Tick, Tick, Boom: Simulating Human Rights Decisions in the Classroom

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ABSTRACT This article presents an original simulation, called Tick, Tick, Boom, which is designed to help students examine the use of torture in counterterrorism interrogations. The simulation is designed to be embedded in a larger array of course content but needs only one 50-minute class period to play. Unlike many similar games, students participate individually, learning the consequences of their actions through dice rolls. The article summarizes the gameplay and debriefing, presents a brief assessment of the simulation as an activity, and offers suggestions for future extensions.

There are many paths for making human rights classes hands-on. Students can connect with human rights organizations for service learning and research (Allam et al. 2021; Bell, Mattern, and Telin 2007; Marlin-Bennett 2002) or to raise funds for and awareness of human rights issues (Brunell 2013; DeLaet 2016). They can create consumption logs to analyze the human rights implications of their actions (Weir 2021); lead modules of the course (McBride 2017); or explore primary source materials to learn about human rights violations and movements—through either archival research (Elder and Wallace 2020) or oral histories (Low and Sonntag 2013). Alternatively, students can participate in simulations.

Simulations are an increasingly popular approach to active learning in political science. Students who participate in them have been found to perform better on exams in those courses and enjoy those courses more (Frederking 2005). They also "develop their communication, negotiation, and critical-thinking skills, and in many cases, improve teamwork skills" (Asal and Blake 2006). Simulations have been applied broadly: in the human rights realm, instructors have used them for the creation of human rights treaties (Kille 2002), health crises and restorative justice (Propst and Robinson 2021), peace processes (Frank and Genauer 2019), and counterterrorism operations (Siegel and Young 2009).

This article describes Tick, Tick, Boom, a counterterrorism ticking-time-bomb simulation. Unlike many simulations, Tick, Tick, Boom is designed to be executed in a single 50-minute class period; however, it is designed to be embedded within other relevant course material. It also is a single-player game: students make individual decisions and learn the outcomes through dice rolls. Most important, the game ends with a debriefing about the choices made, the pressure felt, and the dangers of giving too much

credence to ticking-time-bomb situations in general. Playing at the same time and debriefing together mean that although students participate in the game as individuals, the experience is still communal.

Before discussing the simulation, it is important to address the weaknesses of ticking-time-bomb scenarios. They are not new, and they are intrinsically flawed. These scenarios cheat their way around discussions of the morality of nature by asserting that the bomb is *definitely* in place, that officials have been able to track down someone they *know* placed the bomb, and that there is so little time that the area cannot be evacuated. They assume that the decision by officials to torture is based on a standalone, extreme situation and assert that torture *will* produce the location of the bomb in time to disarm it (Hassner 2018; Hunsinger 2008, 231; Luban 2005; Opotow 2007).

In reality, we know that torture often is an institutionalized practice. Intelligence in these situations generally is far less certain than the information presented in ticking-time-bomb scenarios—officials think there *may* be a bomb and they have detained someone who *may* know something about its location. Or, authorities think that one of a large group of captives may know something about where a high-profile target is hiding—but they are uncertain about which one (Hassner 2018; Hunsinger 2008, 231; Luban 2005; Opotow 2007).

Although torture in some cases may produce intelligence, it is not likely to do so quickly (or within the timeframe of a ticking-time-bomb scenario): "Prolonged detention, gradual escalation, and recurring pauses are the key components of torture. These take time" (Hassner 2018, 89). Frequently, its use either produces no usable intelligence (Feinstein 2014; see also Prokop 2014) or worsens the security situation (Walsh and Piazza 2010). Most important for a human rights course, the freedom from torture is a non-derogable right under international law, which means that there are no circumstances in which the use of torture is considered acceptable (UN General Assembly 1966, 1984). Tick, Tick, Boom gives students the opportunity to grapple with the juxtaposition of

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human rights and security in counterterrorism operations and face the flaws inherent to the ticking-time-bomb scenario.

The remainder of the article proceeds as follows. First, I introduce Tick, Tick, Boom by describing the gameplay and the debriefing. I then present an assessment of the simulation as an activity. The conclusion suggests possible extensions of the project.

THE SIMULATION

The simulation has two main parts: (1) gameplay, which advances through choices made by students and outcomes determined by rolling dice; and (2) debriefing.

Government refuses to meet. Through its various information channels, the government agency for which you work confirms that there are at least three more bombs awaiting detonation. Given the location of a bomb, experts can defuse them. It is not feasible to find the bombs without being given their locations.

Four hours after the first explosion, you and your team track down a single individual linked with placing the first bomb. You are 90% sure that this individual is a leader of the terrorist organization and holds the information you seek, and you have been tasked with persuading the suspect to share with you the locations of the other bombs. Your superiors (off the record) have ordered you and your team to use *any means necessary* to get those locations—with the awareness that if you do use torture and it is exposed, you and your team may go to prison. The suspect has not spoken since you apprehended them.

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Gameplay

Tick, Tick, Boom begins with the following situation,[1] written specifically for the simulation:

A bomb explodes in a major city in the United States, killing 10,000 people. In the aftermath, a terrorist organization broadcasts a video announcing that increasingly larger bombs will detonate in random cities around the country every six hours until the organization's demands are met. The organization is demanding possession of all of the country's nuclear warheads—a demand that the US

Gameplay consists of decisions that students make by the hour (in game time). These decisions must follow these nine rules:

1. In each round of the game, you will choose among torture options, non-torture options, and waiting.
2. Torture and non-torture tactics have the same probability of producing an answer (to start).
3. Each non-torture option takes two hours of your remaining time.
4. Each torture option takes one hour of your remaining time.

Figure 1
Partial Record Sheet

Hour	Tactic Used	Why I Chose This Tactic	Shock/Death Check	Answer Check
Ex.	NT1	I prefer non-torture tactics and consider myself a tricky kind of person.	✕	🎲 / 👍 👎
1			✕	🎲 / 👍 👎
2			✕	🎲 / 👍 👎

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5. You may use each non-torture tactic five times, but you may use each torture tactic only once.
6. After you have used two torture tactics, each additional torture tactic you use has an increasing probability of either sending the suspect into shock or killing them.
7. Suspects leave shock only after the use of a non-torture tactic.
8. You must wait two hours to use a non-torture tactic after using a torture tactic.
9. Continue choosing tactics until you have found all of the bombs or your suspect is dead.

For each hour, each student chooses one interrogation tactic and briefly explains why that tactic was chosen on a record sheet, a portion of which is shown in figure 1. All students then roll two dice[2] to determine if their personal tactic has produced the location of a bomb (based on flowcharts for the use of each set of tactics).

The following are four non-torture options for tactics:

1. Trick the suspect into disclosing the location of the bomb.
2. Appeal to the suspect's better nature.
3. Persuade the suspect that it was wrong to plant the bomb in the first place.

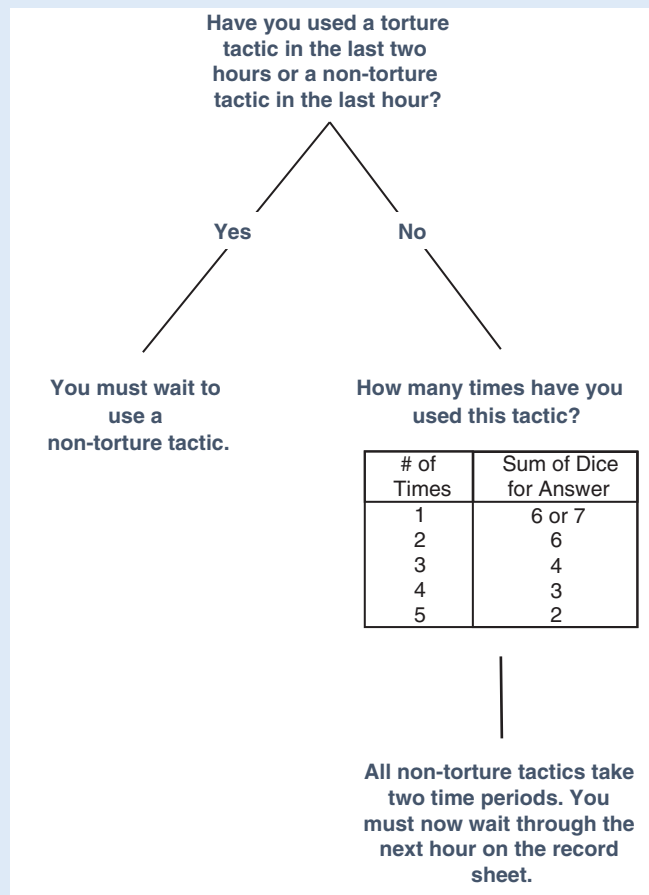4. Offer clemency for revealing the location of the bomb.

These tactics are associated with the flowchart shown in figure 2, which communicates the relevant rules to consider before using a tactic and the dice combination associated with retrieving a bomb location. Thus, if students have used a torture tactic in the last two hours and want to switch to non-torture tactics, they must first wait two hours. If they used a non-torture tactic in the previous hour, they must wait one hour before using another tactic. If they are clear to use a non-torture tactic, they may proceed with rolling their dice. As the flowchart shows, each time they use a specific non-torture tactic, it decreases in efficacy. The first time that students use "appeal to the suspect's better nature," they can retrieve an answer with any combination of dice that sum to 6 or 7. The second time that they appeal to their suspect's better nature, they must roll dice that sum to 6, and so on.

There are 20 torture tactics, adapted from Richards, Morrill, and Anderson's (2012) Torture Acceptability Index, which I loosely sorted into threat-based and physical tactics, as follows:

1. Humiliate the suspect via degrading language.
2. Threaten to beat the suspect.

Figure 2
Non-Torture Tactic Flowchart

Have you used a torture tactic in the last two hours or a non-torture tactic in the last hour?

Yes — **You must wait to use a non-torture tactic.**

No — **How many times have you used this tactic?**

# of Times	Sum of Dice for Answer
1	6 or 7
2	6
3	4
4	3
5	2

All non-torture tactics take two time periods. You must now wait through the next hour on the record sheet.

3. Threaten the suspect with a dog.
4. Threaten to shoot the suspect.
5. Threaten to harm the suspect's family members.
6. Make the suspect face a mock execution.
7. Do not allow the suspect to have food.
8. Do not allow the suspect to have water.
9. Make the suspect listen to loud noise for long periods.
10. Expose the suspect to extreme heat or cold.
11. Do not allow the suspect to sit down.
12. Do not allow the suspect to sleep.
13. Make the suspect go naked.
14. Sexually humiliate the suspect.
15. Punch the suspect.
16. Kick the suspect.
17. Beat the suspect with a cane.
18. Apply electric shocks to the suspect.
19. Hold the suspect's head under water.
20. Sexually assault the suspect.

Torture tactics are listed in a separate flowchart (figure 3). As with the non-torture flowchart, this one communicates the relevant rules, such as not using a torture tactic more than once and the sum of dice needed to produce a bomb location each time a user checks for an answer. Additionally, it walks users through performing shock and death checks, which are required as the number of torture tactics they use increases. Each use of a torture tactic after the first two requires a dice roll to determine whether that suspect has gone into shock. The use of six torture tactics during the game results in automatic shock. Suspects can still provide bomb locations while in shock. However, using another torture tactic on a suspect who is currently in shock includes the possibility of killing the suspect. Suspects leave shock only after the use of a non-torture tactic.

As the game proceeds, bombs explode at predetermined times. They have associated casualty counts, which increase throughout the course of the game. Each time students get an answer from their suspect, they save all victims of the next bomb that has not

Figure 3
Torture Tactic Flowchart
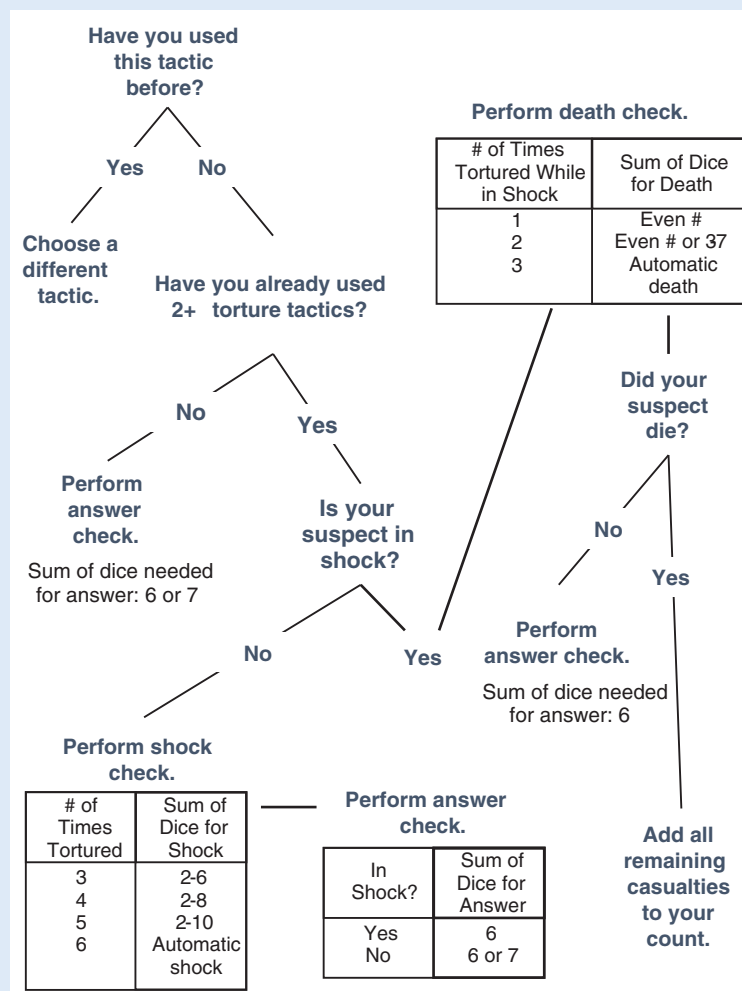
yet exploded. If students fail to acquire an answer before a bomb explodes, they add the entire casualty count of that bomb to their total. The rules and probability flowcharts are complex and the pacing is fast, so mistakes will be made from a sense of pressure. This is deliberate—the choices students make and the logic they use are far more interesting and important than perfect adherence to the rules.

information from these potentially innocent people, are they willing to move on to torturing suspects' loved ones to increase the pressure? Do they draw a line at specific ages?

This also is the time to connect the simulation structure—particularly its twist endings—to the literature discussed previously with regard to both the pressure to choose between human rights and security and the generally flawed nature of ticking-

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After the final (students assume) bomb explodes, the instructor reveals that there actually is one more bomb. The instructor informs the class that only those students who did not use any torture tactics throughout the game will discover that this bomb exists, allowing them to attempt to find its location. They then play an additional six hours of the game, which do not appear on the record sheet.

When the surprise bomb detonates, the instructor reveals that some students (based on preassigned numbers) picked up a suspect who does not have any information related to the bombs and who could not give them any accurate answers regarding locations. They are asked to add all of the possible casualties to their totals, which generally results in a satisfying (for the instructor) wave of groans. Finally, all students who used a torture tactic must perform a prison check. This is based on the severity of the tactics that they used, in which the use of tactics based on threats (i.e., torture tactics 1 through 6) has the lowest probability of going to prison, the use of physical torture has a higher probability, and killing the suspect has the highest probability.

Debriefing

Debriefing is in two parts. The first half is written and uses a form (see the online appendix) that provides space for students to think through their approach to the simulation, the overall experience,

time-bomb scenarios. This is an integral part of the simulation—it often is the time when students' perspectives begin to make clear shifts.

ASSESSMENT

Tick, Tick, Boom has the possibility of producing a significant amount of classroom data for examination. The written debriefing tracks the course content that students considered while engaging with the activity. Moreover, the record sheet and written debriefing both require students to explain the logic behind each of their choices, which is a rich source of qualitative data.[3] This facilitates meaningful studies of students' views on torture as well as the different approaches that they take to engage with simulations.

For example, in the qualitative data I collected from my students, four key clusters emerged regarding the internal logic that guided their decisions in the game: *utility calculations*, *moral high ground*, *moral failure*, and *full immersion*. The utility-calculations cluster is related primarily to the physical act of playing the game. These responses focus on the dice-related probabilities built into the game, typically the likelihood of sending suspects into shock or killing them. Examples include "[I chose this tactic] because it has a higher probability (75%)" and "Do not want to risk shock/death too early." Other comments mention repeating a strategy because it worked before or choosing strategies to get

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and the application of course materials. Similar to a Think–Pair–Share activity (minus the "pair" aspect), this allows participants to order their thoughts before speaking them out loud. It also provides a written record to parse for trends in simulation approaches and experiences.

The second half of the debriefing is a discussion. This is the opportunity to push students to examine how willing they are to normalize the use of torture in the world. Questions to consider at this stage include: How many people would they be willing to torture in these situations? How much? How many lives must be at risk? How certain must they be that getting the information will save lives? Where do they draw the line—if they fail to get

their suspects out of shock.

Non-torture explanations often rely on the moral high ground. For example, "This is the most humane tactic, and if it is possible to convince someone to do the right thing, you should." However, there also is a strong trend of thought among non-torture users that they would be willing to switch to torture if it became necessary (i.e., shaky moral high ground). For example, "The subject could be either compliant or not and I would rather start with a non-torture tactic to test the waters" and "I still have time to torture but do not want to until I have to." Conversely, torture-tactic explanations largely present a sense of urgency or desperation causing moral failure: "Desperate up to

next bomb" and "Need more answers and am running out of time."

By far the most interesting cluster of responses, however, is the cluster I refer to as full immersion. In these responses, students shift from both abstract moral reasoning and focused utility calculations to present themselves as interrogators and consider why they personally would or would not choose a specific tactic. Some responses focused on the prison time associated with being caught using torture: "I decided to use all non-torture tactics because it had higher probability of success and I am generally averse to torture. I also did not want to spend life in prison in the US because the prison systems here are extremely bad." Other responses, however, reference the suspect's assumed backstory or nature—for example, "Assume the suspect's tendencies for crime stem from poor decision-making ability" and "Maybe the suspect feels bad now"—or rely on potential sequential events rather than distinct rolls of the dice—for example, "I wanted to be persuasive without causing any long-term damage that would possibly interfere with interrogation" and "I wanted the suspect to view me as an ally, not as the problem, so that maybe he would tell me what I needed, but I also chose to use torture tactics when I did not initially get an answer so that he knew I was serious about saving the people."

We often see (and grade) the end results of our students' work rather than the thought processes behind the choices they make, leaving a gap in our analyses of assignments and activities. One option to address this gap is to have students write reflection essays after an activity ends. These are great tools for collecting in-depth reactions and (hopefully) genuine assessments of how they interacted with that part of the course. However, although the value of deliberate, thoughtful reflection cannot be overstated, these essays are removed from the heat of the moment. They may present more of an opportunity for students to tell us what they think we want to hear.

Tick, Tick, Boom, however, is a model for collecting live-time data on how our students process and decide to engage with simulations. Such data can only improve these tools. For example, in the categories presented previously, the utility-calculations responses appear to express less engagement with the course content (and the actual point of the simulation), relying heavily on the rules provided as justification for decisions made. Adjusting the rules or instructions of the simulation—such as by using immersive examples—could lead to fewer responses in this category and, therefore, more responses (and thought processes) demonstrating a genuine and active engagement with the course material. We might expect, then, that the simulation would be more effectively connected to the learning goals of the course—and, in this case, measuring and affecting students' ideas about torture.

CONCLUSION

This article presents Tick, Tick, Boom, an original one-shot simulation designed to help students better understand the use of torture in counterterrorism situations and, ultimately, to shape their opinions of torture with the application of international human rights norms. I also argue for the importance of collecting live-time data on why our students make the choices they do as they engage with classroom activities. This is a task at which Tick, Tick, Boom succeeds.

This format would carry over easily to other political science topics. It would not work in any setting in which there *must* be collaborative discussions with others, such as peace negotiations and drafting of policies. However, natural extensions include topics such as elections, roll-call votes, and resource distribution. Multisession simulations have an important role in allowing our students to fully immerse in a situation and work together to produce an outcome. However, not every course has the time for such high-capacity undertakings. One-shot games represent a reasonable middle ground, with which students can engage actively with a challenge and review the outcomes of their choices in a single class period.

SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit http://doi.org/10.1017/S1049096522000051. ∎

NOTES

1. All simulation materials, including detailed instructions for setting up and facilitating Tick, Tick, Boom, are available in the online appendix and on my personal website (www.kannewatson.com.)

2. If using physical dice, it is necessary to have all students roll their dice at each rolling opportunity (whether or not they need to roll for their own purposes). Before I adopted this rule, students mentioned feeling pressure to choose specific tactics based on how they thought their classmates would react—without the noise cover, rolls for shock and death checks reveal all of the students using torture tactics. The noise cover protects students' anonymity. If you do not have enough physical dice or are not playing with an in-person class, students can use an app or website that simulates dice rolls (e.g., www.random.org/dice).

3. Instructors also could use the Torture Acceptability Index (Richards, Morrill, and Anderson 2012) as a pretest and posttest survey and track changes in students' attitudes toward torture from the pretest to the choices they make in the simulation to the posttest with the use of unique numeric identifiers for each student, described in more detail in the online appendix.

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