Rediscovering Rhetoric: Persuasion for Technical Communicators

by Dr Neil James

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Perceptions of rhetoric

Consider for a moment the word 'rhetoric'. What associations come to mind? Perhaps your first thought was negative: rhetoric in the pejorative sense of manipulative language. The media commonly uses this sense in headlines such as:

Candidates escalate rhetoric

Threats dismissed as 'rhetoric'

Rhetoric heats up on both sides[1]

If you responded to the word more positively, you may have thought of rhetoric as soaring oratory, such as Barack Obama's "Yes we can" or the "long night of captivity" in Martin Luther King's 'I have a dream' speech.

Rhetoric encompasses both of these extremes, but its broad middle ground is of more interest to technical communicators. Rhetoric was in fact the first coherent theory of communication, and it remained dominant for at least 15 centuries after Aristotle wrote his seminal *Ars Rhetorica*. Aristotle defined rhetoric as "the faculty of observing in any given case the available means of persuasion"[2].

At first glance, that still mightn't have much to do with technical communications. 'Persuasion' doesn't rate a mention, for example, in the STC's definition of our field:

Technical communication is a broad field and includes any form of communication that exhibits one or more of the following characteristics:

- Communicating about technical or specialized topics, such as computer applications, medical procedures, or environmental regulations.
- Communicating by using technology, such as web pages, help files, or social media sites.
- Providing instructions about how to do something, regardless of how technical the task is or even if technology is used to create or distribute that communication.[3]

Under this definition, we explain and instruct, which doesn't imply much need to persuade. Yet I will argue that persuasion is already an important part of technical communication and will only become more so. Rhetoric still offers a coherent theoretical framework for persuasion and plenty of practical tools for our everyday tasks. I will explore these by tackling three questions:

1. Why is persuasion important to technical communicators?
2. What exactly is this thing called rhetoric?
3. How can technical communicators rediscover rhetoric?

1. Why is persuasion important to technical communication?

Let's start with the obvious. Persuasive skills are already a part of the technical writing job description. Even when we don't use persuasion overtly in our communications, we certainly need it while managing a documentation process.

That starts with marketing our services to get a job in the first place. When we are managing a project, we have to persuade a range of stakeholders. We extract information from subject matter experts by persuading them we are not going to compromise their content. We secure approval for the content and format. Or we prepare training materials that persuade users of the value and relevance of our work. And if all that goes well, we ideally convey the value we have brought to the project.

Rhetoric has plenty to teach us about maximising persuasion at each of these stages. But what about the documents themselves? Do we need to incorporate persuasion into instructional texts? If we take another definition, this time from ASTC Victoria, the scope for persuasion still seems limited:

Technical communicators produce factual information regarding businesses, products and services. The purpose of technical communication is generally to instruct the reader (as opposed to scientific communication or journalism, which inform the reader). For example, online help teaches the

reader how to perform various tasks using a software package; a car manual teaches the reader how to maintain and repair a car; and a set of illustrations teaches airline passengers how to behave in the event of an emergency.[4]

The flavour here is communicating 'factual information' to instruct, scrupulously avoiding the subjectivity of opinion or interpretation. Many of us would take pride in being objective in preparing the content of a communication, presenting our facts as concisely as possible to clarify technical processes. This is understandable, but it uses a narrow model of instruction, focusing more on the content than the user.

Let me illustrate with a simple example: some instructions that might accompany flat-pack furniture from IKEA:

Assembly

Important information

Do not lift heavy items alone

Do place items on a protective surface during assembly

Do call to clarify any problems

This text is concise and clear, using simple language and layout to convey an objective set of instructions. But it takes little account of a user's perspective and motivation. What would persuade users to read and follow these instructions? Consider an alternative:

Assembly

Important information

Prevent injury

Do not lift heavy items alone

Protect your furniture

Assemble on a protective surface

Avoid confusion

Call us if you need to check anything

This uses what I call a rhetorical model of instruction that mixes facts with reasoning to motivate users. It doesn't just tell them not to lift a heavy object, it explains *why*. It explains *why* they need to use a protective surface, and *how* to avoid getting frustrated.

It reaches a further level of subjectivity in the illustrated version IKEA used: [5]
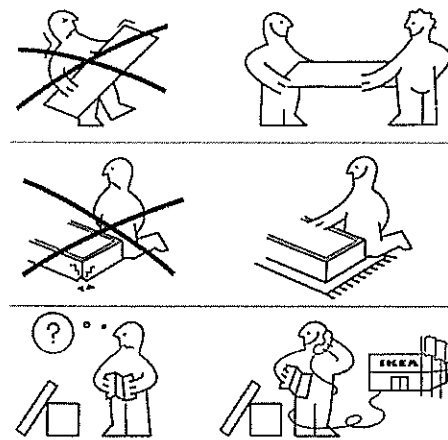
Several things are driving this move toward a rhetorical model of instruction. First there is the information flood brought about by technologies such as the internet and social media. Lotus founder Mitchell Kapor expressed this well a number of years ago when he said that "Getting information off the internet is like taking a drink from a fire hydrant".[6] Today, that hydrant is pumping out an ocean.

Researchers at the University of California have estimated the media information that Americans consumed in 2008 using three measures: hours, words and bytes. The average person processed over 100,000 words per day over almost 12 hours outside of work. Information consumption in bytes grew by 5.4% a year between 1980 and 2008.[7]

This growth has only accelerated. Since 2009, the number of Twitter users increased from 75 to 140 million, echoing growth across the cyberworld in YouTube (20 to 72 hours uploaded per minute) Tumblr (642,000 to 50 million blogs) and Facebook (now over one billion active users).

In the workplace itself, Mindjet last year compiled some killer facts on the information deluge, drawing on research by Lexus Nexis, Bosex, Temple University and Harvard:

* 65% of UK employees believe their work is negatively affected by the amount of data they receive
* 57% of US workers believe the amount of information they have to process at work has significantly increased
* 91% of US workers say they sometimes "delete or discard work information without fully reading it"
* as information flows increase, people reach cognitive and information overload, which impairs decision making
* interruptions caused by information overload cost US companies $650 billion a year. [8]

We will need to make our documents more persuasive and user-oriented simply to keep our information afloat in the flood.

And then it gets worse. People are about to access more of their information in a relatively impoverished mobile format. Consider these statistics:

* In 2012, four billion people used a mobile phone.
* By 2013, more people will go online with mobiles than PCs.
* By 2014, mobile net usage will overtake desktop usage.
* By 2015, there will be one mobile for every person on earth.[9]

Already in 2013, the market research firm NPD Group reported that tablet sales would this year top notebook computers. By 2017, NPD predicts tablets will outpace notebooks by three to one.[10]

So our texts are already struggling to compete, but people are increasingly going to access them on screens they will operate with their thumb and forefinger. New hybrid devices will make information instantly accessible but in a medium with reduced screen size, resolution and navigation.[11]

Our instructional text already had to be clear and concise, and now it will have to be compelling. We need to scrutinise every communication by asking five user 'whys':

* why this information?
* why now?
* why here?
* why this way?
* why should I care?

A rhetorical model of instruction will help us to answer these questions.

2. What exactly is this thing called rhetoric?

If we are open to a more persuasive approach to instruction, where do we turn for the right theoretical framework and the most practical tools for the job? It makes sense to look at what is already available. When it comes to persuasion, rhetoric has been the main game for centuries.

Rhetoric began with the ancient Greeks and was closely associated with the rise of radical democracy. In the Athens of the fifth century BC, any citizen could influence public policy by persuading others through a speech at the Assembly. Suddenly everyone wanted to be a great public speaker, and naturally the first teachers and manuals emerged. Then a clever bloke called Aristotle turned his mind to the task. His *Ars Rhetorica* for the first time set out a coherent *theory* of persuasion.

Aristotle began by identifying three modes through which we persuade:

* logos (logic)
* ethos (reputation)
* pathos (emotion).

We like to think we make decisions based on logic, but as politicians and advertisers know, we just as often decide based on emotional responses and then rationalise our choice after the event. Aristotle also argued that the reputation of the speaker was at times the most important of all.

For technical communicators, the first lesson of rhetoric is that we cannot rely on logic alone to achieve our document outcomes. We are communicating with flesh-and-blood human beings. They will be influenced by our reputation and their own emotional reactions.

Next come the three contexts where rhetoric applies:

* deliberative (deciding future policy)
* judicial (judging past actions)
* ceremonial (celebrating public figures).

In the ancient world, these related to the common contexts for public language: a representative assembly, the courts and public celebrations. Today, we might add a fourth context: informational (providing instruction), which is where much technical communication would fall.

Rhetoric offers practical and rational techniques to persuade our audience through these modes and contexts. While rhetoric is more systematic than an art (such as poetry or fiction), it is not quite as empirical as a science either (such as mathematics or biology). Aristotle dubbed it a 'techne', which is often loosely translated as a 'craft'. There's not a clear equivalent in English, which is probably why we derive the word 'technical' in technical communications from the original Greek.

By the time of the orator and lawyer Cicero during the Roman Republic, the 'techne' of rhetoric divided the tasks of persuasion into five 'canons':

* inventio—discovering arguments
* dispositio—arranging the text
* elocutio—setting the right style
* pronuntiatio—delivering the speech
* memoria—remembering the text.[12]

In more modern language, rhetoric gave you tools for developing your content, choosing the best structure, writing in a style that suits your audience, speaking it with punch and memorising it. It doesn't stretch the parallel to use the same framework for modern communications as shown in Table 1 on page 10.

The canons (in Table 1) hold up quite well after 2,000 years. We still need to develop content and decide how to structure it. There's still a lot of focus on setting the language at the level that will be easiest for your audience to read and understand. That still involves word choice, sentence length, syntax and a level of concision.

Table 1. Choosing the best structure and writing style to suit your audience.

Traditional canon	Traditional application	Current equivalent
Inventio	'Discovering' arguments	**Content:** accurate, persuasive and logical
Dispositio	Ordering and arranging a speech	**Structure:** sequencing of a text
Elocutio	Setting language level for context and audience	**Expression:** word choice, syntax, sentence length, efficiency
Pronuntiatio	Delivering a speech	**Design:** typography, layout, graphics
Memoria	Memorising long passages of text	**Storage:** databases, indexes, manuals, help files

The last two canons seem less relevant given we now use a wider range of media than the oration. While verbal dexterity is no longer the focus of delivery, the equivalent function is the document design—the typography, page layout and information graphics. We no longer have to memorise a speech that could take hours to deliver, but we still need to call up a wide range of information. We are increasingly using the Internet and social media, data bases and searchable help files.[13]

Put these five canons together and rhetoric retains a strong framework for any budding technical communicator. To illustrate this, let's explore the canon that helps us develop persuasive content: invention.

3. How can technical communicators rediscover rhetoric?

Invention begins by considering what action or opinion you want your audience to support. An analytical report will do this overtly through a formal argument structure: identifying a problem, analysing solutions and recommending actions in response. The success of the document flows from the readers' acceptance of the conclusions. Invention helps an author to 'discover' the range of arguments that are available to persuade them.

An informational or instructional text will not mount a formal argument in the same way, but that doesn't mean it isn't making a case. When you are writing a procedure or a help file, for example, you will first need to convince your users to read the document. If you succeed at that, you then need to persuade them to give it enough attention to successfully complete the tasks it outlines. The reasoning isn't as overt as in an analytical document, but failure to motivate your reader can mean your document will fail.

Rhetoric tells us we can draw on three types of reasoning:

- Deductive—starting with a general premise to deduce a specific conclusion.
- Inductive—using individual examples to build toward a general conclusion.
- Rhetorical—using special 'topics' that support a conclusion through a relationship with something a reader accepts.[14]

The first two types of reasoning are the more formal logic, while rhetorical reasoning is what Aristotle regarded as informal logic. This is not as empirically sound—but also not as restrictive—as formal logic. Maximising persuasion means employing all three types of reasoning strategically.

Deductive reasoning is perhaps the most watertight, moving syllogistically from an acceptable premise to a certain conclusion:

> All men are mortal
>
> Socrates is a man
>
> Therefore Socrates is mortal.

As long as the chain of reasoning is sound, the conclusion will be valid. But there is a major problem with deductive reasoning: it requires that your audience agree to the starting premise. If they dispute this, even a valid argument may fail. For example, here's the logic an insurance company might use to explain its flood cover:

> Your policy only includes flood caused by stormwater
>
> The damage to your property was not caused by stormwater
>
> Therefore your insurance policy does not cover the damage to your home.

Many Australians confronted this reasoning after the riverine (as opposed to stormwater) floods of 2011. The logic is watertight, but were they persuaded? Many knew

their policy included 'floods' and assumed they were covered. Their response was to dispute the starting premise that the policy should exclude their type of flood. They were so unpersuaded that many of them managed to convince insurers to grant them coverage they were not strictly entitled to.[15]

So deductive logic is not always enough for the task of persuasion. That's when you can turn to inductive reasoning, which moves in the opposite direction. Rather than deducing a conclusion about a specific situation based on a general premise, induction moves from a range of specific examples to induce a more general conclusion. This is the mainstay of experimental science, which replicates experiments until there is sufficient weight of evidence to support a hypothesis.

Yet the strength of inductive reasoning is also its weakness. It doesn't matter how many examples you gather to support your case, it only take one contrary example to cast doubt on the conclusion. And when it comes to questions of public policy, these doubts are easy to exploit.

Take the current debate over climate change. For some time now, the majority of the scientific community has accepted that climate change is real and requires action. Yet opponents have been able to influence public opinion by citing examples that do not fit the conclusion. As Conway and Oreski [16] have documented, many of those exploiting this weakness refined their technique opposing regulation of tobacco by denying a causal link between smoking and lung cancer. Here's one tobacco company making its case as recently as 2005 in a court document:

> Cigarette smoking has not been scientifically established as a cause of lung cancer. Studies 'report a statistical association between cigarette smoking', not complete proof. They 'also report cancer to be statistically associated with many other factors'. [17]

Eventually, of course, as the mountain of evidence grows, an inductive conclusion will gain greater acceptance. But as the debate on climate change shows, relying on inductive reasoning to persuade won't always succeed.

Aristotle was well aware of these limits. There are many qualitative propositions that cannot be proved using formal logic because they cannot flow from a certain premise. We can use deductive logic to calculate the load carrying capacity of a bridge, but we can't use it to decide whether it is worth building in the first place. We can use inductive logic to develop a procedure, but it won't guarantee that a user will read and follow it. That's when rhetorical reasoning supplements deduction and induction.

Rhetorical reasoning uses one-to-one comparisons to reason a probable conclusion from an uncertain premise. Rhetoricians have spent centuries identifying scores of these types of arguments. For practical convenience, I group them into 12 arguments that most commonly occur

in contemporary documents, grouped into four categories:

- consequence (consequence, cause and effect, possibility)
- example (example, comparison, analogy)
- authority (authority, precedent, principle)
- definition (definition, responsibility, process).

Arguments of consequence are usually the most powerful. Readers are more likely to accept a conclusion if it is associated with a consequence that they care about. In the IKEA example quoted above, which statement is more likely to motivate a user:

Do not lift heavy items alone

or

Prevent injury

Do not lift heavy items alone

The first gives an instruction. The second adds a rhetorical argument of consequence to explain why they should follow it.

At times this will be a future consequence, at times a present problem caused by a past action, and at times an argument about the possibility or feasibility of an action. You can work these into an instructional document by explaining what the procedure may result in (consequence), what problem it may solve (cause and effect) and how feasible it is to complete (possibility).

These rhetorical arguments need not take up much space, nor do they replace your instructional facts. But by incorporating some rhetorical reasoning to support the implicit argument that readers should read and follow your instructions, you will more likely persuade and motivate them.

The second group of rhetorical arguments involves reasoning by example. Readers will often follow an instruction more effectively if you can illustrate it with an example of some kind. These often work well as separate 'case studies' to reinforce an instruction or to offer an alternative way of understanding it.

You can also think of ways to compare the situation of your readers with other users or contexts that they can relate to (comparison). The actions and agreement of others can be highly persuasive if a reader respects the comparison cited.

Of particular use to technical communicators is the third argument in the example category: analogy. Many are wary of analogies because they are a less formal type of reasoning. As the saying goes, a metaphor is not an argument: there is usually little causal connection in the comparison.

Yet analogies can be excellent for explaining technical information to non-technical readers and motivating them to read and act on a text. I was once working with a group of IT auditors who were frustrated that staff in their organisation were not implementing password

procedures despite being warned of the consequences. They wrote an analogy that ran something like this:

> The current password control practices are the equivalent of installing the latest locks and security alarms on your house, but then leaving the home with the front door unlocked, the backdoor wide open and the windows unlocked.

This analogy succeeded in prompting change when the formal logic of their previous reports had failed.

The next group of arguments are probably the most overused in the professional world: authority. These reason in support of a particular action by citing an external authority that is in favour of it. The classic example of an authority is a law, but standards, policies, guidelines and procedures are all forms of authority. How often do we write that a user must do something to comply with a standard or policy?

They are useful arguments to work with, but bear in mind people will instinctively resist what is in effect the 'she says' argument. If they respect the source of authority, they may be persuaded; if they don't, they may react contrary to your request.

Precedent is a form of authority argument that often prevails in large organisations and in sectors such as the law and government. This argues for a course of action because it is in line with previous practice. Again, it can be persuasive if there is respect for the precedent. Otherwise, it is vulnerable to the counter argument 'let's do something different this time.'

Another authority argument is that of a principle—the relationship between a conclusion and some abstract ideal that a user will support. You may be able to persuade somebody to follow your operating instructions for an appliance because it will save water or electricity, both of which will be 'good for the environment'. Or you may persuade them to accept a service that doesn't perfectly match their needs on the basis that it is 'fairest' for most people. These are appeals to principle.

But beware that even the most high-minded readers will often be influenced by a consequence argument far more than a principle argument. Consider which argument is more likely to prompt a user to operate an appliance successfully: that it will be good for the environment (principle) or it will save them money (consequence).

The final category of rhetorical arguments is the hardest to pull off: arguments of definition. You might maximise the chances of someone following your instructions within a workplace by including the process as part of a definition of compliance. You might also argue that it is the responsibility of a particular person (your reader) to complete an action. The warranty on using a website, for example, usually specifies that users have a responsibility for keeping anti-viral software up-to-date to protect themselves from being hacked through the site.

At other times, definitional arguments are based on an accepted process. In the workplace, a committee or review is a common process to develop a solution to an identified problem. There is an implicit expectation that we should then accept the outcome of that process. On a sports field, this is the referee's call. In the working world, the support of a customer committee may be used to argue in favour of a particular product or service.

Table 2. Rethorical arguments to persuade an organisation to upgrade a piece of software to ensure it receives support

Consequence	
Consequence	Without support, error rates may increase, leading to failures in services.
Cause and effect	Our previous error rates have been caused by out-of-date support.
Possibility	An upgrade is readily available for this software at minimal cost.
Example	
Example	In company x, not upgrading led to a system failure.
Comparison	Our competitors have already upgraded their software.
Analogy	This would be like keeping a car when spare parts were not available.
Authority	
Authority	Using unsupported software does not comply with industry standards.
Precedent	We have already upgraded other comparable software.
Principle	Service failure will have unequal impact on our poorer customers.
Definition	
Definition	All software support systems need upgrading.
Responsibility	Under our service contracts, software upgrades are our responsibility.
Process	This need has been identified in our regular risk review.

Putting it together

You will recognise most of these arguments because they surround us in daily life. Pick up a newspaper and read almost any article or opinion piece, and you will be able to map both the inductive and deductive logic in play, but more commonly the rhetorical arguments of consequence, example, authority and definition.

Professionals ranging from politicians, advertisers and the media to lawyers, bureaucrats and bankers use these all the time. Technical communicators don't use them enough, often because we come from a science background that privileges objectivity and formal reasoning.

Let's look at how you might use this framework to discover the rhetorical arguments available to persuade an organisation it should upgrade a particular piece of software to ensure it receives support:[18]. See Table 2 on page 12.

Of course, being able to 'discover' 12 arguments for any proposition doesn't mean that you have to use them all in a communication. Cicero wrote "it is my practice not to count my arguments but to weigh them". Think about the readers of your text and what overt or implicit actions you are wanting to persuade them about. Use the table of arguments as a simple checklist to select the possible ways you might convince them. Then decide which ones will be most persuasive and look for opportunities to work these into your text.

Table 3 shows two versions of the procedure that an authorising officer in a utility must follow for 'hot work', such as welding, that uses a naked flame. It's an important text because of the potential for injury and disruption to other work.

Both versions of the text cover the steps needed to achieve the document's objectives. One version expresses the steps as clearly and concisely as possible. The second incorporates some rhetorical reasoning to strengthen those instructions with some persuasive arguments. Which one is more likely to motivate authorising officers to complete the procedure correctly?

Table 3. Two versions of the procedure that an authorising officer must follow for 'hot work', such as welding, that uses a naked flame

Original procedure	A rhetorical version
Issuing a hot work permit **Procedure for authorising officers**	**Issuing a hot work permit** **Procedure for authorising officers**
1. Inspect the proposed work area.	1. Personally inspect the proposed work area. It is your responsibility to confirm the site conditions. (responsibility)
2. Ensure all reasonably practical controls and precautions are in place.	2. Prevent fire and serious injuries by ensuring that all reasonably practical precautions are in place. (consequence)
3. Assess the potential impact to and from other work or facilities in the area.	3. Assess the potential impact to and from other work or facilities in the area. The company can lose up to two weeks work time each year due to poorly scheduled hot work. (example)
4. Record on the hot work permit the scope of the authorisation, including the equipment and people that must complete the work.	4. Record on the hot work permit the scope of the authorisation, including the equipment and people that must complete the work.
5. Cross reference the hot work permit against any current permit to work certificates.	5. To comply with health and safety standards, cross reference the hot work permit against any current permit to work certificates. (authority)

You may not agree that all of these arguments are needed, and you will need to base that judgement on the context and the users you are writing for. But next time you are writing an instructional text, think about the outcomes you are trying to achieve and turn to rhetorical invention to discover some available arguments. Working a few of these into the text will add some words, but it can also persuade users to follow your instructions.

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