

Rhetorical Tools for Discovery and Amplification of Design Arguments

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- 1 Aristotle defined the genre of deliberative rhetoric to advise about what to do: Aristotle, *On Rhetoric: A Theory of Civic Discourse*, trans. George A. Kennedy (New York: Oxford University Press, 1991), 1358b.
- 2 Considering deliberation as a means to reflect on your own argument dates back to Isocrates. In modern rhetoric we also find descriptions of self-deliberation and being your own audience. See, for example, Chaim Perelman and Lucien Olbrechts-Tyteca, *The New Rhetoric: A Treatise on Argumentation*, trans; John Wilkinson and Purcell Weaver (Notre Dame, IN: University of Notre Dame Press, 1969), 44; Kenneth Burke, *A Rhetoric of Motives* (Berkeley: University of California Press, 1969), 37.
- 3 Richard Buchanan, "Myth and Maturity: Toward a New Order in the Decade of Design," *Design Issues* 6, no. 2 (Spring 1990): 78.
- 4 Richard Buchanan, "Design and the New Rhetoric: Productive Arts in the Philosophy of Culture," *Philosophy and Rhetoric* 34, no. 3 (2001): 198.
- 5 Buchanan, "Design and the New Rhetoric," 194. For further writings on this argumentative perspective, see Richard Buchanan, "Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice," in *Design Discourse. History. Theory. Criticism*, ed. Victor Margolin (Chicago: University of Chicago Press, 1989), 91–110.
- 6 For writings on design and rhetorical genres, see Buchanan, "Declaration by Design," 91–110; Per L. Halstrøm, "Design as Value Celebration: Rethinking Design Argumentation," *Design Issues* 32, no. 4 (Autumn 2016): 40–51.
- 7 See, for example, Buchanan, "Declaration by Design," 91–110; Buchanan, "Myth and Maturity," 70–80; Richard Buchanan, "Rhetoric, Humanism, and

A design process can be defined as a deliberative process about how to design persuasive artifacts. When designers during their design process argue for one way of creating a solution over others, this can be classified as an act of *deliberative rhetoric*, because they are seeking to persuade an audience about what to do.¹ The audience of this form of rhetoric may be fellow team members, clients, investors, users, or even the designers themselves when self-deliberating.²

Rhetoric is particularly relevant to design studies and design practitioners. Buchanan claims that "the ability to explain is an integral part of practice: it enables the designer to judge the progress of work at each stage and persuade colleagues and clients that a particular design is effective in a given situation."³

In later writings, he took these rhetorical perspectives further. Not only the design process can be considered as a form of argumentation, but design products may also be perceived as instances of argumentation. Buchanan argued that if a product is "persuasive in the debate about how we should lead our lives, it is so because a designer has achieved a powerful and compelling balance of what is perceived to be useful, usable and desirable."⁴ Correspondingly, we may perceive all products as "vivid arguments about how we should lead our lives."⁵

This means that rhetorical theory on argumentation is important to designers on two levels. The design process may be considered a process of argumentation, and the designed artifacts themselves may be considered as arguments about how to lead our lives.⁶

The relationship between rhetoric and design has been explored in many publications over the years.⁷ As thorough as these studies are, they provide few concrete answers to how rhetorical theory may support practicing designers in developing and reflecting on the actual arguments they make in the form of artifacts.

If designers design arguments about how to lead our lives, then we must contend with the question of how to discover and judge such arguments. It resembles what Cicero considered to be at the core of argumentation, and what McKeon picked up on in writings on design as an architectonic art: "Invention is the art of

Design," in *Discovering Design: Explorations in Design Studies*, ed. Richard Buchanan and Victor Margolin (University of Chicago Press, 1995), 23–66; Richard Buchanan, "Human Dignity and Human Rights: Thoughts on the Principles of Human-Centered Design," *Design Issues* 17, no. 3, (Summer 2001): 35–39; Richard Buchanan, "Design and the New Rhetoric: Productive Arts in the Philosophy of Culture," *Philosophy and Rhetoric* 34, no. 3, (2001): 183–206; Richard Buchanan, "Strategies of Design Research: Productive Science and Rhetorical Inquiry," in *Design Research Now: Essays and Selected Projects*, ed. Ralf Michel (Boston: Birkhäuser, 2007), 55–66; Nathan Crilly, David Good, Derek Matravers, and John P. Clarkson, "Design as Communication: Exploring the Validity and Utility of Relating Intention to Interpretation," *Design Studies* 29, no. 5, (2008): 425–57; Sonja K. Foss, "Theory of Visual Rhetoric," in *Handbook of Visual Communication: Theory, Methods, and Media*, ed. Ken Smith et al. (Mahwah, NJ: Lawrence Erlbaum, 2005), 141–52; Erin Friess, "Designing from Data: Rhetorical Appeals in Support of Design Decisions," *Journal of Business and Technical Communication* 24, no. 4 (2010): 403–44; Stephen Frith, "A Primitive Exchange: On Rhetoric and Architectural Symbol," *Architectural Research Quarterly* 8, no. 1 (2004): 39–45; Bill Hart-Davidson, "Shaping Texts that Transform: Toward a Rhetoric of Objects, Relationships, and Views," in *Technical Communication and the World Wide Web*, ed. Carol Lipson and Michael Day (Mahwah, NJ: Lawrence Erlbaum, 2005), 27–42; David S. Kaufer and Brian S. Butler, *Rhetoric and the Arts of Design* (Mahwah, NJ: Lawrence Erlbaum, 1996); Richard McKeon, "The Uses of Rhetoric in a Technological Age: Architectonic Productive Arts," in *The Prospect of Rhetoric*, ed. Lloyd F. Bitzer and Edwin Black (Englewood Cliffs, NJ: Prentice Hall 1971), 44–63; Richard McKeon, *Rhetoric: Essays in Invention and Discovery* (Woodbridge, CT: Ox Bow Press, 1987); Richard Patterson, "What Vitruvius Said," *Journal of Architecture* 2 (1997): 355–73; Per L. Halstrøm and Per Galle, "Design as Co-Evolution of

discovering new arguments and uncovering new things by argument, while judgment is the art of testing arguments, proving conclusions, and verifying statements."⁸

Buchanan explored the question of how to create a rhetorical framework for design, and proposed the four questions from stasis theory as foundational for this.⁹ Elaborating on his work, I propose a rhetorical framework for developing design arguments. I intend to exemplify how Hermogenes's method of *amplificatio* may be useful for supporting designers in uncovering new things by argument.

The intention is not to pursue the design method movement's writings on the stages in a design process, such as, *Analysis, Synthesis, and Evaluation*, nor publications by the advocates of design thinking, such as, *Empathize, Define, Ideate, Prototype, Test*.¹⁰ Neither is it an attempt to add to the list of available design methods; instead, *amplificatio* should be thought of as a strategy of inquiry that designers can use to strengthen their design deliberation and design arguments.

This article explores how rhetorical theory on discovering arguments and amplification of arguments can lend support to designers' practice in two ways: (1) exploring an abundance of ways of designing persuasive artifacts to concrete audiences in concrete situations, and (2) deliberating about their process choices and solutions.

To begin, I introduce a method from Hermogenes concerned with amplification of arguments.¹¹ The method consists of and builds on a tradition of *topoi*, meaning "places" in a metaphorical sense of the word.¹² Second, I attempt to make concrete how these *topoi*, originally reserved for the amplification of verbal arguments, can be translated into design practice. I propose ideas about how *topoi* can help designers tease out ideas about making their designs more persuasive. Third, I argue for the importance of *designing* design methods and propose that such practices may benefit from the use of *topoi*.

To further exemplify how *topoi* can be used in design and design educational practice, this article ends by presenting a design student's MA project, in which *topoi* were deliberately used for designing urns.

Topoi as Means of Amplification

Rhetorical *topoi* may be conceived of as places to discover new perspectives and arguments about a case. *Topoi* are often mentioned in writings on rhetoric and design, but a closer examination of how they may be used in concrete design practice to strengthen design processes and arguments is needed.¹³

- Problem, Solution, and Audience," *Artifact* 3, no. 4 (2015): 3.1–13; Halstrøm, "Design as Value Celebration."
- 8 McKeon, *Essays in Invention and Discovery*, 59.
- 9 Buchanan, "Design and the New Rhetoric," 187.
- 10 See, for example, D. School, *A 90-Minute Video-led Cruise through Our Methodology*, Hasso Plattner Institute of Design at Stanford, <http://dschool.stanford.edu/dgift/> (accessed April 14, 2016).
- 11 Hermogenes, "Om Argumenter (Epikheirēmata)," [On Arguments (my translation)], *Rhetorica Scandinavica*, no. 33, trans. Christian Kock (2005): 10–16.
- 12 The traditions of topoi are explored further in depth in numerous writings. See, for example, Jonas Gabrielsen, *Topik—Ekskursioner i den retoriske toposlære* [Topics—Excursions into Rhetorical Teachings (my translation)] (Birkerød: Retorikforlaget, 2008); Michael C. Leff, "The Topics of Argumentative Invention in Latin Rhetorical Theory from Cicero to Boethius," *Rhetorica* 1, no. 1 (1983): 23–44; Mark Backman, "Introduction: Richard McKeon and the Renaissance of Rhetoric," in *Rhetoric—Essays in Invention and Discovery—Richard McKeon*, ed. Mark Backman (Woodbridge, CT: Ox Bow Press, 1987), vii–xxxii; William M. A. Grimaldi, *Studies in the Philosophy of Aristotle's Rhetoric* (Wiesbaden: Franz Steiner, 1972).
- 13 Two comprehensive examples of rhetorical topoi being used in design research may be found in Kaufer and Butler, *Rhetoric and the Arts of Design*, 49–57; Brigitte Trousse and Henri Christiaans, "Design as a Topos-based Argumentative Activity: a Protocol Analysis Study," in *Analysing Design Activity*, ed. Nigel Cross, Henri Christiaans, and Kees Dorst (Chichester, England: John Wiley and Sons, 1996), 365–88.
- 14 Depending on the language used to describe topoi, they may be referred to as common places, loci, or loci communes.
- 15 Ole Tøgeby, *Steder i Bevidsthedens Landskab—Grene på Ideernes Træ*, [Places in the Landscape of the Mind—Branches on the Tree of Ideas (my translation)] (Aarhus, Denmark: Aarhus Universitetsforlag, 2009).
- 16 Aristotle, *Rhetoric*, 1358a.

Topos (*topoi* is the plural form) is the Greek word for "place."¹⁴ Tøgeby has illustrated how topoi provide material for journalists who want to cover a subject in full.¹⁵ The Danish title of his book translates into *Topics – Places in the Landscape of the Mind*. Using the landscape metaphor is useful for conceiving topoi. When developing ideas, journalists may visit various viewpoints from where they can discover material for their writings. An example could be reporters writing about refugees. When considering what to write they may direct their attention toward different "places" (or realms). One could be "economy"; another "war." In turn, this could lead to a story about how refugees affect the economy of the EU, the wars refugees flee from, and perhaps how wars and refugees on a larger scale have affected European countries.

Another commonly used list of topoi is what, when, why, how, who, and where. Lists of topoi have been made for various purposes. Aristotle listed twenty-eight topoi, which he divided into subcategories based on how general (*kanoi topoi*) and specific (*idia topoi*) they were.¹⁶ Grimaldi (1972) and Gabrielsen (2008) proposed that Aristotle's topoi were to be categorized—not by how general or specific they were, but in relation to how they were used. Cicero listed seventeen topoi in his work on rhetorical invention.¹⁷ He wrote about topoi primarily in relation to the invention of arguments: "Every systematic treatment of argumentation has two branches, one concerned with invention of arguments and the other with judgment of their validity."¹⁸ He too explained topoi by drawing on the metaphor of place:

It is easy to find things that are hidden if the hiding place is pointed out and marked; similarly if we wish to track down some argument we ought to know the places or topics: for that is the name given by Aristotle to the "regions," as it were, from which arguments are drawn.¹⁹

Accordingly, Quintilian explained topoi metaphorically:

You will not succeed in finding a particular bird or beast, if you are ignorant of the localities where it has its usual haunts or birthplace, as even the various kinds of fish flourish in different surroundings (. . .) and are found on different shores and in diverse regions (. . .) so not every kind of argument can be derived from every circumstance, and consequently our search requires discrimination.²⁰

I hesitate teaching these lists of topoi from Aristotle and Cicero in design schools. As thorough as they may be, they are difficult to introduce to design practice because of how expansive they are. Lanham describes the traditions of topoi as a category "so large as to prohibit enumeration."²¹

An Example of Design *Amplificatio*

In the following section, I introduce how twelve topoi from an ancient text on argumentation by Hermogenes can be used in design.²² These topoi are meant for *amplificatio* (Latin) or *auxesis* (Greek), which is the act of amplifying ideas, content, and arguments to make them forceful. For instance, if I argue for allowing more refugees to enter Denmark, I could amplify this argument by adding that the Danish economy in twenty years' time will benefit from an influx of new citizens. I might further amplify this claim by involving my Syrian friend, Amjad (who recently escaped Syria), who helped me find a tailor in Damascus ten years ago. I might also add that he has two small children, and that rural Danish towns need young families.

Hermogenes proposed a strategy for such *amplificatio*. The topoi defined in his writings were meant for developing arguments and the ways of expressing them. His method for amplification consists of two lists of six topoi each. One list is for exploring circumstances. The other is for parallels. Kock sees these as aids in further amplifying one's argument or thinking through and exploring one's argument.²³

- Circumstance topoi are: place (*topos*), time (*khronos*), way (*tropos*), person (*prosôpon*), cause (*aition*), act (*prâgma*).
- Parallel topoi are: comparison (*parabolê*), example (*paradeigma*), minor (*mikroteron*), greater (*meizôn*), equal (*isos*), opposite (*enantion*).

These twelve topoi of amplification can be traced back to the *Progymnasmata*, which was an education program full of rhetorical exercises.²⁴ For instance, the exercise called Diegema from the *Progymnasmata* was to narrate an event by covering six topoi that resemble the topoi of circumstances. Students were advised to narrate about the main characters, his or her acts, the time of the event, the place of the act, the way the act was carried out, and the cause of the event.²⁵ This exercise was designed to develop specific narrative skills.

I propose that these topoi can be used as a rhetorical framework for designers to explore various ways of amplifying "the claim" they are making in the form of design artifacts. Imagine you are designing an exhibition for a natural history museum.²⁶ You want your audience to experience how scary it must have been to face a real dinosaur. Your aim is to persuade your audience about how intimidating these giants were.

When designing the room for the dinosaur skeletons, you begin by considering the topoi minor/greater, opposite, and place to amplify your claim. One idea may be to lead your audience through a narrow (*minor*) hall before they see the *great* skeletons.

- 17 How topoi of various writers such as Aristotle and Cicero overlap and separate both semantically and in their intended use is described further in depth in: Gabrielsen, *Topik*; Albert W. Halsall, "The Topics in Classical and Modern Theories of Interpretation," *OSSA Conference Archive* (May 15, 1997), Paper 50, <http://scholar.uwindsor.ca/ossaarchive/OSSA2/papersandcommentaries/50> (accessed May 11, 2016).
- 18 Cicero, *De Inventione, De Optimo genere oratorum, Topica* [Cicero, On Invention—The Best Kind of Orator, Topics], trans. H. M. Hubbell (Cambridge, MA: Harvard University Press, 1976), 387.
- 19 Ibid.
- 20 Quintilian, *Institutes of Oratory*, ed. Lee Honeycutt, trans. John Selby Watson (2006), <http://rhetoric.eserver.org/quintilian/> (accessed April 14, 2016), 5.10.20–22.
- 21 Richard A. Lanham, *A Handlist of Rhetorical Terms* (Berkeley: University of California Press, 1969), II.6, 7–8, 387.
- 22 Hermogenes, "Om Argumerter (Epikheirêmata)."
- 23 Christian Kock, "Om Hermogenes" [About Hermogenes (my translation)], *Rhetorica Scandinavica*, no. 33, trans. Christian Kock (2005): 6–10.
- 24 Further writings on the Progymnasmata tradition may be found in George A. Kennedy, *Progymnasmata: Greek Textbooks of Prose Composition and Rhetoric* (Atlanta: Society of Biblical Literature, 2003); Stina Hansson, ed., *Progymnasmata—Retorikens bortglömda text- och tankeform* [Progymnasmata—The Forgotten Rhetorical Form of Text and Thought (my translation)] (Åstorp: Rhetor Förlag, 2003).
- 25 Stina Hansson, "Prolog—Presentation av Progymnasmata och av Föreliggande Bok" [Prologue—A Presentation of Progymnasmata as well as this book (my translation)], in *Progymnasmata*, 12.
- 26 The example provided here is invented only to exemplify how topoi may tease out ideas about ways of amplifying the main design argument.

You decide to work further with *opposites* to create contrasts between rooms (*place*) to make the skeletons appear surprisingly large (*greater*). You look at places in the room, such as walls, ceiling, and floors (*place*), and decide to decorate them with overwhelming figures and sounds (*greater*) that intimidate the audience to make them feel small (*opposite/minor*). You use a room with small windows and low lighting (*minor/place*) to make people feel trapped with these ancient animals. You use a room overlooking a lake, forest, or sea (*greater/place*) to make the audience feel small (*minor/opposite*). You use mirrors to reflect the image of a dinosaur in the room (*greater/place*) while the audience is only allowed to enter one person at a time (*minor*). You create lighting that extends the shadows of the dinosaurs, thus making them appear larger (*greater*) in the room. And so forth.

When designers believe they have exhausted these topoi, they may add new ones to amplify the design further. It may be fruitful to consider the *time* people visit—winter, late evening, early morning, and so on—in relation to the *way* they are used to moving through an exhibition. This will help designers develop ideas about how to make an audience feel out of place and out of balance. For instance, leaving people alone in the room with the fossils would amplify the feeling of being trapped and having no control.

Each topos, as shown here, helps the designer tease out ideas about how to amplify the claim of the exhibition (that dinosaurs were giant, intimidating animals) and, thus, increase its force. Obviously, much more work needs to be done after such a conceptual exercise. The foregoing is only to exemplify how designers can use these tools for amplification.

Deliberating About and Amplifying Design Arguments

This article proposes various ways that designers may benefit from using topoi. Initially, using topoi can help designers generate ideas about how to make an artifact more persuasive (as in the exhibition example). The topoi become a design thinking method to be used when the aim is to amplify the design argument.

The second way of using the topoi is for the purpose of discovering arguments for design process choices, which may help designers in persuading clients, producers, fellow team members, and themselves. This is closer to what Hermogenes intended his method to be used for: to develop arguments in the form of words.

The topoi may provide designers with knowledge of how to develop arguments for their choices in the design process and thus strengthen their verbal rhetorical skills. For instance, designing the lighting in a room at a natural history museum in a certain way might be difficult to defend. If one is unable to argue persuasively

why this way of designing will be more effective than others, it will be difficult to persuade clients, oneself, and one's team. The answer may be found by exploring topoi such as "greater," "comparison," and "example." One's argument for the choice of lighting could follow this logic: "the lighting, by casting long shadows, makes the dinosaurs appear larger (greater), resembling effects that have been used in thrillers and horror movies (comparison)—as in for instance, *Nosferatu* or *The Sorcerer's Apprentice* section in Disney's *Fantasia* (example)."²⁷

There is a slight change of focus when developing verbal arguments. Nevertheless, designers will find it difficult to create this kind of argumentation without having been through a thorough process of looking for abundant means of amplification in their design argument. However, to strengthen both forms of argumentation, designers are in need of skills to not only generate an abundance of ideas for amplification but also for generating ideas based on knowledge of real users in specific situations.

In the following sections, I explore how designers can relate their ideas for amplification to concrete users in specific situations and exemplify this by introducing an example of a design student's attempt at using topoi in her work.

The Problem of Design Method Validation

Designers and design researchers have sought to make explicit the ways of conducting a design process since the early attempts of the design methods movement.²⁸ Jones proposed methods of invention.²⁹ Kuntz and Rittel proposed the IBIS method to promote discussions and debates in a design process.³⁰ The intention of the central figures of this movement—such as Archer, Rittel, Jones, or Alexander—was "to provide the designer with new tools for invention and discovery in practice."³¹ Also, their writings have been attempts (at least in the cases of Archer and Rittel) to uncover the discipline of design.³²

Since these early design method writings, researchers from various fields have pointed to the problem of validation. This may be validation of solutions as well as methods.³³ Lee argues that research in design methods should not be conducted with the aim of validating a certain method. Rather, designers and researchers should consider the design of methods as an important part of the design process itself.³⁴

Lee introduces several reasons in support of her perspective. One reason is the ever-changing user groups and situations that designers must address.³⁵ She mentions the cultural probes of Gaver and colleagues as an example of method development that was specifically designed for users and their environments. Gaver

27 See <http://www.theguardian.com/film/filmblog/2012/aug/23/clip-joint-shadows> (accessed May 2, 2016).

28 Nigel Cross, "Forty Years of Design Research," *Design Studies* 28 (2007): 1–4.

29 John Christopher Jones, *Design Methods: Seeds of Human Futures* (London: John Wiley & Sons, 1970).

30 Werner Kunz and Horst W. J. Rittel, "Issues as Elements of Information Systems," *Working Paper* no. 131. Berkeley: Institute of Urban and Regional Development. University of California, 1970, 275–86.

31 Richard Buchanan, "Thinking about Design: An Historical Perspective," in *Handbook of the Philosophy of Science. Volume 9: Philosophy of Technology and Engineering Sciences*, ed. Anthonie Meijers (Oxford: Elsevier, 2009), 444.

32 Buchanan, "Thinking about Design," 447.

33 See, for example, Pieter Vermaas, "On Managing Innovative Design Projects Methodologically: The Case of Framing," in *Proceedings of the 2nd Cambridge Academic Design Management Conference* (Cambridge, UK, September 4–5, 2013), 555; Jung-Joo Lee, "The True Benefits of Designing Design Methods," *Artifact* 3, no. 2 (2014): 5.1–12.

34 Lee, "The True Benefits of Designing Design Methods," 5.10.

35 *Ibid.*, 5.3.

et al. themselves emphasize that the real strength of their method was that it was designed for “those people, and their environments.”³⁶ Seeking to validate a method based on how generalizable it may prove to be, and how well others may be able to reuse it, does not acknowledge the importance of designing methods specifically for the users and their environments.³⁷

Another reason for shifting away from proving the validity of a method in a generalized way is that this perspective fails to acknowledge the designer’s role as a facilitator in a research process. Kankainen and colleagues, in their writings on the storytelling group method, stressed the importance of having a designer to guide the group toward design opportunities.³⁸ Similarly, Westerlund points toward this in describing the importance of the designer’s role in framing the design space in co-design sessions.³⁹ A certain design method may work well in one or several situations; yet, it depends as much on the method as on the designers using it, the solution spaces, the potential user groups, and the design situations.

According to Lee, a common fallacy in conclusions of design method publications is that they often state that further explorations of the proposed method is required to validate it.⁴⁰ Such statements suggest that validation is possible, and therefore fails to acknowledge that design methods are not abstract, objective, reusable, and disconnected from designers and what they may study. In alignment with this, Boehner and colleagues have criticized treating methods as recipes in research papers.⁴¹ They found that researchers often cite cultural probes as a method without describing how the specific probes were developed and used in relation to the specific field of study.

While researching the way design students write their design synopses, programs, and reports in two design schools, I came across a similar tendency.⁴² In sections on methods, students often list that they will do or have done “user research,” “interviews,” “sketching,” and “prototyping,” but they fail to specify their specific approach. When writing about methods as if they were recipes, they may be at risk of treating methods as data-producing agents. In turn, this may make them reluctant to assume the role of designer when preparing to intervene to highlight the design space and design opportunities to the group they work in, the people they may be working for, and most of all to themselves, as Westerlund and Kankainen advise.⁴³

As much as designers need methods for getting to know users and their situations—whether by handing out questionnaires, conducting probes, doing observations, through storytelling, co-designing with users, or merely by getting inspiration from

36 Bill Gaver, Tony Dunne, and Elena Pacenti, “Cultural Probes,” *Interactions* 6, no. 1 (1999): 29.

37 Lee, “The True Benefits of Designing Design Methods,” 5.3.

38 Anu Kankainen, Kirsikka Vaajakallio, Vesa Kantola, and Tuuli Mattelmäki, “Storytelling Group: A Co-design Method for Service Design,” *Behaviour and Information Technology* 31, no. 3 (2012): 221–30.

39 Bo Westerlund, “Design Space Exploration: Co-operative Creation of Proposals for Desired Interactions with Future Artefacts” (PhD diss., Kungliga Tekniska högskolan, Stockholm, 2009).

40 Lee, “The True Benefits of Designing Design Methods,” 5.3.

41 Kirsten Boehner, Janet Vertesi, Phoebe Sengers, and Paul Dourish, “How HCI Interprets the Probes,” in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (New York: ACM Press, 2007), 1077–86.

42 I do not intend to generalize about this. It may be different in other design schools. Also, I taught writing courses at both institutions, so the problem may be due to my own lack of teaching skills. I only mention this as something to be aware of as design educators because it may be a symptom of a problematic way of perceiving and using methods in a design process.

43 Westerlund, “Design Space Exploration”; Kankainen, Vaajakallio, Kantola, and Mattelmäki, “Storytelling Group,” 221–30.

other artifacts—they also need tools for designing methods and, arguably, rhetorical skills to deliberate about the methods they design. What I propose here is not a method that is either valid or invalid. I propose that a framework such as the one described by Hermogenes may be useful when designing methods that are to make designers discover various perspectives and insights about the users and their situations, eventually leading to the creation of persuasive artifacts.

Designing Methods from Topoi

To exemplify, topoi may be used for turning an abstract method such as “doing observations” into a concrete practice of designing methods. A team of designers may want to do observations in a hospital.⁴⁴ But they lack ways of discovering something that will teach them about these users and their situations other than what appears at first glance.

The topoi can help in designing methods for exploring an abundance of perspectives rather than what they would stumble on by chance or by having only one perspective at hand. Designing a method based on for instance “time,” “person,” “act,” and “minor” will allow designers to frame their observations. They begin by observing: what happens (act) during the shortest (time/minor) forms of conversations (act) between patient and staff (person)? This may lead to ideas about how technology can prepare patient and staff for such interactions.

Using the topoi “person,” “act,” “way,” “place,” and “example” to explore the topos “greater” may provide another perspective. This may lead to questions for staff and patients (person): “Please tell me (example) about the greatest thing you have done (act) today? Please tell me (example) about the greatest thing you have seen someone do (act) today? Please make a drawing of (way/example) the greatest thing that happened (act) to you in this hospital? Describe (example) how (way) the rooms and the interior (place) might have or might (way) invite such acts.” Such questions might lead to ideas about how to promote acts of kindness in hospitals. The topoi provide a method for teasing out ideas about how to discover insights about real lives of people in real places by directing designers’ attention—insights that might not have been explored otherwise.

Concerns might arise about the ethics of conducting research by use of this method in this particular place. Therefore the designers should be able to make their reflections and concerns explicit to the stakeholders involved. They might use the topoi “way,” “person,” “time,” “act,” and “place” for this. The *way* of approaching various types of patients (person) should be

44 The example provided here is invented only to exemplify how topoi may tease out ideas about ways of designing methods.

considered. Should they approach people in emergency rooms in other ways than cancer patients sitting with relatives? The *place* and *time* of approaching patients and staff is crucial. The researcher's body language (act) should be considered, and so forth.

Obviously, I do not claim that these questions and perspectives could not have been explored without the use of topoi. The topoi can assist designers in being thorough in their process of developing ideas about how to experience users and their situations from various perspectives. Also, it may be argued, in alignment with Lee, that while the designers are deliberating about their methods they become wiser on the users and their situations, since they develop empathy when considering the questions that may or may not be appropriate and relevant to ask in these situations.

The designers might use topoi for designing methods and making arguments about their choices of methods explicit.

Exploring Users, Situations, and Ways of Amplifying Design Arguments

The final example of this article stems from an MA project by Camilla Monsrud who studied furniture design at the Royal Danish Academy of Fine Arts. I introduced Hermogenes's topoi to her two years earlier.⁴⁵

Monsrud wanted to make urns. They were to be conceived as the final piece of furniture for the human body. Her project exemplifies how designers may use topoi both as a method, by creating a map of "regions" to be explored when looking for insights about users and their situations, and as a way of amplifying design arguments.

In terms of argumentation, her urns were aiming to persuade the bereaved to create a ritual of honoring the deceased in a personal way. To explore means of amplifying this, she predominantly used the topoi concerned with circumstances.

During her process some topoi were intentionally made more specific. *Time* was divided into subtopoi because it provided much relevant information. This helped her explore and structure the design process.

Act (prâgma): The Act of Performing the Ritual

During qualitative interviews, Monsrud discovered that people found it disturbing that their last contribution to the world was an act of pollution (the burning of coffins creates pollution). Monsrud thought of making a slide inside coffins. This would allow the body to be slid into the fire, so that the coffin would not have to be burned.

45 The example stems from a qualitative interview with Monsrud. The example is not provided to validate the method but to exemplify how topoi may be useful in a design project. How the project turned out is irrelevant here, although it earned the highest grade. I do not claim that this would not have happened without her use of topoi. Like all tools, topoi do not guarantee success.

Time (khronos): The Time before the Ritual

People were concerned with funeral costs being too expensive for the bereaved. This spoke in favor of the idea of the slide, allowing coffins to be reused. Monsrud also considered coffins made of cardboard. She decided, though, that this would work against her intention to make the ritual a moment of honoring the deceased in a personal way.

Act (prâgma): The Act of Scattering Ashes

People experienced being insecure about how to scatter ashes. This became the focus of attention. Monsrud worked on urns to inform how the ashes were to be scattered. One form might suggest that the ashes were scattered by a united group of people. An elongated form or spade-like urns might suggest ways of scattering, too. By directing courses of action, the urns might support the bereaved in keeping memories of the deceased at the center of their attention.

Way (Tropos): The Way the Urn Is Made

Different materials may be used for different urns. An urn may be developed for users who wish to scatter its material with the ashes. Also, if the urns are ceramic, the bereaved can be included in a ritual of painting or glazing urns together.

Time (khronos): Felt Time

To enhance the moment of personal honoring, Monsrud worked with urns in the shape of an hourglass. This was to extend the time of scattering. Using transparent materials made people see the scattering while contemplating the deceased.

Time (khronos): The Time after the Ritual

Monsrud looked into materials that would last for many years, allowing users to keep urns as memorials. To enhance the feeling of having a personal memento to prompt thoughts of the deceased, she also worked on smaller memorials.

Place (topos): Places for the Urns

Monsrud discovered that in Denmark, people are not allowed to keep urns with ashes in private homes. She reconsidered the memorial idea and made small objects as places to remind the bereaved of the deceased. See Figure 1.

Time (khronos): The Time It Takes for the Urn to Disappear

Monsrud worked with materials and colors that would make the urn sink in the sea or dissolve while being visible to the bereaved. This was to prevent the bereaved from having to smash the urn and discard the potsherds, which might feel disrespectful. She worked with gelatin to make transparent urns that dissolve in water.

Figure 1

Memorials that might contain a ring or a personal note. © Kristian Touborg.



Place (topos): Places for Ashes to be Scattered

When scattering ashes into water an elongated form may work well, especially on windy days. The same may be said for scattering ashes into soil. However, it might be easier to dispose the urn with the ashes. Monsrud used gelatin and a round shape to support such acts. See Figure 2.

Person (prosōpon): The Persons Involved

Funeral directors told Monsrud that they often received requests for special urns for children. She worked on child-sized urns as well as colors and materials that appealed to children. She worked on urns that could be painted and glazed by the bereaved and handles that would invite children to take part in scattering. Eventually, she decided that since the urns primarily were to promote an honoring and personal farewell, they needed to create a feeling of sublimity by their form, materials, and colors.

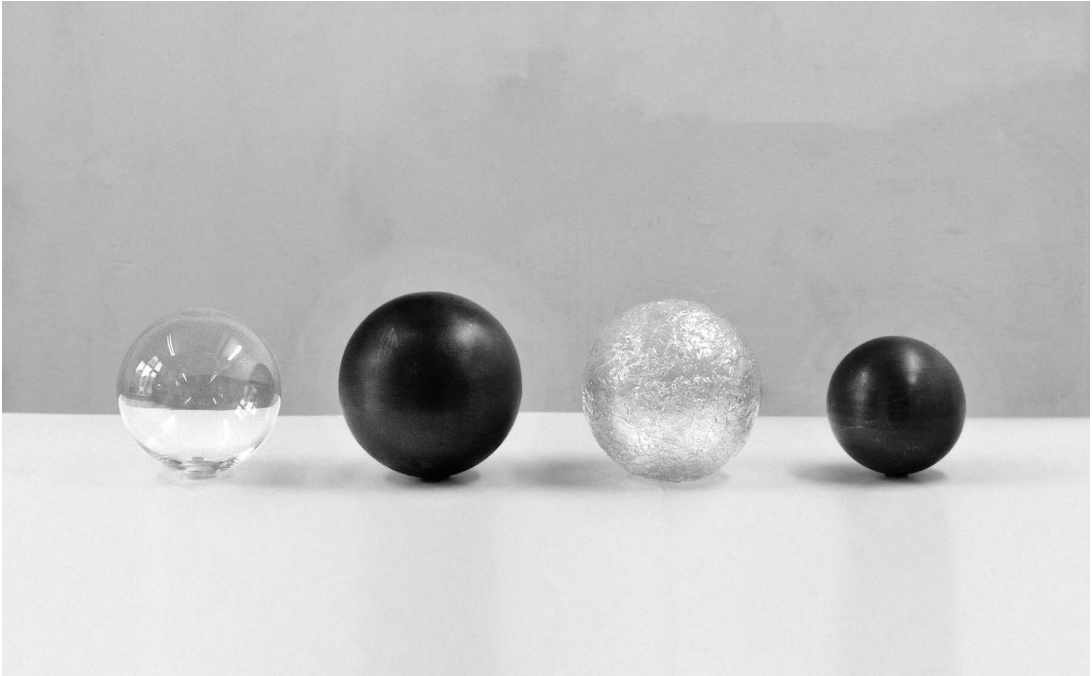


Figure 2 (above)

From left to right: Urn made of glass for columbarium. Urn made of metal for columbarium. Urn made of gelatin to dissolve in water. Child sized urn made of metal. © Kristian Touborg.

Figure 3 (right)

Urns made for couples. © Kristian Touborg.





Figure 4

Urns made visibly interesting to generate conversations about the ritual among relatives. From left: Urn made of ash wood to be disposed in soil. Urn made of steel for the columbarium. Urn made of chalk to be disposed in soil. © Kristian Touborg.

Cause (aition): Causing the Ritual to Feel Impersonal

Monsrud discovered that people found it difficult to start conversations with relatives about how they wanted the ritual to be conducted. She considered making urns so visibly interesting that they became objects of admiration and discussion. Then people might use the urns as starting points for conversations about personal wishes. Furthermore, she worked on urns especially made for couples. Again, this was to generate a conversation about personal wishes. See Figures 3 and 4.

Monsrud's process was far richer and more complex than what I have described here. This is only to demonstrate how topoi can promote a structured way of considering various "places" in a design process to tease out ideas of how to amplify the argument in ways that address concrete audiences.

Some ideas fit several topoi. The goal of using topoi is not to use them correctly or separately but to discover abundant means of persuasion. Monsrud's example could presumably become an ever-expanding process, but the topoi should be used to trigger the imagination and as a means to develop a strategy of deliberation and self-deliberation in a design process rather than being treated as a rigid system to exhaust a subject of interest.

Abundant Means of Amplification

The topoi proposed in this article are surely not the only ones from this rich rhetorical tradition to fit design projects. I have proposed twelve from Hermogenes because they are deliberately vague and

abstract as to invite subtopoi and thus further development to make them fit different projects. Also, the number of them is not too overwhelming.

Presumably, topoi such as those proposed here may be used for other purposes in design. They could be useful for analyzing and critically assessing how well a design has been thought through. Whether examining a train station, a travel agent app, or a race car, one may develop analysis and critiques based on how well the designers have explored topoi such as time, place, act, and opposite to make their solutions persuasive.

As instructors at design schools, we can use topoi to make our examination questions address students' projects from different points of view. If the design process is perceived as deliberation, the question becomes not just a matter of functionality, aesthetics, problem solving, or whether valid methods were used in the process. The question of concern should be whether the designers have explored and selected among the available means of persuasion to address concrete audiences in concrete situations. Arguably, the method proposed here may help designers in deliberating and self-deliberating, and thus help them, quoting Buchanan, "to judge the progress of work at each stage and persuade colleagues and clients that a particular design is effective in a given situation."⁴⁶

The topoi mentioned here may be used to support designers in exploring not just what occurs to them by chance in a design process but also what would not have occurred to them without such topoi. If used well, they may help designers create an abundance of design possibilities, from which they can intentionally select. I have argued that topoi such as the ones from Hermogenes can be efficient tools to support designers in deliberately looking through and making choices between a rich variety of means for amplifying their design arguments, addressing real users in concrete situations, and that this will benefit not only the artifacts they are designing but also their skills in deliberating about the creation of these.

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46 Buchanan, "Myth and Maturity," 78.