

Model Answer: ***An Evaluation of a Complex Argument***

MARK LETTERI

The following comprises an actual assignment on logical structure and evaluation and its corresponding model answer, with some editorial modifications. The task requirements were based largely on the course text, *Reasoning: A Practical Guide for Canadian Students* by Robert C. Pinto, J. Anthony Blair, and Katharine E. Parr. (This is the Canadian edition; the U.S. version is *Reasoning: A Practical Guide* by Pinto and Blair.)

The course involved three written assignments; this represents the third one. Assignment 1 required students to identify and categorize propositions, assess the credibility of sources who make claims, and offer a critique of a mass media account of an event. Assignment 2 focussed exclusively on issues of language (equivocation, problematic evaluative language, and so on). Assignment 3 required students to analyze (diagram) the logical structure of and evaluate a piece of reasoning, and presupposed the expected competencies of the first two assignments.

The evaluative method in *Reasoning* comprises essentially the following two operations or questions:

Strength of inference: “Can I imagine at least one plausible alternate situation such that the premiss(es) is(are) true but the conclusion (or sub-conclusion) false?” (asked of each inferential move);

Acceptability: “Is this premiss acceptable?” (asked of each premiss).

Students should be able to (i) extract and show properly the logical elements and structure of a piece of reasoning, (ii) evaluate the reasoning using the aforementioned method, and (iii) apply all other pertinent aspects of the course to these ends. While my students were able generally to fulfil my hopes for this assignment, in retrospect I suspect that, though it is relatively clear in its general lines, I provided an overly long example.

The strength of inference component of *Reasoning*'s evaluative method rests on the construction of counterexamples. Nevertheless, in recent work Claude Gratton indicates several important issues and concerns regarding counterexamples, both theoretical and practical. His initial theoretical point is that we should distinguish counterexamples by analogy and counterexamples by possible conjunction.

Practically speaking, Gratton says, students need greater direction in the construction of counterexamples. Even a text such as *Reasoning*, which includes some detailed instructions on how to create and use counterexamples, falls short, he claims. I have revised slightly my model answer below in response to Gratton's position and editorial suggestions, although it is still largely an earnest effort to comply with *Reasoning*'s stated method. It must be read as such. On reflection, I will consider additional ways of creating and using counterexamples in future teaching.

References

- Gratton, Claude. "Counterexamples by Possible Conjunction and the Sufficiency of Reasons." *Teaching Philosophy*, 26.1 (2003): 57-81.
- Gratton, Claude. "Using Counterexamples to Estimate Degrees of Support." International Symposium on Informal Logic. Ontario Society for Studies in Argumentation. Windsor, Ontario, 15 May 2003.

Stimulus Passage

Reasoning asks one to determine whether a particular inference link constitutes entailment, and, if it does not, just how strong the link is between premiss(es) and conclusion. The text offers a range of inferential link strengths and forces one to choose a category. The text also asks one to assess the acceptability of each premiss. Nevertheless, *Reasoning* does not actually provide a clear method for generating an integrated judgment.

There is a movement to criminalize parents over the spanking issue. I do not know anyone who wants to spank their child. It is not a good thing to do. Young parents, however, need to be empowered with the skills to meet the challenges of parenthood.

One may have a high-functioning child for whom the issue of spanking never arises or one may be unlucky enough to have a child temperamentally so difficult that the parent feels he is being pulled through a knothole daily. Parents have long recognized they have to adjust their parenting skills to meet these individual needs.

Placing blame is easier than finding real solutions. Eliminating spanking will not cure society's problems. It will not eliminate mental illness. Many childhood behavioural problems are developmentally and neurologically rooted. It has to do with how the brain is hard wired.

The approach has to be a positive one. Neither child nor parent will benefit from cut-and-dry changes to legislation. These changes will pit parents and children against each other. Every time the child acts out, the parents may have to call the police to intervene for fear their child will accuse them of abuse. Parents will be afraid even to touch their child. This

has already happened in the school system. Schools now routinely deal with it by suspension. [Parents need real authority] but can parents also suspend the child [as schools can]?

If one wants truly to decrease the use of spanking, it will take time and resources to implement. It will require real thought and hard work. Advocates for positive discipline need to lobby for increased funding to early childhood programs. Putting parents into the court system is a cheap and lousy solution.

Young parents need positive role models. There should be education on parenting at the high school level and young parent level. . . .

Monies should be provided for early childhood assessment and treatment to empower parents to deal more effectively with the difficult child. To make spanking a criminal offence serves no one, not even the child. It will create orphanages and an increased need for foster homes. The taxpayers will pay exorbitant salaries to fund the spanking police. Taxpayers will pay to set up these out-of-control children in apartments with food and clothing allowances. These needy children will then have to learn the hard lessons of life without their parents.

See the argument diagram opposite.

1a. Strength of Inference operation/question (assume the premisses are true)

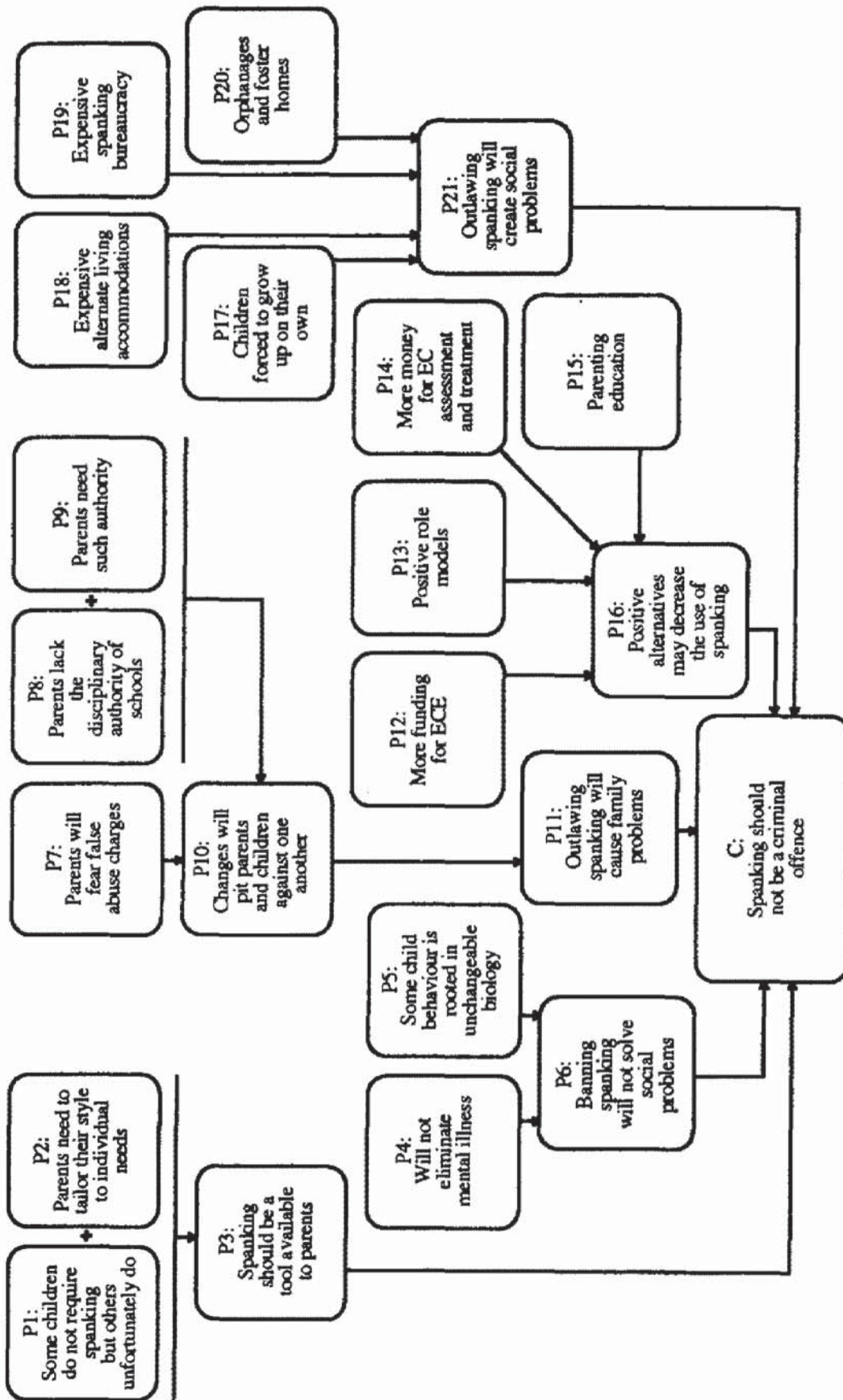
P3: Can we imagine this main premiss being true but the overall conclusion false? No, we cannot imagine any alternate scenarios or “wedges” between this premiss and the conclusion.

. . . Therefore, given my present knowledge and intuitions, the link between this main premiss and the overall conclusion is entailment or maximal strength.

P6: Can we imagine this main premiss being true but the overall conclusion false? Yes, we can imagine one or more alternate scenarios or “wedges” between this premiss and the conclusion. The fact that outlawing spanking will not solve certain social problems is not a sufficient condition, for opponents of spanking view the practice as itself a social problem to be eliminated. This is a serious objection, as critics say that empirical research shows spanking to be deleterious generally.

. . . Therefore, the link between this main premiss and the overall conclusion is weak.

PII: Can we imagine this main premiss being true but the overall conclusion false? Yes, we can imagine one or more alternate scenarios or “wedges” between this premiss and the conclusion. The fact that outlawing spanking will cause certain family problems should not, according to critics, obscure the reality of spanking as itself a problem; more to the point, perhaps, spanking may cause as many or



more family problems than it allegedly solves. This is a serious objection.

. . . Therefore, the link between this main premiss and the overall conclusion is weak.

P16: Can we imagine this main premiss being true but the overall conclusion false? Yes, we can imagine one or more alternate scenarios or “wedges” between this premiss and the conclusion. Positive alternatives may decrease the use of spanking, but spanking in reality may be decidedly counterproductive and even intrinsically wrong, in which case it ought to be against the law. A decrease in spanking, while desirable, is hardly sufficient to resolve the allegedly problematic nature of spanking itself.

. . . Therefore, the link between this main premiss and the overall conclusion is weak.

P21: Can we imagine the main premiss being true but the overall conclusion false? Yes, we can imagine one or more alternate scenarios or “wedges” between this premiss and the conclusion. While outlawing spanking may create social problems by denying parents a potentially effective method of controlling behaviour, more personal and familial problems might ensue from the violent or forceful act of spanking itself, as critics allege. In this case, spanking should still be banned.

. . . Therefore, the link between this main premiss and the overall conclusion is weak to moderate, or moderate at best.

Support for P3: Can we imagine this support being true but the main premiss false? No, we cannot imagine any alternate scenarios or “wedges” between this support and sub-conclusion.

. . . Therefore, given my present knowledge and intuitions, the link between this support and the main premiss is entailment or maximal strength.

Support for P6: Can we imagine this support being true but the main premiss false? Yes, we can imagine one or more alternate scenarios or “wedges” between this support and sub-conclusion. The point about mental illness (P4) contributes to the main premiss (it is at least somewhat helpful), but the point about hard wiring (P5) makes us wonder why spanking would help in such cases anyway (it is unhelpful).

. . . Therefore, “splitting the difference” between these two supporting premisses, the link between the support and the main premiss is moderate.

Support for P11: Can we imagine this support being true but the main premiss false? Assuming that “pitting” parents and children against one another itself counts as a family problem, we cannot imagine any alternate scenarios or “wedges” between this support and the main premiss.

. . . Therefore, given my present understanding, the link between the support and the main premiss is entailment or maximal strength.

Support for Supporting Premiss P10: Can we imagine this support being true but P10 false? Yes, we can imagine one or more alternate scenarios or “wedges”

between this support and internal conclusion. These points may indeed lead to the result that is listed—but not necessarily. Some parents might fear false charges of abuse (P7), and some children might threaten such charges, but it does not follow that parents and children in general would be “pitted” against one another. The same holds true, though perhaps to a lesser degree, regarding P8 and P9. A rather extreme degree of mutual mistrust and animosity, along with an appreciable dearth of safeguards, alternatives, and remedies, probably would have to exist already for P10 to result. This state of affairs, as expressed, would be surprising.

. . . Therefore, the link between the support and P10 is weak to moderate.

Support for P16: Can we imagine the support premisses, whether interpreted as dependent or independent, being true but the main premiss false? No, we cannot imagine any alternate scenarios or “wedges” between the main premiss and any one or combination of the supporting premisses.

. . . Therefore, the premisses, taken individually or collectively, entail the main premiss.

Support for P21: Can we imagine the support being true but the main premiss false? No, we cannot imagine any alternate scenarios or “wedges” between this support and main premiss, or at least it is rather hard to do so. (Some counterexamples may be possible, but they would be highly unlikely and implausible.)

. . . Therefore, given my present knowledge and intuitions, the link between this support and the main premiss is entailment or maximal strength, or close.

1b. Acceptability operation/question (ask whether the premisses are true or believable)

P3: This main premiss is highly debatable in itself. *Supporting Premiss(es):* The point about tailoring styles (P2) is acceptable, but the point about some children requiring spanking (P1) is highly controversial and question begging. Even though this premiss-conclusion set is valid, the latter premiss is not acceptable.

. . . Therefore, this main premiss has not been shown to be acceptable.

P6: This main premiss is acceptable. *Supporting Premiss(es):* These premisses are plausible.

. . . Therefore, this main premiss is acceptable.

P11: This main premiss is debatable. Supporters of spanking would argue that the practice improves the behaviour of children, while detractors would argue that it either does nothing or more likely actually creates bad behaviours and other personal and familial problems. We must bear in mind also the aforementioned question of what “pitting” parents and children against each other means practically. *Supporting Premiss(es):* These supporting premisses are believable enough if considered on their own. Nevertheless, they do not support adequately the point about

pitting parents and children against one another. In particular, the writer assumes that parents need to have the same sort of powers as schools in order to be effective as parents, but this is highly debatable.

. . . Therefore, this main premiss is not acceptable.

P16: This main premiss is acceptable. Educational initiatives would appear promising indeed. (As well, recall that the link between this main premiss and its supporting premisses is entailment or maximal strength, or close.) *Supporting Premiss(es):* These premisses are acceptable.

. . . Therefore, this main premiss is acceptable.

P21: This main premiss is debatable, and needs empirical support rather than speculation. (Indeed, many would reject it as plainly false.) *Supporting Premiss(es):* These premisses are all questionable, with possible exaggeration (“expensive spanking police”).

. . . Therefore, this main premiss is not acceptable.

2. Summary

P3 provides maximal inferential linkage, but is not acceptable. Thus, this line of reasoning fails to establish the overall conclusion.

P6 and P16 are acceptable, but provide only weak inferential linkage. Thus, these two lines of reasoning also fail to establish the overall conclusion.

P11 and P21 provide, respectively, weak and weak to moderate inferential linkage, and are not acceptable. Thus, these two lines of reasoning also fail to establish the overall conclusion.

While various strengths and weaknesses exist, shortcomings preponderate; therefore, we should not accept the conclusion from the given premisses.