

# Chunking Content: Toward a Rhetoric of Objects

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*We need to develop a **rhetoric of objects** to understand the new way in which we must create and deliver content over the Web. We are facing a new multiplicity of audiences—niche groups, and even individuals, to whom we offer customization and personalization. With our new tools and new ways of thinking about what we create, we are inventing informative objects that address the needs of our audiences, letting go of the concept of a document, as we plunge into a world of small chunks of content.*

*In this presentation, I consider how this new approach to technical communication affects our ideas of audience, invention, arrangement, style, delivery, memory, and character—the canons of traditional rhetoric.*

As we move documentation onto the Web, we often carve up the original documents into smaller pieces identified with tags created in XML, then put together various collections of those little chunks, assembling pages on the fly with content tailored differently for particular groups or individuals. In this situation, our old ideas about documents no longer hold. We are creating discrete units of information that can be reused in many contexts, fitting together into multiple structures. Now, instead of thinking about a speech having a natural sequence of parts, or a book having an introduction, chapters, and appendices, we are contemplating an array of meaningful objects. Instead of making a document, we are discovering classes of information, building information structures, populating databases, and issuing answers to queries. We are thinking more like database developers than we ever have before. But our goal is to communicate with other people—and, increasingly, with software agents acting on behalf of those people. Because we still care about “talking” with other people—and their software—in this new environment, we need to come up with a new way of thinking about the process we go through when we invent new material, including the media we work in, the things we arrange, and the many audiences we address. In effect, we need a rhetoric of informative objects.

## CLASSIFYING OBJECTS

The thinking is a bit abstract. First we define a class of objects—a pure form, a concept, a category of information. Then we write a particular instance of that class. So we start with the idea of a class called Procedure, and then write many specific procedures, throughout our user guide. An instance of the class, then, is an actual, tangible chunk of content. A rhetorical object’s class defines:

- The **responsibility** of that type of object, which is to answer a particular type of question from users. For instance, a step answers the question, “What do I do next?”
- The **relationships** between this object and other objects. For instance, a step is contained by a procedure. And the step itself may contain an explanation.
- An **internal structure**. For instance, a procedure contains components such as an introduction, steps, and explanations.
- The **attributes** of this kind of object. For instance, a procedure might have attributes such as the date created, date modified, subject, and author. Each instance of a procedure, then, might have different values for these attributes.
- **Messages** that the object can send out, or receive. Essentially, these are links, requesting another object to show itself.

A rhetoric of objects, then, borrows concepts from object-oriented programming (7, 10, 16, 18, 19, 21, 26, 30, 31, 33, 36, 38, 40, 44, 46), but focuses on communicating content—not building transactions, or processing data. This approach is theoretical; it does not depend on any particular software, tool, or environment. A rhetoric of objects offers a new way of thinking about what we are doing. In fact, with this perspective, we can sharpen our awareness of the structural patterns inherent in our existing documentation, improving the efficiency of editing, and making writing go more smoothly—even on paper.

Comparing this new approach with the ideas we currently consider “traditional” in rhetoric (3, 6, 8, 17, 20, 25, 27, 28, 39, 43), let us walk through traditional canons such as **audience, invention, arrangement, style, delivery, memory, and character**, to see just how our understanding of what we do—and what we produce—is evolving.

## BUT WHAT IS RHETORIC?

Aristotle said: “Rhetoric is the faculty of observing in any given case the available means of persuasion” (3). But I say: Rhetoric should be thought of as the craft of communicating through one or more media with a particular set of audiences for specific purposes. Those purposes may include informing, entertaining, attacking, or reassuring—far more than just persuading. So rhetoric has expanded its scope, to include almost any communicative act, and not just in speech, but in

electronic text, video, audio, or imagery. In this sketch of the emerging rhetoric, I am going to focus on text, but our definition of rhetoric must stress that to communicate we must eventually—later rather than sooner, nowadays—choose one or more media, and that, in anticipation of that variety of environments for our text, we must adapt our writing to those media.

## AUDIENCE

Aristotle said: “People always think well of speeches adapted to, and reflecting, their own character” (3). But he imagined a single coherent audience—all old men or all young men, (never women, of course)—and he suggested adapting your content to appeal to that one group. His model, then, is a speech in front of a live audience, in which you identify their common traits, and adapt your arguments to manipulate that particular audience. But, despite the possibility that you may address a variety of audiences, the immediate audience you are talking to is always conceived of as single, a kind of unified target for persuasion.

Today, on the Web, multiple audiences start and drive the conversation. We hear from people in many niche audiences by email, on discussion lists, in the profiles they fill out when registering at our site. With all this information coming from visitors, we can analyze each group in detail, responding to their demands by creating content catering to their situations. So we address many types on a single Web site: executives, network administrators, small business owners, reporters, stock analysts. We customize for each distinct group, creating audience personas to envision each goal they may have. And, with additional software and good profiling, we can allow individuals to pick and choose personal content, giving them real control over what they see and what they ignore.

Our audiences, then, are multiple small groups, and even individuals. In many situations, we are addressing one person at a time—a very different concept from Aristotle’s rather vaguely defined jury, or senate. And with customization and personalization, we are going way beyond the omnium-gatherum approach that we have taken, in the past, as technical writers, lumping audiences into vaguely defined hordes, serving up some content for each, but not creating one manual for each audience, and allowing each user to reorganize each manual, as they can in a truly personalized Web environment.

We are making an effort to join a community, adopting that group’s concepts, biases, conflicts, goals, contributing to the ongoing debate. We are, as it were, entering a room where a bunch of conversations have already been going on, and, in order to join now one, now another of these whirlpools of chat, we must recognize the participants’ concerns, and adapt what we say to move the conversation forward (5, 28).

## INVENTION

How do we come up with something to say? Aristotle stressed role of reasoning: “The thought element is the way to invent and refute arguments” (3).

We certainly do a lot of thinking when we do technical writing. But, compared to Aristotle’s argumentative orator, we are more practical, following the lead of Hackos and Redish, in *User and Task Analysis for Interface Design*. We often perform very detailed user and task analysis, we may go through user e-mail, and we may even participate in discussions with users, who point us to problem areas, tasks, questions. We respond to all this input from our audiences by inventing standard objects, or genres, such as procedures. Each object has a responsibility to answer a particular type of question from the user. Our styleguides are full of these common elements, with advice about what we should put in each one, and how we should format it. In some cases, our standards already defined a standard structure for the most frequently used elements, such as procedures and reference material.

So increasingly we define the content to be created through a user-centered design process, or, less formally, in a crudely collaborative way. Ideas emerge from the give and take between our audiences and our own groups—a very different process from the classical rhetorician, planning a speech alone, using the tactics of logic to pick the most convincing arguments, certainly taking audience prejudices into account, but not actively getting their input as a starting point, not building the speech in response to their questions, planning always how to manipulate, not serve, the audience. Invention, for us, is part of the conversation.

## ARRANGEMENT

How should we put together all the elements that go to make up our documentation? Aristotle knew how to organize a speech: “A speech has two parts. You must state your case, and you must prove it.” Of course, we aren’t busy making speeches any more. And a two-part structure seems a bit simplistic, even for a FAQ. And now we find that we are no longer even creating coherent units such as speeches, manuals, or job aids, when we create for a web site driven by content management software. Goodbye, documents. Hello, objects.

As we learn about our subject matter, we sort information into predefined objects that fit together into standard patterns, and we learn by organizing. In fact, as we have seen when we create training materials, people learn best when you start with a familiar structure, and offer new information to modify the existing mental structure. As technical writers, then, we often have a fairly clear picture of the structure of a procedure, and as we learn the actual actions a user must perform, we can sort them out into steps. We make meaning by

discovering structure. So arranging content, for us, means learning as we go.

And when we publish to our database, we know that we ourselves may not have created all the pieces that will eventually appear together on a given web page. We are contributing more or less informative objects, and the software assembles those on the fly, building structures that are targeted at specific groups, through customization, or defined by individuals, through personalization. So we are fitting in. We are getting along. We are producing well-behaved objects, that can play well with their fellow objects, in the content management environment.

And what is this unit of structure, the informative object? Each object has...

- A responsibility (to answer a type of question)
- Relationships (it is a component within other objects; other objects are components within it)
- A standard internal structure
- Attributes (info about the info)
- Messages it can send to other objects

To describe these objects, and the structures that can be built out of them, we resort to formal pattern languages (1, 9, 34, 36), such as XML (12, 14, 15, 22-24, 37, 45) and SGML (2, 11, 13, 29, 41, 42). We turn to diagramming of the kind seen in information architecture. We are going beyond the polite recommendations we used to make in styleguides, to define exactly what kind of structural elements must be included, which ones may be added, in what order, and how many. We are making our content storable in databases, usable by software, and consistent enough to be reused in many different genres, some of which we have not yet invented.

So we have come a long way from thinking of the structure of a public oration, and we have begun to go beyond the idea that we are organizing a single large document, such as a book. Thanks to software, we are atomizing the content, and we must learn to write in a new way, to make sure that our content does not explode, and become an incoherent mess.

## STYLE

As for tone, Aristotle recommends a certain strangeness: "Give everyday speech an unfamiliar air. ..But you must disguise your art, and give the impression of speaking naturally" (3).

Of course, as technical communicators, we want our language to sound familiar and clear. But today achieving a plain style is much more complex, because each object has...

- A conventional style inherited from the conventions of its medium (tv, photography, diagrams, text)

- A style inherited from its genre (procedure, news item, FAQ).
- A corporate tone (many authors, comprising, hopefully, one brand)
- A style refined through user testing, click stream analysis, customer service call volumes, discussion lists. (a tone that should now reflect the needs and desires of a particular niche audience).

Pulling all those styles together into a conversational tone that actually communicates meaningful information can be a difficult acrobatic act. At the very least, we have more styles, and more personas, than your average orator.

And, for us, style takes a back seat to structure. In an era of "good enough" documentation, pressure to turn out new material faster than ever before, and a reduction in staff, each of us feels pressure to write faster, even if we must sacrifice grace. Ironically, the best way to increase speed, and improve your prose style, is to pay more attention to the purpose of each element (what good is it for the user?), you can write to the point.

## DELIVERY

Aristotle, thinking of rhetoric as the craft of creating public speeches, sees delivery as depending on volume, pitch, and pace. "It is essentially a matter of the right management of the voice to express the various emotions" (3).

For us, delivery depends on infrastructure. Our conversation is mostly electronic, so we create an environment for exchange:

- Web sites
- E-Mail
- Discussion Lists, Chats
- Content Management Systems
- Customer Relationship Management
- Customization
- Personalization

Delivery, in Aristotle's sense, matters when we must present to a group, live. But most of our talk is virtual, distanced, stained with the media we use, chopped up, blended, and served up by software, through waves. For us, the media are more intrusive, because we are not speaking face to face.

Interestingly, the way the Internet and the Web have developed, we are moving toward a more conversational model, away from publishing documents, which was a little like Aristotle standing at the front of his lyceum, lecturing. We are becoming more Socratic, in our electronic dialogs (4, 5, 28).

## MEMORY

Remembering everything that you want to say when you are actually standing up there delivering a speech can be difficult. But for Aristotle, the amount of reasoning you put into developing your speech should help you recall it when you launch forth. Artfulness and rationality take us beyond rote recall, which even an animal might manage. “The animals other than man live by appearances and memories..but the human race lives also by art and reasonings” (3).

On the Web, though, we have externalized delivery, so that we no longer have to recall what we have written—as long as our server does not crash. Just as Plato warned (27), we depend on what we write, as an archive, rather than actively remembering it. We don’t remember everything we have written; or at least, I don’t.

Instead, many of us rely on databases, Web pages, files, printouts, books, help systems, as aids to memory. We learn, but rarely memorize, these days. We build long-term memory by expanding our existing mental structures, fitting in snippets of new information. After writing, though, we figure we are doing well if we recall where to look up the details. Now where did I put that? Is it in this directory?

Our minds expand to contain a hierarchy of related items, working with them temporarily in our own random access memory, refreshing our memory by scrolling through what we have written so far, then saving it on tape or disk. Is this approach to memory good or bad? Who knows. But with the volume of content we each create, massage, edit, or pass along each day, we are not interested in total recall. We just want to know where we can locate the stuff, later, when we need to update or reuse it. For us, categorization (such as the directories in which we might have put our original files), or meta data (such as values for attributes like author or date created) may be all we need to recall, to summon up the original content.

Increasingly, we are channels through which information flows. If we improve it by making the content reflect reality a little better, or more usefully, then we may recall the key points, in our mind, making our job a little easier the next time we deal with similar topics. But we do not have time to memorize an entire speech, like an amateur orator.

## CHARACTER

Aristotle argued that the orator should look right, and at least pretend to have a good attitude: “The orator’s own character should look right and he should be thought to entertain the right feelings toward his hearers” (3).

We still adopt those kind of poses when we write for our public web site. As writers, we have always adopted personas to signal our relationship with our audiences. But now that the audience has exploded into many different groups, each represented by its own persona, we may find our own characters multiplying.

Now we must write persona to persona. And our own persona must get more personal, to cut through the impersonality of the electronics, and to validate what we say, as if we were really human. This is not primarily an ethical issue; it is a question of conversation. How are we going to relate to ourselves, our content, our boss, and our many different audiences, in this virtual exchange of informative objects?

## SUMMING UP

A rhetoric of objects offers a way of understanding some of the changes we are facing, as technical communicators.

- We are engaged in a conversation through many media.
- This conversation is often provoked and driven by individuals, or groups. We no longer see what we do as publishing to the masses, we are responding to requests from our incredibly variegated audiences.
- We create content objects in response to their questions, demands, problems.
- We arrange these informative objects the way that individuals or groups want, following their conceptual models, in an instant architecture of objects assembled on the fly.

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