The Semiotics of Visual Identity: Logos

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Abstract: Visual identity systems allow a visual object to stand for, and provide suggestive expression of, a host. The primary graphic element in a visual identity system is the logo. In three sections, this article explores important semiotic mechanisms by which logos perform the work of identifying. The first section points to the difference between basic visual differentiation (boundary coherence) and affective/cognitive reference (semantic coherence). It makes a distinction between two kinds of reference that occur simultaneously in logos: (1) an immediate referencing of the host entity (the entity for which identification is sought), and (2), indirect, reference that is often metaphoric in character. The second section offers a four-part classification scheme for logos based upon a Peircean icon/index/symbol division with the addition of an axis of syntactical detail. A "hidden" class of logo is predicted by this Peircean framework; examples are identified and this class is named "gesturegraphs". It is argued that this four-part classification scheme is both semiotically necessary and sufficient. Any further classes of logos can be considered subclasses within the four semiotic factors proposed. These classes are not judged to be discrete, but rather to afford blended and combinatorial situations. The rhetorical tropes of metonym and metaphor are discussed in terms of their value to the pictographic mode of logo design. Finally, in the third section of the article, genre is defined as the coherence of stylistic features in relation to the sector of the host's activity. Two case studies are given as examples of how genre influences the semantical context of logos.

Keywords: boundary, coherence, semantic coherence, first order reference, second order reference, visual gamut, pictographs, logotypes, gesturegraph, semantic repletion, span of abstraction, stylistics, genre

Introduction

Visual identity systems allow a visual object to stand for, and provide suggestive expression of, a host. In a world of proliferating signs, well-designed visual identity systems are increasingly important. But while there are abundant logo collections (Pentagram 2010; Airey

2010) and documented case studies (Skaggs 1994; Miller and Brown 2000), a comprehensive theory of the fundamental semiotics of visual identity systems, and the logos that represent the principle graphic identifier within these systems, has only been emerging piecemeal, like pottery sherds slowly being unearthed. Floch (1995) contributed very detailed accounts of the semiotic connotations of particular brands from a continental semiological perspective. Mollerup (1997) added to the taxonomy of trademarks, and Rand (1996) has addressed some important features of successful logos in a discussion of his own creative contributions. More recently, Clotilde Perez (2016) has investigated trademarks from a marketing point of view, but one that nevertheless includes semiotics in an important way. These studies approach visual identity from different semiotic angles, and for different purposes, from the scholarly, to the practical, to the pedagogical. What is beginning to be possible now is to go beyond the assorted found sherds, and to envision the completed vessel—to suggest a model of semiotic action in visual identity.

The Semantic Domain

Boundary Coherence and Semantic Coherence

A companion piece to this article (Skaggs 2018) focused on visual identity as a systemic set, and the fundamental importance of differentiating the members of the identity set from competing visual systems in the environment. That former discussion was limited to what may be called *boundary coherence*. The present essay assumes such a boundary coherence has already been established; we now examine relations of interpretation between a visual entity and the host it identifies, what might be called an identity system's *semantic coherence*.[1] Semantic coherence has to do with the various ways in which a visual entity's content (both affective and conceptual) create a tie-in, or *semantic ligature*, to the host it stands for as it performs its role as identifier sign.

The semantics of identity systems adheres to the classic Peircean semiotic pattern: visual entities (acting as signs) reference a host (the object or referent), and produce certain effects (interpretants) upon apprehension by members of a public. We use the word "host" for that entity for which

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[1] Anticipating the present article, the former article referred to this feature as a "metaphorical" aspect of identity. Although metaphor will take on an important role in what is to follow here, the term "metaphorical" is too narrow, for the distinction is not between boundary conditions and metaphorical traits, but rather between boundary coherence and its semantic coherence overall. So while metaphor will be part of the picture, we will see that our scope will be much broader than metaphor alone.

identification is sought in the exchange. The host is usually a corporation or other organization, whether commercial, governmental, or otherwise, but the host can also be an individual as is the case when a handwritten signature acts as an identifier for someone. The pertinent "effect", or interpretant, for an identifier sign is that the receiver apprehends that the visual entity is acting to represent the host, much as a proper name does. But the process is polysemous, involving not only the brute denotation of the host, but also expressive affective sensations, and connotative associations. Some of these effects are general throughout a population, usually formed by a process of repeated planned exposures through marketing efforts; others are highly individualized, a result of personal interactions and experiences.

Visual identity systems are comprised of many parts, including a logo, a signature, tag lines, and various ancillary graphic elements. A well-planned visual identity system packages all these components and ensures the consistent interaction of them. Since I want to look at the basic semiotic behavior at play in identity (generally conceived) rather than provide a detailed case study of a single brand, it is good to limit the number of simultaneously moving parts as much as possible. As a result, the discussion will be pared down to an examination of a visual identity system's essential element: the logo.[2]

A logo is a graphic device that acts as the primary symbol of identity for some host.[3] Logos can be stamped, woven as a banner or stitched as a flag, imprinted, or otherwise fastened or placed on property, goods and services. Logos are also used as a kind of signature to claim authorship of communications such as ads, commercials, and other messages between a host and a public. Acting as a visual proper name, a logo is the only part of an identification system that functions even if isolated from the other visual elements of the system. Although other elements in the system may, through context, be suggestive of the host, it is the logo's exclusive function to stand independently at all times for the host, irrespective of context. As a result, observing how a logo fulfills its role effectively, reveals the most critical semiotic mechanisms of identity.

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[2] By looking at the logo in isolation, all the crucial semiotic aspects of identity are brought out. The addition of additional elements of the identity system simply support and magnify these basic concepts and allow the program more flexibility in practical use. For detailed analyses of particular brands, the reader is referred especially to Floch, but also (more peripherally) to Williamson (1978) and Saint-Martin (1990).

[3] Colloquially, logos are referred to as "marks" (i.e., trademarks). Because the shorthand term could cause confusion with the term used in the visual gamut for indexicals, I will mostly stick to the more formal "trademark" as a synonym for the word "logo".

First-Order and Second-Order Reference

No matter what other semantic relations a logo may have with its host, all logos function as symbols. If we take the Peircean conception of a symbol as a kind of sign relation in which the sign's connection to its referent is habitual, and based upon conventional agreement (c.1895: CP 2.297), logos are symbols inasmuch as the host to which they refer is either: (1) an abstract entity, such as a corporation, that cannot be pictured (iconic) or brought into environmental contact (indexic) with its sign, *or* (2) an actual person, place or thing, which might normally be iconically or indexically signified—but in which circumstance the logo invariably functions not as an incidental snapshot, but stands for the host from a detached, generalized, timeless point of reference. In the latter case, some visual cue (the transformation from picture to pictograph, for example) heightens the emphasis on this ground of generality, and this makes the symbolic aspect of the visual entity paramount.[4]

An example: Nike makes running shoes, but depicting a running shoe does not establish an iconic resemblance to the company Nike. Instead, the Nike swoosh logo comes to stand for the company even though it lacks indexicality or iconicity with the corporation. Through the education of the public by way of advertising and other publicity, the swoosh gains recognition and becomes a functioning symbol identifying Nike. The consensual agreement is built by the marketing campaign and experience. The fundamental link of identity—regardless how ill-suited to the company's activities a given graphic form may seem to be—is inevitably a symbolic one. The habitual reinforcing of the connection in the minds of the receivers produces the symbol. This simple, direct, denotative, symbolic connection between logo and host—that this visual thing identifies that host—is *first-order reference*.

The semiotic activity of logos extends beyond first order reference. Other supplemental semiotic devices reinforce, enhance, or otherwise extend the relevance of that reference. These factors may be said to constitute *second-order reference*. While it may seem surprising that a seemingly random graphic form (the swoosh) can be a successful first order reference standing for an athletic goods company named Nike, the energetic gestalt of that swoosh, conveying an appropriate expression of

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[4] To catch my point here, think of the transformation of the image of Che Guevara—the use of a high contrast black and white image—that became a popular symbol during the 1960s. The generalizing impulse is made possible by the graphic effect. Compare that image to the original photograph from which it was derived and you can see this step from iconicity to foregrounded symbolicity.

power and athleticism, is salient as well.[5] The swoosh has a certain vigor, action, boldness and spirited movement that support the brand's activities. The expressive characteristics of the logo's form collaborate with and extend the primary symbolic reference of identity, deepening the ligature between the graphic entity and the host.

In the ensuing discussion of the current and proposed taxonomy of logo classes, the symbolicity of first-order reference will be assumed; it is second-order reference that is the focus.

The Four Classes of Logo

(In the discussion to follow, Figure 1 will serve as a continual resource.)

Various schemes have been used to classify logos, with some contemporary popular sources listing up to seven different classes (Morr 2018), but traditionally, the most common division is a simple three-part division into logotypes (sometimes called "wordmarks"), pictographs, and ideographs (Meggs 2016: 412–435). A logotype uses a name or initial letters, a pictograph is a simplified depiction, while an ideograph is neither an identifiable picture nor a legible word, but an abstract form. Some logos fit cleanly within one of these three classes, while others are blended or make use of combinations of these three basic types.

The Visual Gamut Applied to Logo Classes

All of these schemes, whether three, four, or seven-part, are based upon an old assumption: that graphic design is a practice of combining words and images (Cramsie 2010: 10–11). The traditional taxonomies are based on descriptive methods which start from that assumption and simply observe in logos the use of simplified images (pictographs) and the use of initials and names (logotypes); then a place is made for the occasional abstract shape that cannot be fit into either category.

The traditional schemes are unsatisfying for two reasons. First, they are not based on a semiotic foundation which would allow relation to broader semiotic patterns. Is the assumption that all graphic design is based on words and images correct? If the taxonomy is based on description, might there not be finer or coarser descriptive-based formulae that could be dreamed up? Why not geometrically shaped logos and organically shaped logos or complex vs. simple logos?

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[5] Indeed, the swoosh logo was actually designed before the company was named Nike: it is a rare example of a logo design that preceded the naming of the host company. Phil Knight, the founder of the athletic apparel company, was most concerned to have a logo that expressed energetic motion. In so doing, he was focusing on second-order reference.

	Logo	Class of Logo	What it Depicts	What it Says	What Gesture	Host
1		pictograph	bitten apple	–	–	Apple
2		ideograph/ gesturegraph	–	–	footfall motion?	Nike
3		pictograph	eye	–	–	CBS
4		logotype/ ideograph	–	Showtime	–	Showtime
5		logotype/ pictograph	coaxial cable cross-section	HBO	–	HBO
6		logotype/ pictograph	electron orbits?	GE	–	General Electric
7		ideograph	–	–	–	Chase
8		pictograph	mermaid	–	–	Starbucks
9		logotype/ gesturegraph	–	Coca-Cola	pointed pen nib	Coca-Cola
10		logotype/ gesturegraph	–	Ford	pointed pen nib	Ford
11		gesturegraph	–	–	brush stroke	Lucent
12		logotype/ gesturegraph	–	Nickelodeon	ink splatter	Nickelodeon

Figure 1. Twelve logos mentioned in the essay

Secondly, the adoption of a third category (ideographs) is very different than a simple blend of the other two classes. This suggests that the fundamental word-image assumption may be insufficient to cover the possibilities of graphic design.

If semiotics is to be the foundation of design theory, as I believe it should be, then logos should not be considered independently from other graphic flora and fauna. Logos should find their place within a model of visual design that is semiotically based and that model might be expected to provide insight into the mechanics of how visual identity works. Classes of logos that evolve from this semiotic structure should be necessary in the sense that no major classes should be named that are not of principle importance; they should also be sufficient, which is to say that the classes would be able to cover all the various examples of logos through history and throughout the world.

A promising starting point is the semiotic model, seen in Figure 2 (Skaggs 2017). This "visual gamut" maps the landscape for all the various ways any visual entity might semantically engage its referent. It takes the Peircean icon/index/symbol structure as a starting point, but instead of considering a given visual entity to be a discrete icon, index or symbol, it considers iconicity, indexicality, and symbolicity to be three apexes, or nodes, that define a triangular field of semantic action. A visual entity's semiotic activity can be located anywhere within the field, indeed parts of it might occupy different regions of it, such as when letters (symbolic) are tucked inside a pictorial silhouette (iconic). Thus, the mapping of the relations of a sign to its referent is seen to be flexible, allowing both proportionality and multiplicity.

The gamut's apexes are labeled "image", "word", and "mark". The salient aspect of an image is its resemblance, or iconicity. A word is symbolic, a mark is indexical. But its important to keep in mind that the apexes allow the mapping of visual iconicity, symbolicity and indexicality generally—and the image-word-mark labels are simply shorthand descriptors of the most common visual examples of each.

The top of the visual gamut is defined by word and image, the traditional poles of the field of graphic design. And as might be expected, two of the traditional classes of logos immediately find their respective places there: the pictograph is inherently iconic (image) while the logotype is inherently symbolic (word).[6]

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[6] Recall we are speaking of second-order reference here. All logos are symbolic in their first-order reference.

IMAGE   WORD
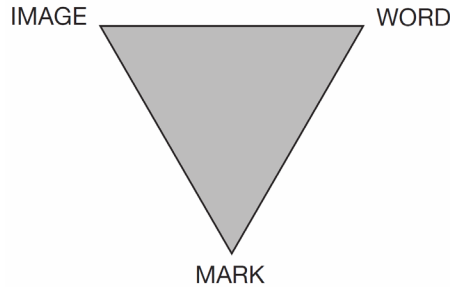
MARK

Figure 2. The Visual Gamut: Defining the territory of visual entities
within a semantic plane defined by their possible sign/referent relations

But it is here that we run into apparent "fit" problems with the traditional logo nomenclature and classes, for if the visual gamut is a useful model, it predicts some class of logo that would relate to indexicality.

Gesturegraphs: Second Order Indexicality

As the visual gamut predicts that there should be some logo class correlating to the third, indexic, "mark" apex,[7] it raises the question: Do we actually find, in the world, logos that represent such an indexical class, in which there would be some environmental contiguity or contact?

Indeed, pure indexical logos are rare. Most logos, in fact, seem to employ a pictograph of some object or person, and/or a name spelled out in some unique fashion. However, examples of such logos are to be found, and some of them are quite pure in their indexicality. The Lucent[8] "innovation ring" in Figure 1 is an excellent example of a logo that makes prominent use of a gesturally written circular form. The brush's bristle marks are distinctively retained in this logo as well as the individuality of the hand gesture of the artist[9] who made the mark. The Lucent logo is not a pictographic image or drawing of a brush mark, it simply is a *recorded* indexical (second-order) brush mark, selected to be the archetypal symbol (first-order) for the company.

Logos located at this apex of the visual gamut employ their second-order indexicality[10] to trace some kind of environmental contact. Such

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[7] The general visual gamut labels this indexical apex "mark" but that term should not be confused with the shorthand term for "trademark".

[8] Lucent, a telecommunications company, used this trademark from 1996 to 2006, upon which the logo fell out of use because of a corporate merger.

[9] San Francisco calligrapher Kazuaki Tanahashi

[10] In making the distinction between first and second order indexicality, it is helpful to think of immediacy. With an index of first order reference, the immediate is always

things as scuffing, handwriting (or the immediacy of other manipulated tools), burned or slashed edges of paper, a gestural movement, a splatter; any evidence of environmental influence or actual marking, used as an "effect" are all second order indexes in logos.

Let us restore this forgotten category of logo, adding it to the pictograph (image) and logotype (word) apexes to complete the field, for logos, of the visual gamut. Perhaps such an indexical mode, when used for logos, can be called a "gesturegraph" (from the root *geste*: action, to perform).

Of course, many logos use combinations of these three pure semantic types. Referring again to figure 1, the Ford logo is certainly a logotype, but the form of the word is a stylization of Henry Ford's handwritten signature, still retaining the gestural vestige of his penmanship. The same can be said for the Coca-Cola logo, in which the gestural action of clerk Frank Robinson's steel-pointed pen is more pronounced. These logos blend gesturegraphs with logotypes. Although we see few purely independent examples of the indexical geturegraph, we find many instances of gesture used proportionally and in combination, especially many logotypes featuring the movements of handwriting. Once we realize this, such a class of logos becomes so populated, that we discover that the gestural logo has been hiding right under our noses all this time.

Ideographs and the Syntactical Axis

Finally we must confront the second fit problem: the classification structure that is emerging so far still does not include the traditional type of logo called an ideograph. An ideograph is an abstract form that is neither word, pictograph nor gestural mark. It is tempting to conclude that ideographs must occupy the center of the visual gamut triangle, equidistant from the other three nodes. It would not be completely wrong-headed to allow it to be so; however, within the concept of an ideograph lies a thread that helps us to realize a more effective new dimension to the visual gamut, a dimension that offers a much deeper understanding of how visual entities work.

To understand what this thread is, remember that ideographs are almost always highly abstracted geometric forms. This is as true of Native American petroglyphs and Chinese characters as it is of ideographic logos. Often, especially with logos, it is the extent of abstraction that

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foregrounded. A stamp on a passport, a logo used as building signage to indicate the headquarters of the host, or the logo when it is a token imprint marking or branding a product in a specific package, would each be examples of first order indexicality. It is the emphasis shift to the token occurrence—this moment and this place, this material—that typifies first order indexicality.

is most salient to their status as ideographs. Consider the immediately recognizable stalwart simplicity of the Chase Bank pinwheel. It is simply an arrangement of four quadrilaterals rotating around a common central pivot, which causes us to see, in a very strong gestalt, both a square and an octagon. If the Lucent logo can be considered the master example of a gesturegraph, the Chase logo is a likely equivalent for ideographs. There is something inherent and important in an ideograph such as this that is not grasped by simply determining that it is equidistant from word, picture and gesture. We must address this move to primal simplicity, because the simplicity itself is causing an interpretive effect.

This awareness of distillation, this subtraction of detail, invites us to account for a new axis if our visual gamut is to be really complete. Whereas the three apexes of image (icon), mark (index) and word (symbol) define a visual gamut of semantic function, this new dimension maps the level of formal detail, seemingly a purely syntactical variable, but one that influences interpretation.

The necessity for this additional dimension becomes more obvious when one stops to think that each of the other three apexes addresses a manner by which a visual entity refers to its referent, i.e., by resemblance, by convention, or by environmental influence. In contrast, the salient aspect of an ideograph is not its means of reference, but rather, what might be described as its reduced materiality. The creation of an ideograph is a move toward an apex that speaks to the degree of detail that has been removed.
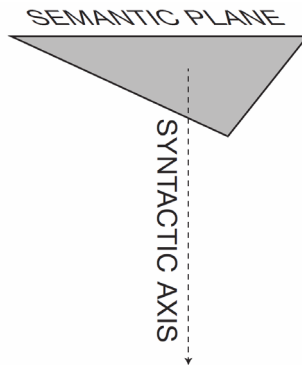

Figure 3. The "Visual Gamut" reconsidered by adding a syntactical axis

So this new syntactical axis emerges, perpendicular to the semantic plane of the visual gamut, a syntactical spectrum that alludes to the detail present in the visual entity. It ranges from extreme detail, up toward the semantic plane, and extends downward, measuring declining detail until

reaching its terminus, that signifies a form that is the simplest possible form of visual entity (Figure 3). Indeed, we have a name for such—the dot. This axis is mapping *abstraction*. As one moves down its spectrum, one is subtracting detail, a reduction that also entails a convergence toward visual entities where clear distinction between pictograph, logotype and gesturegraph begins to disappear.

   In order to understand what this model is suggesting, it is helpful to imagine a personification of visual entity moving around within this enhanced visual gamut. Let's call our morphing visual entity "G". As G starts out being a complex form, but one that is neither image, word nor gesture, it begins the journey in the center of the visual gamut.[11] As G descends the axis, its form loses detail, begins to simplify, to become more abstract. Eventually, G would descend through the region of primitive forms such as circle, square and triangle, before ending its journey at the terminus of the dot.

Detail and the Visual Gamut

Now as we incorporate this syntactic detail axis into our gamut, we have two choices. We could consider detail narrowly, limiting our analysis solely to the assessment of a visual entity's formal complexity irrespective of semantic function or "knock-on" effects. This narrow stance has little to offer about the influence of complexity on interpretation.

   Imagine what happens when one increases the typographical complexity of a word. A more complex typeface is rarely more successful at transmitting a word's verbal content (Figure 4). If we think of the word's purpose as the delivering of linguistic content, the minimalist font Helvetica is much more efficient at doing so than an ornamented typeface such as Bickham. Elaborate fonts such as Bickham sacrifice readability—the verbal symbolic function represented by the word apex—in order to supply other semiotic attributes. Bickham provides connotations, expressions and effects beyond simple linguistic symbol. From the perspective of what the word category is most suited to do (deliver linguistic code) anything beyond that function is a kind of over-coding. The linguistic unit not only has no need for the ornate detail of the typeface, the complexity injures it. The ornamental detail hinders reading, fosters illegibility. From this narrow perspective, then, thinking only of an apex's primary function, anything extra-apex function is, in a sense, parasitic.

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[11] This thought experiment mimics what would occur in a design studio when hundreds of iterative sketches of a potential logo are produced exploring the amount of detail to include or subtract.

Helvetica   *Bickham*

Figure 4. The typefaces Helvetica and Bickham Script

However, from the point of view of the entire semiotic dynamics of the gamut, which holds multiple chains of secondary order reference, such ancillary embellishments are anything but superfluous or injurious. They contribute to the full and deepening ligaturing of the visual form to the conceptual root of the host. A word may be somewhat difficult to read but may refer (by its form) to the 17th century, a pictograph may be difficult to recognize but convey a sense of counter-cultural values, a logo that has—from the standpoint of denotation—various decorative elements, may strongly connote culturally-specific referents.

If we divorce syntactical complexity from the semantics of the visual gamut, we lose the ability to see the inherent relationships between the retention or subtraction of detail and the semantics plane. So we can amend the model so that it not only alludes to the presence or absence of detail, but suggests abstraction's pertinence to each of the three semantical apexes.

The connection allows us to chart what might be called the "efficiency" of each apex as its function is aided or disrupted by the level of syntactical detail. In making this move, I imply that iconicity, indexicality and symbolicity have levels of detail that are most suited to them, that they operate most successfully at particular "home" degrees of abstraction, and that a certain level of detail will tend to be a most efficient complexity saturation level for each. This would be the apex's "sweet spot" to which adding more syntactical detail would be overcoding, in which the essential iconicity, indexicality or symbolicity is not helped, while subtracting detail tends to result in undercoding, possibly leading to confusion and retarded comprehension. This way of thinking means that detail cannot simply be measured as form complexity, but that it enters into a kind of "information efficiency value" that is based on syntax's ability to connect semantically, to help perform second order reference with clarity.[12]

If we accept this premise, then we are enticed to further investigate the implications with respect to image, mark and word to see if they are equivalent in their efficiencies. Imagine three separate spans (Figure 5)

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[12] It is not my intention in this piece to go into measurement arcana, but it would seem there may be a way to set up such an "abstraction efficiency coefficient by taking efficiency to be the minimal degree of detail (complexity) required to deliver the maximal amount of informational content: $e=i/c$.

defining, (a) the range between the most minimally detailed visual entity possible—a dot—and a maximally informative image, (b) the range between dot and maximally informative mark, and (c) the range between dot and maximally informative word. If we suppose the lengths of these spans are drawn solely based on the minimal amount of syntactical detail that is needed to deliver the most semantic content for each apex, the spans will not be of equal length. An image continues to deliver more information as the level of detail increases without apparent limit.[13] For instance, a highly detailed photograph is capable of delivering more information about its scene than a low resolution or blurry photograph. As a result, the span between a dot and a highly detailed image, is long. But, as we have seen, setting a word in a very detailed or ornamented typeface does not aid the legibility of the word; the typographic word is most semantically efficient—as word—when it is very easily or quickly readable, requiring a simple typographic form. Meanwhile, the mark occupies a node somewhere in between the other two, a moderately simplified splatter (such as the Nickelodeon logo) conveys just about as much information as would an un-edited version of the actual splatter.
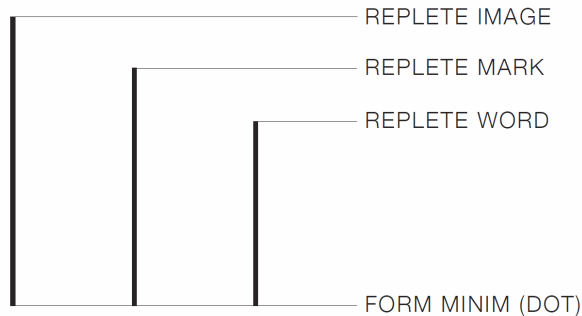
REPLETE IMAGE

REPLETE MARK

REPLETE WORD

FORM MINIM (DOT)

Figure 5. Spans of Abstraction ranging between the most efficiently detailed—Image, Mark and Word—and the most minimal form possible: the Dot. The most semantically replete image will be expected to carry a great deal more formal detail than a semantically replete word

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[13] It's important to clarify here that I am not saying that in every real-world practical instance an image of greater detail will be preferred over an image that has been abstracted to lesser detail. I am only saying that iconicity, as an ideal manner of reference, is potentially limitless in terms of the ability of greater formal detail to render an iconic relation. There are many reasons to prefer greater abstraction, including such choices as only a portion of an object is salient to be the sign's referent, or that practical or technical reasons limit the levels of detail that are possible to render in the visual entity. As image is visual iconicity, the more resemblance is provided, the greater the image "does its iconic work".

Semantic Repletion

It is best to think of the visual gamut, then, as a terrain which not only indicates the amount of detail in a visual entity, but also suggests the relationship of detail to the semantic relations between a sign to its referent. Starting from the ultimate abstraction of the dot, as one moves upward toward the three semantic apexes (image, mark and word), detail increases until reaching a level in which the visual entity is most efficient for its mode or type. Think of this as a point in which an image has a level of detail that allows it to do all that an image can iconically do, or a mark's detail is such that it is doing all that it can do indexically, or that a word's visual complexity is doing all that it can do symbolically in its function as a linguistically coded script. At this point of highest efficiency, where each semantic node performs its role with greatest fullness, we can say the visual entity is semantically replete for its type (i.e., as image, mark or word).[14] Then, the course from this semantically replete level of detail to the absence of detail (the dot) is the span of abstraction, mapping the progressive loss of formal detail as one moves toward the primitive forms of circle, square and triangle and, beneath them at the apex, to the dot. This provides us with an enhanced visual gamut, now including syntactical detail, that maps the possibility-space for any form of visual entity as it performs a semantic function (Figure 6).

Now we can return to our imagined character, G. Let's have G begin its journey from the apex of the semantically replete image, a highly detailed color photograph or hologram. As before, G descends—this time along the abstraction span between image and dot. As G begins the journey, if viewed from above the visual gamut's triangular semantic surface, G's plunge downward toward complete minimalism would appear to also be a movement from the apex of image toward the center of the triangle. As it continues to lose detail on its descent, G will move not only downward but also toward the middle, away from the three apexes. At some point, G will appear to be a visual entity impossible to classify as image, or word, or mark. Finally reaching the syntactic apex of the dot, G (as seen from above) would appear to be in the center of the gamut, equidistant from the three apexes. The same journey, viewed from the side in elevation,

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[14] Compare with Nelson Goodman's concept of pictorial repleteness (Goodman 1976: 229–230). I am identifying a similar kind of semantic density within the concept of an image, but whereas Goodman uses repleteness to discuss how a picture can come to act as a symbol, I am assuming a picture's ability to iconically refer to its object in a Peircean manner. The distinctions between this model and Goodman's are worth pursuing further but are beyond the scope of the present inquiry.
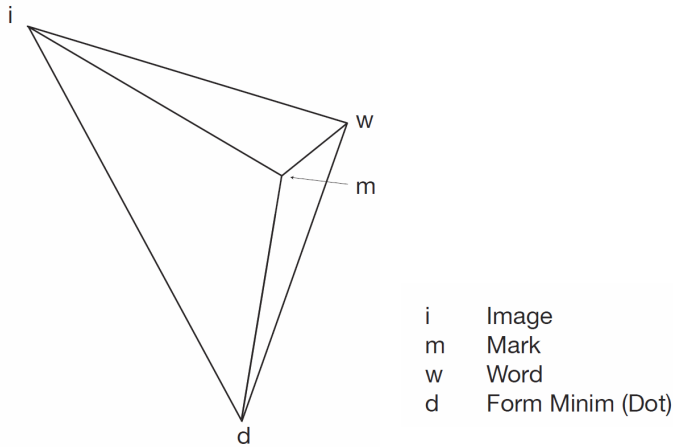
i

w

m

i   Image
m   Mark
w   Word
d   Form Minim (Dot)

d

Figure 6. The enhanced "Visual Gamut" (in 3/4 view). The gamut, now including the syntactical dimension of abstraction, is a tetrahedron. Note that the length of the span from dot (d) to replete mark (m) is actually longer than the span from dot to word, but the reduction to two dimensions makes this difficult to see as the mark apex is foreshortened toward the viewer

would appear quite different. G would move downward from the image apex, angling away from what is replete as an image, but traveling some time before becoming as abstracted as the semantically replete mark, and traveling some more before reaching a level of abstraction occupied by a semantically replete word. Continuing downward, losing detail as it goes, it enters regions where geometrical form predominates over semantics. Eventually, stripped of immediate semantic address that a denotative image requires, G descends through an area inhabited only by the formal primitives of circle, square, and triangle before finally arriving at the formal singularity of the dot.

Before leaving this point of discussion, it is important to stress that semantic repletion is not always the goal. We have mentioned the parasitic aspect of Bickham. As an over-coded typeface, one that is carrying more syntactical detail than is necessary for it to be legible, Bickham doesn't lose a position on the visual gamut; instead, plotting its position on the gamut shows that it actually moves up the lengthened side of the gamut in the direction of gesturegraph. The move toward the mark/gesturegraph node, upward, with a longer span of abstraction, not only reflects Bickham's greater detail, but also suggests Bickham's relation to handwriting. Bickham's designer, Richard Lipton, was striving to create the drama found in 18th-century handwriting (Adobe 2019); and it is precisely those features

that, from the perspective of word legibility are interpreted as over-coding, introduce the gesturality of written mark-making.

Why Logos Usually Employ Abstraction

But if an image that is exquisitely detailed will generally be able to deliver more iconicity about its subject, and continue to contribute information about its subject, then why do we almost always find in logos the highly abstracted pictograph instead of the replete iconicity of the detailed picture?

The practical reason has to do with a logo's utility in the world. In practice, token reproductions of a logo must be used in very small sizes or forced to be in low resolution situations; and, as a result, complex forms cannot be rendered well. This is a parameter that flows not from what iconicity desires but what utility requires.

But there is a second reason, a theoretical reason, that is more interesting and more critical. This is a dynamic that pits the potential benefits of replete iconicity against how a logo functions in its role as a unique kind of information-carrying device. The very detail that is able to convey increased information about a specific individual in a particular place and time stands in the way of a logo's purpose to be general.

As detail is removed from an image, the visual entity stands not for a token individual but for an abstract class, and does so timelessly, which allows it to better function as a symbol in its first order of reference.[15] Think of the successful way the international pictographs of "man" and "woman" are able to convey the generality of their subject when used for restroom signage. It is the abstraction that foregrounds the gender class instead of an individual man or woman.

As a result of these forces to simplify in logos, images are abstracted to pictographs, and detailed marks are abstracted to gesturegraphs. Because of these simplifications, pictographic and gesturegraphic logos end up inhabiting levels of abstraction roughly equivalent to the already truncated abstraction level of typographic words (Figure 7). Just as a legible logotype takes on the authority of standing for a general named entity, so pictographs and gesturegraphs, by adopting more acute levels of abstraction, take on the authority of permanence that symbolizing an abstract entity entails. Paul Rand called this parameter of logo design the "authoritivity" of the logo, and claimed it was not only the most critical but also the only indispensable element of successful logo design (Rand 1985).

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[15] We will see, in the next section, a counter example in which detail provides information about genre, but on the whole, abstraction tends to confer the generality and universality that logos demand.
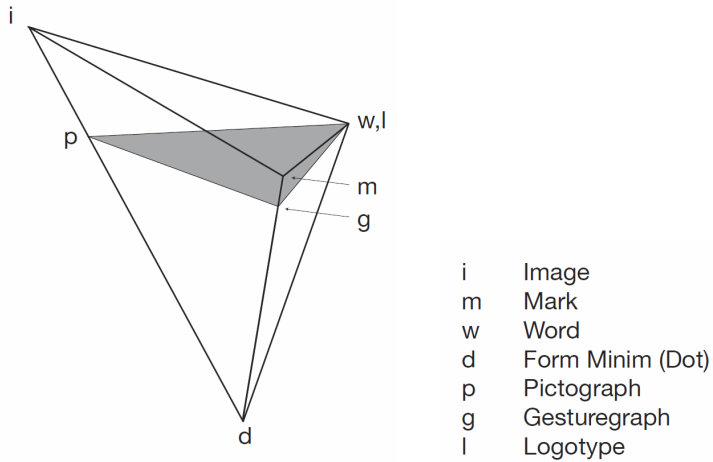
Figure 7. The Enhanced Visual Gamut With Logo Functional Limits
(i.e., the added approximate functional limits of logos). Because logos require
abstraction, pictographs (p) and gesturemarks (g) almost never can achieve
their sematically replete levels of detail. Logotypes (l), however, are often at a
semantically replete level for words.

Blending and Combinations

The discussion so far has treated logos as relatively "pure" examples of image, word or mark (pictograph, logotype or gesturegraph). But in fact, logos frequently combine the three semantic types. They can mix types in two ways: either by being a single visual entity that lies off-apex such as the Coca-Cola logo (primarily a logotype but retaining the gesturegraphic quality of handwriting); or, by possessing multiple visual elements, which are themselves of different types such as the Nickelodeon logo (a logotype placed within a gestured ink splatter).

As with any fine-level taxonomy or typological analysis, at some point definite determinations may be nearly impossible to make. Is the bite out of Apple's image of an apple to be regarded as part of the depiction, or as a gestural trace—a mark made by someone seeking wisdom? To worry about such details is, however, to miss the useful point of the typology, which is to shed light on the different ways logos function semiotically. What is important is to use the visual gamut to explore the ways the Apple logo alludes not just to the action (gesture) of biting and the cultural symbols of the Garden of Eden, wisdom, search for knowledge, but also the abstraction of the logo which brings it into correspondence to other highly abstracted modernist trademarks (of which more will be said below).

Metonym, Metaphor, and Genre

One of the problems with studying logos and visual identity systems is the changing terrain of our subject matter. Jean-Marie Floch wrote his influential studies of the Apple logo in the 1990s; the visual logo that he was studying is now an historical artifact (Floch 1995). The Apple logo no longer has stripes of color. It is not only the visual entity that is changing when we study visual identity systems; the receiving public and cultural environment also changes. Floch may have been correct in interpreting the the color banding on the old Apple logo as an allusion toward counter cultural currents and therefore standing in opposition to the IBM striping (Floch 1995: 36–37). But if color stripes had such prominent reference in 1990, that reference has faded and today color stripes now have different connotations.[16] Even if those stripes made reference to digital technology through the connection with the IBM stripes, IBM is no longer the emblematic behemoth of digital that it was in the second half of the 20th century.

Yet, despite the moving target that visual design presents to a cultural analysis, it is just these potential connections between the visual form and the audience's memories and experience that powerfully govern interpretation. The contextual cultural environment continually reinforces the semiotic connection; even though the logo is a transient visual object in a world that itself is a fast-moving matrix for reception, the points of contact at any snapshot of time remain valuable locales of study.

Metaphor and Metonym

The semantic plane of the visual gamut maps the modes by which logos establish second order identity ligatures with the host. They do this through some combination of four modes: the strictly semantic modes of iconic resemblance, the recording of some environmental trace, or through words or other coded symbol systems. As we've suggested, this purely semantic behavior is modified by the agency of a fourth method: the syntactical abstraction of form. However, among these modes, the connection that is made through pictographs is unique, because unlike gestural marking, words, or syntactic abstraction, pictographs provide the opportunity for a subject to be apprehended seemingly "directly" by sight, a process called depiction or portrayal. Portrayal, at the level of replete semantic detail

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[16] For instance, if a rainbow of stripes carry any special connotation today it is much more likely to refer to LGBT inclusiveness.

(such as a detailed figurative painting or a hologram), has the unique quality of seeming to not stand for, but to simply be, the referent.

This special power is why Barthes called photography a "message without a code" (Barthes 1977: 17). But unlike the portrayal that occurs in, say, your driver's license, the subject that is being directly portrayed in a logo is almost never the host, because as we have mentioned, the host rarely is an individual that has a visage to represent. Instead, the pictographic portrayal that happens in a logo makes use of metonym and metaphor.

Metonym and metaphor are indirect, amplifying, rhetorical devices. Metonym refers to the subject by using abbreviation, contraction or extension of the subject, or the subject's context. Metaphor substitutes for the subject something altogether different than the subject, but something that, once connected conceptually with the subject, deepens understanding. With their somewhat coy indirection, both metonym and metaphor are strong catalysts for engaging the memory, and in so doing, they amplify the resonances of the semantic connection.

Metonym as Anchorage, Metaphor as Relay

How does an abstracted pictographic logo that is indirect in its means of reference make the conceptual ligature? Roland Barthes introduced the concepts of anchorage and relay (Barthes 1977: 39–40). Anchorage reinforces the identity concept through extension as a sort of restatement or reframing. A picture of a flag appears next to the word f-l-a-g. The labeling depends upon proximity between image and text. The extension is simply one of moving from the image apex to the word apex of the gamut within the combination. An example in logos, rarely seen today, is the simple depicting of a product, or the host's building, or some other physical visual entity that is made by or is physically associated with the host, with the host's name underneath.[17] Think of the "Transamerica pyramid"—an emblematic depiction of the headquarters building in San Francisco that serves as the logo for the insurance company. Anchorages are metonymic solutions. Metonyms restate or slightly extend the known sphere of activity of the host: for example, knife and fork may work as a symbol for a restaurant, railroad tracks for a railroad, an image of Marilyn Monroe as a surrogate for cinematic icons.

Relays, on the other hand, are metaphorical. They cast something as a conceptual ligature which, on the surface, has little to do with the host's activities. The Traveler's Insurance umbrella is a good example. the

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[17] This technique is much more common today in advertising of particular products than in logo work, but a century ago it was quite prevalent in identity systems.

pictograph is not a direct iconic connection as Travelers is not itself an umbrella. Neither is it metonymic, as the Travelers company's product is not umbrellas. Instead, it is a metaphor centering around the conceptual ligature of "protection". In an extreme case of relay, the mermaid as the pictograph for Starbucks is completely unexpected. What does a mermaid have to do with coffee? The metaphor causes the receiver to make a leap to understand the connection. Sometimes, this leap is too much to ask and the connection remains private and enigmatic.[18] Proud of their city, the founders of Starbucks wanted to pay homage to its seafaring history; they were also great fans of Melville's *Moby Dick*. But can Starbucks really expect people to know the back story of Starbucks' mermaid? No—however, remember that anything can come to represent a host in first order reference. From that perspective, in one sense they could have selected almost any subject matter for their logo, because a large enough marketing campaign would be able to supply first order connection, and then deliver the covert backstory.

Of course, Starbucks is an outlier. Almost all companies choose a logo with at least some "built-in" relation to their operation. Choosing a fitting metaphor, one that provides a strong conceptual ligature according to some shared principle, allows for a deeper identity to be delivered to the public. Again to draw from the insurance industry, the Prudential use of a pictographic Rock of Gibraltar makes perfect sense because of its metaphorical suggestion of permanence and security. But even in cases where the connection is extremely tenuous, all that is needed for success is an ample initial media budget to inform the public of the relayed ligature. In such a case the metaphor does not start out already formed in the pubic's collective mind, but develops over some period of time, perhaps a year or two. Either way, through metonymic anchorage or through metaphoric relay—clear or extreme—a ligature is built, which serves to strengthen, and conceptually amplify the semantics, building upon mere syntactical formal differentiation.

Of the five logos in figure 1 that include pictographs, CBS, HBO and GE take the metonymic path, each highly abstracted. An eye is an extension of the idea of television watching, the HBO logotype includes an abstracted cross section of a coaxial cable, General Electric pictures clouds of electrons. Apple and Starbucks, on the other hand, use metaphor. While Apple's pictograph is metonymic of the company name (after all, it portrays an apple), the entire name as trademark for a computer company is itself a familiar "frozen" metaphor (Hausman 1989: 18–19) of teaching while

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[18] To give a second instance of this: the star cluster used for the logo if Proctor&Gamble.

the bite taken from the apple further extends the reference, connoting a Biblical event involving the pursuit of wisdom. In the tale recounted in *Moby Dick*, the character Starbuck is not even a mermaid (he's the first mate) and so the pictographic mermaid as a metaphorical device is doubly relayed; ultimately it simply alludes to the sea and adventure.

Genre

So far, we have introduced a taxonomy for classifying logos, using an expanded visual gamut, and examined metonymic and metaphoric strategies that pictographic logos employ to extend and deepen their conceptual semantic ties. But one more important semiotic influence on logos remains to be discussed: the sector-specific symbolism that derives from the stylistics of visual form.

A visual style is nothing more than particular recurring or habitual practices of composing visual motifs and elements. In other words, what is crucial for visual style is not the subject matter or semantic content, but rather the syntactical manner in which it is expressed. In one sense, a visual identity is the imposition of an extremely controlled and precise visual style across all the visual displays that a host produces. Various hosts, operating and competing in a particular economic, mercantile, or public sector, often begin to use styles that are, in at least a few respects, similar. When this stylistic recurrent practice becomes familiar and ex-pected within a sector, it is a kind of meta-style—a stylistic tendency for the sector. We call this style-to-sector link a *genre*. Genres are symbolic in that they are systems, habits and principles (voiced or unvoiced, explicit or implicit) that become normalized, and in turn, take on ancillary roles in identifying the sector of activity within which a host operates.

Minimal Implies Modernist

Let us look at examples of visual genres and to see how they stylistically convey semantic information. First, consider that most of the logos in figure 1 are quite minimal, abstracted forms. The Nike swoosh, CBS eye, and the Chase octagon occupy sites on the visual gamut that are well down the tapering slopes of the abstraction axis. Some of the logos are slightly more complex (Nickelodeon, Coca-Cola, Starbucks) but even they exhibit but a relatively modest degree of detail. Only the Lucent ring is semanti-cally replete for its type. We have mentioned some practical reasons why logos tend toward simplicity: they often must be reproduced in very small sizes, need to be seen at great distance, must withstand reproduction in a variety of materials, etc. And we have given a second reason for this

simplicity: the ability to project "authority" that derives from abstraction to a general class rather than to a specific individual instance. But there is another deeply semiotic influence—one having to do with genre—that is also at play here, and to get at it requires bringing in a bit of design history.

Compared to recent practice, logos of the late 19th and early 20th century were usually more florid and extremely detailed (Figure 8). The tendency for logos to take on very minimal form had much to do with the rise of the modernist aesthetic in the mid-20th century (Eskilson, Cramsie). Beyond its practical benefits and ability to speak to the general, extreme minimalism began to be associated with modernism's ethos. This ethos had to do with the stripping away of pretense, the desire for integrity of materials over decorative beauty, and the rejection of superfluous ornament in favor of the adoption of efficient rationality. As such trademarks gained in favor after the war, they began to connote sharp decision-making, and an enlightened post-WWII business environment. As a result, three streams came together: the utilitarian needs of identity systems that were becoming more complex as systems; the authority of the general class that abstraction offered;[19] and the connotations of seriousness and no-nonsense efficiency that the modernist aesthetic ushered in. These factors mutually

Figure 8. Typical 19th century logos: A selection of 19th century logos showing the common ornamented style

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[19] The diversification of product offerings and the rise of multinational companies also played a part in the suitability of abstract logos during this period.

Figure 9. Unilever logo: Quite complex in its detail, the Unilever logo nevertheless forms an extremely simple gestalt "U" when seen from a distance

reinforced an almost universal move toward by large corporations to adopt minimalist logos (Meggs 2016: 380, 413–430).

Tracing Historical Genre Connotations: Craft Beer Logos

In the last years of the 20th century and gaining momentum into the 21st, some logos have bucked the trend. Both the Lucent logo with its replete brush mark detail, and the Unilever logo (Figure 9) which includes many small objects constituting a large capital U are iconoclasts among large corporations. Although both of these logos are internally complex forms, they use gestalt principles to make from the detailed parts an overall rather simplified form. To find examples of logos that more completely eschew minimalism, it is more instructive to look toward smaller hosts. Smaller companies often opt for greater detail as a way of differentiating themselves from their big-company competition. We will look at two genres that make use of stylistics that intentionally counter the modernist aesthetic.

The first example is to be found in craft beers. Figure 10 shows a group of craft beer logos. These logos are moderately complex, but I would like to draw attention to the narrow range of the forms they employ, generally involving variations of circular or geometric "seal" motifs, usually employing a word in the center and including relevant pictographs such as hops, tools, or workers.

This kind of mark pays homage to the skilled worker labor union emblems of the 1880s–1940s, a selection of which is shown in Figure 11. Not only do the trade union logos have similar geometries and employment of symmetry and text, but their purpose was to explicitly honor a craft and the workers who labor in it. A labor union logo stamped on a product is saying that although a corporate brand may claim to be the producer of

Figure 10. Craft Beer Logos: The stylistic conformity of craft beer logos create a strong sense of genre. This process forms a positive feedback loop making it more difficult for new craft beer logos to deviate in their design from the strong sense of genre identity—which adds to the conformity and strength of the genre template.
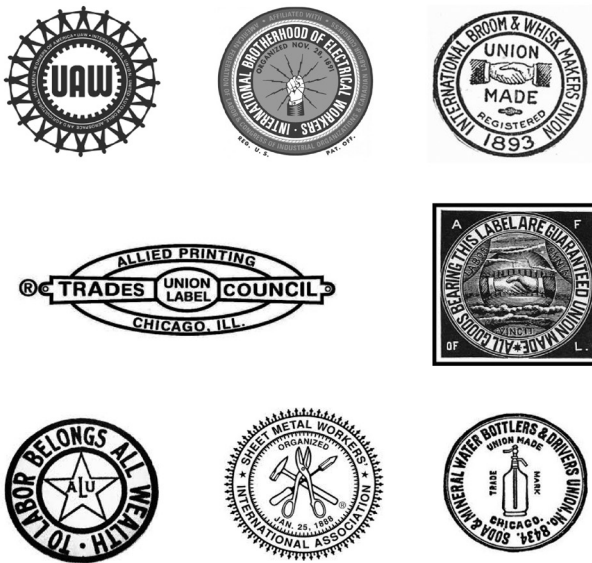
Figure 11. Labor Union logos: Seals from the early to mid-20th century. Craft beer logos gain semantic connotations from the concept of workers performing a skilled trade.

Figure 12. Medieval Guild Seals: It is likely that the adoption
of a seal form by labor unions was influenced culturally by the use of seals
for guilds in the middle ages.

this product, don't forget the skilled worker whose hands actually made it. That message of remembering the skilled worker is one that a craft beer, even if a non-union brewery, is happy to repeat.

Although we do not have the space to pursue all the historical connections here, it happens that a trade union's use of an emblem in the form of a seal also follows historical precedent. As a general family of insignia, seals have an ancient history which played out through the period of the medieval guilds (Figure 12). Roman bricks from the 1st century bear the names of their makers surrounded, cartouche-fashion, by an outlined seal framing device. Seals were used to stamp, to seal openings, and to act as identification surrogates. The key visual attributes of a seal are that they generally have a framing device (usually round), and wording to reinforce the explicit message. They are word-heavy, and both union seals and craft beers carry on these features.

Whether the first craft beer producers and their designers were consciously or subconsciously appropriating the trade union message, there can be little doubt that the connotation carries through the trademarks. It is inevitable that, once several highly-esteemed and well-distributed craft breweries began using such a style of emblematic seal, others followed,

reinforcing the connection, until the genre of craft beer itself is soon announced by the coherence of the trademark to the developing style.

This brief tracing of historical influences could be expanded into a more lengthy study, but for now it is sufficient to suggest that the conscious or unconscious use of certain graphic stylistic elements can come to connote relevant aspects of a message. A beer might be made by Brooklyn Brewery but its logo tells you it is a craft beer without having to read "craft beer" in the emblem or know anything else about it. Logos and other graphic elements of a visual identity system are infused with these conveyances, operating as second order reference, a kind of refractory semantics, flashing suggestive associations outward to the viewer. Like light from a prism's facets, these connections are projected, even if not every viewer is consciously aware of the signaling attempt.

Sublimation of the Host to the Genre: Black Metal Logos

But there is an even more glaring example of a genre stylization practice that constrains logos to such a degree that logos within the sector forfeit almost all differentiation beyond that of genre. The example I have in mind is the genre of music known as black metal (Figure 13).

In spite of the fact that for most of us they are completely incomprehensible as depictions, gesturemarks, or legible as words, the black metal logos are not, strictly speaking, totally abstract ideographs.

Difficult to locate near any one of the visual gamut's semantic apexes, black metal logos often resemble images of insects, dripping algae, root systems, effects of frost or rot. They are actually logotypes in which readability has been almost entirely obliterated in order to (1) defeat, radically, the rational conception of linguistic communication, (2) show the universal eventual degradation of organic structure by forces of nature (such as entwinement in vines, roots, rot and fungal growth), (3) show allegiance to the genre thereby foregrounding the style of music over the name of the host. It is possible that if you walked in on a black metal concert you may never learn the name of the group.

This impulse to reject popular celebrity has been put concisely as: "the purest black-metal artist is one who's unknown and inaccessible"(Nicola Masciandaro, quoted in Ratliff 2009). That purity is an allegiance to genre that supersedes the host's own identity. This paradoxical inversion of the usual priorities provides us with a rare opportunity to observe an extreme example of the refractory semantics of genre. Black metal is an outsider music, relishing dread, always expectant that the end will be a bad one. It opposes politeness. Black metal takes on the role to be opposition to the

Figure 13. Nine black metal logos: In black metal, announcing conformity
to genre supersedes denotation of the name of the individual band.

dominant culture within which it finds itself (and in its more solipsistic forms any culture wherever and whenever it may exist). Therefore it is apt that whatever visual syntax is the norm in the dominant culture should find its antithesis in black metal stylistic syntax. The modernist minimalism that speaks to rationality, cool efficiency and sharp business practices is therefore effectively countered in the logos of black metal artists by an over-wrought knot of organicity, cascades of dripping fungus, and general decay. Black metal logos are overcoded to an extreme degree and along virtually every apex. They are ambiguous amalgams lying somewhere between images, marks and words, but also far from abstracted minimalism. Although many of the logos emphasize strict symmetrical order, even that last visual vestige of the rational is threatened at every turn by the forces of nature, the engines of decay, the inevitability of decline. These are logos that speak to the flashing transience of living, compared to the eternal state of non-living. But they do not seem to greatly value holding on to that transient state, but instead long for its vanquishing.

Whatever black metal's ethos as a genre, it is adherence to the genre's norms and membership in the group that counts here; each black metal logo announces emphatically through its style the "us' against which all else is "other". Even in the cases where a band's identity is valued highly enough to be readable, the connotations of club membership maintain greater importance. The black metal logo not only represents the triumph of group over the individual, it provides a chance to observe the collective process of building group identity.

This is second order reference raised to primary awareness, inverting the usual practice of foregrounding the direct logo-stands-for-host prioritization. Here, the logo stands for inclusiveness within the genre's identity, before circumspectly disclosing—with great effort on the viewer's part—the host's identity. In dominant cultural sectors, this second order indication of genre is present but covert. The normalization within mainstream culture of the modernist logo makes it invisible to us. In cases such as craft beer logos we begin to see its emergence, while in the black metal identities we see this conformity to genre-specific style raised to the starkest possible relief.

Conclusion

Visual identity programs are complex systems in which many semiotic exchanges happen at once. This article has pointed out some of those dynamics. Logos, the primary visual entity for establishing the identity connection with a host, always stand for their host through a symbolic sign/referent first order of reference. Simultaneously, logos establish second order reference—ancillary, enhanced or deepened interpretants—that support or extend the conceptual semantic ligature. While the first order logo/host connection is always symbolic, the strategies for second order reference are diverse, ranging between the three semantic nodes which make up the semantic visual gamut (pictograph, gesturegraph, and logotype), and a syntactic axis of abstraction that ranges down to the minimal amount of detail that is possible for a visual entity to have: the dot.

The current common practice of classifying logos by logotype, pictograph and ideograph is inadequate because while such schemas provide us with the ability to label logos descriptively according to various visual traits, they don't reveal the semiotic interrelationships of the classes, nor are they capable of situating the schema within the context of broader semiotic theory. The model presented here remedies those shortcomings and builds clearly from fundamental Peircean semiotic theory. Not only does this produce a classification scheme which reveals interrelationships

of logo classes, it is semiotically necessary, flowing inevitably from the icon/index/symbol structure of sign-referent relations. The model also adds the important feature of syntactical abstraction, which allows us to investigate semantic/formal efficiencies.

The enhanced visual gamut maps the potential placement of identity elements in the semantic plane according to how they combine iconicity, indexicality, symbolicity, and syntactic abstraction. Second order reference—the conceptual ligature that ties what is represented in the visual entity to connotative non-identity conceptions relating to the host—helps mnemonically to reinforce the otherwise brute identity first order connection.

Within the pictographic mode or reference, both metonym and metaphor are used as devices of anchor and relay respectively to enrich second order reference. Second order reference also becomes a factor when stylistic habits become associated with a sector of activity. In such cases, these second order refractions serve to develop genre.

The complex matrix of semiotic action involved in logos, even at the simple level of description provided in this article, points to the importance of analysis post-design, and the importance, pre-design, of background research prior to putting design pen to paper or cursor to screen.

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