Abstraction

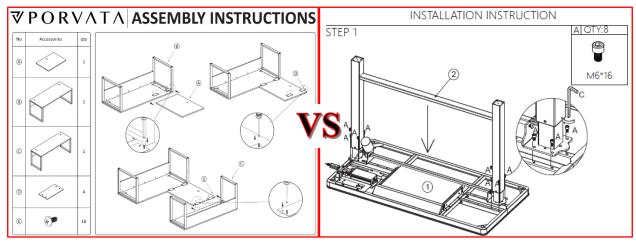


Figure 1. More abstract (less detail)

Figure 2. Less abstract (more detail)

Introduction

I compared two images depicting desk assembly instructions. **Figure 1**, the more abstract image, depicts a single image showing all the steps to assemble the desk. This image is paired with more detailed text in the body of its <u>instructions</u>. **Figure 2**, the less abstract image, shows the *Step 1* excerpt from a larger body of images that contain assembly and operating <u>directions</u>.

Cognates

Table 1 (next page) compares the cognates of Figure 1 and Figure 2 (above). It compares the images using emphasis, clarity, and conciseness. **Emphasis** includes how parts of the image attract *attention*. It also examines special, graphic, and textual *coding effects*, and how critical the *information* is to the image. **Clarity** compares the likelihood of readers *understanding* the image's conventions. It also examines whether the *image size* is large enough, and whether the image has too many or too few *details* to communicate its message. **Conciseness** compares whether the information in the image serves a *rhetorical* purpose. Additionally, it determines if the image's *details* are too concise to communicate the message (Figure 1) or not concise enough to avoid distracting readers (Figure 2).

Figures 1 and 2 (above) appear in Table 1 (below) for quick reference. If readers wish to view the images in more detail than presented, the original copies of the instructions are hyperlinked in the Introduction above. This document examines the assembly instructions for two different desks using the three cognates described in the previous paragraph. Readers who wish to further explore effective image use in constructing assembly instructions, and why strategies may or may not work, may wish to review <u>Designing Effective Step-By-Step Assembly Instructions</u> by Argrawala et al.

Table 1. A comparison of two images showing instructions to build a desk. Figure 1 and Figure 2 (left) are compared via the cognates of emphasis, clarity, and conciseness below.

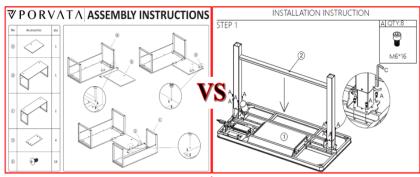


Figure 1. More abstract (less detail)

Figure 2. Less abstract (more detail)

Cognates	Figure 1	Figure 2
Emphasis		
Attention grabbing elements	Complexity of instructions Two desk parts look alike	Screw, Allen wrenchDetails on tables underside
Coding effects	 Orientation shows desk assembled upside down Key on left combined with letters in image show how parts relate 	 Screw in corner informs installing Allen screws is the purpose of this step. Letter A informs readers where the parts need to go.
Information relevance	Brand name is not critical Bolding of "Assembly Instructions" is not needed	Level of detail for underside of table is not required to understand where screws go
Clarity		
Reader understanding	 Compressed instructions with all steps in a single image decrease reader understanding Magnified images with screwdrivers aid understanding 	 Detailed drawing of table makes it challenging to find where the screws are inserted Magnified image to the right of Allen wrench and screws helps
Image size	Increasing size of steps spanning multiple images would be better	Image size is satisfactory.Magnification of Allen screws on left side of table would help.
Level of details	Enough details are present to communicate message	Details of underside of table detract from instructions for Allen screws.
Conciseness		
Rhetorical effectiveness	The image is effective in instructing readers.	The image is effective in instructing readers
Level of details	There are enough details in the image image	There are too many details in the image—the coding "A" for screw locations gets lost in the image

Parks

Introduction

I reviewed the website for <u>Grand Canyon National Park</u> in the United States and <u>Vanoise National Park</u> in France. For this assignment, I only viewed the landing pages linked in this paragraph.

Both websites include images of nature, including views of open landscapes extending to the horizon (**Figure A** below). Both parks also show people engaged with their surroundings; individuals are seen hiking and interacting with the park. The images reveal both websites seek to entice nature lovers to visit the park. However, Grand Canyon Park includes images that depict a busy park with many tourists and vehicles, whereas Vanoise Park has images with small groups of people and no vehicles. Vanoise Park targets individuals who want a more secluded experience than that offered by Grand Canyon Park.

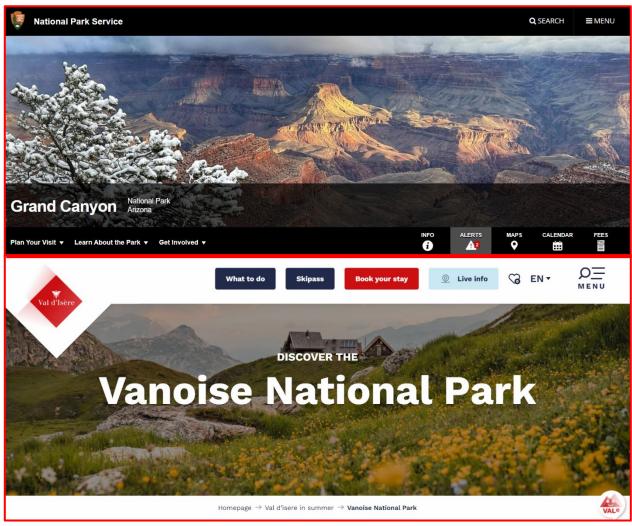


Figure A. These images are the first things visitors see when they visit the sites. At first glance, Grand Canyon Park appears as an undisturbed landscape awaiting exploration, while Vanoise Park shows an isolated structure, implying a secluded location that includes modern conveniences—note the solar panels on the roof of the building. See the next page to learn more about how the two parks use images.

Grand Canyon National Park

Some images on the site appear designed to persuade visitors to choose the park as their destination. Once readers scroll below the opening image of the landscape, images amplify the text and draw visitor attention to potential problems. Images disclose information that concerns visitors, such as information regarding closed trails (Figure B). Another image informs readers of ongoing construction in the park (Figure C). While this image is not inviting for nature lovers, it serves as a visual disclosure of interruptions to the natural landscape depicted at the top of the page. Both images (Figure B and C) link to the same webpage titled Key Hiking Messages.



Current Trail and Campground Closures >

Bright Angel & Tonto Trials are partially closed through April 14, 2024. The Plateau Point Trail is also closed for waterline construction.

Figure B. The image above informs readers of upcoming trail closures. The text below amplifies the textual data in the image.



Current/Upcoming Construction Closures >

Major construction projects are underway to upgrade critical park infrastructure. Project updates, including trail closure schedules: here.

Figure C. The image above informs readers of ongoing construction. Without the text below to explain, it is not clear what specifically the image is communicating.

Vanoise National Park

Unlike Grand Canyon National Park, the French park only uses images to show the landscape and small groups of people enjoying nature. **Figure D** depicts a collage of images from the Vanoise National Park website.



IRBs

Prior to this assignment, I had never heard of an Institutional Review Board (IRB). The Food & Drug Administration (FDA) regulations specify an IRB is "designated to review and monitor biomedical research involving human subjects." The National Institutes of Health (NIH) site linked in the module deals specifically with when researchers can execute a single IRB for studies spanning multiple institutions. Before 2018, a study occurring across multiple sites would require duplicate IRBs, wasting time and resources. The Northern Arizona University (NAU) site provides links and definitions to help researchers navigate the complex bureaucratic process. Interestingly, the NAU site states IRB is required for studies that get information through interaction with individuals which "obtains, uses studies, analyzes, or generates private information." This definition can also be found within the NIH site. NAU's instructions, following guidance from the NIH, imply that any study or survey involving human participants requires an IRB, whereas the FDA site, at least in its opening paragraphs, states that IRBs only apply to biomedical research. While further exploration across the sites may reveal similar guidelines for IRBs, it initially appears that NAU, under NIH guidelines, employs more stringent requirements than the FDA. Additional research, or communication from a subject-matter-expert, would be required to determine if this is indeed the case. **Table A** (below) summarizes data contained within each of the respective websites.

Northern Arizona University

Names the IRB as Human Research Protection Program

- IRB is required if study involves research and human subjects
- Required for information or biospecimens, does not explicitly state information must be biomedical related
- Provides review time, which aids with research study planning
- Provides contact information for IRB at the bottom of the page
- Additional links include IRB submissions, education & training, compliance guidance, IRB staff, and resources and frequently asked questions
- Links open additional webpages with more data and links, revealing an administratively arduous process

Food & Drug Administration

- Presents data as an information sheet for IRBs and clinical investigators
- Specifies that IRBs are required specifically for biomedical research involving humans
- Informs that IRBs may be referred to by any name and clarifies that IRB is a generic term used by the FDA and Health & Human Services (HHS)
- Provides contact information to representatives at the FDA and other parties, including HHS, who hold stakes in IRBs
- Links within document include IRB organization, membership, procedures, and records, as well as informed consent processes, consent document content, clinical investigations, and general questions

National Institutes of Health

- Guidance specifically applies to requirements for single IRBs for multi-site or cooperative research
- Under the NIH Grants and Funding information section
- States that single IRBs are the norm, and exceptions "not based on a federal/state/Tribal law, regulation, or policy" require approval from the NIH Office of the Director
- Site contains a definition of Human Subjects research that is also used on the NAU website
- Links on the website open additional webpages and include policy topics, definition of human subject research, award process, confidentiality certificates, single IRB reqs, policies & regulations, and training & resources

Table A. The three websites in the table above reveal overlapping institutional requirements for research involving human subjects. The points listed in the table offer only a summary of the information available online. Follow the hyperlinks at the top of the table to visit each of the sites described and explore additional details about Institutional Review Boards (IRBs).

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