Appendix III

Guided Analysis: The Case of "Curious George"

To clarify the nature of the case study procedure, the following is a guided analysis of a hypothetical case of "Curious George."

III.1 THE HYPOTHETICAL CASE OF CURIOUS GEORGE

George Simon is a mid-level production engineer employed by Ajax Corporation. Due to a less-than-satisfactory relationship with his wife of 10 years, George tends to stay in the office until late in the evening, often just playing computer games. As a result of his late hours, he has earned a reputation as a hard working and productive employee who is regularly permitted to take extra long lunch hours. George uses these lunch hours to visit his mistress, to whom he gives office supplies from work, which she uses in a business she runs from her home.

One Dec. evening at approximately 11 p.m., George is staring mindlessly out of his office window when he sees an unmarked semi-trailer truck pull up to the loading dock. Curiously, he watches as the truck is loaded with industrial waste, which he recognizes as low-level radioactive waste products from the production line. Although this waste is handled by the environmental division of the company, George knows its disposal is usually contracted out to an environmental disposal company that operates according to a strict set of government regulations. He has also heard rumors that some in company management consider this to be an unnecessary waste of company resources, since proper disposal is a very expensive process. Recent changes in regulations have made the disposal of the waste twice as expensive as it was previously. This added expense occurs at a time when shareholders in the company have been pushing for a greater return on their investments.

Having nothing better to do—and not wanting to go home to his wife—out of curiosity, George decides to follow the truck. After a half-hour drive, the truck stops at a lake and dumps its load near the shoreline. The truck then drives off, and George, somewhat reflectively, drives home. There his wife is waiting up to criticize him, since there is not enough money to pay the mortgage. She wants to know where all the money goes every month, since there never seems to be enough to pay the bills. George slaps her across the mouth and decides to sleep on the couch.

The next day, playing around on his computer, George looks up the lake where he witnessed the industrial waste being dumped. To his surprise, he discovers that lake is the principal source of municipal water for the community in which he lives. George decides to encourage his wife to start a new fad diet, which involves drinking 2 gallons of water every day, and looks forward to a few beers over lunch with his mistress:

1. Identifying Ethical Issues

A number of ethical issues arise in this case, only some of which are directly related to engineering. Nonetheless, listing many of the issues helps to better think through the case. One can list issues in the order in which they occur in the case, remembering to formulate them as questions:

- Should George use company resources for personal entertainment?
- Should company personnel decisions regarding employees be made based on the number of hours spent at work?
- Should some employees be given extra privileges based on the quality of their work?
- Should George take company office supplies to his mistress?
- Should George's mistress accept Ajax supplies from George?
- Should George have a mistress?
- Should George base his actions on rumors?
- Should Ajax be more concerned about the cost of waste disposal or its environmental impact?
- Should Ajax dispose of radioactive waste through abnormal channels?
- Should George interfere with business matters outside of his own division in the company?
- Should George follow the unmarked truck?
- Should George take any action based on the information available to him?
- Should Ajax be held responsible for what a contractor does with its waste products?
- Should George slap his wife?
- Should George encourage his wife to take actions that might poison her?
- Should George drink alcohol at lunch on a workday?

The above list is reasonably complete, but you might discover additional ethical issues further along in the analysis, or you might disagree that all of the questions listed above are ethical in nature. Reasonable disagreement regarding how to interpret the materials dealt with here is to be expected and a natural part of ethical discourse.

Readers should note that the above list includes a mixture of ethical issues raised, including ones related to personal ethics, business ethics, and engineering ethics. Additionally, note that ethical issues can be expressed from a number of different perspectives, including those of George, the company, George's mistress, the environmental division, and the trucking company, among others.

2. Narrowing the Focus

Some of the issues above are so intuitively clear—such as George slapping his wife—that they might not warrant further discussion. In this regard, however, one should be careful not to move on too quickly. Not everyone necessarily shares the same point of view, where answers seem straightforward. That is why detailed consideration of even relatively straightforward questions can often help to clarify and justify decisions. Discussing ethical issues can often bring to the fore ambiguities and/or special circumstances concerning a situation, which have the potential to refine understandings of a case.

In deciding on a main ethical issue, there is also likely to be disagreement. Some might place the issue of harming others above all others, whereas others might focus on the actions of Ajax, while still others might pay attention to George as a person. Since the central concern here is with engineering, it makes sense to focus on an issue related to George's role as an engineer, since he is the only person the case identifies as an engineer. Interestingly, none of the questions raised above have this specific focus directly, although it is clearly an emphasis built into the case. Thus, it makes sense to reformulate one of the questions raised in step one to reflect this overall focus:

In his capacity as an engineer working for Ajax, is George ethically required to take action with regard to the knowledge he has gained concerning waste disposal, and, if so, then what action?

Notice that this question both clarifies a question posed above and places the issue in the context of engineering ethics. The issue is also formulated in a manner that will eventually necessitate the discussion of several of the other issues raised above. This formulation allows for the possibility of an integrated discussion—rather than simply a disparate consideration of a variety of different questions on a random basis, as often occurs in oral discussions of ethics.

3. Determining Relevant Facts

For the sake of this illustrative discussion, it is not necessary to list all of the relevant facts but, rather, initially to focus on only the major ones. The following list is divided into facts provided and facts not provided, but that would be important to know about the case.

Facts provided

- George is a mid-level production engineer.
- George works for Ajax Corporation.
- George has a good reputation at Ajax.
- George has a mistress.
- George showers his mistress with Ajax office supplies.
- George observes an unmarked truck late at night.
- George identifies the cargo as low-level radioactive waste generated by Ajax.
- George is not in the Ajax division responsible for radioactive waste.
- There is a firm that regularly handles Ajax's radioactive waste.

- There are governmental regulations for radioactive waste disposal.
- Waste disposal costs for Ajax have recently doubled.
- Environmental waste disposal is a great expense to Ajax.
- Ajax shareholders are requesting better returns on capital investment.
- The unmarked truck dumps the environmental waste into a lake late at night.
- George hits his wife.

Facts not provided but relevant

- Is Ajax engaged in an illegal process?
- Does the dumping have potential human health effects?
- What is the character of George?

4. Making Reasonable Assumptions

The next step consists in seeing if reasonable assumptions can be made about missing facts considered important. Each should be considered in turn.

First, if Ajax is not doing anything illegal, then the ethical question is not necessarily resolved, since dumping waste in the lake could still have consequences. However, if the dumping is illegal, then this might be a reason for George to take specific actions. The fact that dumping occurs late at night, with an unmarked truck, makes it reasonable to assume the action might be illegal, especially since the waste was dumped in a lake rather than an environmental landfill. Even if one assumes the process is illegal, however, it is still not clear that Ajax, as a corporation, is involved. Perhaps individual employees have initiated the dumping for personal financial gain. Hence, it cannot be assumed Ajax is engaged in illegality.

Second, we do not know if the waste disposal has serious health consequences. However, we can assume it would, since George wants his wife, whom he dislikes—also a legitimate assumption—to drink a lot of the water that comes from the lake. Additionally, since strict government regulations exist concerning the disposal of this waste, it would be legitimate to assume the government also judges that dumping has potential human health effects. Although the specific nature of the particular load of waste dumped is unclear, since the material falls under government regulations, this fact further legitimates assumptions regarding the negative health consequences associated with dumping.

Third, the need to answer the last question is unclear. The text previously emphasized the importance of action rather than character. However, character might be relevant to the determination of excusing conditions. Furthermore, the personal actions of George are given considerable emphasis, such that a focus on character could be expected. It is relatively clear from the facts given that George does not have an admirable character. This can be added to the list of assumptions, even if—later in the analysis—this assumption proves superfluous.

5. Undertaking Definitional Clarification

Value-laden terminology—such as "good," "bad," "just," or "unjust"—typically requires clarification. For example, assessing the character of George as bad might require clarification. In this case, however, "bad" character is sufficiently defined in terms of the actions of George. Another term that might influence the nature of the analysis is "mid-level," in reference to George's status as an engineer. If the word is understood as referring to his status as a "middle manager," then the role of the company would be involved in a way different from if the term was used merely to refer to George's function as an "experienced engineer." The latter seems more reasonable here, since the case does not refer to any supervisory role George occupies. This clarification would simplify the analysis.

6. Conducting Ethical Analysis

Here the first step consists in simply listing applicable principles. Since George is being considered in terms of his role as an engineer, the responsibilities related to that role are of primary relevance. Referring to Chapter 4/the list in Appendix I, these include principles related to public safety (1), human rights (2), environmental protection (3), and truthful disclosure (6). A closer examination of these principles reveals, however, that their application might be subject to some debate.

The question could arise as to whether the above consequences result from the implementation of technology by George. From the point of view of his job—engaged in the production process—the waste is, indeed, a result of his actions as an engineer, despite the fact that another division of the corporation is responsible for waste disposal. Hence, principles (1) and (2) seem to apply. It thus follows that principle (3) applies as well. Finally, if any further actions George might take in this situation are related to engineering, then principle (6) applies as well. From the point of view of engineering principles, George has duties to the public in relation to the waste disposal, since the facts and legitimate assumptions point to potential physical harm to the public. However, George is also an employee of Ajax, and his duties to the corporation should be considered as well.

Referring to the work from step 5, it should be noted that principle (6) of employee ethics has been eliminated from consideration, since the status of George is simply that of engineer rather than an authority. However, principle (3), on confidentiality, and principle (4), on harm, do seem to apply. On confidentiality, if Ajax disposes of waste unethically, then the company would not want this information publicized. Even if not, its waste disposal practices would probably lead to very bad publicity for Ajax. On harm, the situation is more complicated. At issue are two points: not only whether the company would be harmed in the long run if George took any further actions but also whether he would be acting on behalf of the corporation if George took further actions.

As is often the case in ethical analyses, here different considerations compete. Based on the brief discussion thus far, the engineering principles noted above clearly apply, while the employee principles mentioned are more problematic. Preliminarily, the judgment George should act on his knowledge—fulfilling his ethical responsibilities as an engineer—is justified.

7. Reviewing the Process

In considering the analysis thus far, perhaps it becomes evident that the status of George as he undertakes his late-night activities has been insufficiently considered. Specifically, although George was at work the night he witnessed the dumping, he was not actually working. Would his mere physical presence at his place of work be sufficient to evaluate his obligations in terms of employee status? Or, in following the truck, is he acting as either an employee or engineer? George seems to be motivated by mere curiosity rather than any responsibilities that follow from these roles. If his actions are considered in terms of these role responsibilities—and engineering considered a kind of social experimentation—then George would have a responsibility to follow up on the products resulting from his engineering/production activities, even waste products. Whether or not George is motivated by engineering ethical impulses, his possible actions fall within the purview of engineering actions and, thus, can be considered in terms of his role responsibilities as an engineer—even if not necessarily a general employee.

8. Resolving the Issue

Having clarified the remaining ambiguity above, the issue can now be resolved. As an engineer, George is obliged to take further action. While he has a duty of confidentiality in relation to his employer, that duty would not include confidentiality regarding illegal activities. To fully understand this claim, it is important to recognize that if the company is actively involved in the disposal of waste, then it is violating several organizational ethical principles, including principles (1), (2), (3), and possibly (6); again, refer to Chapter 6/the list in Appendix I. The right of the company against employees revealing confidential information is overridden by its unethical behavior. If the company were unaware of the illegal activity, then organizational ethical principle (3) would imply that it would want George to act.

However, that George is ethically required to act only resolves part of the ethical issue posed above. What action or actions should George take? Since George has an obligation as an engineer to protect the public and Ajax has an obligation not to harm the public, any action or actions that would protect the public are ethically justified. Thus, George could talk to his corporate superiors or go directly to the public, making a statement to the media, for example. Both of these actions could cause trouble for George, however, causing him to be perceived as a disloyal employee.

9. Identifying Practical Constraints

Realistically, George cannot be expected to take either of these actions, given the assessment of his character. Does the bad character of George serve as a condition to excuse his potential failure to act? The answer to this question is no, since a "bad" character is not the same as a "weak" character. One could legitimately assume a bad character is reformable, although a weak one might not be. If bad character served as a mitigating condition, then it would be nearly impossible to criticize the actions of bad people. Other types of practical constraints that could be considered include physical threats against one's life, the nature of corporate retaliation, and dire personal circumstances. None of these seem to apply in this case. Hence, the ethical requirement for George stands, even if he cannot be reasonably expected to act.

10. Avoiding Ethical Problems

George might have saved himself trouble—if the actions of Ajax were discovered and it was revealed that George knew about them—by not following the truck. However, this would have been at the expense of fulfilling an ethical duty. This avoidance maneuver would not, therefore, be a way of avoiding ethical problems. A better way of avoiding ethical problems might consist in staying informed about the process of disposing waste from the production process, working to help the company reduce waste disposal and/or production costs through greater efficiency, or ensuring one is working for a company and with colleagues who are ethical.