SSAGE researchmethods

Draw-and-Write Techniques

Other Entries



SAGE Research Methods Foundations

By: Jenna Hartel
Published:2019
Length: 3,000 Words

DOI: http://dx.doi.org/10.4135/9781526421036

Methods: Draw-and-Write Techniques

Online ISBN: 9781526421036

Disciplines: Anthropology, Business and Management, Criminology and Criminal Justice, Communication and Media Studies, Counseling and Psychotherapy, Economics, Education, Geography, Health, History, Marketing, Nursing, Political Science and International Relations, Psychology, Social Policy and Public Policy, Social Work, Sociology, Science, Technology, Computer Science, Engineering,

Mathematics, Medicine **Access Date:** May 6, 2020

Publishing Company: SAGE Publications Ltd

City: London

© 2019 SAGE Publications Ltd All Rights Reserved.

This PDF has been generated from SAGE Research Methods.

The draw-and-write technique is an empirical visual research method. Informants are asked to draw a concept or to answer a question by making an illustration; further, they are prompted to write or speak about their drawing through a caption, survey, story, interview, or focus group. The method generates a dual corpus of visual and textual data that can be analyzed in myriad ways. The outcomes typically deepen, extend, or challenge conventional knowledge generated through words alone. This method is not to be confused with psychological tests, such as the draw-a-person test, that was once used as a measure of schizophrenia or intelligence; rather it aims to make otherwise intangible phenomena visible. The draw-and-write technique is relatively easy for researchers to learn, inexpensive, and low-tech. It is adaptable to a social scientific paradigm (with controls for sampling, reliability, and validity), or it may be staged as an arts-based or creative project that emphasizes collaboration and unfettered expression. In its earliest applications, the draw-and-write technique was limited to research involving children, but it has become a research vehicle for populations at any life stage and for innumerable topics. Champions of the draw-and-write technique believe that drawings offer a different kind of glimpse into human sense-making than written or spoken texts do because they can express ineffable and elusive perceptions that are not easily put into words. Problems with the draw-and-write technique have also been registered, namely pertaining to validity, for subjects may draw what they are able to depict rather than what they initially imagine. This entry explores the history and applications of the method, probes the nature of drawings, elaborates upon the research process in three sequential stages, and notes ethical issues.

History and Applications

An important predecessor to the draw-and-write technique was David Chambers's (1983) research into children's conceptions of scientists. He sought to understand when a stereotype of the scientist emerges among youth. From 1966 to 1977, Chambers asked 4,807 children to "draw a picture of a scientist," and he determined that the stereotypical image takes hold in second grade. Chambers's innovative research design that was centered on drawing did not have a written component, yet it endured for many decades and has been thoroughly reviewed and problematized (Finson, 2002). In the late 1980s, drawing as a data-gathering technique was introduced to health education circles in the United Kingdom (Backett-Milburn & McKie, 1999). Schools at the time were focusing on student health, and the draw-and-write technique was a means to engage children in research on the topic.

The draw-and-write technique has since spread across the social sciences. Following Chambers, the research sometimes aims to illustrate roles such as mathematicians, nurses, or teachers. It also lends itself to producing novel and accessible insights into phenomena that are multidimensional, contested, or oblique. For instance, projects have used the prompt, "What is ...?" or "Please draw ..." to capture visions of earth, menopause, spinal cord injury, bullying, celebrity, fear, privacy, energy, transition, compliance, information, group work, happiness, and leisure, among others. Another formulation of the draw-and-write technique aims to uncover and then compare how two or more populations envision concepts differently, whether within

(Pridmore & Bendelow, 1995) or among countries. Given its ease of implementation as well as immediate, often-striking outcomes, the draw-and-write technique has been used in situations that may not qualify as research *per se* but do inspire discovery. It may function as a classroom icebreaker that capitalizes upon the power of drawing to stimulate discussions, extempore typologies, and more clearly articulated perspectives.

The Nature of Drawings

Before outlining the actual process of the draw-and-write technique, ontological reflections are warranted. When people *draw*, just what is happening and what is the nature of the resulting artifact? Unfortunately, there is no universal explanatory theory of drawing. However, one notion recognizes the indexical nature of drawing, namely, "we apprehend everything which comes to us as impact from the world by imposing some image on it that stresses its salient features and shapes it for recognition and memory" (Langer, 1967, p. 59). In contrast, many scholars argue that children's drawings are iconoclastic, that is, reflections of popular motifs in visual culture—*not* renderings of the natural world as it is. In this view, if asked to draw a mouse, a child would draw Mickey Mouse rather than a lifelike sketch of a field mouse. It has also been conjectured that children learn drawing strategies from their elders and default to these formulations across their lifetime. Therefore, many drawings produced in the draw-and-write technique may be iconic, perfunctory, and anachronistic. Finally, a drawing should not be reduced to its terminal two-dimensional, material, and static artifact. Visual theorist Gillian Rose (2016) offers an holistic view in which images such as drawings are constituted at a *site of production* (where it is created under certain local and global conditions), a *site of the image itself* (including its formal qualities and interpretation), and a *site of reception* by an audience. Next, Rose's three sites are used to organize this discussion of the draw-and-write research process.

The Site of Production

There is great flexibility and variety at the site of production among draw-and-write studies. The drawing exercise can be the sole data-gathering mechanism, or it may be one element of a manifold research design. Participants could be solicited individually, gathered and instructed as a group, or self-selected from a public venue. The time available for drawing could be constrained to a few minutes or be unlimited. The informants may be asked to reflect upon the research topic in advance, or researchers may wish to collect spontaneous visual impressions.

Instructions

As empirical research with human subjects, the data-gathering process must begin ethically; informed consent, right to withdraw, and confidentiality should be established and the topic in question presented to participants in accessible language. Spoken and/or written instructions for the drawing activity are necessary and are known to shape outcomes (Lima & de Lemos, 2014). Scholars have argued that in studies using visual graphic methods, participants may generate diagrams, drawings, or cartoons (Varga-Atkins & O'Brien,

2009); each is best suited to a particular kind of research question, though it may be difficult for the researcher to control the participant's response. Pilot testing can help in finding a balance between instructions that inspire creative expression yet still generate images relevant to the research topic. When presenting instructions, time should be allowed to answer any questions that arise. Often, drawers will object, "but I can't draw!" or express other reservations; these can be met with compassionate and positive reinforcement.

Materials

Practically speaking, producing visual data requires a drawing surface, called a graphic space. Heavy, white, art paper is a standard choice that can be used in portrait or landscape orientation, and it can be any size. The drawing surface may pertain thematically to the subject at hand; in one study of family food practices, children were asked to draw favorite foods on white paper plates. Generally, a larger graphic space requires more of the participant's time and effort. Researchers should think ahead to the data management and analysis stage, which can be more protracted with images in large or irregular shapes and sizes.

Drawing instruments can range from a singular pen or pencil to an array of colored markers, pencils, crayons, and/or pastels. Though it may be tempting to supply abundant instruments for lavish art-making, researchers should keep in mind the costs and portability, as well as the need for indelible results that will not smudge or deteriorate. Any project that generates drawings of people must consider whether the materials on hand allow participants to express human diversity in all its texture and color.

The "and-Write" Component

The part of the draw-and-write technique that involves words can likewise be formulated in many ways, and it can occur before, during, or after the graphical element. Most simply, it might consist of prompts on the back of the paper that capture demographic information from the participant. Or, the informant may be invited to caption the drawing or "say a few words about your drawing." Variations on writing—drawing—captioning have been tested and no superior formulation found (Pridmore & Landsdown, 1997). The written portion could be a short survey that gathers background or contextual information. Another variation is to conduct an interview in which the drawing serves as a springboard for commentary and questions, a technique known as graphical elicitation; the same directed conversation can occur in a focus group. Without the informant's firsthand commentary, some social scientists have asserted that the visual and textual data born of the draw-and-write technique are impossible to interpret, and a "draw, write, and tell" (Angell, Alexander, & Hunt, 2014) technique has been proposed to elicit an overarching narrative.

The Site of the Image

Draw-and-write studies may produce relatively small or much larger data sets upward of 1,000 images, in addition to their verbal commentary. Once collected, each drawing should be given an acquisition number and textual responses may be entered into a spreadsheet. It is a good idea to photocopy and/or scan each

image so that originals can be kept in a pristine state while replicas are used for analysis or exhibition.

Visual Analysis

Researchers are often eager to begin looking for meaning in the drawings. However, a rudimentary *formal* analysis that focuses on description can establish a beneficial intimacy with the corpus. Following in the tradition of art history and art criticism, this is known as *compositional interpretation* (Rose, 2016). For example, Are the drawings *elementary* graphic objects that contain a single figure or *composite* graphic objects made up of many graphic subobjects? Are the images abstract or realistic in style? How many, and which, colors are used? Are the color palettes warm or cool? Do words or letters appear in the graphic space?

For more subjective interpretations or readings of the drawings, handbooks of visual analysis (Leeuwen & Jewitt, 2001; Rose, 2016) provide a host of options. These analytical strategies move beyond formal qualities to focus on what was drawn. An important starting point is to reconcile the role of the textual data, which may be subject to its own analysis process or be used only to expand understandings of the visual material. Another crucial interpretive choice is to recognize the researcher's versus the drawer's conception of the image; a commitment to the latter is known as auteur theory (Mannay, 2015). Inductive thematic analysis is a common approach that captures indigenous visual motifs appearing in the corpus; visual grounded theory (Konecki, 2011) serves as a specific example. Thematic analysis may also be deductive and utilize existing frameworks or definitions within a research domain to interrogate the data. Quantitative visual content analysis (Bock, Isermann, & Knieper, 2011) is a more structured and systematic way to quantify perceptions of the data set. Pictorial metaphor analysis (Forceville, 2008) is a powerful lens into draw-and-write data since metaphor is a common drawing strategy. Jenna Hartel (2017) has described "adventures in visual analysis" in which four of the aforementioned analytical strategies were applied in sequence to a draw-and-write corpus, and each generated distinct insights. No analytical strategy has been deemed best; in fact, scholars (Mair & Kierans, 2007) have argued that most draw-and-write studies enact naive positivist approaches that hold the drawings to be direct and unproblematic expressions of the research subjects' thoughts and beliefs, raising a call to action for more sophisticated efforts to analyze draw-and-write data sets.

The Site of Reception

Draw-and-write research can be disseminated across conventional and innovative channels, through deliverables that capture the imagination of scholars and the public alike. Findings can be peer reviewed and published in the journal literature or at academic conferences. The outputs of the technique lend themselves well to being shown as a poster, a genre for which images are not restricted. A handful of draw-and-write studies have generated monographs. In the spirit of arts-informed and creative approaches, some draw-and-write studies may conclude with a pubic exhibition of the images at a conference venue, gallery, museum, or library. When seen in-person, up close, and in an unhurried manner, drawings can cast a powerful spell.

It is now common for draw-and-write studies to have websites that provide access to any interested party,

including the research participants who may wish to see their contribution alongside others. Such websites often feature information about the research team, participants, method, and outcomes. Given unlimited online space, the entire corpus can be displayed and even indexed so that a viewer can manipulate the visual data by search, tags, or themes. The *Privacy Illustrated* study (http://cups.cs.cmu.edu/privacyillustrated/) has all these features and includes an invitation for visitors to upload their own drawing of "privacy." Increasingly, both researchers and their funding agencies are committed to the long-term, electronic preservation of original data; to this end, researchers should consider depositing material into an institutional repository for the long-term safe-keeping and sharing of their work.

Ethical Issues

Ethical issues permeate the research process for the draw-and-write technique and impact the three sites of an image: production, the image itself, and reception. Here, specific ethical issues that arise within the draw-and-write technique are briefly noted.

It may be preferable to negotiate *consent* in stages; draw-and-write research projects often involve interlinked components that emerge organically. *Confidentiality* should not be assumed in drawings, for in a classroom context or small community, it may be possible to link drawing styles or visual motifs to known individuals. An additional complexity concerning confidentiality is that some contributors may wish to be personally associated with their drawings. While intending to *minimize harm*, drawing activities may provoke discomfort, or embarrassment; may trigger traumatic memories; or be exposed to criticism, and these potentially negative impacts should be mitigated. Ethical issues surround the *authorship and ownership* of the drawings. Legally speaking, copyright is held by the creator of the work, which can be transferred to the research through explicit permission or Creative Commons licensing. A final ethical matter concerns the *representation and reception* of the visual data. Enthusiastic researchers may wish for the most far-reaching and public access to the drawings including in settings such as museums and galleries, yet participants should be consulted first.

Further Readings

Bowden, F., Lockton, D., Gheerawo, R., & Brass, C. (2015). *Drawing energy: Exploring perceptions of the invisible*. London, England: Royal College of Art.

Mannay, D. (2015). Visual, narrative and creative research methods: Application, reflection and ethics. Abingdon, England: Routledge. doi:10.4324/9781315775760

Margolis, E., & **Pauwels, L.** (2011). The SAGE handbook of visual research methods. Los Angeles, CA: SAGE.

Theron, L. (2011). Picturing research: Drawing as visual methodology. Boston, MA: Rotterdam.

Warr, D., Cox, S., Guillemin, M., & Waycott, J. (Eds.). (2016). Ethics and visual research methods: Theory, methodology and practice. New York, NY. Palgrave McMillan.

Weber, S., & Mitchell, C. A. (1995). That's funny you don't look like a teacher: Interrogating images and identity in popular culture. London, England: Routledge. doi:10.4324/9780203453568

Van Leeuwen, T., & Jewitt, C. (2001). Handbook of visual analysis. London, England: SAGE.

Wiles, R., Clark, A., & Prosser, J. (2011). Visual research ethics at the crossroads1. In E. Margolis & L. Pauwels (Eds.), *The SAGE handbook of visual research methods* (pp. 685–706). London, England: SAGE. doi:10.4135/9781446268278.n36

References

Angell, C., **Alexander, J.**, & **Hunt, J.** (2014). "Draw, write and tell": A literature review and methodological development on the "draw and write" research method. *Journal of Early Childhood Research*, 13, 17–28. doi:10.1177/1476718x14538592

Backett-Milburn, K., & **McKie, L.** (1999). A critical appraisal of the draw-and-write technique. *Health Education Research*, 14, 387–398. doi:10.1093/her/14.3.387

Bock, A., **Isermann, H.**, & **Knieper, T.** (2011). Quantitative content analysis of the visual. In **L. Pauwels** & **E. Margolis** (Eds.), *The SAGE handbook of visual research methods* (pp. 256–282). London: SAGE. doi:10.4135/9781446268278.n14

Chambers, D. W. (1983). Stereotypic images of the scientist: The draw a scientist test. *Science Education*, 67, 255–265. doi:10.1002/sce.3730670213

Finson, K. D. (2002). Drawing a scientist: What we do and do not know after fifty years of drawings. *School Science and Mathematics*, 102, 335–345. doi:10.1111/j.1949-8594.2002.tb18217.x

Forceville, C. (2008), Metaphor in pictures and multimodal representations. In **R. W. Gibbs, Jr.** (Ed.), *The Cambridge handbook of metaphor and thought* (pp. 462–482). Cambridge, England: Cambridge University Press. doi:10.1017/cbo9780511816802.028

Hartel, J. (2017). Adventures in visual analysis. *The Visual Methodologies Journal (Special Issue: Fourth International Visual Methods Conference*), 5, 80–91.

Konecki, K. (2011). Visual grounded theory: A methodological outline and examples from empirical work. *Revija za Socioloģiju*, 41, 131–60. doi:10.5613/rzs.41.2.1

Langer, S. K. (1967). *Mind: An essay on human feeling*. Baltimore, MD: The Johns Hopkins Press.

Leeuwen, T. V., & Jewitt, C. (2001). Handbook of visual analysis. Thousand Oaks, CA: SAGE.

Lima, L., & **de Lemos, M. S.** (2014). The importance of the instructions in the use of draw-and-write techniques for understanding children's health and illness concepts. *Psychology, Community & Health*, 3, 146–157. doi:10.5964/pch.v3i3.95

Mair, M., & Kierans, C. (2007). Descriptions as data: Developing techniques to elicit descriptive materials in social research. *Visual Studies*, 22, 120–136. doi:10.1080/14725860701507057

Mannay, D. (2015). Making the visual invisible: Exploring creative forms of dissemination that respect anonymity but retain impact. *Visual Methodologies*, 3, 68–76.

Pridmore, P., & **Bendelow, G.** (1995). Images of health: Exploring beliefs of children using the "draw-and-write" technique. *Health Education Journal*, 54, 473–488. doi:10.1177/001789699505400410

Pridmore, **P.**, & **Lansdown**, **R.** (1997). Exploring children's perceptions of health: Does drawing really break down barriers? *Health Education Journal*, 56, 219–230. doi:10.1177/001789699705600302

Rose, G. (2016). Visual methodologies: An introduction to interpreting visual materials (4th ed.). London, England: SAGE.

Varga-Atkins, T., & **O'Brien, M.** (2009). From drawings to diagrams: Maintaining researcher control during graphic elicitation in qualitative interviews. *International Journal of Research & Methods in Education*, 32, 53–67. doi:10.1080/17437270902759998