

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

BOMBS AWAY

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In Art, Visual Art

By

Thomas Dang

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The graduate project of Thomas Dang is approved:

Samantha Fields, Professor

Date

Christian Tedeschi, Assistant Professor

Date

Patsy Cox, Professor, Chair

Date

Dedication

I would like to thank the Marines I have served with in Fox Company 2/24, India Company 3/23, Golf Company 2/24, and all the other units, I thank you for all the times we have shared together. To all that gave some, and to some that gave all, I will always honor your sacrifice and know that you will never be forgotten, Semper Fidelis!

Also, I would like to thank my graduate committee Sam Fields and Christian Tedeschi for your support and guidance. You all have been an amazing inspiration and I appreciate all the motivation you have set forth on this journey. A special thanks to my chair, Patsy Cox. You have paved a whole new pathway for my life and I cannot thank you enough for your influence.

Last but not least, thank you to all my family and friends that have supported me along the way.

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ABSTRACT

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An influential part of my life has been my journey through the Marine Corps. Having done two combat tours in Iraq, I have been confronted with many hostile engagements. My training exercises involved Mission Oriented Protective Posture (MOPP) suits and gas masks to prepare us for imminent biological and chemical agent exposure. The study of pathogenic organisms has become a direct point of departure. Connections drawn from my military experience as well as my studies in microbiology are visually manifested in my pieces. Though my work may elicit many different responses, my goal is not to extend a political viewpoint on war but to expound upon my experiences of combat and the potential threat for annihilation.

The *Bombs Away* installation is a metaphor for combat that references biological and chemical weapons in particular. The pathogenic organisms depicted in my work, are capable of causing catastrophic events. These pieces are representations of projectile weapons that emulate the intense and hostile gestures which embody personal

experiences in combat. Each “bomb” works together to envelop the space as an implied comparison formulating different exposures of what veterans encounter in war. These exposures can be as literal as being attacked by incoming mortars or can be stress induced from the fog of war.

Introduction

Bombs Away is an installation representing biological bombs inspired by the influences of war, past and present. Embedded with hand-built ceramic sculptures representing biological agents, these bombs occupy the surrounding space giving a sense of depth through different height variation. The installation captures the intense potential energy of the bombs falling as you walk through the installation. Having completed two combat tours in Iraq, I have been confronted with many hostile engagements. The effects of war have left many veterans scarred with traumatic stress when coming home, leaving our service members confronting another battle no one understood at the home front. *Bombs Away* serves as a means to develop a dialogue with veterans and to envelop the experiences and stories of combat while depicting a threat of the world in an enduring fight in the “War on Terror.” As the war on terrorism continues, fears of encountering biological and chemical weapons increase with each year passing. Having studied these pathogenic organisms, they have become a direct insight to my work, drawing a connection with my military experience and my studies in microbiology.

Background in Clay

My exploration with ceramics began by creating functional ware as a way to share an interconnected relationship between myself and the user. Coming home from war was never easy. For me, the adjustment was difficult, and to hear and see that my fellow Marines are continuing the fight while I am at home on leave is hard to bear. I could not stand being away from my Marines, I needed to find a way to contribute. It was not until I discovered ceramics that I was able to express and portray important aspects of my military experience in my work. In addition, I am able to reach out and engage other veterans on a subject many people have a hard time understanding.

Every time I came back from a deployment, I discovered that even in my absence, the users of my pots kept me in their thoughts as if I left a small part of myself with them. I wanted to pass this experience to all Veterans. Therefore, I created a series of commemorative mugs with the Marine Corps emblem, and gave a mug to every Marine I met and their families. These mugs connect with one another as a symbol of honor and family. The reason I chose the mug as the icon to share with others is because the Marine Corps was born on November 10, 1775 in Tun Tavern Philadelphia. This tavern was the birth place for the Marine Corps, which led to years of creating the finest men and women this country has offered. In addition, the mug has bestowed a sense of community that brings about great social activities and can portray ways of remembrance and tribute by honorable toasts. Moreover, in other cultures it is not just the proposing of the toast that is the expression of respect, but also the consumption of the drink that is connected to that celebration. ^[7]

Combat Experience

“The most powerful, effective weapon in modern war is a well-trained, well-armed, and well-led infantry soldier.”^[12] In the Marine Corps, every Marine is a rifleman. Throughout the history of war, infantry are the first in combat and have the lowest life expectancy. “There is no worse place than where the Infantry is...or what it has to do. A war is not over until the Infantry is done with it...finished moving on foot more than the other, finished killing more than the other. And when it is all done, and the Infantryman is taken home again, some of him will remain in that place...forever.”^[12] The visions of combat for many people are portrayed through what Hollywood has allowed us to experience. “The reality is that only a handful of individuals actually participate fully and whole heartedly in combat, rare individuals who are true warriors.”^[10] Many of these warriors are true heroes who I have had the pleasure to know and work with.

While serving in Operation Iraqi Freedom, I have been confronted with many life and death situations; November 23, 2003 was the most tragic day I remember. That evening I received a phone call that still haunts me today. Hearing that my best friend Rel Allen Ravago IV died from an ambush in Mosul, Iraq made my life flash before my eyes. Many people have their own individual take and feelings towards the war, but with Rel's passing, this made it very personal for me. Whether going to war was about trying to find weapons of mass destruction or not, nothing mattered to me after that point. The war became a feeling of reprisal to honor my friend's death.

During my first tour to Iraq in September 2004 to March 2005, my unit, Fox Company 2nd Battalion 24th Marines, was to obtain and control operation in the city of

Yusafiyah, Iraq, which was held inside the “Triangle of Death.” I was constantly reminded of the realities of war by the ongoing mortars, small arms fires, car bombs, and road side bombs. The impact of those senses and memories “has a much more profound effect on the combatant.”¹⁹¹ From the first day we landed in country, we were welcomed by a car bomb that injured Marines guarding the gate, forecasting the horrific events soon to come.

We had no time to get acclimatized to the extreme weather conditions and pursued onward with our death march towards Yusafiyah. I remember that patrol as if it were yesterday, getting dropped off several miles away from our destination point and patrolling to our location with about 200 Marines. The heat was relentless and the constant missile and bomb attacks were endless. The next several months were definitely implacable and the weight of exhaustion was unbearable. Getting little to no sleep and constantly being under attack kept morale to an all time low. Throughout this deployment, many of our Marines were severely injured and some have paid the ultimate sacrifice.

On October 12, 2004, we lost our first brother, Lance Corporal Daniel R. Wyatt by an Improvised Explosive Device (IED) while conducting a patrol in Yusafiyah. His death, definitely hit close to home and brought back all the same feelings of when Rel passed away. November 12, 2004 was another tragic day. Within my company, we had a platoon size outpost separated from the main element of our unit. On that day, that outpost of about 30 Marines was attacked by an insurgent group of about 130 strong. My squad was the quick reaction force that day and responded to that attack within minutes. As a squad size of 9, we went out to provide resupply of ammunition and to pick up

casualties. However, what normally takes a two minute drive took us about thirty minutes due to the constant bombings and shootings we faced on the way down. That was the longest fight we took as a company lasting a total of eight hours long. We received the highest number of injured Marines that day than any other time during our deployment and we lost Corporal Brian P. Prening. During that ruthless fight, Corporal Prening was killed in action while conducting aid to one of his Marines.

During the December time frame, the enemy activity has gone down drastically. I always assumed it was due to the extreme cold but on December 13, 2004, it just reminded me never to be complacent. That day we lost another two of our own in one massive car bomb, Lance Corporal Richard D. Warner and Private First Class Brent T. Vroman. It had been fairly quiet for a few weeks when Lance Corporal Warner and Private First Class Vroman conducted an everyday presence patrol. The quiet ended when the parked vehicle next to their patrol exploded, leaving a 5 foot deep crater. This IED took out the entire city block and nearly took out the entire squad patrol. My checkpoint was the closest to them, but the explosion was so intense, they passed away on site. On February 5, 2005, my squad was on a vehicle mounted patrol providing security for the Executive Officer when their vehicle got hit by an IED. The shrapnel penetrated the armor like butter and instantly killed Lance Corporal Travis M. Whiclacz.

Many people ask me why I continue to serve and risk my life on the line for the war. I never really know how or what to tell people except that I do it for my fellow Marines. The Marine Corps is a special breed of people that live upon the Corps Values of honor, courage, and commitment. It is a brotherhood, words can never convey how our bond is shared. To give your own life for a fellow Marine is almost instinctive. The

Marine Corps is a band of brothers that will always carry on the valor and uphold the highest traditions of our Corps Values. As Marines, we conduct our duties and perform our tasks in any clime and place. We honor the Marines of the past and the future and commemorate those that have given up their own lives. To never leave a man behind and to give your life for another Marine is intuitive. Therefore, it is extremely important for me to ensure that the Marines are remembered and to honor those that have lost their lives in combat. *Bombs Away* allows for combat veterans to relate and share a common ground to open up a conversation on their past experiences.

Nose Art

Nose art goes back into ancient times when charioteers would decorate their chariots to express individuality and to distinguish themselves from others. ^[8] It was intended to be good or bad, naughty or nice, funny or sad, and sometimes deprecating. ^[8] Nose art is a military tradition that has grown since World War II in order to identify friendly units on the battlefield. While under great stress and uncertainty in times of war, the desire to personalize and involve memories of life can become a psychological guard against the pressures of combat and the possibility of death. Sharks were drawn on the noses of the planes for intimidation, others had their wives or girlfriends drawn as pin-ups, and some were commemorative. During World War II, any effort used to increase morale and unit proficiency were allowed. However, after the Korean War nose art became censored and removed from U.S. aircraft due to inappropriate and confrontational images. ^[8]

Nose art traditions still carry on and can be seen throughout all major wars. The concept of nose art to commemorate and honor individuals is still seen today. Instead of drawing on the planes, they would write personal messages or draw sharks on the bomb itself. With the current Iraq and Afghanistan war, many of those personal messages can be seen on missiles honoring those that have died in combat, or can even be provoking and affronting statements.

Having lost several friends in combat, my use of nose art has become a personal endeavor to commemorate those that passed. To honor the fallen and wounded comrades, personal retribution was sought for and messages would state, "This is for..." with the

person's name on each bullet or grenade delivered to Al-Qaeda forces or other insurgencies. These messages have been a tradition of previous wars and were meant to provide ways to honor and endow vengeance for those whose name was placed on the munitions, whether it is a bomb, a bullet, or a grenade.

Biological Warfare

With our nation's history in combat, *Desert Storm* initiated a revolution in warfare. "Wars would be fought at a distance with guided munitions, precision weaponry, and a full range of information-age technological weapons."^[12] Moreover, with the vast growing interest in biological weapons, great concern arises by the possibility of these agents being acquired by rogue states or by terrorists. "The use of infectious microorganisms as a weapon is an old idea where the purpose was to kill or incapacitate large numbers of soldiers."^[16]

"After the 'Golden Age' of bacteriology at the end of the nineteenth century, when scientists first unraveled the causes of infectious diseases, the military applications of this knowledge intrigued several countries, some of which initiated offensive programs."^[10] It was not until recently, where the aim of bioterrorists has frightened the general population and caused wide spread panic.^[16] During World War I, attacks on military draft animals were secretly infected with anthrax. This led to major speculation of chemical and biological weapon attacks. Due to widespread panic, this began the world's entry into the biological weapons arms race, with each nation creating their own biological weapons as an impediment. It was not until the Geneva Protocol, effective in 1928, where the ban was implemented on the use of both biological and chemical weapons. The ban did not prevent some countries from the development of offensive biological weapons programs and the stockpiling of these agents for retaliation and deterrent value.^[10] The 1960's Biological Weapons Convention (BWC) resulted in the ban against countries to develop and produce biological weapons not intended for

peaceful or healthful purposes. Even after the BWC, recent times have shown that the United States and the rest of the world are still exposed to the dangers of infectious diseases and still need to confront a serious bio-security threat. ^[6]

When entering the Iraq war, I recall pondering the possibility of encountering biological agents. I can remember the austere endeavors of training in Mission Oriented Protective Posture (MOPP) suits with gas masks as the possibility that such confrontations were likely forthcoming. Studying these pathogenic organisms as a student has influenced my work relating my military experience to my studies in microbiology.

Microorganisms are essential for all living creatures to survive. ^[17] However, the use of certain microbes can either be extensively beneficial or can be extremely harmful.

Different periods within our history displayed many catastrophic events caused by pathogenic organisms, such as the 2001 anthrax attack targeting several news media offices and two U.S. Senators. ^[2] This has led to controversial research where infectious diseases are used to create biological weapons. It has been a superior weapon to use because bioweapons are relatively easy to spread, cost effective, and most importantly, can cause extreme chaos and panic. The term bioterrorism is defined as “terrorism involving the intentional release or dissemination of biological agents (bacteria, viruses, or toxins), that may be in a naturally-occurring or in a human-modified form.” ^[2]

Currently, the Centers for Disease Control and Prevention categorized bioterrorism agents into three separate categories based on their severity of the agent and the simplicity of it spreading. Category A is considered the highest priority which includes deadly toxins or organisms and poses the highest risk to the local populace. This category

requires specific actions for public health preparation, and can be transmitted from person to person. Category B is the second level in priority which can cause major illness and low death rates. Category C is the lowest in priority which are potential new pathogens that could be used for future use because they are easily produced and can have the potential rate of causing high fatalities and morbidities. These pathogens obtain incredible virulence factors that can induce various symptoms to bring on death. These organisms are that much more dangerous because they can be transmitted to infect the general population. Depending on which agents are being used, many of them can be passed on by aerosols, ingestion, and or cutaneously. Thus, the manner in which these pathogens are being utilized can cause a worldwide epidemic and panic, whether it be direct attack or by indirect contamination of the food and water supply.

Effects of War

“The impact of war extends far beyond the battlefield.”^[13] The traumatic experiences and distress faced in combat makes it hard to transition when coming home for not just the service member, but for family and friends as well. Everyone has changed and it will take more time and readjustments when settling back into a normal life style. However, some troops can find this adjustment much more difficult than actually facing combat.

The impact amongst family members and friends can draw out a wide range of emotions. Family members and spouses may live in constant panic for the safety of their loved ones or can even be angry at the government for the cause of their family separation. Some may be emotionally scarred due to a roller coaster of emotions and experiences of anticipatory grief, “where they try to emotionally prepare for the possibility that their loved one will not return alive.”^[13] Media coverage can make it much worse where some families just rather not know what is going on overseas.

One may feel guilt for leaving their family members back home or may even feel concerned with the ability of supporting a family while overseas. However, it is a different world when you are the one who deploys in a combat environment. You have to immediately adjust to a new environment of extreme temperatures, repetitive tasks, dangerous missions, threats of roadside bombs or improvised explosive devices (IED's), and possibly close quarter combat with your enemy.^[13] The concerned trauma of combat is a “private, intimate occurrence of tremendous intensity, in which the destructive act becomes psychologically very much like the procreative act.”^[9] Very few people can

relate to such taxing duties, life altering experiences, and hyper-vigilance. The possibility of death is a fact of life once overseas. I wanted to embrace and capture the moments of what service members go through when enduring combat and to be able to share and relate my experiences with other veterans. “Combat savagely impacts us physically, spiritually, emotionally, and relationally.”^[14]

There has been an abundant number of studies conducted that exhibited many combat veterans to show an increase amount of psychiatric problems due to exposure of combat. Such problems include “depression, substance abuse, anxiety disorders, and posttraumatic stress disorder.”^[3] In addition, other studies have focused on the relationship between combat and antisocial behavior, where the media has targeted some attention on surrounding military misconduct both during and after deployment. Previous research suggested Vietnam War veterans illustrate an affiliation between the exposure of combat and antisocial behavior. This opened current studies with recent military engagements where Killgore et al (2008) was able to discover that Operation Iraqi Freedom combatants exposed to traumatic experiences “has shown more aggressive behaviors following deployment, including angry outbursts, destroying property, and threatening others with violence.”^[3,4]

Without having the adequate time to readjust from deployment, the best way to reestablish and confront combat trauma is to be able to share it with someone that can relate to it. With the intense emotional exhaustion caused by combat, “troops in the field tend to draw together and become very close.”^[13] This is a brotherhood is something “no one can understand except the members of our brotherhood.”^[14] Keeping close relations with the members you served with is very important to all those who have served. It is a

special bond that when reconnecting it is like being reborn. By reaching out and inviting the veteran community to view the installation, *Bombs Away* will allow for veterans to engage in that dialogue and to visually connect with the experiences we all faced in combat.

Technical Process

The results of my investigation in Ceramics lead me to an installation of “dropping” bombs. These bombs are suspended throughout the surrounding space and at all levels to engulf the room in order to give the viewer a tense and cautious sensation while walking through them (figure 1.1-1.5). The head and tail end of the missiles are made out of porcelain, thrown on the wheel, and assembled. The missiles are fired to various different temperatures depending on the surface effects. Some missiles are esoteric messages that create an open dialogue with other veterans by the different imagery captured from the harsh times of a combat deployment (figure 9.1-9.2) while others are different glazed application surfacing the missile (figure 6, 7.1).

Embedded in each missile are hand built sculptures representing pathogenic organisms moving freely throughout the missile. Created out of colored porcelain, each organism is specific to each missile by blending into its environment and taking on the same characteristics of the missile itself.

The bodies of the missile are made out of glass with the material inside filled with a form of rubber called Encapso K. Encapso K “is a water clear encapsulation rubber that looks just like water and is ideal for a variety of encapsulation and display applications.”^[18] It comes in a two part mixture, part A and part B, which are mixed in equal amounts. When pouring to embed the microbe sculptures, it is necessary to allow each layer to cure at room temperature before moving onto the next layer. With each layer taking about 5-8 hours to cure, the Encapso K bonds together to create a clear water effect.

Conclusion

Combat veterans and their families have suffered through over ten years of combat operations in Iraq and Afghanistan. Continuing with many struggles at the home front has made it very difficult for some wounded warriors to adjust. Many face survivor guilt thinking that their lives were spared at the cost of another and bear a heavy sense of responsibility for the one who is gone. ^[10] The impact of combat stress and trauma draws this brotherhood closer than anyone can ever explain. This new family is the only one to confide in and to depend on for each others' physical protection and emotional support. To risk your life for one another is without question. Just as Marines have succeeded in every clime and place and found adversity is in every corner, this brotherhood will continue to protect the Nation and each other.

Bombs Away contributes a dialogue for combat veterans and their family members to experience. Whether these warriors honestly look forward to combat or only do so because they have to, this installation responds to their experiences whether it is a single moment they had in combat, the entire deployment, or even something they did not personally encounter but heard. *Bombs Away* assists in building closer relations with the members you served and others who commend your sacrifice. In sharing these experiences, it helps reconnect you closer to home.

References

1. "Post-Traumatic Stress Disorder (PTSD)." *NIMH*. U.S. Department of Health and Services. Web. 26 Feb. 2012. <<http://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml>>.
2. "Bioterrorism Agents/Diseases." *CDC*. Center for Disease Control and Prevention. Web. 26 Feb. 2012. <<http://www.bt.cdc.gov/agent/agentlist-category.asp>>.
3. Highfill-McRoy, Robyn M., Gerald E. Larson, Stephanie Booth-Kewley, and Cedric F. Garland. "Psychiatric Diagnoses and Punishment for Misconduct: The Effects of PTSD in Combat-deployed Marines." *BMC Psychiatry* 10.1 (2010): 88. Print.
4. Killgore, W., D. Cotting, J. Thomas, A. Cox, D. Mcurk, A. Vo, C. Castro, and C. Hoge. "Post-combat Invincibility: Violent Combat Experiences Are Associated with Increased Risk-taking Propensity following Deployment." *Journal of Psychiatric Research* 42.13 (2008): 1112-121. Print.
5. Machi, Ethel, and Jena B. McNeill. "New Technologies, Future Weapons: Gene Sequencing and Synthetic Biology." *Confronting Future Bioterrorism Weapons*. The Heritage Foundation, 24 Aug. 2010. Web. 26 Feb. 2012. <<http://www.heritage.org/research/reports/2010/08/new-technologies-future-weapons-gene-sequencing-and-synthetic-biology>>.
6. Fidler, David P., and Lawrence Gostin O. *Biosecurity in the Global Age*. Stanford, CA: Stanford Law and Politics, 2008. Print.
7. Wolff, Edwin Daniel. *Why We Do It*. Freeport, NY: for Libraries, 1968. Print.
8. Valant, Gary M. *Vintage Aircraft Nose Art*. Osceola, Wis., USA: Motor International, 1987. Print.
9. Grossman, Dave. *On Killing: The Psychological Cost of Learning to Kill in War and Society*. New York: Little, Brown and Company, 2009. Print.

10. Grossman, Dave, and Loren Christensen W. *On Combat: The Psychology and Physiology of Deadly Conflict in War and in Peace*. [Illinois]: Warrior Science Pub., 2008. Print.
11. Wheelis, Mark, Lajos Rozsa, and Malcolm Dando. *Deadly Cultures: Biological Weapons since 1945*. Cambridge, MA: Harvard UP, 2006. Print.
12. McManus, John C. *Grunts: Inside the American Infantry Combat Experience, World War II through Iraq*. New York: NAL Caliber, 2010. Print.
13. Wills, Garry. *Bomb Power: The Modern Presidency and the National Security State*. New York: Penguin, 2010. Print.
14. Slone, Laurie B., and Matthew Friedman J. *After the War Zone: A Practical Guide for Returning Troops and Their Families*. Cambridge, MA: Da Capo Lifelong, 2008. Print.
15. Johnson, James D. *Combat Trauma: A Personal Look at Long-term Consequences*. Lanham, MD: Rowman and Littlefield, 2010. Print.
16. Salyers, Abigail A., and Dixie D. Whitt. *Bacterial Pathogenesis: A Molecular Approach*. Washington, D.C.: ASM, 2002. Print.
17. Murray, Patrick R., Ken S. Rosenthal, and Michael A. Pfaller. *Medical Microbiology*. Philadelphia: Elsevier Mosby, 2005. Print.
18. "Reynolds Advanced Materials | Everything for Mold Making & Casting." *Reynolds Advanced Materials*. Reynolds Advanced Materials, 2008. Web. 27 Feb. 2012. <<http://www.reynoldsam.com/>>.

Images



Figure 1.1



Figure 1.2



Figure 1.3

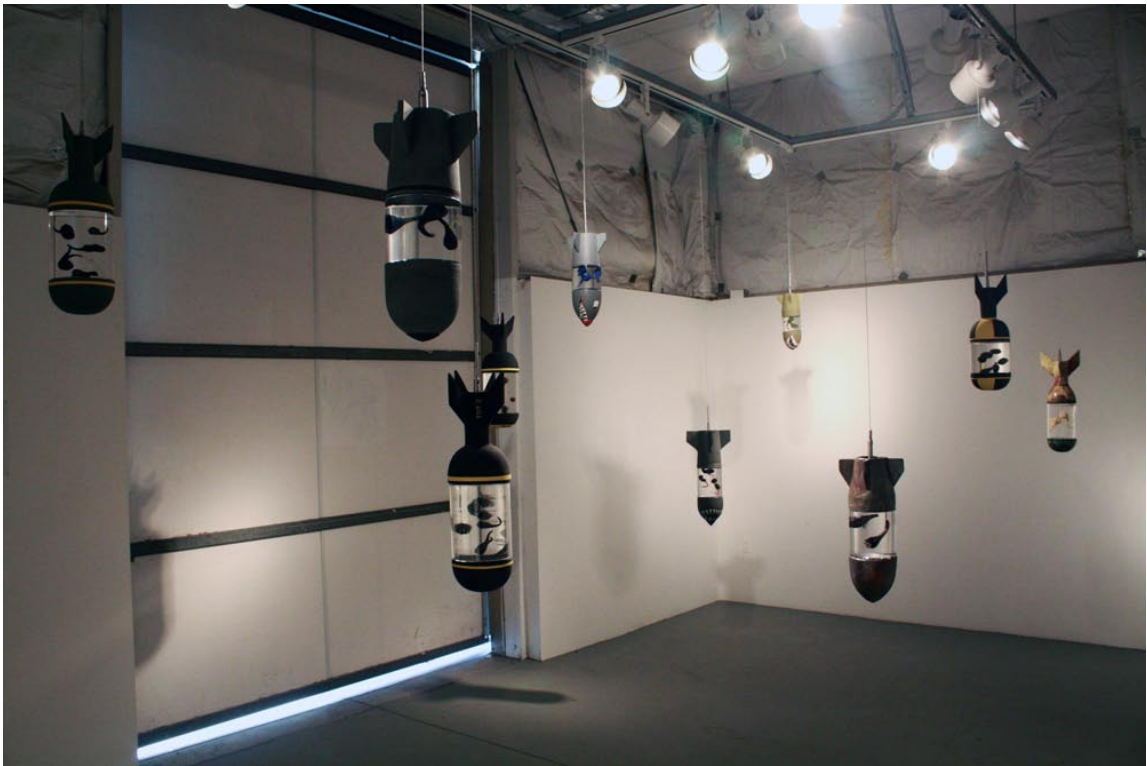


Figure 1.4



Figure 1.5



Figure 2



Figure 3



Figure 4



Figure 5.1

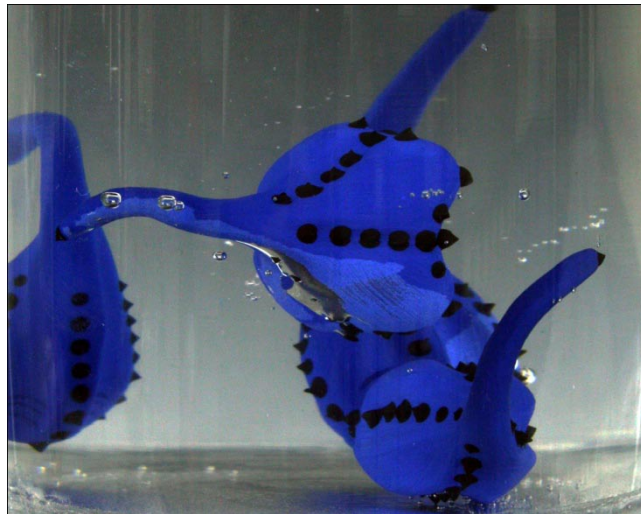


Figure 5.2



Figure 6



Figure 7.1



Figure 7.2



Figure 8



Figure 9.1



Figure 9.2



Figure 10.1

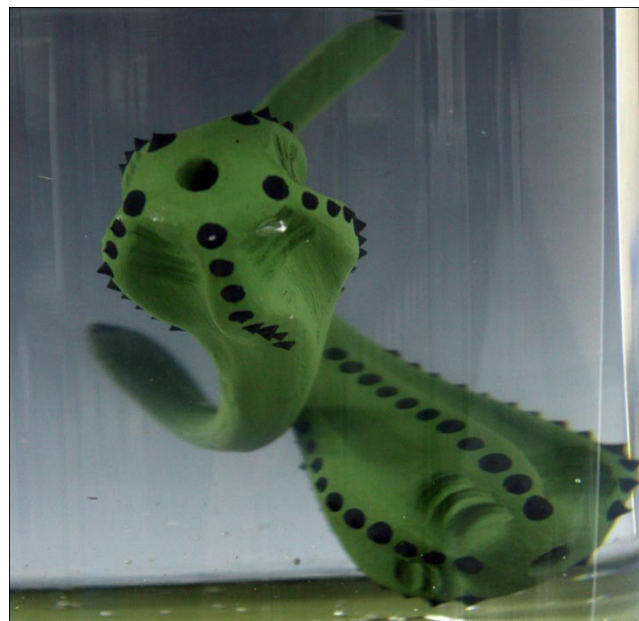


Figure 10.2