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INTRODUCTION
Design Theory and Multimodal Consulting

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As Brian and I sat down to discuss this book, we explored the different theoretical underpinnings that inform our concepts about multiliteracies, multimodality, and digital composing. We recognized that writing centers are increasingly becoming sites for feedback on multimodal projects, especially as educators are expanding their concepts of literacy to encompass "the burgeoning variety of text forms associated with information and multimedia technologies" (Cazden et al. 1996, 61). More specifically, instructors are including assignments that ask students to negotiate multiple modes (words, images, colors, gestures, movement) in order to communicate effectively to their audiences. An interdisciplinary group of scholars called the New London Group encourages more comprehensive understandings of literacy, especially in light of all the means of communication available to us in today's culturally and linguistically diverse world. Simply put, they explain that "new communication media are reshaping the way we use language" (64). Given that consultants are in the writing business, as Jackie Grutsch McKinney (2014) reminds us, and that the business of writing is evolving, we must prepare to work with students being asked to explore new ways of communicating and thinking about language use. Moreover, we believe multimodal composing provides consultants with an opportunity to expand the ways writers think about language and connecting to audiences. The multiliteracy center John Trimbur (2000) imagined as a place where consultants will begin seeing assignments that move beyond the printed text is upon us. This collection is designed to prepare consultants to offer feedback on those projects by providing them with an overview of visual and audio design principles, the rhetorical nature of multimodal composing, and a variety of multimodal genres.

Given this starting point, we specifically found ourselves drawn to concepts put forth by the New London Group, Claire Wyatt-Smith and Kay Kimber, the Gestalt principles of design, and Theo van Leeuwen's sound theory. Through this book, we aim to pull from the New London Group's emphasis on six design elements in the meaning-making process: "Linguistic Meaning, Visual Meaning, Audio Meaning, Gestural Meaning, Spatial Meaning, and the Multimodal patterns of meaning that relate the first five modes of meaning to each other" (Cazden et al. 1996, 65). By critically examining these six meaning-making elements, consultants can assist writers as they learn how to effectively compose projects that explore the use of multiple modes:

- *linguistic meaning*—"emphasi[s on] the productive and innovative potential of language as a meaning-making system" (79) that has linguistic features including delivery, vocabulary, positioning, word choice, information structures, and the overall organizational properties of the text
- *visual meaning*—colors, images, font, page layout, perspective, and screen formats
- *audio meaning*—noise, music, and sound effects
- *gestural meaning*—body language, behavior, and sensuality
- *spatial meaning*—the arrangement of elements on a physical plane, environmental spaces and architectural spaces
- *multimodal*—the dynamic relationship among all these modes

Meaning is shaped by the interaction among the different modes (linguistic, visual, audio, gestural, spatial, and multimodal) and how they are combined to create a message. How these modes are used or implemented to shape meaning depends on the modal affordances (Wyatt-Smith and Kimber 2009). These affordances refer to the potentials and limitations for a particular mode. According to Carey Jewitt (2013), affordance "is a complex concept connected to both the material *and* cultural, social and historical use of a mode. Modal affordance is shaped by how a mode has been used, what it has been repeatedly used to mean and do and the social conventions that inform its use in context" (254). Understanding modal affordances provides consultants with opportunities to discuss the social conventions surrounding modes and how the possibilities of the mode impact the ways writers communicate. For example, as Wyatt-Smith and Kimber (2009) explain, "The affordance of still images are governed by the logic of space and simultaneity, while the affordance of speech is governed by temporal logic" (76). It is difficult to avoid the logic of time sequence when dealing with speech because "one sound is uttered after another, one word after

another, one syntactic and textual element after another" (Jewitt 2013, 254). Images, on the other hand, have an impact based on the time, setting, and context in which they are taken and viewed. Images can also be influenced by the material in which they are presented, such as through a screen or on a poster. Therefore, the use of particular modes shapes the meaning of the message in ways other modes might not.

In order to create unity within a text, cohesion must occur. Cohesion "refers to the ways in which the selected visual, verbal and even aural elements are displayed and combined to achieve unity. Headings, sub-headings, lexical choices and cohesive ties directly affect cognitive structuring and meaning-making" (Wyatt-Smith and Kimber 2009, 78). Writers can create greater cohesion by taking into account the individual modal affordances, as well as the meaning created through the combination of those modes. Effective communication involves the meaning-making process that occurs across multiple modes. We use these concepts of multimodality and the meaning-making process from the New London Group and Wyatt-Smith and Kimber to provide consultants an opportunity to reconceptualize how they interact with writers and texts.

As you make your way through this book, looking at specific areas of design, remember the basis of meaning making that occurs through multiple modes. All these areas of design are closely associated with the essential rhetorical choices of design.

RHETORICAL CHOICES AND NARRATIVE

Rhetorical situations are applicable to all projects a student designs. As Pamela Takayoshi and Cynthia Selfe (2007) argue, "Conventional rhetorical principles such as audience awareness, exigence, organization, correctness, arrangement, and rhetorical appeals are necessary considerations for authors of successful audio and visual compositions" (5). The three main rhetorical elements essential to communicating effectively involve taking into consideration the writer's purpose, audience, and context:

- *purpose*—the goal of the writer's communication. Consultants can ask writers what they expect the audience to do with the information they receive. Does the purpose match up with the intended audience? Is the writing aiming to inform or persuade the audience in a certain way? Is there a call to action?
- *audience*—whom the writer is aiming their communication towards. Consultants and writers can discuss the audience's age range,

education, culture, race, class, gender, and familiarity with the topic. Who will be receiving the message? What background knowledge do they have on the topic? What is their previous experience with the type of communication the writer is designing?

- *context*—where the communication is taking place: "the physical and temporal circumstances in which readers will use your communication" (Kostelnick and Roberts 2011, 5). Consultants can inquire about the surrounding setting of where the writer intends to display their communication. Is the writer interacting with the audience, or is the project standing alone? Will the writer see their audience, or is the audience in cyberspace responding remotely? Is the audience expected to glance at or skim the information, or should they be pondering the concepts?

Effective communication requires the writer to determine the various elements associated with the rhetorical situation. First, writers need to understand their purpose for writing; they need to know what story they are trying to tell and to be able to succinctly summarize that story for their audience. Similar to working with writers on text-based papers, consultants help writers effectively articulate their purpose for multimodal projects. Once they know their storyline or purpose, they are able to tailor the story for their particular audience, taking into account language choices, familiarity with subject matter, and comfort level with the mode of communication. In considering new media and rhetorical situations, Andrea Lunsford and Lisa Ede (2014), who are experts in audience and collaboration, note that "as writers and audience merge and shift places in online environments, participating in both brief and extended collaborations, it is more obvious than ever that writers seldom, if ever, write alone" (196). Writing center consultants know this better than most, and they have the unique opportunity to respond as engaged audience members/ collaborators to help writers process these areas. Consultants can "help designers think and learn about rhetorical choices (audience, context, purpose), aesthetic elements and visual design, the designing process, goals and plans for revisions, and design products" (Sabatino 2014, 41). For example, Brian Fallon's chapter in this collection on artist statements calls attention to the ways artists communicate their work to audiences both visually and verbally using these familiar rhetorical principles.

VISUAL DESIGN PRINCIPLES

In order to assist writers in areas of design, consultants need a basic understanding of visual-design principles to provide meaningful feedback on projects—specifically applying the Gestalt principles

of psychology to discuss visual-design basics. *Gestalt* means "form" or "wholeness" (Kostelnick and Roberts 1998, 52), and the principles come from a German movement in psychology that refers to the ways we organize information and perceive objects in relation to the whole visual field. Therefore, the "gestalt principles cover a wide range of perceptual experiences" (Kostelnick and Roberts 2011, 52). Susan Hilligoss and Tharon Howard (2002) state that "in visual communication, the principles of Gestalt psychology are flexible, powerful tools for interpreting many kinds of visual information and for creating successful documents, pages, and screens" (9). For a more detailed compilation of Gestalt principles applied to art design, see Rudolf Arnheim's book *Art and Visual Perception: A Psychology of the Creative Eye* (1960). In other places in this collection, authors draw upon similar practices called the "CRAP" (contrast, repetition, alignment, and proximity) principles presented by Robin Williams (2008)—these principles are outlined in detail in Shawn Apostel's chapter on visual aids for presentations. Similar to the Gestalt principles, the CRAP principles help focus the audience's attention to visual details. While there are many different Gestalt principles, this introduction focuses on three that provide practical guidance when working with multimodal writers: figure-ground, grouping, and color.

Figure-Ground

Figure-ground is the distinction between the figure and ground. Figure-ground contrast is "our ability to separate one image from another, to distinguish what stands in the front and what stands in the back" (Kostelnick and Roberts 2011, 52). As shown in figure 1.1, there is clear figure-ground contrast, as the white triangles (figure) stand out on the dark black circle (the ground).

Whenever we view images, we actively engage in making the figure-ground distinction. The level of distinction might vary depending on the contrast created between the images and the overall purpose of the image. Figure-ground contrast is important when designing because it creates a visual distinction between objects and creates the context for the how the image will be viewed. The level of figure-ground contrast depends on the writer's purpose for the visual and how the writer intends the audience to interact with that visual.

Ambiguous figure-ground contrast occurs when we cannot easily determine what is in the front and what is in the back (Hilligoss and Howard 2002). For example, in figure 1.2, image A has a clearer distinction between the triangles and circle than does image B. Ambiguous
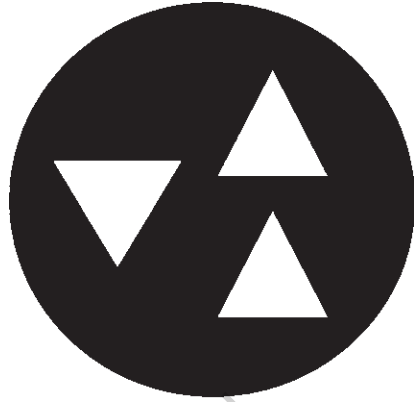
Figure 1.1. Figure-ground
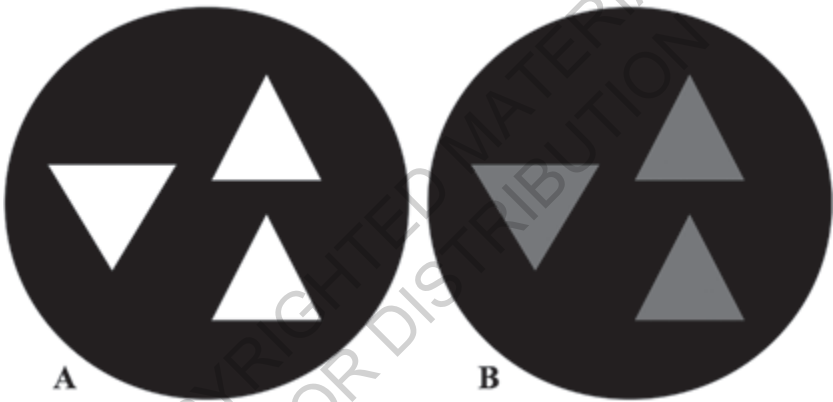
Figure 1.2. Levels of distinction in figure-ground contrast

figure-ground contrast can be effective when designing optical illusions, but if that is not the writer's goal, the lack of distinction between the objects only acts as a hindrance for the audience. With strong figure-ground contrast, the writer is clearly indicating to the audience how to perceive the visual, whereas ambiguous figure-ground contrast puts more responsibility on the audience to determine the elements and goals of the visual. By sharing their perceptions of the writer's figure-ground contrast, consultants can help writers determine their intended meaning.

Grouping

Another important Gestalt principle for consultants to be aware of involves the ways our eyes organize information and group them

together. This visual arrangement is the act of our minds grouping information and determining how objects differ from one another. As explained by Kostelnick and Roberts (2011), "Visual arrangement also involves spatial orientation within a field, as in left and right, up and down" (15). In this process, we create a hierarchy, or queuing, of information. We prioritize objects based on how we group them, as well as how they look in relation to one another.

Visual grouping involves sorting through parts and differentiating the objects the eyes are seeing. This important step in design helps the reader understand the organization of the project. Effective grouping practices are significant for visual projects, such as slide presentations, posters, brochures, infographics, and web design. Kostelnick and Roberts (2011) state that "grouping is a powerful tool for structuring the parts of a document—pieces of text, pictures, icons, lines, bullets, and so on. By threading these parts together into manageable units, grouping enables readers to sort through the parts of a document more efficiently" (59). Specifically, in order for our minds to make sense of the information we are receiving, we begin to group objects together in two ways: (1) proximity or (2) similarity. Proximity refers to grouping objects together based on how close the objects are in relation to each other (see fig. 1.3). Objects grouped together based on similarity are organized by their similarity in shape, orientation, color, or texture. Figure 1.4 demonstrates grouping by similarity.

As seen in the example of proximity, based on the distance of the objects from one another, the brain comfortably organizes the circles in three sets of objects: a vertical line and two triangles. By grouping the circles through proximity, the eyes can quickly organize the information on the page in order to make sense of it. Proximity is a grouping method that creates unity based on where the objects are in relation to one another. In the similarity example, the objects are grouped together based on their shapes: triangles and squares. Due to the similarity of the shapes, the eye is more likely to group figure 1.4 into vertical columns instead of horizontal rows. The repetition of these shapes creates an association and grouping for the eye to follow. Similarity can be a powerful grouping method because it is used to create unity among objects.

Effectively grouped items can be used to create meaning for the viewer. Poorly grouped items create confusion and make it difficult to differentiate the message the writer is trying to send. Consultants and writers can discuss the path their eyes follow and which visuals their eyes are drawn to first. The ways a reader groups information are influenced by their cultural background and context. Therefore, as explained by
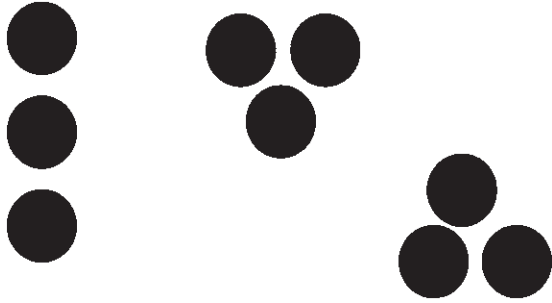
Figure 1.3. Grouping by
proximity
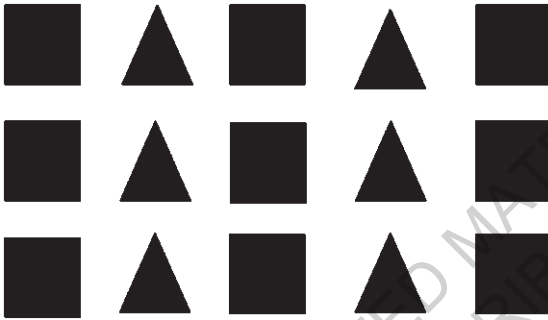
Figure 1.4. Grouping by
similarity

Ray Kristof and Amy Satran (1995), in Western languages readers iden-
tify the following conventions:

- text will read from top left to bottom right
- larger items are more significant than smaller items
- items higher on the page have more priority than those lower down
- signals of continuation ("more to come") appear at bottom center or
  bottom right (quoted in Hilligoss and Howard 2002, 22).

When grouping information, the writer must be aware of their
audience's cultural background. Consultants can help writers reach
their audience by explaining their knowledge of the visual practices of
a culture.

Color
Color is another powerful way of grouping information; it can also be
used to evoke emotion and create an emphasis or distinction. Color
can be used to effectively distinguish and group items of similar topics
together. As powerful and effective as color can be, it can equally cause
distraction or overwhelm readers. Since the goal of this chapter is to

introduce you to basics of color, this section is focused on color characteristics, contrast, and figure-ground and will provide a simplified overview about color choices. Color versions of the images in this collection and additional resources are available at www.multimodalwritingcenter.org.

Color consists of three characteristics: hue, saturation, and value.

- *Hue* is the color, such as yellow, red, blue, and so forth.
- *Saturation* is the purity or the strength of the color. The higher the saturation the more vivid or bright the hue appears.
- *Value* is the lightness or darkness of the color based on the amount of black or white in the color.

Value is used to distinguish a figure from the ground. More specifically, "Value is a graphics term meaning the relative lightness or darkness of a color. The lightest is white; the darkest is black. Use very dark text on light backgrounds. Alternatively, use light text on very dark backgrounds" (Hilligoss and Howard 2002, 98). In order to distinguish the figure from the ground effectively, there must be a contrast in the colors used in order for the figure to stand out. Without proper contrast in color, the audience must strain their eyes and might not be able to receive the intended meaning.

Avoid using colors that strain the eyes.

Instead, consultants should encourage writers to use colors that are complementary and contrastive. As a result, there is a distinction between the colors of the figure and the ground, and the message is more easily deciphered

Use contrasting colors.

In addition to discussing contrasting colors, it is important for consultants to remind writers to use colors consistently throughout the text. If the writer establishes green to indicate subheadings on a poster, it will be disorienting for the audience if that green switches to orange halfway down the poster. Obviously, the concept of cohesion is key, and one way to achieve cohesion in a project is to make sure the colors are consistent throughout the design.

All colors used in a project should have a purpose. Each color chosen should take into consideration the purpose, audience, and context. The color should also reflect the tone and content of the project. For example, some writers might cringe at the thought of using bright pink as a background color in a project, but if the topic is breast-cancer awareness, the

use of pink fits the content and rhetorical situation. Consultants can ask writers why they've chosen the colors used in their project and encourage writers to explore what the colors convey to their audience.

Additionally, colors are contextually compatible with meaning—sensitive to contexts and cultures. For example, according to a 2016 post by SmarterTraveler on the Huffington Post blog *Life*, in Western cultures, the color blue represents melancholy and "is also a symbol of masculinity and represents the birth of a boy—the opposite of China, where blue is considered a feminine color." Consideration of intended audience is particularly important when choosing color because some choices can be seen as insulting. For example, according to SmartTraveler, in Western cultures, green is typically meant to represent money, greed, freshness, or spring. Whereas "most Eastern and Asian cultures relate green with new and eternal life, new beginnings, fertility, youth, health, and prosperity . . . in Chinese culture, wearing a green colored hat for men is a taboo because it suggests the man's wife is cheating on him." During a session, consultants can help writers research the meaning behind colors in order to appropriately address their audience. For more information about color and using the color palette, see color .adobe.com or paletton.com.

FONT

Font, or typeface, is the design of all alphabetic and numerical characters and punctuation of documents and projects. In order to provide you with suggestions for discussing font with writers, this section focuses on the Gestalt principles, legibility research done by Miles A. Tinker, and the scholarship produced by Susan Hilligoss and Tharon Howard, and Rob Carter, Ben Day, and Philip Meggs. These tips are to help writers effectively use font based on their rhetorical situation and accepted practices in Western genres.

The legibility of a font is determined by the ability to read it rapidly and easily. As explained by Tinker (1963), legibility refers to "perceiving letters and words, and with the reading of continuous textual material. The shape of letters must be discriminated, the characteristic word forms perceived, and continuous text read accurately, rapidly, easily, and with understanding" (7–8). Other factors that affect the font's legibility "include the medium of the document (page or screen), readers' genre knowledge, and their goals for reading" (Hilligoss and Howard 2002, 124). Legibility is an important aspect of choosing the appropriate font.

Serif versus Sans Serif

Serif fonts have small strokes, or "tails," at the end of the letters, such as Times New Roman or Cambria, whereas sans serif fonts do not, such as Arial or Helvetica.

<div align="center">

Serif   Sans Serif

</div>

Serif font strokes also have varying weights, or thicknesses; "A typeface that is too light or too heavy has diminished legibility," as the letters merge visually, making it hard to discern (Carter, Day, and Meggs 1993, 91). When choosing between a serif and sans serif font, the writer must consider the context in which the document or project will be viewed. Serif fonts tend to be used more often for printed text and longer bodies of work, whereas sans serif fonts tend to be more legible on screens and on the web. The research into the legibility of serif versus sans serif font has been inconclusive.

When designing a document or project, the writer should use no more than two or three different fonts. Hilligoss and Howard (2002) describe how to create a structural contrast between serif and sans serif fonts within one document: "Use sans serif fonts like Arial or Helvetica for headings and display type. Use Old Style serif font like Times New Roman, Palatino, Garamond, or Goudy Old Style for body type. These contrast in structure. The built-in styles for body text and headings of many word processing programs incorporate this basic concept. The more traditional the audience and rigid the genre, the more likely that this combination will serve well" (129). In general, sans serif fonts are viewed as cleaner, friendlier, and more modern, while serif fonts appear more classic and formal. Information about choosing the best fonts for accessibility will be discussed later in this chapter.

Font and Tone

The font a designer chooses must match the rhetorical situation in which the information is presented. Therefore, consultants should encourage writers not to choose a font solely based on personal preference but by examining how purpose, audience, and context inform font choices. For example, if the heading below was printed in a medical journal, would the audience take it seriously?

<div align="center">

Depression and War

</div>

No, this font does not match the purpose or seriousness of the topic. Instead, this font would more likely be found on a birthday invitation or

a bakery storefront. If a writer does not choose a font that matches the tone or purpose of the project, the audience will question the credibility of the designer or wonder whether the designer is mocking the topic.

Depression and War

A more appropriate font might include Georgia (shown above) because of its traditional yet modern look, and the weight behind the strokes makes it more serious in appearance. The tone of the font sets the precedent for how the content should be read. As Shawn Apostel's chapter in this collection mentions, the weight of the font can impact how the audience perceives the information. It is important to make sure the font is sending the right message. James Truman outlines how font impacts personal branding in his chapter on professional identity.

Creating Emphasis

Italics, bold, all capitals, and color changes are some ways designers emphasize text within a document. These changes in text can be a helpful tool to signal to the audience the importance of information. When using signals, the designer should be consistent with the signal they choose and only use one.

Bolding text can be used to create a hierarchy of information. Bolding "should not be employed for large amounts of text" (Tinker 1963, 65) but instead should only be used for a word or phrase. *Italics* and text in ALL CAPITALS can impede reading or cause the reader to slow down (Carter, Day, and Meggs 1993, 89, 91; Tinker 1963, 65). Therefore, italics "should be restricted to those rare occasions when added emphasis is needed" (Tinker 1963, 65). Additionally, italics should be avoided when information is being presented on a screen. As described by Hilligoss and Howard (2002), "Italics are harder to read. On screen, the combination of thin, slanted lines and the *pixellation* (jagged, dot-like appearance) of letters is particularly hard to decipher" (128). Similarly, "If a text is set entirely in capital letters, it suffers a loss of legibility and the reader is placed at a significant disadvantage" (Carter, Day, and Meggs 1993, 89). Text in all capitals also takes up more space on the page or screen.

Color is another tool designers use in order to emphasize a point. Similar to the other signals, color should only be used to create emphasis for a word or phrase. As previously discussed with figure-ground contrast, being able to discern the text from the background is crucial for legibility (Hilligoss and Howard 2002, 124). Typically, body text is most readable when it is on the black or white scale. As explained

by Rob Carter, Ben Day, and Philip Meggs (1993), "Large amounts of text are most legible as black on white, rather than the reverse" (92). Also, following their suggestion of using black or white text, the introduction of color to signal the importance of text makes it stand out even more.

Making decisions about font requires practice and experimentation. This process can be time consuming, but it is necessary in order to make good choices. Additionally, it is helpful to test out the font in the context in which it will be presented. If designing materials for a printed brochure, the writer cannot solely judge the font based on what appears on the screen. The printing process might result in a font looking smaller or bigger than the writer intended. As both Russell Carpenter and Courtnie Morin's and Sohui Lee and Jarret Krone's chapters advise, consultants should encourage designers to print a prototype of their project in order to see whether the elements change when moving from the screen to a tactile, physical version. While there are numerous font options available, consultants can help designers make quality choices that have the right impact on the audience.

AUDIO-DESIGN PRINCIPLES

Similar to visual design, there are principles and concepts for consultants to consider when helping students create multimodal texts that include audio elements. Drawing from Theo van Leeuwen (1999), Gunther Kress and Theo van Leeuwen (2001), and the National Communication Association (NCA), this section provides consultants with an introduction to sound theory and basic concepts and language for discussing audio components of multimodal projects with writers.

When utilizing sound in composing projects, writers should consider the planes or layers of sound:

- *figure or foreground*—the most important sound. This is the sound the listener must be immediately aware of and identify with.
- *ground or middle ground*—contextual sounds the listener is aware of but pays little attention to. These sounds are ones that "we take for granted and only notice when it is not there any longer" (van Leeuwen 1999, 23).
- *field or background*—sounds added to the foreground in order to simulate real-world conditions and natural reality. These sounds can also come in the form of music and are meant to create a particular mood or emotion. While these sounds are a part of the listener's physical world, they are not ones the listener pays close attention to.

By identifying these layers and understanding their function, consultants can help writers create a soundscape and perspective for the audience. The figure, ground, and field can change depending on the listener's perspective; for example, "Even sounds which are clearly intended to stand out, such as bells, alarms, and sirens, may become Ground, for instance in a big city. It all depends on the position of the listener" (van Leeuwen 1999, 17). When creating soundscapes, the writer must determine the perspective from which the listener is engaging and interacting with the audio components. Brenta Blevins's chapter on podcasting also reminds us of the importance of paying attention not only to sound but also to the impact of silence. As explained by van Leeuwen (1999), "Sound is dynamic: it can move us *towards* or *away from* a certain position, it can *change* our relation to what we hear" (18). In order to accomplish this, writers should be able to distinguish the layers in order to recognize their impact on the audience.

Voice and Delivery

Narration can be used in audio and video projects as a way for the writer to create a connection with and engage an audience, develop a storyline, and prompt critical thinking. Similar to written text, when crafting the narration, writers must be selective with language, choosing words appropriate to the topic, audience, purpose, and context. Text written for an academic paper is not always suitable for audiences who will only be following along with the spoken word. The writing in this scenario should be designed for a listening audience, which means the language tends to be more conversational, specific, and direct. When responding to audio-based projects, consultants can help writers develop a script or storyboard, provide feedback as writers practice delivery, and remind writers to check the quality of their microphone. Brandy Ball Blake and Karen Head's chapter provides resources, templates, and guidelines for creating different types of storyboards.

In addition to the language chosen, delivery and voice quality also impact the message. Delivery includes employing vocal varieties in pitch, rate, and intensity. The aspects of vocal delivery and voice quality are outlined by Kress and van Leeuwen in *Multimodal Discourse: The Modes and Media of Contemporary Communication:*

- *tension*—tightness or constriction of muscles in one's throat producing a strained or sharper sound
- *roughness*—hoarseness, raspiness

- *breathiness*—heavy breathing, soft tone; typically associated with intimacy (Kress and van Leeuwen 2001, 83)
- *loudness range*—level of noise produced and the range of territory it can cover, which "is strongly related to power and domination" (Kress and van Leeuwen 2001, 83)
- *pitch range*—highness or lowness
- *vibrato*—tremble in sounds, typically associated with emotion

The combination of these material qualities of voice and delivery influence the way a message is received. By being mindful of these concepts and manipulating these aspects of voice quality, consultants can help writers make an emotional impact on the audience. These concepts help writers understand the importance of using vocal variety to heighten and maintain interest and of using intensity appropriate for the message and audible to the audience (National Communication Association). Brenta Blevins's chapter on podcasting helps consultants think about how writers communicate in a nonvisual medium.

UNIVERSAL AND ACCESSIBILITY DESIGN

The goal of universal design when creating multimodal projects is to make them accessible to all audiences. As explained by the Centre for Excellence in Universal Design, "The designer is not expected to find one design solution that accommodates the needs of 100% of the population, as Universal Design is not one size fits all. Rather, designers are urged to explore design solutions that are more inclusive; those designs that push the boundaries as far out as possible without compromising the integrity or quality of the product." While addressing all aspects of universal design in multimodal projects is beyond the scope of this book, I'd like to highlight a few concepts: color, font, images, captioning, and transcripts. For more information about accessibility for particular genres, please see Russell Carpenter and Courtnie Morin's chapter on poster design, Shawn Apostel's chapter on slide presentations, Clint Gardner, Joe McCormick, and Jarrod Barben's chapter on web design, Brenta Blevins's chapter on podcasting, and Patrick Anderson and Florence Davies's chapter on video project.

Color

Not everyone sees color the same; as a result, when designing, careful consideration must be taken when choosing colors. High-contrast colors, such as black and white, work best for audience members who have

a color-vision deficiency or color blindness. Designers should avoid combining colors (text and background or images) in the red and green or blue and yellow color families because they are not easily distinguishable. As explained by Mario Parisé (2005), "For most people, red and green contrast very well. But red and green are common color deficiencies. For example, if you use purple, brown or orange, all of which have red in them, I'll get lost. What seems clear to most people may seem blurry or indistinguishable to others." There are resources available to help writers address color concerns, such as uploading any image to color blindness simulation websites (http://www.color-blindness.com/coblis-color-blindness-simulator/) to see how they will appear or color universal design (CUD) software in Photoshop (http://www.adobe.com/accessibility/products/photoshop.html).

Font

In addition to helping writers create well-contrasted text, consultants can also encourage writers to use fonts that are accessible for all audiences. Some qualities of accessible fonts include sans serif, open letters, medium weight, and evenly spaced letters and words. Consultants can remind writers to choose fonts that have easily discernible letters, such as the distinction between a lowercase *l*, uppercase *L*, and the number *1*. As mentioned above, consultants can help writers think about the legibility of their font options. In their research on accessible fonts for people with dyslexia, Luz Rello and Ricardo Baeza-Yates (2013) determined that the best fonts for writers to use are "*Helvetica, Courier, Arial, Verdana* and *CMU*, taking into consideration both, [*sic*] reading performance and subjective preferences. Also, *sans serif, monospaced,* and *roman* font types increased significantly the reading performance, while *italic* fonts decreased reading performance" ("Conclusion"). Together, consultants and writers can discuss how font can impact their audience and ways to make choices that promote inclusivity.

Images

Poor use of images in web-based or digital projects can make them inaccessible for some users. Text-to-speech readers cannot accurately represent an image if it is missing alternate text or proper descriptions. When placing an image in a website or digital project, it is important to:

- specify alternate text, which appears when the mouse or pointer hovers over the item;

- provide a long, detailed description of a table or image, which should allow the audience to have a clear understanding of the essential aspects, such as data points;
- avoid putting essential text, large paragraphs, or navigational information in images (Centre for Excellence in Universal Design).

For a more detailed discussion about using alternative text in web design, refer to Clint Gardner, Joe McCormick, and Jarrod Barben's web-design chapter.

Captioning and Transcripts

Captioning and transcripts are important tools when creating podcasts, videos, or public service announcements that will reach a wider audience. They allow the viewer to follow along with a text representation of the audio. Captioning and transcripts are useful for a number of reasons; specifically, they allow the audience to move at their own pace and are helpful for audiences who might have difficulty hearing or processing auditory information. Captioning and transcripts are also helpful for people who are not proficient in the language in which the audio is being delivered, who are in noisy environments, or who have low bandwidth (Henry 2014).

Creating a script or text version before recording makes it easier to add captioning in the editing stages. Consultants should encourage students to develop a script for a podcast or video in the early planning stages of the project. Then, the consultant and student can revisit the script and make adjustments in order to ensure it lines up with what was recorded and what remained after editing. This script can then be used for creating captions and transcripts. Both Brenta Blevins's chapter and Patrick Anderson and Florence Davies's chapter provide details on creating scripts and transcripts for podcasts and videos, respectively.

The audio, visual, and accessibility design principles presented in this chapter are in no way exhaustive. The goal of providing this information is to help consultants develop a language to use when working with writers on multimodal projects. Additionally, these concepts help readers understand basic elements of design in order to effectively navigate through this book.

NAVIGATING MULTIMODAL COMPOSING

The chapters in this collection were written for writing consultants developing skills and abilities to meet the needs of students using the

writing center for multimodal and design-focused purposes. *Multimodal Composing* introduces consultants to key elements in design, technology, sound, and visual media and how they relate to the rhetorical and expressive nature of written, visual, and spoken communication. The text is organized as a kind of journey through multimodalities, starting from more traditional text-based experiences that exist at the intersection of language, information, and images and moving toward more dynamic online and video-based compositions. This collection begins with Brandy Ball Blake and Karen Head's chapter on storyboarding, which lays a foundation for many of the following chapters that involve planning and organizing multimodal projects.

A number of chapters focus consultants' attention on the relationship between texts and images, as well as on the how to present linguistic and visual information persuasively. Brian Fallon's chapter on artist statements introduces why and how artists should discuss their visual work. Both Russell Carpenter and Courtnie Morin's chapter and Sohui Lee and Jarret Krone's chapter focus attention on design thinking, layout, and presenting information in rhetorically savvy and aesthetically pleasing research posters and brochures, respectively. Presentation slides are often under discussion during sessions at our writing centers, and Shawn Apostel offers consultants helpful strategies for choosing presentation platforms and making design decisions. Alyse Knorr's chapter on infographics demonstrates the power of visualizing complex data.

As the collection continues, the topics move toward navigating online tools and environments and using video and sound. Lauri Dietz and Kate Flom Derrick's chapter on ePortfolios provides insight into the purposes of ePortfolios, especially as tools for demonstrating students' accomplishments in logical and comprehensive ways. Clint Gardner, Joe McCormick, and Jarrod Barben move the discussion of ePortfolios to web design using a CMS and how consultants can serve as test users for web designers, providing key information on how users interface with web pages. Brenta Blevins brings the collection into the realm of sonic literacy and provides an overview of the world of podcasts. Patrick Anderson and Florence Davies introduce consultants to working with film and video projects, laying out some basic concepts that will help them discuss planning and editing video projects. Additionally, Alice Johnston Myatt looks at public service announcements, which can exist as video, audio, or written text, stressing the importance of connecting audience and purpose in multimodal texts. In the penultimate chapter, James Truman asks consultants to consider their professional identities online in order to help students think through personal branding and social media.

Finally, Brian and I chose to conclude this collection with Molly Schoen and Sarah Blazer's chapter on copyright and citation when it comes to multimodal and visual sources. In our experience, discussing attribution in the era of online sharing is always tricky, especially when we don't feel completely confident ourselves about what must be cited, how it should be cited, and whether we even have permission to use an image, sound clip, video, and so forth. Since the entire collection tends to focus on what we might consider nontraditional texts, we thought consultants would find it helpful to know the basics when it comes to fair use, attribution, and due diligence in finding out where multimodal sources originate.

Along this journey, readers will get a glimpse into the practices and values of different writing and multiliteracy centers that have been engaging in multimodal work. Each contributor offers peer, graduate-student, and professional consultants practical information and strate-gies based on first-hand experience. We encourage readers to adapt the activities for your own purposes and centers: individual use, classroom use, staff education, and so forth. Ultimately, the book is designed to be a go-to resource that guides consultants who are new to multimodal projects in their conversations with students.

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