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Bent out of Shape Embodied Knowledge in the Art of Copper Repoussé

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SIT Study Abroad

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Abstract

Over the course of a 1,300 year history the Newar art of moulding copper into fine architectural ornaments and full bodied sacred figures has been passed through family lineages and working apprenticeships. Presently the copper repoussé technique has continued to elude a regulated school format instead favoring individual apprenticeships in the workshops and homes of more experienced artists. In a two week short-apprenticeship and study in Sajan Raj Shakya's workshop in Mangchal Tole, Patan I was instructed in the basics of creating copper forms through repoussé and chasing. This experience is documented both in terms of the delineated process for affecting copper sheets, as well as an analysis of my experience from participating in the workshop through the concepts of body techniques (Marcel Mauss 1934) and anthropologies of the body. Observations from the field and conversations with two Newar art masters are used to consider the ways in which bodies are represented in the broader context of Newar art traditions. Ultmately, bodies provide the Newar art tradition with not only the means of production for art, but are involved in the perception of social rules and the communication of ideas across time.

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Introduction

Down the streets of Patan a constant ringing of hands working metal purveys the sounds of the streets filled with people. While Patan serves as a haven for artists of many traditions and mediums, the Newar tradition of copper repoussé in this part Kathmandu Valley is renowned throughout the world for both the antiquity of its continuous tradition, and the quality of work produced. In a process that dates back over twelve centuries in this valley alone, sheets of copper and pounded and bent out of their flat plane into the ornate structures of stupas and the embodied forms of divinities from both Buddhist and Hindu pantheons. As the heir to one of the copper repoussé lineages in the valley, Sajan Raj Shakya has been exposed to the art his whole life, learning first from his grandfather and father, and furthering his education at the Norbulingka Institute of Tibetan and Himalayan arts near Dharmsala, India. His greatest accomplishment to date was as the leader of the copperwork section for the 2008-2010 Swayambu renovation project in Kathmandu. He currently owns and operates a workshop of ten other copper artists on Mangchal Tole in Patan, and agreed to teach me the basics of this longstanding art form. As an apprentice, I learned not only the ways in which the metal is altered through force, but how the body is used in relation to the work through body techniques of the workshop culture. Through the actions of my own body I came to understand the process of working the copper and moulding it into form, as well as how acquired skills can affect not only the metals but the bodies that practice them. This lead me to consider they ways in which embodied knowledge is treated in the Newar community, both the execution of the art and comportment f the artist, as well as in the consideration of the divine figures represented in their devotional art. Ultimately, bodies provide the Newar artistic tradition with not only the means of production for art, but are involved in the perception of social comportment and the communication of ideas across time.

Art Historical Background

The earliest textual reference to copper repoussé in the Kathmandu valley dates back to the seventh century, as Wang Hsuan-t'se toured Nepal on behalf of the T'ang Chinese Emperor, and remarked at the impressive beauty and craftsmanship of a temple, including the copper architectural ornaments (Pal 1975:13). From the earliest surviving pieces of copper repoussé, dating back to the seventh century as well, the artistic tradition is already established both through the quality of the work, and the inscription on the back of a piece that states it is a replacement for an identical piece that had already worn away (Slusser 1990:216). Since these earliest references, there has been a dynamic of consistency in the quality of work as well as the iconographic depiction of gods in the Kathmandu valley. "Indeed in figural representation and composition, the Nepali tradition has remained extremely conservative throughout its history." (Pal 1985:83). Once a representational norm had been established in Nepal, many dating back to the Licchavi Period (400-880 AD) when artists were strongly influenced by the Gupta style of India, it was preserved and used as the correct form in the Nepali pantheon, with the styles of different showing preference for the most subtle of changes such as the more slender figures and crisp silhouettes of the Transitional period. Images of fleeting popularity, such as the practice of representing boddhisatvas as dwarves in India are rarely found in (surviving) Nepali art, with the one such boddhisatva dwarf in an exhibition considered a rare find and an exception in the production of art in Nepal (Ibid). This consistency of form in Newar artwork especially pertains

to the bodies of divinities, with the same beings given the same embodied form by artist for centuries, "...the sanctity of an image prevented rapid stylistic mutations, for consistency in appearance was regarded as vital to the continued potency of an image." (Pal 1975:14) Such a well preserved iconography is virtually unmatched in the length of its use as well as the quality of the craftsmanship. This longevity is attributed to the regulations placed on both the artists as preservers of the tradition as well as the artwork; enforced by the Newar caste system and the *Pratima laksana* set of standards respectively. However, in the recent past the artists themselves have seen a considerable raise in social and economic staus within the Newar community, as the result of their increasingly international status as the producers of fine devotional art (LoBue 2002:170). This restricted form of representation is here understood as a social and political regulation of bodies both physical and depicted as the result of the knowledge and tradition that they represent for the community.

The Methodology of Apprenticeship

For my research in the art of the copper repoussé figures that grace the finest shrines and the ornaments that decorate the most revered figures, people, and buildings. I chose to immerse myself in the copper work through an apprenticeship. For two weeks, seven hours a day for eleven days I worked and ate in Sajan Raj Shakya's workshop along with the ten men who staff the workshop in Mangchal Tole, Patan. Despite the short amount of time I was able to actually apprentice in the workshop compared to the average learning period of one to three years, I was able to gain a basic knowledge of copper work, and my participant observation provided me with insight into how these traditional Newar artists relate to their medium and each other. Engagement with the work performed in the shop enabled me to interact with both Sajan and the other men in the capacity of their work as opposed to my own research, as described by Marchand, to interact with how the tradition of their particular work is "communicated, understood and negotiated between practitioners largely without words" through the course of apprenticeship (2008:247). Furthermore, with such limited time it was through my demonstrations of hard work and effort that I was able to build rapport, with the demands of my own metalwork project granting me access to all the active areas of the workshop, as well as assistance from several of the workers aside from Sajan. This privileged access to both the facility and the expertise of others as co-workers rather than mere subjects of study was enabled through my own physical contribution (Marchand 2008:248). Similarly, this access afforded me the opportunity to ask questions in the context of conversations and informal interviews over the course of working. Such interviews provide insight into the perpection of the work and it's integration into a historical and cultural context (Samdura 2008:670)

However, the most significant advantage to apprenticeship as a form of field work is the access to concepts not verbalized by people engaged in the work, and not enacted between people in ways visibly accessible to the untrained observer. For this research such ideas largely pertain to the individual and experiential nature of physically moulding the copper. Marchand notes that in many trades that traditionally use apprenticeships, knowledge of the requisite working methods that can be verbally communicated is limited, and in lieu of satisfactory words an explanation is often deferred to a demonstration, with the observer parsing out the necessary motion or concept for themselves (Marchand 2008:253). Indeed, for many kinesthetic cultures—including the skilled manual labor of copper artwork but also dance or other communities that face such an emphasis on bodily movement in their culture such as those studies by Jaida

Samdura—language is not used even amongst in-group members to describe either the function or feel of an action (Samdura 2008:668). While it is important to note that the anthropologist as a participant is unlikely to have an identical experience or sensation to the other subjects, this should not be considered a problem as much as an expression of the intersubjective nature of learning skills, that in language there exists just as much an approximation of meaning as the approximation of experience between two different people (*ibid* 677). The insight is gained in the transmission of such embodied knowledge is more valuable than an analysis merely subjecting it to the detached academic gaze, but this distinction must be reflected in the final product of the research. Samdura notes the importance of executing the cumbersome and difficult task of converting such kinesthetic experiences to words in the course of field work, noting that "movement is a kind of social history enacted in presently moving bodies (*ibid* 678). Such rich sources of information must be captured and translated in order to better understand the ways in which bodies interact with and alter the world around them.

In order to best convey both the emirical knowledge of the process of copper repoussé as well as the subjective knowledge of the motions involved, my analysis will first describe the procedure of how copper is transformed from a sheet into a three-dimensional piece of art. Using this as a base level of knowledge I will attempt to transcribe the movements involved in the repoussé process, using Mauss' concept of body techniques analyse how these ways of moving the body with relation to both the act of working copper and the cultural environment of the workshop. Beyond my own experience in apprenticeship and in the workshop, an artist whose creations are used as functional objects of devotion for the larger community—Newar repoussé sculptures are by both the Newar community and an international clientele—is expected to comport themselves differently than other members of the community out of deference to the importance of their work. I analyse what cultural expectations are imposed on the bodies and actions of those empowered by their knowing bodies, as well as how bodies are used in Newar and Himalayan art traditions to transmit knowledge.

Copper Repoussé Production

The basis of the workshop is the production of high quality copper repoussé pieces of art, which are considered to be not merely decorative, but functional in the quality of their beauty as it lends to use in meditation and religious practice. Before arriving in the workshop I had already practiced sketching the traditional proportion drawings of the dieties, as Sajan had mentioned the importance of sketching first (Conversation 2/11/12). However once in the workshop drawing is only a preliminary step, and far from the most important, in copper repoussé. A preliminary sketch may be drawn before starting a project, if requested by the patron or if desired by the artist, but the majority of drawing occurs in marker on metal as the outlines of what is to be made are drawn on the flat sheet of copper (between 18 and 16 guage being the most desirable for high quality work, though as a begginer I worked with 22 guage) (20/11/12). Sajan places a heavy emphasis on exact measurement, and thus he uses a compass and tracing paper are used to measure out the same distance and angle, and make sure repeated elements and motifs are exactly the same throughout a piece. Once the form is traced on the metal he cuts sheet with a generous border surrounding the form, Sajan cites that he was taught to leave a border the same size as the piece as a rough estimate while trainging at Norbulingka(29/11/12).

Repoussé work, or *jhwayegee* as it as known in Newar, is accomplished with the use of a series of hammers, called *muga* (Conversation with Manish Ratna Shakya 29/11/12). Each

hammer is equipped with two distinct faces on either side of the head, such that a small selection of hammers will offer twice as many possible surfaces, with each face having a best use, but also flexible such that an experienced craftsmen can use any number of faces to accomplish the same task. The hammer is used against a long iron bar with each end curled in opposite directions and shaped into a work surface, the whole anvil is called a *khalu* in Newar, and is propped up by a wooden A-frame support known as a *kailoshe* "wood stand" (Sajan 16/11/12). Like the hammers the anvil also has two distinct ends, each functioning as a different work surface, which can be further substituted with a seried of iron caps possessing other types of surfaces, these work surfaces known as *swakhalu* and attatched to the ends of the anvil. The hammer strikes the edge of this work surface, squeezing the metal between them and forcing it to conform to the same shape, creating lines of varying depth and curve or texture depending on the combination of hammer and surface used, as well as the force used.

Anvil set in wooden stand with hammers set below and an example of copper work in progress

Actually working the copper, Sajan starts by following the lines that define the shape of his envisioned metal form. The left hand guides the metal and the right hand swings the hammer, tracing the marker lines with blows that leave them raised in the metal. Sajan stresses that it is important to go over each line only once, as the metal is weakened with each blow, the particles rearranged and spread thin, disposing them to tear apart if any single spot is overworked (20/11/12). A good line will advance a dent just before the hammer and leave nearly no trace of individual strikes, just one smooth line of work.

Once the outline and key features are set in the metal the sheet, it is embossed to give it the depth the desired form requires. This can be accomplished in two ways, which once completed produce indistinguishable results, but with the trade-off of speed of the process versus the amount of depth that can be pulled from the sheet (20/11/12). The faster and easier process is embossing from the back. Rounded hammer faces are used in conjunction with a *twaka*, a large solid square block of wood with a metal cube worksurface set centered atop it, and a hole through the side to disperse the excess force. Working from the back side of the metal sheet the form is pounded out with heavy

Embossing done from the back of a form

fells of the hammer, at first striking against soft surfaces such as the leg or the wood of the twaka before refining and directing the volume of the growing form with various sized rounded hammers on the metal top of the *twaka*. Here again it is crucial to consider the relative fragility of worked copper, and Sajan places his strikes in clear and precise rows progressively spreading the copper out and away from the flat border to achieve an evenly spread and strong form. Once the bulk of the form has been extracted, the various details and different depths ranging across the form can be embossed using various sizes of the same rounded hammer surface.

This process of internal embossing is contrasted with that of embossing from the front, which takes considerably more time and skill, but allows for more depth to emerge from the flat sheet without exerting the same amount of strecthing stress on the delicate metal (29/11/12). The anvil is used for the entirety of this embossing, without the *twaka*, the hammer's surface a rounded line. After the lines of features with the greatest depth have been set in the metal (eyes and nose in the instance of a face), the rows of hammer blows radiate out and downwards, moving the enire metal sheet to spread it into the sloping curve of the desired form, repeating the radiations outwards several times to accomplish the desired depth. As the embossing continues, additional features are pulled from the copper when the sheet have reached the appropriate depth in relation to the starting elements, and then again rows radiate depth away from these elements as well. After either method of embossing it is important to smooth out the dents and tool marks with a rounded worksurface set on the anvil and a straight hammer face to preserve the smooth look and feel of the finished copper piece.

Embossing done from the front of a form

Throughout the process of working the metal, regardless of which embossing method is used and even after following lines, the artist anneals the copper frequently to avoid weakening and tearing as a result of the excessive forces placed upon it during the repoussé process. With each blow the affected area of the copper takes on a slightly different sheen, the visible trace of the stress on the structure of the metal, and when the piece has been sufficiently worked or is riddled with signs of this distress, the process of annealing makes the copper both stronger and more supple. Annealing heats the metal to such high temperatures that the particles rearrange

A piece of metal embedded in wax is annealed, showing the changes in color under the propane torch

to their unbeaten structure: leaving the sheet the same thickness and shape, but less stressed and less likely to tear. Before starting, Sajan solders shut any holes already apparent in the form, and then the copper is placed on a pile of bricks that acts as a hearth. A propane torch is then used to heat the copper which progressively changes color from a dull copper color to an oil-sheen phase to black and eventually a dull glowing red, at which point that area has been sufficiently heated. Once the entire surface of the piece has been heated to the glowing red the torch is turned off and the metal is grabbed with tongs and carefully submerged in a drum of sulfuric acid. When the hissing and spitting of the acid is done the metal is sufficiently cool to touch Sajan grasps it with his hand and brings it over to the tap for washing. What is left of the black coloration from the heating process easily scrubs away and with it the water removes the acid as well, leaving the copper gleaming with a high red tone. Sajan sets the piece is once again on the brick hearth for a moment more subjection to the propane torch, this time only enough to evaporate the water, and turns the torch off before the metal becomes too hot to touch, and carries it upstairs to resume work.

After enough embossing and lining that the copper has sufficiently built to the desired form, it can be set in wax for carving, a process known in the European tradition as chasing. The wax itself, called *jhao* in Newar, is hardly a waxy substance, and more closely resembles tar pitch, and is made from a combination of powdered brick, clay and oil which can be hardened and reheated for indefinite recycling (26/11/12). This wax melts in a cauldron over a propane flame, and as it loses the forms of its previous piece it takes on a black sheen Sajan pointed out as demonstrating the proper consistency and ratio of ingredients. Once sufficiently melted, he ladles the wax into the back of the copper form, allowing it to sit until cool enough to touch, then while still malleable he flips the wax-filled piece onto a large wooden board and nails the copper into place through the border, with additional wax piled over the border, and allows it to set for over two hours. Once cooled the carving of the copper takes place with this wax backing preventing the force of the punches from collapsing the embossed form, while still being able to absorb the changes in surface form of the copper as it is carved into intricate patterns and life-like details.

Carving invoives the tracing of patterns and details, generally drawn on first in marker, onto the copper form using punches held in the left hand and a slightly smaller hammer in the right hand. The punches, though each have only one face, have a similarly diverse selection of faces to the hammers for repoussé, each cutting or smoothing the metal in a particular way. They can be roughly grouped into punches for straight lines, *tukhi,* and those for curves lines, set in a crescent form that is wrapped into the appropriate curve as it is propelled, *zughi*. As with repoussé the lines must be carefully and confidently executed and not retraced to avoid damaging the metal. While the carving process is fairly straight forward, it too can be

Member of the workshop carves a detail into a large piece of copper embedded in wax.

A worker sanding a finished piece to smooth and shine it

extended with cycles of annealing and cooling, and even reset face down in wax to be carved from the back for a more extreme relief (29/11/12).

Once carving is complete the final figure or element is cut from the border, using an especially sharp punch or metal-cutting shears, and is delicately smoothed and any last disfigurements reshaped. A final annealing leaves the copper glistening and it is sanded smooth and polished with a thick black polish. Alternatively the copper can be left un-annealed and in the rough working form, which will develop a nice subtle patina on its own over the course of a few weeks. Small figures in only front relief may be complete, but those with a back, or elements of larger statues must be attached to their corresponding parts via toothed seams and further soldering (Sajan 28/11/12). Most devotional figures of larger scale have considerable embellishment, with set precious stones, filigree, and guilding all performed in the same workshop before delivery to the client. Any ceremonies to consecrate the figures, such as placing scrolls in their bodies or pujas are the responsibility of their new owners and not handled by the workshop.

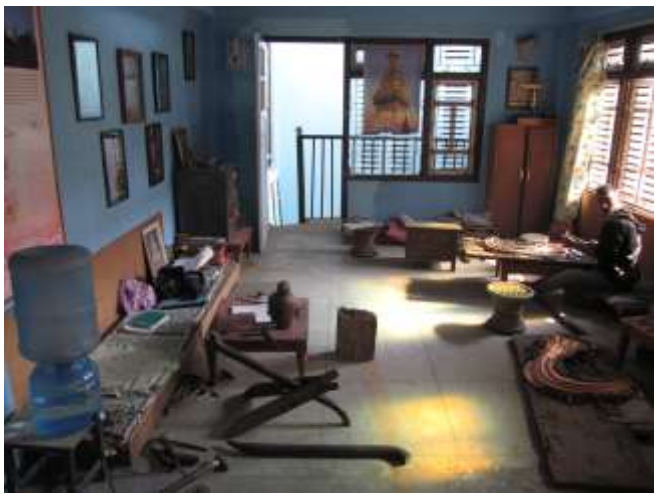
Body Technique and Navigating the Demands of the Workshop

The process of creating repoussé as described above is purely procedural, and that procedure is under constant inspection and revision by the artist. However, the actual enactment of creating a piece of art through repousse is defined less by the delineated steps and more by the discourse between what is in the artists' imagination and the medium of copper as translated by the artists own body, affecting the raw materials through the appropriate tools. In order to capture the dynamic of interpretation through action I offer the lens of Marcel Mauss' body techniques: "ways in which, from society to society, men know how to use their bodies" (1934:70).This concept provides the link between the sheer mechanical necessity of movement, and the refinement and application provided by understanding and using the body from a learned perspective. He defined techniques as "an action that is effective and traditional," stressing tradition as the factor that no action could be shared within a group without transmission, or in his terms in the absence of tradition (*ibid* 74). Mauss argued that through such habitus, the anthropologist can percieve a dialogue between the individual and the "collective" culture of their respective contexts. Through his definition, body techniques are more than mere movements, and should certainly not be mistaken as mindless imitation: but are a way of describing how people conceive their bodies as useful in the accomplishment of tasks, they are as much a mental process as a physical one.

As a microchasm of the field, the social space in which interactions and actions result in habitus, the workshop is where a significant amount of the field of Newar metal artist culture comes into effect and where body technique is created/reinforced through daily interactions of men at work. The workshop itself is a created environment, one in which bodies interact with

both metal and other people to enact body techniques. In an apprenticeship. this setting is especially crucial for acquiring the sense of "tradition" described by Mauss, as observations are made beyond strict instruction period to pick up other small mannerisms and ways of accomplishing tasks (Marchand 2008:250). The shop itself has acquired a somewhat traditional feel as it was built by Sajan's father, then passed down to Sajan who has built additions and made the space a reflection of his own work as well. While Sajan mentioned having instructed some people in their own homes, these students were already metal craftsmen, whom he was instructing on additional techniques, and thus are already conversant in the norms of metalworking (conversation 28/11/12). Thus the space of the workshop, where I spent almost eighty hours and did all of the metal work, became an integral part of my experience in apprenticing.

The most striking aspect of the workshop is its atmosphere; the space has an air of complete productivity, not frenzied work, but concentration and exerted effort. This sense begins on the street outside as the clangs and booms of manual labor are apparent, and purveys through the limited chatter and bodies bent purposefully over their work. Entering the pink concrete building through the main door the kitchen is to the left, the office is directly in front though these rooms are generally closed. Stairs to the right lead down to the workshop, which itself comprises two levels connected by another staircase in the open air. The main workshop is on the higher level, a long open rectangular room lit by two large windows on the same wall as the door, with the far side of the room storing a myriad of tools and locked trunks full of metal, a few partially completed projects. Towards the head of the room the three walls are lined with low platform seats that serve as workbenches, with cushions stationed wherever someone has taken up residence for the time being, a number of low tables, logs, and anvils set up before each station. The workmen mostly work at the nearest wall, with their backs to the windows. I sit directly opposite that wall, the only current station on this shorter bench, next to the safe that is a surface for the shrine, still painted with orange symbols and with a mud line traced between it and the door outside from the recent Tihar festival. On my other side is a water jug and beyond that a long large fish tank, with pictures of finished statues and accomplishments spread over the wall. Against the short wall, what I came to think of as the head of the room, was Sajan's station under a large picture of the Swayambu stupa and next to another door that leads down a spiral stair into the high open chamber of the lower workshop. Down in this room, an addition made to accommodate the workload of the



Head of the main workshop room

Far end of the main workshop

Swayambu renovation project of 2008, the creations are slowly assembled, two life-sized Buddhas sit on ornate thrones, one completed and the other represented by a rough lower body shape (Sajan 25/11/12). In the far corner sits a gigantic nine foot tall Buddha mock-up atop a lotus seat, currently a melange of copper head and clay body draped in burlap, a few large copper sheets before the behemoth are in various stages of conforming to the shape of the clay knees.

Lower workshop space with partially assembled sculptures

Under the main workshop is another small room where the propane tanks are kept and used to heat the copper to anneal and solder it during the working process. Outside on this lower level is a tap used for everything from washing metal to feet and plates after lunch. Looking down on this is Sajan's German Shepard puppy chained up on the narrow balcony next to the stairs. Sajan says he wants to have a full menagrie, while it's only fish and his dog now he wants a bird and a rabbit as well, and he notes that animals are relaxing and nice to have around (conversation 27/11/12).

While the room is roughly organized with Sajan, the owner and master artist, at the head of the room and the two men most responsive to the calls for help from Sajan and his wife nearest the door, there was no harshly delimited space other than Sajan's station. Workers are freely mobile around the workshop, but only Sajan spends considerable amount of time upstairs in the office or elsewhere around the building, eating lunch with his wife while one of the workers brings down a large woven tray carrying the plates for the other workers, who eat in the main workshop their bodies draped easily in relaxation over the same spots where they normally tense over work. Once Sajan's wife was not there to cook, and so the youngest member of the workshop did the cooking, only sporadicly present in the workshop, and Sajan ate at his station in the workshop (observations 27/11/12). Even over lunch there is limited talk, a group of four to five generally form and speak quietly with each other. When I commented what an excellent productive work team he had compiled Sajan admitted that "working time, so good. Drinking time, so bad." (conversation 30/11/12). But the workshop is not the place for such activities and workers relax and take a minute before washing their dishes, and some go down to the lower workshop for a cigarette before returning to work.

Productivity in the workshop

The day ends quite abruptly at five o'clock. work is continued right until the end with no change of pace, and when the hour comes everyone just stopped working where they were, laid their tools down and Bijay swept the floor. Sajan might stay in his spot putting away papers or speaking with someone, but everyone else goes down to the water tap and thoroughly washes both their hands and feet. While I struggled to finish

whatever aspect I had been working on, or strategized as to what I could complete before the end of the day, this was not a concern in the workshop: tools and metal will be in the same spot ready to be worked again tomorrow morning, no one is waiting on documents or progress reports that they would have to rush to complete. For as productive as the space feels, there is a distinct attitude that things will take as much time as they take, and get done when they need to be done. The transitions between working hours and the start/end of the day was so easy it was strange for me, used to the hustle of setting up at the start of the day and packing up at its' close. Yet here simply being in the workshop denotes work; and just walking in, slipping off shoes and sitting down to resume carving makes for a quick transition between off/on work.

The central movements involved in working the metal are how the hands grasp the metal and manipulate it with the appropriate tools. When doing repoussé the right hand's vertical strikes are unwaveringly focused on a single point on the work surface while the left hand glides the metal in it's placement in respect to the working surface, presenting the appropriate spot to meet the right hand's blows. Thus, the planes of movement are separated, and the work of navigating them largely divided between the two hands: the right operating in purely vertical motion as it swings the hammer, while the left follows the horizontal axis denoted by the lines sketched onto the metal.

Sajan at work with the anvil and hammer

In order to avoid losing its precious alignment with the sweet spot of contact on the anvil, the right hand should avoid any side-to-side motion. Even the elbow is generally stationed at rest against the inner leg where it falls naturally, only opening and closing by narrow degrees as the wrist enacts the brunt of the repetitive motion, adding the finesse of a sharper strike for harsh lines or the buttery smear for polishing blows. Such motion appears simple, but requires the confidence and power in each blow to bite through the debris of the sheet metal and find the same clear note of resonance that vibrates down the anvil, progressively moving it back slightly with each blow such that frequent readjustment of the *khalu* and *kailoshi* anvil setup is a sign of good work. When timid—as I am at first from lack of experience and concern over making errors—the din of loosing the strike in the volume and folds of the sheet sends vibrations through the copper instead of the anvil, a cluttered and rough sound that leaves scrapes across the dented form: neither giving it shape nor leaving it pristine, and further sending the left hand chattering off course. I initially found myself floundering, not able to control where the hammer struck and casting around desperately for the sweet spot along the edge of the worksurface, leaving a chaotic crinkle of misshapen metal. But with practice came confidence, and the feeling of a well executed line is like carving skis into a fresh slope, the edge catches and the line flows effortlessly in a perfect sequence, it is one of those sensations that just like the rolling of the knees in a turn I am able to recall the feeling of though quite distant from my skis or snow.

Simultaneous to the regulation of hammer strikes with the right hand, the left hand grasps the metal and presents it on the work surface for the right hand to meet. This dynamic gives me the odd sensation of aiming with the target as the shooter remains stationary firing off rounds. The whole dance not unlike that of two friends, one trying to toss Cheetos into the others' open mouth. The left elbow may also rest on the leg, here lending stability for the subtlety of of movement required, allowing the hand to glide millimeter by millimeter if necessary as it presents to the correct aspect of the metal for a continuous flow of work. Sajan compares the movement to steering, and the whole process to learning to drive: a new driver does not know the sensitivity or transitions of steering wheels and erratically swerves across the road until it becomes second nature to smoothly control the vehicle (conversation 20/11/12). I however find the motion to more closely resemble the strokes of a bow across a violin's strings: navigating towards or away from the bridge to demand more or less power, changing between planes from string to string, and most importantly, gliding so seamlessly through changes in direction so that they are imperceptible to the audience. I should note that that driving and bow strokes are both performed with the right hand (or at least both hands), and that cultivating such graceful control in my rather neglected left hand, used to jumping from note to note rather erratically, has been a challenge, but one that like all these obstacles is overcome with practice.

Carving work, or chasing at it is formally known, is a similarly difficult choreography with the hands executing slightly different functions. Again the right hand need only deliver the vertical force, but instead of remaining stationary it must chase the left hand and the punch across the surface of the piece and around the contours. The challenge comes as it is again required to always strike true, directing force from the top of the punch in such a way that it is driven both down into the metal and channelled forward so that the left hand can steer the design of the pattern. The left hand uses a three fingered grip between the thumb and first two fingers, the middle finger tracing along the wax as it leads the tip of the punch and the last two fingers bracing against the metal to stabilise the motion. This leaves the finger tips pitch black from the wax and the hand cramped quite tightly. While the right arm is now mobile the motions are nearly identical to the repoussé work, using slightly less force but just as confident blows for a slightly muffled sound as the wax absorbs the shock of the bow.

Despite their differences in motion, both hands feel the same at the end of the day: fingers curled in claws of careful grip and forearms ablaze from rarely so concentrated hand strength. Interestingly enough, none of the workers mentioned this pain or sympathized as I stretched fingers at breaks. Only Naina, Sajan's wife who admits she has never tried copper work inquired about my hand pain, from this I assume that with time and consistent use you become accustomed to the task at hand, the body physically changed as well asdeveloping these new ways of moving.

Beyond the hands there is a certain way in which the metal workers move around their stations. Before sitting down shoes are quickly slipped off and in a single motion they spin around and end up in a cross legged position before the anvil, pulling it towards or away from them as needed. Even this way of sitting down is foreign to me and I cannot quite manage to do it without at some point standing on the bench, which I know is an error in both the proper way of sitting down and the cultural rules around what feet can touch/face/do. The experienced carvers have a habit of using their feet to support or hold the smaller objects they carve, their toes wrapped around in an ape-like grip I could never achieve. But the need to access the nooks and crannies of the metal form force I found myself bent over the figure, hunching around the curve of the metal to reach its far end, or prop it up against large logs, adjusting it so I could

reach the right point. I even held the board against myself so that I could reach the crevice where the embossing met flat metal.

As each day passed I thought myself slightly better habituated, slightly more callus to the deafening blows of ten men at work on echoes and booms. Yet, again, the next morning the cycle would start afresh: the silence at first eerie but soon missed as the colossal sounds from the lower workshop overtook the high pitch pop of the radio, and I strained to hear instructions from a few inches away while the workers seemed to converse quite quietly from opposite sides of the room. While I quickly adapted by the end of the day, my immunity was disposed of on the end of a que-tip in a futile attempt at hygiene, my ability to actually hear over the racket was merely the muffling of my body's reaction to such constant noise.

But my struggle with sound was less about volume and more concerned with the required ability to parse noises between those that provide feedback on your own progress, versus the pangs of others' work, or the voice of a coworker requesting one of your tools. From this distinction, once your own hammer fells have been identified, they must be assessed as either the clear ringing tone of a good strike or the clutter of a miss, a distinction that sometimes eluded my overwhelmed ears. Sajan mentioned on an especially loud day that some copper workers have taken to wearing ear plugs, just as some wear face masks indoors. While he admits that hearing loss is a problem in the repoussé artist community, with artists in their 60's and 70'd having significant problems with hearing loss, including Sajan's father (conversation with the author 01/12/12). He says that he will not wear earplugs, commenting that maybe he's just in denial that he too might loose his hearing, but that he feels it would affect the quality of his work. He certainly kept tabs on my work through this means, reprimanding me that he could always hear this "tink tink tink" that was not good, and I occasionally felt like a stretch of rough clattering fells would broadcast my struggles through the workshop and out into the world, with ringing tones sending the same audience a resounding confident accomplishment.

This importance of hearing and touch somewhat upstage the emphasis on other senses, specifically sight. This is an impostant aspect of body techniques as the modes of how the body perceives and is percieved as a tool is crucial to the anthropologies of the body (Synott 1992:160). I found myself craning to better see the line I was executing, to the extent that my face was an obstacle in the path my hammer while carving the smallest and most difficult to reach sections. However, Sajan corrected me, sound is a much more important tool, and while it is necessary for me to look at my own work now, an experienced artist simply feels where the line needs to go rather than looking, and hears that it is striking correctly (conversation 27/11/12). He demonstrates by correcting my work while looking pointedly around the shop, and claims that artists in their 60's and 70's can literally do the work in their sleep it comes so naturally to them and the rely so little on sight.

In his various apprenticeships of masonry Marchand noted that there was rarely a true *a priori* form to which the finished project would conform (2008:260). Instead, the finish product unfolds as the result of a dialogue between the creative mind of the artist, the actions of the body, and the materials used. Similarly, while Sajan might work off of a specific image, the process of working the copper is one of constant reassessment and interpretation in the execution of a form. With each stretch of work Sajan jumps from one aspect to another seemingly as it strikes him, eventually working bit by bit across the entire surface of the sheet before annealing it, retracing the main features in marker, and starting work again. As he pauses and picks up the sheet to assess his progress he points out: "this part, not enough coming, so it's fine, next time coming." (30/11/12). He constantly referred to features as "coming" from the metal, speaking and acting

in terms of cooperation with the metal, coaxing it into a shape but recognizing its limits. He describes the work on the whole as relaxing, that when you enjoy the work you get much better results, and the satisfaction of being able to create something after it manifests itself in your imagination is fulfilling (1/12/12). While he has off moods and may set aside a piece he is not feeling or is not "coming" for over a year before picking it up again, he describes work as enjoyable based on this creative faculty, the giving of forms to his ideas. Starting with such inspiration, often choosing a divine figure to represent, he considers each element as it is pulled from the metal; whether the eyes should bulge more or less, the ornamentation with flowers or ropes, subtle changes to the curve of the chin. It is in the immediate moment of acting, in the moment a defined form is executed where he exercises the most creativity and control, that is evident in the finished product.

The Politics of Representation: Bodily and Iconographic Regulation in the Newar Art World

As bodies acquire techniques and come to embody the knowledge earned they are altered, both physically in terms of callus and muscle, as well as in how their actions and interactions with the world around them. The process of acquiring embodied knowledge results in "knowing bodies," individuals whose concepts of their own bodies is changed and whom--to a certain extent-- are defined by their abilities as a craftsmen, performer, or artist (Marchand 2008:256). This new dialogue of how the artist interacts with others is governed more by cultural expectations than the mechanical and psychological cogs involved in their work. In association with the new identity and abilities of the artist, a new set of expectations governs the actions of artists in traditional Newar society. While these may not all translate to the modern context, and as an outsider I felt little obligation to follow these rules, the responsibility and privilege of depicting sacred images still carries weight in how these artistic bodies comport themselves.

Within the Newar caste system the Shakya artists are expected to be Buddhist practitioners who follow a specific set of class rules in the execution of their work as well as in the broader context of social life. Sajan begins defying such expectations immediately, he states "people expect us to be Buddist because we're Shakyas, but really we're both, we practice and respect both Buddhist and Hindu religions" as evidenced by the signs of the puja left over from Tihar and the portrait of Lakshmi above the workshop safe (Conversation 27/11/12). Before beginning work in the morning, indeed before eating or even drinking tea one member of the household is expected to do *nyeghaa* prayers (Ibid). Although Sajan does not perform these prayers he alludes that he might when he is older and the eldest member of his household, but currently he lives with not only his parents but also his grandparents, and it is these older generations who perform this rite for the house. Traditional expectations dictate that the artist should individually meditate and recite mantras before a day's work, but these requirements have fallen by the wayside in personal practice (Manish 29/11/12). In the consideration of a divinity before embarking on their depiction the artist is technically granted an exception in their caste standing and allowed to take initiation above their normal rights by temples and monasteries in order to meditate in the form of the divinity the intend to depict (*Ibid*). This specific requirement of the artist, which is also noted in Gega Lama's treatise on the proper comportment and attitudes of a Tibetan artist, lends the artist a social and spiritual exception to their relatively low caste standing, mobility that is rare and demands respect for the artist in its enactment (Gega Lama 1983:58). While this literal transcendence of form, and intimacy with the embodied experience of the divinity that it enables before the artist provides the being a physical figure in their art is a

perfect connection between the conception and portrayal of embodied knowledge, it is unfortunately rarely taken by the artists currently working.

The dietary restrictions of the caste further prevent an observant artist from consuming chicken meat or eggs, pork, snake meat, or drink wine (Manish 29/11/12). Although Sajan normally does not follow these restrictions, during the Swayambu renovation project (2008-2010) his father and grandfather imposed on him to observe them as he was the leader of an important project at a sacred and revered site (28/11/12). Thus, while the inherited expectations of how an artist should act to represent themselves and their trade are still present, they are practiced in mixed form by modern Newar artists.

Yet Manish notes that this failure to meet with the traditional social requirements of the artist does not diminish the quality of their work, the final product must still be up to the standards and expectations of the client in a competitive market (29/11/12). This explanation is particularly telling of the new set of expectations emerging from the globalizing atmosphere of the Kathmandu Valley. As Sajan lead a group of artists through his workshop one morning he showed off the impressive detail and scale of the pieces he is currently producing (observations 28/11/12). All dressed in jeans and black leather jackets, the artists snapped pictures with their smart phones and shared images of their own finished work on the same screens, their comportment and actions betrayed a clear difference from the workers around the shop, who wear track pants and turtle necks with slip-on rubber shoes, clothes fitting their needs and suited to the rigors of skilled labor, have much more limited english and certainly no iphones. While these "great" artists as Sajan introduced them, might not follow the old regulations of prayer and dietary confinement, they do adhere to a certain look, they have attained the cultural capital to present themselves to an international clientele and comport themselves with the restrictions of this new social environment: dressing, speaking, and interacting with the community to "westernized" expectations. The past century has seen an increasing trend in the raised social and economic status of Newar artists as their clientele has expanded across the globe along with the Tibetan diaspora (LoBue 2002:123). Current emphasis in their interactions as artists stresses not the philosophical aspect of their work, but the communication: they can be reached via cell phone, email, or the new office line Sajan had installed in the workshop, he speaks English and was trained by the Norbulignka institute in addition to his family lineage: he is the image of the new expectations of how the knowing bodies of artists successfully represent themselves in the Newar community.

Just as the bodies of artists are expected to represent their status to the larger community, the forms of the gods themselves are bodies controlled by the appropriate iconography and style to maintain their potency and respected position in Nepali religious practices. Although limiting, the regulating forces at work on the bodies of both the artist and their produced forms in Nepali has resulted in the preservation of an exemplary artistic tradition that has outlasted and outperformed similar traditions around the world. The images of sacred art in the Kathmandu valley must conform to the correct form in order to function as a viable image for devotion and meditation. Newar iconography is dictated in part by the volume *Pratima laksana*, or "shape and size" which provides guidelines for the way in which the divinities are represented in bodily form, with a corollary principle of following the proper portions and positions in Tibetan art instructional volumes, such as those set forth by Gega Lama in Principles of Tibetan Art (Manish 29/11, Gega Lama 1958:5). While true masters may view the strict rules as only loosely applicable--and may stray from such rigid requirements in the finest examples of art--it is through the consistency provided by such standards that images have maintained a clear

representational form over the course of twelve centuries. Indeed, taking this concept to the extreme Pratapaditya Pal claims that it is only through this adherence to standards of form that the images of gods attain their potency in traditional Nepali art (Pal 1975:15, Pal 1985:8). While it is difficult to say if the statues and other arts would loose their efficacy without adhering to the correct bodily standards, and Manish Ratna Shakya backs away from that, he does state that good work, work which people will admire and order, should follow the standards set forth for embodied representations so that the image is recognizable as *Arya Prusha* or "high persons," whom are known to possess 32 exemplary characteristics according to traditions (conversation 29/11/12). The presence of this retinue of traits—which have been used in varied forms to identify thulkus, child goddesses, and emperors—is a way in which bodies are ascribed meaning: these idilic traits signifying that the body depicted is a representation of more than just the human form. Here the artist, or the personage in case of the living emanations and embodiments, becomes dynamically involved with the creation of meaning in their work. As Manish describes, the images of the gods must portray their respective philosophy as well, such that study of a correctly formed painting or statue will reveal aspects of their nature and works, enabling a transmission of concepts through the use of idealized bodies as symbolic forms in lieu direct language (*Ibid*). At the conclusion of his essay Mauss speculated that bodies may use techniques to tap into a deeper connection with their world, that Taoism and other and a sense of spirituality denied to others who do not consider those concepts to be accessible through movement (1934:83). While here created artificial bodies present the spiritual connection to philosophy rather than one's own body, it is through the body that spirituality can be mapped geographically onto an image, embodied, the qualities given form in perfect proportions.

While this further transmission of information through bodies--from the textual sources through the iconography and art as presented by the artist to the viewer--is an excellent demonstration of a different conception of how the controlled representation of bodies is a way of "using bodies" to communicate meaning, the process is somewhat less of a direct translation from one source to another in practice. Manish admits that many artists are not themselves versed in philosophy, that further than not adhering to their own restricted actions/consumption, they do not know why each deity has their own appropriate proportions, or the difference in holding a lotus versus a peony, but he maintains that they never-the-less adhere to the correct standards of depiction (conversation 29/11). When asked, Sajan admits he does not know the philosophy behind why each figure is depicted exactly as it is, that such knowledge was neither passed down from his family nor taught at Norbulingka, but he is still inspired by the Buddha's work, and that it feels good to depict the divinities that inspire him (conversation 29/11/12). Yet I cannot help but equate mindless mimesis of set standards with the rote memorization of action that is insufficient to acquire the techniques of copper work in the first place. Perhaps less than the philosophical treaties of proportion, such comfortable familiarity with the iconographic forms, such as possessed by masters, combined with inspiration from the admiration of the beings themselves enables the deviations from strict obedience: that inspiration from the mental connection that drives the process of creation to an inspired piece of art--the leap to beyond what is acceptable to an exceptional (literally) depiction. Such that the embodiment of the ideal of the divinity rather than just it's reproduction results in admiration and consideration of the spiritual being that inspired such perfect form.

Conclusion

At the conclusion of my research and apprenticeship the relationship between bodies and art in the Kathmandu valleys emerges as a rich point in the cultural system for conveying knowledge and conceiving of social systems. While the body is the essential tool for both the execution of work and communication of ideas in the copper repoussé community, it is further appreciated as social actor and involved in the representation of the artist to the broader community. The pieces of art created in workshops such as Sajan's and across the various mediums and communities of this Himalayan valley are themselves incorporations of philosophical knowledge to embodied form. While the links between the knowledge presented in the figures of divinities are somewhat corroded, with the artists not necessarily knowing the reason for the specific requirements of depiction for each divine form, and not observing the complete set of restrictions set upon their own bodies, this is not necessarily detrimental to either the art or the continuity of value of embodied knowledge. Instead, while the forms represented in the art remain incredibly consistent and iconographically similar to their forebearers for the past twelve centuries, the actors behind their creation are still dynamicly involved in the change and progression of their larger cultural context. The Newar art community has seen a revitalization in the wake of the Tibetan diaspora and the spread of Buddhism to wealthy patrons around the world who look back to the traditional source of excellent devotional figures in a Himalayan traditional style, and with this the artists have responded to their new economic and social status and changed their actions to reflect the globalizing trend of their industry disposing of some of the antiquated restrictions of their past.

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Photographic appendix

Me and Sajan at work

Sajan's illustration of correct context for the Head of Bhairava mask