Technical Writing

or Getting Paid to Write
(Sometimes)

Roelf Woldring
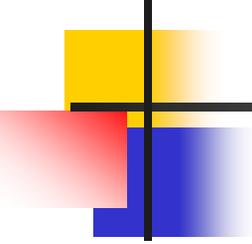
A Budding Technical Writer

Character Study—April 27, 2005

Madison sat down on the floor and sighed- one of those really long, slow, tired, about-to-tackle-something-awful sighs. So began her most dreaded time of the day. She took her backpack off of the couch, opened it, and took out her agenda. Madison stared at the cover and slowly flipped to April 27th. Before looking at what she had written there, she prayed silently "due Monday, due Monday, due Monday". Of course, it did not work, it still said Friday. She grabbed a piece of lined paper and a pencil, ready to do what she had to.

"Who thought up dumb character studies anyway?" Madison screamed to herself. "Whose fault is it that I'm sitting here, not playing outside?" She sighed again, "I'd better get a good mark for all this wasted time and pain!" She turned on the radio and began to think about how she would make her teacher feel sorry for giving out Journal Writing to her poor class. Madison tried to think of a good character to write about. Some one who might make her teacher realize how Journal Writing was not necessary for gr. 5's. Madison could not think strait.

"Mom," she screamed at the top of her lungs "Help me with my homework!" Her mom walked into her room. "What do you want, and why haven't you started your homework yet! It's due Friday! I can't believe you have not started it!" Her mom paused, "Hurry up; dinner will be ready in 10 minutes!"

"Yeah….. That's great mom, now help me." Madison answered, "I have to do a dumb character study, and I can't think of anything!" Her mom started to talk again, "You could write about your brother, or me, or your dad, or one of your friends." Madison complained to herself, "that's too ordinary." As her mom walked back to the kitchen she said, "well, I have to get dinner ready, hurry-up."

"Great!" thought Madison, "Now I have to do every thing!" Then, she got an idea, and this is how she began; She sat down on the floor and sighed-one of those really long, slow, tired, about-to-do-something-awful sighs……………………..

By Melissa DesBrisay, Age 11

The Scheme I Use to Define Technical Writing

A "Technical Writer" Must Explicitly Consider Each of the 5 Elements, and their Relationships, as Part of Deciding "What to Write"

What is My Contract?

Who is the Intended Audience?

What Subset of the Language will I Use?

What Content Must I Cover?

In What Format and Media will the End Product be Delivered?
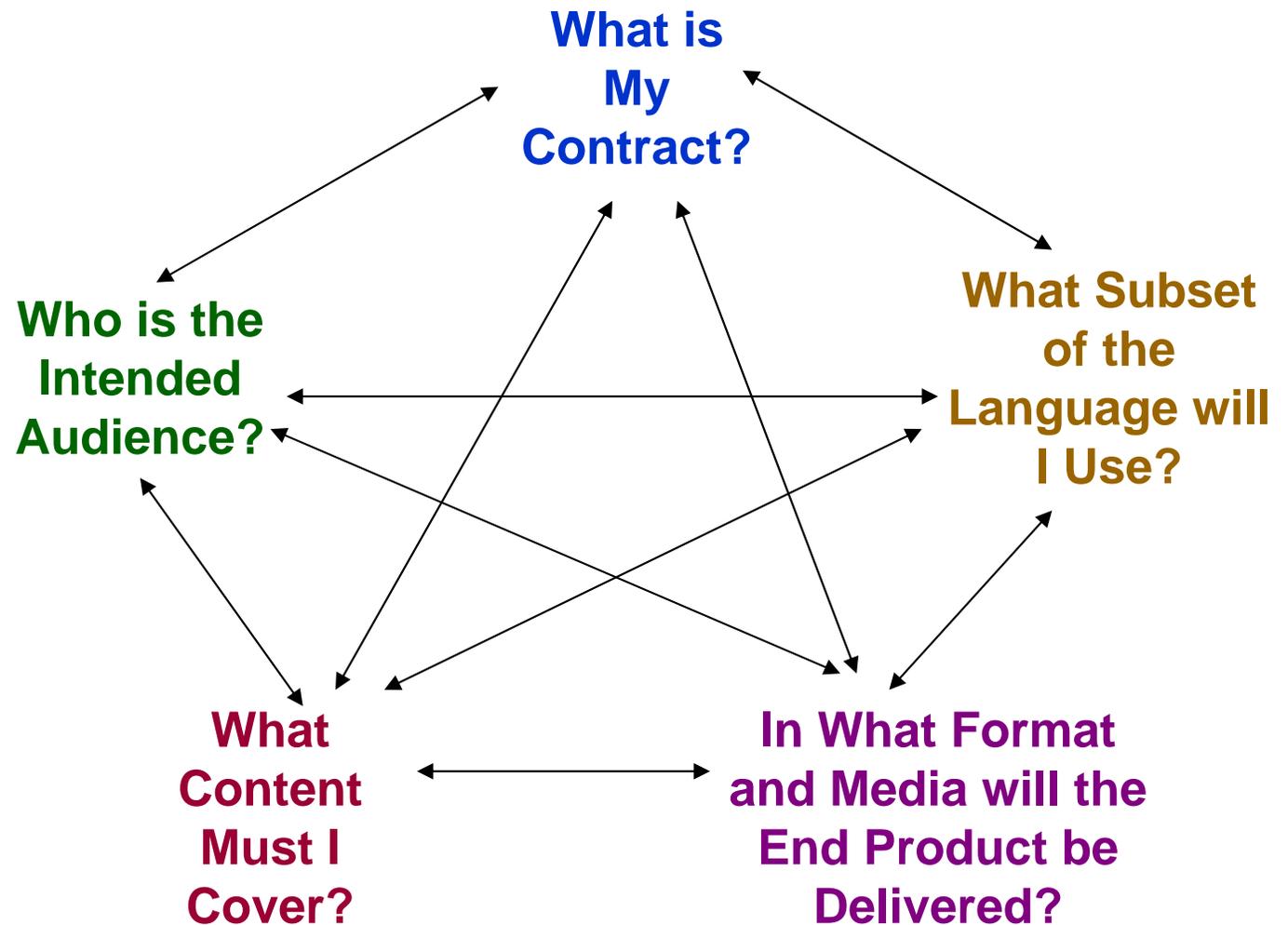
Does Melissa's Essay Fit My Way of Looking at Technical Writing?

Melissa writes an essay and gets a grade

What is My Contract?

Who is the Intended Audience?

What Subset of the Language will I Use?

The Language Spoken in Melissa's Grade 5

Melissa's Teacher

What Content Must I Cover?

In What Format and Media will the End Product be Delivered?

Whatever format and media Melissa's teacher will accept … …

A "Character Study"
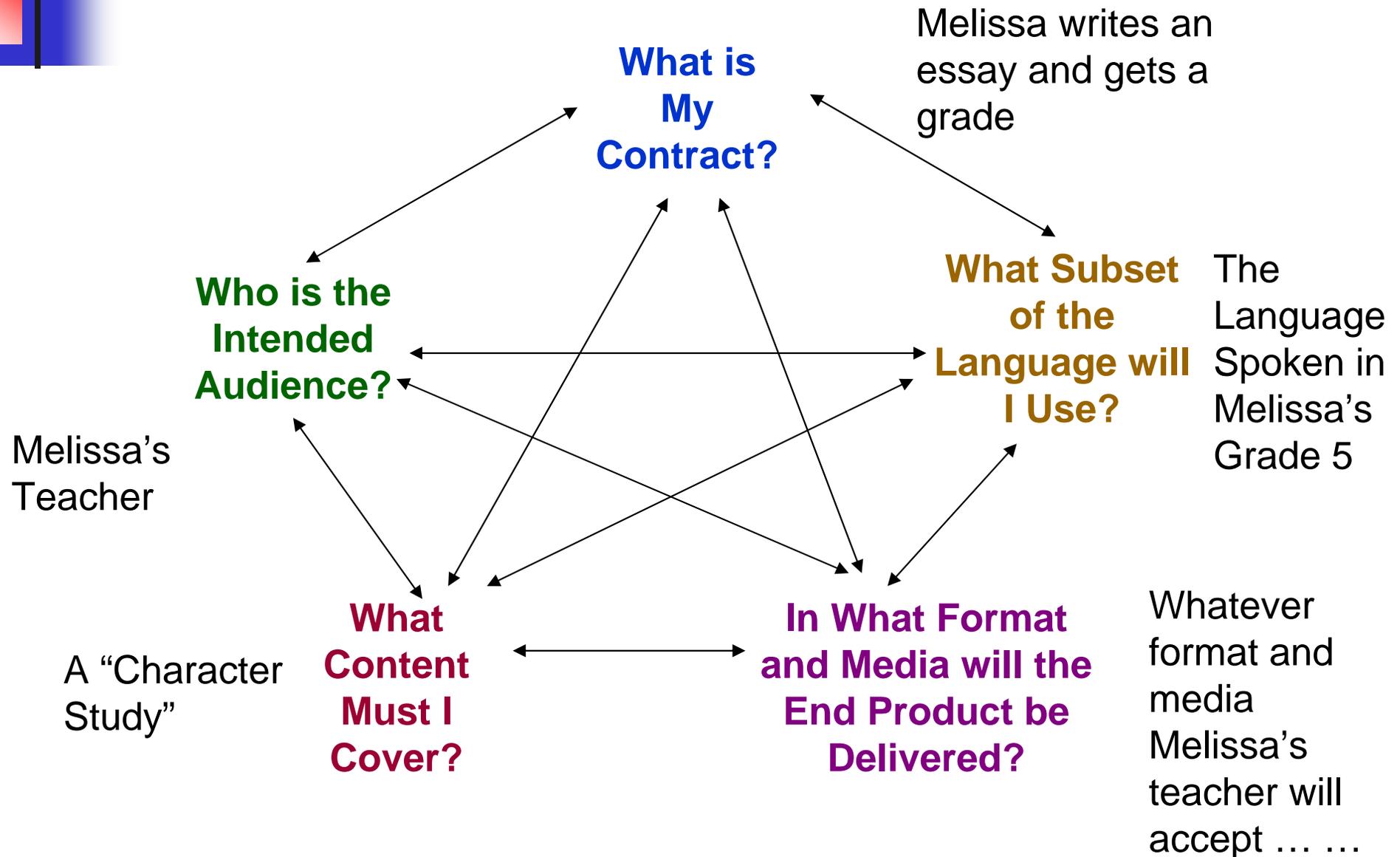
When I define technical writing, I use this model ...

What is
My
Contract?

Who is the
Intended
Audience?

What Subset
of the
Language will
I Use?

What
Content
Must I
Cover?

In What format and
media will the End
Product be
Delivered?

- **It defines the conditions and the environment of the work that will be done by a technical writer**
  - How much effort for what return … …
  - What content will be included … …
  - Who is the audience who will use the content …
  - What language, format and media must the content be in so that the audience can use it … …
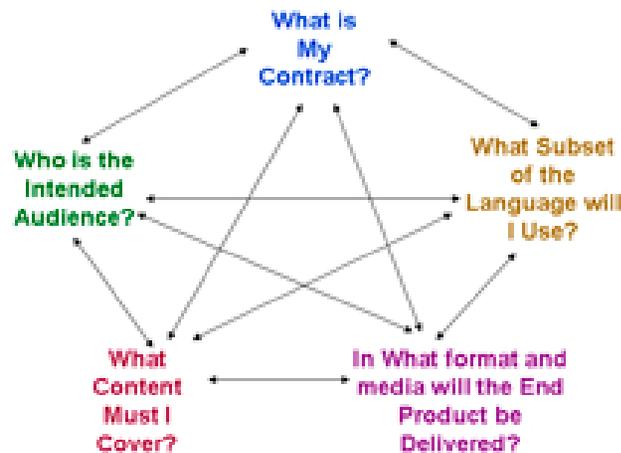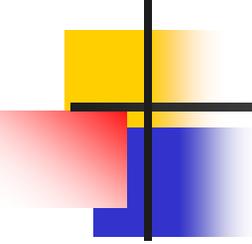
- Let's explore each of the 5 elements in turn
- Later on, I will add some thoughts about:
  - Tools Useful to Technical Writers
    - Hardware and software that you may find useful
  - Skills That Will Help You Work as a Technical Writer
    - Competencies that help you be a "technical writer"
  - Environments
    - Places where technical writers get a chance to practice their craft
- I will conclude with some ideas about moving between "technical writing" and other kinds of writing
- Let's have an open dialogue at the end
  - Questions, opinions, points of view … ….

Let's Start with the Contract … ….

**What is
My
Contract?**

- How much it is worth?
- How do I get paid
- When is it due?
- Formal (written) or Informal (verbal)?
- Part of a "Bigger" Contract or This Assignment only
- Who owns which rights when?
- Who else is involved?
- How do I deliver the final product?
- How long do I have to rewrite?
- What is the subject or content area?

- Do I work by myself or with others?
- Are graphics involved?
- Who are the editors and copyeditors?
- Who acts as publisher? Who will it be published or communicated to the intended audience?
- Are there reviewers involved? What impact will they have on the final piece?
- … …
- … …
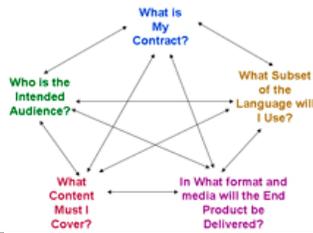
- **Sets boundaries for this piece of writing**
  - When, why, what, who, where and how

- **Defines how you will be "remunerated"**
  - Tells you how much effort / energy it makes sense for you to put into to this writing task

- **Creates the base from which the other issues that you will need to know develop**
  - the other 4 elements … …

- **Can be very explicit or implicit in another contract**
  - A written contract for this piece of writing
  - A job contract that includes my writing work
 - A freelance arrangement that involves verbal contracting
  - … …
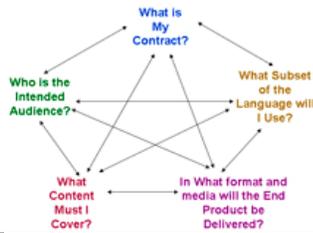
- Every piece of successful technical writing involves an effective contract

  - Even if the contract is with "yourself"

- The contract provides a stable definition of the writer's task

  - A contract needs explicit re-negotiation in order to change

    - Either side can initiate the re-negotiation

  - The contract can be with "yourself"

    - In this case, the re-negotiation can be quite "fluid"

- Negotiating effective writing contracts is a core competency for a technical writer

  - Especially if this is done in the context of a "job" or freelance arrangement

    - Most (all ?) technical writers are their "own agents"

    - The exception might be established authors of non-fiction books

- You may love technical writing, but technical writing is seldom, if ever, an effort of love … … it is a piece of work done in return for remuneration – it is business

The Contract (continued 3)
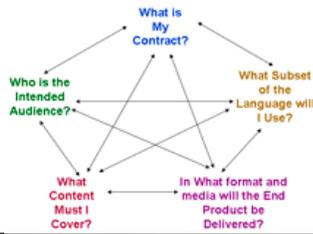
- Here is an example of a piece of technical writing done by a **team** of technical writers – some employed and some freelance

- The contract here is time defined – get it done by a certain date … …
    - The total effort is defined by the start and stop dates
    - The remuneration for the effort comes in the form "salary" for the employees and "rate per day" for the freelancers in the writing team
        - The Team had the following roles: project coordinator, researcher, graphic designer and writer
        - Different individuals take on these roles in different combinations
    - It is team effort that combines words and images in order to have an impact on the audience

- As you can see – the contract sets up the "other elements"

   - Audience, language, delivery format and media, and language … …
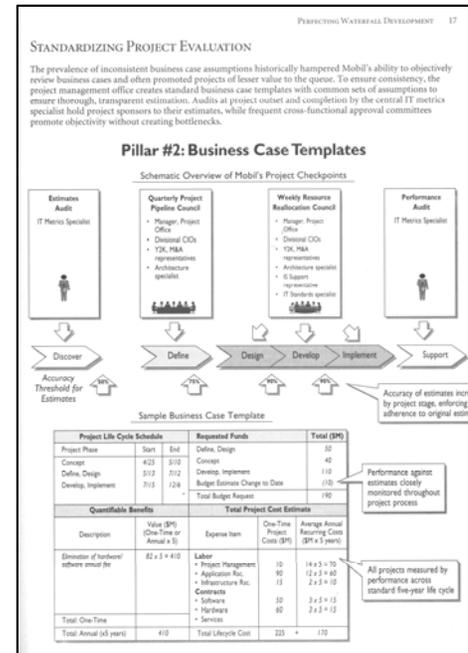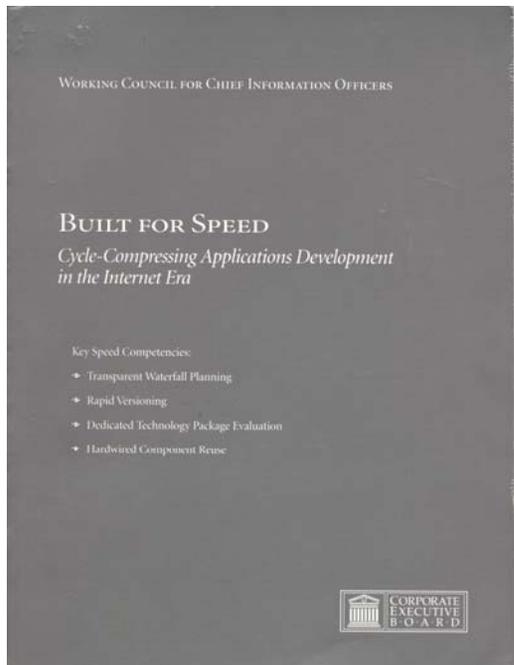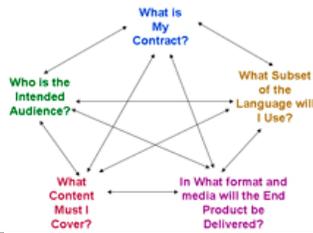
- **Negotiating the contract is a core skill for technical writers**

  - Some people have jobs that involve technical writing assignments
    - E.G. Business analysts, journalists, marketing analysts, product developers, financial analysts, web designers, programmers, copy writers, … …. …. ….. ….. ….. …..
    - Their writing assignments come as part of their job
      - Once they understand what they writing they are to do "in general"
      - They work out the particular details of each assignment with the person(s) they work for

  - Other people move from writing assignment to writing assignment
    - They work as freelancers or as "staff" for companies offering client services that involve writing
    - They (or the people they work for) negotiate explicit contracts for each writing assignment
    - Their work may involve relatively short pieces or they may be part of writing team that is producing a document that is thousands of pages long … …

  - Other people do technical writing as part of the flow of work normal in the book publishing industry
    - Some are "authors" in the sense that we use that word to talk about people who write "fiction"
      - They come up with an idea for a book and either write it, or sell the idea for it to a publisher
    - The final product is the result of the contract that they negotiate with the publisher
      - Others in the publisher's organization (staff writers, book designers, editors, copy editors, printers …. ….) have a great deal of impact on the final product – which reflects the financial risk that the publisher takes in agreeing to publish (produce, print, market and distribute) the final product

Let's Move Onto the Audience … ….

Who is the Intended Audience?

- Who will use the final product?
- Does their use involve more than reading?
- Under what conditions will they read or use it?
- When will they read or use?
- What happens after they read or use it?
- Where are they located?
- How will they normally get access to the final product?
- What is the relationship between the author(s), the person(s) the authors are working for and the people in the intended audience?
- What is the profile of the "average" or "normal" individual in the intended audience?
- Does the intended audience have "sub-sets" who have different "average" or "normal" individuals that must be considered?
- … …. …
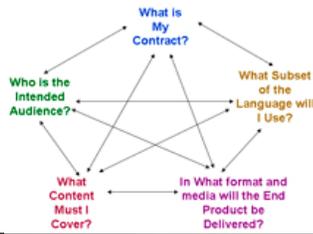
Technical Writing is done for an Intended Audience

The technical writer

who does not have

a clear and constantly "present"

sense of audience while writing

will not succeed

in technical writing
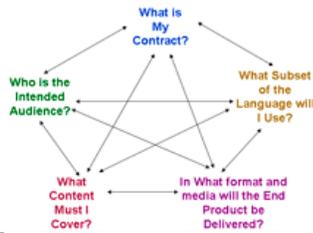
- Technical writing is done for an intended audience
  - Defining the intended audience requires explicit attention
    - Different audiences may require different treatments
      - Sometimes, sample members of the intended audience are explicitly included as reviewers and commentators during the writing process
      - This is one way of making the audience "clear and present"
  - The size and nature of the pre-defined audience will define the resources that will be expended on the writing (and the publishing)
    - When the audience size is "known" before publication
      - it is easier to define the "value" of the final result
        - and therefore, the amount of resource ($ and time) to spend on the writing
        - and on the "publishing"
      - the writing and publishing risk is more sharply defined in these circumstances
    - When the final audience is defined by eventual sales (as in fiction)
      - All of the undefined risks traditionally associated with fiction publishing are alive and real for the publisher
      - But the writer often does not care, since the writer's remuneration is defined on a total dollars or time to be spent basis
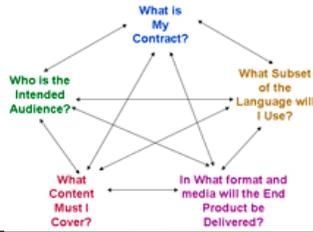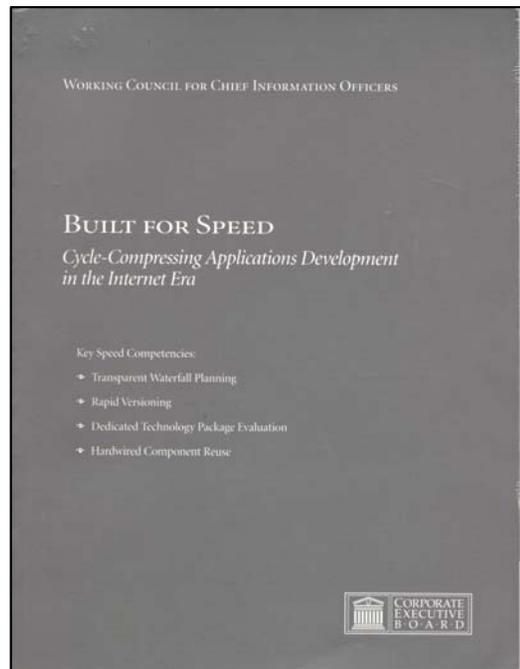
Technical writing done for a pre-defined audience

An Example:

- The audience for this piece of technical writing is the CIOs and IT professionals in organizations who have paid an annual subscription ($20,000 US) for receiving a "number" of best practices research reports during the year
  - These organizations belong to the Working Council of Chief Information Officers of the Corporate Executive Board (Washington, DC)
  - The budget for each report is established from the beginning
    - Producing the report is treated as a **project** –
    - someone acts as the coordinating project manager
    - the budget for writing and printing is known in advance
    - the amount of money that will go to the writers is defined in advance
- This is the case in many organizations where technical writing for a defined audience is part of the "work of the organization"
  - Examples
    - Product manufacturers and vendors
    - Consulting organizations
    - Service provision organizations
    - … …

Often "technical writer" is a job in such organizations
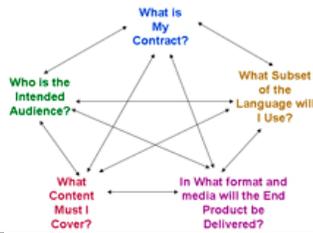
- Knowing the intended audience defines many of the other dynamics in technical writing
  - The language to be used (more on this later)
  - The format and media to be used for delivery (more on this later)
- The definition of the intended audience is usually much sharper than that experienced in fiction writing
  - A piece of fiction often "finds" its audience by exposure to the reading public
  - A piece of technical writing may also find its audience, but it does so in a defined sub-set of the reading public
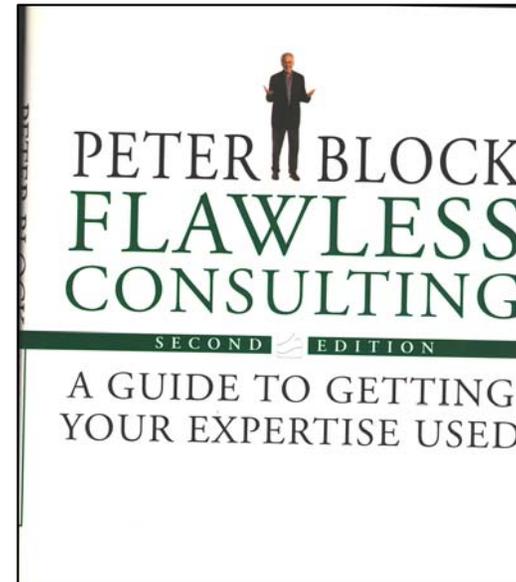
Let's think a second about the intended audience for these two technical books … …


This is a classic

This is little known reference work
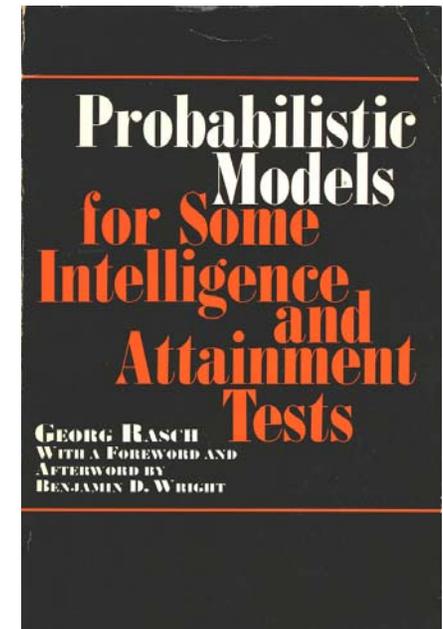
- The technical writer must have a clear and "present" sense of audience while writing
  - Sometimes this happens as a result of the technical writer's life or job experience ➔
  - Sometimes this happens because representative individuals of the audience included as reviewers and commentators during the writing project
  - Sometimes the technical writer is writing based on constant and continuous dialogue with members of the audience during the writing work

- In every case, it means having the ability **to imagine** what it is like to be and to read the final product as a member of audience

 - Empathy is a required skill for technical writers
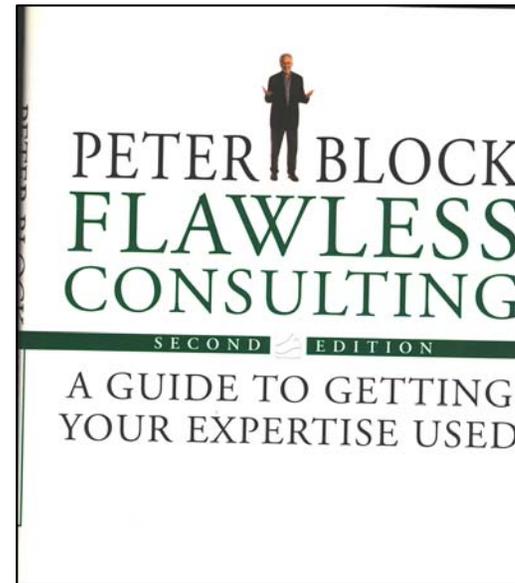
Peter Block wrote this book based on his experience as a consultant to organizations and as a consultant to people working inside organizations as consultants, and to external people who offered consulting services to organizations

Empathy means being able to imagine what it is like to be a member of the intended audience – being able to put yourself into their shoes and see the world from their point of view

- What "technical" ideas, concepts and terms will be used during the writing?
    - How does the technical writer learn them?
    - How is the correct use of them validated before publication?
- Do these terms and concepts need to be "explained" or its it likely that the "average" or "normal" member of the intended audience knows them?
- What is the main reason for writing this piece:

    - explaining or educating,
    - influencing or persuading,
    - presenting or recommending,
    - arguing or presenting a case,
    - some or all of the above?

    - How does this affect the language to be used?

- What kind of time is the "average" or normal member of the audience likely to spend with the final product?
    - How does this affect the language to be used?
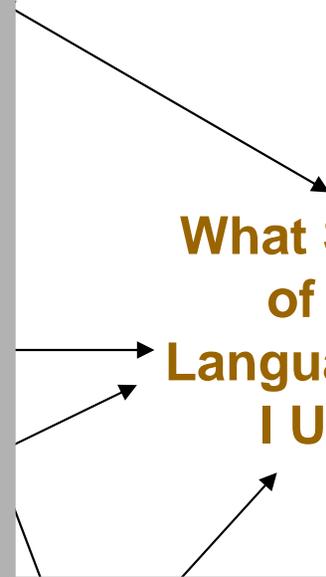
What Subset of the Language will I Use?

- … …
- … …
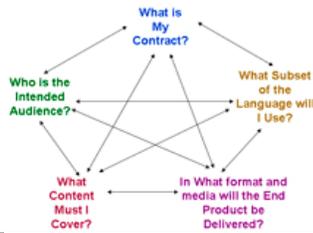
- Each intended audience for technical writing has its own specialty language that defines in-group membership
    - Often 600 to 800 technical terms form the "core" of the specialized language that are used by a professional group
  - Knowing this sub-set of the language, and **using it correctly**, have important consequences
    - Other members of the profession know that you are a valid member of the profession by the way that you use this specialized sub-set of the language
    - Credibility means "using" the audience's specialized language in a way that is natural to them
  - Using this sub-set of the language **appropriately** is essential to achieving the reason for doing the writing in the first place

> - **explaining or educating,**
> - **influencing or persuading,**
> - **presenting or recommending,**
> - **arguing or presenting a case … …**

The Language (continued 2)
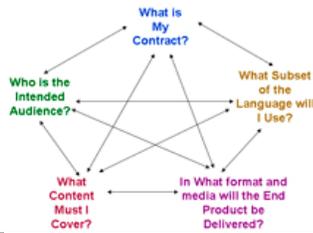
- Technical writers must pass the correctness and the appropriateness tests when writing for their intended audience

   - They can acquire the skills to do so in a number of ways

least

My belief about degree of difficulty

most

- Be working members of the professional group, and use the sub-set of the language because of their day-to-day experience as a member of the group

- Work with subject matter experts who contribute this use of the specialty language as part of a team writing effort

- Develop experience in the specialty language of the professional group through specializing in technical writing assignments for this subject area over time

- Learn the specialty language and use it correctly for this writing assignment

- This use of specialized language must be accompanied by skill in the use of the everyday language that makes up the rest of a piece of technical writing
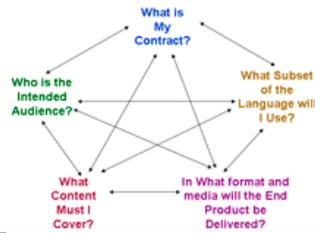
- Technical writing is "writing" – using language well makes all the difference
    - A superb technical writer uses both English (or Spanish or Thai or … …) **well**
    - and the sub-set of this language that makes up the technical subject specialty language **well**
    - **Readers ultimately decide if this is the case**
        - Editors and reviewers can help improve the final language of the piece, just as in fiction writing
        - Technical writing involves writing and re-writing and re-writing … …
        - The rewriting process is often complicated by the fact that technical writing often involves extensive use of graphics and pictures as well as words
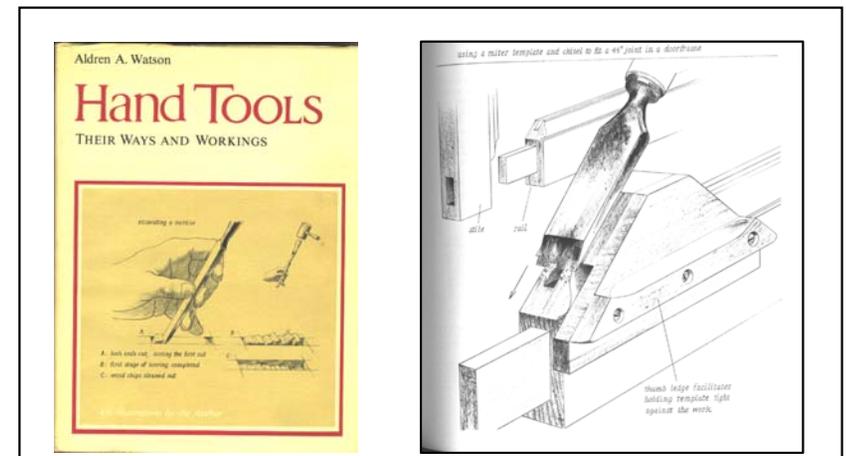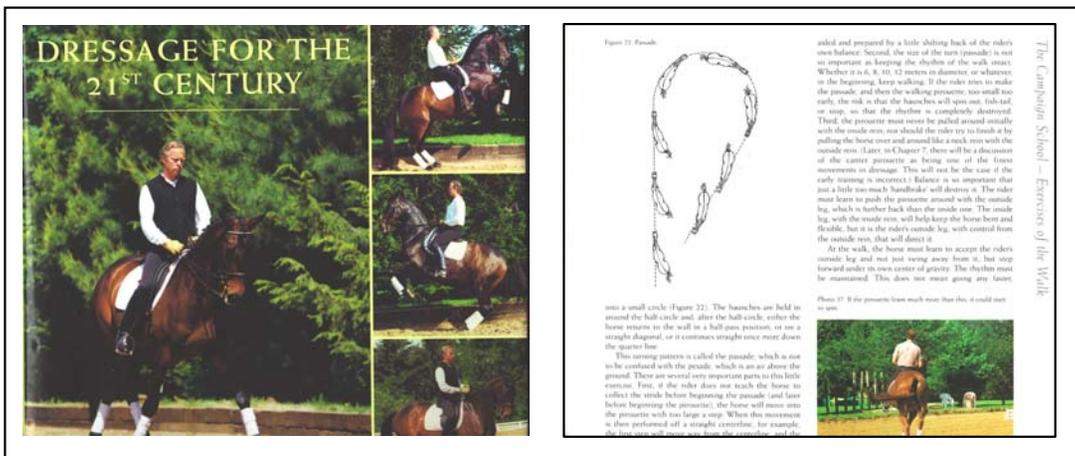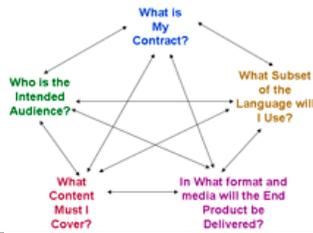
- Using language well starts as a craft that is learned through practice

- Practice leads to the discipline and the skilled habits that make a writer a language craft person

- Add talent, creativity and inspiration to this craft-person-ship and you may get truly inspired writing, even in technical writing

- By and large, the majority of technical writing is done at the craft level
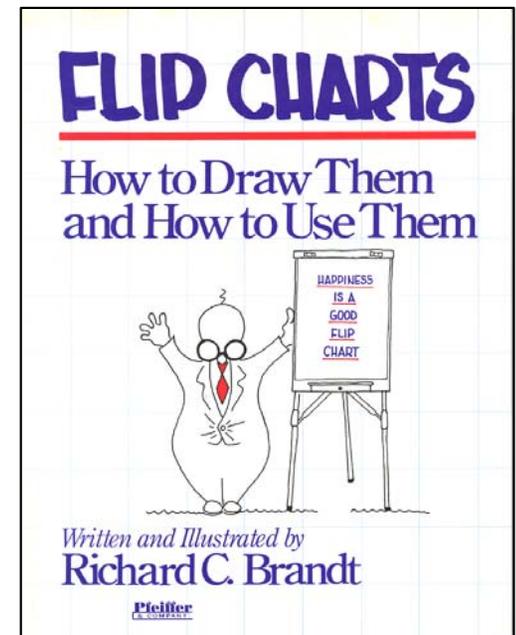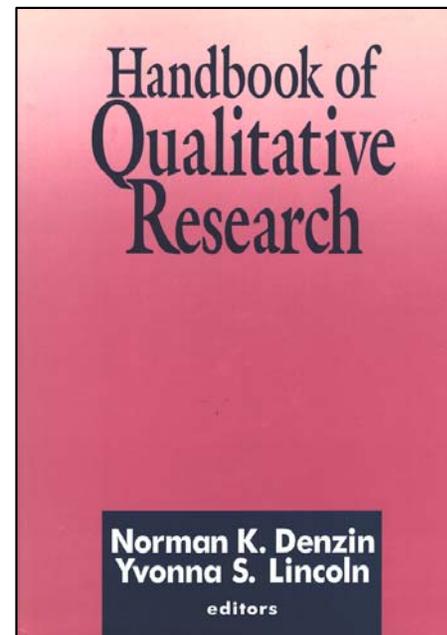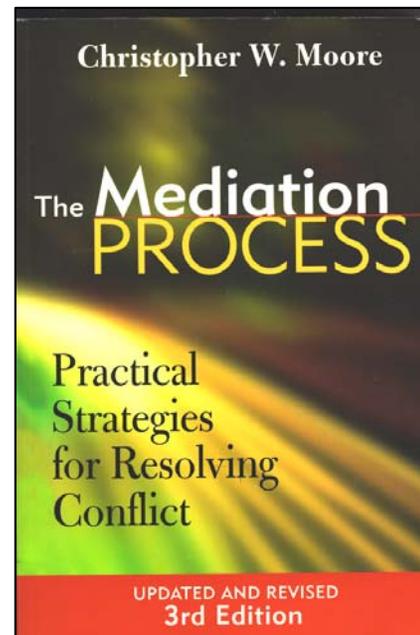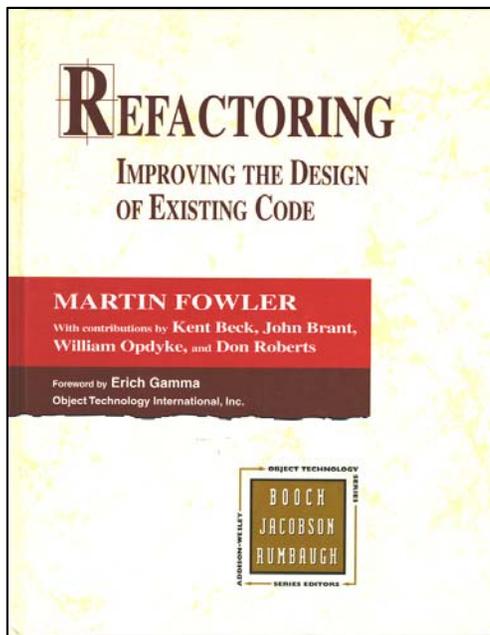
The Format and The Media

- Paper? computer screens?, film, CDs or DVDs to be viewed on TV or computer screens? – integrated media, ie. Multimedia – or some combination of these?

- Passive? or interactive?: e.g. simply read or controlled responses on a web site or in a computer?

- What software will be used during the writing – MS Office (or another word processor), Quark Express, … …. …. …… → what file formats will be used during production and for delivery to the audience? Are there any HW/SW compatibility concerns to be dealt with?

- Color? – RBG?, CMYK?, 2 colour?, black on white – or some combination? – what resolutions are required for viewing? For printing?

- If it is to be traditional black text on white paper – what about the fonts to be used? – what font sizes for what textual elements? – how will the final product be printed or reproduced? – does it allow good grayscale? Or will line art be all that will reproduce well?

- What about the pictures and illustrative graphics? Will the writer have to work directly with the graphic designers or artists? Or will pictures and graphics be added afterwards? Do the words and the pictures/graphics have to work together to deliver the message?

- What is the projected lifetime of the final product? Is it subject to "security" considerations as well as copyright? Does all the work have to be done in a way that includes concerns about "backup and recoverability" should anything happen to the writer or other team members during the production process?

- … … … …

- ... … … …

**In What Format and Media will the End Product be Delivered?**
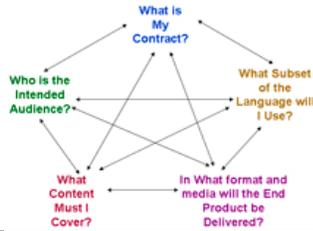
■ **Range of possibilities and some examples**

A project team, including technical writers, producing the passive documentation and interactive training material (10 to 15 documents and pieces of software), to accompany the sales of a large complex machine that sells for several million dollars; delivered in colour on paper and as interactive training material created in Macromedia Director, and delivered on DVDs for use on micro-computers

A writer, who is also an entrepreneur, producing a series of related "personal development" books and a number of coordinated Internet websites (common look, feel, etc)

A writer hired to produce a text document describing product requirements and specifications, in a way that uses a detailed word processing template and follows a completed previous example

A writer producing a black text on white text document to be copied and distributed for use inside an organization

A Lot

A Few

No of variable elements In the final product

The Technical Writer

Who Decides?

Someone else

The Format and The Media (continued 2)

- In traditional fiction publishing, this work is called design or book design
    - It is often done after the writing has largely been completed
    - The re-writing required by design considerations is largely done during the editing and proofing stage of the overall publishing project
- In technical writing, this design work is done before or at the same time as the writing
    - We often think of it as "desktop publishing" or document layout
        - Using publishing tools such as Quark Express and Adobe InDesign or PageMaker
    - Complex projects involve team work between the writers, the graphic designers/illustrators and the layout designers
    - A single person may act as the overall project coordinator,
        - This person makes the final "design" decisions as the work of the team moves forward – this person manages the project
            - The timing of the work
            - The cost of the work
            - The cost implications of design decisions for later points in the production process
                - E.g. color is more expensive to print on paper than black and white but it costs about the same to deliver when the delivery media is electronic
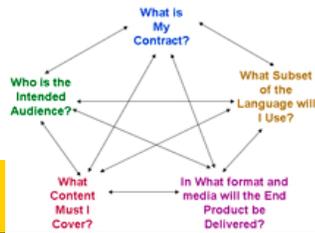
- Because of the range of delivery options – paper and electronic – that now exist – technical writing and graphic design are now done for a variety of computer related delivery mediums
    - Web sites
    - Computer applications
    - Interactive training material
    - DVD based promotional and other material that uses sound, animation as well as full motion project

- Technical writers often have technical skills that allow them to cross over into the other roles on such production projects
    - Web design using tools like Macromedia's Dreamweaver or Adobe's GoLive or Microsoft's Front Page
    - Document and page layout using tools like QuarkExpress or Adobe's InDesign or Adobe's PageMaker
    - Financial analysis using tools like Microsoft Excel or presentation preparation using MS PowerPoint
    - Graphic work using tools like Adobe Photoshop or Illustrator or Macromedia's Freehand
    - … ….

- As a result, some people stretch the concept of technical writing

- But I believe that the job of the technical writer focuses on "words"
    - When technical writers do the kind of things described above, they are adding other roles onto their core role as word craft person or word smith
    - However, technical writers who do not have **good team participation skills** severely limit their usefulness and marketability (more on this later)

The Format and The Media (continued 4)

- Some of my "desk" reference books
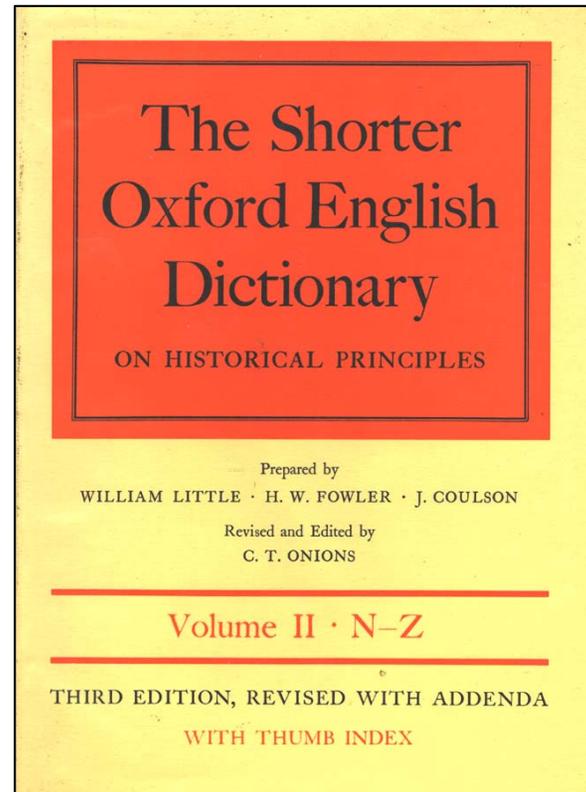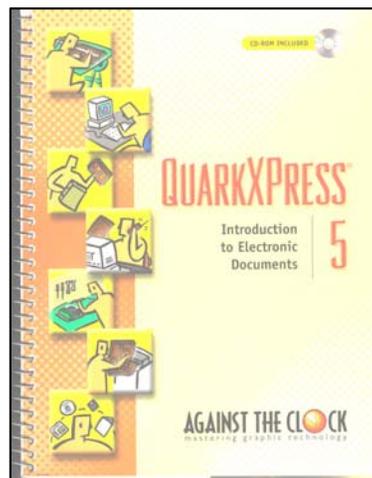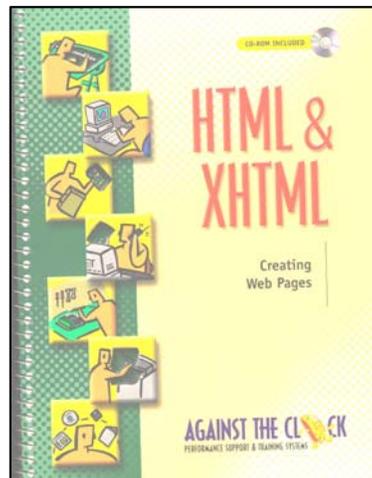
The other reference books are
about the tools are used to
deliver the
WORDS
to the audience
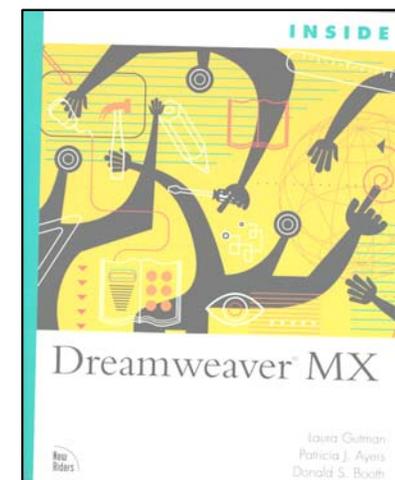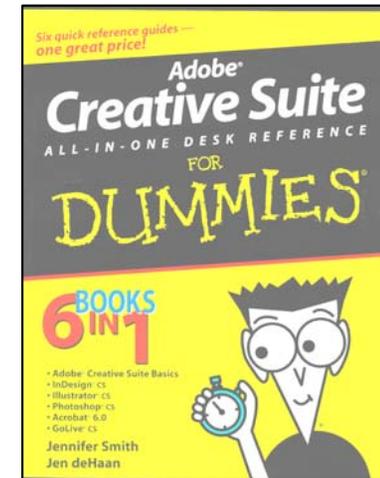
The Format and The Media (continued 5)

- Technical books that continue to teach me about "technical writing" each time I open one of them … …

- I recommend becoming familiar with the work of Edward R. Tufte if you are a technical writer
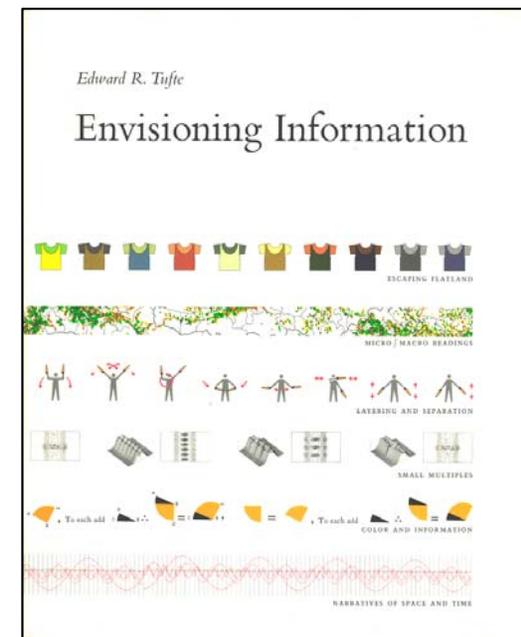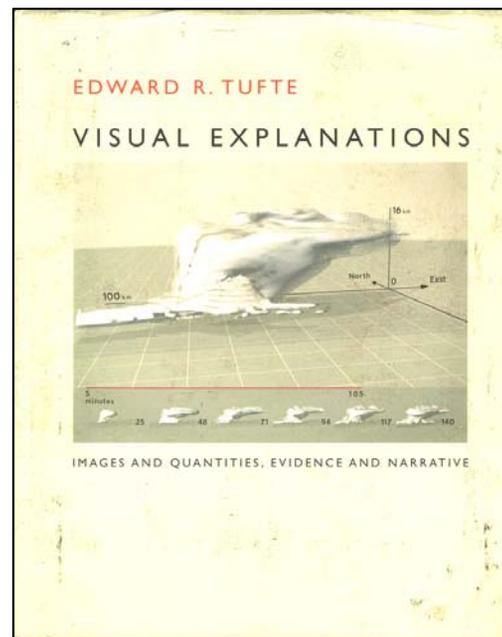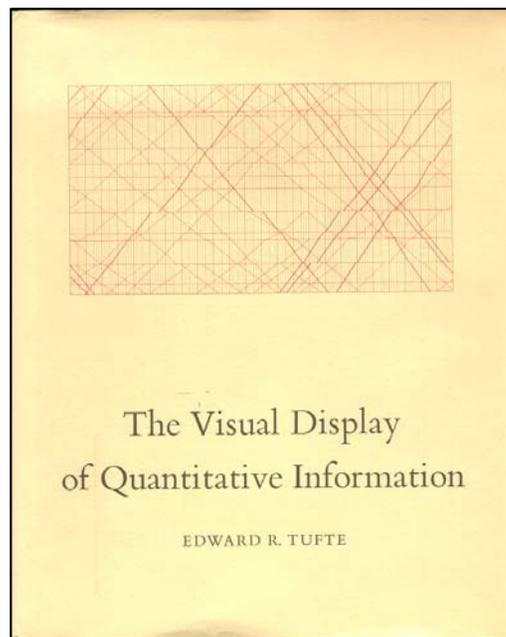
The Format and The Media

- Two papers that are well worth pondering if you have to persuade and to influence others through visual displays of facts and numbers in PowerPoint presentations
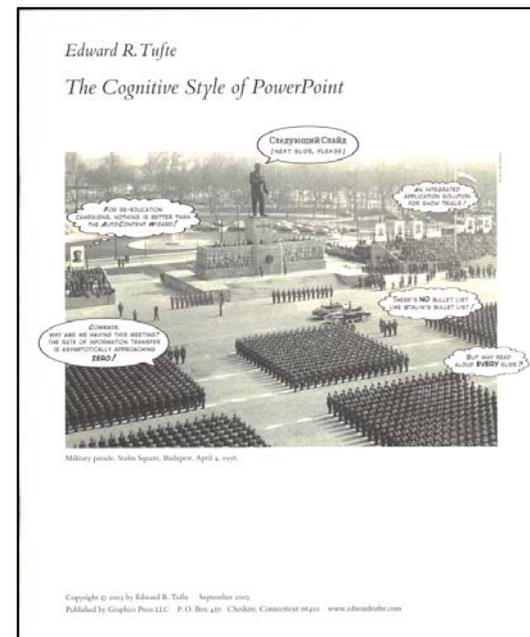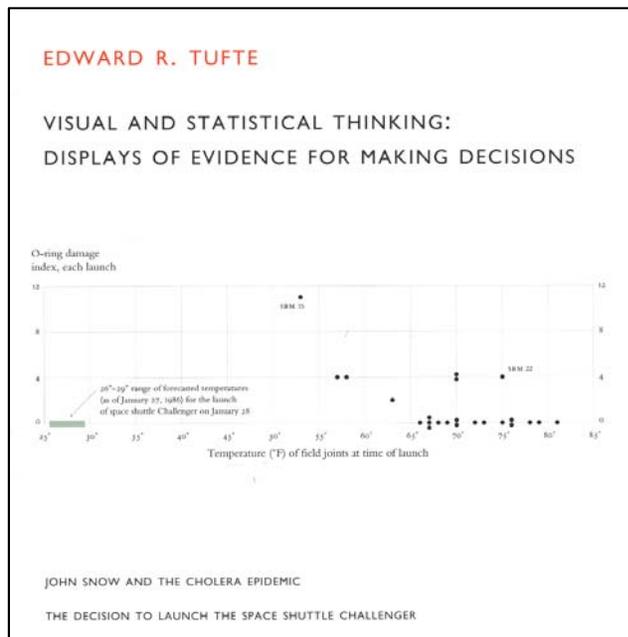
The Content

Finally, it is about the content, and only about the content … …
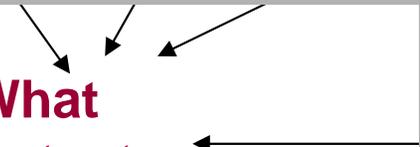
What Content Must I Cover?
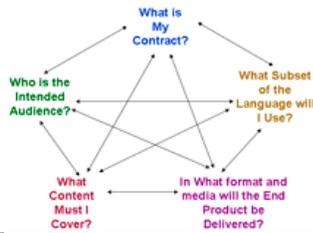
- A lot of the content that is created by technical writers is not readily available to the general reading public
    - It is produced for a specific audience within an organization
    - It is confidential to that organization
    - It is never distributed outside that organization
        - Until the last years, most of my own technical writing has had these characteristics
- My guess is (and it is only my guess)
   - That far more technical writing gets done in the world than fiction writing
    - That in aggregate, people **earn far more money doing technical writing** than fiction writing
- The products of technical writing have a very short life span
    - They are useful when they are useful
        - They disappear when they are no longer useful
    - Many of them are produced for a single use and a single purpose only
        - They disappear as soon as that purpose is achieved or passed by
- There are no hero's of technical writing
    - The social rituals around technical writing are dramatically different from fiction writing – there are no "book prizes" for the majority of technical writers
    - Many successful technical writers do not really think of themselves as writers – they write within the context of a different role or job
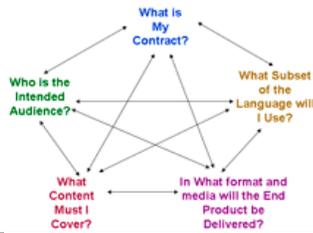
- The technical writer addresses the content the client wants to deal with
    - This content may or may not be content technical writers would have worked on if it was their choice
        - Often it is not
    - Therefore, technical writers have to come up with motivation, energy and "stick-to-it-ness" in ways that do not depend on the content
        - Partly, this originates in a technical writer's sense of being a professional writer
            - Professional means "completing the work that I contracted to do to a reasonable level of satisfaction on the part of the client"
        - Partly, this originates in the fact that the technical writer is being paid to complete a piece of writing
            - Being paid does motivate, especially when the re-numeration is perceived as being "fair" or "reasonable"
        - Partly, this originates in each technical writer's sense of self, and their way of expressing who they are through their professional work
- Technical writers sometimes develop a specialty content area in which they focus
    - They develop **expertise** in a **subject matter area** as they move from assignment to assignment – this helps deals the specialty language dynamics covered earlier
    - This helps a technical writer demonstrate capability during marketing and contracting activities
    - A personal reputation and a network of contacts grow over time
        - This helps with the issue of finding the next assignment, in that the assignments start to find "you"
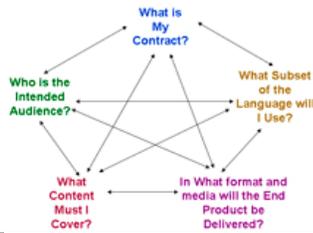
- **Sometimes, a technical writer is her or his own "client"**
  - Like fiction writers or journalist, technical writers sometimes write material that they market to publishers or "self publish"
    - In this case, content interest (wanting to write something specific or say something through writing) is the source of the motivation, energy and "stick-to-it-ness"
    - The "I get paid" motivation is generally deferred to some point in the furture
  - The contracting dynamics change substantially
    - Contracting with publishers often gives individuals in the publishing organization a great deal of influence on what gets published when, in what format
    - Contracting with yourself as "client" bring in very different dynamics
      - Some folks are very good at contracting with themselves – they are as disciplined when writing for 'themselves" as when they write for others
      - Others are very fluid in the way that they "contract" with themselves
    - **Every piece of successful technical writing involves an effective "contract"**
      - Even if the contract is with "yourself"
  - **Audience** requires even more attention from the writer when writing for "yourself"
    - **The technical writer who does not have a clear and "present" sense of audience while writing will not succeed in any piece of technical writing**
    - Sometimes, it is difficult to stay aware of the difference between the audience that is the self, and the audience for whom this piece of writing is intended
      - Dialoguing with friendly "reviewers" during the writing, and having a courageous editor, make a large contribution to dealing successfully with this dynamic
      - Often, it just means accepting the need to rewrite
        - Write it first for yourself, then rewrite it for the intended audience

Where are We on My Agenda?

- Let's explore each of the 5 elements
- Later on, I will add some thoughts about:
  - Tools Useful to Technical Writers
    - Hardware and software that you may find useful
  - Skills That Will Help You Work as a Technical Writer
    - Competencies that help you be a "technical writer"
  - Environments
    - Places where technical writers get a chance to practice their craft
- I will conclude with some ideas about moving between "technical writing" and other kinds of writing
- Dialogue
  - Questions, opinions, points of view … ….

Hardware You May Find Useful

The "Technical Writers' Desks in Our Environment

- Notice the large double screen PC configurations

Hardware You May Find Useful (2)

Our printers let us print in black and white, working color, and in "reasonable" CYMK proofing colour

- A lot of our equipment is 1 to 2 generations old and second hand
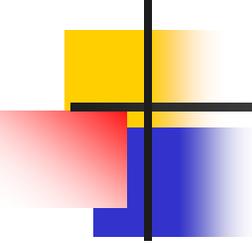
Skills That Will Help You Work as a Technical Writer

- **Interviewing**
  - The ability to carry out a structured conversation with an individual, and subsequently produce a set of notes that the "interviewee" confirms as accurate (90% plus) when reading them for the first time

- **Team Work and Interaction Skills**
  - See www.competencystyles.com for 4 core team work skill areas
    - "Interacting with Others"
      - How you interact with others in one-on-one and team situations
    - "Gathering and Using Information"
      - How you gather and use information to be creative
    - "Making Decisions"
      - How you make decisions by yourself and with others
    - "Structuring Personal Activity"
      - How you structure your personal and team activities

- **Project Participation Skills**
  - The ability to work effectively a member of a multi-individual team in which you do some tasks by yourself and other tasks with others
  - The ability to dialogue and to negotiate the dependencies that exist between project tasks so that your work does not delay others, or is inappropriately delayed by the work of others
  - The ability to participate effectively in project team meetings (speaking effectively, working through differences of opinion or approach … …)
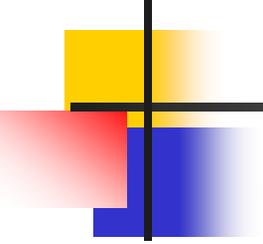
Environments Where I have Met Technical Writers

- Large Corporations / Organizations of all kinds

    - Information Technology
    - Finance
    - Marketing
    - Engineering
    - Human Resources
    - Product Design
    - … …

- Consulting Organizations, Large and Small, of all kinds
- Training Organizations
- Marketing and Advertising Agencies
- Publishing Organizations
- Public Service Organizations, large and small of all kinds
- Academia
- … …

- Technical writing is done anyplace where people use words to communicate

    - Ideas and concepts,
    - Requirements,
    - Proposals,
    - Recommendations,
    - Action plans,
    - Policies,
    - Explanations,
    - Documentation,
    - Service Offerings,
    - … …

  to other people on paper or on screens.

P.S.

  I exclude most commercial journalism and writing for stage and movie screen from "technical writing"

Moving from Technical Writing to Other Forms of Writing

- Technical writing teaches you the discipline of putting someone else's content into a format and into the words that are understood and useful to members of an intended audience
    - Technical writers are "disciplined" words smiths and writing craft people

Sometimes, individuals who start their writing career as journalists and technical writers move onto other things …. …

I wonder where Melissa will end up in her writing career … …

mindscan

ROBERT J. SAWYER

WINNER OF THE HUGO AND NEBULA AWARDS FOR BEST NOVEL

OBERT J. SAWYER, the author of fifteen revious novels, is the winner of both the ebula and Hugo awards. His excellent Web te can be found at SFwriter.com. He lives in ississauga, Ontario.
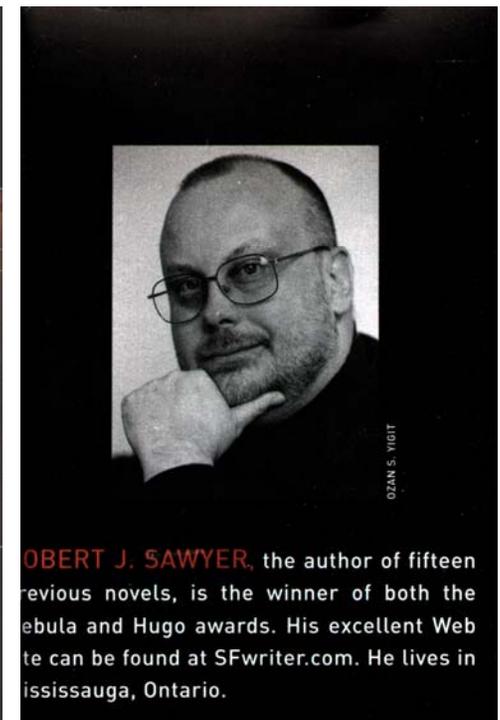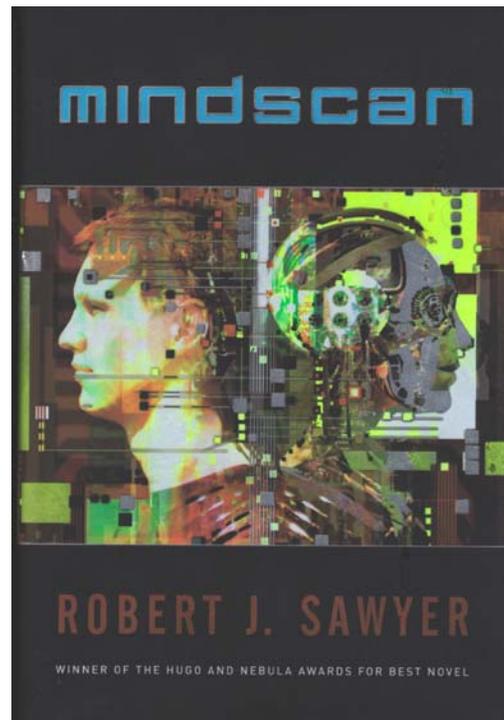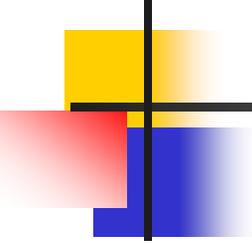
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Thanks for your attention and dialogue