## Writing from the Reader's Perspective

1. A because of the the the this to to which expected its most necessary particular single clues English interpretation it language meaning order people readers sentence word convey does gives lacks not.
2. This sentence does not convey a single particular meaning to most people because it lacks the expected word order of the English language, which gives readers the necessary clues to its interpretation.
3. The effects reported in this study have one of two explanations. Either the congeners themselves have direct and permanent effects upon the central nervous system, or there may be a retardation of the metabolism of ethanol by the congeners so that it has a stronger effect. The probability of the latter is less, because the observation of the effects occurred well after the blood alcohol concentrations were immeasurably small.
4. To obligate a corporation upon a contract to another party, it must be proven that the contract was its act, either by corporate action, that of an authorized agent, or by adoption and ratification and such ratification will be implied by acquiescence or the acceptance of the benefits of such contract, it being essential to implied ratification that the acceptance be with knowledge of all pertinent facts.

5a. What would be the employee reception accorded the introduction of such a proposal?

5b. How would the employees receive such a proposal?

5c. How would the employees receive such a proposal if the medical board introduced it at this time?

6a. To obligate a corporation upon a contract to another party, it must be proven that the contract was its act, either by corporate action, that of an authorized agent, or by $\underline{\text { adoption }}$ and ratification and such ratification will be implied by the acquiescence or the acceptance of the benefits of such contract, it being essential to implied ratification that the acceptance be with knowledge of all pertinent facts.

6b. For a contract to obligate a corporation to another party, the other party must prove that the corporation acted in one of two ways:
(1) The corporation or its authorized agent explicitly acted to enter the contract; or
(2) the corporation implicitly adopted and ratified the contract when it acquiesced in or accepted its benefits.

In this second circumstance, the other party must show that when the corporation accepted the benefits of the contract, the corporation knew all the pertinent facts.

7a. The effects reported in this study have one of two explanations. Either the congeners themselves have direct and permanent effects upon the central nervous system, or there may be a retardation of the metabolism of ethanol by the congeners so that it has a stronger effect. The probability of the latter is less, because the observation of the effects occurred well after the blood alcohol concentrations were immeasurably small.

7b. We can explain our results in one of two ways. Either the congeners themselves directly and permanently affect the central nervous system, or the congeners retard the metabolism of ethanol so that it affects the nervous system more strongly. Retardation is less probable, though, because we observed the effects well after the blood alcohol concentrations were immeasurably small.

8a. The Dean made a decision to conduct a review of the matter.

8b. The Dean decided to review the matter.

9a. There was a modification of the program by the Director.

9 b . The Director modified the program.
12.

A defect which involves the possible failure of a frame support plate may exist on your vehicle. This plate (front suspension pivot bar support plate) connects a portion of the front suspension to the vehicle frame, and its failure could affect vehicle directional control, particularly during heavy brake application. In addition, your vehicle may require adjustment service to the hood secondary catch system. The secondary catch may be misaligned so that the hood may not be adequately restrained to prevent hood fly-up in the event the primary latch is inadvertently left unengaged. Sudden hood fly-up beyond the secondary catch while driving could impair driver visibility. In certain circumstances, occurrences of either of the above conditions could result in vehicle crash without prior warning.

## VERBS

involve

|  | failure | fail |
| :---: | :---: | :---: |
| may exist |  |  |
| connects |  | connect |
|  | failure | fail |
| could affect |  |  |
|  | directional control | not steer |
|  | brake application | slam on brake |
| may require |  |  |
|  | adjustment service | adjust |
| may be misaligned |  | not align |
| may not be restrained |  | not restrain |
| to prevent |  | not prevent |
|  | fly-up | fly up |
| is left unengaged |  | not engage |
|  | fly-up | fly up |
|  | driving | drive |
| could impair |  |  |
|  | visibility | not see |
|  | occurrence | occur |
| could result |  |  |
|  | crash | crash |
|  | warning | not warn |

ACTIONS AS NOUNS ACTIONS AS VERBS
failure
connect
fail
not steer
slam on brake
adjust
not align
not restrain not prevent
fly up
not engage
fly up
drive
not see
occur
crash
not warn

## ACTIONS AS VERB

| -- | fail |
| :---: | :---: |
| ------------ | connect |
| --------- | fail |
| ---------- | not steer |
| ------------ | slam on brake |
| ------------ | adjust |
| ------------ | not align |
| ------------- | not restrain |
| ------ | not prevent |
| ------------ | fly up |
| ------ | not engage |
| ------------ | fly up |
| ---- | drive |
| -------- | not see |
| --------- | occur |
| ------------ | crash |
| ------------ | not warn |

13a. If there could be the presentation of data that would indicate the representation of the status of the problem was accurate, then a decision could be made.

13b. If [ ] presents data that would indicate that [ ] accurately represented the status of the problem, then [ ] could decide...
14. Andrus also concedes that surface coal mining operations will destroy wildlife. He contends that "while reduced populations will result from increased human activity in the areas and from the loss of habitat, no adverse long-term impact is anticipated."
15. A study was performed on the causes behind the decrease in the identification of child abuse among emergency room service by the Social Services staff.

16a. The GS of A. fumigatus was prepared as described by B. et al. Briefly, frozen mycelial cells were broken at $4^{\circ} \mathrm{C}$ with 500 mm -diameter glass beads. Cleared lysates were obtained by low-speed ( 2000 X g) centrifugation of the lysed cell suspension. The lysates were then submitted to a high-speed centrifugation (100,00 X g) to pellet the membranes, which were washed and subsequently homogenized in cold extraction buffer. The protein concentration in the homogenates was determined with the B-R Protein Assay Concentrate according to the manufacturer's instructions and was adjusted to $1 \mathrm{mg} / \mathrm{ml}$ with extraction buffer. Membranes were then frozen in a dry-ice methanol bath and were stored at $-80^{\circ} \mathrm{C}$. This material was defined as the membrane preparation.

16b. We prepared the GS of A. fumigatus as described by B. et al. Briefly, we broke frozen mycelial cells at $4^{\circ} \mathrm{C}$ with 500 mm -diameter glass beads. We obtained cleared lysates by low-speed ( 2000 X g ) centrifugation of the lysed cell suspension. We then submitted the lysates to a high-speed centrifugation ( $100,00 \mathrm{X} \mathrm{g}$ ) to pellet the membranes, which we washed and subsequently homogenized in cold extraction buffer. We determined the protein concentration in the homogenates with the B-R Protein Assay Concentrate according to the manufacturer's instructions and adjusted it to $1 \mathrm{mg} / \mathrm{ml}$ with extraction buffer. We froze the membranes in a dry-ice methanol bath and stored them at $-80^{\circ} \mathrm{C}$. We defined this material as the membrane preparation.

16c. We prepared the GS of A. fumigatus as described by B. et al. Briefly, Ellen broke frozen mycelial cells at $4^{\circ} \mathrm{C}$ with 500 mm -diameter glass beads. She obtained cleared lysates by low-speed ( 2000 X g) centrifugation of the lysed cell suspension. Mark then submitted the lysates to a high-speed centrifugation (100,00 X g) to pellet the membranes, which I washed and subsequently homogenized in cold extraction buffer. Mark determined the protein concentration in the homogenates with the B-R Protein Assay Concentrate according to the manufacturer's instructions and Ellen adjusted it to $1 \mathrm{mg} / \mathrm{ml}$ with extraction buffer. She then froze the membranes in a dry-ice methanol bath and stored them at $-80^{\circ} \mathrm{C}$. We all defined this material as the membrane preparation.

16d. The GS of A. fumigatus was prepared as described by B. et al. Briefly, frozen mycelial cells were broken at $4^{\circ} \mathrm{C}$ with 500 mm -diameter glass beads. Cleared lysates were obtained by low-speed ( 2000 X g ) centrifugation of the lysed cell suspension. The lysates were then submitted to a high-speed centrifugation (100,00 X g) to pellet the membranes, which were washed and subsequently homogenized in cold extraction buffer. The protein concentration in the homogenates was determined with the B-R Protein Assay Concentrate according to the manufacturer's instructions and was adjusted to $1 \mathrm{mg} / \mathrm{ml}$ with extraction buffer. Membranes were then frozen in a dry-ice methanol bath and were stored at $-80^{\circ} \mathrm{C}$. We defined this material as the membrane preparation.
17. The trial court's conclusion that the defendants made full disclosure of all relevant information bearing on the value of Knaebel's stock is clearly erroneous.
18. Any assertion that chemical "retesting" is a valid technique but because of a time lag has not been recognized by the scientific community is untenable.
19. Significant variations in the process for the initial review of some major grant mechanisms, such as research project grants, First Independent Research Support and Transition (FIRST) Awards, program project grants, Academic Research Enhancement Awards, Small Business Innovation Research grants, National Research Service Awards, Support of Scientific Meetings, and Research Career Development Awards are described in subsequent sections.

20a. Similarly, in Weaver, the D.C. Court of Appeals held that the qualifying word "estimate" used in conjunction with the stipulations and conditions that the quantities were "to be used to canvass bids" and "not to be the basis for any payment by the ultimate consumer of the products" and that payments would be made "only for actual quantities of work completed," transformed the contract into a requirements contract.

20b. Similarly, in Weaver, the D.C. Court of Appeals V1 T1 S2
held that the qualifying word "estimate" used in
conjunction with the stipulations and conditions T2 S3 V3 that the quantities were "to be used to canvass
bids" and "not to be the basis for any payment by
the ultimate consumer of the products" and

| T3 | S4 |
| :---: | :---: |
| that payments would be made "only for actual |  |

V2
quantities of work completed," transformed the
contract into a requirements contract.
21. First, the mechanisms of development and tissue specific control of the gonadotropin genes in pituitary cells, including the roles of both transcriptional activation and restriction in directing unique patterns of gene expression, will be assessed. Second, the molecular basis of hormonal regulation of gonadotropin gene expression, with emphasis on induction of gene expression by hypothalamic gonadotropin-releasing hormone (GnRH) and repression by gonadal steroids will be determined. Finally, the molecular events determining the developmental lineage of the gonadotrope in the anterior pituitary, utilizing approaches in transgenic mice including targeted immortalization, cell ablation, and ectopic expression of regulatory proteins, will be investigated.
22. Public Question No. 1 (New Jersey 1996 election ballot)

Shall the "Port of New Jersey Revitalization, Dredging, Environmental Cleanup, Lake Restoration, and Delaware Bay Economic Development Bond Act of 1996," which authorizes the State to issue bonds in the amount of $\$ 300,000,000$ for the purposes of financing, in whole or in part, the costs of constructing subaqueous pits and a containment facility or facilities for the disposal of materials dredged from the Kill Van Kull, Arthur Kill, and other navigation channels located in the New Jersey/ New York port region; projects related to the decontamination of dredged material; dredging the Kill Van Kull, Arthur Kill, and other navigation channels located in the New Jersey/ New York port region; dredging navigation channels not located in the New Jersey/New York port region; remediating hazardous discharge sites; and constructing Water supply facilities to replace contaminated water supplies; the restoration of lakes; and economic development sites in the Delaware River and Bay Region; and which provides the ways and means to pay the interest on the debt and also to pay and discharge the principal thereof, be approved?
23. The pie smashed John in the face.

Mary smashed John in the face with the pie.

Mary smashed the pie into John's face.

John's face was smashed by the pie.

John's face was smashed by Mary.

John's face suffered under Mary's pie attack.

John suffered severe injuries as a result of Mary's pie attack.

Defendant maliciously and without provocation smashed the pie into the plaintiff's face.

Plaintiff suffered severe and irreversible damages as a proximate result of defendant's malicious and unprovoked pie attack.

24a. Miss Grundy taught me grammar.
24b. I learned grammar from Miss Grundy.
24c. Grammar I learned from Miss Grundy.

25a. $\quad \mathrm{t}$ (time) $=15^{\prime} \mathrm{T}$ (temperature) $=32^{\circ} ; \mathrm{t}=0^{\prime} \mathrm{T}=25^{\circ} ; \mathrm{t}=$ $6^{\prime} \mathrm{T}=29^{\circ} ; \mathrm{t}=3^{\prime} \mathrm{T}=27^{\circ} ; \mathrm{t}=12^{\prime} \mathrm{T}=32^{\circ} ; \mathrm{t}=9^{\prime} \mathrm{T}=31^{\circ}$

25 b .
time (min) Temperature ( ${ }^{\circ} \mathrm{C}$ )

| 0 | 25 |
| :---: | ---: |
| 3 | 27 |
| 6 | 29 |
| 9 | 31 |
| 12 | 32 |
| 15 | 32 |

25c. Temperature ( ${ }^{\circ} \mathrm{C}$ ) time (min)

| 25 | 0 |
| :--- | ---: |
| 27 | 3 |
| 29 | 6 |
| 31 | 9 |
| 32 | 12 |
| 32 | 15 |

26a. The establishment of a new maintenance shift with a new starting time -- even if that starting time were to coincide with an established starting time for non-maintenance jobs, such as 12:00 midnight -would also require Union agreement.

26b. Union agreement would also be required before [ ] could establish a new maintenance shift with a new starting time -- even if that starting time were to coincide with an established starting time for non-maintenance jobs, such as 12:00 midnight, and I could go on further to add more details and the main thrust of the sentence would still be perceivable.

27a. Maximum left ventricular wall velocity, mean left ventricular wall velocity, and amplitude of posterior left ventricular wall excursion were calculated directly by previously described techniques.

27b. We used previously described techniques to calculate directly the maximum left ventricular wall velocity, the mean left ventricular wall velocity, and the amplitude of posterior left ventricular wall excursion.
28. Churches exhorting members to sever family and marital ties, rodent infestation, and employee discharge, and a refusal to make a retraction in a newspaper, were all considered outside the net of "extreme and outrageous."

29a. A gross violation of academic responsibility is required to dismiss a tenured faculty member for cause, and an elaborate hearing procedure with a prior statement of specific charges is provided for before a tenured faculty member may be dismissed for cause.

29b. In order for a university to dismiss a tenured faculty member for cause, it must prove a gross violation of academic responsibility.

29c. Even when a gross violation of academic responsibility is uncovered, the University may still not dismiss a tenured faculty member until it (1) formally makes the faculty member aware of the specific charges, and (2) provides an elaborate hearing.

30a. This film has been modified from its original version. It has been formatted to fit your TV.

30b. This film has been modified from its original version: It has been formatted to fit your TV.

31a. In order to minimalize cost for this project, we should subdivide it into discrete sub-tasks: the creation of maintenance procedures, the analysis of systems; and the definition of requirements.

31b. In order to minimalize cost for this project, we should subdivide it into discrete sub-tasks: the analysis of systems; the definition of requirements; and the creation of maintenance procedures.
32. As used in the foundry industry, turn-key means responsibility for the satisfactory performance of a piece of equipment in addition to the design, manufacture, and installation of that equipment. $P$ et al agree that this definition of turn-key is commonly understood in the foundry industry.
33. I also have a hard time thinking of conclusions, so I will end this paper with that thought.
34. If I am not sure, I will revise the sentence using a conjunction, then I know where to put the comma.
35. The techniques for performing the latter are very briefly described (perhaps, indicative of the inexperience of the applicant in measuring transcription and mRNA stability), but assuming that the assays are competently performed, their proposed utilization overlooks the fact that the preliminary data presented indicates that there are no changes in mRNA abundance with vitamin D induction (and, consequently, no reason to measure transcription rates or message stability).
36. A disease that progresses with few or no symptoms to indicate its gravity is an "insidious" disease, under this definition. Asbestosis, neoplasia, mesothelioma, and bronchogenic carcinoma are all examples of insidious diseases. Asbestos insulation installers who have inhaled asbestos fibers over a period of many years regularly contract these diseases.
37. The utilization of dextropropoxyphene products has been increasing gradually since 1981. Sales of these products have risen significantly in 1983 as a result of several factors, including the withdrawal of Zomax from the market in March 1983 and the Tylenol scare in 1982. Total prescriptions for dextropropoxyphene products continue to show strong and consistent growth since the removal of Zomax.

The Three Units of Discourse You Must Come to Recognize

1. The Main Clause
2. The Qualifying Clause
3. The Phrase
"Unit of discourse" --
Any group of words having a beginning and an end
"Main Clause" --
Any unit of discourse that (1) contains both a subject and a verb and (2) can stand by itself as a whole sentence
"Qualifying Clause" --
Any unit of discourse that (1) contains both a subject and a verb but (2) cannot stand by itself as a whole sentence
"Phrase" --
Any unit of discourse that does not qualify as a clause because it lacks either a subject or a verb or both

## Current statistics

-- Average words per scientific sentence $=\mathbf{2 8 . 8 9}$
-- Percentage of sentences that have more than a main clauses $=49.8 \%$
-- Percentage of sentences with more than one clause that have a main clause first problem $=91 . \%$

38a. Inhibition of CMA in heart unexpectedly confers resistance to stress-induced cardiac dysfunction in both pressure overload and myocardial infarction models, which is opposite to MA deficiency in heart, and differs from CMA deficiency in other tissues.

38aa. Inhibition of CMA in heart unexpectedly confers resistance to stress-induced cardiac dysfunction // in both pressure overload and myocardial infarction models, // which is opposite to MA deficiency in heart, // and differs from CMA deficiency in other tissues. //

38b. Inhibition of CMA in heart unexpectedly confers resistance to stress-induced cardiac dysfunction. This happens in both pressure overload and myocardial infarction models: In heart, this is opposite to MA deficiency; in other tissues, it differs in CMA deficiency.
39. Fred and His Dog
a. Although Fred's a nice guy, he beats his dog.
b. Although Fred beats his dog, he's a nice guy.
c. Fred's a nice guy, but he beats his dog.
d. Fred beats his dog, but he's a nice guy.
e. Fred is a good husband, a caring father, a fine colleague, and an altogether nice guy, even though he beats his dog.
f. Even though he beats his dog, Fred is a good husband, a caring father, a fine colleague, and an altogether nice guy.
g. We should invest in the MRX plan, even though the risks are high.
h. Even though the risks are high, we should invest in the MRX plan.
i. Even though the risks are high, we should draw upon whatever funds are available and invest in the MRX plan.
40. While the hypothesis from this highly qualified investigator is novel, the rationale is poorly justified, the studies lack the input of an expert in metabolism, and a more simple approach should be used first to assess the validity of the primary hypothesis with preliminary data and reduction in cost and risk to the experimental subjects.

41a. This overall scope, though it might prove to be overly ambitious, is a great conceptual strength of the proposal.

41b. Although this overall scope is a great conceptual strength of the proposal, it might prove to be overly ambitious.

42a. This is an exciting, but somewhat flawed application from a creative investigator.

42b. This creative investigator has produced an exciting but somewhat flawed application.

42c. This creative investigator has produced a somewhat flawed but exciting application.

42d. This creative investigator has produced a somewhat flawed but truly exciting application.
44. This current research effort by this investigator has been in progress now for more than six years, but, unfortunately, the productivity of the many studies has been disappointing.
45. Four publications have been produced in the last funding period but they are not focused on the three specific aims in the previous proposal.
46. Overall, however, this proposal is scientifically sound, but there is no innovation.
47. This is a very short application with little experimental detail by two new investigators who are very well trained in mouse genetics.
48. Although Dr. X was not able to realize his goals with this interesting protein, considerable progress was made in other related areas.
49. Over the last several years, much doubt has been raised as to the future of the US space program. The space program received a major setback on January 28, 1986, when the space shuttle Challenger exploded. The explosion of the Challenger was more than simply the tragic death of seven brave Americans, it represented the death of a dream. This dream of the conquering of space is crucial to our continued growth as a nation. Our nation needs space exploration and development in order to maintain the worldwide balance of power, to provide new sources of raw materials, and also to establish a new frontier, against which another generation of Americans may be able to grow and rediscover the values that made our country great. This greatness has been diminishing of late, and today's space program is now a prime target of both governmental and nongovernmental critics. These critics argue that we must radically cut back on, if not eliminate entirely, our space program because it has allowed itself to be dominated by the Defense Department (DOD) and has been unable to define a specific set of goals necessary for future progress. Progress must be made by designing new projects like the space plane and reorganizing NASA into a joint, Cabinetlevel agency. This agency would be the sole directional institution for space-related activities within the country. Our country's future is, despite the complaints of critics, inexorably linked to the future of the space program; our space program must go forward.
50. In recent years, a substantial body of information has accrued indicating that for cells belonging to the monocyte/macrophage family the active metabolite of vitamin D3 $(1,25(\mathrm{OH}) 2 \mathrm{D} 3)$ may act as a potent maturation-differentiation agent. Among the changes associated with such maturation are the acquisition of specific cell surface markers (e.g., CD4 and CD14) and enhanced phagocytic and bacterial cell killing potential. Since both (and, perhaps, all) the latter are energy-requiring processes, our application suggests that this energy requirement is fulfilled by the generation energy-rich phosphate bonds by the phosphorylating enzyme, creatine kinase B (CK-B). CK-B is evidently expressed at very low levels in immature monocytes; but it increases dramatically following either the induction of differentiation or activation by antigen. Specifically, in the model system to be used in the present study (the histiocytic lymphoma cell line U937), although it is unmeasurable in the native (immature) state, it increases dramatically following induction with $1,25(\mathrm{OH}) 2 \mathrm{D} 3$. This increase is manifest at the protein level but not at the RNA level, where the data presented indicate the following: (1) that the abundance of CK-B mRNA does not change with induction by $1,25(\mathrm{OH}) 2 \mathrm{D} 3$; (2) that control of CK-B protein synthesis is, therefore, at the translation level; and (3) that CK-B expression can be blocked by infesting (transfecting) U937 cells with a retroviral vector capable of overexpressing antisense CK-B cRNA. It is these latter observations which form the basis for the proposed studies.
51. The Breton lai became one of the most popular poetic forms in England in the 12th and 13th centuries. The adventures of a single main character formed the content of this relatively short type of poem. The long continental romance, such as that written by Chretien de Troyes in France during the late twelfth century, preceded the lai as a popular form of literature among the Norman nobility. The concept of "amour courtois," or courtly love, was at the heart of most romances, and the development of the Breton lai was strongly influenced by the exaggerated attitude toward love and chivalry that was expressed in the courtly love tradition. A lower and illiterate audience was apparently the major consumer of this form, however; a form peculiar to England, therefore, evolved out of these concepts.
52. Violence on television may offend people of highly moral beliefs. These people live cleanly and despise any corrupt acts. For example, if people worship the devil then this could greatly disturb their life. These scenes presented on television demoralize people of definite tenets. Besides providing a bad influence, this type of violence may affront people considerably.
53. In order to further our understanding of how proteins transit through the eukaryotic secretory pathway, we propose to study in vesicular transport the function of the Saccharomyces cerevisiae protein Uso1p. Recently we demonstrated that Uso1p is homologous to a mammalian protein - required in vitro for cis to medial Golgi transport - P115. P115 was identified and purified using a specialized version of the in vitro cis to medial intra-Golgi transport assay that was used to purify several cytosolic transport factors including both NSF (N-ethylmalemide sensitive factor) and $\alpha, B$, and Y SNAP (Soluble NSF Attachment Protein). The SNAPs are required for the binding of NSF to the membrane. NSF and SNAP are components of the protein complex which mediates the targeting and/or fusion stages of vesicular transport. These proteins have been shown to function at multiple transport steps throughout the secretory pathway, as well as in endocytosis, transcytosis, and synaptic vesicle fusion. We believe that like NSF and SNAPs, p115 and Uso1p may also function at multiple steps of transport.

55a. The wilderness masters the colonist. It finds him a European in dress, industries, tools, modes of travel and thought. It takes him from the railroad car and puts him in the birch canoe. It strips off the garments of civilization and arrays him in the hunting shirt and the moccasin. It puts him in the log cabin of the Cherokee and the Iroquois and runs an Indian palisade around him. In short, the frontier is at first too strong for the man. It imposes on him conditions which it furnishes or it destroys him, and so the Indian clearings come to fit him and the Indian trails lead him. Little by little, the wilderness changes because of him, but the outcome is not the old Europe....The fact is, that here is a new product that is American.

55b. The colonist must submit to the wilderness. He comes to it a European in dress, industries, tools, modes of travel and thought. Because of it, he leaves the railroad car for the birch canoe. He must strip off the garments of civilization and array himself in the hunting shirt and the moccasin. He must adopt the log cabin of the Cherokee and the Iroquois and run an Indian palisade around himself. In short, the colonist is at first too weak for the wilderness. He must accept the conditions which it furnishes or perish, and so he fits himself to the Indian clearings and follows the Indian trails. Little by little, he transforms the wilderness, but the outcome is not the old Europe ....The fact is, that here is a new product that is American.

55c. The wilderness masters the colonist. It finds him a European in dress, industries, tools, modes of travel and thought. It takes him from the railroad car and puts him in the birch canoe. It strips off the garments of civilization and arrays him in the hunting shirt and the moccasin. It puts him in the log cabin of the Cherokee and the Iroquois and runs an Indian palisade around him. In short, the frontier is at first too strong for the man. He must accept the conditions which it furnishes or perish, and so he fits himself to the Indian clearings and follows the Indian trails. Little by little, he transforms the wilderness, but the outcome is not the old Europe....The fact is, that here is a new product that is American.

55d. The colonist must submit to the wilderness. He comes to it a European in dress, industries, tools, modes of travel and thought. Because of it, he leaves the railroad car for the birch canoe. He must strip off the garments of civilization and array himself in the hunting shirt and the moccasin. He must adopt the log cabin of the Cherokee and the Iroquois and run an Indian palisade around himself. In short, the frontier is at first too strong for the man. It imposes on him conditions which it furnishes or it destroys him, and so the Indian clearings come to fit him and the Indian trails lead him. Little by little, the wilderness changes because of him, but the outcome is not the old Europe....The fact is, here is a new product that is American.

55e. Mastery was achieved by the wilderness over the colonist. He appears in European dress, industries, tools, modes of travel, and thought. The birch canoe replaces the railroad car. The moccasin and the hunting shirt are worn by the colonist when he strips off the garments of civilization. The log cabin of the Cherokee and the Iroquois house him; he is surrounded by the Indian palisade. The strength of the frontier exceeds that of the man, in short. Acceptance must be afforded the conditions it furnishes, or he must die, and so the Indian clearings are accommodated, and he follows the Indian trails. Little by little a new product called America - not the old Europe - emerges from this transformed wilderness.

57a. Much has happened since the Apollo program and the Mercury and Gemini missions that paved the way for it in the early 1960's. Numerous scientific and communications satellites have been launched into Earth orbit. Unmanned deep-space probes have been sent to the sun, the moon, and the planets, where they gathered a wealth of information about our solar system. Skylab demonstrated that American astronauts could live and work in space for months at a time. And a dramatically different launch vehicle entered service: the space shuttle. The winged reusable craft was supposed to make space flight routine and cheap.

57b. Numerous scientific and communications satellites have been launched into Earth orbit. Unmanned deep-space probes have been sent to the sun, the moon, and the planets, where they gathered a wealth of information about our solar system. Skylab demonstrated that American astronauts could live and work in space for months at a time. And a dramatically different launch vehicle entered service: the space shuttle. The winged reusable craft was supposed to make space flight routine and cheap. Much has happened since the Apollo program and the Mercury and Gemini missions that paved the way for it in the early 1960's.
58.

Dear Mr. President,
As a concerned citizen of the United States, I am writing to you to express my disapproval of the current state of affairs in South Africa. Certainly you are aware of the system of apartheid, which has been in effect for some three hundred years. Apartheid is a system of racial segregation in housing, education, and commerce throughout the various provinces of South Africa. It is propagated by the government of South Africa, which is composed entirely of whites, in a nation with a large black majority. The government keeps the black majority in a state of disenfranchisement and denies all means of self determination to the country's majority.

Mr. President, this flagrant disregard for human rights and democratic principles flies in the face of all accepted principles of democracy and morality. Seeds of rebellion are being sewn by black opposition leaders in South Africa. A liberated black majority in South Africa is a nation whose time has come. There will be no turning back. Considering the geopolitical position which South Africa maintains, I urge you not to alienate the emerging black revolutionary forces which will inevitably claim power in South Africa. Please pledge the complete support of the United States to ending apartheid in South Africa and ensuring a healthy relationship with the new government that is to come.
59. The essential element of the structure is the manner in which the two chains are held together by hydrogen bonds between the bases. The bases are perpendicular to the fiber axis and joined together in pairs. The pairing arrangement is very specific, and only certain pairs of bases will fit into the structure. The basic reason for this is that we have assumed that the backbone of each polynucleotide chain is in the form of a regular helix. Thus, irrespective of which bases are present, the glucosidic bonds (which join sugar and base) are arranged in a regular manner in space. In particular, any two glucosidic bonds (one from each chain) which are attached to a bonded pair of bases, must always occur at a fixed distance apart due to the regularity of the two backbones to which they are joined. The result is that one member of a pair of bases must always be a purine, and the other a pyrimidine, in order to bridge between the two chains. If a pair consisted of two purines, for example, there would not be room for it; if of two pyrimidines, they would be too far apart to form hydrogen bonds.

60a. The summer I was 16, I took a train from New York to Steamboat Springs, Colo., where I was going to be assistant horse wrangler at a camp. The trip took three days, and since I was much too shy to talk to strangers, I had quite a lot of time for reading. I read all of Gone with the Wind. I read all the interesting articles in a couple of magazines I had, and then I went back and read all the dull stuff. I also took all the quizzes, a thing of which magazines were even fuller than now.

60b. The summer I was 16 , I took a train from New York to Steamboat Springs, Colo., where I was going to be assistant horse wrangler at a camp. The trip took three days, and since I was much too shy to talk to strangers, I had quite a lot of time for reading. I read all the interesting articles in a couple of magazines I had, and then I went back and read all the dull stuff. I also took all the quizzes, a thing of which magazines were even fuller than now. I read all of Gone with the Wind.

60c. The summer I was 16, I took a train from New York to Steamboat Springs, Colo. The trip took three days, and since I was much too shy to talk to strangers, I had quite a lot of time for reading. I read all of Gone with the Wind. I read all the interesting articles in a couple of magazines I had, and then I went back and read all the dull stuff. I also took all the quizzes, a thing of which magazines were even fuller than now. I was going to be assistant horse wrangler at a camp.

60d. The summer I was 16, I took a train from New York to Steamboat Springs, Colo., where I was going to be assistant horse wrangler at a camp. Since the trip took three days, I had quite a lot of time for reading. I read all of Gone with the Wind. I read all the interesting articles in a couple of magazines I had, and then I went back and read all the dull stuff. I also took all the quizzes, a thing of which magazines were even fuller than now. I was much too shy to talk to strangers.

54a. I have refrained directly from criticizing the President for three years. Because I believe that Americans must stand united in the face of the Soviet Union, our foremost adversary and before the world, I have been reticent. A fair time to pursue his goals and test his policies is also the President's right, I believe. The water's edge is the limit to politics, in this sense. But this cannot mean that, if the President is wrong and the world situation has become critical, all criticism should be muted indefinitely.

A fair chance has been extended the President, and policies that make our relationship with the Soviet Union more dangerous than at any time in the past generation no longer deserve American support and support cannot be expected.

Reagan administrative diplomacy has had this grim result: We could face not the risk of nuclear war but its reality if we allow present developments in nuclear arms and United States-Soviet relations to continue.

54b. For three years, I have refrained from directly criticizing the President of the United States. I have been reticent because I believe that Americans must stand united before the world, particularly in the face of our foremost adversary, the Soviet Union. I also believe a President should be given fair time to pursue his goals and test his policies. In this sense, politics should stop at the water's edge. But this cannot mean that all criticism should be muted indefinitely, no matter how wrong a President may be or how critical the world situation may become.

President Reagan has had his fair chance, and he can no longer expect Americans to support policies that make our relationship with the Soviet Union more dangerous than at any time in the past generation.

This is the grim result of Reagan Administrative diplomacy: If present developments in nuclear arms and United States-Soviet relations are permitted to continue, we could face not the risk of nuclear war but its reality.

## Bibliography

## Dr. Gopen's Website: www.GeorgeGopen.com

## Books

Expectations: Teaching Writing form the Reader's Perspective.
Pearson/Longman. 2004.

The Sense of Structure: Writing from the Reader's Perspective.
Pearson/Longman, 2004.

Gopen's Reader Expectation Approach to the English Language:
A New Tweetment. (Cupertino, CA: ThiNKaha Publications, 2016.)

Articles (all of which can be found on Dr. Gopen's website)
"Writing to Facilitate Reading: Supplying Full Grammatical
Closure to Main Clauses Makes a Significant Difference in Reader Comprehension." American Scientist, JanuaryFebruary 2023, 28-33.
"Getting the Point Across." American Scientist, NovemberDecember 2022, 346-351.
"The Science of Scientific Writing." (With Judith Swan.) American Scientist, Nov.-Dec 1990. This article has been recognized by American Scientist as one of the 36 "Classic Articles" in its 100-year history of publication. It leads that journal's citation index.
"The Litigation Articles." A series of 42 two-to-five-page articles published by the American Bar Association journal Litigation. Suitable for non-lawyer readers.

## Videos

Now available for rental on Vimeo.com: A 15-hour video of Dr. Gopen's lectures on the Reader Expectation Approach to the English Language. See his website for details. The first of the twelve episodes is avaliable free of charge on the website.

