Journal of Technical Writing and Communication
0(0) 1–19

DOI: 10.1177/0047281616646752
jtw.sagepub.com
SAGE

Toward a *Topos* of Visual Rhetoric: Teaching Aesthetics Through Color and Typography

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Abstract
This article proposes a heuristic that teachers and students can use together to create a vocabulary for discussing the aesthetic aspects of color and typography in document design work. By using this framework, teachers and students can generate a collection of shared *visual topoi* or commonplaces for describing the aesthetic value of color and typography that they can then draw from to inform visual analysis and production work.

Keywords
technical communication, pedagogy, visual rhetoric, visual commonplaces, visual topoi, aesthetics, document design

Introduction

As the importance of visual rhetoric has grown in the field of technical and professional communication (TPC) over the past 30 years, increasing attention has been directed toward visual rhetoric pedagogies. Producing technical communication requires proficiency in both visual and verbal literacies (see Brumberger & Northcut, 2013, pp. 1–7) with instruction tending to be situated, as Lauer (2013a) characterizes it, "at the intersection of visual literacy, visual

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rhetoric, and document design approaches" (p. 119). Indeed, instruction in design principles and page layout is often included in commonly used technical communication textbooks targeted to non-majors (see Alred, Brusaw, & Oliu, 2015; Johnson-Sheehan, 2015; Lannon & Gurak, 2014; Markel, 2015). Yet, while teaching perceptual principles gives instructors a pragmatic heuristic for guiding students in making visually effective design decisions, perhaps because such instruction is now routine in many technical communication service courses, this method often goes unquestioned with limited attention directed toward critiquing its limitations.

In this article, I argue that a critical component of document design instruction that has tended to be undertheorized in visual rhetoric pedagogical scholarship and oversimplified in textbook coverage is the role of aesthetic considerations. Aesthetics is closely linked to abstract notions of style, beauty, and taste. Thus, this aspect of document design is often seen as subjective and grounded in the notion that such work involves creativity and artistic expression, revealing the influence of what Schriver (1997) has described as the romantic tradition. Yet, the aesthetics of document design is very much contextually situated, reflecting particular cultural values (see Kostelnick, 1995) that I suggest can be identified and explained.

To address this shortcoming in visual rhetoric instruction in the technical communication service course, I propose a heuristic that teachers and students can use together to create a vocabulary for discussing the aesthetic aspects of color and typography in document design work. I focus on these visual elements specifically because we tend to interpret color and typography through metaphoric associations, which rely on shared cultural knowledge. I argue that the heuristic I propose allows students and teachers to generate a collection of *visual topoi* or commonplaces for describing the aesthetic value of color and typography that they can then draw from to inform visual analysis and production work.

My argument in this article grew, in part, from an investigation among technical communication instructors that sought to learn about their teaching practices as well as any challenges they may face related to visual rhetoric in their technical communication service courses. Thus, I begin by describing several focus groups sessions that explored these topics, detailing points raised by participants about the limitations of instruction in perceptual principles and rhetorical theory. I then conduct a literature review that explores the ways that aesthetics has been addressed in pedagogical scholarship focusing on visual rhetoric in service courses in TPC as well as in several commonly used textbooks for non-majors. While textbook coverage does not necessarily reflect actual instructional practices, their content can nonetheless lend insight into dominant pedagogical patterns and trends in the field.

Drawing from the focus group discussions and an instructional approach that participants identified as *modeling*, I propose that teachers and students in

basic technical communication service courses can use what I characterize as *definitional* and *descriptive* terms to provide summative and evaluative assessments of document design work. I suggest that *definitional* terms are likely already in use because these terms stem directly from the principles of design and rhetorical theory, two commonly used pedagogical approaches in the field. I then propose a framework specifically for generating *descriptive* terms, which focuses on working with color and typography and that students and instructors create together. By using this heuristic to generate *descriptive* terms, I argue that students and instructors can construct a vocabulary for discussing aesthetics that complements the *definitional* terms and that instructors and students can use as a collection of *visual topoi* for guiding discussions about visual analysis and production of technical communication artifacts in the basic service course.

Focus Groups

Overview and Description

Focus group participants were recruited through a survey about teaching visual communication (results not reported here) distributed to the Association of Teachers of Technical Writing (ATTW) and the Council for Programs in Technical and Scientific Communication (CPTSC) listservs. The last question on the survey asked respondents to provide contact information if they were interested in participating in a focus group. A total of 36 respondents provided contact information, and 17 technical communication instructors participated in three focus group sessions, which were held at the national conferences for CPTSC (one session) and ATTW (two sessions). Eight participants attended the CPTSC session, and three and six participants attended the ATTW sessions, respectively. Most respondents identified as full-time (tenured and tenure-track) faculty with formal academic training in writing studies. Two participants were graduate students, and one was part-time faculty. Two identified as full-time, non-tenure track. The majority of participants were employed at highest or higher research activity schools with several working at moderate research activity schools. During each session, participants were asked the following open-ended questions:

- How did you learn about visual communication (grad school, on-the-job as a professional communicator, and/or other)?
- How does your academic and professional training influence how you teach visual communication? What are your teaching strengths and limitations?
- Can you describe your general pedagogical strategy in terms of visual communication? (i.e., do you tend to teach many textual dominant forms like reports and proposals; do you teach more visual dominant forms like posters,

brochures, web pages; do you balance instruction?) What seems to be effective about what you do, and what is not?
- The survey asked about challenges instructors may face. The three most common answers were the following: (a) teaching students everything they need to know, (b) covering instruction in both visual and verbal modes, and (c) students make decisions based on personal preference rather than rhetorical principles. Were these the challenges you named? Can you explain more about the challenges that you may face in your classroom? Are there other challenges?

I asked participants the questions listed in the first three bullet points to understand their professional and academic backgrounds as well as their classroom practices related to teaching visual communication in their basic technical communication service courses. Brumberger and Northcut (2013) observe that most technical communication instructors have been trained primarily in alphabetic literacies. Thus, I also sought to learn if this observation reflected focus group participants' backgrounds—that is, if an instructor's approach was grounded primarily in a TPC or writing studies approach or if another theoretical framework (art or graphic design, for instance) influenced his or her practice and beliefs about teaching visual rhetoric. The discussion then led into a conversation about instructional challenges. All participants signed a consent form before participating in a focus group. All data collection tools and participant recruitment materials related to this project were approved by the University of Delaware Institutional Review Board.

Discussion

Respondents' responses varied in terms of where and how they learned about visual communication, with several participants reporting that they learned exclusively in graduate school and others learning on-the-job as professional communicators as well as in graduate school. However, not all participants' academic or job-related experiences had been in TPC. For instance, one participant had a background in graphic design, while another had worked in journalism. These divergent experiences allowed these participants to bring a different perspective to the session they joined, particularly during the portion devoted to discussing challenges related to teaching visual rhetoric.

During the focus group sessions, the conversation focused on two areas: (a) participants' pedagogical strategies and the visual literacy skills and proficiencies they want students to learn, and (b) the challenges that participants face. Participants responses for the first category emphasized rhetorical decision-making, often within the context of instruction in the principles of design. Respondents also reported their ongoing efforts to assign work that required students to simultaneously write and design—as one respondent put it "to

heighten, complicate, and integrate the relationships among the writer, the reader, and the text." Several participants also discussed "modeling" effective and ineffective design—that is, showing examples of "good" and "bad" design work to their students, as they put it, as well as asking students to bring in their own examples to critique.

As I shifted the conversation toward discussing possible instructional challenges (by asking the questions described in the last bullet point), many participants referred back to their teaching strategies to elaborate, which led to a rich discussion in two of the groups about the limitations of two of the theoretical frameworks that we often use in TPC to teach visual literacies: principles of design and rhetorical theory. In one of the sessions, this conversation was prompted to a large extent by one of the participants without a background in writing studies who pointed out the shortcomings of rhetorical theory in ways that many of the other participants (myself included) were both less aware of as well as unlikely to acknowledge (probably because many of us tend to privilege rhetoric as the master theoretical framework under which all other composing decisions can ultimately be explained).

One particularly significant insight that emerged during this session was the notion that teaching effective design cannot be accomplished solely through the instructional frameworks that we commonly rely on such as principles of design and rhetorical theory. For instance, a document (or website or other TPC artifact) might effectively execute the principles of document design, but it might not actually "look good" and vice versa. Further, strong document design and rhetorical effectiveness are not necessarily related. In other words, a document might effectively use design principles and may even "look good," but it may be rhetorically ineffective. Further, as one participant pointed out, design decisions might not always be driven by an audience that can be clearly defined as is the case when content is single-sourced across divergent digital platforms. This is one of the areas, as the participant put it, "where rhetoric fails."

The notion that rhetoric might "fail" is probably problematic to those of us who have been trained primarily in writing studies-related fields. Indeed, some participants appeared to be taken aback by this comment during the session. Yet, this participant's observation also moved the discussion forward toward the idea that no single visual rhetoric theory can explain all of the ways that visuals persuade. Indeed, while rhetorical theory can explain why particular writing or design choices might be effective within a certain context, neither rhetoric nor the principles of document design can fully explain why some design choices just look better than others. There was a strong level of consensus among participants in two of the sessions that we need a better "balance [of instruction] between these rules [referring to the principles of design] and rhetoric," as one participant put it, as well as options for talking about the effectiveness (or ineffectiveness) of design choices with students in ways that cannot always be explained through the two pedagogical frameworks that tend to dominate the

way we teach visual rhetoric in our technical communication service courses. For instance, one participant referred to the "emotional" effect or tone that design work invokes, while another stated that there are clearly underlying "cultural aesthetics" at work in design practice (another participant used the term "creative aspects") that participants agreed have not necessarily been well-articulated in our instructional materials.

Limitations and Strengths

Recruiting participants via the ATTW and CPTSC listservs offered the potential to reach TPC instructors at the college level. At the same time, the exact demographics of subscribers are unknown. The majority of participants who responded to a 2003 survey of ATTW members reported a 56% participation rate, with most respondents identifying as full-time faculty with doctorates (Dayton & Bernhardt, 2004), suggesting that today's subscribers might fall primarily into this category. Further, the last focus group question was developed from a survey question that asked about teaching challenges. This question in the survey gave participants the option to select "none", while the focus group question built off the most common responses from survey participants—time constraints in terms of teaching students everything they need to know and covering instruction in both visual and verbal modes as well as students making decisions based on personal preference rather than rhetorical principles. Thus, the framing of this last question may have discouraged focus group respondents from voicing that they experienced no challenges. At the same time, ultimately, this question served as a springboard for an in-depth inquiry into the limitations that instructors had experienced when teaching commonly used theoretical frameworks like perceptual principles and rhetorical theory and not their own perceived individual instructional shortcomings. The focus group discussions highlighted the importance of responding to the aesthetics of design work, while also revealing that many of the participants perceived that they lack concrete strategies for doing so.

Literature Review: Addressing Aesthetics in TPC

Aesthetics has long been an important consideration in the creation of "functional texts" (Kostelnick, 1994, p. 101). In TPC today, we tend to use the term in two ways: (a) to describe the extent to which a creator's specific design choices—layout, color and typography, image selection—are perceived as visually pleasing (*visual appeal*), and/or (b) to describe the particular design style or visual effect that the creator of a technical document or artifact constructs by making specific visual choices (*design style*). These two categories align with Dake's (2005) characterization of aesthetics as "the quality [of an object or visual representation] itself and the response to it" (p. 4). While these aspects

are not separate—we frequently assess and react to design work simultaneously—this division provides an organizational framework for discussing the ways that aesthetics has commonly been addressed in TPC. In this section, I use these categories, *visual appeal* and *design style*, to review the pedagogical literature on visual rhetoric and visual rhetoric coverage in four select technical communication textbooks that are commonly used in the basic technical communication service course.

Aesthetics: *Visual Appeal*

Several references that use aesthetics through the *visual appeal* perspective described earlier can be found in the pedagogical scholarship. For instance, Amare and Manning (2007) use the word *aesthetic* when discussing layout considerations in their "visual rhetoric tutorial," specifically using "decorative aesthetic" twice (pp. 57, 64). *Aesthetic* also characterizes the "tone" of two student posters (p. 205) and is included in a list of suggestions for classroom practice (p. 207) in Lauer and Sanchez's (2011) article on facilitating visuospatial thinking. Their evaluation criteria in the appendix also differentiate between color and type "contrast" and color and type aesthetic (p. 213) as well as "aesthetic dynamism/creativity" (p. 214). Lauer (2013b) includes a similar evaluation criterion, "aesthetic interest/creativity," in her work on the role of critical reflection in student design work, while Toth (2013) uses the phrase "aesthetically pleasing" (p. 451) to caution against the design of infographics that do not also reflect strong rhetorical decision-making.

As these examples illustrate, *aesthetics* is often used as a synonym in visual rhetoric pedagogical scholarship to describe an overall sense of appeal or attractiveness of visual representations. Indeed, this trend can also be seen in several commonly used technical communication textbooks targeted to non-majors: Gerson and Gerson (2017), Johnson-Sheehan (2015), Lannon and Gurak (2014), and Markel (2015). While only Lannon and Gurak (2014) specifically use the word *aesthetic* to convey the idea of visual appeal,[1] indirect references to visual appeal and attractiveness are pervasive in many of the chapters that cover visual communication (page layout and document design, and creating graphics). For instance, Markel (2015) advises students to "Create different grids until the design is attractive . . . " (p. 263) and describes a three-column layout as "creative" because it allows "the designer to fill the page with content while keeping it visually interesting" (p. 278). Johnson-Sheehan (2015) explains that: "Today, readers expect paper-based documents to be attractive and easy to read, and to include images and color" (p. 447). In their chapter on graphics, Gerson and Gerson (2017) advocate using " . . . shading [to] provide[s] the right touch of artistry to enhance the information communicated" (p. 162). Color is also described as facilitating visual interest (Lannon & Gurak, 2014, p. 279; Markel, 2015, p. 303).

Clearly *visual appeal* is important in design work. Yet, the exact design strategies that creators might use to construct this particular visual effect are not well articulated. Northcut (2013) specifically addresses the difficultly of responding to aesthetic, considerations in students' design work. She notes that such judgments are often perceived as "whatever I like," (p. 189) but also that TPC instructors do not necessarily use a consistent vocabulary for discussing visual rhetoric, generally speaking. At the same time, the lack of a direct explanation in the pedagogical scholarship and textbook coverage of the strategies and conventions that lead to strong visual appeal does not indicate that this visual effect is achieved solely through intuition or that these strategies and conventions are unknown. Rather, the visual features and conventions that we often characterize as "good design" can be explained by addressing *aesthetics* through the second perspective that I identified—that is, as referring to a particular *design style* or effect created by making specific visual choices.

Aesthetics: *Design Style*

As previously discussed, aesthetics in TPC conceived through the first perspective I identify, the overall sense of visual attractiveness of a particular document or technical communication artifact, specifically refers to what Dake (2005) describes as our "response" when we assess "the quality [of an object or visual representation]" (p. 4). The visual "qualities" then (or what I am referring to as *design style*) that invoke the perceived sense of visual appeal (or response) that often tend to characterize effective document design today can be explained to a large extent through what Kostelnick has referred to in much of his work as a "modernist design aesthetic."

Characterized by "functional simplicity," and a "clean, minimalist" appearance (Kostelnick, 1998, p. 476), this design style emerged in the early 20th century with the advent of modernism and became closely linked to Gestalt theory. As Kostelnick (1990) explains, "Many modernist principles of design are founded on innate perception," which designers could then invoke through Gestalt perceptual principles (p. 22). Gestalt cognitive psychology proposed that humans organize and perceive visual information in universal ways that impose a sense of order. For instance, figure/ground contrast explains why we interpret visual information on a page or screen as either *figure* (the primary visual content) or *ground* (the background for the figure) and why we see visual information that is grouped together as related. Poorly executed perceptual principles then are directly related to reader comprehension and meaning-making because readers can quickly become intellectually taxed if they cannot easily understand how information is visually organized. At the same time, poorly executed perceptual principles are also an aesthetic issue because readers interpret documents that are difficult to understand as "bad design." "Good" or "bad" design then is simultaneously both a pragmatic and an aesthetic judgment.

Indeed, Kostelnick (2007) argues in his theoretical work on data visualizations that perceptual principles and aesthetics are closely linked. "Clean" design "looks good" because readers can more easily cognitively process the information therein and because such design schemes follow established visual conventions that reflect this cultural value. Data visualizations in particular achieve this "clarity," he explains, through "minimalist, high-contrast displays guided by perceptual principles" that we often interpret as "objective, universal, and culturally neutral" (p. 283; see also Kinross, 1985). While the rise of postmodernism has pushed back against many of these positivist values (see Kostelnick, 1994, 1995, 2007), modern design aesthetics can still be found in the 21st century in "the rational page design of computer manuals, the geometry of online icons, and even the sans serif text of a . . . graphical interface" (Kostelnick & Hassert, 2003, p. 93).

In contemporary instructional materials in TPC, there is no shortage of language that prompts students to create design work that aligns with the conventions of modernist design. For instance, in her well-known handbook on principles for "non-designers," Williams' (2014) explains that a good alignment strategy "creates a clean and sophisticated look," while proximity "reduces clutter, and gives the reader a clear structure" (p. 13). In a redesign quiz, she prompts readers to rework the visual elements to create a "more professional, clean, and direct advertisement" (p. 91), and repetition promotes "clarity of the information" (p. 68). In Williams discussion, the connection between effectively applying the principles she outlines and creating "good design" is clear. Good design is streamlined and uncluttered. Good design is "clean."

These same themes can also be found in the technical communication textbooks I discussed earlier, which frequently link modernist design values like clarity and simplicity with the strong execution of the principles of design, which facilitates comprehension and readability. For instance, Markel (2015) describes a layout that uses multiple columns as "neat and professional" (p. 276). He advises " . . . when you design a page, you want to make the text inviting and easy to read" (p. 277) and "to pay more attention to designing your [online] information so that it is clear and attractive" (p. 281). Gerson and Gerson (2017) state that "Graphics will help you achieve conciseness, clarity, and cosmetic appeal" (p. 160); these visuals should also be "simple and uncluttered" (Markel, 2015, p. 297), and the design should be "clean and easy to read" (Lannon & Gurak, 2014, p. 251). Gerson and Gerson (2017) caution against using "Too many highlighting techniques [because they] are distractions and clutter the document design" (p. 146) and, Johnson-Sheehan (2015) advises following the principle of "consistency" can help "limit[ing] the amount of clutter" (p. 461).

While the above discussion tends to align with aesthetics as referring to a particular *design style* (modernist), there is overlap with aesthetics as *visual*

appeal (as discussed earlier). For instance, Gerson and Gerson (2017) condemn using "Ugly blocks of unappealing text [that] negatively impact readability" (p. 137), while Johnson-Sheehan (2015) observes: "Unbalanced pages add tension to the reading process" (p. 470). In the scholarly literature, Allen (1996) includes a checklist at the end of her article on ethics and creating graphics that includes a category for aesthetics that links these two perspectives. More specifically, she prompts creators of technical communication to consider: "Is the visual design attractive? Do the enhancements contribute to meaning or add clutter? Are any dimensions important for interpreting meaning blocked from view?" (p. 102). The reference to "attractive" here refers to the document's overall *visual appeal*, while the notion that "enhancements" should not "add clutter" points toward attending to the document's *design style*—more specifically, a modernist design aesthetic.

As the discussion in this section seeks to demonstrate, aesthetics tends to refer (often simultaneously) to both *visual appeal* and *design style* in the pedagogical scholarship on visual rhetoric and in textbook coverage in the field. These two concepts are deeply connected, but the relationship between making specific visual choices, like applying Gestalt principles, and the value judgments that we then assign to these choices—clean, simple, neutral, high readability—are not well-articulated. Indeed, the "clean" aesthetic that characterizes a modernist design style describes more than just the successful application of design principles; clean, simple, and uncluttered are the values that we attribute to executing these principles in particular ways.

Most technical communication instructors are probably far more comfortable invoking rhetorical theory and perceptual principles to discuss student design work than aesthetics for several reasons. We can often easily point to rhetorical theory to explain when design choices do or do not meet the informational needs of the intended audience. We can advise students when they are appropriately adhering to genre conventions or breaking them in ways that might be confusing for readers. And we can point to perceptual principles to explain how arranging information in particular ways is more (or less) visually effective. However, discussing the aesthetic aspects of design choices can be problematic because this aspect is often seen as driven by intuition, creativity, or an innate understanding of what "looks good." But the visual conventions that characterize "good design" can be explained by particular "conventional codes," as Kostelnick (2004) puts it, that "embody cultural values and norms" (p. 215). Further, these conventions often "seem[s] transparent [only] because we know the [semiotic] code already" (Kress & van Leeuwen, 1996, p. 32). In the next section of this article, I propose a strategy for identifying and working with some of these codes by focusing on color and typography that technical communication instructors can use in their basic technical communication service course.

Toward a Topos of the Visual: Teaching Aesthetics in the Technical Communication Service Course Through Color and Typography

One strategy for concretely tying aesthetic considerations to document design work through the two perspectives—*visual appeal* and *design style*—that I discuss in the previous section lies in the *modeling* approach that several focus group participants reported using. That is, one of the key instructional strategies for calling attention to the conventions of "good" as well as "bad" design that many participants discussed was critiquing examples of effective and ineffective design with their classes. Generally speaking, instructors reported often using modeling as an analytical tool for evaluating design work. This strategy allows them to focus on micro-level or macro-level concerns or both, demonstrating that design work draws simultaneously on multiple theoretical frameworks—principles of design, color theory, typography, and rhetorical considerations. An instructor teaching scientific posters, for example, might show several "good" and "bad" examples to illustrate genre conventions, point out the ways that the writer or designer used the principles of design, and highlight color, typography, and graphics choices while connecting these decisions to a specific rhetorical situation—a professional conference presentation, for example.

During these *modeling* sessions, I propose that instructors and students discuss these choices using what I characterize as *definitional* and *descriptive* terms. Definitional terms are those that are already well-established in visual rhetoric instruction, such as Williams' (2014) principles of design, white space, characterizations of different color schemes (e.g., complementary, analogous, triadic), and categories of typeface (e.g., serif, sans serif). I categorize these concepts as *definitional* terms because they are frequently used to *define* particular kinds of relationships between visual elements and the specific visual effects that such relationships achieve. For instance, contrast defines the relationship that is created between two visual elements that are very different, such as size and weight in typography, which work together to create a visual hierarchy in textual information. The design principle proximity defines the visual effect that is created when two design elements appear either close together or further away from each other, enabling readers to visually understand information as related or not related.

Descriptive terms, on the other hand, are adjectives like formal, professional, friendly, or playful that describe the ways that viewers might perceive the effects of a particular design choice—that is, the aesthetic value that they might assign through the *tone* or *feeling* or *style* that the choice invokes. Certainly, viewers also place aesthetic value on *definitional* terms, as demonstrated by the adjectives commonly used to describe visual choices

that align with modernist design aesthetics as previously discussed. However, I am drawing a distinction between terms that we tend to use to *define* design effects and terms that we tend to use to *describe* design effects in order to propose strategies for addressing the aesthetic spaces of design work that often seem more subjective and thus less concrete and well-defined.

At the same time, some aesthetic considerations are less ambiguous than others. For instance, research on intercultural communication demonstrates that warm and cool colors are often interpreted similarly across cultures (e.g., Madden, Hewett, & Roth, 2000). Amare and Manning (2013) suggest that color can be understood primarily through emotional associations, and Kress and van Leeuwen (2002) argue that certain aspects of color, such as saturation and modality (realism), often hold consistent meanings. Bright, saturated, warm colors often metaphorically signify vibrancy and excitement, for example, while Brumberger's (2003a, 2003b) work on typography proposes that some typefaces have "personas" (see also Mackiewicz & Moller, 2004). Script typefaces usually convey elegance, for instance, while a sans serif typeface like Helvetica conveys the clean, streamlined aesthetic of modernism. These metaphoric associations of color and typography and the *feeling* or *tone* or *style* that they convey are constructed through cultural conventions that invoke particular values. In other words, there is nothing inherently vibrant about a bright color or elegant about a script typeface or neutral about Helvetica. Rather these visual elements—typography and color—invoke abstract ideas that are connected to when and how such elements have been previously used [see also van Leeuwen's, (2006) discussion about "connotation" and "experiential metaphor" in typography, informed in part by Lakoff & Johnson, (1980)]. For instance, a contemporary script typeface invokes the nostalgia of the handwritten letters that were common before the invention of digital composing technologies, while Helvetica invokes the sentiments associated with modernism.

Because color and typeface are interpreted through metaphoric associations that are often interpreted in consistent ways (like the examples discussed earlier), I suggest that incorporating descriptive terminology (in addition to *definitional* terms) can provide a strong framework for discussing these aesthetic choices with students. More specifically, I propose that students and instructors can generate their own descriptive adjectives for these two design features (color and typography) through two brainstorming exercises that draw from shared cultural knowledge, which I describe in more detail in the next section. Through these exercises, students and teachers can then develop a collection of visual commonplaces or *visual topoi* that can inform class discussions of aesthetic considerations (along with *definitional* terms) during visual analysis, and that students can then also draw from as a tool of invention when creating their own design work.

Visual Topoi: A Heuristic-Based Approach for Visual Analysis and Production

Visual topoi are grounded in the notion of the topics in invention in classical rhetorical theory, which have been described as "strategies of argument useful in dealing with any subject" (Aristotle, 2007, p. 21). Aristotle (2007) is often credited with theorizing the scope of the *topoi* in outlining the canons of rhetoric, differentiating between common and special topics. Common topics, he explains, are applicable to any argument and include loose organizational structures such as past or future fact, greater or less, and possible or impossible, whereas special topics are grounded in specific subject matters. Common topics are "artistic" because arguers create or invent these and apply them to any speaking situation. Conversely, special topics are nonartistic because arguers need only use them.

In ancient Greek thought, however, *topoi* and commonplaces were fairly synonymous, referring to the "'places' the rhetor turns to," as Jost (1991) puts it, "...to discover what to say on a given matter" (p. 3). Crowley (1998) further explains: "Ancient invention also drew on communal epistemologies that privilege the commonplace; that is, they began with tradition, precept, generally accepted wisdom, what everybody knew." (p. 209).

Today, metaphoric associations invoke this sense of common cultural knowledge because in order to understand a metaphor, the audience must *already know* the essential comparison between the two things or concepts being compared. Furthermore, we interpret color and typography primarily through metaphoric associations. In the technical communication classroom, instructors and students can draw from this shared cultural knowledge to construct visual commonplaces for these two design elements by first exploring the meanings of colors that tend to have strong cultural associations in Western cultures: red, yellow, green, and blue. Instructors might begin by introducing the idea that colors have different meanings by listing these colors on the board and asking students to provide a few adjectives for each. For example, red can convey anger or passion or love, while blue can be peaceful or sad or calming.

After establishing this idea, the instructor might then explain that context also influences meaning. For instance, a red heart in a Valentine's Day card conveys something quite different than the red heart used in a defibrillator sign, although both images might use a similar red hue. The instructor then might show different logos (which rely on color, shape, and context to convey meanings) and ask the class to "read" the color choices. The logos of fast food chains work well for this discussion because they tend to use warm, bright colors, whereas the logos of grocery stores frequently use cool shades of green. Instructors can point out these visual choices when asking students consider why the designer of the logo used a particular color scheme. In

other words, the instructor might ask: What tone or feeling or style was the creator of the logo trying to invoke and why? This discussion can also be linked to other instructional activities related to color theory such as the rhetorical effect of a triadic color scheme (red, yellow, and blue), which is often used by toy companies, for instance.

Through these exercises, students often quickly grasp the idea that color choices create particular rhetorical effects. However, perhaps because we generally tend to be less critical viewers of typography, students often need more guidance when considering the ways that typography conveys meaning metaphorically. Thus, instructors might teach students about color associations first and then use a similar approach to teach students about typography. More specifically, instructors might begin by showing students several typefaces that have strong cultural associations (script and Comic Sans, for instance) followed by typefaces that tend to be more flexible in how they are interpreted and more commonly used like serif (Times New Roman) and sans serif (Arial) options. Instructors might also differentiate between what Mackiewicz and Moeller (2004) have described as *text typefaces* and *display typefaces*—that is, typefaces used for body copy and those used for headers, respectively—and discuss how the design style of the typeface (e.g., rounded or narrow letters, and serif vs. sans serif) may be interpreted metaphorically.

Instructors might then prompt a class discussion about typeface associations that is structured similarly to the discussion about color by providing a short list of sample adjectives: formal or informal, professional, playful, friendly, heavy or soft, sophisticated. Students can then use these descriptive terms to discuss the typefaces shown as well as propose other terms at the prompting of the instructor. After this second brainstorming session, instructors might return to the logos that were previously shown and ask students to simultaneously consider how color and typeface construct meaning in each as well as refer back to the previous class discussion about color to reinforce students' previous observations.

The goal of these activities is not to develop a prescriptive list of associations for every color and typeface. Rather, students learn that these visual elements often have a range of meanings, some of which are more fixed than others, and which are contextually and culturally situated. Indeed, the notion of *visual topoi* draws on shared cultural knowledge about color and typeface meanings, which can be constructed by students and instructors through these brainstorming activities and then used as a complement to the established *definitional* terms previously discussed, which many instructors may already be using. Using *visual topoi* as a tool to facilitate invention in terms of color and typography choices also reinforces that such choices are grounded not in subjective personal preferences but in cultural knowledge. In other words, if color and typography invoke particular kinds of associations, which are culturally dependent, then viewers are likely to interpret many of these choices in ways that align with

particular cultural norms. The exercises that I propose provide a framework for students and instructors to overtly identify these norms as *visual topoi* or commonplaces and then use them to make strategic design choices. For example, if students decide that red invokes several potential associations that vary depending upon the particular communicative context, then when they use this color, they do so in order to create a specific rhetorical effect. Instructors might also use the concept of *visual topoi* to prompt invention in the early stages of an assignment, for instance, by asking students to brainstorm the *style*, *tone*, or *feel* they want their document to convey to their audience and then speculate about how they might achieve this effect through color and typography choices. This inventional activity allows students to explore ideas for their work, which instructors might open up for class discussion as well. As a final step and after the completion of an assignment, instructors might also require students to then articulate their design choices through critical reflection (see Lauer, 2013b). Asking students to explain their design choices can firmly link their decision-making process to rhetorical considerations, while also emphasizing that design work involves a balance between following the rules (adhering to Gestalt principles, for instance) and purposeful, rhetorically informed decision-making.

Conclusion

Over 25 years ago, Kostelnick (1990) described the emergent role of the technical communicator as encompassing "typographer, graphic designer, and aesthetician" (p. 6). Indeed, as design software has become increasingly sophisticated, professional communicators now routinely engage in these tasks. At the same time, the expectations for professionals who produce technical communication have also grown to include proficiency in both language-based and visual modes. If the goal of the technical communication service course is, as Matveeva (2008) suggests, to "prepare [students] for workplace communication" (p. 388), and if such "communication skills are no longer limited to linguistic texts," as Northcut (2013, p. 191) observes, then as technical communication instructors we need strategies for teaching non-majors in our basic service courses about constructing visual information in ways that more fully account for the complex and multifaceted ways that visuals persuade and construct meaning.

In this article, I have argued that responding to aesthetic considerations is a fundamental component of document design instruction. Indeed, Northcut (2013) postulates, "aesthetic values may actually be the most important factor in the viewer's interpretation of a visual text" (p. 189). Yet, as I have also endeavored to argue, this aspect has not been addressed in ways that are always practically useful for instructors. For instance, textbooks often prompt students to create design schemes that reflect the values of modernist design aesthetics (e.g., clarity, simplicity, functionality) but with limited attention

toward explaining the ways that applying perceptual principles achieves this particular effect as well as how this effect might be achieved through other design choices like color and typography. On the other hand, some pedagogical scholarship references aesthetics directly, but much like the textbooks, such discussions do not elaborate on the visual conventions that characterize particular kinds of aesthetic effects.

The heuristic I propose for generating a collection of *visual topoi* specific to color and typography choices endeavors to address these limitations by serving as a complement to the *definitional* terms instructors may already be using to teach their students about design work. The framework for generating *visual topoi* also seeks to go beyond vague, holistic value judgments of "good" or "bad" in characterizing students' design work by giving teachers and students strategies for pointing to specific aesthetic values like formal or friendly or professional. Certainly as instructors of technical communication we can (and should) tell our students when they create a design scheme that "looks good" (and find appropriate ways to also communicate to our students that their design needs more work when this is the case). But we also need strategies for explaining the aesthetic effects of our students' design choices in ways that go beyond just effective execution of the principles of design or adhering to genre conventions, particularly when these frameworks do not fully explain why a student's work may be visually effective or ineffective. In this way, the *visual topoi* also seek to strike a balance between following the "rules" that often guide teaching students about visual rhetoric, like applying perceptual principles or adhering to genre conventions and making rhetorically grounded choices that also respond to aesthetic considerations. The framework I propose for generating *visual topoi* offers instructors strategies for responding to design work in this fashion as well as accounting for the multiple ways that the visual elements of a particular design persuade.

Acknowledgments

The author would like to thank the focus group participants for contributing their time and valuable insight. The author would also like to thank Erin Huston for her editorial assistance.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by the University of Delaware General University Research Fund, grant #ENGL175961.

Note

1. At the beginning of their chapter on page design, the authors state: "An audience's first impression tends to involve a purely visual, aesthetic judgment: 'Does this look like something I want to read, or like too much work?'" (p. 294). A few pages later, they also note that students should consider the "intended aesthetic effect" (p. 298) when choosing paper for documents they create that will be printed.

References

Allen, N. (1996). Ethics and visual rhetorics: Seeing's not believing anymore. *Technical Communication Quarterly*, *5*(1), 87–105. doi:10.1207/s15427625tcq0501_6

Alred, G. J., Brusaw, C. T., & Oliu, W. E. (2015). *The handbook of technical writing* (11th ed.). New York, NY: St. Martin's Press.

Amare, N., & Manning, A. (2007). The language of visuals: Text + graphics=visual rhetoric tutorial. *IEEE Transactions on Professional Communication*, *50*, 57–70. doi:10.1109/TPC.2006.890851

Amare, N., & Manning, A. (2013). Teaching form and color as emotion triggers. In E. R. Brumberger & K. M. Northcut (Eds.), *Designing texts: Teaching visual communication* (pp. 71–95). Amityville, NY: Baywood Publishing, Inc.

Aristotle (2007). *On rhetoric: A theory of civil discourse*. (G. A. Kennedy, Trans.). New York, NY: Oxford University Press.

Brumberger, E. R. (2003a). The rhetoric of typography: The awareness and impact of typeface appropriateness. *Technical Communication*, *50*(2), 224–231. Retrieved from http://www.jstor.org/stable/43089123

Brumberger, E. R. (2003b). The rhetoric of typography: The persona of typeface and text. *Technical Communication*, *50*(2), 206–223. Retrieved from http://www.jstor.org/stable/43089122

Brumberger, E. R., & Northcut, K. M. (2013). *Designing texts: Teaching visual communication*. Amityville, NY: Baywood Publishing Company, Inc.

Crowley, S. (1998). *Composition in the university: Historical and polemical essays*. Pittsburg, PA: University of Pittsburg Press.

Dake, D. (2005). Aesthetics theory. In K. Smith, S. Moriarty, G. Barbatsis & K. Kenney (Eds.), *Handbook of visual communication: Theory, methods, and media* (pp. 3–22). New York, NY: Routledge.

Dayton, D., & Bernhardt, S. A. (2004). Results of a survey of ATTW members, 2003. *Technical Communication Quarterly*, *13*(1), 13–43. doi:10.1207/S15427625TCQ1301_5

Gerson, S. J., & Gerson, S. M. (2017). *Technical communication: Process and product* (9th ed.). New York, NY: Pearson Education, Inc.

Johnson-Sheehan, R. (2015). *Technical communication today* (5th ed.). New York, NY: Pearson Education, Inc.

Jost, W. (1991). Teaching the topics: Character, rhetoric, and liberal education. *Rhetoric Society Quarterly*, *21*(1), 1–16. doi:10.1080/02773949109390904

Kinross, R. (1985). The rhetoric of neutrality. *Design Issues*, *2*(2), 18–30. Retrieved from http://www.jstor.org/stable/1511415

Kostelnick, C. (1990). Typographical design, modernist design aesthetics, and professional communication. *Journal of Business and Technical Communication*, *4*(1), 5–24. doi:10.1177/105065199000400101

Kostelnick, C. (1994). From pen to print: The new visual landscape of professional communication. *Journal of Business and Technical Communication*, *8*(1), 91–117. doi:10.1177/1050651994008001004

Kostelnick, C. (1995). Cultural adaptation and information design: Two contrasting views. *IEEE Transactions on Professional Communication*, *38*(4), 182–196. doi:10.1109/47.475590

Kostelnick, C. (1998). Conflicting standards for designing data displays: Following, flouting, and reconciling them. *Technical communication*, *45*(4), 473–482. Retrieved from http://www.jstor.org/stable/43088562

Kostelnick, C. (2004). Melting-pot ideology, modernist aesthetics, and the emergence of graphical conventions: The statistical atlases of the United States, 1874–1925. In C. Hill & M. Helmers (Eds.), *Defining visual rhetorics* (pp. 215–242). Mahwah, NJ: Lawrence Erlbaum Associates.

Kostelnick, C. (2007). The visual rhetoric of data displays: The conundrum of clarity. *IEEE Transactions on Professional Communication*, *50*(4), 280–294. doi:10.1109/TPC.2007.908725

Kostelnick, C., & Hassert, M. (2003). *Shaping information: The rhetoric of visual conventions*. Carbondale, IL: Southern Illinois University Press.

Kress, G., & van Leeuwen, T. (1996). *Reading images: The grammar of visual design* (2nd ed.). New York, NY: Routledge.

Kress, G., & van Leeuwen, T. (2002). Colour as a semiotic mode: Notes for a grammar of colour. *Visual communication*, *1*(3), 343–368. doi:10.1177/147035720200100306

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago, IL: The University of Chicago Press.

Lannon, J. M., & Gurak, L. J. (2014). *Technical communication* (13th ed.). New York, NY: Pearson Education, Inc.

Lauer, C. (2013a). Teaching visual communication online: Methods for a changing classroom. In E. R. Brumberger & K. M. Northcut (Eds.), *Designing texts: Teaching visual communication* (pp. 117–141). Amityville, NY: Baywood Publishing, Inc.

Lauer, C. (2013b). Examining the effect of reflective assessment on the quality of visual design assignments in the technical writing classroom. *Technical Communication Quarterly*, *22*(2), 172–190. doi:10.1080/10572252.2013.757156

Lauer, C., & Sanchez, C. A. (2011). visuospatial thinking in the professional writing classroom. *Journal of Business and Technical Communication*, *25*, 184–218. doi:10.1177/1050651910389149

Mackiewicz, J., & Moeller, R. (2004, September). Why people perceive typefaces to have different personalities. *In Professional Communication Conference, 2004. IPCC 2004. Proceedings. International* (pp. 304–313). IEEE. doi:10.1109/IPCC.2004.1375315

Madden, T. J., Hewett, K., & Roth, M. S. (2000). Managing images in different cultures: A cross-national study of color meanings and preferences. *Journal of International Marketing*, *8*(4), 90–107. doi:10.1509/jimk.8.4.90.19795

Markel, M. (2015). *Technical communication* (11th ed.). New York, NY: Bedford/St. Martin's.

Matveeva, N. (2008). Teaching intercultural communication in a basic technical writing course: A survey of our current practices and methods. *Journal of Technical Writing and Communication*, *38*(4), 387–410. doi:10.2190/TW.38.4.e

Northcut, K. M. (2013). Evaluating visual communication. In E. R. Brumberger & K. M. Northcut (Eds.), *Designing texts: Teaching visual communication* (pp. 181–195). Amityville, NY: Baywood Publishing, Inc.

Schriver, K. A. (1997). *Dynamics in document design*. New York, NY: John Wiley & Sons, Inc.

Toth, C. (2013). Revisiting a genre: Teaching infographics in business and professional communication courses. *Business and Professional Communication Quarterly*, *76*(4), 446–457. doi:10.1177/1080569913506253

Williams, R. (2014). *The non-designer's design book* (4th ed.). Berkeley, CA: Peachpit Press.

van Leeuwen, T. (2006). Towards a semiotics of typography. *Information Design Journal*, *14*(2), 139–155. doi:dx.doi.org/10.1075/idj.14.2.06lee.

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