

EDUCATIONAL NOTE

Have Coase - Will Travel: New Ways to Teach Coase Using Old Media

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Abstract

“Bitter Wine” was the twenty-third episode of the premiere season of the Emmy-nominated western, *Have Gun - Will Travel*. Gun-for-hire Paladin settles an externality issue between a small-scale vintner and neighboring oilman à la Coase, but two years before Coase’s seminal paper. This 1958 episode acutely portrays the Coasian solution often taught in undergraduate courses. Incorporating this episode into the undergraduate curriculum can serve as a stepping stone for discussing the implications of transaction costs and the Coase Theorem.

JEL Codes: A21, A22

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I. Introduction

When Ronald Coase first presented “The Problem of Social Cost” at the University of Chicago in 1960, he was met with skepticism and resistance. After an evening of conversation, debate, and haranguing, Coase was able to convince the other members of the seminar of his insights: externalities were reciprocal; in a world of zero transaction costs, there are no externalities; and when transaction costs exist, the

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assignment of property rights matters (Davies 2016, pp. 87–90). Yet, Coase’s insights are still misunderstood today—so much so that forty years after its publication, Coase ([1988] 1990) felt compelled to add an explanatory chapter on the paper in his book *The Firm, The Market, and The Law*.

It is not surprising, then, that undergraduate economics students struggle with the Coase Theorem, which is perhaps one of the most difficult concepts in their undergraduate studies.¹ Two questions on the thirty-question microeconomics version of the Test of Understanding in College Economics (TUCE) (Walstad, Watts, and Rebeck 2006) focus on externalities, and their correct response rate ranks in the five lowest scores on the pretest. The positive externality question score does improve significantly in the post test, but the negative externality question still ranks in the lowest five based on response rate.

Could media be the key to helping students understand negative externalities and conveying the powerful insights of Coase to students without overwhelming them? Anecdotally, our students left class with the incorrect perception that the Coase Theorem states that there is no need for regulation because Pigouvian taxes impose themselves by way of bargaining, as was demonstrated by answers given on a final exam question.

The inspiration to use media to teach externalities and the Coase Theorem comes from a particular episode of *Have Gun - Will Travel* titled “Bitter Wine” (1958).² This episode may be the most Coasian episode of television ever made. Every element of Coase’s “The Problem of Social Cost” appears in the episode: the reciprocal nature of externalities; how the initial allocation of property rights matters in a world with transaction costs; and how the legal system can overcome transaction costs to allow for an efficient allocation of rights.

Elzinga (2001) argues in his *Fifteen Theses on Teaching* that good lectures need good stories. The overarching story line of *Have Gun - Will Travel* details the adventures and exploits of a West Point graduate turned righteous hired gun in the late nineteenth century

¹ Krugman (1998) describes “Ricardo’s difficult idea” of comparative advantage as being a challenging topic to teach.

² This episode has been uploaded to the Economics Media Library (Wooten 2018) with captioning added by the authors.

western United States,³ a man known as Paladin. Though Paladin is clearly a man of classical virtues, he is also a man of up-to-date scientific learning. Despite being a hired gun, Paladin prefers to avoid violence whenever possible and seeks peaceful resolutions.

II. Literature Review

Expanding academic discussions beyond the abstract using popular media references is not a new phenomenon. We know from student lecture notes that Adam Smith ([1983] 1985, p. 129) used current and classic literary references to explain or highlight difficult concepts in his classes. Why do educators use this method? Some studies find that students with different personality types respond well to alternative forms of presentation (Ziegert 2000). Furthermore, changing the material presentation helps students engage in active learning and apply the material instantly, as Stowe (2010) explains. Active learning and the use of media in the classroom have grown significantly over the past fifty years (Hoyt and McGoldrick 2019) such that new work in the area has focused on cataloging the variety of active-learning methods (Picault 2019).

While previous educators have explored entire series to identify short clips that can be used to explain topics across the curriculum, few researchers have approached the process the other way: identifying a single topic in their curriculum and finding media to supplement that instruction. Previous work has led instructors to use *The Office* (Kuester and Mateer 2018) and show tunes (Rousu 2018) to teach how free markets work, *Moneyball* to introduce marginal revenue product (Wooten and White 2018), and political cartoons to support instruction of the production possibilities curve (Jenyk and Wakefield 2018). Hoffer (2015) uses a singular episode from the Comedy Central hit show, *South Park*, to illustrate an innovative way to teach public choice in the principles course.

Our work follows in this broad tradition of using media, but differs in that the show *Have Gun - Will Travel* is not in the realm of current popular culture. While it was very popular in its time, it is not

³ Although exact dates are not given in the series, we were able to estimate the approximate time frame of the show by various clues over the course of the series. The presence of certain firearms, along with several plot points that revolve around reintegration of Confederate veterans into society and various Native American conflicts, lead us to believe that these adventures take place approximately in the 1870s and 1880s.

well-known to the typical modern student.⁴ Using media that predates students is not new in the economic curriculum; Leet and Houser (2003) detail how to use classic films and documentaries, while Cotti and Johnson (2012) detail the use of a historical novel to teach economics. Many of the events covered in ESPN's *30 for 30* documentary series predate student experience, but Al-Bahrani and Patel (2015) outline how each can be used in a course to supplement larger topics.

A benefit of students likely not having seen the show is that they may not have any preconceived notions about the show or its characters, and they are unlikely to know how the show ends. Furthermore, since the episode takes place in the so-called Wild West and during a period of ill-defined but evolving property rights (Anderson and Hill 2004), students get to see the importance of property rights in the economic exchange process, something that can be lost in more modern contexts with a very visible legal system. Economics shines throughout the entire episode, and, as such, we propose using the episode to supplement a traditional Coasian lesson.

III. *Have Gun - Will Travel*

Have Gun - Will Travel was a hit television and radio series produced and broadcast by CBS from 1957 to 1963. This particular western was immensely popular across the United States and regularly ranked third or fourth by Nielsen ratings every year during its first four seasons (Brooks and Marsh 2009). The series chronicles the adventures of Paladin, who travels the Old West as a mercenary-for-hire, solving problems in the towns he visits. During its television run, the show received four Emmy nominations, including Best Western Series and Best Cinematography for Television, and two acting awards for Richard Boone, who played Paladin (Television Academy 2020). All six seasons (225 episodes) are available on DVD, distributed by Paramount. We have made "Bitter Wine" available for streaming on Critical Commons in the Economics Media Library.

IV. "Bitter Wine"

The tale begins at a fair in San Francisco at which Paladin serves as a judge in a competition among local vineyards. First prize goes to the Donatello Vineyards. In thanking Paladin, Donatello suggests that his

⁴ Anecdotally, polls of the authors' students have revealed that only one student had seen an episode of the show.

winery is in grave trouble, reporting: “Next year the poorest peasant will spit my wine upon the ground. It is for goats to drink.” Paladin offers his iconic business card, which reads, simply, “Have Gun - Will Travel,” to a skeptical Donatello. Overcoming his skepticism, Donatello tells Paladin that a man has bought the land next to his vineyard and built an oil well and refinery on it. The smog from the refinery is making his grapes bitter, and the wastewater is infecting the groundwater on his land. This is a classic externality problem begging for a Coasian resolution. Remarkably, Paladin begins to arrange precisely that.

Paladin recognizes what Coase calls the reciprocal nature of the problem, as becomes clear from the two conversations that form the crux of the episode, one with each of the two stakeholders. Paladin initially heads to the refinery to meet the owner, Tim Gorman.⁵ During their meeting, Paladin asks about the heavy security he had to evade to get onto Gorman’s property. Gorman responds that Donatello has hired men to raid his well, and proceeds to give Paladin a tour of the production facility. Paladin is impressed.

Although Paladin congratulates Gorman on his success, he also tells him that his well’s wastewater and smoke are damaging Donatello’s grapes. Gorman initially dismisses these concerns, stating flatly that they are not his problem. Because Donatello hired him to solve the problem, Paladin disputes this claim. Gorman initially suspects that Paladin was sent to kill him, but Paladin insists that he is looking for a peaceful solution and suggests this: (1) Gorman builds a sump and pumps the water over a different hill, away from Donatello (and, we are led to presume, onto unoccupied land); and (2) Gorman builds a smoke stack that brings the smoke up, away from a downdraft and away from Donatello’s vines.

This scene is the first hint of a potential property right assignment: Paladin argues that Donatello has a right to clean vines. Gorman initially sympathizes with this solution, but points out he is barely profitable given his current arrangement. He simply does not have the extra resources to implement Paladin’s suggestions. Further, Gorman asks why he should care about the vintner’s success since Donatello has fought him every step of the way and he sees no use for wine. Paladin nods in appreciation of Gorman’s situation and returns to talk to Donatello.

⁵ Appendix B reproduces this conversation in full.

The conversation with Gorman pairs nicely with the one that Paladin has later with Donatello.⁶ Donatello asks Paladin to lead a raid on Gorman's rig. Paladin refuses, stating that the oil rig means as much to Gorman as the vineyard means to Donatello. Donatello scoffs at this, declaring there is no use for that "black slime." Paladin points out two uses in Donatello's own home: oil lamps and cleaning solutions. Donatello bemoans this fact, asking if Paladin thinks that he should let himself be ruined. Paladin responds that the same solution can occur if Donatello lends Gorman \$3,000 for construction of a sump pump and a smoke stack.⁷ Donatello refuses, flatly stating that he would rather die than help the person who is ruining his business.

Paladin recognizes that it is only the coincidence of the vineyard and the oil rig that is problematic. Gorman also appears to understand that the problem is the interaction between the vineyard and the oil rig, but Donatello is reluctant to think this way. This inability to see the reciprocity is reminiscent of Coase (1960, pp. 1–2):

The conclusions to which this kind of analysis seems to have led most economists is that it would be desirable to make the owner of the factory liable for the damage caused to those injured by the smoke, or alternatively, to place a tax on the factory owner varying with the amount of smoke produced and equivalent in money terms to the damage it would cause, or finally, to exclude the factory from residential districts (and presumably from other areas in which the emission of smoke would have harmful effects on others). It is my contention that the suggested courses of action are inappropriate, in that they lead to results which are not necessarily, or even usually, desirable.

Donatello's sentiments betray a kind of incumbent bias leading him to frame the problem in moralistic terms, with himself on the side of the angels. Just as Coase corrected economists, Paladin endeavors to correct Donatello when he points out that "very useful things" come from oil production. Indeed, Coase's example of the doctor and the confectioner is well-chosen insofar as people are generally favorably disposed toward both physicians and

⁶ Appendix C reproduces this conversation in full.

⁷ While the show is most likely set in the late 1800s, reliable inflation adjustments are not readily available. For viewers who watched the episode live in 1958, this value would be equivalent to around \$26,500 in 2019 dollars.

confectioners.⁸ As both Coase and Paladin understood and struggled to have others understand, the principle is the same: both Donatello and Gorman provide useful services. Neither has a moral higher claim given the services they provide.

As Paladin notices, seeing this conflict as a morality tale results in wasted resources. Donatello hires gunmen to end Gorman's operations, and Gorman hires guards to prevent Donatello from raiding him. Likewise, the men's anger toward each other indicates substantial transaction costs need to be overcome before any bargain can take place.

While Paladin is away, seeing a lawyer to draw up a literal Coasian bargaining agreement that Donatello and Gorman do not yet realize they need, Donatello, refusing to bargain, leads an attack on Gorman's facility. Four men are wounded (three of Donatello's force and one of Gorman's), and Donatello's forces are routed. Gorman's men give chase. Paladin arrives in time to prevent further bloodshed and forces Gorman to recall his men at the point of his own gun. The battle is ultimately a stalemate, but given that Gorman is still polluting, it is, *de facto*, a loss for Donatello.

As a chastened Donatello resigns himself to his fate, Paladin requests a keg of his wine. An indifferent Donatello permits it, as "nothing matters anymore." Paladin places the wine in a conspicuous location near Gorman's oil well. Gorman's men overindulge and fall asleep, reducing some of the bargaining transaction costs. Paladin takes advantage of that fact and brings Donatello to Gorman's oil well. Paladin lights a torch, climbs to the top of the oil well, and holds it over the well. Gorman points a rifle at him, giving him five seconds to drop the torch. Paladin calls Gorman's bluff, stating that if he is shot, the whole place will go up in flames. After five seconds, it becomes clear that Gorman will not shoot.

Paladin reaches into his coat pocket and tosses to the ground the lawyer's contract (an explicit assignment of property rights and subsequent negotiation on how to solve the issues). Donatello, not quite grasping the situation, still refuses to sign, telling Paladin to drop the torch. Paladin points out that an oil fire is uncontrollable. If he drops the torch, Donatello's vineyard will also go up in flames. Suddenly, Donatello gets it: the game has changed. The cost of not

⁸ In Coase's example, a doctor had built an office next to a confectioner's shop. The machinery from the confectioner's shop was right next to the wall of the doctor's office, and when the machinery ran, he could not treat patients due to the noise. Both the doctor and the confectioner provided value to the community.

negotiating has increased drastically; it is high enough for even these two enemies to negotiate. Relatively speaking, the transaction costs have fallen: first, because of the clear assignment of rights, and second, because of the threat of losing everything. Donatello and Gorman agree to become partners.

The elements of Coase are clear in this episode. First, externalities are reciprocal. Gorman's wastewater and soot are issues only because they flow onto Donatello's land. There is no issue when they are pumped onto unoccupied land. Second, the initial allocation of rights matters when the transaction costs are high: since neither Donatello nor Gorman was willing to negotiate, given their hatred of each other, an initial allocation of property rights giving Donatello the right to grow pollution-free vines had to occur before the negotiation could begin. Third, the legal system can overcome transaction costs to ensure an efficient allocation of resources. Once the rights were defined, Paladin was able to increase the cost of not negotiating to the point where it was more costly not to negotiate than to deal with a hated enemy. While it is true this solution was not entirely peacefully gained (four men died in Donatello's raid on Gorman's camp and Paladin had to threaten to burn the whole valley to the ground in an oil fire), ultimately, a reduction in violence was achieved with this solution rather than with the status quo position of Gorman and Donatello raiding each other.

V. Pedagogical Approach

The episode supports most undergraduate-level instruction on externalities and the Coase Theorem, regardless of class composition.⁹ The discussion questions in appendix A can be given to students prior to watching the episode so that they know what topics to focus on. Or, they can be given post-video in the form of an assessment.

A. Reviewing the Lesson

An instructor teaching a principles-level course or a survey course may benefit from focusing on (1) the difficulties of overcoming transaction costs or (2) the benefits to exchange from transforming a contentious situation into a cooperative situation. Anecdotally, a common confusion among students was measuring transaction costs,

⁹ The episode has been used in the following courses: Economics for the Citizen (100-level, non-major survey course), Law & Economics, Intermediate Microeconomics, and Principles of Economics.

particularly because the students believed the Coasian payment was the transaction cost. Introducing the traditional lecture on externalities and transaction costs allows students to develop a baseline understanding of key terminology before identifying examples of externalities and transaction costs in the episode.

Following the episode, some prompting discussion questions can be used to initiate conversation. Focusing on low-level questions like having students identify the externality or transaction costs may allow students to articulate the narrative of the episodes. From the authors' experience, students engaged readily on their own and even discussed the initial assignment of property rights. Students agreed with Paladin's initial assignment of rights to Donatello, but some argued that Gorman should have had the initial right. On occasion, a student may note that the initial allocation would not matter if the transaction costs were low enough. This typically leads to a conversation on whether or not the transaction costs were low.¹⁰

Depending on the structure of the class, the conversation could fill an entire class period and may even continue after the class ends. While it is not clear whether students' assessment scores increased following the conclusion of the video, an increase in conversation about the nature of property rights and solutions to externality problems among students who are non-economists is a success by the authors' standards.

B. Previewing the Lesson

The sequencing of the video and lecture could be reversed if an instructor prefers using examples to introduce key terms. Showing the video at the beginning of the lecture, or as part of a pre-lesson assignment, allows students to form a base-level understanding of a particular situation that can be analyzed through the lens of economics. While some students may read the textbook before class and identify concepts before the instructor points them out, many will not. A brief class discussion between the video and lecture could serve as a step toward the introduction of externalities and transaction costs in the lecture. Throughout the lecture, instructors can point back to scenes in the episode that illustrate the main points of the Coase Theorem.

¹⁰ The outbreak of a gun-battle between the two neighbors indicated the transaction costs were quite high.

Depending on the instructor's preferences, showing the video first may not be the most effective method unless students are prompted to focus on key portions. If students are not aware of the upcoming lesson topic, they may not appreciate the subtleties of the episode. The value of drawing back to the episode assumes that students remember interactions from an entire twenty-five-minute episode.

C. Segmenting the Lesson

The entire episode is twenty-five minutes long, which allows for the video to be segmented and have the discussion questions interwoven between important scenes. Wooten (2020) details the methodology of interweaving classroom response questions (where the instructor is just seeking an answer) and discussion questions (meant to prompt a back-and-forth interaction among students) between longer video clips. One advantage of this process is that students focus on the segments in pieces and the discussion closely follows the relevant scene.

Given that classroom discussion is often associated with smaller classrooms, segmenting allows the instructor to take advantage of classroom response systems and survey students about their understanding of key terminology in the video. Boyle and Goffe (2018) redesigned a principles of macroeconomics course to emphasize the roll of a classroom response system. Handheld remotes were used to gather students' responses to multiple-choice questions primarily to introduce and apply concepts, but to also connect with prior knowledge. Both classroom discussion questions and discussion questions could be used with the "Bitter Wine" episode.

Using response systems invokes a form of deliberate practice and may create a social learning environment (Moulton 2014), potentially generating outcomes similar to those of the discussions found in smaller classrooms. If enough time is allowed for discussion between scenes, students can be encouraged to learn from each other and discuss their responses with their peers. The efficacy of classroom response systems in a variety of disciplines has grown since their introduction and the CU (University of Colorado) Science Education Initiative (2017) has developed a resource guide for instructors interested in the effective use of classroom response systems.

D. Use During an Unexpected Disruption

With the COVID-19 pandemic in the United States forcing most university classrooms online, the following experience outlines how the episode could be used in a remote or online teaching environment. More broadly, the episode can be deployed for any classroom disruption (weather, mechanical issues such as a power outage at the school, professor illness, etc.). As long as the student has access to the Internet, they can access the video. Indeed, since any disruption can be stressful, deploying *Have Gun - Will Travel* could be calming as a source of entertainment (the violence is not graphic).

The use of *Have Gun - Will Travel* in two principles of microeconomics classes (one hybrid, the other online) met with qualified success. In both instances, the episode was preceded by a YouTube video lecture on externalities and market failures. Students were required to watch *Have Gun - Will Travel* and answer the questions from appendix A. Students initially struggled with identifying the reciprocal nature of externalities (questions 4 and 5). Of the seventeen total students over the two classes, only two earned full credit on those questions. Students focused on (1) accusing Gorman of causing the externality since he was the newcomer and (2) the pollution as the externality, not the interaction of the grapes and the smoke. A follow-up forum discussion on Blackboard was used to emphasize the reciprocity point to students.

The reciprocity dimension of Coase's paper has long been one of the most difficult aspects of the paper for students and even economists to grasp. While the point may now seem obvious to economists, especially those who teach within a Coasian framework, it is highly counterintuitive for students who come with their own moral biases.¹¹ Non-majors who may be encountering this material for the first time also face an uphill battle. From our anecdotal experience, it appears that some form of classroom discussion is needed to emphasize the main takeaway of reciprocity.

A colleague used the episode in their classroom and appended a question linking the COVID lockdowns to externalities and Paladin's discussions with Gorman and Donatello: "How does [the COVID-19 situation] compare with the externality issue faced by Gorman and Donatello? What do the lockdowns say about the assignment of property rights?" She noted that students had an excellent discussion

¹¹ For more on the point of dealing with student biases in introductory economic classes, see Clark and Lee (2017).

around the contemporary issues of the lockdowns. Instructor involvement to drive home the main takeaways is certainly a necessity; the video alone, unless one is tuned into Coase, is not sufficient. The episode is a supplement for instruction, not a replacement for it.

VI. Caveats

The episode is not without some drawbacks. Both Donatello and Gorman are portrayed as ethnic stereotypes, which was common in the film and television of the time. Donatello speaks with a heavy Italian accent and is concerned with fine wine and good food, whereas Gorman speaks with an Irish accent and prefers whiskey. Donatello's niece is portrayed as an able-bodied homemaker whom men would be considered lucky to marry.

An instructor who wishes to show the episode on discs instead of streaming should be aware that the current DVD release is not compliant with the American with Disabilities Act because it lacks subtitles. The digital version uploaded to Critical Commons in the Economics Media Library has had captions added by the authors.

As of this writing, the authors have not faced student complaints with the show's portrayal of ethnic characters, but issues could be raised by future students. If an instructor were concerned with the episode's portrayal of Irish and Italian characters, they may wish to seek administrative approval. We have found it helpful to mention the stereotypes employed in the show beforehand.

VII. Conclusion

Bitter Wine has been a successful tool for the authors in teaching undergraduates at various levels the elements of Coase's great economic insights. It has been an entertaining way for students to engage with the material and presents Coase (albeit unintentionally) in a simple, but not simplistic, manner. Despite potential concerns around ethnic stereotyping, the authors have felt that "Bitter Wine" has been a valuable addition to the economics toolkit (Picault 2019). The episode presents a rather seamless integration into existing economics curriculum, both at an introductory level and an intermediate/advanced level.

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Appendix A. Classroom Discussion Questions

The following questions have been used in a variety of classrooms to spur discussion of externalities and transaction costs both before and after the associated lesson. The same questions could be adapted to classroom response questions and used in larger classrooms if classroom discussion is a limitation.

1. When Donatello initially engages Paladin’s services, what problem does Donatello say he faces?
2. What is Gorman’s problem as revealed by his initial conversation with Paladin?
3. Before Paladin comes in, what is the initial property rights allocation? (Hint: there aren’t any. That’s the problem.)
4. Following Paladin’s discussion with Gorman, what is the externality presented here? In other words, who is “at fault”? (This question is best asked at the 10:02 mark).¹²
5. Why does Paladin suggest building a sump and smoke stack to carry the pollution away (9:39–9:45)? If the pollution is the externality, does this not solve the problem? (The point of this question is to help students recognize the reciprocal nature of externalities.)

¹² In a Law & Economics class, this question can also be used to segue into a broader discussion of initial allocation of property rights, such as “first use” versus other allocation methods.

6. Why does Paladin suggest Gorman take action to prevent the externality as opposed to Donatello? What does this suggest about the initial property rights allocation by Paladin?
7. When Paladin first returns to Donatello and proposes that Donatello loan Gorman \$3,000, what is Donatello's reaction?
8. When Donatello is shocked that Paladin compares his wine to Gorman's "black slime," what is Paladin's answer? How does this compare with Gorman's dismissal of Donatello's wine as an improper drink?
9. Paladin fairly quickly finds a mutually beneficial solution to the problem of "bitter wine." Why didn't Gorman and Donatello reach the same conclusion? What are the barriers (i.e., transaction costs) that prevent this solution from arising without Paladin?
10. Referring to question 6, why does Paladin need to go to see a lawyer in Stockton? What role is this unseen lawyer playing?
11. After Paladin returns from Stockton and ends Donatello's doomed raid on Gorman's well, he asks to borrow a keg of wine. What does he intend to do with this keg? How do his actions affect the transaction costs in the situation?
12. Even after Paladin lulls the guards to sleep and gets Gorman and Donatello face to face, Donatello still refuses to negotiate, preferring to see Paladin start an oil fire. Paladin explains that the effects of the fire would not be confined to Gorman, but would impact Donatello as well. How does Paladin's explanation change the situation? (Hint: It has to do with estimated costs/benefits versus actual costs/benefits).¹³

Appendix B. Paladin Meets Gorman

The following transcript outlines the first interaction between Paladin and Gorman after Paladin visits the vineyard. Paladin recommends two potential abatement offers to divert the externality away from his client's vineyard, but Gorman ultimately declines.

Gorman: It's a wonder you weren't shot. I've got rifle guards all around the place.

Paladin: What's the reason?

Gorman: I'll tell you the reason. A crazy Italian is trying to ruin me.

Paladin tours Gorman's oil production facility. His visit concludes:

Paladin: That's a nice rig you've got there. Only two things wrong with it.

Gorman: Oh? Name them!

Paladin: The main drainage ditch and the smoke from the boiler. The waste drains over on Donatello's land; the smoke drifts over and coats his vines.

Gorman: The wind takes care of my smoke and gravity takes away my waste. None of my business what they do with it.

Paladin: So now it's my business.

Gorman: And your business is killing?

Paladin: Not if there is a better way.

Gorman: You know any?

¹³ In a more advanced class, this question is a good place to introduce, or elaborate on, Carl Dahlman's (1979) discussion of Pareto-relevant versus Pareto-irrelevant externalities. See, in particular, table 1 and his discussion on page 149.

Paladin: I think so. Dig a sump right over there. Pump the waste over that rise and drain it off down the opposite side. And a twenty-foot stack on the boiler would carry the smoke above a downdraft and carry it off harmlessly.

Gorman: I could do those things you said but it would cost money; a lot of money. I haven't got it. Every cent I could beg or borrow went into this well. I have to run full blast just the way things are. Otherwise I'll go broke; lose everything. Understand?

Paladin: Perfectly.

Gorman: If Donatello gets hurt in the process so much the better. He's fought me every step of the way from the minute I bought the land.

Paladin: Well, personalities aside, it's a crime to ruin a vineyard that produces the finest wine in the state.

Gorman: I've never tasted wine. When I want a drink, I take white mule straight. That's a man's drink.

Appendix C. Paladin Reports to Donatello

After meeting with Gorman to request the installation of smoke stacks and a sump pump to divert externalities, Paladin reports back to Donatello that he was initially unsuccessful. He recommends Donatello invest in Gorman's operation to save himself, but Donatello declines as well.

Donatello: Now you can lead an attack. I will pass out the guns. We will wipe out this menace.

Paladin: Renalto, I'm afraid it's not quite that simple. The vineyards, the winery, they mean a great deal to you. Don't they?

Donatello: This is my whole life. I have no wife, no little ones, but I have my vines that I put in the ground with my own hand. I make them grow with water I carry on my own back. These are not vats of wine; these are years of my life.

Paladin: I understand. Believe me. And I want you to understand Tim Gorman feels exactly the same way about his oil well.

Donatello: Oh no! You cannot compare my beautiful wine with that black slime!

Paladin: I agree, but the principle is the same. The oil business is here to stay and night raids won't stop it.

Donatello: But why? Who needs this oil?

Paladin: Some very useful things come from it. Oil for the lamp. Benzene for cleaning. Very useful things.

Donatello: What must I do? Let myself be ruined?

Paladin: No. You must loan Tim Gorman \$3,000.

Donatello: No. I will cut my throat first!