

EMPLOTTING THE READER: MOTIVATION AND TECHNICAL DOCUMENTATION

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ABSTRACT

Technical documents implicitly require readers to play out textually constructed roles in order to create meanings. Good technical writers create texts that motivate their readers by emplotting them in an attractive fabula, and, especially, in a role that not only achieves the ostensible purposes of the documentation but also allows the reader to function as the hero in a narrative of progress and improvement. Drawing on reader-response criticism and narratology, this article shows how a particular instructional software manual, the *VP-Expert*™ guide, instructs and motivates readers by using devices which resemble the conventions of heroic narrative.

Killingsworth, Gilbertson, and Chew have argued recently that "just as rhetoric in all its types aims to 'move' the reader, all technical writing is action-oriented" [1, p. 16]. Applied to instructional, tutorial-based software manuals, this statement proves to be true in two senses. Explicitly, an instructional manual attempts to move the reader, step by step, through a sequence of actions to a desired outcome. Word-processing software manuals, for instance, lead the reader through the creation, storage, printing, and design of documents; spreadsheet software manuals, through the steps leading to the production of visually displayed columns, tables, charts, and so on. Implicitly, however, a manual must accomplish a great deal more. It must encourage the reader to face the daunting spectre of neologisms, foreign terms, and abstract, technical concepts, and to continue to read the text in spite of these obstacles. To accomplish this goal, a manual must *emplot* the reader, that is, must *create an action-oriented role within a storyline that transforms the reader from a hesitant, if not reluctant neophyte, into a*

Thus if the authorial-readership role is demeaning, inappropriate, ill-defined, or in some other way alienating to the actual readership, a schism develops between the aims of the writer and the actions of the reader. "We resist the blandishments of the copywriter," says Gibson, "just in so far as we refuse to become the mock reader his language invites us to become" [3, p. 266]. This resistance can originate from a number of sources: from the writer's violation of the actual reader's sense of the credible, for instance, or from a violation of any commonly accepted truism about writing style, content, organization, or document design. To find an example of the first case—violating credibility—we need only look to late-night television commercials. Do we really believe we can julienne-cut a large pile of fries in seconds? Do we want to be a member of this implied audience? Examples of the second case—violating stylistic and genre conventions—abound in any computer manual which presents material in a visually unappealing way, relies heavily on the passive voice, and puts cause-and-effect sequences in the wrong order. In this situation, we are asked to play an equally unattractive role: namely, the passive processor of information, the mere attendant to the writer's purposes, servile even to the point of untangling vague pronoun referents and awkward sentence structures merely because it is expected of us.

Excluded and Enforced Readers

Pushed hard enough, audience resistance gives way to hostility: the reader closes the manual, despises the writer, forgets the product. Hostile readers become likely candidates for one of two other audience roles: the excluded or the enforced reader. Marie Maclean defines excluded readers as those "highly ambiguous spectators who, either by reason of such authorial prohibition as 'This book, this performance is intended for men/women alone' or by reason of social convention or legislation, *should* not be present or are discouraged from being present, at the performance, just as they are discouraged from reading the text" [10, p. 38]. Examples of excluded audiences might consist of females at a female strip show or female readers of a document that uses sexist language. She defines enforced readers, by contrast, as those who "have to hear the performance [or read the book] . . . whether they like it or not" [10, p. 38]. This audience, in turn, might consist of students who must read and write about Shakespeare, or employees who must read and respond to the memos written by superiors within an organization.

Unlike strip shows and Shakespeare, software manuals don't usually generate completely excluded or enforced readerships. They do, however, create roles along a spectrum marked, at either extreme, by exclusion and enforcement. At the one end, we find manuals that use highly technical language without providing glossaries of terms, or that introduce abstruse concepts without grounding them in examples familiar to the real readership. Such manuals address an elite audience and exclude all others who have not been—nor, while reading these manuals, will

be—initiated into the language and concepts required to understand the documentation. At the other end, we have manuals written for software users within organizations, users who are forced to learn software applications in order to keep their jobs or advance in their positions.

The worst situation is to be both an excluded and enforced reader: someone who must learn software from a manual that provides little or no instructional support. Instead of invitees, such readers become exiles, marooned in a text without any means adequate to address their needs or pursue their ambitions. As Maclean points out, "the betrayal by enforcement . . . which forcibly couples reader and texts, stands to free reading as rape stands to love" [10, p. 40]. Little wonder, then, that technical writers who pay insufficient attention to the authorial roles they create can easily lapse from invitation to violation with devastating effect on the actual reader.

THE WRITER'S EMPLOTMENT OF THE READER

Clearly, technical writers need to understand the nature and implications of the roles they embed in their documentation. By using this knowledge, they can avoid creating authorial audiences that alienate or exclude—and promote ones that attract and motivate—the actual readership. Specifically, they should be familiar with the basic unit in narratology—the *fabula*, or basic story structure—because readership roles, as I hope to show, always function within a storyline.

The Structure of Fabulas: Events, Actors, and Outcomes

Fabulas consist of three basic components: events (actions), actants or actors (those who act or are acted upon), and outcomes (the results of the acts) [11, pp. 11–13]. Put simply, a *fabula* traces the sequence of events in which someone (or something) attempts to produce some result or achieve some goal. Time and location, too, can be added to this list of features since all actions presuppose a period of time (duration) and an expanse of space in which to occur.

Narratologists define an *event* as an action involving a "transition from one state to another, caused or experienced by actors" [11, p. 13]. Often this event is a sequence of individual acts, many of which involve human choices and confrontations, and most of which operate within some pattern of recognizable relationship: the rain falls and then the ground gets wet; someone wins a lottery and then buys a yacht; and so on. In a software manual, the event may be the sequence of explanations, tasks, and examples that lead the reader from one state (desiring computer knowledge and skill) to another (acquiring that knowledge and skill). Correspondingly, an *actor* is defined as someone or something which undergoes transitions. A wide range of actors can function within any given *fabula*. For instance, there are senders (something or someone who initiates the change), receivers (who benefit from the action), helpers (who aid an actor to achieve a

In instructional manual writing, the events and outcomes of the primary and secondary fabulas ideally should map on to each other, so that the real reader, by adopting the role of the authorial reader, becomes a knowledgeable, competent, and accomplished user of software. For instance, the relationships which govern events in the secondary fabula must correspond exactly with those in the primary fabula. Otherwise, pressing CONTROL-K will not give users the same result on their computer screens (primary fabula outcome) as it does in the manual (secondary fabula outcome). Similarly, the outcomes of the two levels of fabulas should overlap as much as possible. In the primary fabula, the process of improvement usually involves "the fulfillment of a task," namely, the real reader's successful accomplishing of tasks specified by the software. In the secondary fabula, each task in a manual—the steps required to format a disk, for instance—functions as a separate narrative episode, complete with its own helpers (an illustration or graphic), opponents (an example which applies only to hard drives while the actual reader's system has two floppy-disk drives) and, of course, outcomes (the user's success or failure to format the disk). Ideally, the sum of the authorial reader's successes will add up to a successful outcome for the actual user.

Ultimately, then, the writer succeeds when the actual reader fulfills the same tasks and achieves the same level of knowledge and skill that the authorial audience is emplotted to fulfill and achieve. A number of narratological nonequivalencies, however, can disrupt the ideal relationship between actual and authorial readers. Actual readers, for example, may have an external sender (an employer who requires computer competence) and an internal one (their own curiosity or ambition); may be direct receivers of the action (a pay increase or promotion) and an indirect one (intellectual pleasure); may find the manual—and embedded in it, the authorial reader—a helper or an opponent (see Figure 3). Authorial readers, on the other hand, may lack senders, only receive from an action what the writer has inscribed as ideal, and can always count on the aid of helpers (such as diagrams, tables of contents, examples, and so on) whatever that the writer has included in the manual. These nonequivalencies, if allowed to surface in the minds of actual readers, can interfere with their ability to identify with their counterparts in the secondary fabula.

READER MOTIVATION AND THE HERO'S PROGRESS

Writers must be careful, therefore, to provide incentives for the real readership to overcome its points of difference—and emphasize its points of resemblance—with the other, textually bound audience. These incentives, or motivations, play a crucial role in the structure of any successfully written instructional manual.

Kinds of Actors in a Heroic Fabula and their Roles in Instructional Manuals

1. **The Hero:** the primary actor who undertakes some action and achieves a successful outcome. In an instructional manual, the Hero is the authorial reader (the reader constructed by the text).
2. **The Sender:** the actor who motivates the Hero to undertake an action. In an instructional manual, the Sender is the implied writer (the writer constructed by the text).
3. **The Receiver:** the actor who receives something from the Hero's actions; very often the Hero and Receiver are the same. In an instructional manual, the authorial reader is always successful and therefore always derives benefits from the events. If the manual is successful, the actual reader, the actual writer, and the software company may all receive benefits as well.
4. **The Helper:** the actor who provides knowledge, advice, and other aid to the Hero. In an instructional manual, the Helper might be, for instance, a graphic aid, a glossary of terms, or an example.
5. **The Opponent:** the actor who blocks or challenges the Hero in his or her progress. In an instructional manual, the Opponent can be any graphic or textual element that hinders the real reader's ability to master skills or acquire knowledge.
6. **The Power:** a generalized, abstract force which can help or block the Hero. In a technical manual, the Power might be language, the software company, or the manual taken as a whole.

Figure 3. A narratological division of the roles embedded within instructional manuals.

The Unmotivated Reader: Operationalism

Many actual readers complain that software manuals are boring, repetitive, abstruse. These complaints frequently arise from the *operationalist mode* of most technical manuals. *Operationalism* is a scientific methodology aimed at reducing all concepts and terms to a set of experimental procedures and measurements [1, pp. 19-20]. Applied to technical manuals, operationalism reduces human acts to strict causal sequences—A follows B follows C, and so on—with little or no attention given to goals, satisfactions, or challenges. Kenneth Burke's distinction between *motion* and *action* might apply here: *motion* is activity "in the realm of sheer matter," namely, in the "realm of entities that do not respond to words as

HEROIC CONVENTIONS IN THE *VP-EXPERT*™ MANUAL

Vp-Expert™ is a software package designed, as it says, to help the user "create . . . a rule-based expert system" and to "encode the knowledge and judgment of an expert on any subject, then distribute it to others" [13, back cover]. To motivate actual readers to become competent users of the software, the "Beginner's Guide," Chapters 1 to 4 of the *Vp-Expert*™ instructional manual, employs a number of conventions borrowed from heroic narratives.

Late Point-of-Attack Time Sequencing

Specifically, the "Guide" makes use of a type of time sequencing peculiar to heroic tales: late point of attack. Late point-of-attack narratives start with the outcome of a major event and then work backwards, so to speak, tracing out the sequence of events that led to that outcome [14]. This time structure has one enormous advantage over storylines that begin at the beginning (early point-of-attack): the reader is introduced immediately to a significant and symbolically charged event.

Most heroic narratives, and almost all epics, avoid storylines that develop *ab ovo*, or from the beginning, since epics focus more on a specific set of heroic actions than the entire chronicle of the hero's life. Instead, these narratives begin *in medias res*, that is, in the middle of things, so that the central action of the hero grabs the reader's attention from the outset. Even the modern, low-key heroic structure of the "whodunit" opens with a gripping initial event—a murder—that motivates us to continue reading in order to solve the crime. The success of this genre depends greatly on the symbolism of the initial action: because murder represents a profound violation of the social order, it provides the reader with motives to act out a social imperative (to see justice done) and meet a personal challenge (to solve a profound puzzle or mystery).

The "Beginner's Guide" adapts the late point-of-attack structure to its own purposes. Rather than opening with an explanation of how to create an expert system (learning the inference engine and creating a knowledge base), Chapter 1 begins by having the reader run a completed expert system (an end-user or runtime consultation). The first chapter, then, begins at the end, with a fully functioning expert system. By doing so, the chapter seems to violate the progression of tasks actual readers have come to expect: the movement from means to ends, and from simple, preliminary tasks to more complex, interdependent ones. From an operationalist point of view, such sequencing of tasks might seem ill-advised, if not capricious. From a motivational point of view, however, the sequencing makes perfect sense: it presents readers with a desired outcome (the final product), and then leads them through all the steps necessary to achieve that outcome (creating that product). This narrative structure allows the actual reader to understand, right from the beginning, the benefits of using the software. Indeed, by running a

consultation program, authorial readers get to catch a glimpse of themselves in the future, not as readers, but as competent and accomplished users of the software.

The "Beginner's Guide" proceeds by means of retroversions, or flashbacks, that carefully introduce the reader to the nomenclature, principles, and rationale underpinning the runtime consultation introduced in Chapter 1. Chapters 2 to 4, for instance, outline how the inference engine works, how to use induction to create a knowledge base, and finally, how to develop the knowledge base further once it has been created. The "Final Comments" section of Chapter 1 signals the order and function of these retroversions [13, p. 127]:

Chapter 1 has shown you how to conduct a simple *VP-Expert* consultation, making use of all the available command options. However, it has not shown you how a consultation actually works—"behind-the-scenes"—processes that make it effective. To find out how problems are solved in *VP-Expert*, it is necessary to look at the knowledge base and understand how the inference engine uses a method called "backward chaining" during a consultation.

Of course, most of the tasks outlined in each subsequent chapter move in a predictable, straightforward, and linear fashion. Chapter 2, for instance, takes the reader through a series of steps required to create an induction table, beginning with "entering the editor" and then proceeding to "using the editor" and "building the induction table." The late point-of-attack structure of Chapter 1, however, shapes the actual readership's response to every task outlined in subsequent chapters, and provides a covering motive for the whole manual: to teach readers to create an expert system like the one they were introduced to, and indeed used, in the opening pages.

Ekphrasis and Chapter Summaries

Besides late point of attack, another feature common in heroic, and especially, epic narrative, is *ekphrasis*. An *ekphrasis* is a verbal or written description of a sculpture, painting, tapestry, or some other form of graphic or plastic art. A typical example of *ekphrasis*, taken from classical epic, is the description of the frieze above the temple of Juno in Book I of Virgil's great Latin epic, the *Aeneid*. In this particular episode, Aeneas (the epic hero) enters the city of Carthage and finds a temple dedicated to his chief opponent, the goddess Juno. He "reads" the painting which depicts all the major events that have brought him to Carthage, including, of course, the saga of the Trojan War, in which he lost family and homeland. Embedded in the picture, too, are hints of events yet to happen to Aeneas: his impending love affair with Dido, Queen of Carthage, and his eventual founding of a new civilization—Rome [15, pp. 32-35].

In general, then, an *ekphrasis* serves a number of functions: it interrupts the narrative *flow*, or progression of events, by describing an essentially static object; it embeds one kind of narrative within another, since the object being described

symbolic action rather than pure motion and will resist any role that does not transform causal sequences into narratives of progress and success.

- Remember your own role as implied writer. You send the authorial reader on a set tasks. You provide advice, warnings, and helpers to ensure the reader-hero's success. If you fail to carry out this role successfully, the reader may cast you as an undesirable actant, such as an opponent.
- If possible, motivate the actual reader by placing authorial readers in a late point-of-attack time sequence. In this way, actual readers may become familiar with the operation and benefits of the end-product first and will be more patient when reading instructions.
- Summarize chapters, sections, parts, and so on by emphasizing what the reader, as user, has achieved. Such summaries function as an *ekphrasis*, that is, as a reminder of the reader's competencies and progress to date, and provide an orientation to future tasks.

Using reader-response criticism and narratology to analyze technical documentation opens up many opportunities to research the structures of motivation in non-literary writing. Reader-heroes, writer-senders, late point-of-attack time sequencing, and *ekphrasis* are only a few heroic conventions embedded in the *VP-Expert*[™] manual. Many other heroic conventions, such as the use of epithets (the repetition of adjectives with certain nouns), catalogues (long lists of nouns), preparation scenes (descriptions of the hero's preparation for a journey or battle), and so on, may also find analogues within technical documentation. Common phrases, such as "user-friendly software" for instance, may fix the qualities of a thing in relation to a welcomed outcome in much the same way that often repeated epithets, such as "sharped-edged sword," do in Homeric poetry. Appendices of software functions and graphic insets of upcoming tasks, too, may function as epic catalogues and preparatory scenes, respectively: the first, by cataloguing all the power available to the user through the software; the second, by orienting the reader to future lessons and benefits. Both of these conventions may serve to make the role of the enabled and successful authorial reader-hero more attractive to the actual reader.

Finally, applying literary critical distinctions—in this case, distinctions borrowed from reader-response, narratology, and heroic story-constructions—to technical documentation underscores the value of constant dialogue among writers from different disciplines and professions. How writers emplot authorial readers, why real readers accept or reject particular roles, what roles succeed in which discourse communities—these questions touch on issues important to anyone who wishes to communicate with others. Ideally, research into these issues will help create the framework for a more unified approach to writing and discourse, one that will borrow methodologies from a variety of sources. As writers from different communities share more information, both practical and theoretical, we may see discussions of time, point-of-view, character, plot

structure, and so on become commonplace in technical writing circles. And if we are very fortunate, the intellectual exchange will go both ways, with the analysis of non-literary texts influencing, in turn, the methods and goals of literary criticism and criticism.

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