Making Arguments in Practice and in Studio

Richard Hoag
Department of Architecture
rhoaq@ksu.edu

David Smit
Department of English
dws@ksu.edu

Kansas State University, Manhattan, KS 66506 USA

Arguments in Architectural Practice

In 2010, we received a grant from the United States National Council of Architectural Registration Boards (NCARB) to study the writing of architects. We interviewed five architects, representatives of a small firm, a firm that specializes in stadiums, and two medium-sized multi-disciplinary firms, all in the Midwest. In addition we interviewed the principal of a large international firm in New York, the real estate development director for Disney, and a former State Architect for Kansas.

We collected representative samples of the writing done by these architects or by members of their firms. During the interview process, we also asked the architects for other kinds—or genres—of writing they did that was similar to or different from the genres we had already collected. From the samples we collected and from the additional notes from interviews, we created a typology of over 30 written genres regularly used by architects in practice. [See Appendix item 1].

Then we analyzed the samples to test a hypothesis that we had entertained for some time: that the writing of architects is primarily rhetorical, persuasive, and multi-modal. By rhetorical, we mean that writing always takes place in a particular context, and writing must be adapted to the purposes of the writer, the genre she is using, and the audience she is addressing. Such contexts may include the writer herself in the process of design, jury members and clients, and fellow professionals, such as contractors and engineers.

The writing of architects is primarily persuasive. In A Theory of Discourse James Kinneavy, a major figure in rhetorical theory, divides all writing into four categories: expressive, informative, persuasive/argumentative, and literary. To Kinneavy the primary purpose of expressive writing is to convey a sense of the writer’s point of view, the primary purpose of informative writing is to describe accurately and to convey information effectively, the primary purpose of persuasive writing is to change the audience’s mind or move them to action, and the primary purpose of literary writing is to draw attention to the textual features of the writing itself, to demonstrate that the writing is well crafted. Thus, contrary to our usual association of literary writing with imaginative work, such as fiction and poetry, to Kinneavy, expressive, informative, and persuasive writing can also be literary in the sense that genres with these purposes can be well crafted.

Our interviewees/ informants told us that much of what they wrote involved “selling” their designs to clients and juries, through proposals, Requests for Qualification (RFQs) and Requests for Proposals (RFPs). They even thought that the web pages for their firms involved “selling” their experience and expertise to potential clients. When we explained that “selling” seemed like persuasion to us, they universally agreed. In examining the genres used by architects, we had to agree. Most of the major writing in the field of architecture is not primarily descriptive or explanatory but persuasive. In briefs and programs, in responses to clients and fellow professionals, in award submissions, architects are not primarily describing their designs or conveying information about the features of their designs; they are persuading their audiences that their designs are fulfilling the requirements of the program, providing what their audiences want or need, whether they know it consciously or not.

Persuasion necessarily involves making claims or propositions, controversial statements that must be supported with evidence. Because images alone can be interpreted differently according to the background and experience of those looking at them, architects cannot rely on images alone to persuade their audience that their designs should be accepted. To put it another way, images cannot directly state claims and propositions; they can only imply such
claims. We know from research in visual cognition that we can miss what is right in front of us, that different people can consistently miss the same and different things in their visual fields. We now know that “seeing” is not photographic and that it is more of a construction project than we originally thought. We miss things in static displays, we miss things in dynamic visual displays, we miss things in real word simulations (see Simons and Chabris 1999, Enns 2004, Chabris and Simons 2010, Chabris, Weinberg, Fontaine, and Simons 2011).

As a result, the writing of professional architects is also multimodal: it combines text and image, perhaps because professional architects recognize intuitively that images cannot speak for themselves. We have studied presentations to clients and award submissions written by the firms represented by our interviewees/informants. In every case, the presentations and award submissions were multimodal and persuasive; that is, they combined text and images in order to “sell” the design. The text in effect “cued” the audience into seeing how they should understand the images and how each image contributed to and supported larger claims about the design. The text prepares the audience to “see,” in effect, providing the audience with background information and cueing them, directing their attention to what they should “see” or “understand” about the images.

Our study of writing in professional practice also revealed that most professional architectural prose is much like standard business prose. It is clear, straightforward, and to the point. It is well organized, often using headings and bullet points to signal key ideas. It uses language adapted to its audience: it uses technical terms when addressing fellow professionals; it avoids technical language when talking to clients. Moreover, architectural prose accompanies images of the architect’s designs in documents that are graphically refined.

There is, however, a caveat here and that is that although the graphic displays in their RFQs, Power Points, and webpages are often quite polished visually, their multimodal messages often miss their intended audiences. We have found that many architects are unaware of the basic research in the science of vision that if applied to their graphic displays would make their displays more responsive to the ways their audiences behave.

Unfortunately, when the graphic standards of the profession are used to organize graphic displays on boards and sheets, RFQ’s, award submissions, client presentations, or webpages they often miss their target audiences.

After considerable analysis of the genres and discussion with both architects and academics, we focused on three genres as the most appropriate for novice architects to learn. We chose these genres because in many cases they were identified by practitioners as the most important. In addition, these genres seemed the most appropriate for integration into a studio curriculum, and they seemed to demand the writing skills most likely to transfer from academic work to professional practice. The genres we chose are these:

- Note-taking at meetings and consultations
- Proposals in response to RFQs and RFPs
- Award submissions

In order to give students practice in the skills necessary to write these professional genres, we developed a number of assignments that only exist in the academy, what we call “school writing”:

- Notes from critiques and consultations with professors
- Reports on the implied “arguments” of presentations (claims and evidence for how a student design solves the problems of a program)
- Assessments of how well past and existing building designs solved the problems of particular programs
- Design process reflections
- Checklists of features that these genres should contain.

Note-taking

We use note taking to give our students opportunities to learn to read arguments and to practice transforming the writing they use to talk to themselves into communications that are easily accessible to others. In our formal
critiques of student design work we teach our students to read arguments by having them take notes during their peer’s critiques. By requiring them to take notes during their peers’ critiques we use writing to further their abilities to read arguments. Learning to read the arguments of their peers furthers their abilities to frame and write arguments of their own. We distribute checklists that give structure to their note taking. These checklists are virtually the same as the checklists we give them as prompts for writing arguments. For example a writing checklist prompt might read: “Are you presenting evidence or a rational in support of your claim?” A reader checklist prompt would change to “Did she present evidence or a rational in support of her claim?” The paper checklists we distribute are formatted with space for students to give written responses immediately following each prompt. [See Appendix items 2 and 3]

These checklists are easily modified to focus on record keeping accuracy, an important component of meeting minutes in practice. We have students get together in groups of two and three to check and discuss their notes. After comparing notes they provide the presenting student with the “minutes of her presentation.” The presenting student benefits from the record of the critique she could not keep and may not be able to completely remember, and the note-taking students benefit as they begin to learn what it will take for them to accurately record what they see and hear in class and eventually in meetings in practice.

This is also an opportunity for students to get practice in transforming the visual and verbal notes they make for themselves into formal communications they will eventually use with their professional collaborators in practice. Here they learn about turning the multimodal writing, drawing and diagramming they use to think and remember into a form of multimodal communication that is accessible to an audience of their peers and their professors.

This teaching strategy transforms a normally passive review experience into an active learning experience that furthers the student’s thinking and writing about architecture. Students who normally sit passively, listening and trying not to fall asleep have a task and a framework for completing it. The array of prompts a teacher can use can be crafted to the specific objectives of the studio, from a beginning studio to a capstone studio. Students can also be asked to respond to their class lectures or readings in the same way, by answering these kinds of questions:

“Did anything contradict what you already knew?

Does anything expand or provide more evidence for what you already know?

What don’t you understand?

What support does the speaker give for his or her facts?

What patterns of reasoning does this speaker or writer offer as evidence?” (Smit 2010)

Did the critic provide counter arguments or new information on this particular design solution?

What type of claim is the presenter making?

Would another claim type have been more effective? If so, Why?

Were there violations of principles of graphic display?

It is worth noting that when the studio professor arrives at the student's desk after a mid-critique, this teaching strategy insures there is a record of the critique with the advantage of streamlining the desk critiques, enabling the student to prepare alternative designs and courses of action prior to the professor’s arrival.

**Multimodal Arguments**

We ask our students to make multimodal arguments in brochure and sheet/board formats. These “school argument” formats are meant to simulate RFQ, RFP and award submission formats. When we began developing checklists for students we found our students transferring strategies and writing formats that surprised us. For example, our students transferred the essay format that they learned in high school, a format required by most of their university professors. Their submissions to us were double-spaced, a format that enables their seminar professors to edit and comment on their work, but makes it difficult for the them to effectively match images and texts in a compelling and visual fluent way.
In fact, our students had trouble making multimodal arguments. They had difficulty matching texts and images. This is not surprising because they came to the task with very little practice in putting texts and images together. They wrote essays in their seminars; they learned and applied the graphic principles of contrast, repetition, alignment, and position, to their graphic displays in studio; but they were rarely asked to combine text and image.

We realized that along with the argument checklists that we created for them for RFQs for example, we would also need to give them guidance in matching text and image in their graphic displays on their sheets/boards and in their brochure formats. As we began analyzing the genres of practice we recognized that many professional architects are less adept than we originally thought in thinking rhetorically about their graphic displays. We found that architects are often quite unaware of much of what we know about the science of vision and the strategies that, if applied, would give their audiences, both architect and non-architect, better access to the multimodal arguments they are making.

Stephen Kosslyn, a cognitive neuroscientist, found that many of his peers, who knew the science well, were not applying it to the graphs they created or the Power Points they made. In Graph Design for the Mind and Eye and in Better PowerPoint: Quick Fixes Based on How your Audience Thinks he applied years of research on perception and memory to graph design and Power Points (Kosslyn 2006, 2010).

Our research has put us in the audience for presentations made by many different firms — firms responding to RFQs and RFPs, firms of different sizes, designing buildings at different scales, all firms with excellent reputations — and we were surprised to find all of them violating at least four of the eight principles Kosslyn tells us are important to an effective PowerPoint presentation. Even more surprising was that all the firms violated the discriminability principle: text and graphics must be legible to the audience.

Using a mnemonic device that may work better in the States then in Europe Kosslyn helps us remember the discriminability principle by labeling it Mr. Magoo.

Mr. Magoo is a cartoon character in the Bugs Bunny cartoon series. He is a character that has a great deal of difficulty seeing the world around him. Kosslyn’s message is make sure your audience can see the message. Don’t make it difficult. Your audience will resent it.

We realized that to teach multimodal argument in architecture we would need to create checklists that built upon and extended Kosslyn’s principles to graphic displays more generally, and to graphic displays in architecture specifically (Hoag and Smit 2011, 2012). In theory with adjustments in display type and audience there was no reason that most of Kosslyn’s principles could not be transferred to other graphic genres. Kosslyn himself makes this clear when he use a four-panel Doonesbury cartoon to explain his first four principles.

Conclusion

When we began teaching students in architecture to write arguments, we thought that teaching them to use the standard patterns of persuasive writing would improve their writing in school, and it did. The writing of our beginning students improved and the writing of our advanced students improved. Our students learned to transfer the patterns of persuasive writing to making oral arguments, and so their oral presentations improved. Our students continue to have problems matching patterns of persuasive writing with patterns of persuasive graphic display. However, their skill at matching image and text has improved as we integrate prompts for writing and graphic display into multimodal checklists that ask our students to think rhetorically about the multimodal messages they send.

As architects talk to us about the role of writing in their practices and share their insights with us, we are finding that they are thinking about and using writing in ways we anticipated, but we are also finding they are using writing in ways we did not expect. They are telling us that writing is important, if not critical to the conduct of their daily activities. That is, they are telling us that writing is more important to their practices than they imagined as students, and they are trying, often struggling, to improve their skills. We are positioned to teach our students to create multimodal arguments and to give them opportunities to practice making arguments before they move into practice. We know from
our research that writing the genres of practice well is an integral part of the scaffolding for effective negotiation, mediation, and collaboration in the design process.

Notes


Appendices

Item 1:
Genres of Practice

Award submissions
Review board submissions
LEED submissions
Building programs
Development programs
Master planning programs

Building planning proposals
Financing and funding proposals
RFQs (request for qualifications)
RFPs (request for proposals)
Green proposals
Life-cycle-cost proposals
Legal and ethical issues resolution proposals
Office-to-office project management proposals
Studio-to-studio project management proposals
Conflict resolution proposals
Business planning proposals
Contract negotiation proposals
Risk management proposals
Marketing and communication proposals

Marketing brochures
Firm websites
Project pinups
Presentation boards
Interview Power Points
Presentation Power Points
Meetings notes
Memoranda of agreements
Progress reports
Compliance reports
Field reports

Letters/Email

Item 2:
Artist Argument: Viewer/Reader Checklist

Author

Reader

In addition to answering the questions below be sure to make suggestions that will help the author with her argument.

Did the author take a position on the scope, scale, and definition of the artist's work, or has she cited a critic or other authority that has and stated their position?

If she cited authorities or critics, has she told you whether she agrees or disagrees with their positions?

Are her main claims framed as architectural challenges and opportunities?

Is evidence, or a rationale presented in support of her claims?

Is the information presented in her argument relevant to the argument that she is making or has she unintentionally included information that
directs your attention away from her claims, making you work to find the relevant information?

Are her claims visually accessible?

Is her argument multimodal (visual-verbal)? Is she directing your attention to the meaning and significance of the images she included in her graphic displays or pages?

Has she referred to, or written about all the images she included in her argument and are the images directly tied to the text?

Are the images used as evidence in support of claims, or is she wrongly using images as filler or decoration?

Has she used diagrammatic images to direct your attention to the main ideas in her argument?

**Item 3:**

**Arguments in Architecture: a response to a RFP for a one-artist museum**

When we, your instructors, give you a program for a building to design, we are implicitly asking you to think in ways that are inherently persuasive: we are asking you to think of the program as a problem for which you are to offer a solution. A rhetorician would say that this way of thinking calls for you to support a persuasive claim of policy that your design is the best solution to the problems implied in the program. It is common to call claims of policy proposals. Your building designs, then, can be viewed as a solution to the problem implied by the program. Often in making presentations, we try to persuade our clients to approve our designs by this form of persuasion. In working with clients you will frequently make arguments as you negotiate with them and their representatives. When you compete for work you will often respond to RFPs (requests for proposals). These proposals will take many forms, but almost all of them will require you to make an argument. Think of your artist study as a proposal to a potential client. In this case the client is looking for an architect to design a one-artist museum. In the RFP they have asked that respondents take a position on (interpret) the artists work and tell them the architectural opportunities you see and the challenges they can expect to encounter in building a museum. The RFP also asked respondents to take a position on the effectiveness of a museum their donor admires.

**Artist Argument: making claims and supporting them**

**Claims for Proposals:**

**X** is an architectural opportunity because

1. it solves a problem (e.g., light, circulation, space...)

2. it matches the artist's views on art,
3. it solves the problem of narrating the art,
4. it is better than the alternatives.
5. ...

**Support claims with evidence**

In making a proposal, you will need to use your interpretation of the artists work to make a case for the opportunities and challenges you identify. When you write your argument make certain that you state in just a few sentences what your claim is. Make your claim visually accessible. Don't make the reader work to find your claims. Most readers resent being made to search. A longtime state architect reported that when he read proposals for state work he was *inclined to favor* the proposals that made it easy to identify the claims he agreed with and could quickly get to the claims he questioned.