10.8: Conclusions

We normally use the word “conclusion” to refer to that last section or paragraph of a document. Actually, however, the word refers more to a specific type of final section. If we were going to be fussy about it, the current chapter should be called “Final Sections,” which covers all possibilities.

There are at least four ways to end a report: a summary, a true conclusion, an afterword, and nothing. Yes, it is possible to end a document with no conclusion (or “final section”) whatsoever. However, in most cases, that is a bit like slamming the phone down without even saying good bye. More often, the final section is some combination of the first three ways of ending the document.

Summaries

One common way to wrap up a report is to review and summarize the high points. If your report is rather long, complex, heavily detailed, and if you want your readers to come away with the right perspective, a summary is in order. For short reports, summaries can seem absurd—the reader thinks “You’ve just told me that!” Summaries need to read as if time has passed, things have settled down, and the writer is viewing the subject from higher ground.

Figure 1: Summary-type of final section. From a report written in the 1980s.

VIII. SUMMARY

This report has shown that as the supply of fresh water decreases, desalting water will become a necessity. While a number of different methods are in competition with each other, freezing methods of desalination appear to have the greatest potential for the future. The three main freezing techniques are the direct method, the indirect method, and the hydrate method. Each has some advantage over the others, but all three freezing methods have distinct advantages
over other methods of desalination. Because freezing methods operate at such low temperatures, scaling and corrosion of pipe and other equipment is greatly reduced. In non-freezing methods, corrosion is a great problem that is difficult and expensive to prevent. Freezing processes also allow the use of plastic and other protective coatings on steel equipment to prevent corrosion, a measure that cannot be taken in other methods that require high operating temperatures. Desalination, as this report has shown, requires much energy, regardless of the method. Therefore, pairing desalination plants with nuclear or solar power resources may be a necessity. Some of the expense of desalination can be offset, however.

“True” Conclusions

A “true” conclusion is a logical thing. For example, in the body of a report, you might present conflicting theories and explored the related data. Or you might have compared different models and brands of some product. In the conclusion, the “true” conclusion, you would present your resolution of the conflicting theories, your choice of the best model or brand—your final conclusions.

Figure 2: A “true”-conclusions final section. This type states conclusions based on the discussion contained in the body of the report. (From a report written in the 1980s.)

V. CONCLUSIONS

Solar heating can be an aid in fighting high fuel bills if planned carefully, as has been shown in preceding sections. Every home represents a different set of conditions; the best system for one home may not be the best one for next door. A salesman can make any system appear to be profitable on paper, and therefore prospective buyers must have some general knowledge about solar products. A solar heating system should have as many of the best design features as possible and still be affordable. As explained in this report, the collector should have high transmissivity and yet be durable enough to handle hail storms. Collector insulation should be at least one inch of fiberglass mat. Liquid circulating coils should be at least one inch in diameter if an open loop system is used. The control module should perform all the required functions with no added circuits. Any hot water circulating pumps should be isolated from the electric drive motor by a non-transmitting coupler of some kind. Homeowners should follow the recommendations in the guidelines section carefully. In particular, they should decide how much money they are willing to spend and then arrange their components in their order of importance. Control module designs vary the most in quality and therefore should have first priority. The collector is the second in importance, and care should be taken to ensure compatibility. Careful attention to the details of the design and selection of solar heating devices discussed in this report will enable homeowners to install efficient, productive solar heating systems.

Afterwords

One last possibility for ending a report involves turning to some related topic but discussing it at a very general level. Imagine that you had written a background report on some exciting new technology. In the final section, you might broaden your focus and discuss how that technology might be used, or the problems it might bring about. But the key is to keep it general—don’t force yourself into a whole new detailed section.
VII. CONCLUSION: FUTURE TRENDS

Everyone seems to agree that the car of the future must weigh even less than today’s down-sized models. According to a recent forecast by the Arthur Anderson Company, the typical car will have lost about 1,000 pounds between 1978 and 1990 [2:40]. The National Highway Traffic Safety Administration estimates the loss of another 350 pounds by 1995. To obtain these reductions, automobile manufacturers will have find or develop composites such as fiber-reinforced plastics for the major load-bearing components, particularly the frame and drivetrain components. Ford Motor Company believes that if it is to achieve further growth in the late 1980’s, it must achieve breakthroughs in structural and semistructural load-bearing applications. Some of the breakthroughs Ford sees as needed include improvements in the use of continuous fibers, especially hybridized reinforced materials containing glass and graphite fibers. In addition, Ford hopes to develop a high speed production system for continuous fiber preforms. In the related area of composite technology, researchers at Owens Corning and Hercules are seeking the best combination of hybrid fibers for structural automotive components such as engine and transmission supports, drive shafts, and leaf springs. Tests thus far have led the vice president of Owen Corning’s Composites and Equipment Marketing Division, John B. Jenks, to predict that hybrid composites can compete with metal by the mid-1980’s for both automotive leaf springs and transmission supports. With development in these areas of plastics for automobiles, we can look forward to lighter, less expensive, and more economical cars in the next decade. Such developments might well provide the needed spark to rejuvenate America’s auto industry and to further decrease our rate of petroleum consumption.

Combinations

In practice, the preceding ways of ending reports are often combined. You can analyze final sections of reports and identify elements that summarize, elements that conclude, and elements that discuss something related but at a general level (afterwords).

Here are some possibilities for afterword-type final sections:

- Provide a brief, general look to the future; speculate on future developments.
- Explore solutions to problems that were discussed in the main body of the report.
- Discuss the operation of a mechanism or technology that was described in the main body of the report.
- Provide some cautions, guidelines, tips, or preview of advanced functions.
- Explore the economics, social implications, problems, legal aspects, advantages, disadvantages, benefits, or applications of the report subject (but only generally and briefly).

Revision Checklist for Conclusions

As you reread and revise your conclusions, watch out for problems such as the following:
• If you use an afterword-type last section, make sure you write it at a general enough level that it does not seem like yet another body section of the report.
• Avoid conclusions for which there is no basis (discussion, support) in the body of report.
• Keep final sections brief and general.