I remember the first time I moved a piece of metal with a hammer. I was seduced by the relationship that formed between the material, the tool, and myself: put into motion by my own action. This relationship is physical, mental, and emotional. The process of my making is the struggle to continually discover something about process and technique. These discoveries break the boundaries of my knowledge and help me to find new challenges. This is a different struggle than learning new things. What I show you is the effort of this entangled relationship imbued in the material.

"The step from work to making is not always clearly defined, it is the starting point of creativity. Not without modesty and an awareness of some inadequacies, the satisfaction in creative making is none-the-less the step that makes man once more close to the divine, towards a paradise, which is threatened and unprotected, but which he may regain, having earned it by his own efforts." – Hermann Junger

I manipulate rods of steel and bronze in a way that is in conflict with the materials' own properties. Through my work, through effort, I show the relation between a body in action and the material's ability to be manipulated, distorting its processed, stock identity. I transform a bar of milled steel's linear orientation through careful forming, cutting, and welding, to re-assemble a bar that is no longer straight. For example, a window grate where all of the vertical, straight bars have been tied and twisted, creating an opening in a structure meant to deny access (fig. 1). I choose to make these window grates for their ability to evoke dialogue about access to spaces. Institutions geared towards knowledge, faith, and government are erected to house
privileged individuals. These institutional structures affect our lives and shape our knowledge. These institutions are the most inclusive clubhouses in western culture, and segregate based on cultural hierarchy and class systems. A window grate acts as both a barrier and a reminder of one's place in the world. In domestic architecture, a window grate can also imply the same distinction of class. However, this implication of the domestic setting reaches a wider economic spectrum. A window grate can protect any person or family from home invasion; however it does not provide protection from all outside aggression. I cannot help but think of my experiences in metropolitan areas, specifically Detroit. It struck me that in Detroit, the same kinds of bars at once fortified homes in the slums, suburban neighborhoods, abandoned and and ravaged neighborhoods, and the mansions of Indian Village. The one thing that can perpetrate all of these domestic structures, in any of these locations, is a bullet. A drive-by shooting is a tragic act that often kills or injures more people then just the desired target. Such an act shuts down a neighborhood and devastates entire communities. In this body of work, I contrast the idea of gaining access to spaces by making window grates that deny any and all access (fig.2, 3, 4). In order to make a structure that functions to protect so intensely, the window is ultimately shut off to the world, even to the sun. It creates a sense of isolation and literal darkness in order to protect, but at what cost?

Process:

Initially the material is processed, square, and consistent. We often see this type of material functioning in the world. By selecting an object that denies access, and forcibly denying that function, I am changing our understanding of this strong material
by making it appear as though I have tied it like rope, creating new openings for our understanding of an object and its integral material.

Steel is the material. It is heated inside of an extremely hot forge until it is a glimmering bright orange color (fig. 5). When the material reaches this temperature it becomes soft, like a dense clay body. The iron is pulled from the fire in its bright orange state, and for just a moment, there is the opportunity to transform the material. In the flashes of time when the metal is in this vulnerable state, the action is inflicted upon it: the hammer is swung as fast and as true as possible (fig. 6). There is no time for mental considerations in this moment, only a deep understanding of what the hand is able to do. By the time one would finish a thought, the metal would have cooled to its rigid, black, and steadfast state. There is no time for the mind to wander; there is only time for action, precision, and diligence. Through a deep understanding, the act of process is an opportunity for making that relies purely on manual dexterity, effort, and a personal truth that brings the work to life. This personal truth has many sides. In the physical act of making, it lies in a confidence in one’s technical virtuosity and willingness to take risks with unknown outcomes. I have found that this truth cannot be taught, but must rather be understood through time and the recognition of progress. Through the repetitive and diligent action of a practiced skill, one becomes a master. There are a lot of ways to see this progress; for me it is in my dissatisfaction in completed works. I work and work deeper into an object, solving the problems of the piece as it comes to life. But when it is realized, I am somehow disappointed, and look forward to greater challenges. My efforts
show the viewer this struggle that calls me back to the forge and anvil day after day; this pursuit of understanding and the ability of my own hand.

To capture these moments of making, I seek simple formats. I use steel bar stock to create lines in space. I aim to interrupt these lines of steel. My action interrupts these rigid black lines. Sometimes the steel is entangled, frozen in a moment before a loop turns into a knot (fig. 7). Other times, particular sections appear to be melting away. The strength of steel allows me to freeze these moments in time. The lines become drawings of a particular action, while my control of the material creates these physical illusions. I frame these gestures within recognizable formats of architectural ironwork. Doors, gates, and railings are objects that physically direct and support us through physical space. We touch them; we respect their suggestions of utility and direction. We know them so well we often see no need to acknowledge their presence in the world. I employ simple examples of these functional structures, which are often absent of ornamentation, to more effectively nuance my abstraction of such forms. I ask myself: how many ways can I change a row of bars, and what can I make them say?

In congruence with the window grate work, I tie knots with the same material. Over and over and over again I heat and hammer the metal into a knot as quickly as I can (fig. 8). Once I have tied the knot, I chisel it off the rod. It projects off of the anvil like a red-hot dart. There it rests, accumulating into a mass of knots: a pile of effort. This pile is arranged in a line on the floor. The line describes my height and my approximate weight. This work is my self-portrait as the maker: open and infinite internally; a body tied in knots (fig 9).
The strength of steel allows this manipulation to create a sense of motion, frozen in time, becoming a glimpse into the actual act of process. There is an implication of time and duration in the work, as an accumulation of volume and weight. A conviction and effort put forth, and a relentless diligence that takes innumerable hours. In this way, time can be felt – maybe not understood, but felt. “For in this world, time has three dimensions, like space. Just as an object may move in three perpendicular directions, corresponding to horizontal, vertical, and longitudinal, so an object may participate in three perpendicular futures.” (Einstein’s Dream 21). How does an object change over time? It can change in meaning, where it exists, or in the ways we understand it, whether it is significant or overlooked. These are essential questions to ruminate with when you decide to bring objects into the world. My knots express time in more than one way. A bar of steel cannot be tied in a knot the way a rope can. It is not a material used to tie a knot. Through the use of multiples, time can be seen as a kind of futile effort to make something that should not be. By continuing to expand upon this mass of attempts, time takes on an impact of conviction and absurdity. Time can also be seen in the mark of the tool. Each knot has a series of unique marks made by my hammer. The hammer mark is a marker for a time, an attempt, and a record or history of this effort. Each knot becomes a record measuring my ability to forge a knot. Each knot is a record of my incapability to produce a perfect knot.

**Historical Precedent:**

For millennia, humans have been engaged with the qualities and potential of metal as a material. I locate my own fascination with metal within this history, and find inspiration
in the relentless pursuit of gaining knowledge in this material. It is a divine inquiry. In Exodus 31:3-5 God instructed Moses to build a tabernacle. God told Moses the names of the practitioners he desired to build His structure. In these makers He bestowed a divine level of skill and intuition equal to one another in their respective disciplines. Moses was sent to find these holy makers, who were chosen by God, and were the only ones worthy of bringing this tabernacle into being. These makers were imbued with the sevenfold spirit, in the eyes of the believer. The sevenfold spirit was used as a way to understand the mystery of their mastery, a way to accept their magic, and the illusion of effortless execution of skill upon a material. It was also a tactic to control the makers’ output and ego, as everything that happened in their workshop was dictated and controlled by God’s will. The maker was conditioned to believe that without God, he would have nothing, no skill, and no conviction to learn a craft. Theophilus, the 11th century maker and writer, describes these makers of the Tabernacle in his writings on metalwork in the text "Treatise de Artifus."

“Therefore, act now, prudent man (happy before God and of men in this life, happier still in the future life), by whose labor and zeal so many burnt offerings are being shown to God. Henceforth be fired with greater ingenuity: with all the striving of your mind hasten to complete whatever is still lacking in the house of the lord and without the divine mysteries and the administering of the offices cannot continue. These are chalices, candlesticks, censers, cruets, ewers, caskets for holy relics, crosses, missal covers, and all the other things that practical necessity requires for use in the ecclesiastical ceremony."

When read from a secular perspective, one can interpret God’s bestowing of divine skill on these makers as a way of understanding the mystification of mastery. Mystery has always been a tool of the crafts. When a thing is made by hand with exquisite execution, the layman is often astonished by the achievement. In an age where rapid information
and explanation are at our fingertips, it has never been more important to preserve the mystery and illusion of the hand.

Through a critical understanding of craft’s artistic, contemporary, historical, and theoretical disposition, I have found strategies to understand why I must make. Looking to the history of making, especially within the discipline and subject of metal, in order to understand the motive and agenda of makers is integral to understanding my work. In my practice I continually go farther back into history, searching for the end of the root system of ideology and methodology.

My Contribution to Wonder:

Makers help to create and preserve wonder in culture, and provide a kind of stable illusion; the haptic, the visual, the tactile, the human experience without simulation. As Glenn Adamson explains when describing the opening of the Crystal Palace that housed the Great Exhibition of 1851:

“The deep-perspective glass and steel structure provided an experience of gradual revelation for the proto- flâneur who came to see it. As they walked the long halls, visitors were presented with a seemingly endless series of distant spectacles, which were inexorably revealed to them as they approached each in turn.

Between the perceiver and the object of wonder there might be a veil of mystery, perhaps one having to do with production- how were all these things made, and by whom? But the veil would always be penetrated. There was a strong sense of inevitability built into this modern way of looking at the world…..” (pg 58 Invention of Craft)

Adamson, in regards to such works, goes on to say, “(A) ‘curiosity’ like this was valued because it is displayed not just as the mysterious workings of nature, but also the equally wondrous working of the maker’s hands, and the harmonious conjunction of the two.”
In my own work I hope to create a sensation of illusion and wonder in a material that is thought of as intelligible, by reorienting the material in a way that conflicts with our common understandings of its natural properties.

Through the abstraction and subversion of the window grille or window grate format, I ask the viewer to reconsider practical and ornamental function. Venetian blinds so strong they would stop a bullet because they are made from steel; a set of steel bars over a window frame that are exaggerated, swooped, and tied into an absurd bow (fig. 10). These call into question ideas of access and denial: who is allowed inside, who must be kept out, and why. Whether you are in, or out, I am giving you a window to access issues surrounding social and cultural institutions, and who is able to have a voice in them.

IN//ACCESS//ABLE
Bibliography:


FIGURES:

Figure 1
*Hung Up*
Steel

Figure 2, 3, 4
*Drive-by Proof Blinds*
Steel, .22
Figure 5
Steel heated by forge

Figure 6
Hammering steel
Figure 7
A loose steel knot

Figure 8
Forging a knot

Figure 9
*A Pile of Effort: My Height and Weight in Knots*
Steel
Figure 10
*A Pretty View*
Steel
The Work

in//access//able
2014

a pretty view
steel
48"x18"x14"
something to lean on
steel, bronze, silver
70"x40"

let some light in
steel
74"x43"
drive-by proof blinds
steel, .22 caliber bullet
20"x30"

A Pile of Effort: My Height and Weight in Knots
76", 196 lbs.
Steel

residual ornament
steel
18"x18"
hung up
steel
70"x40"

condemned
OSB, paper, steel
38"x20"
Exhibited at the Samuel Dorsky Museum, May, 2014