Prof. Stephen R. Tate

Reading Reflection Information and Sample

For each chapter that you are assigned from the book *Blown to Bits*, you are required to fill out a "reading reflections" survey. The questions are generic, and are not specific to the particular chapter or even this particular book. They are, in fact, the kinds of questions you should be thinking about as you read any serious writing, as these questions give you an opportunity to reflect on and carefully think about what you are reading. Don't just carelessly jot things down to "get it done!" If you honestly think about and answer these questions, it will help you make sense of the material. Learning is largely about making connections between new concepts and the things you already know, and these questions are designed to help you do that. Try these questions when you have reading assignments in other classes as well — you might be surprised by how much it helps!

Like everything you produce in this class (and in life!), presentation counts. Proper English, including spelling, punctuation, and grammar, is important. However, these aren't formal essays, so you don't need to think about multi-paragraph structure and "thesis statements" and that sort of thing. Write clearly so that what you want to say comes through, and make your points in a logical way, but that's the only requirement that I impose on "structure."

The seven questions that are on the reading reflection are given below, with some sample answers so that you can see the level of answer that I am expecting. Your goal should be to have answers of similar depth to those given below, although this will vary somewhat — sometimes you might have a lot to say about how the reading relates to your personal experiences, and other times there might not be much. That's expected and OK. The answers below are for Chapter 8 in *Blown to Bits* — we won't get that far in the book, so you won't be assigned a reading reflection on that chapter. One final comment on the *Blown to Bits* book: a lot of students in this class are fascinated by technology, and focus on technical aspects that are described in the book, but that is *not* the main focus of this book! The book only talks about technologies for the purpose of discussing how they have changed human lives. For example, if you think the main point of Chapter 4 is to describe how Google works, you've missed the point — it's about the power wielded by search companies when they control what information they identify for a user and and what information they don't. For every chapter in this book, keep in mind that it's about people, not technology.

Sample Reading Reflection Answers

1. What are the main points of this reading (focus on concepts, ideas, and theme, not on individual facts)?

In Chapter 8 of Blown to Bits ("Bits in the Air: Old Metaphors, New Technologies, and Free Speech"), the authors discuss regulations on radio and wireless technologies, where these regulations include both technological regulations and content regulations. The authors describe how radio technologies evolved, from the late 1800's to today, with an important part of this development happening between 1910 and 1930. In those days, radio technology was just being invented, and the airwaves were somewhat chaotic without regulation. At first, regulation was introduced to allocate parts of the radio spectrum for technical reasons — to avoid interference. Not long after that, regulations on content emerged, with the argument that 1st Amendment free speech rights didn't have free reign in such a limited resource (limited because, at the time, technology didn't make efficient use of airwaves and available frequencies). Because of the scarcity of the resource, licenses to use it were reserved for broadcasters that worked "in the public interest." This is the historical background for current content regulations against profanity, nudity, etc. Putting these regulations in this historical context is interesting, but unlike the rest of the book, this chapter went beyond discussion of facts and historical context into some pretty blatant advocacy for a particular position: removing almost all regulations on wireless/radio use. The authors do effectively make the case that the original arguments about resource scarcity no longer apply in light of today's better technology, but it's a logical leap to go from there to saying that the only sensible approach now is to remove all the regulation. While there are certainly some good arguments for less regulation, the authors didn't make a very good case — the writing comes across as whining from technologists who think they should be allowed to do whatever they want. A little less whining and a little more logical argument would have made this a better chapter.

2. Was anything unclear or confusing to you?

As mentioned in my summary, I don't think the author's made a convincing argument that the solution is doing away with regulation. Did I miss how they connected these pieces?

3. What was new to you, and did it change the way you think about or perceive things?

The historical context was interesting, and I hadn't been aware of how chaos in radio development led to the FCC and associated regulations. The discussion of how technology has advanced while policy and regulation have not — resulting in regulations relevant for 80 year-old technology but not so relevant to today — made me think about what would be sensible from a policy standpoint with today's technology. The book pushed one particular view of what would be sensible, but it's worth thinking about other approaches.

4. Was there anything you would like to explore further or find out more about?

Smart technologies for radio sound interesting, such as software-defined radios and cognitive radios. It would be interesting to compare how much capacity was available with 1930's technology (when "scarcity" arguments led to regulation) versus what could be done with today's technology. Is it 10 times greater today? 1000 times greater? It would be interesting if this could be quantified.

5. Describe at least one connection between the reading and topics from outside class (other classes, news stories you've seen, etc.)?

It was not very long ago that Janet Jackson's "wardrobe malfunction" at the 2004 Super Bowl caused a big controversy, resulting in a fine of over half a million dollars being levied against CBS by the FCC. This is exactly the kind of content regulation that is discussed in this chapter, and is based on decades old arguments that no longer make sense. The technological advancements that make better and better use of airwaves is also apparent from the way smartphone speed keeps increasing (from 1x to 3G to 4G and 4G/LTE). It's difficult to see how scarcity of the resource can be a problem when current technology can deliver multiple megabits per second to thousands of cell phones simultaneously.

6. Give at least one specific example of an aspect or experience in your personal life that is related to the reading.

The chapter lists quite a few recent innovative uses of wireless transmission, including WiFi, car lock/unlock remotes, Bluetooth, cell phones, wireless handsets for home phones, and wireless game controllers. I have used all of these technologies, so my life has clearly been affected by innovation in wireless devices. The role of regulation in limiting further wireless innovation is important to the technologies that might be part of my life in the future.

7. Is there anything else you think would be relevant for the class discussion of this reading? Are there other arguments for regulations on wireless transmission? Assuming we don't want complete deregulation, what are reasonable regulations in light of current technology?