

VISUAL RHETORIC

Visible Language

A SPECIAL ISSUE

Guest Editors

Mária González de Cosío

Sharon Helmer Poggenpohl



ADVISORY BOARD

Colin Banks · *Banks and Miles, London*

Naomi Baron · *American University, Washington, DC*

Fernand Baudin · *Bonlez par Grez-Doiceau, Belgium*

Peter Bradford · *New York, New York*

Gunlaur SE Briem · *Oakland, California*

Matthew Carter · *Carter & Cone Type, Cambridge*

James Hartley · *University of Keele, United Kingdom*

Dick Higgins · *Barrytown, New York*

Aaron Marcus · *Emeryville, California*

Dominic Massaro · *University of California, Santa Cruz*

Estera Milman · *University of Iowa, Iowa City*

Kenneth M. Morris · *Siegel & Gale, New York*

Thomas Ockerse · *Rhode Island School of Design*

David R. Olson · *University of Toronto, Canada*

Charles L. Owen · *IIT Institute of Design, Chicago*

Sharon Helmer Poggenpohl · *IIT Institute of Design, Chicago*

Denise Schmandt-Besserat · *University of Texas, Austin*

Christopher Seeley · *University of Canterbury, New Zealand*

Michael Twyman · *University of Reading, United Kingdom*

Gerard Unger · *Bussum, The Netherlands*

Jan van Toorn · *Amsterdam, The Netherlands*

Richard Venezky · *University of Delaware, Newark*

Dietmar Winkler · *University of Illinois, Urbana*

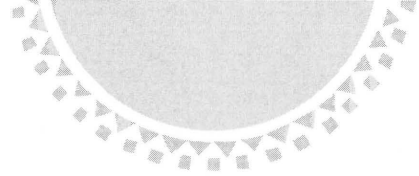
Patricia Wright · *University of Cardiff, United Kingdom*

CONTENTS

- 197 *Introduction*
Sharon Helmer Poggenpohl
- 200 *Doubly Damned: Rhetorical and Visual*
Sharon Helmer Poggenpohl
- 234 *Tale of the Origin: A Rhetorical Visual*
Analysis of a Mexican Mythical Tale
Alejandro Brizuela
- 256 *Pre-Columbian Stamps: Pintaderas*
Claudia Navarro Tapia
- 264 *Rhetoric in Logotypes*
Márida González de Cosío
- 280 *National Currency as Rhetoric: The Peso*
Martha Salázar

Index to Volume 32





VISUAL RHETORIC: AN INTRODUCTION

Sharon Helmer Poggenpohl

This special issue of *Visible Language* is part wake-up call to those involved in communication and education and part experiment. Resuscitating rhetoric is the goal of the first article by Sharon Helmer Poggenpohl. This is the wake-up call. She argues, along with various experts in rhetorical history, psychology and education, that scientific fact is not sufficient to solve many of the complex issues facing the human community. In this regard, rhetoric can serve as a means to open issues that will require examination and debate, and which will lead to some form of judgment and action. Considering rhetoric as a visual tool is yet another dimension of this article, along with establishing the role that rhetorical thinking and development can play in not only communication design, but in design in the broadest sense. Here the author examines design as a projection of a future state whose realization requires human agency. The specifically rhetorical presentation is the prototype or the tentative physical model of the future object and/or event. This prototype enlarges discussion among the interested parties and enhances their ability to think through its implications, thereby improving the decision making process.

The experimental section follows in the form of articles analyzing rhetorical use in various Mexican communications. Because rhetoric is an aid to interpretation and meaning it may also serve as an aid to seeing and understanding cultural difference in communication. As products and communications flow more easily between cultures, we run the risk of either homogenizing all culture into some international hybrid or viewing another culture's products as some combination of quaint, mysterious or backward.

Building analytically from Gui Bonsiepe's list of rhetorical figures (see page 224), each author in the next four articles examines particular communications with a view to

identifying rhetorical use. Rhetoric was not used generatively in the creation of these communications. In at least one case, that of the pre-Columbian stamps, the design was created without any contact with ideas of rhetoric. In the other examples, the creators were not naive, but were also not working consciously within a rhetorical frame. In a sense the rhetorical patterns survive despite being denigrated and nevertheless are present as forceful templates for communication. We might ask if some cultures use certain rhetorical figures more prominently than others. We might speculate if these patterns are universal within the human community. We might question if there is a cognitive relationship between modes of thinking and rhetorical use. But these questions go far beyond what is attempted here.

Moving into the specifics of this experimental section, the second article by Alejandro Brizuela analyzes his own artist's book, a retelling of the Nahuatl origin myth. In the basic Mesoamerican myth, gods sacrifice themselves in order to create the world. The mission of humankind is to preserve universal life, including their own, by feeding the gods with a divine substance – blood. Octavio Paz locates the power of this belief for us:

To rob the Mexican gods of their awesome and horrible nature, as our art criticism sometimes tries to do, is tantamount to subjecting them to a double amputation: as creations of religious genius and as works of art. Every divinity is tremendous, every god is a source of horror. And the gods of the ancient Mexicans possess a charge of sacred energy that can be adequately described only as fulminating. That is why they fascinate us.¹

Brizuela's presentation of the Nahuatl origin myth transcends its local culture and time and reminds us of powers not yet conquered, of cycles beyond human memory.

The third article by Claudia Navarro Tapia examines the artistry of pre-Columbian stamps depicting snakes and birds. These enigmatic creatures are distinctly portrayed with economy and high energy, referencing their life cycle, power and transcendent significance.

The fourth article analyzes student work – the design of logotypes. Within this abbreviated visual/typographic

¹ Paz, Octavio. 1987. *Essays on Mexican Art*. New York: Harcourt Brace and Company, 53.

form, Mária González de Cosío gave her students the problem of creating a meaningful identity for Mexico. Each student identified a particular historic or political context in which to locate the work, thus enriching and rendering a particular vision of their country. Writing about Mayan art, Paz examines its metaphorical transformations:

[That] Mayan art amazes me lies in its transformation of literal realism into an object that is a metaphor, a palpable symbol. Image-signs, without ceasing to be signs, become altogether one with the forms that express them and even with the material itself. Nuptials of the real and the symbolic in a single object. The conch shell that I mentioned is a notable example. Its practical function is to be a trumpet, probably used in a self-sacrifice ceremony. But the conch shell trumpet turns into a god, the god into a scream, and the scream into a face. Not only are we offered the crystallization of an idea in a material object, but the fusion of the two is a genuine metaphor, not a verbal but a sensory one. The idea is transformed into matter: a form that, when we touch it, turns into a thought, a thought that we can stroke and make resound.²

A more complex analytical framework is used to describe and reveal the inner workings of the logotypes. The framework includes: unity, coherence and emphasis; what is denoted and what is connoted; a consideration of contextual knowledge on the part of the viewer/reader; and an identification of which rhetorical devices are in play.

Money, that most abstract medium of exchange, is the subject of the final article by Martha Salazar. While the security dimensions of money are fairly universal, with each nation preserving its autonomous wealth through nearly invisible, ever-evolving technological devices, what a nation chooses to reify in their currency is revealing. This article examines the peso and its multicultural celebration of Mexico's history.

Mexico's complex cultural identity reveals itself in many ways in these articles. Returning to rhetoric as both a mode of thought and presentation, this special issue suggests that we cannot escape rhetoric; in fact, we should embrace it for its considerable deliberative possibilities.

² Paz, *Essays on Mexican Art*, 77.

Doubly Damned

R H E T O R I C A L A N D V I S U A L

Rhetoric has long been in ill repute. This article traces its decline and the underlying social changes that hastened its slow and then precipitous fall from grace. The need for a reconstructed rhetoric is argued. Distrust of the visual is then faced head-on in order to create the context for considering a visual rhetoric and its larger role in design in general. The fundamental perspective put forth by the author is that abstraction and scientific reductionism fail to address issues of human agency. Design has the ability to create prototypes that demonstrate by example a possible future result, support discourse and decision making in direct and understandable ways. Such prototypes are rhetorical.

Sharon Helmer Poggenpohl

Doubly Damned

J A U S I V D N A J A C I O T H E R Y

Institute of Design, IIT
350 North LaSalle Street
Chicago, Illinois 60610

Visible Language 32.3
Poggenpohl, 200–233
© *Visible Language*, 1998
Rhode Island School of Design
Providence, Rhode Island 02903

SEDUCTIVE, MANIPULATIVE, UNTRUTHFUL – these and other unsavory adjectives come to mind when “rhetoric” is mentioned. Denigrated and misunderstood, this article argues that rhetoric can provide a missing mode of inquiry for contemporary life. Two authors (Thomas B. Farrell and John D. O’Banion) whose work respectively examines rhetoric historically and in a present-day setting provide the technical, philosophical argument for rhetoric’s revitalization. Another pair of authors (Jerome Bruner and Kieran Egan) provide supporting arguments, but from the practical perspective of education. My own contribution to this discussion is to move our understanding of rhetoric from its oral and literary roots into the realm of visual communication. And even further, to consider the designer’s generation of prototypes as rhetorical statements that go beyond presenting a clever argument to becoming the focus of deliberation with regard to the social and technical nature of the future. In conclusion, I will develop the need for rhetoric in the context of contemporary culture by citing five examples of social or cultural problem that rhetoric can help to address.

RHETORIC — A BRIEF HISTORICAL LOOK

What we communicate, how we communicate, how meaning is interpreted, whether something is true or false and how we know that it is the case has always been subject to inquiry, if not speculation and argument for millennia. We are the species that lies and we know it, yet we rely on “good” information that we can accept as true. But not all information can be verified or proven to be true. And this is exactly the core of the problem with rhetoric’s reputation. The frequent epithet “that’s just rhetoric” is a clear indication of the distrustful and dismissive attitude most people have with regard to it. Rhetoric engages in messy human communications that encompass interpretation of events, alternative actions and ethics, opposing values or dramatic re-tellings that hinge on the reputation of the presenter or the source of the information rather than in truth. Yet truth has been the measure of rhetoric and that has been its downfall. Rhetoric is more about meaning and interpretation, as we shall see, than about truth. It is about contingency and human agency.

Early in Aristotle’s *Rhetoric*,¹ he identifies three species of rhetoric: *deliberative*, which addresses the future and attends to expedience and harm, focusing on the useful; *judicial*, which addresses the past and attends to what is just or unjust; and *evaluative*, which addresses honor and disgrace, focusing on the good. Aristotle’s rhetoric is a civic practice — it is about practical rationality. The three species of rhetoric can be separated for analytical purposes, but when put into practical use, their edges tend to overlap. Among these, deliberative rhetoric is the one to which I will return at the end of this article.

More than two millennia of changing notions of rhetoric are examined in John D. O’Banion’s recent book *Reorienting Rhetoric*. By tracking its decline in the context of its changing cultural milieu, its current state and the reasons

¹ Aristotle. 1995. *Treatise on Rhetoric*. Theodore Buckley, trans. Amherst, NY: Prometheus Books. See book 1, chapter 3.

for its dismissal become apparent. Originally, rhetoric was a reflection on cognition and communication. Along these lines, the significant shift from oral to written and, later, printed communication is the particular basis for O'Banion's analysis.

*Socrates wrote nothing, encouraging oral ways of knowing and discouraging writing; Plato wrote dialogues, preserving the semblance of oral language but encouraging more technical and cautious modes of thinking; Aristotle wrote exposition, in which conflicting voices became mute, silenced by the singular controlling voice of the author.*²

The relationship between thinking and styles of language use has been investigated by many scholars. Using theories developed by Walter J. Ong and Jack Goody regarding the effect literacy has had on thinking, O'Banion develops his own analysis based on the "Story," a synecdoche for orality, and the "List," a synecdoche for literacy. Story and List become the pivotal elements in the telling of rhetoric's demise. Literacy frees thinking from the constraints of context and immediacy, which are among oral story telling's essential characteristics. Both the teller and the listener are caught in the linear flow of the story which unfolds in a very present moment-to-moment context. Writing encourages logical and systematic expression; it allows comparison because writing externalizes ideas and makes them concrete. While a story is a singular event, the List is generative – facilitating reordering and recombination. O'Banion quotes Jack Goody:

*Appearing in a variety of forms, the list makes visible and explicit the classifications and abstractions that writing both requires and encourages. These processes of thought are characteristic of Western logic, science, technology, and "rationality."*³

Literacy supports logic and orality supports narration or story telling. Figure 1 compares their differences.⁴

And so literacy with its List is detrimental to rhetoric in its original spoken form. Ong defines rhetoric as the art

2 O'Banion, John D. 1992. *Reorienting Rhetoric: The Dialectic of List and Story*. University Park: Pennsylvania State University Press, 48.

3 O'Banion, *Reorienting Rhetoric*, 11.

4 O'Banion, *Reorienting Rhetoric*, 14.

FIGURE 1 A Comparison of List and Story

<i>List</i>	<i>Story</i>
discontinuous	continuous
congruent	incongruent
spatial	temporal
expands in space	expands in time
multidirectional	directional
abstract order	sequential order
focus on “idea” boundaries	focus on human effects or boundaries
written	oral or written
anonymous maker	story teller
phrases or words	sentences
emphasizes analysis	emphasizes synthesis
eliminates human qualities	heightens human qualities
categorical	integrative
abstraction	symbolization

developed by a literate culture to formalize the oral communication skills which had helped determine the structures of thought and society before literacy.⁵ In this way oral-based thinking – narration, reflective dialogue, reenactment and public address – was preserved.

Other philosophers continued to develop rhetoric. Cicero (106–43 BC) advocated a discipline of rhetoric that encompassed philosophy, poetry, drama, acting and criticism along with other arts. Quintilian (35–ca 100) did not separate rhetoric and logic but understood them as complementary. “It would be more accurate to say that logic is buried or secreted in narration, that narration is buried in logic, and that rhetoric encompasses both symbolic modes.”⁶ The facts of any case were presented in two ways according to Quintilian: narratively and logically. “‘Proof’ was *narrati-one congruens*, and ‘narration’ was *continua propositio*. Proof was the ‘congruent’ or logical version of Story, and Story was the ‘continuous’ or narrational version of the proposition (to be defended in proof’s Lists).”⁷ The interrelation

5 O’Banion, *Reorienting Rhetoric*, 48.

6 O’Banion, *Reorienting Rhetoric*, 83.

7 O’Banion, *Reorienting Rhetoric*, 82.

of rhetoric and logic was vital. To develop an argument meant telling a story or in a logical mode, analyzing the structural relationships derived from a story or the facts of a situation.

Rather than truth, appropriateness was the rhetorical objective for Quintilian. “Truth alone did not win cases; the truth needed careful, lucid presentation. Nor did presentation alone succeed; such a speech, ‘from its very monstrosity, meets with applause, [but] the case remains unintelligible.’”⁸ Ideas and their presentation were conjoined and evaluated based on “appropriateness.” He took a stand against excessive language. A “congruent argument was effective only when presented within a lucidly told narration of the contexts within which any argument could be perceived as appropriate.”⁹ Both Cicero and Quintilian were committed to securing rhetoric’s place in education.

Somewhat later, Augustine (396–430) defends rhetoric on behalf of Christian truth. His interest was to level the playing field for persuasive presentation so that morality could be cogently and forcefully argued as well as falsehoods and deceptions. Augustine defined the important attributes of *narratio* as brevity, clarity and plausibility. His concern was that through ignorance of rhetoric, cleverly presented falsehood would sway an audience and perhaps initiate regrettable actions. Learning rhetorical methods was not mysterious or subject to inspiration, but was in fact quite teachable.

*Underlying every medieval rhetorical treatise, whatever its genre, is the assumption that the communication process can be analyzed, its principles abstracted, and methods of procedure written down to be used by others. This is the essence of rhetoric.*¹⁰

8 O'Banion, *Reorienting Rhetoric*, 98.

9 O'Banion, *Reorienting Rhetoric*, 98.

10 O'Banion, *Reorienting Rhetoric*, 125.

LOGIC DISPLACES RHETORIC

Rhetoric and logic were complementary, alternative ways to examine, construct and present information for consideration. They were not arranged hierarchically, but that would change. By the mid-fifteenth century, forces were at work that would dramatically change the cultural context.

Johannes Gutenberg's invention of movable type and its expansion and democratization of reading material altered the institutions of that and subsequent times. Scholars no longer had to tediously hand copy manuscripts important to their work. Libraries grew in both the private and public realm. Elizabeth Eisenstein's book *The Printing Revolution in Early Modern Europe* gives an extensive and credible account of the changing social and intellectual history that Gutenberg's invention helped to underpin.¹¹ The growing power of print, philosophical attention to the conception of truth, and rationality reduced interest in rhetoric. Style or eloquence became the focus of rhetoric as its formerly integral concepts of order and invention were stripped away. Peter Ramus (1515–1572), an orator and teacher – not a philosopher – was a pivotal figure in this change.

Ramus, the development of his particular pedagogical style, and his impact on rhetoric deepened understanding of the shift from rhetoric and logic as a pair of complementary alternatives to logic as dominant with rhetoric as an embellishment. Beginning with medieval universities there was increasing interest in creating order and efficiency in teaching – in developing a method for knowledge delivery and application. Walter Ong traces what he calls “method agitation” in the two generations before René Descartes (1596–1650), who is generally acknowledged to be one of the foremost thinkers advocating abstraction, rationality and method. Among the many methods developing at this time, Ong mentions methods of speculation, activity, light, darkness, popular, exact, mental, sensory and a whole science.

11 Eisenstein, Elizabeth. 1983. *The Printing Revolution in Early Modern Europe*. Cambridge: Cambridge University Press.

*This tremendous buildup in method in the period just preceding Descartes has never been adequately studied... the phenomena resulting from it in Ramism alone show the utter inadequacy of the view which regards interest in method as stemming from Bacon and Descartes. These late writers on method were great explosive forces indeed, but the reason was less the size of the bombs which they manufactured than the size of the ammunition dumps, stocked by whole centuries of scholasticism on which the bombs were dropped.*¹²

Method was the most famous aspect of Ramus' repertory of teaching tools. His desire was to simplify instruction. In some circles he is known as the greatest master of the shortcut the world has ever known. Ramism is derivative based on logical analysis, systems thinking and diagrammatic presentation. The dialectic or "logic" of the method transformed rhetoric, dividing it, suppressing aspects of it and elevating the operations of logic. Of the five traditional parts of rhetoric – elocution, pronunciation, invention, disposition or judgment and memory – only the first two are now associated with rhetoric. And these two can hardly be dissociated from it.

*Ramist rhetoric is concerned with expression, with communication, with speaking, with not only a subject matter but also an auditor. But it is a rhetoric which has renounced any possibility of invention without this speaker-auditor framework; it protests in principle if not in actuality, that invention is restricted to a dialectical world where there is no voice but only a kind of vision. By its very structure, Ramist rhetoric asserts... that there is no way to discovery or to understanding through voice, and ultimately seems to deny that the processes of person-to-person communication play any necessary role in intellectual life.*¹³

While he emphasized logic, Ramus made no contribution to logic or mathematics. He was known as a fine orator and teacher who used polarities to organize and emphasize ideas. Further, he considered the stuff of thought to be interchangeable as elements or items to be subject to endless combinations. Humanists of Ramus' time used "common-

12 Ong, Walter J, 1958. *Ramus, Method, and the Decay of Dialogue*. Cambridge: Harvard University Press, 230.

13 Ong, *Ramus, Method, and the Decay of Dialogue*, 280.

places” to stock the imagination with “matter” by means of extensive reading and processing of much *copie* (ideas, phrases committed to memory, etc.). “Commonplace books and other devices were resorted to, in order to fix in memory, ‘sentences’ or proverbial matter, epigrammatic turns, apothegms, descriptive phrases, allusions, and conceptual and verbal associations of all sorts... abstract truths, hair-raising expressions, detached phrases, comparisons... [to] be exploited at all cognitive levels, sensory and intellectual simultaneously.”¹⁴

A new science was taking shape in the sixteenth and seventeenth centuries founded on the development of mathematics and an application of deductive procedures. This was a knowledge that was silent and diagrammatic – separate from a concept of knowledge enveloped in disputation and teaching. Ramist logic owes a debt to medieval developments in quantification which were in part class logics. Influenced by this, Ramus concentrated on dichotomies which found a final form diagrammatically in his *P. Rami Dialectica* (see Figure 2). Ramist dichotomized tables display convincingly in space the results of research and thinking. Apprehended by sight, these visual models present their ideas in a clear and memorable manner.

*Ramism is at root a cluster of mental habits evolving within a centuries-old educational tradition and specializing in certain kinds of concepts, based on simple spatial models for conceiving of the mental and communicational processes and, by implication, of the extramental world.*¹⁵

Medieval society, dominated by church authority, family allegiance, tradition and faith with its widely accepted conceptions of virtue and vice was giving way to an increasingly modern society characterized by a focus on science and technology, logic, business and individualism, with increasing doubt and confusion regarding what constituted virtue and vice. O’Banion cites Descartes as a pivotal philosopher in this regard because through his work philosophical thought became more abstract and methodical. His search for abstraction, classification and certainty

14 Ong, *Ramus, Method, and the Decay of Dialogue*, 211.

15 Ong, *Ramus, Method, and the Decay of Dialogue*, 8.

undermined the rhetorical tradition, however Descartes' method is not inimical to rhetoric as long as it is viewed only as *a* method and not *the* method.

To summarize the diminishing scope of rhetoric and its increasingly tenuous support, O'Banion lists nine crises in order of their appearance.¹⁶

- 1 *Appearance and reality.* Rhetoric is denigrated as being merely an act of appearance, failing to express reality.
- 2 *Faith, knowledge, and the narrowing of significance.* Rhetoric is accused of unhealthy skepticism.
- 3 *Print, truth, and the quest for rationality.* Rhetoric, rooted in orality, is judged obsolete by literate thinkers.
- 4 *Doubt, fragmentation, and the pursuit of method.* Rhetoric is attacked for its reliance on traditional modes of knowledge.
- 5 *The separation of narration from logic, Story from List.* Rhetoric is cut off from its basis for thinking.
- 6 *Past-blindness, egoism, and rule-mindedness.* Rhetoric is considered inappropriate for the Age of Reason.
- 7 *Immateriality and the search for substance and method.* Rhetoric casts about for ways to survive.
- 8 *Absence, despair, and cultural deterioration.* Rhetoric is marked by a glaring void – narration has disappeared as a way of thinking and arguing.
- 9 *Relevance and rediscovering of narrational bundles of judgment.* Rhetoric is reclaimed by a few.

RHETORIC AS INQUIRY

Thomas B. Farrell agrees with O'Banion's assessment of the decline of rhetoric. He may be more inclined to locate our deprecation of rhetoric in the contemporary media penchant for "high style," catchy sound-bites and buzz words

¹⁶ O'Banion, *Reorienting Rhetoric*, 107–109.

that while memorable, often signify nothing or obscure the issue at hand. For Farrell, the essential problem for rhetoric is that it is caught between the cunning of technical reason and the relativistic notion of meaning as demonstrated by post-modernism. He establishes his particular point of view early in his book *Norms of Rhetorical Culture* :

As a theory, if this term is even applicable, it [rhetoric] is seen as either an archaic longing for an original lost ideal or reason's evil twin, the carnivalesque sideshow of figurative relativism. This latter view has justifiably provoked suspicion from what remains of philosophy. But neither of these views does us much good when it comes to empowering, engaging, and trying to ameliorate the collaborative practices of civic life.¹⁷

Using Aristotle's ethical and aesthetic rhetorical tradition as a base, Farrell desires to use rhetoric to inform the practice of contemporary advocacy. Aristotle begins inquiry with appearance, but recognizes there are multiple ways to approach appearance. He defines three methods: *analytics*, *dialectics* and *rhetoric*. Analytics are concerned with the grammatical relationships between subjects and predicates; dialectics deal with dichotomous relationships formed by question and answer; rhetoric explores appearance by proposing themes and arguments which invite judgment, decision and action.

Rhetoric as practical reason provides us with a manner of engaging the particularity of appearances. Specifically, it presents audiences with appearances as particular contingencies in which they share an interest. The argument for rhetoric's ethical propensity thus turns on the mutual regard that speakers and audiences must have for one another, given the simultaneous condition of being a witness to the construction of proof and an agent vulnerable to the partisanship of others.¹⁸

In this sense, the audience is reconceived as a party with a vested interest, not a passive audience, a market entity or a voyeur. The audience takes on a responsibility as a social agent engaged in "formulating and adjudicating proofs on

17 Farrell, Thomas B. 1993. *Norms of Rhetorical Culture*. New Haven: Yale University Press, 2.

18 Farrell, *Norms of Rhetorical Culture*, 62.

difficult, but inescapably public practical matters... the reflective judgment of the audience remains pivotal to the story's outcome."¹⁹

Rhetoric's material is appearance in all its particularity and the assignment of meaning which leads to possible human action. As such, contingency, which is troubling to some (philosophy and ethics in particular), becomes an issue. "Aristotle distinguished the contingent from both the necessary and the impossible. The contingent is neither something that is necessarily the case nor something that could never be the case. Rather, it is something which sometimes is and sometimes is not the case."²⁰ The voluntary nature of the contingent binds it to human agency.

Contemporary rhetorical theorists are engaged with developing theory with unmistakably ethical, aesthetic and normative significance. Theory and practice in rhetoric require criticism – it is a manner of thinking that turns on the invention of possibilities for persuasion, judgment, resolve and action. The goal of rhetoric for Aristotle was for the audience to see a situation more clearly and be able to act more judiciously as a result.

These philosophical arguments for rhetoric may seem remote from the scientific and technological context in which we live. One might ask why the facts of a situation are not a sufficient guide to human action. The very facts one considers are often subject to contingency. Many so-called facts remain open to interpretation depending on the viewpoint one brings to a situation. Which facts take priority, how compellingly they are presented, even the order of their presentation alters their perception. But it is the very scientific and technological context in which we live our lives that has created a resurgence of interest in the ethical issues that arise as a result of increasing human control – human agency – over what were formerly thought to be the acts of a supreme being.

19 Farrell, *Norms of Rhetorical Culture*, 79.

20 Farrell, *Norms of Rhetorical Culture*, 77.

RHETORIC AS LEARNING PROCESS

To underscore the abstract argument for rhetoric, I will present two more concrete arguments, one from Jerome Bruner, a psychologist, the other from Kieran Egan, an educator. Their recent work is concerned with education.

While Bruner only mentions rhetoric in passing in his book *The Culture of Education*, many of his observations are synonymous with or at least tangential to cultural criticism which leads to a repositioning of rhetoric and narrative. After a lifetime of investigation of perceptual psychology and human cognition from a scientific perspective, Bruner is interested in developing a *cultural* psychology. The test frame for his enterprise is education, a cultural institution generally regarded as now failing to meet ordinary performance expectations and failing to adapt to contemporary needs.

Taking the broadest possible view of education, culture and psychology, Bruner considers “the questions that loomed large in creating such a cultural psychology – questions about the making and negotiating of meanings, about the constructing of self and a sense of agency, about the acquisition of symbolic skills, and especially about the cultural ‘situatedness’ of all mental activity... learning, remembering, talking, imagining, all of them are made possible by participating in a culture.”²¹

Bruner discusses two strikingly different views about how the mind works. One is computational and concerned with the sorted, coded, stored, retrieved information processing view of mind. The other is culturism or a technical-social way of life organized and construed by virtue of symbolism. He defines culture as superorganic. The computational approach is concerned with all the ways in which information is organized and used, but only information in the well-formed and finite sense. In contrast, culturism concentrates on human beings in community – how they create and transform meaning.

²¹ Bruner, Jerome. 1996. *The Culture of Education*. Cambridge: Harvard University Press, x–xi.

*This clarity, this prefixedness of categories that imposes the most severe limit on computationalism as a medium in which to frame a model of mind... For the meaning making of the culturalist, unlike the information processing of the computationalist, is in principle interpretive, fraught with ambiguity, sensitive to the occasion, and often after the fact. Its "ill-formed procedures" are like "maxims" rather than like fully specifiable rules."*²²

Despite the extreme difference between computationalism and culturism, they are not unrelated. Once meanings are established, they can be subject to formalization that can be managed by a rule system. In this sense, the meanings are transformed from their ill-formed beginnings to a well-formed state, thus becoming more abstract and manipulable. Culturalism's task is messy and double layered. "On the 'macro' side, it looks at the culture as a system of values, rights, exchanges, obligations, opportunities, power. On the 'micro' side, it examines how the demands of a cultural system affect those who must operate within it."²³

Among the educational tenets that Bruner discusses is narrative. Two broad ways in which human beings organize and manage their knowledge of the world are logical-scientific thinking and narrative thinking.

*Truths are the product of evidence, argument, and construction rather than of authority, textual or pedagogic. This model of education is mutualist and dialectical, more concerned with interpretation and understanding than with the achievement of factual knowledge or skilled performance."*²⁴

All knowledge has a history and is subject to revision. Bruner reminds his reader that "being interpretive does not imply being anti-empirical, anti-experimental, or even anti-quantitative."²⁵ Bruner thinks we may have erred by separating science from the narrative of culture. He suggests that a more complete understanding is possible if science and its cultural story, even its story *in* culture is reunited. In O'Banion's terms the List has brought fragmentation and isolation.

22 Bruner, *The Culture of Education*, 6.

23 Bruner, *The Culture of Education*, 11.

24 Bruner, *The Culture of Education*, 57.

25 Bruner, *The Culture of Education*, 133.

I have tried to characterize the new idea [school culture] as creative communities of learners. Indeed, on the basis of what we have learned in recent years about human learning – that it is best when it is participatory, proactive, communal, collaborative, and given over to constructing meanings rather than receiving them – we even do better at teaching science, math, and languages in such schools than in more traditional ones.²⁶

Bruner supports the idea of teaching live science by shifting attention to making science “by invoking criteria like conceivability, verisimilitude and other criteria of good stories.”²⁷ The focus shifts from “finished” science to the making of science – it is process rather than answers. Science becomes the story of discovery – an individual student or team story as well as the story of the professional scientist. Giving over science to narrative, developing a memorable story, creating interest and curiosity, taps into human desires, intentions, beliefs and conflicts.

Regarding the debate on the issue of interpretation and explanation, Bruner says:

It has always been supposed, moreover, that it is the object of study that determines which of the two approaches is appropriate to it. Generally, human action that is believed to be mediated by meaning is regarded as the domain of interpretation. Meaning, according to the classical mantra, cannot be explained causally. . . . Causal explanation, on the other hand, is categorical rather than particular, and based on the testing of propositions whose verifiability does not depend upon a contextual setting or upon the meaning-making processes of participants in the action. In old-fashioned terms, causal explanations deal only in material, efficient, and formal causes.²⁸

Returning to O’Banion, he observed that recent scholarship has no name for the mode of thought one uses when logically derived rules do not apply. From a technical/scientific perspective, the ideal language of knowledge is ahistoric and timelessly universal – that is, not a narrative. There is no denying the power of abstraction, of understanding and applying theorems, logically deriving proof,

26 Bruner, *The Culture of Education*, 84.

27 Bruner, *The Culture of Education*, 126.

28 Bruner, *The Culture of Education*, 102.

or coming to grips with theories and principles, but not all knowledge or human activity is amenable to this approach.

Moving to a consideration of educational theory, very young children are not capable of using a technical/scientific perspective. Another critical voice with regard to educational practice is Kieran Egan, who wrote *The Educated Mind, How Cognitive Tools Shape Our Understanding*. He agrees with Bruner regarding the overemphasis on abstract scientific knowledge in learning. He argues that children go through different modes of learning from their earliest attempts to understand the world through mythology and fantastic stories, to more reality-based heroic accounts of daring deeds, to the scientific abstraction we consider to be the highest and most powerful form of knowledge acquisition, and finally to ironic understanding, which encourages a creative and flexible turn of mind. He terms these phases: mythic, romantic, philosophic and ironic respectively. Egan ties these integrative cognitive tools to fairly specific ages: *mythic*, 2 1/2–7 years of age; *romantic*, 8–15; *philosophic*, 16–adult; and *ironic*, adult.

In many circles, Egan would need to defend his progressive and changing application of cognitive tools to education. The mythic approach requires a defense of fantasy and story telling. “[The] persistence of various forms of fantasy at every stage of life suggests that it is not some contingent, accidental invention of a few storytellers but is somehow tied up with profound features of our mental lives.”²⁹ Who among us has not mentally entertained possibilities for future action which if examined carefully would reveal themselves to be stories? Who among us does not cast ourselves as the hero or heroine in our life story as we selectively relate its episodes to others? Mythic understanding is not an aberrant or deficient form of thinking – it is thinking vividly in a poetic mode. Bruner presents yet another argument: “We all know by now that many scientific and mathematical hypotheses start their lives as little stories or metaphors, but reach their scientific maturity by a process of conversion into verifiability, formal and empirical, and their power at maturity does not rest on their dramatic origins.”³⁰

29 Egan, Kieran. 1997. *The Educated Mind: How Cognitive Tools Shape Our Understanding*. Chicago: University of Chicago Press, 45.

30 Egan, *The Educated Mind*, 29.

Romantic understanding attends to the extremes of experience and the limits of reality – knowledge is personalized and contextualized. Discovery could be an underlying theme – the human search, the problem, the frustrations, all leading to the triumph of new knowledge that improves the human condition. Fantasy is gone but a sharply told story with a strong human context is present. Egan is concerned about the transitional years when children move from one mode of cognition to another. The story can provide the glue between the mythic and the romantic. Egan emphasizes the importance of the romantic curriculum in its relation to middle school children who are often alienated from the process of learning, and are making the transition between mythic and philosophic understanding.

The philosophic needs no defense, it is the abstract powerhouse of modern education. But the last category, irony, needs discussion. Irony is about the development of multiple perspectives and a flexibility of mind that fosters creativity. It challenges the categories and givens of philosophy and abstraction. “The recognition of epistemic fragility has been one of the constants of Western intellectual life. Irony has been both a traditional product of this recognition in the West and a changing strategy for dealing with it.”³¹ The ironic and the philosophic need to coexist. Philosophy and abstraction attempt to capture the complexity of reality into a coherent scheme. “These two somewhat distinct perspectives... do not fit entirely clearly together, but they are far from incompatible. The trick is to keep one’s irony pervasively skeptical without letting it undercut and disable the exercise of philosophic capacities. Irony without philosophic capacities is impotent.”³²

Much learning grows by accretion and amendment, or is revisited in greater depth or abstraction. Many children would say that the repetitive aspects of a curriculum are boring. Egan’s four cognitive phases or tools provide appropriate context for increasingly sophisticated modes of thinking. While Egan envisions a progression of cognitive tools that are sympathetic to a child’s development, Bruner proposes a “spiral curriculum” based on teaching a subject intuitively at first and then returning to it later with a more

31 Egan, *The Educated Mind*, 155.

32 Egan, *The Educated Mind*, 157.

formal or highly structured account of it. According to Bruner, the topic should be returned to as many times as is necessary for mastery of the topic's full generative power.

As demonstrated, rhetoric is undergoing a resuscitation by contemporary philosophers, psychologists and others. Something is missing in human discourse, and rhetoric may be what we are searching for. But now, given the broader rhetorical context, we need to look more specifically at communication design.

RHETORIC — INTO THE VISUAL WORLD

Communication design (graphic design and information design) has been looking for contributory theory on which to position practice. And like many young disciplines, it has been borrowing theory from more developed disciplines, trying to cobble together an understanding of itself. The search is for a pattern that reveals and explains the activity or for a method to guide practice. No one expects it to be a formula but most expect it can serve as both an analytical and generative tool. Developing an analytical tool is by far the easier activity. Moving from theory to its analytical application to an existing communication can demonstrate what falls within the realm of theory and what escapes it. It also shows how deeply the theory takes us and whether it is a genuine aid to understanding. Using theory generatively, finding a way to close the gap between theory and practice, is more problematic. A successful generative approach often results in a method to guide practice.

One of the most persistent theoretical connections has been to language itself. Semiotics and semiology continue to compete for territory and credibility under the banners of Charles Sanders Peirce and Ferdinand de Saussure respectively. Neither camp has been able to mount the definitive demonstration that neatly puts theory into an analytical frame and then uses it as a generative tool within communi-

cation design. There seems to be a tantalizing relationship between the structure of spoken language and that of visual imagery; perhaps this is true only if language is taken metaphorically as a system of signification. But if language is understood to be what linguists study – spoken language – then, as they have argued, the structure doesn't translate. Still, there seems to be a connection. Could it be rhetoric?

Before looking at this in more detail, the visual world needs acceptance. The shadows in Plato's cave have historically cast doubt on the trustworthiness of images. Now to compound this, contemporary digital manipulation allows for a seamless collage of parts – some created, others pirated. What are we to believe? Barbara Stafford, an art historian, has been arguing for the importance of the visual.³³ The problem is once again that of using truth as the measure for usefulness – as if what we call reality were a given, stable situation that we can behold if only we cast off certain habits of mind or use only “pure” language.

The growing sophistication of electronic mimicry and the explosion of unlicensed private publishers who fiddle with software add a new dimension of uncontrollability to the venerable notion that images are dangerously transgressive and ungovernable. To the destabilizing of reality... can be added a second, disquieting social phenomena. On one hand, electronic infringement by everyman debases visualization by calling attention to the problematic practice of borrowing. Even legitimate and openly acknowledged imitation necessarily undermines the long-standing, if mythic, ideal of an unmixed original. On the other hand, the proliferation of software has, paradoxically, created two classes of citizens separated according to whether they need images or not.³⁴

Images for the less-than-literate have a long history to which a new digital chapter is being written. Visualization has long been associated with a kind of “plain” intelligence. The presumption is that full knowledge cannot come through images, and that those who create or use images instead of words or numbers are somehow deficient. Literacy and numeracy have been the key symbolic instru-

33 Stafford, Barbara. 1996. *Good Looking: Essays on the Virtue of Images*. Cambridge: MIT Press.

34 Stafford, *Good Looking*, 45.

ments of education. Yet not all ideas, concepts or plans of action can be presented effectively through these systems.

The suppressed premise maintaining the inferiority of images (and, conversely, the superiority of texts) is predicated on the privileging of language as standing for all higher handless and sightless cognitive activity. Hermeneutics, defined as the interpretive, exegetical, and theoretical procedure performed on resisting text, fostered such a hierarchy by ranking close reading above the ostentatious shallowness of sight. The historical emergence of difficult discourse was contingent on the moral censure of fast and loose gazes. Thoughtless visible experience has as its foil the internalized, invisible patrimony of literate civilization.³⁵

But looking isn't quite so simple. Ordinary looking locates the viewer in space, identifies the attributes and affordances of the objects and individuals in his or her immediate range, tells about time, weather and movement. But even what is looked at ordinarily is based on selective attention and choice. Unschooled looking tends to be literal; it accepts the world as a given. More sophisticated forms of looking – whether instrument-aided or whether achieved by a willed attention to geometric form or color – go beyond the literal world to reveal either an invisible structure or new patterns of information and structure present in the usual visual environment. This movement to abstraction and a constructive approach to creating particular kinds of representation has been discussed in the literature of art history and need not be reviewed here. This century has explored the relation between abstraction and construction – we have become masters of controlled making. For example, the constructivists, cubists and minimalists in the visual arts; and Mallarmé, the Zaum poets and Joyce in the literary arts have uncovered the syntax of their particular materials. Exploration of music based on a twelve tone scheme, the disaffection of architecture from the Beaux Arts tradition – these and many more events in multiple forms of representation mark the deconstructive and reconstructive tendency of this century.

While focusing on syntactic or constructive aspects of human artifacts, the semantics or meaning dimension of what was made was taken as a given or was at least obvious to the recipient. Just past mid-century, Gui Bonsiepe called attention to a visual/verbal rhetoric in an article of the same name,³⁶ in which he observed that rhetorical practices were considered largely in terms of verbal application. (Rhetoric was originally not a literate practice but an oral one.) Two thousand years of history accompany this practice, yet it is usually discussed from its classical perspective. Bonsiepe stated that “the practice of rhetoric has far outrun its theory.” He was referring to what is now an ever more mediated world of verbal and visual communication.

Of the five sections of classical rhetoric, Bonsiepe focused on stylistic formulation of material (the visual equivalent of elocution and pronunciation, i.e., presentation) – the part of rhetoric most vociferously attacked for its ability to mislead. These stylistic formulations are referred to as rhetorical figures – they depart from ordinary, normal or uninflected communication for the purpose of increasing attention to the communication or casting its idea in a new light. They are like communication templates or patterns that can suggest ways to control the syntax and semantic construction of a message in order to achieve attention and reception on the part of the recipient.

Shifting from verbal to visual, Bonsiepe discussed two subdivisions of rhetorical figure: the *syntactic*, which operates through formal visual construction such as position in space, color, contour or shape; and the *semantic*, which operates through its meaning or more literal identification as a particular person, place, thing or event. A third subdivision, *pragmatic*, use forms of “address,” the character and believability of the originator of a message and the kinds of expected response as its basic material. This was thought to have less application to visual communication than the syntactic and semantic, and while its impact remains less obvious, post-modern analysis of communication would include it as important to understanding the institutional and authoritative structure of a communication’s origin. The list of rhetorical figures is presented in Figure 3 (page 224).

36 Bonsiepe, Gui. *Visual / Verbal Rhetoric*. *Dot Zero* 1.2, 37-42.

Bonsiepe was also interested in quantifying the rhetorical force of a statement – to measure its persuasive force. This needs to be understood in the push for objectivity and quantification that was very present in the middle of this century during a time of high modernism and logical positivism. The idea of quantifying rhetorical force is fatally flawed. His proposed idea was to count the use of rhetorical figures and contrast this with “normal” communication in order to arrive at a ratio of rhetorical to non-rhetorical elements. The fiction here is that non-rhetorical elements can be identified – that they even exist – and that rhetorical elements can be separated and categorized according to their power. Advertising, which represents the most direct persuasive appeal, provided the visual examples of various rhetorical figures.

A few others have picked up on this idea, and of course many designers and communicators intuitively use these figures as they seem so deeply embedded in our processes of telling, witnessing, influencing, showing and convincing others. Hanno Ehses took up the problem of using rhetorical figures generatively. He was interested in the possibility of using rhetoric for the purpose of concept formation in visual terms. He considered rhetoric to be a kind of secondary grammar. “Rhetorical figures do not by any means represent specific recipes. They are exploration tools that can spur lateral thinking, giving designers awareness of possibilities to make the best choice... The real problem continues to be that of bringing together the abstract construction principles with original ideas within the confines of a specific task.”³⁷ His students created a series of posters for *Macbeth* to demonstrate various rhetorical approaches.

Neither Bonsiepe nor Ehses question the limited role allowed to rhetoric. Both use it as a means to improve communication and focus the stylistic aspects of a message. Their contribution was understanding and demonstrating that rhetoric transcended the verbal world and had efficacy in the visual world as well.

37 Ehses, Hanno. 1984. Representing *Macbeth*: A Case Study in Visual Rhetoric. *Design Issues*, 53–63.

FIGURE 3 *List of Rhetorical Figures*

SYNTACTIC FIGURES

The following examples use structural elements rhetorically.

Transpositive Figures

- Apposition* Uses an explanatory insertion
- Atomization* Treats dependent parts as independent
- Parenthesis* Encloses one thing in another
- Reversion* Dislocates an element for emphasis (Also called *anastrophe*)

Figures of Omission

- Privative* Omits elements
- Ellipsis* Leaves out elements that can be supplied from context

Repetitive Figures

- Alliteration* Repeats a sound or form
- Isophony* Repeats similar elements in a series
- Parallelism* Repeats a rhythm

SEMANTIC FIGURES

The following examples develop meaning rhetorically.

Contrary Figures

- Antithesis* Unites elements with opposite meanings
- Exadversion* Asserts with a double negative
- Conciliation* Joins contradictory relata

Comparative Figures

- Gradation* Organizing in ascending or descending order
 - Hyperbole* Exaggerating obviously or intentionally
 - Understatement* Excessive minimization
 - Metaphor* Transfers an element to another field of application so that a similarity is assumed and expressed between the two fields
 - Simile* Explicitly compares two unlike things
 - Analogy* Extends a known comparison to include a partially known one
-

Figure 3, continued

<i>Allegory</i>	Tells an extended story that deals with an idea indirectly
<i>Parable</i>	Tells a brief story that deals with an idea indirectly
<i>Satire</i>	Tells an exaggerated and simplified story
<i>Irony</i>	Tells a story by using words to express a sense contrary to that really intended

Substitutive Figures

<i>Metonymy</i>	Replaces one sign with another, the relation of both being in a real relationship
<i>Synecdoche</i>	Replaces one sign by another, the relation of both being in a quantitative relationship; uses a part to stand for the whole
<i>Personification</i>	Attributes human qualities to an inanimate or nonhuman object

PRAGMATIC FIGURES

Address

<i>Fictitious dialogue</i>	Author asks and answers
<i>Direct address</i>	Author addresses the audience
<i>Reposition argument</i>	Translates an objection into an argument in one's favor
<i>Asteism</i>	Replies with an irrelevant statement
<i>Rhetorical question</i>	Asks a question that expects no answer

RHETORIC — DESIGN PROCESS AND HUMAN DECISION

But rhetoric can do even more than this. It is even legitimate to consider it in the world of three-dimensional constructions — it can go beyond convincing argument to a direct role in the design process itself. As mentioned earlier in this article, rhetoric supports issues of human agency. Individuals engaged in defining some future prospect to be realized through the expenditure of resources, whether human or material, sometimes unwittingly use rhetoric in the creation of prototypes and models of the projected future. In this sense, virtually all designers (architects, urban planners, product designers, multimedia designers, information designers, software designers, etc.) are developing rhetorical representations as prototypes of the idea to be realized.

Unpredictability is a characteristic of the future — one we try to neutralize through strategies like trend projection, control management, hedging and statistical surveys. Yet the essential unpredictability remains. Four sources of unpredictability in human affairs can be identified: 1) radical invention cannot be predicted; 2) decisions contemplated but not yet made escape prediction; 3) elements of game theory such as indefinite reflexivity, imperfect knowledge or the open character of situations cannot be predicted; and 4) pure contingency escapes prediction.³⁸

To these can be added the more sweeping statement that design generally takes place in a concrete situation characterized by complexity, uncertainty, instability, uniqueness and value conflict.³⁹ These are situations of high fluidity which require the human agency of judgment and choice.

Aristotle also envisioned rhetoric as a civic art of deliberation — as part of our mental strategy for developing practical reason. As mentioned earlier, Aristotle defined three kinds of rhetoric: that which dealt with the future was deliberative, that which dealt with the past was judicial and that which dealt with present performance was evaluative.

38 Macintyre, Alasdair. 1984. *After Virtue*. Notre Dame, IN: Notre Dame University Press.

39 Schön, Donald. 1983. *The Reflective Practitioner*. New York: Basic Books. Schön explores the problem of judgment in such diverse fields as city planning, psychotherapy, architecture and business management.

Our interest here is only with the first. Deliberative rhetoric considers action for the future by reasoning from example.⁴⁰ It is not a big step to consider Aristotle's examples as the designer's prototype or the planner's scenario. All are examples or postulations of a possible future – ones that are contingent and subject to human choice and action.

*The useful is not automatically just or honorable: there is a surplus, usually marked off by necessity, for what it is best to do, although unjust, or at least not just. Deliberative rhetoric is especially concerned with the possible and the impossible, and so necessity becomes its special plea. The characteristic method of deliberation is reasoning from example, and so a concern with consequences and success dominates. It is easy for pleas of necessity to get a hearing. Apart from that surplus, in the area where translation is successful, the intertranslation between utility and justice assures that deliberative reason not be reduced to instrumental reason. If the useful is generally just, then it is not useful in the amoral sense that arguments from necessity bring with them.*⁴¹

The ability to anticipate a future situation is difficult. Failures to do so make the evening news and are represented by well documented unexpected side-effects such as the impact of the automobile on living and working patterns. Even sophisticated deliberation may be unequal to the task of accurately envisioning the future, but no deliberation surely is not the answer.

*Deliberation is both ethical and logical because it is reasoning that requires knowledge of ends as well as means. Deliberation is always in danger of becoming merely instrumental reasoning, since... it simply takes for granted whatever end is desired by the audience; we deliberate about means, not ends.*⁴²

Designers question the problem they address, for the framing of that problem proposes or at least limits a solution. Schön specifically cautions designers and policy makers to be careful about the analogies and metaphors used to describe and discuss a problem, for these descriptions will

40 Garver, Eugene. 1994. *Aristotle's Rhetoric, An Art of Character*. Chicago: University of Chicago Press, 51–67.

41 Garver, *Aristotle's Rhetoric*, 67.

42 Garver, *Aristotle's Rhetoric*, 69.

direct both means and ends. One of the important skills the designer brings to deliberation about the future is the ability to manipulate concrete means (the prototype) to envision an understandable and concrete end.

Deliberative rhetoric uses opinions about the good to advocate a policy or decision. Examples, like prototypes, are the important focus of such inquiry. These examples are the rhetorical version of induction – reasoning from particular cases to a general rule. The choice of examples cannot evade ethical discourse.

In these terms, rhetoric is used in two ways: as a prototype or as an argument in favor of realizing a plan. While the prototype and the plan for its realization are deeply interrelated, here they are considered separately. Prototypes are the objects all designers create in order to externalize and make concrete the objects they design before these designs are realized in the everyday world of use. Prototypes are a form of synecdoche, in which some part is representing an as yet undeveloped whole. The prototype helps the designer understand what they know about a design and what is unknown, half-baked or faulty.⁴³ It is also a pragmatic form of address as it serves to share a vision with others involved in the decision making process. The generation of a prototype is not a naive or neutral operation. In the early stages of its development, a prototype is a kind of “ill-formed” argument. The designer is working through conceptions of what “might be.” These early prototypes can take the form of a diagram or sketch which respectively reveal a primary set of functional relationships or an even more general basic concept.

Designers who engage in user observation as part of their design process may develop behavioral prototypes which offer users in the field a kind of thesis about how an idea will communicate or work. These prototypes are usually highly focused on what the designer desires to validate.

As users work through some behavioral activity with the prototype, they sometimes inadvertently reveal an antithesis – their conception of how something should work is not compatible with the designer’s. Such moments are critical to the observation, its analysis and the future develop-

43 Besides *The Reflective Practitioner*, see also Schön, Donald. *Frame Reflection: Toward the Resolution of Intractable Policy Controversies*. 1994. New York: Basic Books; and Generative Metaphor: A Perspective on Problem-setting in Social Policy, in Ortony, Andrew, editor. 1979. Cambridge: Cambridge University Press.

ment of the prototype. The antithesis is a product of communication and use – a product of interaction that would not be revealed without the behavioral prototype.

A procedural prototype may take the user through the logic of an operation to see if they can follow the classification, organization and operation of some activity. This more rigorous form of prototype helps to move an idea from “ill-formed” to “well-formed.”

An appearance prototype concentrates on the formal design values of the object. It applies rhetorical ideas broadly, including syntactic, semantic and pragmatic adaptations, with the goal of focusing the user’s attention, assuring a revealing organization, and even creating pleasure in the use of the design. Like other prototypes, the appearance prototype may undergo user interaction in order to refine and clarify the visual aspects of a proposed design. In a sense, the various kinds of prototype are indices of where the designer is in a development process. However, to the extent that the design process is iterative, it may be impossible to identify the extent of design development from the most current prototype alone.

It should be clear that prototyping is a way to postulate some proposed design for a kind of reality check with those involved, whether clients, other designers or end users. The kind of prototype developed for interaction and discussion depends on how far the designer has gone with an initial idea, what kind of information they need to elicit from an interaction and who is the partner in the interaction. For example, if the designer is communicating with those people engaged in the project, the designer must be careful to communicate the important features, the most important attributes of the proposed idea in as real a relationship as possible so as to honestly reveal the idea in its current state of development. Sometimes several prototypes will be put into competition with each other, or one concept will be developed in many divergent ways. All these are ways in which the designed object (prototype) explores contingency, appearance and alternative points of view in order to facilitate sound judgment, decision and action. It is in this sense that rhetoric is a design tool supporting human decision.

The rhetoric of the prototype allows a vision of a proposed future in much the same way that science fiction is a rhetorical narrative of future science and technology developments. Technology can be separated from science in that its development is more related to contingency – what might be – while science is related to certainty. In this sense, technology is like design, its prototypes for practical use and action can be examined as rhetorical statements rather than as necessities or givens.

*Solutions are only probable and can always be changed or set in opposition to others. In this sense, technology is part of the broader art of design, an art of thought and communication that can induce in others a wide range of beliefs about practical life for the individual and for groups... Design is an art of thought directed to practical action through the persuasiveness of objects and, therefore, design involves the vivid expression of competing ideas about social life.*⁴⁴

CONCLUSION

Walter Ong speaks powerfully in favor of rhetoric: “The loss of narration left much of the Western world with no language of order and disorder, no moral criteria, no sense of life as a heroic quest, no instruction on how to interpret the relevance of general principles for particular situations, no sense of man as a storyteller, and no means by which to encourage individuals to discover their own stories. What the West did have, and pursued with a vengeance, was Lists, rules, detachment, universals, solipsism, rationalism, and anomie.”⁴⁵

I have argued here for rhetoric and the visual. In closing, I would like to make a practical connection between rhetoric and the situation in which we are living. Five contemporary needs serve to demonstrate the role rhetoric can play in its ability to celebrate appearance, focus meaning

44 Buchanan, Richard. 1989. Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice. In Margolin, Victor, editor. *Design Discourse*. Chicago: University of Chicago Press.

45 Ong, *Ramus, Method, and the Decay of Dialogue*, 180.

and interpretation, deal with contingency and support human agency.

- *First, the need for a critical apparatus for understanding information and media relationships.* In an ever more pervasive media environment, calculated manipulation of an audience seems to be the standard. Like Augustine, we need to be concerned that people can understand the manipulation in order to question its purpose and be able to use rhetorical methods to advance other points of view.
- *Second, the need for a mode of inquiry that can address social and cultural issues.* Discussion and decision making in the context of daily human life lacks form and voice. Without going into a critique of the media, suffice it to say that news reports, for example, use a severely abbreviated form of story-telling which frequently presents only one point of view, pretends to deliver the “facts” as they are known, and fails to connect to larger human issues and agency. The conundrums of our time (genetic engineering, multiculturalism, euthanasia, globalism, educational reform, to name a few) need to be given form by advocates for various points of view so that the public may play its role in determining future action. These issues need to be brought down from the largest “abstract” context to a more manageable “concrete” and local context for examination.
- *Third, the need to reinvigorate learning.* The crisis in education is well documented and culturally profound. As discussed previously, Bruner and Egan both point to an educational blind spot that prevents seeing rhetoric and story-telling as a legitimate method for learning.
- *Fourth, the need to address “meaning” in visual communication.* In recent decades there has been much focus on technique and syntax. The digital situation reinforces attention to technique and syntax while it constrains the means of execution. Technique and syntax can be technologically automated, but the making of meaning remains a human enterprise. In the largest sense, rhetoric can serve to develop a sharper awareness of this process.

- *Fifth, the need for a better understanding of sign context for new media.* The tradition of print or television does not translate to computer mediated communication in the largest sense. Book pages yield to sequences with links that reveal “selected” information. Given the pressure of increasing information processing and interpretation, seamless, real-time live-action or animation may not be the best use of multimedia’s potential. Sampling, selective examination in depth and other, as yet unspecified, operations may better serve our needs.

None of the above lend themselves to a purely technical or even factual solution. All point to rhetoric and storytelling as a way to open inquiry and explore possible futures. Returning briefly to science fiction as it rhetorically represents future scientific and technological developments for our consideration, design prototypes rhetorically postulate a future situation or condition that can elicit behavior as well as enthusiastic endorsement or critical comment. Rhetoric is culturally present, but we recognize it only negatively when it is blatantly over or under used.

[No] culture or public life project can survive for long without some form of rhetorical practice, some coherent, symbolic manner of securing collaborative public action... every culture requires some avenue for addressing and thereby explicating its identities, accomplishments, and needs – and hence some form of rhetorical practice.⁴⁶

Rhetoric provides us with the occasion for higher order thinking. The messages are not “givens” but are rooted in the messy contexts of our lives and the possibilities of human agency. As such, they engage our consideration of rejection or acceptance, or the creation of another possibility. Some might still say rhetoric is bad while others might say the opposite. This article would like to convince the reader that rhetoric is necessary and unavoidable – it supports communication and human decision.

Acknowledgement

The author thanks Bob Ladenson, a philosopher and ethicist, whose critical reading and suggestions helped to sharpen this argument.

Sharon Helmer Poggenpohl teaches human-centered communication design at the Institute of Design, Illinois Institute of Technology in Chicago. Her research interests include communication design theory, humanizing new technology and the future of learning.



A R H E T O R I C A L V I S U A L A N A L Y S I S

A contemporary designer pays homage to the ancient codex designers or Tlacuilo. "Tale of the origin" is a Mesoamerican science-religion story of the beginning and end of life. The myth is presented first as a Spanish language artist's book in a documentary style. Key moments and characters in the myth are symbolically visualized. This document is then analyzed and interpreted using rhetoric as a subtext or key to understanding the ideas of the myth as well as the visual structure of the unfolding story and book. Yet another subtext translates the myth into English.



Alejandro Brizuela

Tale of the Origin

OF A MEXICAN MYTHICAL TALE

Universidad de las Américas Puebla
Departamento de Diseño Gráfico, AP 100
Cholula, Puebla 72820 Mexico

Visible Language 32.3

Brizuela, 234–255

© *Visible Language*, 1998

Rhode Island School of Design

Providence, Rhode Island 02903

The cover and gesture of the presentation are rhetorical.



Understatement

A small title represents a huge story.

Allegory

The format of the book is based on the cosmic relation 13:20, which represents the Aztec science-religion philosophy.

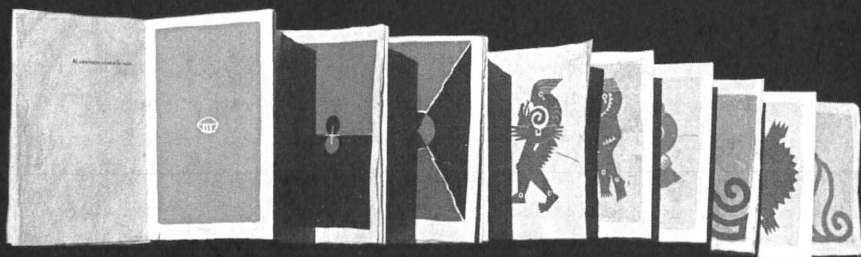
Metonymy

The *amate* paper represents the ancient culture, while the cord represents the idea of rustic, hand-crafted work.

Parallelism

The structure reveals a continuous rhythm.

INTRODUCTION



This article attempts to analyze an interpretation of a Mexican mythical tale using visual rhetoric.

While rhetoric has long been used in literary analysis, only recently has it been used by graphic designers to organize visual messages and to explain how viewers make sense of images.

Rhetoric considers how messages are addressed and constructed. It redefines its content, tone and intention. The manner in which the visual text is constructed prefigures the way in which the reader will examine the material.

Individual elements in a visual text might have a sense or meaning when they are alone, but once they become part of a visual system, their meaning changes based on that specific context. Emiliano Zapata, the Mexican revolutionary, is an icon that acquires different meaning depending on who uses it and how it is used – a symbol of rebel groups in Chiapas, hero for the official party, symbol of the leftist parties.

What I will establish is that it is not possible to analyze a message only through its parts, because every part influences the whole.

ANCIENT MEXICAN TRADITION

Since the Earth's creation, in accordance with the Mesoamerican tradition, there have been five different stages, illuminated by five different suns. These suns were incarnations of the god representative of each time. Each of these historical stages has finished, tragically, with a cataclysm so devastating that every single vestige of civilization was erased with each cycle.

The everyday life of ancient Mexicans was ruled almost entirely by their religious thoughts. They had a bipolar cosmogonic idea of the universe. They believed that everything had its opposite, creating a balance. For them, life existed because of death, so if they have a god representing life, they should have one representing death. The story of the creation of the world states that all the things were created by four original gods that were the descendants of the original couple, which in fact was a dual god, mother and father. This idea of the four original *Tezcatlipocas* colored the number four with a mystic aura. This number is repeated again and again.

Some anthropologists call the Aztec system of philosophical thought a science-religion, because there is such an intimate relationship between them. Aztecs were very accurate astronomers and mathematicians, they had a counting system based on twenty units. Their religious calendar consisted of thirteen months of twenty days each, based on the cycle of the moon. Their civil calendar consisted of 360 days with a complement of five "empty" days dedicated to worship and sacrifice.

They knew how to make paper out of bark and to use that material along with vegetable and mineral resources to make paint. They wrote their own history on long pieces of *amate* paper that later were called a *codex*, because they were written in a code that could be read only by a few. Codices were folded several times to one side and then to the other to make an accordion-like package that could be easily unfolded.

ANALYTICAL FRAMEWORK

Tale of the origin is a graphic and poetic synthesis of the Aztec cosmogony, that narratively shows an interpretation of the mythical creation of the world. *Historia del origen* aims to recreate a myth, to pay homage and to promote knowledge of the ancient Mexicans. In a sense, a modern book designer is paying homage to the ancient codex designers called *Tlacuilo*. The reader is expected to enjoy the discovery of a new way to understand an ancient tradition and to appreciate that Mexican culture has a rich heritage worthy of rediscovery.

The tone of this work is poetic – it is an interpretation of an old story recreated by the graphic expression of the author. Production of the codex-book is limited to just ten copies that have been distributed as an “artist’s book.” The typography used for the text was designed by the author who wanted to imitate the movement of the architecture and sculpture of Aztec artists. It is printed on *amate* paper that is exactly the same as was used by the Aztecs to construct their codex. The work measures, when folded, thirteen by twenty centimeters. It consists of text and very synthetic and abstract images printed in primary colors with the graphic work retelling the symbolic concepts of the ancient Mesoamerican science-religion.

The whole “book” is based on the cosmic relation 13:20. The relations among these two numbers determine all astronomic and religious calendar cycles of the Mesoamerican people. The work is also based on the number four, a mystic number which represents the four directions of the universe with its four basic colors: red, black, blue and white; the four sacred elements – paradoxically repeated in every culture in the world – water, earth, fire and wind. These elements according to the tradition, were created by the four original gods named *Tezcatlipocas*, who were descendants of the original couple (*Omecihuatl* and *Ometehcutli*).

Another important concept is the use of the double spiral that represents the origin and growth to other planes of consciousness.

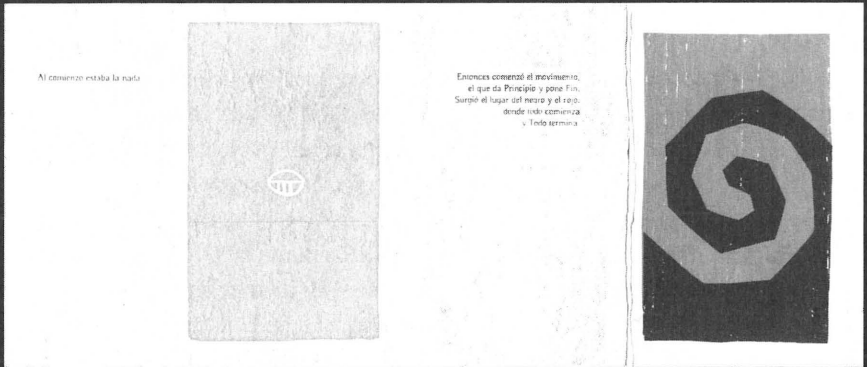
The “book” has a continuous and never-ending reading. When one finishes one side, the reader in a natural way, continues reading the other side of the paper and so on. This is analogous to the spiral – a never-ending continuum of movement.

TALE OF THE ORIGIN

The creators

Before the origin there was nothingness.

*Then movement started –
the one that gives principle and end.
The movement produced the place
of the black and the red
wherever movement starts and ends.*



Metaphor

The symbol of the zero stands for the nothingness.

Metaphor

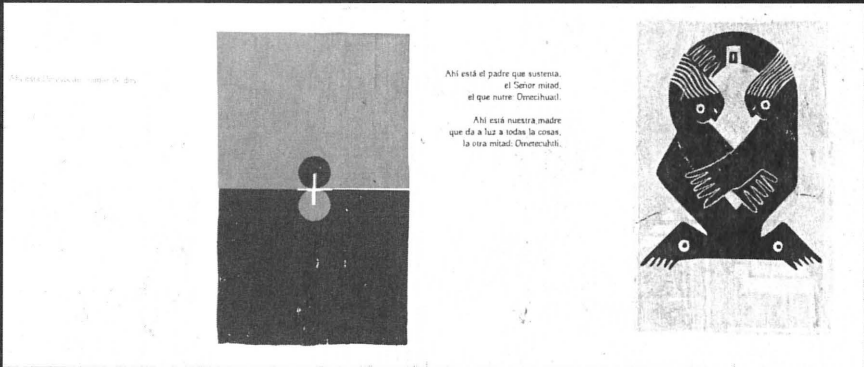
The spiral represents beginning and end.

Metonymy

The movement is presented by the spiral.

*There is Omeyocan –
the place of two...*

*There is the father who sustains,
the lord of the half,
the one who feeds: Omecihuatl.
There is the mother
who gives birth to all things –
the other half: Ometecuhtli.*



Analogy

Two colors are compared with two genders expressing the duality of things.

Metaphor

The *plus* symbol represents the union of two.

Allegory

The entire idea of the creation is based on the dance of Omecihuatl and Ometecuhtli.

Analogy

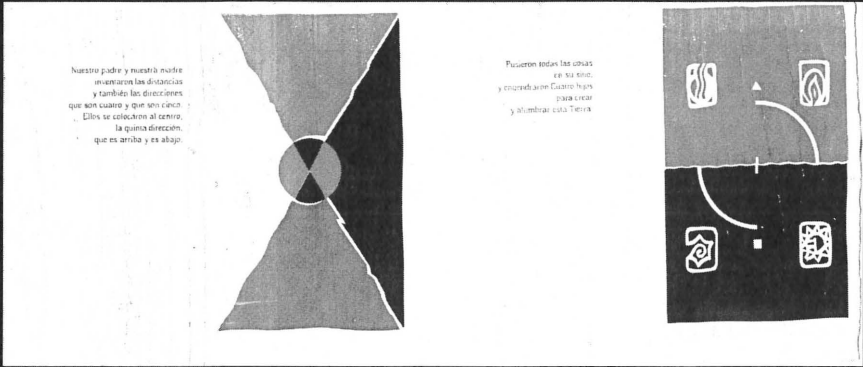
Two colors are compared with two genders expressing the duality of things.

Metaphor

The *plus* symbol represents the union of two.

*Our father and our mother created the
distances and also the directions
which are four, which are five.
They placed themselves at the center
of the fifth direction
which is above and below.*

*They put everything in place,
and engender four descendants
to create and to light up this earth.*



Synecdoche

The four colors, red, black, blue and white represent the four directions – the whole universe. The circle in the center is in place of Omeyocan.

Antithesis

Joining together the opposites: earth and fire – the two poles.

Ellipsis

The circle is composed of just two parts.

Synecdoche

The four Tezcatlipocas are represented by four different icons.

*Tezcatlipoca – the smoking mirror –
the lord of the north and black
the lord of the night and sorcerers.
The donor of life, supreme father,
creator of the word and the fire,
the Almighty,
the everlasting young,
the warrior.*

*Quetzalcoatl – the feathered snake –
lord of the white and the west,
lord of light and sacrifice,
supreme priest, the oldest.
Creator of the corn and the wind.
The one who returns to himself:
the everlasting.
He is the end and the beginning.
Creator of the days and the skies.*



Allegory

The sign of the smoking mirror replaces one foot, representing one passage of the character's legend.

Personification

A god is represented as a human.

Apposition

The circle between the arms is inserted as the name of the divinity, Tezcatlipoca.

Synecdoche

The bracelets on the arm and the big earring are signs of royalty.

Metaphor

The crossed arms represent the wings of a bird – the feathers represent the sky and wind.

Apposition

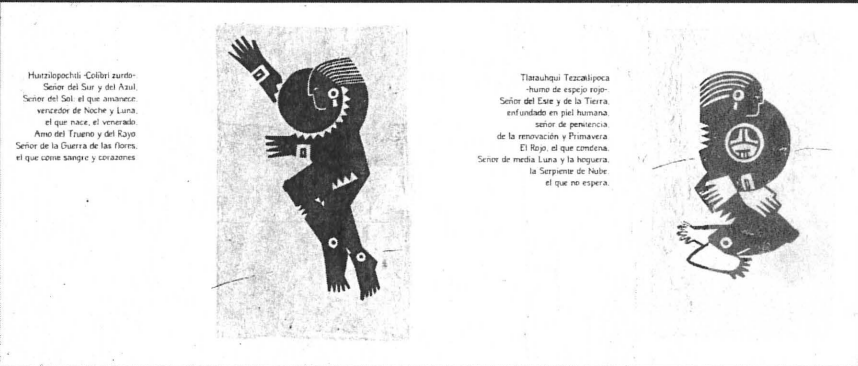
The symbol of Quetzalcoatl (the spiral between the arms) is inserted in the figure as the name of the divinity.

Synecdoche

The head of the snake stands for the entire creature.

*Huitzilopochtli – lofty hummingbird –
lord of the south and the blue,
lord of the sun: the one who dawns,
defeater of the night and the moon,
lord of thunder and storm,
lord of the flowers war,*
who eats hearts and blood.*

*Tlatauhqui Tezcatlipoca –
red mirror's smoke –
lord of east and ground,
dressed with human skin,
lord of penance, of renovation and spring.
The red, who condemns.
Lord of half moon and bonfire,
the snake of clouds, the impatient.*



Apposition

The sign of the sun between the arms represents the name of the character.

Allegory

Huitzilopochtli is in an ascending position, giving form to the sunrise.

Metonymy

Huitzilopochtli's mission is to carry the sun, representing the light and the dawn.

Ellipsis

It is possible to complete the idea of sun beams, even if they are not present.

Metonymy

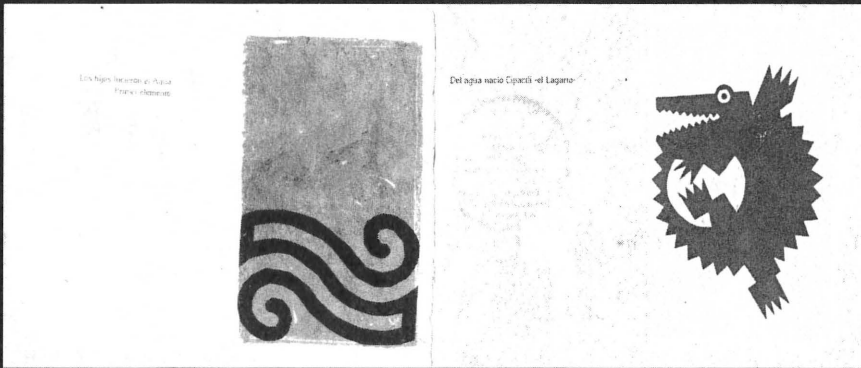
Tlatauhqui is on his knees, in a position of penance and sacrifice. He is looking to the east which represents his origin. He embraces a seed that is the representation of new life, growth and change of form.

Metaphor

The human skin that Tlatauhqui Tezcatlipoca is wearing as a suit, represents the life in this world, the dead and the survival of spirit.

*The four descendant Gods created the water,
the first element.*

*From water was born Cipactli –
the alligator –*



Metonymy

The movement of the water represents this liquid entity.

Alliteration

The repetition of the rhythm of the lines, creates an illusion of movement.

Anastrophe

The normal position of the alligator is dislocated to emphasize the continuity of the circular shape.

Repetition

The serrated edges around the body of the alligator are repeated to show the aggressive character of the beast.

* *The different Mexican groups of the plateau organized battles called guerras floridas. The motive for these battles was to capture young warriors for religious sacrifice.*

*Cipactli gave rise to the earth,
to Coatlicue,
the second element.*

*Tezcatlipoca made the fire –
donor of light and warmth,
the third element.*



Metonymy

The dented shape of the figure recalls the origin in Cipactli.

Gradation

The spiral shape seems to be pushing or growing up.

Synecdoche

Fire is represented by a flame.

Gradation

The lines are growing from right to left.

Parallelism

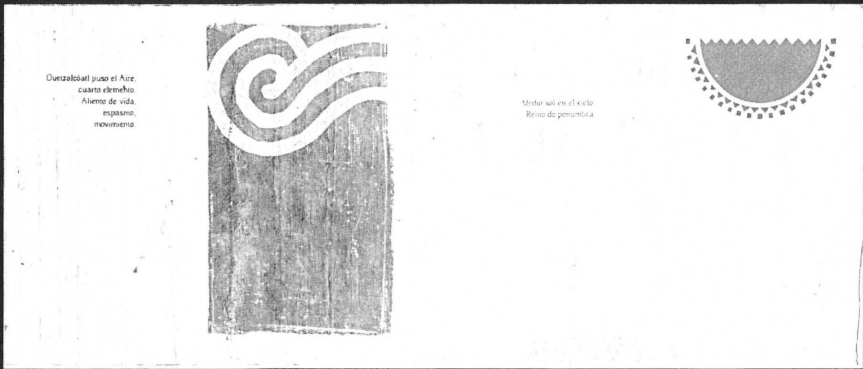
The lines composing the figure are the same but change position rhythmically.

TALE OF THE ORIGIN II

From the suns that have illuminated the earth

*Quetzalcoatl placed the air,
the fourth element.
Breath of life,
spasm, movement.*

*Half sun in the sky,
Kingdom of shades.*



Metonymy

Wind is represented by movement.

Parallelism

The lines composing the image are the same but change position rhythmically.

Parallelism

The figures composing the sun are the same but change position rhythmically.

*Tezcatlipoca made himself the sun,
the first sun to shine.
He reigned for many centuries,
the Sun God Tezcatlipoca.*

*One day “four-jaguar” –
Quetzalcoatl with his stick –
was knocked down from the endless sky,
the first sun to shine.
As a revenge Tezcatlipoca came back,
dressed as a jaguar to devour men.
There were giants living on the earth
which became depopulated the day
of “four-jaguar.”*



Synecdoche

Tezcatlipoca is represented by the placement of his symbol, the “smoking mirror.”

Parallelism

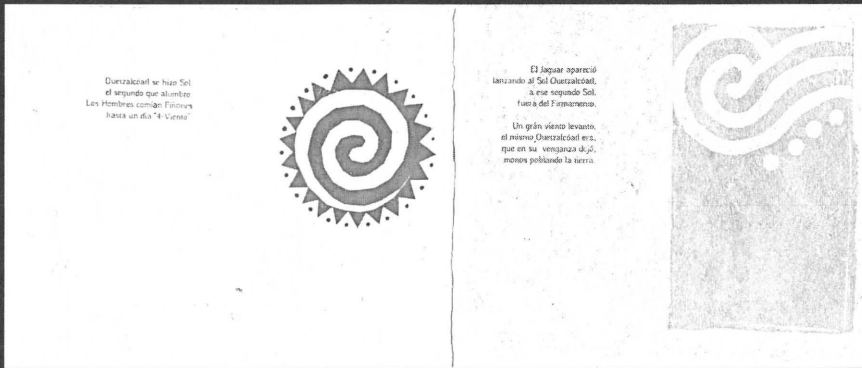
The lines composing the figure are the same, but change position rhythmically.

Metaphor

Tezcatlipoca is represented by the jaguar. The jaguar is an animal with mythical attributes always related to divinity.

*Quetzalcoatl became the sun,
the second to lighten the Earth.
The humans ate pine nuts
until a day of "four-wind."*

*The jaguar appeared again
throwing the sun, Quetzalcoatl,
that second sun,
out of the universe.
A great wind arose,
it was Quetzalcoatl himself
leaving in his revenge
monkeys to populate the Earth.*



Synecdoche

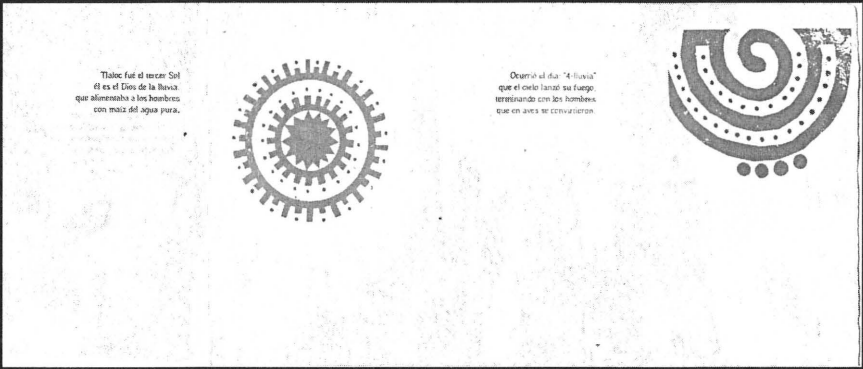
Tezcatlipoca is represented by the placement of his symbol, the spiral.

Parallelism

The triangles composing the figure are the same, but change position rhythmically.

*Tlaloc was the third sun.
He is the God of the rain,
who feeds the men
with corn from pristine water.*

*One day "four-rain,"
the sky threw his fire,
ending with men
who became birds.*



Parallelism

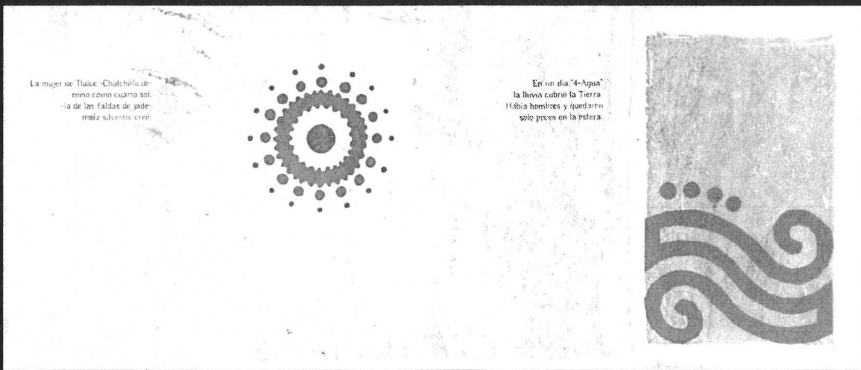
The lines composing the figure are the same, but change position rhythmically.

Gradation

The round shape, seems to be growing.

*The wife of Tlaloc, Chalchitlicue,
ruled as the fourth sun,
the one of the jade skirt
created wild corn.*

*One day "four-water"
the rain covered the Earth.
There were men and then
only fishes in the sphere.*



Parallelism

The dots composing the figure are the same but change position rhythmically.

Gradation

The dots seem to be decreasing.

Metonymy

This sun is related to water which is represented by a circular form with dots as drops.

The Earth was left dark for the fourth occasion.

“When everything was night, when there was no light as yet, the Gods came together there in Teotihuacan.”

There was elected the fifth sun.

Two went to the ritual –

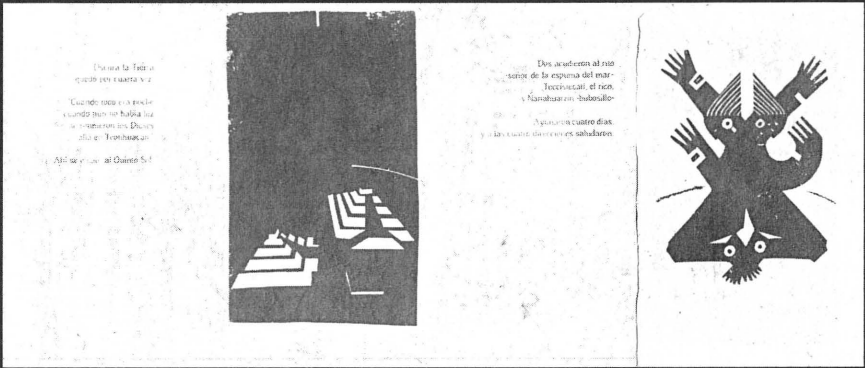
Lord of the sea foam –

Teccistecatl, the rich

and Nanahuatzin – the face with pustules.

They fasted four days

and saluted the four directions.



Metonymy

The pyramids of Teotihuacan are placed to represent the reunion of the Gods.

Metaphor

The darkness represents uncertainty and emptiness.

Antithesis

Two antagonistic characters are united as one.

*Four times tried Teccistecatl
and he failed all four.*

*Nanahuatzin closed his eyes
and without thought he jumped,
immolating himself in the bonfire.*

The fifth sun arose.

*Teccistecatl, upset, then jumped in the fire
becoming the moon by the luck of a rabbit.*

*The fifth sun is hungry, the fifth sun is angry.
To move on he requires a sacrifice of a life,
to drink for him the blood, to pull out a heart.
It must be holy war, he must be honored.*

*The fifth sun is now
and shines at this very moment.*

*His reign must end one day –
“four-movement.”*



Allegory

Placing the sun in the landscape tells a different story.

Antithesis

This image unites the idea of the two sides: life and death – dark and light.

Metonymy

The four directions are represented by the arrows.

CONCLUSION

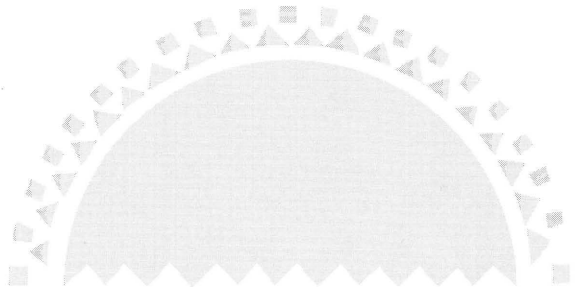
The pages of this work are filled with a spirit – the spirit of ancient Mexico. The images are designed to reveal this. But Mexican identity is not due to a particular use of rhetorical resources. Visual rhetoric also does not operate alone in its signification. All the representations that deliver some meaning are fed by the reader of the visual text. The reader must have an appropriate background of knowledge to animate the text in a particular manner. Even if all that the reader has is what is printed on those pages, the visual text comes alive only when the reader identifies signs that are familiar or that capture interested attention.

The rhetorical figures help to analyze how the text is constructed and how some parts of the visual text refer to significant ideas through their representation. Metonymy, allegory and repetition are the most commonly used figures. Metaphor is always present, but it requires deeper background knowledge for precise interpretation. The degree of connotation found in metaphors requires a stronger effort by the reader to find the path that leads to cognitive relations.

In the act of constructing the visual text, the author reveals a hidden structure that reinforces the strength of the work. Rhetoric is a supporting structure that both gives coherence and is a path for interpretation. Any reader must interpret to understand a text. If background knowledge is not sufficient to make an interpretation, rhetoric can deliver clues for opening either a visual or verbal text.

Here rhetoric has been used retrospectively. It needs to be considered more in the conscious construction of a message – to go beyond an analysis of what is already designed.

Alejandro Brizuela is the chairman of the Graphic Design Department at Universidad de las Américas Puebla. He has done graduate work in Belgium. A continuing interest is the study of theories of design including semiotics and interpretation.



P R E - C O L U M B I A N S T A M P S



Universidad de las Américas Puebla
Departamento de Diseño Gráfico, AP 100
Cholula, Puebla 72820 Mexico

Visible Language 32.3

Tapia, 256–263

© *Visible Language*, 1998

Rhode Island School of Design

Providence, Rhode Island 02903

Pintaderas

Claudia Navarro Tapia

Three pre-Columbian pintaderas, or stamps, are analyzed rhetorically to reveal their visual meaning for a contemporary audience.

Pintaderas are flat or cylindrical stamps generally made of baked clay and used by pre-Columbian civilizations as articles of trade. Thus the places where they are found today are not necessarily their geographical places of origin. For example, in the United States stamps have been discovered in Indiana, Illinois, Ohio, Michigan, Arizona, New Mexico and Florida. In Mexico they are found mainly on the high central plateau, in the state of Guerrero and on the Gulf of Mexico. They are scarce in the Pacific lowland, the Isthmus of Tehuantepec, the Yucatan peninsula and in southern Mexico. They are also known in the Antilles, Puerto Rico among the Taino Indians, in Central American countries and in Colombia among the Quimbaya Indians to the west of the Cauca River. Samples from this locality are known to be made of stone and sheet gold. Wooden stamps are used in Ecuador, Brazil and on the shores of the Negro River. North of Trujillo in Peru, gourds have been carved for use as stamps. Mexican *pintaderas* have been traded widely from North to South America.

The *pintaderas* can be applied in two different ways: by printing in color or stamping in relief. Printing can be done on skin as a sign of distinction or as a symbolic adornment in rites and customs. It can also be used as identification on clothing or paper. Stamping in relief was used to decorate pottery. It was either applied before finishing or done directly in the mold. Stamps were even used for decorating food and pliable objects.

The Indians were familiar with and used a great variety of vegetable and mineral dyes. The most commonly used for stamping were smoke black from pine trees (*ocotl*), black soil or pine charcoal (*tlayacac*), white soil or chalk (*tizatlali*), and gypsum (*chimaltizatl*). Arnotto tree (*achiotl*), cochineal (*nochistli*), and the sap from the *escuahuitl* tree (the tree of blood) were also used for reds. *Tecozahuil*, the yellow soil; the sap of argemone, “thorny poppy” and the *zacatlascal*,

a parasite of certain tropical trees, were used for yellows. Indigo was available for blue, while turquoise blue was obtained by mixing a little white and alum in with the indigo. Colors were ground and then mixed with a white medicinal soil, Mexican argemone or with alum (*tlalxocotl*).

Printed patterns were rectangular, rounded, triangular or irregular, depending on their various ornamental uses. Despite its abstract character, geometric design was common in the oldest stamps, in part because the forms can be easily made. Naturalistic designs, plants, animals and human figures, combined with geometric designs followed. Such motifs became so simplified that they eventually evolved into conventional symbols such as stepped-frets, and finally fantastic patterns were created by using the former elements along with symbolic, ceremonial or artificial figures, taken from other native crafts, rites or customs.

LIFE AND DEATH – SNAKE SYMBOL

The snake is a creature that can be represented in a simple way. It is one of the most enigmatic symbols, associated with fear of a fatal bite from a hidden serpent lurking on the ground, in the grass or between the stones – thus the snake symbolized death.

However, the figurative association of the snake with the phallus, together with its similarity to something rooted in the ground with an invisible life force, placed the animal in an absolutely ambivalent context: it was both a carrier of death and a creator of life. The snake's ability to abandon its old skin is a more subtle signification

relating to man's deep concern with resurrection and immortality.

The symbolic sign of the "round" snake with its tail connected to its head, seeming to consume itself or being nurtured by its own death, is symbolic of eternal return. The idea of regeneration equals representation of the secret of eternity. The linear form of the snake body provides a rhythmic succession of spots, lines, colors – it is a perfect context for ornament. The spirals, knots or ribbons represent abstractions of great symbolic content. The snake body facilitates the joining of the figurative with the symbolic.



Figure 1

Snake from Veracruz [Figure 1]

What is denoted? Here we see a snake with different kinds of patterns and spots on its body and head. Its tail has a little bell. Its mouth is open displaying its fangs. It faces in a particular direction – showing movement to the right.

What is connoted? We may interpret this image as a sacred animal – authoritative, perhaps poisonous, in its dangerous and threatening appearance. It is full of energy and threatening to bite.

The image can also be interpreted in terms of its syntactic or structural rhetorical representations. The repetition of dots and patterns in the body is a kind of isophony. The repetition of a rhythm with stepped-frets at the top and bottom of the body are a form of parallelism. While these are a kind of hybrid repetition, there is a simple repetition in the ovals in the tail and the dots in the head.

From a semantic point of view, we can see exadversion, or assertion with a double negative, in the poison in the tail and the menacing jaws of death. The bell and texture of the snake skin are presented as hyperbole – as emphasized attributes. The design of the snake skin represents a sacred animal, a kind of deity with the power to bring death. This is definitely metaphorical and strongly based on pre-Columbian beliefs. Beware: the snake is a god.

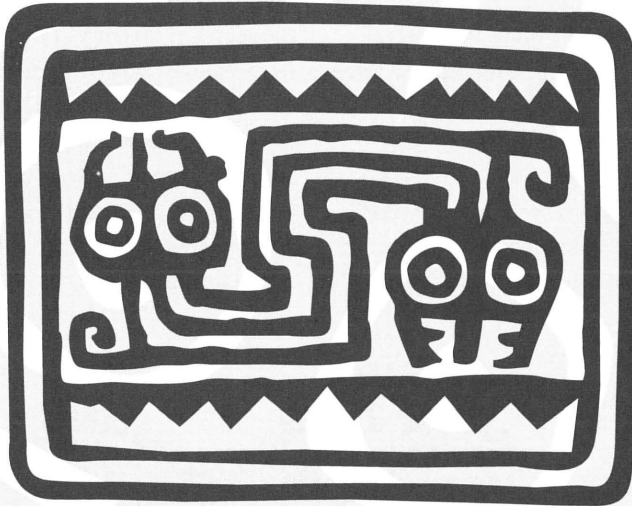


Figure 2

Snake from Guerrero [Figure 2]

What is denoted? One snake body has two heads oriented in opposing directions. The snake is between two stepped-frets and is contained in a rectangle.

What is connoted? Duality; a positive appearance is present in the left head and a negative one in the right head. Further, the left head is oriented up to life, while the right is oriented down with the mouth opened connoting death. Here is life from beginning to end. The rectangle is a figure with four sides and four is a magic number for pre-Columbian civilizations.

From a syntactic point of view, the rectangle enclosing the snake is a form of parenthesis. The repeating rhythm with stepped-frets at the top and bottom of the snakes is a form of parallelism.

From a semantic viewpoint, two different concepts are represented within the same animal figure: life and death – an antithesis. The size of the heads is too big for the size of the

body, this generates hyperbole or overstatement. Together, the antithesis and hyperbole indicate how important the opposing snake heads are to this image's significance. The juxtaposition of life and death, represented by the figure of the snake, are metaphorical. In this case, the rhetorical figure with the greatest force is antithesis, representing the duality of life from beginning to end.

SYMBOLIC FIGURES BETWEEN SKY AND GROUND

For people anchored to the ground by gravity, birds seem imbued with extra-terrestrial power. That the bird is associated with both the earth and the heavens, and thus transcends a primitive conception of life, adds to its symbolic power. All flying animals have been objects of spiritual reverence in symbolic-mythic beliefs. It is curious how the faculty of flying is associated

with earthbound creatures in which wings or feathers alone signify flight; *Quetzalcoatl*, the feathered snake, is one such example. The majestic front view is commonly used to show the bird rising and flying simultaneously. In most cases the image isn't a realistic representation, but rather is an idealized "superspecies" richly decorated with symbolic motifs.

Eagle from Mexico City [Figure 3]

What is denoted? The body and claws of an eagle are shown. The head has a big eye and the wings are spread. There are decorative motifs in front of the body which is enclosed in a rectangle.

What is connoted? The duality of the earthly and the heavenly. The eagle is ever watchful as it is within the bird's power to fly over people and protect them. The eagle has special attributes and is considered to be a sacred animal, an authority. Again, we see four, the magic number, reappear in the four sides of the rectangle.



Figure 3

From a syntactic point of view, the rectangle enclosing the eagle is a form of parenthesis. The repeating forms in the tail is a kind of parallelism.

From a semantic point of view, the eagle could be an adversary of men or a protector deity, able to save them from their enemies. The simultaneous presence of a positive and negative du-

ality indicates antithesis. The size of the eyes and the size of the head is too big for the rest of the body – this is hyperbole or exaggerated emphasis again. As an authority, the eagle eternally watches over people. Here again, the strongest rhetorical figure is antithesis – the power of the eagle to protect or to destroy.

CONCLUSION

After reviewing the rhetorical figures in these stamps, it is clear that a primary knowledge of their specific use and the value of the visual message provides for a richer interpretation. The historical moment of this interpreter (the author) is a handicap to accurate interpretation. This is not unusual when examining images from the past. While the rhetorical analysis here is repetitive, revealing the same figures used again and again, this however, is what is important. It provides a framework within which to understand the main characteristics of

signification for these ancient images. Exadversion and antithesis, both of which simultaneously assert and deny, present an aesthetic and mystical tension and is in keeping with the science-religion philosophy of early Mexican cultures. Hyperbole, which insists on attention and perception, reinforces the key symbolic elements. This, together with the syntactic figures of parenthesis and the repetitive structures of isophony and parallelism, may have most clearly addressed what was an illiterate audience. Mysteries are symbolically revealed in the *pintaderas*.

REFERENCES

- Enciso, Jorge. 1947. *Sellos del México Antiguo*. Mexico City: Imprenta Policolor.
- Frutiger, Adrian. 1981. *Signos, Símbolos, Marcas y Señales*. Barcelona: Editorial Gustavo Gili.

Claudia Navarro Tapia is a professional designer working in the development of clothing brands for department stores. A graduate of the Master in Design Theory at Universidad de las Americas Puebla, she has been design director of two design studios in Mexico City.

Rhetoric in

Three dimensions of analysis – unity, coherence and emphasis, along with an explicit listing of denotation and connotation and a rhetorical analysis – provide a framework within which student designed logotypes are examined. Consideration of audience background knowledge and interpretive ability is a primary consideration.

Universidad de las Américas Puebla
Departamento de Diseño Gráfico, AP 100
Cholula, Puebla 72820 Mexico

Visible Language 32.3
González de Cosío, 264–279
© *Visible Language*, 1998
Rhode Island School of Design
Providence, Rhode Island 02903

Logotypes

María González de Cosío

Rhetoric is the art of communicating effectively and persuasively. It implies the use of adequate elements to express correctly and convey a clear message to convince the audience. “Rhetoric,” says Robin Kinross, “would be a way of understanding the mechanisms of the visual/verbal rhetoric conceived as a development from classical rhetoric, but modified by the inter-discipline of semiotics (Kinross, 197). In fact, visual communication should take important elements from rhetoric to construct a concept, articulate it in an intelligible structure and give it an individual expression; but we should always consider the audience as one of the most important components of the communication process, by using appropriate language that allows for the interpretation of the message.

Richard E. Hughes mentions that to achieve its purpose, a work must have unity, coherence and emphasis.

Unity is related to the quality and number of elements chosen to communicate the idea or message. They should work together to determine what we want to accomplish with a design. Unity and fulfillment of purpose can be considered as the hypothesis of the project.

Coherence is regarded as the organization, or sequence of elements, in the design. It is also related to function – readability and intelligibility. Hughes talks about three different types of coherence: *logical* or *objective*, when impersonal and analytical elements are chosen to communicate the idea; *associative*, when subjective and personal relations are established between the elements; and *chronological*, where successions of time and space unfold.

Emphasis is given by the way the ideas are expressed, elements are employed and vitality is expressed in each project (Hughes, 1966). These three elements can also be closely related to form, function and signification as the basic requirements for an effective design project.

It is also important to consider the levels of language a designer chooses for each message. Graphic language needs to be in relation to the audience and attentive to the method of address. For example, different scales are available, such as customized language use for individuals or specific subgroups or generalized language for mass me-

dia; language as presented abstractly or concretely; vernacular or learned; and finally messages with emphasis on denotation or connotation.

Individual and mass language

Individual language refers to words or graphic elements that refer to a particular meaning; the possibility of different interpretations is diminished because they refer to something specific. On the other hand, *mass language* is vague because it takes more than one referent in its attempt to communicate with a large undifferentiated audience. Some of these words could be even transformed into what Uwe Poerksen (1995, 8) calls *plastic words*, which “by contrast, are rarely used in a particular, precise, appropriate manner. They are used as interchangeable modules. Because of this, they lose any potential for precision, concreteness, or exactitude.” Some plastic words he mentions include *communication*, *development*, *work* and *sexuality*. These could be found in any kind of communication and are difficult to define because they refer to such broad topics.

Concrete and abstract language

The second scale divides language between concrete and abstract language. The difference relies on abstract language that is associated with intangible feelings, ideas or concepts. Popular and learned language are based on the level of usage (Hughes, 2004). *Popular* refers to words or elements that are in common and direct use. *Learned*

words imply a higher level of sophistication and intricacy often associated with a scholarly discourse on a subject.

Denotation and connotation

The denotation of a word or graphic element specifies the object. Connotation is related to additional qualities that give more information or suggest additional characteristics about the object denoted. Connotation is amplified or restricted depending on the experience of the audience dealing with the term or graphic element.

Finally, I will also include the values of style that Hughes mentions: “the rhetorician aspires to create a persuasive image of himself, *ethos*, and a receptivity in his audience, *pathos*, so that an idea, *logos*, could be shared” (Hughes, 226). In communication we cannot escape from rhetoric and therefore persuasion. In even the most objective information a selection has been made with regard to type, color, materials, etc., that alters persuasive force. Even though the first goal is to convey ideas in the clearest and most effective way, we also convince our audience. Hughes emphasizes the ethical appeal of the writer that inadvertently projects his or her own image as

author of a communication. However, the function of the designer is to solve visual communication problems and direct the specific graphic solution using the codes of the audience and leaving personal style as a secondary consideration. Hanno Ehses, on the other hand, refers to *ethos* as “the finer emotions of sensibility, taste and philosophical belief... The ethical appeal focuses on the decorum and aesthetic qualities of a design, often addressing the traditional values and moral tendencies of an audience” (Ehses, 7). This is a way to focus the design problem, by considering aesthetic values and ethics to elevate the design product to a higher performance. For this study, I will consider Ehses’ approach which implies a less personal process and focuses on the need to cover the three appeals mentioned previously.

Such comparisons between verbal language and visible language should be considered essential in the work of the designer. “Linguistic analogy is stretched beyond mere analogy, to constitute an enormous extension of language itself: the world becomes a ‘text,’ to be read and decoded or deconstructed” (Kinross, 194). Let us now analyze the work that follows.

ANALYSIS OF MEXICAN LOGOTYPES

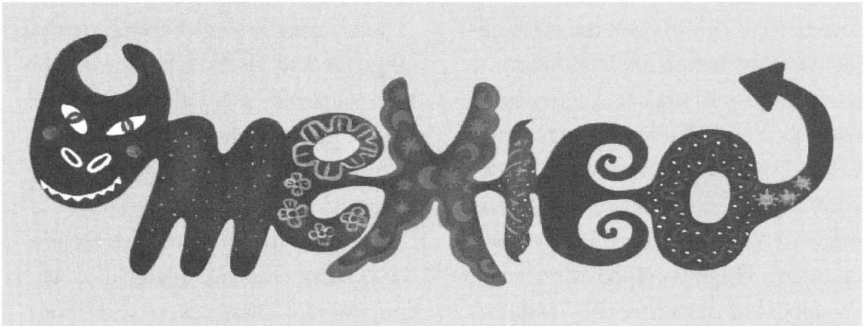
All the examples presented are the work of second semester typography students from the Universidad de las Américas in Puebla, Mexico. The main objective was to understand the terms *denotation* and *connotation* and exemplify them in a logotype for Mexico. One of this exercise's requirements was to manipulate the letterforms in order to communicate the message,

trying not to rely on the surface of the letters, but to use the form as content.

Because the reader needs context in which to consider the effectiveness of these logotypes, information about Mexican culture and history is provided. The development of the analysis of these designs considers these issues and rhetorical figures are flagged as they are used in each example.

MEXICO OF THE ALEBRIJES

Nadia Roldán, 1996

*Context*

The alebrijes' origin goes back to the 1950s in Mexico City. This special form of folk art was created by Pedro Linares, a craft artist who worked for several years making masks, death skeletons and other pieces using paper and straw structures covered with

glued white paper and painted with acrylics or decorated with cut paper. Some of these structures, like *piñatas*, are filled with candies and fruits and are torn into pieces or are consumed at parties; objects are consumed by fireworks like the so-called *judas*. These customs are religious in nature and

represent the destruction or annihilation of bad spirits.

This is a result of syncretism in Mexico, or the combination of different religious traditions which gave rise to new customs and traditions. For example, Franciscans and Dominicans arrived with the goal of converting the ancient Mexicans to Catholicism. The old gods were substituted by the images of saints and God. One can still find Catholic celebrations combined with pagan rites, as is the case in the Tarahumaran tribe in Chihuahua. This group celebrates Mass during Holy Week and mixes it with dance and tattoo decorations on their bodies. The religions and customs coexist.

Pedro Linares' skeletons and masks changed over time. After recovering from an illness that seemed to have affected him deeply, Linares started working on paper maché pieces with different shapes and characteristics: imaginary and fantastic animals that combined parts of fish, birds, dragons, reptiles, etc. These multicolored monsters were called *alebrijes*. *Alebrije* is an invented word that the *Diccionario de México* defines as the name given to the plastic fantasies in the form of animals and devils, made out of formed paper. The alebrije maker says that alebrijes are "what one is looking at and what one is thinking of."

The alebrije's shape is developed in the forming process with additional elements like ears, tails or spines added to the basic shape. These handicrafts are created from branches in Oaxaca,

in the southwestern part of the country. The shape of the branch determines the basic gesture of the alebrije.

Alebrijes are sold in the street or craft stores and are representative of the variety of Mexico's magical, naive and dramatic imagery. They talk about the unknown in an animal shape – the magic is also a way to give these animals supernatural powers.

Analysis

Unity · In order to assure the logotype is communicating its message, we can ask if the ideas (alebrijes, magic, etc.) are expressed in the logotype. The precise idea of Mexico of the alebrijes could be difficult for foreign audiences that might not know these crafts, but the logotype still conveys the essential idea that the alebrijes deal with magic and a fantastic Mexico.

Coherence · This logotype is made of an organized series of legible letters, arranged by association between the most representative images and their appropriate letters. In terms of function, the Mexican public recognizes the logotype because of their familiarity with alebrijes.

Emphasis · The logotype has color, vitality and energy. It was designed with animal shapes integrated with the letters, decorated with dots and flowers with bright and energetic colors that contrast in a warm/cool combination – yellow for the background and purple for the letters.

Concepts · Given the varied audiences for this logotype, it will shift between abstract and concrete, popular and learned, customized and mass-use language based on their knowledge. The Mexico of the alebrijes is abstract, learned and uses mass language. A foreign audience will understand the general idea of fantastical and magical Mexico. A Mexican audience will view it as a concrete, popular and customized language, since they can immediately identify the craft.

Syntactic rhetorical figures

Repetition · The author repeats flowers, dots or stars on the surface of the Mexico alebrije.

Semantic rhetorical figures

Personification · The fantastic animal possesses the word. This imaginary animal also wishes to transform into a butterfly. Here personification is used rather casually as the word *Mexico* is not taking human characteristics but animal shapes.

Metaphor · Mexico is replaced by the animal possessing its name and transforming it into something else. Likewise, the alebrije is transformed as part of a new field: the word. Like a

metaphor, a simile compares two things different in most respects, but alike in respect to which the comparison is made. Here the combination of two elements allows a new, more spiritual interpretation of Mexico. Subtleties of language sometimes can't be drawn out easily from words such as *like*, but the simile may be identified more easily when visible language or imagery is used. Metonymy is also included in the transformation of the letter *X* into a butterfly, suggesting the incorporation of different animal sections into one. Most alebrijes have this fusion of elements.

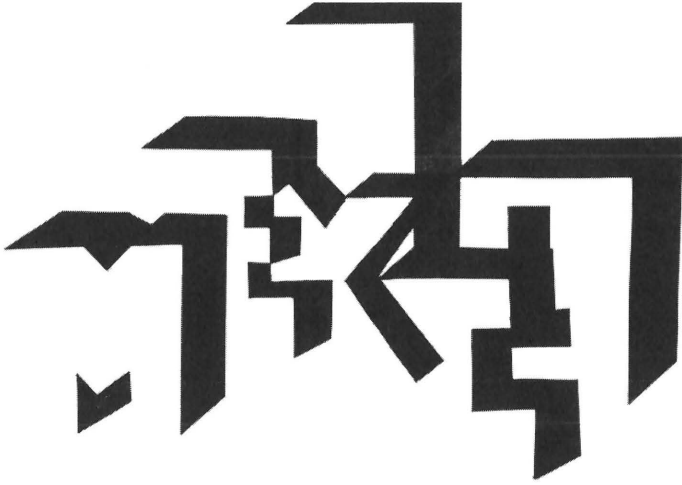
Denotation and connotation · These relationships are listed below.

<i>Denoted</i>	<i>Connoted</i>
Decoration	Mexican crafts
Yellow, blue	Mexican colors
Curves / shapes	Mexican baroque
Animal parts	Alebrije
Letter X	Butterfly

Since the whole is much more than the sum of its parts, I would say that the connotation of this logotype as a whole is Mexico as a playful, fantastic and magical country.

MEXICO OF POLLUTION AND SATURATION

Daniel Naredo, 1994

*Context*

Mexico City is the largest city in the world in terms of population and size, with over twenty-five million people in the metropolitan area. Mexico City, the capital of the Mexican Republic, was founded by the Spaniards in 1521 after the conquest of the Aztec empire. The city was built on the remains of Tenochtitlan, the Aztec capital that occupied parts of the lake of Texcoco.

Mexico City is the center of the country in geographical, technological, political and economic terms. It has major problems: pollution, overpopulation, traffic and construction. Large sums are spent every year to improve transportation – the subways transports up to eight million people

every day – and highways are built, sometimes sacrificing green space. Despite all this, Mexico City is a fascinating city that keeps alive centuries of history, tradition and culture.

Analysis

Unity · This logotype contains the necessary elements that transmit the idea of Mexico City's environmental problems: saturation, grayness, concrete, and contamination.

Coherence · In terms of coherence or organization, the logotype is readable, with breaks and movements, but it remains recognizable. These breaks are due to the need to express saturation, since the letters do not have space to

easily fit. It also uses association since certain images and ideas talk about life in Mexico City as experienced by outsiders who may be more sensitive to the lack of space and blue sky.

Emphasis · The individual expression of the rhythm of the heavy block letters, the cluttered space, and gray dotted areas that simulate concrete constructions and skyscrapers all provide emphasis.

Concepts · The scale of concepts applied is abstract, learned and mass language addressing all audiences. It uses concepts like saturation and pollution, which do not have a concrete, popular or precise representation. However, it is also a customized and specific language when a Mexican viewer, who knows the city, can also relate to other abstract characteristics of Mexico City.

Syntactic rhetorical figures

Anastrophe · The letters move consciously non-linearly on the space to transmit the idea of saturation and collision of elements.

Repetition · In order to give unity to the logotype, the same condition of shading, volume and block letters are repeated in each letter of the word.

Ellipsis · Ellipsis is also applied because elements are left out: shadows are just part of the whole representation of the letters and the strokes of the letters do not appear.

Semantic rhetorical figures

Simile · Here the comparison consists of relating gray, saturated and dusty volumes to the letters for *Mexico*. Metaphorically, they say Mexico City is gray, saturated and dusty.

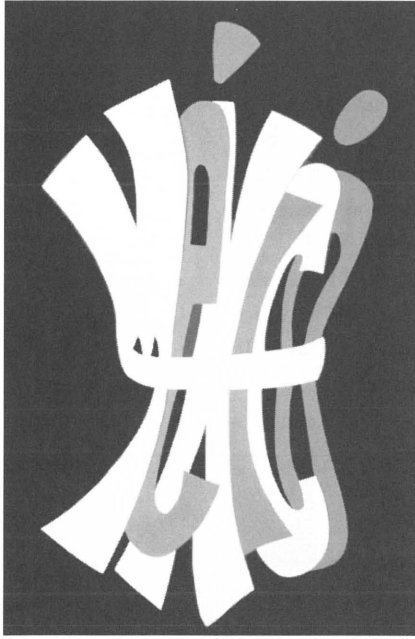
Metonymy · The shadows and letterforms are closely packed and refer to heavy construction and the dense concentration of buildings.

Denotation and connotation · These relationships are listed below.

<i>Denoted</i>	<i>Connoted</i>
Letters	Heaviness, volume
Gray	Dusty, contaminated
Movement	Saturation, disorder

MEXICO OF THE ECONOMIC CRISIS

Tania Vera, 1995

*Context*

December, 1994, produced two terrible headlines in the news: first, the volcano Popocatepetl erupted and nearby cities were covered with ash; and second the peso, Mexico's monetary unit, was considerably devalued – Mexico was falling into one of the worst economic crises of the century. Since then, the news has been quite depressing about economic and political issues and the future's promise, and this situation has radically influenced the humor, expectation and well-being of the Mexican society.

Analysis

Unity · Mexico of the economic crisis is a very expressive representation of the feeling of the people. It has precise unity: it uses the letters themselves to transmit the idea. It speaks of conflict, of slimming down, of getting together.

Coherence · The logotype's elements are legible, and the alternating use of yellow and red reinforces the organization. As in the other examples, associative concepts are used – the author manipulates the shape of the letters to transmit the idea of struggle.

Emphasis · The shape of the letters gives a sense of emphasis. Form conveys content, delivering extra meaning to the word *Mexico*. Emphasis is also given by the contrast between foreground and background.

Concepts · The logotype uses abstract, learned and mass language. It is abstract because it takes “signs or symbols for relations, ideas and concepts which are not directly sensible” (Hughes, 201). It is learned because the audience needs more information in order to establish these relations. It could be interpreted in ways like *squeezed* or *tied* without addressing a specific situation or audience.

Syntactic rhetorical figures

Parenthesis · In this example, the vertical stroke of letter *M* is used to enclose the rest of the letters. It also has a semantic dimension, since this stroke is communicating as a binding element.

Repetition · Repetitive figures are also present because of the alternation of colors and the similarity of shapes.

Semantic rhetorical figures

Parable · Although this word can't represent a whole story, we can nevertheless see a complete narrative: the letters are squeezed and tied in the middle – at the waist. They're struggling to keep their space and their shape, but are pressed into each other. The accent and the dot of the letter *i* “are splashing from the squeezing” of the six letters tied together.

Satire · This logotype almost makes fun of Mexico's economic struggle by simplifying it to the extreme.

Denotation and connotation · These relationships are listed below.

<i>Denoted</i>	<i>Connoted</i>
Black background	Unknown environment; depression
Inter-letter space	Squeezing
Stem of <i>M</i>	Binding elements
Yellow and red	Still alive

This design recalls a newspaper cartoon in which the government asks a peasant to act more vigorously to reduce expenses. The government states, “It's time to tighten the belt.” The peasant answers, “Oops, I've already eaten it!”

MEXICO OF THE GOURMETS

Mario Vargas, 1996

*Context*

After the conquest in 1521, Spain left an important heritage to Mexico and other Latin American countries through its language, religion, Occidental customs and traditions. Food is one of the areas of mixture between Spaniards and native Mexicans. The Spanish returned to Europe with things like potatoes, coffee and chocolate, while leaving traditions like sweet fresh bread. Bread can be bought every day, salty and sweet, in different shapes and with decorations; adequate for lunch or breaks, to have with hot chocolate, milk, tea or coffee. Family

dinners typically have a tray with an assortment of sweet breads in the middle of the table.

Analysis

Unity · Unity is given by the same realistic expression of each of the breads that is repeated in the entire composition. The objective of the message is clear: "Mexico has a multitude of good bread." The letters separate from the background table cloth and cup.

Conherence · It is stylistically coherent because it subjectively ties food to the word, relating two different concepts.

There is also a logical coherence because of the iconic representation of the bread and the placement of the logotype with the table cloth and cup.

Emphasis · Emphasis is given through this particular and personal way to communicate a positive idea about Mexico's culinary culture.

Concepts · This represents the customs and food traditions Mexicans keep regardless of the influx of fast food and technology. This logotype could be considered a concrete, vernacular and customized use of language. It represents the concrete or specific bread production one can find in Mexico. It represents popular knowledge since one can find these products in cities and towns and it is part of the context in which Mexicans are raised. Finally, it is also a customized language because it realistically identifies a local tradition for the Mexican audience.

Syntactic rhetorical figures

Atomization · While each letter is treated independently as a piece of bread, it does not lose the sense of unity needed to create a word.

Parallelism · The structure is given by the bread itself. The letters adjust to these forms and depend on them to transmit the idea.

Semantic rhetorical figures

Metaphor · Two different ideas without previous relationship are brought together. An unexpected combination of joining a Mexican culinary custom with Mexico creates surprise.

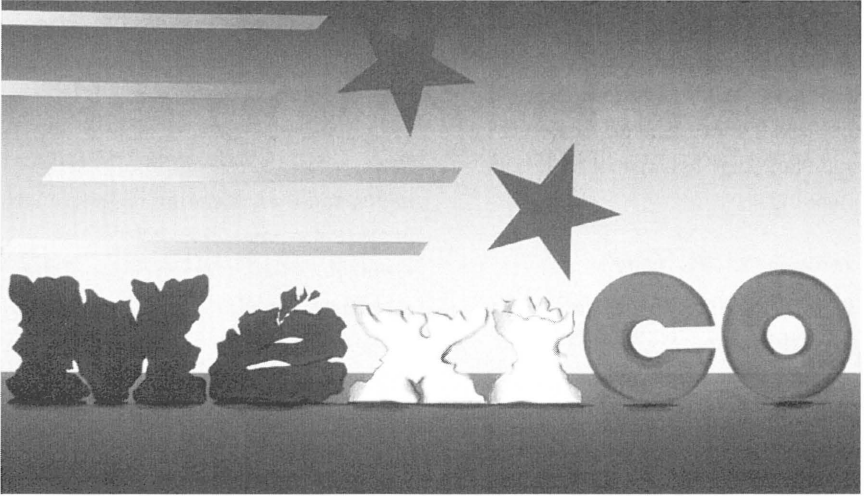
Denotation and connotation · These relationships are listed below.

<i>Denoted</i>	<i>Connoted</i>
Bread	Mexican variety/ plenty/hospitality
Jug	Mexican pottery, hot chocolate
Tablecloth	Care and delicacy

All the elements working together suggest an invitation to have some delicious Mexican bread with a hot drink in a warm setting. The highly iconic representation, along with the use of a color-pencil drawing supports this rather antique setting.

MEXICO OF THE NAFTA AGREEMENT

María Luisa Ramírez, 1996

*Context*

In 1993 Carlos Salinas de Gortari, the former president of Mexico, signed the NAFTA agreement with the United States and Canada. This measure was criticized by some and celebrated by others. One of the most acute criticisms dealt with the idea that Mexico was not prepared for such a commercial relationship: many small enterprises were destroyed by the competition, and many others did not have the time to modernize and prepare for such competition. On the other hand, it was well received by productive sectors that were interested in exporting products and services.

Analysis

Unity · Unity is attained by letters that keep the same style. The work fulfills the function of legibility and it presents its message by referring to the impact of the United States on Mexico.

Coherence · Coherence is shown with the association of subjective ideas and images: stars and stripes in motion and burnt or broken letters affected by the passing of the previous elements. Another type of coherence is exemplified relating to chronological order. It could be said that the stars in motion are in a certain stage that continues to the end of the message which in its entirety is located in an environment.

Emphasis · Emphasis is given in the form of the letters and the additional elements of stars and stripes.

Concepts · The concepts applied here are abstract, learned and mass language for the varied audiences. The abstract concepts are the ideas related to NAFTA – they need to be learned and understood. The logotype uses a mass language because of its broad meaning.

Syntactic rhetorical figures

Parenthesis · The stripes and lines are the active elements that explain the project. They function both syntactically and semantically as the ground in a figure/ground relationship and semantically referring to the U.S. flag.

Ellipsis · Two stars and three stripes are sufficient to suggest the U.S. flag, the rest is completed by the audience.

Semantic rhetorical figures

Gradation · Gradation means organizing in an ascending order. Here we see a form of gradation because the stars seem to move with accelerating speed.

Hyperbole · The stars and stripes, following a definite movement from left to right, leave broken letters as they pass. From this we can deduce that

American strength has destroyed part of Mexico.

Metaphor · In this project two ideas are represented: the word *Mexico* and the United States flag. The result of this combination is the image of Mexico suffering from the dynamism of the United States.

Satire · The exaggeration of the elements and their meaning is directed to blame the government for its economic decisions taken in favor of the NAFTA agreement.

Synecdoche · The stripes and stars represent the United States.

Denotation and connotation · These relationships are listed below.

<i>Denoted</i>	<i>Connoted</i>
Burnt letters	Devastated Mexico
Round letters	Still-healthy Mexico
Stripes and stars	Movement and energy of the U.S.
Colors	Related to each country

The connotation of the whole logotype is that Mexico is losing its stability and is being weakened by the impetus, energy, dynamism of its neighbor to the north.

CONCLUSIONS

The importance of the social role of graphic design can be seen in these logotypes. The understanding of the message, translation of the information into graphic form, Mexican background and the designers' individual interpretations of the design problem are combined into a whole that gives a perspective of the country.

It should be mentioned that visual language has difficulty with the subtleties that can be identified in writing. Gombrich said, "We shall see that the visual image is supreme in its capacity for arousal, that its use for expressive purposes is problematic, and that unaided it altogether lacks the possibility of matching the statement function of language" (Gombrich, 2).

REFERENCES

- Ehse, Hanno, and Ellen Lupton. 1988. *Rhetorical Handbook. Design Papers 5*. Halifax, NS, Canada: Nova Scotia College of Art and Design.
- Gombrich, E.H. 1972. The Visual Image. *Scientific American*, 227:3, September.
- Hughes, Richard E., and Albert Duhamel. 1966. *Principles of Rhetoric*. New York: Prentice Hall.
- Kinross, Robin. 1986. Semiotics and Designing. *Information Design Journal*, 4:3, 190-198.
- Ocejo, Almudena. 1993. *Alebrijes: Sueño, Magia y Fantasía Mexicanos*. Universidad de las Américas Puebla: Humanities thesis.
- Poerksen, Uwe. 1995. *Plastic Words*. College Park, PA: Pennsylvania State University Press.

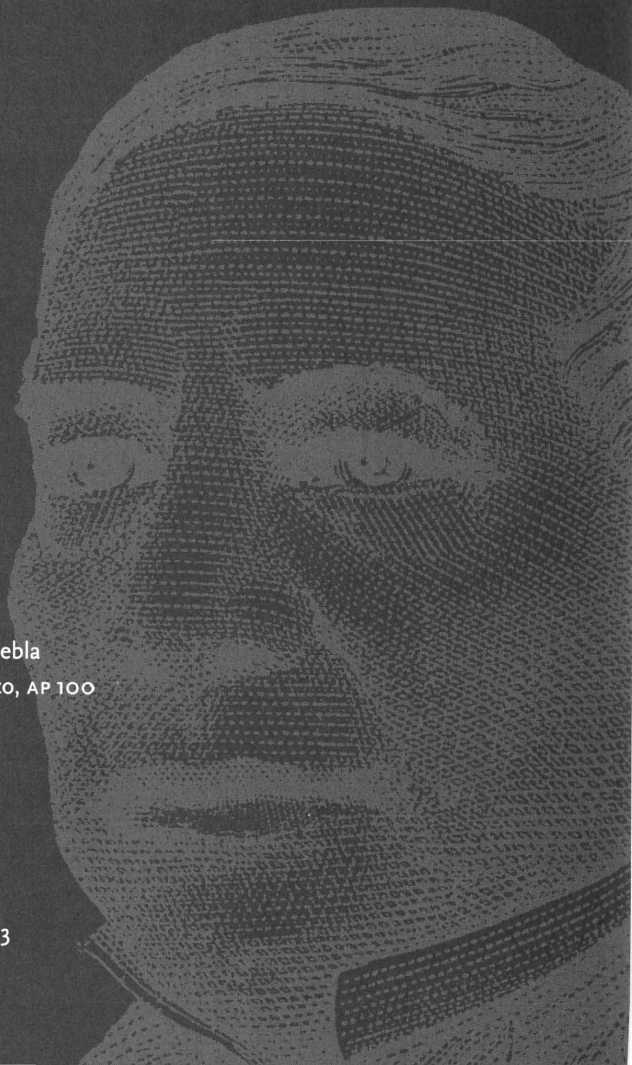
María González de Cosío is the administrative coordinator of the Master of Arts program in Information Design at Universidad de las Américas Puebla and a graphic design professor. Her masters degree is in Art Education and Design Theory. Her research interests center on information design, typography and color.

The Mexican national identity, as presented on its paper currency, is examined rhetorically. Three notes, the 50, 100 and 200, serve to demonstrate notable historic and geographic conditions. Individually and collectively they form allegorical stories of the past and the present.

NATIONAL CURRENCY

Universidad de las Américas Puebla
Departamento de Diseño Gráfico, AP 100
Cholula, Puebla 72820 Mexico

Visible Language 32.3
Salazar, 280–293
© *Visible Language*, 1998
Rhode Island School of Design
Providence, Rhode Island 02903





The Peso

Martha Salazar

Has rhetoric been forgotten? Is it confined only to old works of literature? Rhetorical procedures seem inevitable and perhaps inescapable as we use language and work to communicate effectively. Aristotle conceived of rhetoric as the art of persuasion. Quintilian understood rhetoric as a method that could provide procedures to evaluate (and create) literary works. However, analysts of oratory as well as of literature agree that rhetoric is used normally and automatically in daily communication. "Normal" language refers to the means of communication between human beings and the world around them. Rhetoric orders the elements of language in oral, gestural and visual communication in order to increase attention and sharpen the message. It basically establishes a relationship that Charles Morris calls *semiosis*, which is composed of three elements: a sign or signifier, that which is signified and an interpreter.

In visual communication, the formal or structural aspects of the sign corresponds to syntactics, while the meaning of the sign corresponds to semantics. Both of these are related to pragmatics. Each sign consists of three aspects: a structure, a meaning and an interpretation. Therefore a figure is syntactic when it operates through the formal aspect of the sign (such as color or contrast), semantic when it functions through its meaning (such as presenting specific iconic images – flowers, buildings, people) and pragmatic when it is interpreted through use (such as pesos representing a

diverse Mexican ethnic heritage and history, serving as a medium of economic exchange).

Money is a complex instrument of exchange. It must be secure in the sense of being resistant to unauthorized duplication and also in the sense of having believable value. It is nothing more than an ephemeral token of value. But what is often overlooked is the communication potential of money – it is widely circulated and visually examined by other cultures. It can be thought of as perhaps one of the primary pieces of national corporate identity.

MEXICAN PAPER MONEY

As in other countries, the development of Mexico's monetary system was tied closely to the society's development. Before the Spanish Conquest (1521), indigenous societies paid tribute to the Aztec leaders with goods such as jade beads, cotton cloth and gold objects. But the symbol that had the greatest importance in commercial trade was the cacao bean. Its use continues into modern times; as late as 1911 it remained the basis for transactions in the state of Chiapas (*Enciclopedia de México*, volume 9).

With the Conquest, Spanish economic structures were suddenly incorporated into the economy of the con-

quered people forming an initial stage of capitalist society, according to the peculiar mercantile characteristics of the Hispanic economy (*Enciclopedia de México*, volume 9). During colonization, cacao was revalued considerably in terms of the *real*, a unit of currency equivalent to two hundred grams of cacao bean.

New Spain's first mint was established in 1535. For two centuries it functioned as a private enterprise, minting coins in silver. In 1731, the Mexico City mint was established, where gold and silver coins were produced, notable not only for design, but for the amount of precious metal they

contained. (Later, copper coins were produced.) The evolution of coin production was evidence of the decline of the Spanish empire in Mexico. Much currency was not in general circulation at this time, but was held and controlled by the church. (*Enciclopedia de México*, volume 9).

When the independence movement began in 1810, in response to the insecurity that prevailed throughout the Mexican territory, the mint in Mexico City authorized other mints in various parts of the country to produce coins and bills with particular regional characteristics like the name of the state (rather than that of the country) and images of locally important people. These “foreign” mints, operating autonomously, were gradually closed during the War of Independence. But the symbolic celebration of regional themes continues even to the end of the twentieth century.

In 1925, the Banco de México began to issue paper notes, the first of which was worth five pesos. Later bills of ten, twenty, fifty, one hundred, five hundred and one thousand pesos began to be issued. All were produced by the American Bank Note Company of New York and were backed by gold reserves. At first, their use was voluntary. It was not until 1935, ten years later, that the circulation of paper money was mandated.

In September, 1969, a modern facility to produce paper money was opened in Mexico City and the bills made there were gradually put into

circulation. These modern bank notes represent themes that will never die – the images of Mexican heroes. The bills are produced by Mexican experts with the world’s most up-to-date procedures and techniques. The currency designs are indigenous, representing historical themes, places of natural beauty and monuments (Bátiz, 1984).

Because of recent inflation in the Mexican economy, the “new” peso was introduced in 1994 to reduce the number of zeroes; the bills and coins that were formerly valued at 1000 pesos, for example, became one new peso. All the money issued during a two-year transition period was designated as the new peso. In January, 1996, once people had become accustomed to the conversion system, the adjective was dropped and the designation *peso* was reintroduced on bills and coins, which otherwise retained the same design. Gradually “new” peso money was withdrawn from circulation through the normal process of retiring deteriorated currency.

Minor modifications have been made in the production of the most recent bills. The seals bear only the name “Banco de México” and have two signatures instead of three. The lower denomination bills (ten, twenty and fifty pesos) have been reduced in size, thus saving seventeen percent of their manufacturing cost, and the two hundred and five hundred peso bills are now also being produced.

Like most currency systems worldwide, there are certain systematic fea-

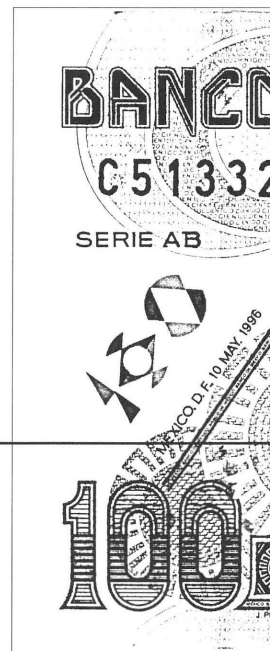
tures built into the peso. Among these are size and color differentiation to assist users in accurately selecting the correct denomination even if they have impaired eyesight; security features, including threads visible against bright light, lines of micro-print re-

peating the words *Banco de México*, the seal of the bank and signatures, a numbering system and complex color printing. The obverse of each bill features the portrait of a historic person, while the reverse celebrates a monument or specific location in Mexico.

R H E T O R I C A L A N A L Y S E S O F M E X I C A N M O N E Y

The One Hundred Peso Note

The one hundred peso note represents the Aztec culture which once dominated the Mexican territory. The bill bears an idealized image of the king Nezahualcóyotl (1402–1472), the Great Lord of Texcoco, who consolidated his dominion over the Valley of Mexico by forging alliances with the lords of Itzcatl and Totoquiyahtzin. Nezahualcóyotl was one of the most notable figures in the history of ancient Mexico. In his youth, he was deposed from his empire, but when he finally came to power he ruled with just and even progressive laws. He conquered immense territories, demanding respect, service and loyalty from the conquered peoples. During his reign, Nezahualcóyotl restored local power to lords of the smallest kingdoms, who were expected to pay tribute. Other accomplishments during his rule include the institution of councils for public education, war and the treasury, and the enactment of



• *Background glyphs in pre-Columbian style represent suns, water and mountains*

Speech volute with repetition of volute form in background

Nezahualcōyotl glyph

Coyote animal totem represents King Nezahualcōyotl

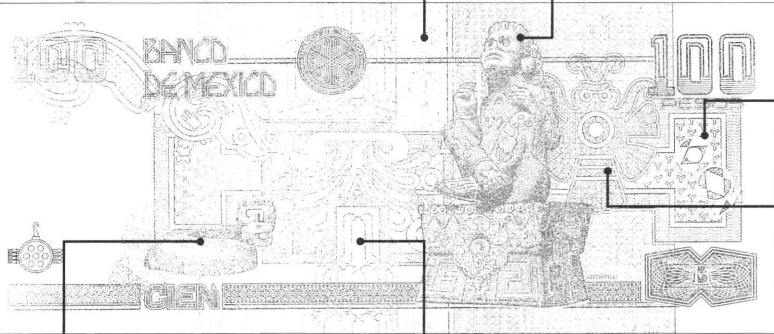


Seal represents a butterfly

Idealized drawing of King Nezahualcōyotl

*Different peoples who
paid tribute to the
Aztecs (parenthesis)*

*Sculpture of Xochipilli with ornaments
of jade flowers and butterflies
represents art (metaphor)*



Ball court (ellipsis)

*Butterfly represents
souls of warriors dead
in battle (metaphor)*

*Stone sculpture pays
tribute to Quetzalcoatl,
the highest divinity*

*Glyph of cave with falling water
with shells and jade stones represents
life and kindness (metaphor)*

eighty laws to guarantee loyalty to the state and adherence to good customs. Nezahualcōyotl was also concerned with ecological conservation in his territory. In the Tezcutzingo forest, he protected trees, propagated animal species, collected spring water, built aqueducts, introduced irrigation and carved pools out of rock.

He also wrote beautiful poems in his native language, Nahuatl, which was represented both iconographically and phonetically. After the Conquest, his poems were translated into Spanish. One of his poems appears on the obverse of the bill:

*I love the song of the mocking bird
Bird of four hundred voices
I love the color of jade
And the perfume of the flowers
But I love more my brothers, mankind.*

While the ancient Mexican people thought there were many gods, Nezahualcōyotl came to believe in the existence of one God, whom he called Tloque Nahuaque.

In addition to the figure of Nezahualcōyotl, some pre-Columbian glyphs also appear on the one hundred peso note. They represent places, things or aspects of the Aztec culture,

such as the ball court, the god of art, Xochipilli, and the tribute paid to the Aztecs by conquered peoples.

Semantically, the images on the reverse are representative of Aztec culture. They include some of the principle elements of this ancient society and identify the origins of the Mexican people. For example, the *Mitl Chimalli* is a shield used in battle – important since the Aztecs were warriors. The butterfly symbolizes fire and the souls of the warriors who died in battle. The game played on the ball court was not just a sporting event, but also pertained to the cult of the gods. The losers of the game were sacrificed in the belief that the sun needed to be fed human blood in order to guarantee that it would rise the next day, and that with

the sacrifice, it would grant the favors of good climate and abundant harvest. The stone sculpture of the plumed serpent represents *Quetzalcoatl*, the great pre-Columbian god of the Aztecs. The face of *Nezahualcōyotl* shows a young man with indigenous features, with a sparse moustache and beard and a penetrating look that connotes strength, solemnity and power. His diadem and earrings are characteristic of royalty and indicate his position of power.

The people represented here are allegorical as they indirectly tell a story about the pre-Columbian Mexican people. The pre-Columbian symbols stand for larger concepts; for example, the shield represents *Mitl Chimalli*, which as a synecdoche stands for the warrior dimension of Aztec society.

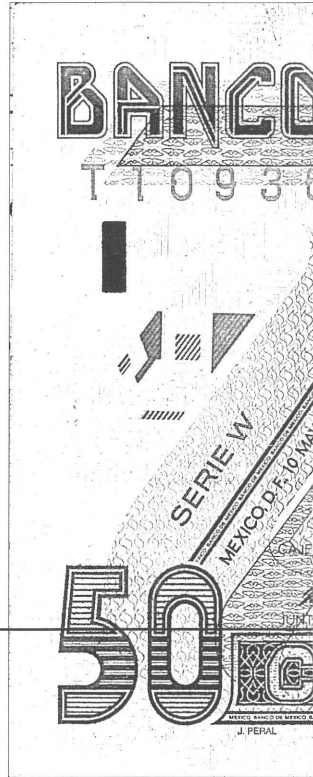
The Fifty Peso Note

The main image on the obverse of the fifty peso bill is José María Morelos (1765–1815), a national hero, Mexican priest and soldier. At the beginning of the revolution, he united with “Fatherland” Hidalgo with whom he fought for Mexican independence. Morelos was the first to create laws directed to distribute land among the Indians. The reverse of the bill depicts Lake *Pátzcuaro* in the Michoacan state, the place where Morelos was born. *Morelia* City, the capital of the state, was named to honor this hero.

The images shown on both sides of the bill are representative of the history and culture of Mexico. The image of “*El Generalísimo*,” don José María Morelos, has appeared six more times in different versions of bills. His presence evokes feelings of Mexican nationalism. The seal with the canyons alongside this historic man connotes the idea of the Independence Revolution. In Morelos’ face we see a strong and mature man, serious and convinced of the values that he defended in the revolution. His clothes are that

of a priest and he wears a handkerchief because of the headaches from which he suffered.

On the reverse are images representative of the Michoacan state that connote peace, beauty, candor and the traditions of that place. Michoacan (which means "place of fishermen" in Nahuatl) is one of the most beautiful states of Mexico. Besides showing where Morelos was born, it is the monarch butterfly sanctuary.

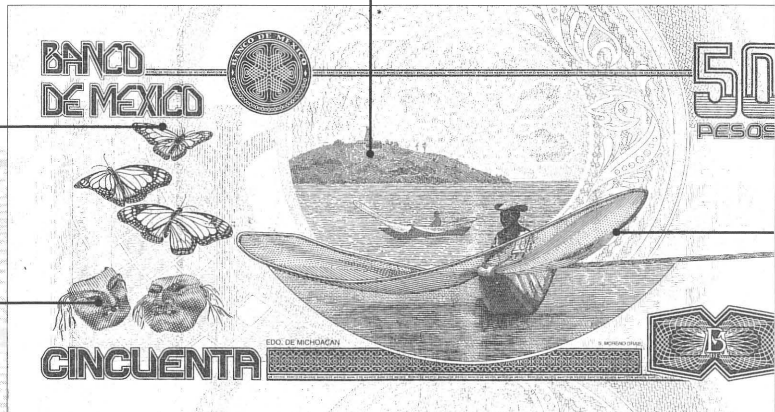


Crossbow with crossed cannons

Janitzio Island in Lake Pátcuaro

Butterflies signify the migratory sanctuary in Mexico

Old men masks used in traditional Michoacan dances





• Eagle with the Latin phrase "victory will happen"

• Broken chains with the word "south" between them

• Portrait of José María Morelos

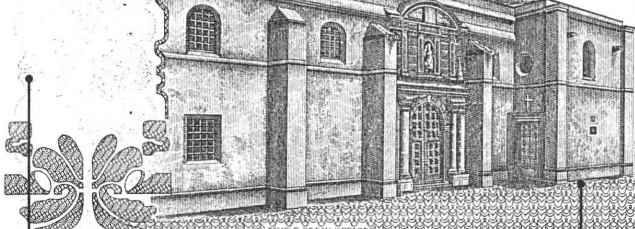
• Fishermen with nets represent marine economy; Michoacan bateas ("wooden plates") signify craftsmanship

200

BANCO DE MEXICO



200
NUEVOS PESOS



DOSCIENTOS



Vignette of flowers in colonial style

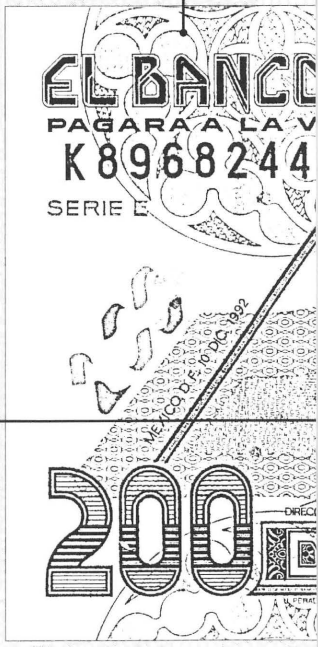
Spanish tiles

San Jerónimo Temple

The Two Hundred Peso Note

The obverse features the image of the poet Juana de Asbaje y Ramírez who was born in 1648 in San Miguel Nepantla. In 1669, she professed her faith as a religious *concepcionista* in San Jerónimo convent where she became Sister Juana Inés de la Cruz. She was a prolific writer, producing over four hundred works in many styles. Well versed in every known science, she was also a painter and musician. She fought for equal rights and equal opportunity for women.

Circle of flowers



Light illuminating an open book

Pen and inkwell

Books

Portrait of Juana de Asbaje y Ramírez



MEXICO
AL PORTADOR

SERIE
E

200

JUNTA DE GOBIERNO
CAJERO

JUANA DE ASBAJE

CIENTOS

NUEVOS
PESOS

K8968244



BANCO DE MEXICO S.S.

The images on the bill are a clear sample of cultural aspects of colonial Mexico. Sister Juana Inés de la Cruz during her long life became one of the most important literary figures in Mexico. Her talent and deep interest in knowledge at a time when the world of art was only for members of the court and the church is remarkable. The bill is allegorical because it tells with images aspects of Sister Juana's life story.

The books, pens and ink wells represent literature. Sister Juana's clothes

represent her as a member of a religious order. The pens and the ink well show that she lived during colonial times. Her determined look and calm, young face connote a serious woman, cultivated and devoted to religious service and the literary arts.

The Temple of San Jerónimo is an ancient religious construction. This construction speaks to us of the isolation of the people who lived there. Its harsh appearance contrasts with the vignettes of flowers that convey the femininity of the writer.

CONCLUSION

These three peso notes tell a larger story – Mexico embraces and officially celebrates all its people, the conquered and the conquering, the native and the imported, men and women and humble artisans along with political heroes. It also celebrates its land. The use of rhetoric and visual symbolism

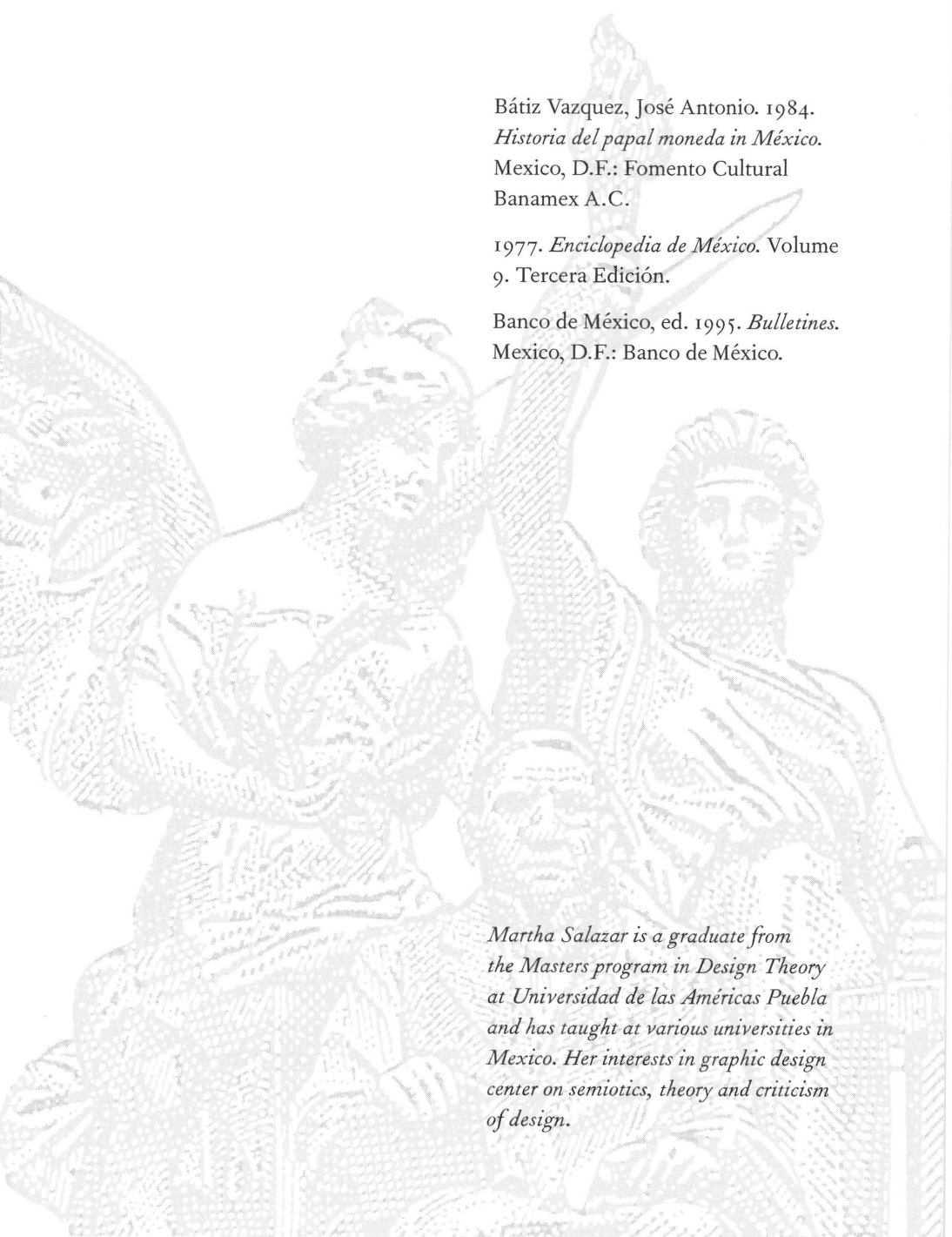
in the design of national currencies bears greater scrutiny. What themes and rhetorical communication devices are common among many countries, and which are used selectively or uniquely. What meaning can we attach to these similarities and differences? These are questions for another time.

REFERENCES

Bátiz Vazquez, José Antonio. 1984. *Historia del papel moneda in México*. Mexico, D.F.: Fomento Cultural Banamex A.C.

1977. *Enciclopedia de México*. Volume 9. Tercera Edición.

Banco de México, ed. 1995. *Bulletines*. Mexico, D.F.: Banco de México.



Martha Salazar is a graduate from the Masters program in Design Theory at Universidad de las Américas Puebla and has taught at various universities in Mexico. Her interests in graphic design center on semiotics, theory and criticism of design.

SUBSCRIPTION RATES

United States	<i>Individual</i>	<i>Institutional</i>
1 year	\$35.00	\$65.00
2 year	\$65.00	\$124.00
3 year	\$90.00	\$183.00
Foreign*		
1 year	\$42.00	\$72.00
2 year	\$79.00	\$138.00
3 year	\$111.00	\$204.00

Prepayment is required.
Make checks payable to
Visible Language in U.S.
currency only.

Foreign banks need a U.S.
correspondent bank.

*Foreign subscriptions
include additional postage
(\$7.00 per year).

BACK COPIES

A limited number of nearly all back numbers is available. A booklet listing the contents of all past journal issues is available on request. Individual reprints are not available.

ADVERTISING

Detailed information about advertising is available on request.

COPYRIGHT INFORMATION

Authorization to photocopy items for internal or personal use, or for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of \$1.00 per article, plus .10 per page is paid directly to:

CCC

21 Congress Street

Salem, Massachusetts 01970

Telephone 508/744-3350

0022-22244/86 \$1.00 plus .10

ISSN 0022-2224

Published continuously
since 1967.

Index included in last issue
of volume year.

EDITORIAL CORRESPONDENCE

Manuscripts, inquiries about research, and other contributions to the journal should be addressed to the editor. Letters to the editor are welcome. The editor will also relay to the author questions or comments on any article. Your response – and the author's reply – will not be published without your permission and your approval of any editing. If you are interested in submitting an article to the journal and would like a copy of our *Notes on the Preparation of a Manuscript*, please request this information from the editor. Editorial correspondence should be addressed to:

Prof. Sharon Helmer Poggenpohl
Editor, *Visible Language*
Institute of Design, IIT
350 N. LaSalle Street
Chicago, Illinois 60610
Telephone 312/595-4921
Fax 312/595-4901
E-mail idpoggenpohl@id.iit.edu

If you are interested in serving as guest editor for a special issue devoted to your specific research interest, write to the editor, outlining the general ideas you have in mind and listing a half dozen or so topics and possible authors. If you would rather discuss the idea first, call the editor at 312/595-4921.

BUSINESS CORRESPONDENCE

Subscriptions, advertising, and related matters should be addressed to:

Visible Language
Rhode Island School of Design
Graphic Design Department
2 College Street
Providence, Rhode Island 02903
Telephone 401/454-6171

INDEX TO VOLUME 32 BY TITLE

- 78–92 *Cloth-Bound Reverie* · Michael Golec.
- 128–149 *Customized Digital Books on Demand: Issues in the creation of a flexible document format* · Karsten Lücke.
- 200–233 *Doubly Damned: Rhetorical and Visual* · Sharon Helmer Poggenpohl.
- 150–181 *The Effects of Line Length and Method of Movement on Patterns of Reading from Screen* · Mary C. Dyson and Gary J. Kipping.
- 100–127 *Extending Control of Digital Typography* · Peter Karow.
- 280–293 *National Currency as Rhetoric: The Peso* · Martha Salázar.
- 56–77 *Paper Representation of the Non-Standard Voice* · Mark Balhorn.
- various *Poems* · Errol Miller
- 256–263 *Pre-Columbian Stamps: Pintaderas* · Claudia Navarro Tapia.
- 264–279 *Rhetoric in Logotypes* · Mária González de Cosío.
- 234–255 *Tale of the Origin: A Rhetorical Analysis of a Mythical Mexican Tale* · Alejandro Brizuela.
- 5–34 *Twenty-Six Not-So-Easy Pieces* · Sharon Helmer Poggenpohl.
- 193–304 *Visual Rhetoric: A Special Issue* · Mária González de Cosío and Sharon Helmer Poggenpohl, guest editors.
- 197–199 *Visual Rhetoric: An Introduction* · Sharon Helmer Poggenpohl
- 35–54 *Writing in the Age of Email: The Impact of Ideology versus Technology* · Naomi S. Baron.

INDEX TO VOLUME 32 BY AUTHOR

- 56–77 Balhorn, Mark · *Paper Representation of the Non-Standard Voice.*
- 35–54 Baron, Naomi S. · *Writing in the Age of Email: The Impact of Ideology versus Technology.*
- 234–255 Brizuela, Alejandro · *Tale of the Origin: A Rhetorical Analysis of a Mythical Mexican Tale.*
- 264–279 de Cosío, Mária González · *Rhetoric in Logotypes.*
- 193–304 de Cosío, Mária González, and Sharon Helmer Poggenpohl · guest editors, *Visual Rhetoric: A Special Issue.*
- 150–181 Dyson, Mary C. and Gary J. Kipping · *The Effects of Line Length and Method of Movement on Patterns of Reading from Screen.*
- 78–92 Golec, Michael · *Cloth-Bound Reverie.*
- 100–127 Karow, Peter · *Extending Control of Digital Typography.*
- 150–181 Kipping, Gary J. and Mary C. Dyson · *The Effects of Line Length and Method of Movement on Patterns of Reading from Screen.*
- 128–149 Lücke, Karsten · *The Digital Book: A Flexible Digital Document Format.*
- various Miller, Errol · *Poems.*
- 200–233 Poggenpohl, Sharon Helmer · *Doubly Damned: Rhetorical and Visual.*
- 197–199 Poggenpohl, Sharon Helmer · *Visual Rhetoric: An Introduction.*
- 5–34 Poggenpohl, Sharon Helmer · *Twenty-Six Not-So-Easy Pieces.*
- 193–304 Poggenpohl, Sharon Helmer, with Mária González de Cosío · guest editors, *Visual Rhetoric: A Special Issue.*
- 280–293 Salázar, Martha · *National Currency as Rhetoric: The Peso.*
- 256–263 Tapia, Claudia Navarro · *Pre-Columbian Stamps: Pintaderas.*

NO VACANCY

Kingswood

MOTEL

EFFICIENCIES

WEEKLY RATES
DELUXE



SINGLE
SUN. - THUR.

FREE
MOVIES

Visible Language ^{Call for Papers} in Space

Off paper and off screen, visible language is part of the outdoor environment – permanently as an integral part of architecture or ephemerally as sky writing. In large scale and various materials, it both captures attention and fades into the man-made environment. It functions to name, orient, aid navigation and exhort us in our everyday lives. Often invisible, it captures attention with surprise as it reveals a poetry of place and time.

Visible Language invites papers investigating architectural signage, large scale poetry installations, novel advertising appeals, language demonstrations in political and social rallies and other as yet unidentified instances of visible language in space. The issue will necessarily be quite visual with documentation of the physicality of language as a significant part of the discourse.



To express interest in participating or to ask questions regarding this special issue, contact the editor:
poggenpohl@id.iit.edu

Abstracts or proposals for articles are due June 1, 1999. Notification of selection will occur by June 15, 1999 with the deadline for article submission on September 15, 1999. We will celebrate the beginning of the 21st century with this issue.

For more general information about the scope of **Visible Language's** interests, visit the website at www.id.iit.edu/visiblelanguage



A NOTE ON THE DESIGN

Much of this issue of *Visible Language* dwells on the idea of a cycle of eternal return – a tail-biting snake that draws nourishment from its own demise – an apt metaphor for Mexico, which for over five centuries has synthesized indigenous and imported elements into a new cultural whole.

We were fortunate to be given these words and images to guide our hands and to imagine a design that “reveals a continuous rhythm” of dark into light and of earth and sky bound by the horizon. The circular snake served as a kind of talisman, and we aimed to integrate it throughout – from the prismatic cover to the column rags.

We’d also like to say a few words about the types. This issue has been set in Monotype *Fournier* with *Scala Sans* for display, products of two widely divergent ages – 1738 and 1994 respectively. Their remarkably similar skeletal frameworks yield an easy pairing while their surface contours create a dialogue of contrasts between old and new worlds that, in itself, complements many of this issue’s themes.

Charles Gibbons & John Nordyke



