POST-DEFENSE QUESTIONS FOR STRIFF

1. In footnote 14, you say to simply ignore the pole at u = 1. Can you pick one of these two integrals [2.84 or 2.88] and show explicitly how to do that? Draw the integration contour or how you're displacing the poles or whatever technique you're using.
2. In Quantum II we derived the radiative transition rate by treating the electromagnetic wave classically as a perturbation on a closed system. Can you compare and contrast that approach with what is presented in your thesis? Are there situations in which you must use one or the other to get the right answer?
3. Describe, in a technical setting, the content of Figure 3.1. En route, give an example of a simple system for which the "spaghetti diagram" is a useful quantitative tool, please make your example appropriate for a Quantum Mechanics I student.