity, the company's systematically applied symbol and its name and logo (Wathen, 1986). A logo, the visible part of the corporate identity program, helps to "humanize" a company by presenting a face, a personality, in the form of a symbol. The logo symbol reflects the company's identity and helps to mold its *image* in a positive way (Napoles, 1988).

Graphic design has always played a large role in the visual expression of corporate identity, but corporate identity is not simply about creating logotypes. All identity comes

from inside the company and moves outward into the world where it is perceived.

According to Wathen (1986) corporate image cannot be artificially constructed. It emerges from popular feelings and an understanding of a company's origin and direction. Design is only a tool, the graphic expression of a very carefully developed corporate strategy. The most critical service of corporate identity is that of strategic communications; of communicating long-range goals and strengths to the investing public (Wathen, 1986).

Corporate logos are the signatures companies use in talking to consumers and shareholders alike. They can potentially do more harm than good, however, undercutting the corporate image. The Wall Street Journal (December 5, 1991, p. B1) reported that a survey of 900 consumers conducted by Omnicom Group's Schechter Group, a strategic-design firm, asked subjects to look at 22 nationally advertised logos. The design firm found that half of the symbols don't live up to their company's names. People often don't recognize them, or don't know what products the logos represent. Abstract and futuristic nameplates, in vogue for many high-tech companies, can be more confusing than revealing. It seems that Colonel Sanders of Kentucky Fried Chicken is a far better communicator than Infiniti's pizza-like partial disk (Bird, 1991).

If a company requires a new corporate identity program, specific choices must be made about how to express the identity. Often this means creating a new logo, which begins with selecting the basic form the new logo will take. The logo can be expressed in as many ways as there are colors, typefaces, and shapes.

Selame (1975) discusses basic forms for a logo, which are:

- The Monogram: Initials used in a unique manner (see Figure 1). Initials can be taken in by the viewer quickly and are ideal for a company widely known by its initials. Some people feel initials are too sterile, depersonalized, and very forgettable. This would be true only for companies not known by their initials, or not often exposed to the public's

eye, such as manufacturers. For others, however, such as IBM, or RCA, initials are worth a thousand words, or pictures.



Figure 1. The Monogram: A letter or combination of letters rendered in a distinctive manner devoid of confinement. Designers: IBM, Paul Rand; AVX Aerovox and E-Z Shops, Selame Design Associates; RCA, Lippincott & Margulies, Inc.

- The Seal: A name or group of words worked into one total form (see Figure 2).

This is a good choice for a service company as it might be difficult to depict such a business in a graphic. It also enables the company to use its name, or motto, for its symbol against a background that gave the letters depth and warmth.

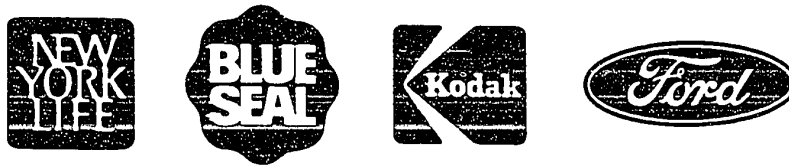


Figure 2. The Seal: A name or group of words rendered in a cohesive form. Designers: New York Life, Lippincott & Margulies, Inc.; Blue Seal, Selame Design Associates; Kodak, Kodak Staff; Ford, Ford Staff.

- The Monoseal: Initials that are worked into a form like the seal (see Figure 3).

This has the same advantages as the monogram, but also has the added benefits afforded by the seal's background. Putting a monogram into a seal can add warmth to the initials, thereby satisfying those who feel that initials alone are too sterile.



Figure 3. The Monoseal: A monogram or initial within a shape or seal-like form. Designers: Maytag, Dave Chapman, Goldsmith & Yamasaki, Inc.; Westinghouse, Paul Rand; PPG, Lippincott & Margulies, Inc.; General Electric, GE Staff.

PG&E's Story

In early 1986, Pacific Gas & Electric assessed its image and identity and responded to the results by beginning a major corporate identity overhaul including changing from a brown logo with no graphic to a blue, white, and yellow with a triangle graphic (see Appendix A). The changes to the new identity system cost approximately \$12 million over a period of five years, and was paid by shareholders. The bulk of the cost - \$9 million - was budgeted for repainting the company's fleet of vehicles (PG&E Week, October 14, 1987). Little information exists in the public domain to identify the reason behind such an expensive step.

PG&E used news releases to announce its intention to make the changes, and then to show the color changes made (D. Anderson, personal communication, July 1992). A search of the San Francisco Chronicle and The Wall Street Journal for 1985, 1986, and 1987 revealed no coverage of the new corporate identity plan. Inquiries made to the PG&E news bureau, current corporate identity manager, and corporate library revealed that they do not have copies of any press releases or news clippings from that time. The only materials available, other than the PG&E Week (October 14, 1987) article, is the Symbol Use Guidelines, produced for PG&E for its own use (Pacific Gas & Electric, 1987).

Retired Corporate Identity Director Deacon Anderson and S&O Consultants founder Bob Ohrenschall have discussed their recollections of the corporate identity system process and details have been inferred from the limited corporate literature made available. Many gaps exist in the chronology and detail of PG&E's corporate identity system process,

such as the scientific research data, because of what they are unable, or unwilling to disclose.

An interview in July 1992 with Anderson and Ohrenschall, supplemented with articles on the topic in the October 14, 1987 issue of PG&E Week provide the following story:

The seed of the idea for change came from new management's perception that the company's logo was outdated and did not provide the contemporary market-driven identity they desired. Chairman of the Board Dick Clarke may have seen the corporate identity change as an opportunity to make his mark during his early years in the position and to make a powerful, successful first statement (Anderson, personal communication, July 1992). The company began looking into effects of its old corporate identity system. It formed a corporate identity task force with PG&E marketing people and S&O Consultants, Inc. to measure public perceptions of the company. Its purpose was to assure that the company's symbol accurately reflected its mission of serving customers today with the strength to be here tomorrow as well (PG&E Week, October 14, 1987).

S&O interviewed more than 300 customers in shopping centers throughout PG&E's service area and conducted an analysis of data from an undisclosed number of past PG&E customer opinion surveys. They also measured employee impressions of the company's values, policies, and plans. Investment analysts in New York and in the West were asked their views of the company's market position and the effects, if any, of their corporate identity (PG&E Week, October 14, 1987). Unfortunately, specific interview questions and research design were not available for review.

These interviews revealed that PG&E's logo was seen as a symbol of endurance but was so low key that it left the impression with customers and employees that the company was embarrassed about itself. Some investment analysts didn't even know

PG&E had a corporate identity. It found that, in general, people liked the company a lot, but liked it a lot less when they saw the color of the logo (PG&E Week, October 14, 1987).

The S&O research (PG&E Week, October 14, 1987) concluded that:

- 51% recognized brown as a company color
- 24% recognized tan as a company color
- 18% recognized beige as a company color
- 31% thought blue was a company color
- 26% thought white was a company color
- 1 in 10 knew that "and" was used in the company name instead of ampersand (&)

Once exposed to the old logo, customer opinion, which had been favorable, dropped dramatically (See Appendix A for logo samples). For example, PG&E Week (October 14, 1987) reports that, shown the old identity system, customers tended to rate PG&E as old fashioned, inefficient, and slow to take advantage of new technology (PG&E Week, October 14, 1987).

A new identity was considered a sound business investment to assure a strong visual presence in its markets. Company leadership felt it could no longer afford to blend into the background, quietly providing reliable gas and electric service as it had in the past. The new identity, with its bold, strong logo meets this need. New technology has made it easier for customers to use less of PG&E's products, or to switch to less expensive alternative fuels or self-generation. This threatens to erode sales. If sales decline, rates would rise which would further reduce sales, creating a downward cycle. To retain existing and attract new business, especially large industrial and commercial accounts, the company leadership determined that in addition to cutting costs and keeping rates as low as

possible, it must be visible. They needed communicate that PG&E is here, ready to serve and capable of meeting their demands. Its new identity was considered a forceful way of sending that message (PG&E Week, October 14, 1987).

New technology, industry deregulation, and the threat of new competition have dramatically altered our market environment. Our new corporate identity is a clear signal to employees, customers, and shareholders that PG&E can meet and is meeting the challenges of our times. Our new corporate identity will help the company position itself in its markets as the energy supplier of choice. It ensures that our most important symbols -- the PG&E name and identity -- promote a positive and accurate image among customers and investors (PG&E Chairman Dick Clarke, PG&E Week, October 14, 1987, col. 1, p.1).

The new logo was subsequently introduced. Shown the new system, customers brought back original impressions that the company was progressive, dynamic, modern, innovative, competent, efficient, and professional. In addition, tests indicated people preferred the "&" to the word "and". In fact, they erroneously thought the "&" was part of the company's old logo. The new logo retained and reinforced customer's impressions that PG&E is a reliable, dependable, cost-conscious company that cares about its customers. When asked which logos, uniforms and service vehicles were most appealing, customers preferred new over old in every case (PG&E Week, October 14, 1987).

The goldenrod "&" appears to be illuminated by a spotlight beam coming from the top of the logo, and links the "electric" and "gas" parts of the company's name. PG&E selected blue and goldenrod for its logo because those colors were already frequently identified as PG&E's colors. According to PG&E, customers probably thought the company color was blue because their PG&E bills were and still are blue. S&O Consulting results did not name goldenrod, but PG&E thought gold was familiar from its hard hats (PG&E Week, October 14, 1987). The PG&E Symbol Use Guidelines (1987) indicates

that the goldenrod reinforces the theme of "light" established by the white triangular "spotlight".

The letters of the logo use big, bold, block capital letters to present the message of strength, endurance, and reliability. It is meant to portray a progressive company, to serve today in a new business climate with the strength to be here tomorrow as well (PG&E Week, October 14, 1987). According to the Symbols Use Guidelines (1987), the letters in the logo are all custom modifications of classic Helvetica typeface. They are open at the bottom, allowing light to spill into and out of the symbol in a powerful way.

The new PG&E logo is best characterized as a monoseal (see Figure 4).



Figure 4. PG&E logo design as an example of a Monoseal logo.

The logo is basically a monogram of the company's initials but also uses a square of color for a background with a triangle used to represent light, the fundamental nature of its business. The monoseal allows quick identification for PG&E, which is widely known by its initials, with the added advantages of a seal background, which gives the letters depth and warmth.

The old PG&E logo (see Appendix A) is best described as a monogram. It consisted of the company initials joined by "and" in a consistent style with no shape, or outline added. Although PG&E is a company widely known by initials, it discovered that people did perceive the company as too low key, depersonalized and forgettable.

Overall, PG&E reports that the new logo must communicate the company's warmth and humanity. At the most basic level, it must appeal to customers. This requires that it attract attention, and foster positive impressions and accurate perceptions of the company's best qualities (Symbol Use Guidelines, 1987) .

PG&E expects that the new corporate identity system will be effective for at least 20 years. The old system was used for about 60 years. To be sure the new system does what it's supposed to do, the company planned to test its effectiveness five years later, and again ten years after that. Recent interviews with personnel at PG&E and others involved in the original project reveal that they perceive such overwhelming success with the plan that to further test it would be a waste of money. Their impressions are the result of anecdotal interviews in the field with individuals representative of the original test population, observation of PG&E media coverage, and the professional opinion of S&O Consulting, now Addison Consulting (PG&E Week, October 14, 1987; D. Anderson, personal communication, July 1992; Ohrenschall, personal communication, July 1992).

PG&E's objective was to update its corporate identity. It sought to maintain the positive aspects of its image while adding the impression of a modern, friendly company that will continue to provide quality, technologically advanced service in the future. The particular attributes that PG&E wishes to convey include (PG&E Week, October 14, 1987):

- | | | |
|--------------------------|------------------|------------------------|
| • progressive | • modern | • dynamic |
| • innovative | • competent | • efficient |
| • professional | • businesslike | • reliable |
| • dependable | • cost conscious | • strong |
| • cheerful | • friendly | • high quality service |
| • caring about customers | | |

According to PG&E Week (1987), the old logo did represent the company as professional, efficient and a high quality service provider, but it also characterized the company in the public mind as:

- too low key
- inefficient
- embarrassed about itself
- slow to take advantage of new technology
- old fashioned

PG&E contends that its logo has a powerful effect on the perception of the company it represents regardless of other variables. It asserts that the new blue and gold logo is better than the old brown and tan logo (Anderson, personal communication, July 1992; PG&E Week, 1987). If this is true, the question is why is the new logo better? What particular changes in the logo brought about effects in which specific areas?

To further understand and test the effects of PG&E's logo changes, each element of change must be addressed in more detail. PG&E made three changes in its identity system:

1. Design
2. Color
3. Contrast in color

Change 1. Design

In the design of its new logo, PG&E changed the overall shape of the logo, from rectangular to square; changed the typeface of the signature from serified to Helvetica Condensed; used an "&" instead of the word "and"; and added a triangle graphic intended as a spotlight on the "&".

The overall profile of the logo was changed from a horizontal rectangular profile to a slightly vertical square. This bold area of blue was intended to make the symbol easily and quickly identifiable. In addition, the consistent and coordinated use of the Helvetica family of type styles was intended to enhance and reinforce the company's graphic image and add to the identity's memorability. Helvetica Condensed was designated as the official corporate type style, replacing the serified style of the old logo. Because of the simplicity of its letterforms, Helvetica projects an image of power, utility, and high quality consistent

with the goals of PG&E (PG&E Symbol Use Guidelines, p. 23, 1987). The triangular ray of light from the top of the square illuminates the "&", which links the "gas" and "electric" parts of the company's name. The ampersand is goldenrod in color, reinforcing the light theme, and links the "gas" and electric parts of the company name. The "&" was used because that is what S&O Consulting, Inc. discovered was what most people preferred and thought was already used. The triangle symbolizes light, warmth, energy, security, and peace of mind (PG&E Week, October 14, 1987; Symbol Use Guidelines, 1987).

The triangle shape, one of many structural forms, is seen repeatedly in nature as well as in man-made structures. The reason for its success as a structural form is that it is intrinsically stable. The stability of the triangle is one of the basics of structure, making the triangle the basis for most structural forms (Williams, 1981). The triangle symbolizes strength in PG&E's logo, which is important because the company is involved in building new structures, and it wishes to be perceived as a strong, stable company built to last.

Designers of the logo selected shapes and typeface that express specific attributes that PG&E wished to convey with its new identity. The most significant changes in the area of design were in the addition of a triangle graphic and the change from a serified typeface to the current Helvetica Condensed typeface. The triangle shape indicates dependability, power, strength, caring and friendliness, and the Helvetica Condensed typeface indicates power, quality service and efficiency.

Hypothesis 1: A company will be perceived as more dependable, powerful, strong, caring, friendly, cost conscious, efficient and a more quality service provider when its logo incorporates the triangle shape and Helvetica Condensed typeface than when its logo does not incorporate the triangle shape and Helvetica Condensed typeface.

Change 2. Color

PG&E identifies its logo color change from brown to blue as a key aspect of its new identity system. Color provides a powerful means of visual recognition. When a company's colors can be consistently identified, the company's graphic identity will be more memorable. PG&E Blue, the foundation color for the identity system, is a custom color specially created to give the company a color it can "own" in the marketplace. The color PG&E calls Goldenrod is actually the Pantone matching system color yellow #137 (PG&E Week, October 14, 1987). Therefore, for the purposes of comparison in this study, this color will be referred to as yellow.

The fact that people have given color so important a role in life since the dawn of history is in itself of psychological interest. Color associations exist by the score. In the hues of the spectrum people have found emotional analogies with sounds, shapes, forms, odors, and tastes. Color expressions exist in language, symbolism, tradition, and superstition, probably because the sensation of color is primitive in nature. Reaction to it and appreciation of it requires little effort of intellect or imagination. Color conveys moods, which attach themselves quite automatically to human feeling, making color significant in the psychic make-up of human beings (Birren, 1961).

Research on the use of colors, called chromodynamics, has proved the affect that certain colored lights and pigments have on people. Red, green, and blue are colors that most easily lend themselves to such experimentation; red is the most exciting color, green the most restful, and blue the most cheerful (De Grandis, 1986). This supports the PG&E assertion that its new logo is perceived as more cheery and pleasant.

Symbolism for color has been built upon centuries of history, religion, tradition, and superstition. This represents an expression of human feelings and associations as developed in the course of civilization. In the Roman Catholic rite, for example, the color

of the vestments has a definite significance: White is the symbol of light and signifies innocence and purity, joy, and glory. Another tradition is found in the symbolism of heraldry: Blue ("azure") signifies piety and sincerity; Yellow ("or") stands for honor and loyalty; White, or silver ("argent") represents faith and purity (Birren, 1961).

In modern times, yellow has associations of cheeriness, enlightenment, sunshine, intelligence, action, and youth. Because of the high visibility of yellow, it serves many purposes in safety (Napoles, 1988). The color blue has modern associations of conservatism, devotion, justice, rationality, passivism, contentment, and is physically cool, soothing, and restful (Napoles, 1988). Blue is also restful and sedate, and is an outstanding favorite throughout the world (Birren, 1961). The color white has associations of refreshment, perfection, wisdom, truth. Brown has associations of organic, strength, masculinity, earthiness, health, and utility (Napoles, 1988).

The objective of color is always to impart information, sell the product and create lasting identity. When associated with a corporation, or its products, color can improve identification and add suggestive imagery and symbolic value (Napoles, 1988). PG&E presented a list of attributes it wished to express, as cited previously. The modern color associations of blue, yellow, and white correlate well with many of the attributes listed (see Figure 5).

PG&E Attributes	Yellow	Blue	White
progressive	action; youth		
modern	action; youth		
innovative	intelligence; action; youth		
competent	safety		wisdom; perfection
efficient			perfection
reliable	safety	rationality	truth
cheerful	cheeriness; sunshine	cheery; pleasant	
friendly	cheeriness	world favorite	
cares about customers		soothing; devotion	
favorable impression		world favorite; contentment	

Figure 5. Modern color associations as they relate to PG&E's desired attributes.

In summary blue, yellow, and white indicate reliability, caring, friendliness, modernness, progressiveness, and efficiency.

Hypothesis 2: A company will be perceived as more reliable, caring, friendly, modern, progressive, taking advantage of new technology, and efficient when its logo incorporates blue, yellow, and white than when its logo does not incorporate blue, yellow, and white.

Change 3. Contrasting Color

The Poynter Institute, which in 1985 did a major survey of color in American newspapers, in 1990 set out to do a follow-up study. The study highlights the significance of color in media in the 90's and indicated some specific reasons why a company might choose certain color combinations for its logo, which is seen so heavily in the media .

The study discusses complementary colors, which are those found opposite each other on the color wheel. What is it about the relationship of "complementary" colors, such as blue and orange, that makes it so special? It is largely due to the phenomenon of "afterimages". It can be demonstrated by staring at a red paint blob for two minutes

without blinking. When closing your eyes you should see the image of the paint blob but it will look green, which is the complementary color of red. The brain cells recording the color of one image will, in its absence, project the complementary color in its place. We tend to see the complements of all colors. Salmon and pastel blue are complementary colors, which explains the abundant use of salmon and pastel blue for text screens in newspapers in the early 1980's. This was the beginning of color in newspapers and these colors were used in tandem so often because their complementary nature drew the eye to the page on the newsstand and created greater viewer interest (Poynter, 1990).

The Poynter Institute Study (1990) indicates a need for more research on emotional reactions to color. It questions whether color, with its tones and intensity, create deeper feelings about a subject. It also emphasizes the particular importance of complementary colors in drawing attention to a printed item.

In a three-primary system consisting of red, yellow, and blue, the complement to any primary is the secondary made by a mixture of the other two primaries. Sloane (1989) says that in color theory complementary applies to the following sets:

- red and green (green is a mixture of yellow and blue)
- blue and orange (orange is a mixture of yellow and red)
- yellow and purple (purple is a mixture of red and blue)

Color wheels are arranged so that each primary lies opposite its complement. The concept can be extended to any hue variation with appropriate shifts but particular shades of color opposite one another are never the same from one color theorist's wheel to the next (Sloane, 1989). This lack of agreement in the literature leads to too many possibilities for what would be the complement of a particular hue such as PG&E Blue. The PG&E hues of blue and yellow could be considered complementary with a shift of one of these competing color wheels.

This research provides a competing hypothesis about color. It says that it isn't the color itself that is important, but the juxtaposition of contrasting colors. The blue and yellow color combination of PG&E's logo resembles the phenomenon of complementary colors. It is possible that in keeping with the Poynter Institute Study (1990), the positive effects of the new logo are derived from the fact that it may contain complementary colors. So, although the colors in the new logo are not known to be complementary, it is true that they are far more contrasting and closer to being complementary than were the two shades of brown used in the old logo. Research has supported the concept that contrasting color combinations elicit a positive response in people.

Hypothesis 3: A company will be perceived more favorably when its logo incorporates contrasting colors than when its logo does not incorporate contrasting colors.

CHAPTER III RESEARCH METHODOLOGY

An experiment was conducted to compare the effect of logo variations on perceptions of PG&E.

The test instrument was a self-administered questionnaire. Each participant received a cover letter (Appendix B) and a questionnaire (Appendix C) that included a color copy of one of five versions of the PG&E logo (Appendix A). Participants were asked to rate the company represented by the logo at the top of the page on 15 attributes, using a 10-point Likert scale. The 200 questionnaires were administered throughout one day in a rotation including equal numbers of the five possible logo versions.

Individuals outside the San Jose State University Student Union were approached by the researcher and asked if they would take 3 or 4 minutes to complete a questionnaire for graduate research. Approximately 25 people refused to participate throughout the day, but the vast majority agreed to participate and were given the questionnaire on a clip board. They were able to complete the questionnaire on the spot in approximately 4 minutes while the researcher stepped away to allow privacy.

Sample Frame

Respondents were San Jose State University students and staff asked to participate outside the Student Union on February 2, 1993. A tally of estimated gender, age, and income range of participants was used throughout testing to assist in securing a varied sample. During the one day of testing, 200 questionnaires were administered; 197 respondents completed the questionnaire. The demographics indicate a sample of varied

age, gender, and income range with comparable distribution among the logo variations (see Figure 6).

	Logo 1 (old logo)	Logo 2 (new logo)	Logo 3 (old design/ new colors)	Logo 4 (new design/ old colors)	Logo 5 (new design/ blue only)
Sample Size N = 197	n = 38	n = 40	n = 39	n = 40	n = 40
Female	55%	40%	41%	25%	45%
Male	45%	60%	59%	75%	55%
Average Age	25	27	28	25	25
range	18 - 44	18 - 64	19 - 66	19 - 47	18 - 45
st. dev	6.9	9.8	10.5	6.0	7.1
Average Income	35,828	47,499	34,538	43,464	42,369
range	0 - 89,999	0 - 95,000+	0 - 95,000+	0 - 95,000+	0 - 94,999
st. dev	1.7	2.1	2.1	2.1	1.8

Figure 6. Sample Demographics for Questionnaire Respondents

Approximately the same number of questionnaires were completed for each of the five logo variations. There were fairly equal numbers of male and female participants, except for the Logo 4 version in which males were over represented. The average age was similar with a wide range of ages represented for each of the logo variations. Average income represented a less than \$12,000 span across the logo variations with a wide range of income represented for each variation.

PG&E is a highly recognized company that provides gas and electric service to virtually all residences and businesses in its service area. It was expected that most of the participants in this experiment were familiar with PG&E and probably held perceptions and

opinions about the company. This could raise questions about the study concerning whether participants were reacting to the logo on the questionnaire, to their total perception of PG&E, or to utility companies in general. If participants were responding without regard to the logo, however, results should be consistent across all five variations of the logo. If the logo on the questionnaire did affect the participants' perception, the results would reflect significant differences in responses to each of the five logo variations.

Conducting the testing on one day limited the effects of intervening variables such as media coverage of PG&E positively or negatively influencing the perceptions of participants.

Measuring Variables

Independent Variables

Computer-generated and printed replicas of the old, new and test variation logos were produced for use, one per questionnaire (Appendix A). The logo variations included:

1. The old logo color and design
2. The new logo color and design
3. The old logo design in new logo colors
4. The new logo design in old logo colors
5. The new logo design in two shades of blue (no complementary colors)

Using color and design samples (Symbol Use Guidelines, 1987; PG&E Life, 1966) copies of test logos were produced for each questionnaire. The samples were scanned into the Macintosh computer program Adobe Photo Shop. Colors were approximated for old and new logos, then applied to the test variations. A color laser printout of the logos was compared to the samples to match colors. The images were then imported to the Quark XPress program and sent by network to a Techtronix printer to print

sheets of logos that included 40 copies of each of the five variations. A color logo was then affixed to the top of each questionnaire.

Dependent Variables

The self-administered questionnaire was designed to test for the following 15 attributes that PG&E wished to be reflected by its logo:

- dependable
- quality service
- modern
- reliable
- cost conscious
- efficient
- progressive
- powerful
- strong
- cares about customers
- innovative
- takes advantage of new technology
- friendly to the public
- competent
- generally favorable impression

The 15 questions used a Likert Scale for participants to rate the level of perception of the company represented by the logo at the top of the page, with higher numbers indicating a more positive perception. The following is a sample question with scale:

8. Is the company powerful?
1 2 3 4 5 6 7 8 9 10
Not at all Extremcly

Predictions

Design

Hypothesis 1: A company will be perceived as more dependable, powerful, strong, caring, friendly, cost conscious, efficient, and a more quality service provider when its logo incorporates the triangle shape and Helvetica Condensed typeface than when its logo does not incorporate the triangle shape and Helvetica Condensed typeface.

Nine questions provide data to test this hypothesis:

1. Is it dependable?
2. Does it provide quality service?
5. Is it cost conscious?
6. Is it efficient?
8. Is the company powerful?
9. Is the company strong?
10. Does it care about its customers?
13. Is the company friendly to the public?
15. In general, do you have an overall favorable impression of the company?

In each case, higher values are predicted for the responses among those exposed to the triangle shape and Helvetica Condensed typeface logo than among those exposed to the old design.

Color

Hypothesis 2: A company will be perceived as more reliable, caring, friendly, modern, progressive, taking advantage of new technology, and efficient when its logo incorporates blue, yellow, and white than when its logo does not incorporate blue, yellow, and white.

Ten questions provide data to test this hypothesis:

3. Is it modern?
4. Is it reliable?
6. Is it efficient?
7. Is it progressive?
10. Does it care about its customers?
11. Is it innovative?

12. Is it modern?
13. Is the company friendly to the public?
14. Is the company competent?
15. In general do you have a favorable impression of the company?

In each case, higher values are predicted for the responses among those exposed to the blue, yellow, and white logo than among those exposed to the old colors.

Contrast

Hypothesis 3: A company will be perceived more positively when its logo incorporates contrasting colors than when its logo does not incorporate contrasting colors.

One question provides data to test this hypothesis:

15. In general do you have a favorable impression of the company?

For this question, higher values are predicted for the responses among those exposed to the contrasting color logo than among those exposed to the colors without contrast.

CHAPTER III

RESULTS

The goal of this study was to examine the effects of logo design and color on the perceptions of the company it represents, as tested with elements of PG&E's old and new logos. Logo design, color and contrast were found to influence perceptions of PG&E. According to this research, many - but not all - of the effects sought by PG&E were achieved with elements of the new logo.

Design

Significant results were found in the expected direction for the following 4 of the 8 predicted outcomes (see Table 1):

- 1a: Is it dependable?
- 1b: Does it provide quality service?
- 1d: Is the company powerful?
- 1e: Is the company strong?

Table 1
Design of PG&E Logo: Mean of viewer responses to logo variations for predicted attributes

<u>Attribute</u>	<u>N</u>	<u>Mean: Old Design</u>	<u>Mean: New Design</u>	<u>Sig of F</u>
<u>1. dependable</u>	N = 192	7.07 n = 75	7.84 n = 117	p<.01
<u>2. quality service</u>	N = 192	6.96 n = 75	7.76 n = 117	p<.01
<u>6. efficient</u>	N = 186	6.26 n = 72	6.55 n = 114	n. s.
<u>8. powerful</u>	N = 186	7.61 n = 72	8.55 n = 114	p<.001
<u>9. strong</u>	N = 186	7.46 n = 72	8.24 n = 114	p<.05
<u>10 caring</u>	N = 186	5.63 n = 72	6.14 n = 114	n. s.
<u>13 friendly</u>	N = 189	6.16 n = 75	6.25 n = 114	n. s.
<u>15. generally favorable</u>	N = 189	6.03 n = 75	6.68 n = 114	n. s.

The significant results indicate that the new design more strongly represented PG&E as a dependable, powerful, strong provider of quality service. In all but one of the predicted areas, the mean of viewer responses was above the midpoint of the 1-10 point Likert scale and shifted in the expected direction to some degree. For the predicted outcomes that produced significant results, the mean of all responses shifted less than one point on the scale in the expected direction but tested with a high level of significance (see Table 1).

The results for all the following predictions are based with comparison to the

triangle shape and Helvetica Condensed typeface in PG&E logo variations.

Prediction 1a: Those who see the PG&E logo with a triangle shape and Helvetica condensed typeface will mark a higher response on average to Question 1 (Is it dependable?) than those seeing the PG&E logo that does not have the triangle shape and Helvetica condensed typeface.

A comparison of the average mean response for Question 1 (Is it dependable?) showed higher response for the group that saw the logo with a triangle shape and Helvetica condensed typeface than for the group without the triangle shape and Helvetica condensed typeface, $F(1, 188) = 7.048; p < .01$; (see Table 2). This supports H1 that PG&E is seen as more dependable when represented by the new design than when represented by the old design.

Table 2
Dependability as perceived in the PG&E Logo Design and Color: Results of ANOVA
analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	27.383	3	9.128	2.722**
<u>Shape</u>	23.383	1	23.631	7.048***
<u>Contrast</u>	.015	1	.015	.005
<u>Color</u>	.166	1	.166	.050
<u>Explained</u>	27.383	3	9.128	2.722**
<u>Residual</u>	630.362	188	3.353	
<u>(Total)</u>	654.745	191	3.444	

** p<.05

*** p<.01

197 cases were processed
5 cases (2.5%) were missing.

Prediction 1b: Those who see the PG&E logo with the triangle shape and Helvetica Condensed typeface will mark a higher response on average to Question 2 (Does it provide quality service?) than those seeing the PG&E logo that does not have the triangle shape and Helvetica Condensed typeface.

A comparison of the average mean response for Question 2 (Does it provide quality service?) showed higher response for the group that saw the logo with the triangle shape and Helvetica Condensed typeface than for the group without the triangle shape and

Helvetica Condensed typeface, $F(1,188) = 7.112$, $p < .01$; (see Table 3). This supports H1 that PG&E is seen as a provider of quality service more so when represented by the new design than when represented by the old design.

Table 3
Quality Service as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	29.414	3	9.805	3.021**
<u>Shape</u>	23.079	1	23.079	7.112***
<u>Contrast</u>	.114	1	.114	.035
<u>Color</u>	.054	1	.054	.017
<u>Explained</u>	29.414	3	9.805	3.021**
<u>Residual</u>	610.065	188	3.245	
<u>(Total)</u>	633.479	191	3.348	

** $p < .05$

*** $p < .01$

197 cases were processed

5 cases (2.5%) were missing.

Prediction 1c: Those who see the PG&E logo with the triangle shape and Helvetica Condensed typeface will mark a higher response on average to Question 5 (Is it cost conscious?) than those seeing the PG&E logo that does not have the triangle shape and Helvetica Condensed typeface.

A comparison of the average mean response for Question 5 (Is it cost conscious?) did not show a significantly higher response for the group that saw the logo with the triangle shape and Helvetica Condensed typeface than for the group without the triangle shape and Helvetica Condensed typeface. This fails to show support for H1 that PG&E is seen as more cost conscious when represented by the new design than when represented by the old design, $F(1,188) = .431$; $p > .05$; (see Table 4).

Table 4
Cost Consciousness as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	10.725	3	3.575	.664
<u>Shape</u>	2.322	1	2.322	.431
<u>Contrast</u>	.192	1	.192	.036
<u>Color</u>	3.114	1	3.114	.448
<u>Explained</u>	10.725	3	3.575	.664
<u>Residual</u>	1012.478	188	5.386	
<u>(Total)</u>	1023.203	191	5.357	

197 cases were processed
5 cases (2.5%) were missing.

Prediction 1d: Those who see the PG&E logo with the triangle shape and Helvetica Condensed typeface will mark a higher response on average to Question 6 (Is it

efficient?) than those seeing the PG&E logo that does not have the triangle shape and Helvetica Condensed typeface.

A comparison of the average mean response for Question 6 (Is it efficient?) did not show a significantly higher response for the group that saw the logo with the triangle shape and Helvetica Condensed typeface than for the group without the triangle shape and Helvetica Condensed typeface. This fails to show support for H1 that PG&E is seen as more efficient when represented by the new design than when represented by the old design, $F(1,182) = .179$; $p > .05$; (see Table 5).

Table 5
Efficiency as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	8.093	3	2.698	.579
<u>Shape</u>	.836	1	.836	.179
<u>Contrast</u>	4.413	1	4.413	.947
<u>Color</u>	2.225	1	2.225	.478
<u>Explained</u>	8.093	3	2.698	.579
<u>Residual</u>	847.756	182	4.658	
<u>(Total)</u>	855.849	185	4.626	

197 cases were processed

11 cases (5.6%) were missing.

Prediction 1e: Those who see the PG&E logo with a triangle shape and Helvetica condensed typeface will mark a higher response on average to Question 8 (Is the

company powerful?) than those seeing the PG&E logo that does not have the triangle shape and Helvetica condensed typeface.

A comparison of the average mean response for Question 8 (Is the company powerful?) showed higher response for the group that saw the logo with a triangle shape and Helvetica condensed typeface than for the group without the triangle and Helvetica condensed typeface shape, $F(1,182) = 13.728$; $p < .001$; (see Table 6). This supports H1 that PG&E is seen as more powerful when represented by the new design than when represented by the old design.

Table 6
Power as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	57.353	3	19.118	5.479****
<u>Shape</u>	47.902	1	47.902	13.728*****
<u>Contrast</u>	3.093	1	3.093	.886
<u>Color</u>	16.114	1	16.114	4.618**
<u>Explained</u>	57.353	3	19.118	5.479****
<u>Residual</u>	635.061	182	3.489	
<u>(Total)</u>	692.414	185	3.743	

** p<.05

**** p<.005

***** p<.001

197 cases were processed

11 cases (5.6%) were missing.

Prediction 1f: Those who see the PG&E logo with a triangle shape and Helvetica condensed typeface will mark a higher response on average to Question 9 (Is the company strong?) than those seeing the PG&E logo that does not have the triangle shape and Helvetica condensed typeface.

A comparison of the average mean response for Question 9 (Is the company strong?) showed higher response for the group that saw the logo with a triangle shape and Helvetica condensed typeface than for the group without the triangle shape and Helvetica condensed

typeface, $F(1,182) = 10.114, p < .005$; (see Table 7). This supports H1 that PG&E is seen as stronger when represented by the new design than when represented by the old design.

Table 7
Strength as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	41.423	3	13.808	4.135***
<u>Shape</u>	33.777	1	33.777	10.114****
<u>Contrast</u>	2.510	1	2.510	.752
<u>Color</u>	12.988	1	12.988	3.889*
<u>Explained</u>	41.423	3	13.808	4.135***
<u>Residual</u>	607.803	182	3.340	
<u>(Total)</u>	649.226	185	3.509	

* $p < .1$

** $p < .05$

*** $p < .01$

**** $p < .005$

197 cases were processed

11 cases (5.6%) were missing.

Prediction 1g: Those who see the PG&E logo with a triangle shape and Helvetica condensed typeface will mark a higher response on average to Question 10 (Does it care about its customers?) than those seeing the PG&E logo that does not have the triangle shape and Helvetica condensed typeface.

A comparison of the average mean response for Question 10 (Does it care about its customers?) did not show a significantly higher response for the group that saw the logo with a triangle shape and Helvetica condensed typeface than for the group without the triangle shape and Helvetica condensed typeface. This fails to support H1 that PG&E is seen as more caring when represented by the new design than when represented by the old design, $F(1,182) = .828$; $p > .05$; (see Table 8).

Table 8
Caring for Customers as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	18.633	3	6.211	1.265
<u>Shape</u>	4.067	1	4.067	.828
<u>Contrast</u>	6.023	1	6.023	1.227
<u>Color</u>	5.704	1	5.704	1.162
<u>Explained</u>	18.633	3	6.211	1.265
<u>Residual</u>	893.716	182	4.911	
<u>(Total)</u>	912.349	185	4.932	

197 cases were processed
 11 cases (5.6%) were missing.

Prediction 1h: Those who see the PG&E logo with a triangle shape and Helvetica condensed typeface will mark a higher response on average to Question 13 (Is the

company friendly to the public?) than those seeing the PG&E logo that does not have the triangle shape and Helvetica condensed typeface.

A comparison of the average mean response for Question 13 (Is the company friendly to the public?) did not show a significantly higher response for the group that saw the logo with a triangle shape and Helvetica condensed typeface than for the group without the triangle shape and Helvetica condensed typeface. This fails to support for H1 that PG&E is seen as more friendly when represented by the new design than when represented by the old design, $F(1,185) = .070$; $p > .05$; (see Table 9).

Table 9
Friendliness as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	18.900	3	6.300	1.356
<u>Shape</u>	.325	1	.325	.070
<u>Contrast</u>	2.273	1	2.273	.489
<u>Color</u>	15.308	1	15.308	3.296*
<u>Explained</u>	18.900	3	6.300	1.356
<u>Residual</u>	859.206	185	4.644	
<u>(Total)</u>	878.106	188	4.671	

* $p < .10$

197 cases were processed
 8 cases (4.1%) were missing.

Prediction 1i: Those who see the PG&E logo with a triangle shape and Helvetica Condensed typeface will mark a higher response on average to Question 15 (In general, do you have an overall favorable impression of the company?) than those seeing the PG&E logo that does not have the triangle shape and Helvetica Condensed typeface.

A comparison of the average mean response for Question 15 (In general, do you have an overall favorable impression of the company?) did not show a significantly higher response for the group that saw the logo with the triangle shape and Helvetica Condensed typeface than for the group without the triangle shape and Helvetica Condensed typeface. This failed to show support for H1 that PG&E is seen as generally more favorable when represented by the new design than when represented by the old design, $F(1,185) = 2.445$; $p > .05$; (see Table 10).

Table 10
Favorability overall as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	23.108	3	7.703	1.706
<u>Shape</u>	11.034	1	11.034	2.445
<u>Contrast</u>	3.508	1	3.508	.777
<u>Color</u>	1.404	1	1.404	.311
<u>Explained</u>	23.108	3	7.703	1.706
<u>Residual</u>	835.030	185	4.514	
<u>(Total)</u>	858.138	188	4.565	

197 cases were processed
8 cases (4.1%) were missing.

Color

Significant results were found for the following 2 of the 10 predicted outcomes (see Table 11):

2d: Is it progressive?

2h:: Is the company friendly to the public?

Table 11
Color of PG&E Logo: Mean of viewer responses to logo variations for predicted attributes.

<u>Attribute</u>	<u>N</u>	<u>Mean:</u> <u>Old Design</u>	<u>Mean:</u> <u>New Design</u>	<u>Sig of</u> <u>F</u>
<u>3. modern</u>	N = 192	6.78 n = 77	6.99 n = 115	n. s.
<u>4. reliable</u>	N = 192	7.49 n = 77	7.43 n = 115	n. s.
<u>6. efficient</u>	N = 186	6.41 n = 73	6.46 n = 113	n. s.
<u>7. progressive</u>	N = 186	5.77 n = 73	6.16 n = 113	p<.05
<u>10. caring</u>	N = 186	5.81 n = 73	6.03 n = 113	n. s.
<u>11. innovative</u>	N = 189	5.66 n = 76	5.86 n = 113	n. s.
<u>12. modern</u>	N = 189	6.20 n = 76	6.22 n = 113	n. s.
<u>13. friendly</u>	N = 189	5.86 n = 76	6.46 n = 113	p<1.0
<u>14. competent</u>	N = 189	6.57 n = 76	6.83 n = 113	n. s.
<u>15. generally favorable</u>	N = 189	6.36 n = 76	6.45 n = 113	n. s.

The significant results for the predicted outcomes indicate that the new colors portray PG&E as more progressive and somewhat more friendly than did the old colors. In each of the predicted areas the mean was above the midpoint of the 1-10 Likert scale and shifted in the expected direction to some degree. For the predicted outcomes, the mean of responses shifted less than one point on the scale (see Table 11).

The results for all the following predictions are based with comparison to blue, yellow, and white in PG&E logo variations.

Prediction 2a: Those who see the PG&E logo that incorporates blue, yellow, and white will mark a higher response on average to Question 3 (Is it modern?) than those seeing the PG&E logo that does not incorporate blue, yellow, and white.

A comparison of the average mean response for Question 3 (Is it modern?) did not show a significantly higher response for the group that saw the logo with blue, yellow, and white than for the group without blue, yellow, and white. This failed to show support for H2 that PG&E is seen as more modern when represented by the new colors than when represented by the old colors, $F(1,188) = .002$; $p > .05$; (see Table 12).

Table 12
Modernness as perceived in the PG&E Logo Design and Color: Results of ANOVA
analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	61.620	3	20.540	4.799**
<u>Shape</u>	52.716	1	52.716	12.316****
<u>Contrast</u>	.162	1	.162	.038
<u>Color</u>	.009	1	.009	.002
<u>Explained</u>	61.620	3	20.540	4.799**
<u>Residual</u>	804.693	188	4.280	
<u>(Total)</u>	866.313	191	4.536	

** $p < .05$

**** $p < .005$

197 cases were processed

5 cases (2.5%) were missing.

Prediction 2b: Those who see the PG&E logo that incorporates blue, yellow, and white will mark a higher response on average to Question 4 (Is it reliable?) than those seeing the PG&E logo that does not incorporate blue, yellow, and white.

A comparison of the average mean response for Question 4 (Is it reliable?) did not show a significantly higher response for the group that saw the logo with blue, yellow, and white than for the group without blue, yellow, and white. This failed to show support for H2 that PG&E is seen as more reliable when represented by the new colors than when represented by the old colors, $F(1,188) = .183, p > .05$. (see Table 13).

Table 13
Reliability as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	22.775	3	7.592	2.415*
<u>Shape</u>	19.077	1	19.077	6.070**
<u>Contrast</u>	.002	1	.002	.001
<u>Color</u>	.575	1	.575	.183
<u>Explained</u>	22.775	3	7.592	2.415*
<u>Residual</u>	590.891	188	3.143	
<u>(Total)</u>	613.667	191	3.213	

* p<.1

** p<.05

197 cases were processed
 5 cases (2.5%) were missing.

Prediction 2c: Those who see the PG&E logo that incorporates blue, yellow, and white will mark a higher response on average to Question 6 (Is it efficient?) than those seeing the PG&E logo that does not incorporate blue, yellow, and white.

A comparison of the average mean response for Question 6 (Is it efficient?) did not show a significantly higher response for the group that saw the logo with blue, yellow, and white than for the group without blue, yellow, and white. This failed to show support for

H2 that PG&E is seen as more efficient when represented by the new colors than when represented by the old colors, $F(1,182) = .478$; $p > .05$; see (Table 5, p. 33).

Prediction 2d Those who see the PG&E logo that incorporates blue, yellow, and white will mark a higher response on average to Question 7 (Is it progressive?) than those seeing the PG&E logo that does not incorporate blue, yellow, and white.

A comparison of the average mean response for Question 7 (Is it progressive?) showed higher response for the group that saw the logo with blue, yellow, and white than for the group without blue, yellow, and white, $F(1,182) = 4.877$; $p < .05$; (see Table 14). This supports H2 that PG&E is seen as more progressive when represented by the new colors than when represented by the old colors.

Table 14
Progressiveness as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	38.962	3	12.987	3.126**
<u>Shape</u>	2.601	1	2.601	.626
<u>Contrast</u>	19.063	1	19.063	4.589**
<u>Color</u>	20.258	1	20.258	4.877**
<u>Explained</u>	38.962	3	12.987	3.126**
<u>Residual</u>	756.033	182	4.154	
<u>(Total)</u>	794.995	185	4.297	

** p<.05

197 cases were processed

11 cases (5.6%) were missing.

Prediction 2e: Those who see the PG&E logo that incorporates blue, yellow, and white will mark a higher response on average to Question 10 (Does it care about its customers?) than those seeing the PG&E logo that does not incorporate blue, yellow, and white.

A comparison of the average mean response for Question 10 (Does it care about its customers?) did not show a significantly higher response for the group that saw the logo with blue, yellow, and white than for the group without blue, yellow, and white. This failed to show support for H2 that PG&E is seen as more caring when represented by the

new colors than when represented by the old colors, $F(1,182) = 1.162$; $p > .05$; (see Table 8, p. 37).

Prediction 2f: Those who see the PG&E logo that incorporates blue, yellow, and white will mark a higher response on average to Question 11 (Is it innovative?) than those seeing the PG&E logo that does not incorporate blue, yellow, and white.

A comparison of the average mean response for Question 11 (Is it innovative?) did not show a significantly higher response for the group that saw the logo with blue, yellow, and white than for the group without blue, yellow, and white. This failed to show support for H2 that PG&E is seen as more innovative when represented by the new colors than when represented by the old colors, $F(1,185) = 2.484$, $p > .05$; (see Table 15).

Table 15
Innovativeness as perceived in the PG&E Logo Design and Color: Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	13.427	3	4.476	.980
<u>Shape</u>	2.166	1	2.166	.474
<u>Contrast</u>	11.575	1	11.575	2.534
<u>Color</u>	11.347	1	11.347	2.484
<u>Explained</u>	13.427	3	4.476	.980
<u>Residual</u>	845.240	185	4.569	
<u>(Total)</u>	858.667	188	4.567	

197 cases were processed
8 cases (4.1%) were missing.

Prediction 2g: Those who see the PG&E logo that incorporates blue, yellow, and white will mark a higher response on average to Question 12 (Does it take advantage of new technology?) than those seeing the PG&E logo that does not incorporate blue, yellow, and white.

A comparison of the average mean response for Question 12 (Does it take advantage of new technology?) did not show a significantly higher response for the group that saw the logo with blue, yellow, and white than for the group without blue, yellow, and white . This failed to show support for H2 that PG&E is seen as taking advantage of new technology

more so when represented by the new colors than when represented by the old colors,

$F(1,185) = 2.55$; $p > .05$; (see Table 16).

Table 16

Taking advantage of new technology as perceived in the PG&E Logo Design and Color:
Results of ANOVA analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	27.880	3	9.293	1.837
<u>Shape</u>	.623	1	.623	.726
<u>Contrast</u>	26.138	1	26.138	5.168**
<u>Color</u>	12.897	1	12.897	2.550
<u>Explained</u>	27.880	3	9.293	1.837
<u>Residual</u>	935.655	185	5.058	
<u>(Total)</u>	963.534	188	5.125	

** $p < .05$

197 cases were processed

8 cases (4.1%) were missing.

Prediction 2h: Those who see the PG&E logo that incorporates blue, yellow, and white will mark a higher response on average to Question 13 (Is the company friendly to the public?) than those seeing the PG&E logo that does not incorporate blue, yellow, and white.

A comparison of the average mean response for Question 13 (Is the company friendly to the public?) show a marginally higher response for the group that saw the logo

with blue, yellow, and white than for the group without blue, yellow, and white . This showed marginal support for H2 that PG&E is seen as more friendly when represented by the new colors than when represented by the old colors, $F(1,185) = 3.296$; $p < .10$; (see Table 9, p. 38).

Prediction 2i: Those who see the PG&E logo that incorporates blue, yellow, and white will mark a higher response on average to Question 14 (Is the company competent?) than those seeing the PG&E logo that does not incorporate blue, yellow, and white.

A comparison of the average mean response for Question 14 (Is the company competent?) did not show a significantly higher response for the group that saw the logo with blue, yellow, and white than for the group without blue, yellow, and white. This shows marginal support for H2 that PG&E is seen as more competent when represented by the new colors than when represented by the old colors, $F(1,185) = 1.321$; $p > .05$; (see Table 17).

Table 17
Competence as perceived in the PG&E Logo Design and Color: Results of ANOVA
analysis of variation in logo elements

<u>Source of Variation</u>	<u>ss</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Main Effects</u>	6.865	3	2.288	.568
<u>Shape</u>	.072	1	.072	.018
<u>Contrast</u>	2.679	1	2.679	.665
<u>Color</u>	5.318	1	5.318	1.321
<u>Explained</u>	6.865	3	2.288	.568
<u>Residual</u>	744.828	185	4.026	
<u>(Total)</u>	751.693	188	3.998	

197 cases were processed
8 cases (4.1%) were missing.

Prediction 2j: Those who see the PG&E logo that incorporates blue, yellow, and white will mark a higher response on average to Question 15 (In general do you have a favorable impression of the company?) than those seeing the PG&E logo that does not incorporate blue, yellow, and white.

A comparison of the average mean response for Question 15 (In general do you have a favorable impression of the company?) did not show a significantly higher response for the group that saw the logo with blue, yellow, and white than for the group without blue, yellow, and white. This fails to show support for H2 that PG&E is seen as generally more

favorable when represented by the new colors than when represented by the old colors, $F(1,185) = .311$; $p > .05$; (see Table 10, p. 40).

Contrast

Significant results were not found for the 1 predicted outcome.

Table 18. Contrasting color of PG&E Logo: Mean of viewer responses to logo variations for predicted attributes.

<u>Attribute</u>	<u>N</u>	<u>Mean: Old Design</u>	<u>Mean: New Design</u>	<u>Sig of F</u>
<u>15. generally favorable</u>	N = 189	6.56 n = 115	6.45 n = 74	n. s.

Significant results were not found for this predicted outcome of "generally favorable". The means in each area was above the midpoint of the 1-10 point Likert scale and moved in the opposite of the expected direction but not at a significant level (see Table 18).

The results for the following prediction is based with comparison to contrasting colors in PG&E logo variations.

Prediction 3: Those who see the PG&E logo that incorporates contrasting colors will mark a higher response on average to Question 15 (In general do you have a favorable impression of the company?) than those seeing the PG&E logo that does not incorporate contrasting colors.

A comparison of the average mean response for Question 15 (In general do you have a favorable impression of the company?) did not show a significantly higher response for the group that saw the logo with contrasting colors than for the group without contrasting colors. This fails to show support for H3 that PG&E is seen as generally more favorable when represented by contrasting colors than when represented by not contrasting colors, $F(1,185) = .777$; $p > .05$; (see Table 10, p. 40).

Interactions

No interactions were found among the variables.

CHAPTER IV
CONCLUSIONS & SUMMARY

It was expected that PG&E was correct in its assessment of the success of its corporate identity program, particularly the new logo, implemented five years ago. This thesis sought to identify the success of expressing specific attributes that PG&E desired for its image through the logo aspect of corporate identity. The study was successful in predicting 6 out of 19 outcomes in the areas of design and color. There were an additional 6 unpredicted results of interest (see Figure 7). The 6 attributes that were not supported by elements of the new logo also revealed no significant findings of support by the elements of the old logo. These findings combine to support the success of the new logo design and color for 9 of the 15 attributes tested. This showed support for design and color elements of the new logo that were identified as effective in portraying the specific attributes PG&E desires for its image.

Questionnaire Item	Design		Color		Contrast	
	old	new	blue	brown	no	yes
1. Dependable		*				
2. Quality Service		*				
3. Modern		!	0			
4. Reliable		!	0			
5. Cost Conscious		0				
6. Efficient		0	0			
7. Progressive			*		!	
8. Powerful		*		!		
9. Strong		*		!		
10. Cares About Customers			0			
11. Innovative			0			
12. Takes Advantage of New Technology			0		!	
13. Friendly to the Public		0	*			
14. Competent			0			
15. Generally Favorable		0	0			0

KEY:

- * = Expected and obtained
- ! = Unexpected and obtained
- 0 = Expected but not obtained

Figure 7. Expected and unexpected results of viewer perception of PG&E based on logo design, color and contrast

For only 3 of the 9 attributes with significant findings was the design, color or contrast of the logo predicted as the isolated influence. In the case of the remaining 6 attributes, the significant finding was either duplicated by or only presented by an unexpected significant finding (see Figure 7). This suggests that the new PG&E logo better

represents the company for the desired attributes, but the attributes are not always expressed by the expected element of design, color, or contrast.

Design

The greatest number and most significant results were found in the area of design (see Figure 7). In general, when PG&E was represented by the new logo design it was perceived as more dependable (see Table 2, p. 30), provider of higher quality service (see Table 3, p. 31), modern (see Table 12, p. 43), reliable (see Table 13, p. 44), powerful (see Table 6, p. 35), and strong (see Table 7, p. 36). This supports some of PG&E's reports of success in its corporate identity program. It is interesting, however, that although PG&E credits most of the logo's success on the new colors, the design aspect tests higher in number of perceived attributes and level of probability than does the aspect of color. This suggests that although elements of a company's logo are highly influential in creating perceptions of a company it is difficult to be sure which element is representing what attribute.

Color

There were also significant results in the area of color. As predicted, the blue logos were perceived as more progressive (see Table 14, p. 46), and friendly (see Table 9, p. 38). An unpredicted result of interest indicates that the brown logos were perceived as more powerful (see Table 6, p. 35), and somewhat stronger (see Table 7, p. 36) than the blue logos. PG&E reported that the old logo did convey strength and power, but had intended the new logo to do the same. The loss of these attributes was compensated for in the area of design of the new logo as predicted in this study (see Figure 7, p. 55), but not in the area of color. Respondents perceived PG&E's intended message of power and

strength through the design of the new logo, but it was not supported by the change in color. This suggests that when modifying an identity element such as logo, another element may be required to express attributes lost with the changes.

Contrast

The use of contrasting colors was predicted to affect the overall favorable opinion of PG&E. Significant results were not found to support the use of contrasting colors, but in fact were found to support the absence of contrasting colors in the PG&E logo. Blue logos with no contrasting colors were perceived as more progressive (see Table 14, p. 46), and taking advantage of new technology (see Table 16, p. 49), than the blue logos with contrasting colors. The contrasting colors of the new logo did not support the hypothesis that the company would be seen as more progressive with the new logo, but the new colors did show significant results in this area (see Table 14, p. 46). This allowed the color element of the logo to compensate for the negative impact of the contrasting colors for the progressive attribute. No such compensation exists, however, for the attribute of taking advantage of new technology which presented significant findings only in the absence of contrasting colors.

Expected Results Not Found

Some of the attributes that PG&E hoped to convey with its new identity program were not among the significant results found in this study. There were no significant results to support its image as cost conscious, efficient, or that it cares about its customers. No significant results were found to support PG&E being perceived as innovative, but significance was found to support the perception with their current logo as progressive and modern. This may reflect a perception that PG&E doesn't develop its own new ideas but is

willing to adopt those of others. There were no significant findings in the area of competence, but there was significance in the area of high quality service and efficiency. There were also no significant results in the area of overall favorable opinion (see Figure 7, p. 55).

Explanations for the lack of findings in the expected areas include the possibility that no significant difference in perception exists in these areas; that these areas are not affected by logo design, color, or contrast; that faulty questions didn't detect the significantly different perceptions in these areas. Another explanation for the lack of significant findings in some areas may lie in the fact that 4 out of 6 questionnaire items not showing significant results were in the final third of the questionnaire. Participants tend to hurry through the final portion of the questionnaire to finish, or are tired of the process and may not put as much thought into their answers.

In summary, the mean response to all of the questions was above the midpoint, with significant findings shifting less than one point on the 10 point Likert scale. This indicates that none of the logo variations poorly represented the company for the attributes tested, but some attributes did a better job of increasing the perception of attributes by viewers. There were no significant results for the old shape, or presence of contrasting color, and the significant results for brown were duplicated in the area of new shape (see Figure 8). Therefore, the most ideal logo derived from the design and color elements presented in this study to express the attributes desired by PG&E would be a blue logo with no contrast in the new design (Appendix A, logo 5). The logo indicated by this study's findings differs from PG&E's actual new logo only in the absence of yellow (Appendix A, logo 2). PG&E appears to have been somewhat successful in creating a logo that effectively elicits the response to many of the attributes it determined desirable for its image.

Shape		Color		Contrast	
Old	New	Brown	Blue	Absence	Presence
	<ul style="list-style-type: none"> • dependable • higher quality service • modern • reliable • powerful • strong 	<ul style="list-style-type: none"> • powerful • strong 	<ul style="list-style-type: none"> • progressive • friendly 	<ul style="list-style-type: none"> • progressive • take advantage of new tech. 	

Figure 8. Composite of attributes expressed by elements of logo design color and contrast.

Areas for further study

Logo design, color, and contrast clearly influence viewer perceptions of a company as demonstrated by this study of PG&E logo. Shapes, colors, and typefaces can be selected to express specific attributes which allows control over aspects of corporate identity to create a winning corporate image. It appears from this limited study that PG&E was somewhat successful in implementing a new logo that addressed many of the specific attributes it wished to convey. Significant results were found for nine of the 15 attributes tested in this experiment (see Figure 7, p. 55). Some of these outcomes were predicted, but some were not, which suggests a need for further study into the accuracy with which logo elements can express specific attributes.

This test focused on the perception of desired attributes for PG&E's new logo design and colors. Using a convenient sampling on the SJSU campus provided an unscientific sampling for comparison. Replicating this study with a larger, randomly selected sample would more scientifically determine whether the findings hold true for the general public. Extending this study with other means of measurement such as questionnaires with open ended questions, mall stop interviews, or mail questionnaires

would also build on the existing data. This would broaden the range of responses to further isolate the effects of logo on viewer perception.

Now that a base of knowledge is established for the new logo design and colors, further study is needed to explore perceptions presented by the old design and colors, or logo designs and colors that have never been used by PG&E. This would provide further clarification of the impact of newly created logos on desired perceptions of viewers by allowing comparison to a wider range of possibilities.

There are additional variables that could be addressed in a study of public perception of PG&E through its logo. The climate of rate increases and legal troubles during the late 1980's may have created a negative image of PG&E that would have occurred regardless of its identity program of the time. Current public perception may reflect the company's actions after the 1989 Loma Prieta earthquake and the 1991 Oakland fire. These are only a few of the areas that could effect perception of PG&E before and after the logo change. This experiment tested only the influence of logo variations on viewer perception at one point in time. Further research on additional variables would be necessary to learn the full scope of factors influencing public perception of PG&E and the role of logo design and color in shaping those perceptions. Logo color and design as a primary component of corporate identity is a subject that remains open to further research.

References

- Ackerman, Laurence D. (1990, September). Identity In Action. IABC Communication World, 33-35.
- Bird, Laura (1991, December 5). Eye Catching Logos All Too Often Leave Fuzzy Images in Minds of Consumers. The Wall Street Journal, pB1.
- Birren, Faber (1961). Color Psychology and Color Therapy. New Hyde Park, New York: University Books.
- Chajet, Clive & Shactman, Tom (1991). Image by Design. Reading, Massachusetts: Addison-Wesley Publishing Company, Inc.
- De Grandis, Luigina (1986). Theory and Use of Color. (J.Gilbert, Trans.). New Jersey; New York: Prentice Hall, Inc.; Harry N. Abrams. (Original work published in 1984).
- Napoles, Veronica (1988). Corporate Identity Design. New York: Van Nostrand Reinhold Company.
- Olins, Wally (1990). Corporate Identity. Cambridge Harvard Business School Press.
- Pacific Gas and Electric. (1987). Symbol Use Guidelines. San Francisco, California: Author.
- Staff. (1987, October 14). New Corporate Identity Unveiled. PG&E Week.
- Staff. (1966, July). PG&E Story. PG&E Life.
- The Poynter Institute for Media Studies. (1990). Eyes on the News. St. Petersburg, FL: Garcia, Dr. Mario R.; Stark, Dr. Pegie.
- Selame, Elinore (1975). Developing a Corporate Identity. New York: Lebhar-Friedman Books.
- Sloane, Patricia (1989). The Visual Nature of Color. New York: Design Press.
- Tolley, James L. (1984). Corporate Identity Programs. In Bill Cantor (Ed.), Experts in Action, Inside Public Relations (pp. 80 - 90). New York: Longman.
- Wathen, Mel (1986). Logo motion: Corporate Identity and Strategic Planning. In Ray Eldon Hiebert (Ed.), Precision Public Relations (pp. 211 - 215). New York & London: Longman.
- Williams, Christopher G. (1981). Origins of Form. New York: Architectural Book Publishing Company.

Appendix A
Logo Samples

1. Old

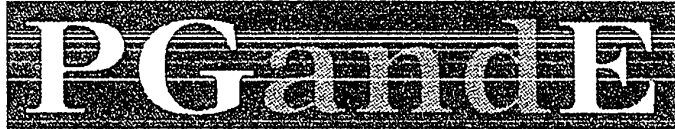


2. New



Appendix A (cont'd)

3. Old logo in new colors



4. New logo in old colors



5. New logo in 2 shades of blue (no complementary colors)



Appendix B Questionnaire Cover Letter



A campus of The California State University

Office of the Academic Vice President • Associate Academic Vice President • Graduate Studies and Research
One Washington Square • San Jose, California 95192-0025 • 408/924-2480

I would like you to participate in a study of corporate identity. No risks or benefits to you are anticipated and no compensation will be given. Questionnaire results may be published but not with information that could identify individuals. Participation is optional, with no penalty or jeopardy if you refuse to participate or to withdraw at any time.

When you have completed the questionnaire, please return it to the collection box indicated by the researcher who gave you the questionnaire. Confidentiality will be maintained.

Questionnaire begins on the next page...

Questions about the research may be addressed to the principal investigator: Susan Olofson (408) 924-3240 at the Journalism Department Office.

Complaints about the research may be presented to Mass Communication Graduate Coordinator Dr. Dennis Wilcox (408) 924-3268.

Questions or complaints about research, subjects' rights, or research related injury may be presented to: Serena Stanford, Ph. D., associate vice president of Graduate Studies & Research, at (408) 924-2480.

11. Is it innovative?
 1 2 3 4 5 6 7 8 9 10
 Not at all Extremely
12. Does it take advantage of new technology?
 1 2 3 4 5 6 7 8 9 10
 Not at all Extremely
13. Is the company friendly to the public?
 1 2 3 4 5 6 7 8 9 10
 Not at all Extremely
14. Is the company competent?
 1 2 3 4 5 6 7 8 9 10
 Not at all Extremely
15. In general, do you have a favorable impression of the company?
 1 2 3 4 5 6 7 8 9 10
 Not at all Extremely

Please complete these final questions so we may better understanding the data. Results will be held confidential. We like to obtain this information so that we know something about the entire group participating in the study, but completion of this section is voluntary.

- a. Gender ___Female_____ Male b. Date of Birth: _____
- c. Education: _____(highest level completed)
- d. Current major in college: _____
- e. Annual household income range:
- | | | |
|----------------------|----------------------|----------------------|
| _____under \$10,000 | _____40,000 - 54,999 | _____85,000 - 89,999 |
| _____10,000 - 24,999 | _____55,000 - 69,999 | _____90,000 - 94,999 |
| _____25,000 - 39,999 | _____70,000 - 84,999 | _____95,000 & over |

Thank you for completing this questionnaire