



**Simulation Interoperability
Standards Organization**

"Simulation Interoperability & Reuse through Standards"

Incorporating Ethics in Defense M & S: New Frontiers in Standards

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Introduction

This presentation and the underlying paper asserts that there is an unrepresented set of issues in current simulations that may now be addressed due to advances which are announced almost daily. One of these is ethics training. This area is not as quantifiable as the physics-founded weapon systems and the doctrinally memorialized unit tactics, but it is important nevertheless. While it appears, after a diligent literature search, to be not particularly well recognized in the simulation community, it may or should be incorporated soon. Those who have fought the standards battles may be well-suited to assist in this transition. Let us start with a little “show of hands” research.



A Warrant Officer





A Warrant Officer and a Captain





A Warrant Officer, a Captain and a Lieutenant





WO Hugh Thompson

WO Hugh Thompson showcased extraordinary moral fortitude during the My Lai Massacre in 1968. As a helicopter pilot in the U.S. Army, Thompson took it upon himself to intervene, landing his helicopter between the soldiers and the civilians, and told his door-gunner to open fire if the killing continued. He retired as Major and passed away in 2006 from cancer.





Capt Ernest Medina

Captain Ernest Medina was a central figure in the My Lai Massacre. As the CO of Charlie Company, he played a pivotal role in leading the troops. Medina faced scrutiny for his alleged role in directing the soldiers to engage in the indiscriminate killing of unarmed Vietnamese civilians. After a career in real estate, he died in 1981





Lt William Calley

Lieutenant William Calley was a U.S. Army officer and became well-known for his role in the 1968 My Lai Massacre during the Vietnam War. Calley was accused of leading a unit that killed hundreds of unarmed Vietnamese civilians. In 1971, he was convicted of murder for his actions, but his sentence was later reduced, and he served only three and a half years under house arrest. Retired now, he lives in Florida.





Major Theses and Assumptions

- **Ethics, morality and mission success all demand an almost inhuman level of restraint in the face of inconceivable stress**
- **Major efforts have been undertaken by many industrialized nations to strengthen the bindings of acceptable conduct**
- **Much of those efforts have been in the form of lecture or classroom study**
- **Studies have shown that in other training one finds that live, virtual and constructive simulations produce desirable results**
- **Recent advances in AI have improved the ability to both present realistic interpersonal scenarios and to more effectively analyze improvements**



Background I

- **Homo Sapiens Sapiens has been around for several hundred thousand years and has a written record of rules of conduct for the last four thousand years**
- **The Code of Hammurabi, ca. 1750 BC, has a clause forbidding the abuse of the weak by the powerful**
- **The book of Deuteronomy, ca. 1350 BC, has as interesting proscription of the destruction of fruit trees**
- **Both culture's history record examples of violation of these set constraints**



Background II

- In the time of the Roman Empire, ca. 400 AD, these early sparse rules were contemplated and fleshed out
- One major contributor was Saint Augustine of Hippo who lived and wrote in great depth about the concept of a Just War.
- He set out the major parameters of such an acceptable set of circumstances in which one could deviate from the stricture to “love one’s enemies”
- The next slide presents these in a tabular form



Justice Before the War and During the War

<i>Jus ad bellum</i>	<i>Jus in bello</i>
Damage inflicted by the aggressor must be lasting, grave, & certain	Moral law retains during armed conflict. The mere fact that war has broken out does not mean that everything becomes licit between the warring parties
All other means of putting an end to it must have been shown to be impractical or ineffective	Actions contrary to the law of nations and to its universal principles are crimes, as are the orders that command such actions. Blind obedience does not suffice to excuse those who carry them out. Extermination of a people, nation, or ethnic minority must be condemned. One must resist orders that command genocide.
There must be serious prospects of success	Non-combatants, wounded soldiers, and prisoners must be respected and treated humanely.
Use of arms must not produce evils graver than evil eliminated	Every act of war directed to the indiscriminate destruction of whole cities or vast areas with their inhabitants is a crime against, which merits firm and unequivocal condemnation



Saint Thomas of Aquinas Adds Post-War Justice

- Saint Thomas Aquinas lived and wrote in the mid 13th century in Italy
- He gave the world a discussion of the obligations of the victor at war's end
- His writings and philosophy have been adopted and adapted by many nations today
- The US DoD has fielded a; 1,300 page manual on the Law of War and provides training
- A small font version is shown next; it can be downloaded and read off-line

<i>Jus post bellum</i>
Just cause for termination
Right intention
Meaning no revenge
Use legitimate existing authority that respects human rights



From the US DoD Manual on the Law of War

<i>Jus ad bellum</i>	<i>Jus in bello</i>	<i>Jus post bellum</i>
A competent authority	Rules between enemies for conduct of hostilities and protection of war victims	Just cause for termination an agreement to end hostilities,
A just cause (e.g, self-defense)	Rules between belligerents and neutrals	Right intention an agreement to end hostilities
Means must be proportionate to cause	Rules for military occupation	Meaning no revenge an agreement to end hostilities,
All alternatives must have been exhausted	Duties during peacetime to help implement the above rules	Complete subjugation of an enemy State and its allies
Right intention on the part of just belligerent		Simple cessation of hostilities



Some DoD Methods

- **Documents**

- DOD DIRECTIVE 2311.01 Law of War Program
 - *Lists various directives as to how to comply with the accepted Law of War*
 - *17 Pages*
- *DoD Law of War Manual*
 - *Complete discussion of Law of War*
 - *1,700 pages*

- **Training**

- Classroom Lecture
- In USMC, that amounted to ~ 5 hours of instruction prior deployment
- Reinforced by consistent comments from NCO's on how to behave



Attempt to Make Training More Effective

- Can Hollywood Help train
 - ICT Background
- Navy Program on leadership
- Using Drama to Engage Trainee
- Watch 3 min. clips
- Respond to “?s”
- Try it: <http://www.hpc-educ.org/Danz/PAL3/LdrShpClips.php>

 Bridge on the River Kwai	An adventuresome British Officer tries to induce a more junior, less enthusiastic rescued American to go on a dangerous mission	What leadership style is optimal when facing a suicidal mission and needing significant independent action?	<u>Transformational</u> <u>Transactional</u> <u>Servant</u> <u>Authoritarian</u>	<u>First</u> <u>Second</u> <u>Third</u>
 A Bridge Too Far	An enthusiastic General addresses his officers before a difficult evolution, seeking their commitment to its success	Charismatic is another term for what leadership style, which is shown here by LtGen Horrocks (Edward Fox)?	<u>Transformational</u> <u>Transactional</u> <u>Servant</u> <u>Authoritarian</u>	<u>First</u> <u>Second</u> <u>Third</u>
 The Caine Mutiny	A new Captain addresses his officers after taking over a very battered ship with a worn-out crew	Trite language and adherence to rules, but with a lot of "or else" language, indicate this CO is in which mode?	<u>Transactional</u> <u>Servant</u> <u>Authoritarian</u> <u>Transformational</u>	<u>First</u> <u>Second</u> <u>Third</u>
 Lawrence of Arabia	A commanding General empties his magazine of persuasive prowess to gain the support of a wounded officer	Here the General Allenby (Jack Hawkins) employs several styles; is one missing?	<u>All</u> <u>Authoritarian</u> <u>Transformational</u> <u>Transactional</u>	<u>First</u> <u>Second</u> <u>Third</u>



Other Professions

- **Not the same as combat troops**
 - Less imperative threats and rarer PTSD
 - Police come the closest, losing ~ 1 officer out of 6,300 in a year
 - The US lost 1 out of 50 service personnel in a year in Vietnam
- **Police**
 - Code of ethics, Police Academy Training, Refresher, Posted on wall
- **Medical**
 - Study in Med School, Required as part of Annual Continuing Medical Education
- **Law**
 - Study in Law School, Required as part of Annual Continuing Legal Education



Should LoW and Ethics Training use Simulations

- **Engagement is key to effective training**
 - Teachable moments and trainee engagement has been shown to be needed
 - Observation: time in the simulator environment shows up in combat
- **Difficult to train for ethical behavior during actual combat**
 - The wrong time to come to grips with moral issues is when one's blood is up
- **Simulation has been shown to evoke comparable engagement**
 - Vital signs show physical parameters, (e.g. pulse rate) are elevated
 - Antagonisms between “combatants” sometimes becomes physical
 - This may provide the most realistic environment in which users can learn
 - Those who cannot may be evaluated as high risk candidates for combat



Role of Simulation Standards Community

- **Issues of Unintended Consequences**
 - Maintain consistency
 - Setting metrics parameters
- **Need to plan and implement and maintain**
 - Scenario development
 - Requisite insertion in exercises
- **Major Parameters to be considered**
 - Which issues to cover
 - Assessment of compliance
 - Consideration of updates



Conclusions

- **Ethics, morality and mission success all do demand an almost inhuman level of restraint in the face of inconceivable stress**
- **Must learn from prior efforts to strengthen the bindings of acceptable conduct**
- **Lecture or classroom study can be improved upon**
- **Live, virtual and constructive simulations will likely produce desirable results**
- **Recent advances in can be adopted and adapted to both present realistic interpersonal scenarios and to more effectively analyze improvements**



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Q&A / Discussion