

SCIENTIFIC AND TECHNICAL TRANSLATION EDITING

Lecture5

“Documents create a paper reality we call proof.” (Mason Cooley)

Types of Documents

In scientific writing, types or “genres” of documents are often understood as templates for content: forms that theoretically allow the writer to fill in spaces without having to think about the structure. This is a dangerous and simplistic way of thinking about genre, especially in engineering writing. Templates cannot accommodate the demands of different situations, unless they are revised according to those situations. In other words, genre can be thought of as both a type of document and a specific situation.

Almost all technical documents conform to one the following standard document types:

Memoranda, agendas, meeting documents, literature reviews, reports, letters, proposals, press releases, specifications, documentation, instructions and procedures, style guides, theses, oral presentations, résumés, notebooks;

or to electronic document types such as:electronic mail, Web sites, hypertext.

Memoranda

are brief, informal reports used to establish a record. They generalize the communication process by transmitting the message from one or more authors to one or more recipients. E-mail messages typically take the form of memoranda.

The memorandum is among the most versatile of organizational documents. The memo form is widely used to communicate technical and administrative information. Memoranda are written for numerous internal purposes, e.g. to request information, to make announcements, to outline policies, and to transmit meeting minutes. Thus, in most organizations, memos play a crucial role in establishing a record of decisions, requests, responsibilities, results, and concerns. The distinctive element of the memorandum is its **heading**, which is used to frame the message in a very accessible and transparent manner. This information sets out the context of the message and should be detailed enough to make the context very clear. **The Memo Body:** Generally, the topics of the memorandum are organized in order of importance, with the key statements first and the details further on. The memorandum should normally begin with a brief summary statement, in one or two sentences, identifying the key topic and the scope of the memorandum.

An agenda is a simple list of topics to be discussed (in order of listing), along with the names of individuals who have agreed to lead discussion of those topics. An agenda helps focus a meeting on a core of topics and allows you to control the pace and flow of a meeting and identify important items to be acted upon. Meetings without published agendas generally seem unfocused and unproductive. Circulation of an agenda before a meeting allows audience to consider their responses to items listed and will help stimulate discussion. Agendas may be circulated by e-mail or hard copy. The advantage of hard-copy agendas is that they may be brought to a meeting to facilitate the taking of notes during discussion.

Minutes are an essential part of organization life. They maintain an institutional memory of all actions taken or proposed and the key points of discussion. They also inform appropriate individuals who were not present at the meeting of the key action and discussion items. Minutes can be formal or informal. Formal minutes are often required by federal, state, or local law, by-laws, charters, or regulations. They are usually distributed to the members of the group before the next meeting, and then approved (sometimes after being amended).

Some minutes are legally parts of the public record and available to anyone. Often, however, organizational minutes are private and confidential documents, which should be distributed only to appropriate individuals. If the minutes are confidential, each page is stamped with a message such as “CONFIDENTIAL” or “DO NOT DISTRIBUTE.”

Literature Review summarize existing printed or electronic information on a specific subject in a literature review. A literature review may be a self-contained document, or it may be a section of a larger report. Because literature reviews inform colleagues and managers of current information on a subject, they prevent needless duplication of work and provide crucial information for current projects. Literature reviews can e.g. inform about the costs and efficacy of existing solutions to a particular technical problem.

Structure: Introduction, main body, conclusion, references, appendix.

Reports are standard documents in all organizations. A report is a stand-alone document that relays the results of a factual inquiry to other parties who have a professional interest in the results, expert opinions, laboratory tests, policy issues, trips, and administrative details--anything of importance to the professional organization. Because a report typically circulates as an independent document, it will typically follow a standard format that begins with a front matter section that orients the reader to the main purpose and content of the report. This section is followed by a report body, which contains the factual content of the report, and the body is followed by a section of end matter, which contains various references and secondary material.

Reports may be internal or external, informal or formal. The material of an internal report often takes the form of a memorandum. Informal reports are often short and concern administrative and policy issues or perform the function of keeping others informed about your work. Formal reports are generally tightly structured and extensively reviewed before they are released. Report structure may vary according to the intended audience. For example, the same material may be organized for peer specialists or for a managerial audience.

Types of Letters

Like memoranda, letters perform many functions in scientific and technical communication. The following are some of the most common types of letters written by people in technical fields.

Job application letters

Acceptance letters(Letters accepting a job)

Transmittal letters:A transmittal or cover letter accompanies a larger item, usually a document. The transmittal letter provides the recipient with a specific context in which to place the larger document and simultaneously gives the sender a permanent record of having sent the material.

Inquiry letters

Technical-information letters

Letters of recommendation

Letters have the following elements: Heading; Date;Recipient's address;SalutationBody;Closing;End notations.

Proposals

Most organizations rely on successful proposal writing for their continued existence. Proposals are carefully prepared and just as carefully reviewed by granting agencies. Proposals demonstrate that you understand the scope of the problem (its background, theory, and application) and, furthermore, that you have developed a valid and well-focused approach for reaching proposed objectives.

All proposals develop a plan of action in response to a specific need or problem. Some proposals are external, written in response to a request for proposals or an invitation to bid that has been published by an external organization. Other proposals are internal, written in response to a need within your own organization. In either case, proposals must show that you understand the nature of the problem and that you have a specific and

well-developed plan for arriving at a solution. Most proposals share a general structure for identifying the motivating problem, the objectives, and the proposed course of action.

A technical **press release** usually announces the development of a new product. The audience for such a document consists of writers and editors of trade journals, where the product may be reviewed and potential customers who might want purchase the new product. A press release contains the following elements:

A headline that identifies the product

A lead paragraph giving key information that attempts to persuade the reader to investigate the product further

A graphic that will secure the reader's attention

A description of the product

An explanation of why the product is important

Information about whom to contact for further information

Specifications are design outlines. They describe the structure, parts, performance, packaging, and delivery of an object or process in enough detail to enable a second party to construct the object or process. Specifications are widely used by contracting organizations as procurement documents. In this role, they legally bind the subcontractor to produce and deliver the object or process within the described guidelines. Specifications often include details of designs, dimensions, materials, performance, schedules, methods, and tests. The writer of a specification must carefully study the requirements of a situation to determine what the key performance requirements for the specified technology should be.

A specification could be a plan for

- a manufactured implement, such as a telephone
- the subsystem of an industrial product, such as an airplane
- a computer program for maintaining a physician's records
- a commercial contract, such as a house fire alarm system.

Specifications generally contain requirements for many of the following items:

Purpose and scope

Design overview

Functional description

Parts

- Dimensions; Materials

Performance requirements

Testing

- Method and equipment; Test procedure

Delivery

- Packaging
- Schedule
- Documentation

Troubleshooting

Documentation (Manuals)

The formal description of a mechanical system or a technical process is known as its documentation. Documentation takes the form of technical and user manuals that accompany various technological objects, materials, and processes. Electronic hardware, computers, chemicals, automobiles all are accompanied by descriptive documentation in the form of manuals. Two kinds of documentation are required when products are sold: **technical documentation and user documentation.**

Technical documentation is a physical description of a system, device, material, or process. This technical description is used by expert users and designers as guidelines to maintain and modify various elements of the system. Good examples of technical documentation are the wiring diagrams that accompany electrical hardware, the computer code that accompanies many programmed instruments, and the detailed pharmaceutical descriptions that accompany various medicines. These descriptions are all intended for experts, who must make informed decisions about the installation, capabilities, modifications, and applications of the technology in question.

User documentation includes the product guidelines addressed to the general user who needs to know basic requirements for getting the best use out of the technology. User documentation includes the manuals for product use, assembly, maintenance, operations, and repair.

Instructions and Procedures

A procedure is a series of steps followed in a regular, definite order to achieve a specified result. The goal of a written procedure is to enable a user to carry out an action with which he or she might not be familiar. Procedures save the writer time, transfer expertise, ensure consistency, and prevent errors and accidents. Procedures may amount to a single sheet for assembling a table, a lengthy manual of operating routines for a nuclear reactor, or a computer manual full of routines for using an operating system like UNIX or DOS.

A procedure is generally organized as follows:

Purpose and scope. States what the procedure accomplishes and the extent of its application.

Preliminary requirements. Identifies any items such as documents, personnel, special tools, approvals, field preparations needed to perform the procedure.

Warnings. Includes any dangerous aspects in performing the procedure.

Steps. Gives a step-by-step series of actions to be carried out in completing the procedure.

Style guides are widely used in the professions and in organizations to achieve a uniform document look by identifying formal requirements for document appearance. They are task-oriented documents in the sense that they provide definite instructions for preparing a document. In style guides, instructions are generally provided for numerous document elements, including most of the following:

Page formats (title page and sample page with headers or footers)

Numbering systems (page, graphics, sections)

Headings and subheadings

Bibliography, notes, and references

Graphics elements

Usage

Punctuation and mechanics

Theses. The thesis or dissertation is an extended research report on a theoretical, experimental, or design project. The thesis seeks to make some original contribution to the writer's field of specialization. Written by college seniors, and by master's and Ph.D. candidates, theses are long, sometimes immense - from 30 to 250 pages and more - a once-in-a-career effort. Although the immediate audiences are mainly thesis committees, prospective employers also read theses. Thesis work is good evidence of how you work on problems. The quality of a thesis indicates the quality of an individual's thinking, organization, and powers of expression. Thesis work at the master's and Ph.D. levels may be cited by other researchers, and some thesis work is condensed and published in journal articles and reports.

Oral presentations can be formal or informal, depending upon their explicit and implicit purposes and the delivery situation. An oral presentation can be almost any report type, such as a design review, a proposal, or a conference talk. Whatever the specific type,

however, an effective oral presentation is carefully planned with your objectives in mind and pays close attention to the demands of your audience.

Oral presentations differ significantly from written documents in several ways.

Résumés. Almost all prospective employers meet your résumé before they meet you, and their reaction to it usually determines whether or not they will consider you further by interviewing you. In addition, your job interviews will often start with references to your résumé. Consequently, spend considerable time in developing one or more versions of your résumé, each one targeted for a specific type of job.

Effective résumés contain the following elements:

Heading

Professional or job objective

Educational history

Work experience

Your special skills, activities, and accomplishments directly relevant to your professional objective

Reference statement.