

**ART 183: METAL FABRICATION  
WINTER 2016**

**WITH KYLE LANE-MCKINLEY  
M/W: 9:30-12 & FRIDAY WORKTIME  
SRA: BRUCE KIRK BKIRK@UCSC.EDU**

**EMAIL: KYLEFORU@UCSC.EDU  
OFFICE HOURS: MONDAY 12-1PM IN METAL SHOP  
& WEDNESDAY 12-1PM IN DARC 233**

“A spider conducts operations that resemble those of a weaver, and a bee puts to shame many an architect in the construction of her cells. But what distinguishes the worst architect from the best of bees is this, that the architect raises his structure in imagination before he erects it in reality.”

–Karl Marx, *Capital* Vol. I, Part III, Chapter Seven

“Stop thinking about art works as objects, and start thinking about them as triggers for experiences... That solves a lot of problems ... Art is something that happens, a process, not a quality, and all sorts of things can make it happen ... [W]hat makes a work of art ‘good’ for you is not something that is already ‘inside’ it, but something that happens inside you...”

–Brian Eno

This class is appropriate for the beginner or advanced student and is focused on creating metal sculpture through fabrication. Techniques covered include MIG welding, folding, cutting, drilling and grinding. Listening, seeing and thinking will expose you to a diverse sampling of historical and contemporary art, theories of art practice, and materials and techniques used to create contemporary art objects with the use of metal. In an attempt to balance talking with doing, studio shop demos and class dialogs will be a regular part of the overall course content.

In order to accomplish this synthesis of theory and practice, all of the assignments for this course are structured as research opportunities. UCSC is a research university, meaning that our school has a dual mission of teaching knowledge to students and to expanding knowledge. Frequently this notion of “research” can appear distant or alien to the experience of undergraduate students – as though it is only undertaken in some secret rooms that you don’t have access to. In this course, we will bring research into the classroom by positioning each student as a researcher. Being a researcher is an opportunity and a responsibility; an opportunity to partially determine the direction of your studies, and set of responsibilities to the institution, to the discipline(s), to your research subjects, and above all, to the research itself.

In practice, fulfilling the class assignments as research opportunities will mean that the success of each assignment will be gauged in terms of the scope of the research involved and the fidelity to that research of the finished work. That means documenting at least some of the sources of your research, and of your process, and providing citation of that documentation upon presentation of the work. Citations might include references to online-tutorials, quotations from art-critical or art-historical readings, influences from other makers (artists and otherwise), outside lectures or exhibitions, walks in the woods, popular media, conversations with friends, etc. In short, anything that you can think of that informs your work counts as a citation; you will be graded on how well these citations inform your artistic productions. Similarly, we are flexible by

what is meant by “documentation of your process.” In most classes of this sort, students are required to submit a maquette for each project before actually beginning to make the object from metal. In this class, you will instead submit documentation of your process as part of your completed presentation of the work (see below). That might include a maquette, or a drawing, or a digitally aided draft of the piece (photoshop/ illustrator, sketch-up, or simple CAD software), but it might also include documentation of the thinking that you went through in planning the project (journal entries, sketches) or photographs of failed attempts.

### CLASS SCHEDULE:

Week 1: Introduction: Class overview, facilities tour, safety discussion and material discussion.

Assignment #1: DIFFERENCE & REPETITION (due: week 2)

Demo #1: MIG welding basics

Demo #2: drawings, maquettes, modeling

Reading: Welding for Dummies: Chapter 3, “Setting your Sights on Safety” (pg. 33-52)

### ECOMMONS

Week 2: Work Time, Critique #1, Introduce Project #2,

Tuesday: DIFFERENCE & REPETITION Groups meet with Kyle

Demo #3: soldering copper

Tuesday Reading: “Welding for Dummies”: Chapter 1 & 2, “Diving Into the World of Welding” & “Considering Commonly Welded Metals”

Thursday: Critique project #1 DIFFERENCE & REPETITION

Discuss Assignment #2: Rasquachismo (due week 3)

Thursday Reading: Welding for Dummies: Chapter 9 & 10, “Understanding the ABCs of Mig Welding” & “Practicing Mig Welding” ECOMMONS

Week 3: Work Time, Demos, Critique Assignment #2, Field Trip?

Demo #4: brazing & gas cutting

Individual Meetings with Kyle

Demo #5: taps and dies

Critique Assignment #2 Rasquachismo

Discuss Assignment #3: The Dialectics of Usefulness and Uselessness

Reading: “Sculpture: Not-Not-Not (or, Pretty Air)” by Johanna Burton, from The Uncertainty of Objects and Ideas: Recent Sculpture (2007) ECOMMONS

Week 4: Work Time, Demos, Critique Assignment #3

Demo #6: Simple Machines (bike parts)

Reading: “Now and Elsewhere” by Raqs Media Collective in E-Flux Journal #12 (2011). ECOMMONS and “The Device Laid Bare: On Some Limitations in Current Art Criticism” by Grant Kester in E-Flux Journal #50 (2013). ECOMMONS.

Critique Assignment #3

## Introduce Assignment #4: Reprise

Week 5: Final Critiques, clean-up, work time.

### COURSE REQUIREMENTS

1. Commitment, motivation and hard work
2. Full participation in class discussion
3. Completion of all class assignments on the scheduled due date
4. Timely attendance is required. Four absences results in a failing grade. Three “tardy” days, or days when a student leaves without permission, count as an absence. There are no “excused” absences. If you are having attendance issues, or anticipate that you might, contact Kyle promptly via email or in person.
5. Expect to spend a minimum of 10 hours out of class per week on projects
6. Respect for the work space; failure to observe safety rules or to clean up properly will result in grade deduction or failing the course.

#### Grading:

Studio assignments will be evaluated using the following criteria: Level of understanding of formal and materials concerns; the ability to use this information, to which extent personal ideas are extended into work; the amount of personal growth you’ve experienced in this class; time spent on projects; and effective documentation. Class discussion, attitude and participation during critiques will also form an important part of your determining evaluation.

Here is the breakdown:

Assignment #1 (images, drawings/maquette, artist’s statement, research): 15%

Assignment #2 (images, drawings/maquette, artist’s statement, research): 15%

Assignment #3 (images, drawings/maquette, artist’s statement, research): 15%

Assignment #4 (images, drawings/maquette, artist’s statement, research): 15%

Attendance and Participation: 20%

Final Portfolio: 10%

Safety & Clean-up: 10%

Repeating for Credit: Art 183 (Metal Sculpture) may be repeated for credit. We often rely on such students to serve as (unpaid) studio monitors, which allow us to keep the shop open when neither the instructor nor an SRA is present while maintaining our high standards of safety and reliability. Students who have taken the course previously, or who have advanced metal fabrication skills, are urged to work with the instructor (Kyle) to develop a personalized plan of study; this may take the form of alternate assignments, the development of a consistent body of work, or substituting one or two large projects for some of the smaller project prompts. All students are welcome to propose alternate ideas or divergent interpretations of project prompts; project prompts are meant to generate ideas, not dictate themes or techniques.

Materials Fee:

UCSC has billed you for a “materials fee” for this class. The fee is \$95, which can feel like a lot. Here is where those fees go:

mostly, the materials fees from this class are needed for “expendables” in the metal studio: Argon gas for the MIG welders, wire spools for the MIG welders, grinding and cut off wheels, saw blades, etc. Some money goes to replacing worn or broken tools, and, especially, safety gear (helmets, gloves, ear protection). Finally, we use some of the money to buy raw materials (mild steel) at a bulk / wholesale price, and distribute these materials to students in the class. In order to do this fairly, and to ensure that materials aren’t squandered, each student is allotted a limited amount of such materials. A good rule of thumb would be EITHER a 2 foot by 4 foot piece of 18 gauge sheet metal, OR a dozen pieces of 3/16” rod (5 foot lengths). For most students, this means that some or most of the raw materials to complete course projects will need to be procured outside of class (see list of metal resources). If you are going to be buying a relatively large quantity of some materials, it may be a good idea to see if other students wish to pool resources, and put in a shared order online or through George Wilson Sheet Metal, in order to save money through quantity, and to share the work of transporting the materials to campus.

Presentation of Work:

**THIS IS VERY IMPORTANT, SO READ IT TWICE.** In this class, we’ll be performing group critiques as a regular part of the class schedule, and I view group critique as one of the primary benefits of studying art in the context of a class at a research university, but critique will not be the manner in which you present your work for a grade. Rather, you will submit documentation of your work, documentation of your process, and documentation of your influences (citations of research), to me throughout the quarter **AFTER** critiques, so that you can incorporate feedback into the work. This documentation will be submitted electronically (email me images and writings, or, preferably, a link to images and writings). Finally, you will submit a final portfolio at the end of the quarter, bringing together documentation of all of your work in the class, including research citations and documentation of process. Students are responsible for determining what form this portfolio will take, but it should serve as an opportunity to start building a professional portfolio for use after graduation; to that end, high-quality photographic or video documentation, paired with carefully edited prose, on a personal website or as a .pdf portfolio, would be well received.

A note about machisimo: the problems of sexism and hetero-patriarchy, which continue to pervade our society despite dramatic progress in recent decades, are especially acute and apparent in fields such as metal fabrication which women have historically been excluded from. In our class we attempt to address this legacy of oppression head-on by declaring our shop-space as pro-feminist and trying to maintain it as a safer space for women and gender minorities. This does not in any way mean that women are afforded special treatment: quite the contrary. Rather, we attempt to foster an environment of safety and equality through specific

and general rules of conduct, which include:

- a) never take a tool out of someone else's hand. Many women have had the experience of men "helping" them by doing work for them. This is strictly forbidden in our shop.
- b) step-up, step-back: certain folks have been raised to speak up or take risks, while others have been raised to remain quiet. In our classroom, everyone will push against these socialized habits by challenging themselves to either speak more or listen more, depending on their personal history.
- c) respect for difference: equality doesn't mean that everyone is the same, it means that we acknowledge and admire differences. In our classroom and our shop this means acknowledging and respecting a variety of differences of experience, including class, ethnic / racial, and gender identity. Students should feel safe using whatever pronouns and identifiers they feel comfortable with.
- d) steel is hard, but people are soft. Regardless of the gender of the artist, critical feedback on creative work should be focused on what the artwork means or how to make it mean differently. Fixating on technique or structural integrity without a theory of meaning can often serve as an alibi for sexist attitudes or assumptions about metal sculpture.

Repeating for Credit: Art 183 (Metal Sculpture) may be repeated for credit. We often rely on such students to serve as (unpaid) studio monitors, which allow us to keep the shop open when neither the instructor nor an SRA is present while maintaining our high standards of safety and reliability. Students who have taken the course previously, or who have advanced metal fabrication skills, are urged to work with the instructor (Kyle) to develop a personalized plan of study; this may take the form of alternate assignments, the development of a consistent body of work, or substituting one or two large projects for some of the smaller project prompts. All students are welcome to propose alternate ideas or divergent interpretations of project prompts; project prompts are meant to generate ideas, not dictate themes or techniques.

**SAFETY IS VITAL IN THE METAL STUDIO: ANY TIME BRUCE, KYLE, OR THE ACTING STUDIO MONITOR OBSERVES YOU ACTING UNSAFELY, OR FAILING TO CLEAN UP YOUR MESS, POINTS WILL BE DEDUCTED FROM THE SAFETY AND CLEAN-UP GRADE.**

1. NEVER WEAR SHORTS, SKIRTS, OPEN-TOED SHOES OR SYNTHETIC FIBERS.
2. ALWAYS TIE LONG HAIR BACK TO PREVENT IT FROM CATCHING FIRE OR CATCHING IN MACHINERY.
3. ALWAYS WEAR THE CORRECT SAFETY APPARATUS.

Safety apparatus you will need to wear in order to safely work in the shop

1. One pair of cheap leather boots, shoes or sneakers
2. One pair of leather welding gloves \*

3. One pair of clear plastic eye protectors \*
4. One pair of ear protectors (cheap foam inserts advisable). \*
5. One pair of denim jeans, no holes.
6. One cotton baseball cap.

\*We recommend that students buy their own gloves, eye protection and ear protectors to guarantee the best fit/style, however we do provide them for you as well.

UC-wide safety protocols require that:

a) No one shall use any equipment until (s)he has demonstrated understanding of basic safety principles, and no one shall use any particular equipment until (s)he has been checked out for safety on that particular machine.

b) Appropriate personal safety equipment is to be worn and used in our shop under all circumstances. This includes eye and ear protection, closed-toe shoes, and care to avoid loose hair or garments that might become caught in machines.

c) There shall be no minors in the shop unless those minors are enrolled in the class or we are holding a public tour or event (such as open studios) and the shop is not in use.

### Art Department Studio Clean Up Policy

In order to maintain studios in the best condition possible, students are responsible for complying with the following rules. All faculty are responsible for ensuring their students comply with these rules:

Notify area Bruce Kirk immediately if there are mechanical problems in the studio (i.e. clogged sinks, broken equipment, lighting, etc.) or safety /security issues. Be aware of location of telephone, fire extinguisher, and first aid kits in your area.

Keep the floors free of objects or debris that impedes safe walkways and fire exits.

Deposit trash and recyclables in their appropriate receptacles.

Return furniture used outside the studio to the studio after use.

Work is not to be installed or suspended from track lighting or fire sprinkler system.

Ensure that installation of work on the exterior of building has approval of faculty. Ask SRA if there are questions on this.

Keep areas outside the studio covered/protected to prevent evidence of work from showing.

Floor and wall surfaces should be free of paint, charcoal, etc.

Remove staples, nails, and other devices after work is taken down. Holes should be appropriately patched.

### Hazardous Substances:

Ensure that all containers have labels, securely attached, identifying their contents.

Dispose of solvents only in designated containers. Do not dispose of solvents in the sink, floor, or storm drains.

Place rags or other solid materials contaminated with hazardous materials in designated con-

tainers, not trash.

Thoroughly and properly clean up spills.

**Metal Slag:**

small bits of metal, often sharp, and dust from grinders tend to accumulate quickly in the area in front of the metal shop. It shall be swept regularly-- at least once a day-- and not allowed to run down the storm drain.

**Scrap Metal:**

Pieces of metal that you no longer wish to use / store shall be placed in the scrap metal bucket. These materials are free for other students to make use of, provided that they are retrieved from the scrap can carefully. Unlabeled materials found in the metal shop will be placed in the scrap metal container for re-use or recycling. This has sometimes resulted in the destruction of materials that were not intended to be recycled; let this serve as a warning for you to clean up and label your materials.

All students will participate in the end of quarter clean-up of the metal shop and classroom, as well as any other cleaning parties scheduled during the quarter. Failure to participate, including abandoning work at the end of the quarter without prior approval from Bruce Kirk, will negatively impact student grade (see grade break-down) and, in some cases, may result in an automatic failure.

## RESOURCES

**Metal Finishes:**

Using the angle grinder and power drill:

Grinder Angle grinder with grinding disk

Flap Disk 24 grit, 40 grit, 60 grit, 80 grit, 120 grit

Buffing Disks

Flap Wheels

Strip-it disks (lava wheels)

Dermal Drill

Wire Wheels with power drill

By hand:

Sand Paper Grit Common Name & Uses:

40-60 Coarse Heavy sanding and stripping, roughing up the surface.

80-120 Medium Smoothing of the surface, removing smaller imperfections and marks.

150-180 Fine Final sanding pass before finishing the wood

220-240 Very Fine between coats of stain or sealer.

280-320 Extra Fine Removing dust spots or marks between finish coats

360-600 Super Fine sanding of the finish to remove some luster or surface blemishes and scratches.

Wetsanding

Wire Brush

Brillo Pad

File

Paint:

Enamel Spray Paint (Colored, Clear, and Primer. Rustoleum is highly thought of, but any brand will work, especially if proper primer is applied, and enamel is baked on) here is a fairly comprehensive introduction to (re)painting bicycles, much of which applies equally to mild steel more broadly: <http://sheldonbrown.com/paint-prep.html>

Latex Paint

Enamel Paint

Tool Dip

Motor Oil

Powder Coating (locally in Santa Cruz: S & S Powder Coating, Grizzly Powder Coating)

Sand Blast:

Foundry: portable sand blaster (with training and permission)

Rusted:

Vinegar & water mixture

Urine ( <http://www.instructables.com/id/A-NO-Cost-Alternative-to-Patina-for-steel/#step1> )

## Metal Resources

George Wilson Mechanical Contractors

250 Harvey West Blvd. Santa Cruz CA 95060 • (831) 423-9522

(Wilson isn't actually a metal supplier, they are a contracting firm, but they are very friendly and use so much sheet metal that they offer good prices for special orders. Please, please, please be very polite to them, as our ability to place such special orders is entirely dependent on the good will of the staff there).

Aeris Welding Supply

324 River St / Santa Cruz, CA 95060 / (831)423-0808

(personal safety equipment, small tooling, tanks refilled)

Dietrich Iron Works

140 Ingalls St

Santa Cruz, CA 95060

(831) 426-5577

(Historically, this was by far the best place for students of metal sculpture to purchase small quantities of steel. They are under new management and seem to be closed all the time, and generally uninterested in selling small quantities any longer).

Sea Berg Metals

125 Coral St.



Santa Cruz, CA 95060

(831) 423-6580

(Primarily industrial / residential fabrication shop. Call and ask for availability of metal and cutting before you go.)

Habitat for Humanity Re-Store

<http://www.habitatsc.org/restore.html>

719 Swift Street, Suite 62

Santa Cruz, CA 95060

831-824-4704

(the Re-Store primarily sells used / donated household building supplies of all sorts; and excellent source for various cheap materials, but not necessarily mild steel-- ie check with Bruce before welding. Proceeds benefit Habitat for Humanity. Check website for hours).

State Steel

56 Porter Drive

Watsonville, CA 95076

(831) 724-7111

(Fabrication shop with fairly large selection of recycled steel, copper, brass, various building materials-- technically this is in Pajaro / Royal Oaks, but just over the river from Watsonville)

#### Hardware and other supplies

San Lorenzo Lumber \* 235 River St \* Santa Cruz, CA \* (831) 426-1020 (

Westside ACE Hardware \* 849 Almar Ave, \* Santa Cruz, CA 95060 \* (831) 426-7650

Midtown ACE Hardware \* 1214 Soquel Ave (at Seabright Ave) \* Santa Cruz, CA 95062

\*(831) 457-2222

Home Depot \* 2600 41st Ave Soquel, CA \* (831) 462-5650

Orchard supply \* 1601 41st Ave Capitola, CA 95010 \* (831) 475-7701

Santa Cruz City Landfill \* 605 Dimeo Ln. Santa Cruz, CA 95060 \* (831) 420-627

(You must drive in and ask to speak to someone who can escort you to collect metal for a sculpture class at UCSC. Also a good source for cheap / salvaged paint)

#### Found Art / Misc

Bargain Barn, Flea Market, Various Thrift Stores, Bike Church, Fabrica, UCSC Savings Through Surplus. Ask Kyle for details.

#### Websites

artmetal.com

(a full-fledged forum and “social network” for arts metal fab. Lots of rather dull concepts, but from folks who know a lot about how to work with metal. A great resource for planning specific and technically challenging tasks)

Readymade.com

(This is more of a craft and hobby type magazine. But it has some handy tips and innovative ideas for affordable assembly of various items.)

Artstuf.com

(This is the Douglas and Sturgess website where you can order tons of mold making supplies. This is especially important for people also enrolled in the Foundry class. )

Makezine.com

(This is the website where you can learn to make anything. Especially important for people interested in robotics and electronic media.)

Dailydiy.com

(This is a smaller do it yourself website that thrives on blogs and posts from various users to collect a ton of practical and helpful information. There are a lot of tricks for various electronic devices from free payphone use to MacGyver techniques for charging electronic devices.)

Instructables.com

(This is the ultimate Do it yourself website. Anything is possible when you check instructables!)

Woostercollective.com

(The Wooster Collective was founded in 2001. This site is dedicated to showcasing and celebrating ephemeral art placed on streets in cities around the world.)

<http://www.16miles.com/>

(excellent arts writing and reviews from one of the editors of GalleristNY; mostly NYC focused, but broad in themes and forms)

Craigslist.com

(This is a great place to post if you are looking for a specific part and to search for scrap metal.)

## ASSIGNMENT #1: DIFFERENCE & REPETITION

“The more our daily life appears standardised, stereotyped, and subject to an accelerated reproduction of objects of consumption, the more art must be injected into it in order to extract from it that little difference which plays simultaneously between other levels of repetition, and even in order to make the two extremes resonate—namely, the habitual series of consumption and the instinctual series of destruction and death” - Gilles Deleuze, *Difference & Repetition*, (1968, p. 293)

WITH KYLE LANE-MCKINLEY

The overwhelming majority of metal objects that we encounter today are the outcome of industrial processes which are intended to erase the “hand” or idiosyncrasies of the makers of those objects, and in doing, erase the obvious fact that industrially produced objects are made, at base, by people. At the same time, industrial production represents a profoundly complex “collaboration” of many different workers and designers, working together to make each individual item that rolls off of the assembly line in serial indistinguishable from the last, other than its serial number, in an seemingly endless cycle of repetition.

The history of metal fabrication in the arts is quite distinct from the logics of industrial production: often the “hand” or idiosyncrasies of the individual maker are visible, or even prized, precisely because of the ways in which Art markets and institutions valorize individual makers as “genius artists” while devaluing the forms of collaboration and support that go into such processes. While we might maintain systemic critiques of the ways in which such valorization tends to reproduce within the art world the intersectionalities of oppression that characterize industrial capitalism and settler-colonialism generally (racism, sexism, ageism, able-ism, class hierarchy, etc), we can likely agree that the space that is carved out for Art to be something “different” is valuable, and that those differences might find their concrete form in the specific material differences of the hand-made character of artistic production.

In the philosophical work by Gilles Deleuze that this project is named for, and even more so in his later works with Felix Guattari, such tendencies are not viewed as antithetical or opposite, but as mutually constitutive: we come to know and recognize difference precisely because it represents a change from the long line of sameness or repetition which precedes it, and we would not be able to experience the consistencies of repetition as such if not for the contrast which difference provides. To that end, this project asks you to embrace each of these tendencies – of difference and repetition – while seeking to undermine the tendency of high-art to valorize individuals as isolated geniuses.

Project requirements:

1. Students will work in groups of 4-6.
2. The project will consist of a series of objects which highlight both “differences” and “repetition.”
3. Each group will work collectively to design, plan, and implement this series of objects: groups are responsible for documenting not only their design process but the process by which design and fabrication decisions were made: who made decisions? Did the whole group agree? How did hierarchy or authority or prior knowledge play into these decisions? How did clarity of vision or desire play into these decisions?

ART 183: METAL FABRICATION

4. The group will collectively document the finished work in the form of photos or video.
5. Artist statements about this work may be authored individually or collectively, but should answer this question: how did the group of artists working together on this project reflect the notion of difference and repetition?

Artists for inspiration: Tony Smith, Donald Judd, Robert Morris, etc (minimalist sculptors),

## ASSIGNMENT #2: Rasquachismo

Rasquache is a Spanish word with etymological roots in Nahuatl, the indigenous language of the Aztec culture. Historically in Mexico it was a slur that connotes lower-class or peasant attitudes and beliefs, especially as pertains to aesthetics and visual culture. Like poor and working-class people everywhere, the visual culture of lower-class Mexicans is one of *bricolage*, of using what is freely available to make do. For art-theorist Tomás Ybarra-Frausto, however, working in the context of Chicano arts practices that celebrate Mexican heritage within the United States, the celebration of Rasquache as the specifically Chicano/a / Xican@ practices of creating a visual culture out of the freely available bits of cast-offs and left-overs serves to highlight the incredible creative resources of such communities in the face of adversity (see Tomás Ybarra-Frausto on “Rasquachismo” -- <https://vimeo.com/27727487> ).

I would like to extend and expand Ybarra-Frausto’s theory of Rasquachismo by suggesting that such bricolage approaches to visual culture locate Latinx / Chican@ sensibilities at the heart a wide swath of thinking about contemporary art and the transformation of culture more broadly through digitization and cybernetics. “Bricolage” itself is a French word which can be translated into English as “Do It Yourself.” DiY culture in the US has many rich histories, including notions of popular science and home-engineering that have developed into the “maker” industrial complex of today, but is especially vibrant in punk counter-cultures as a set of strategies for achieving a level of autonomy from work-life and capitalist institutions. That notion of autonomy substantially overlaps with the notion of autonomy in the history of Art and the Academy, in the sense that artists and scholars shouldn’t be told what to think or how to act. More broadly, the history of modern and contemporary art in general can be thought of as one of the appropriation of various sorts of non-art materials into an arts context: from Duchamp’s ready-mades and Dadaist photo-montage to Paul Miller (DJ Spooky)’s theories of sampling and the important role of cut & paste in Software Studies as an approach to digital art and new media, the basic techniques of Rasquachismo are ubiquitous in visual art production.

As concerns metal sculpture specifically, the notion of Rasquachismo relates closely to the variety of additive techniques that welding made possible during the 20th century. Artists such as David Smith, Jean Tinguely, and Alexander Calder were among the most canonical of those who used additive or assemblage techniques to create distinct visual languages. What distinguishes Rasquachismo from the variety of additive / assemblage processes that surface in the history of modern art, however, is that rasquache is specifically associated with the creative manner in which poor folks use *what they have to make things work*. In that sense, Rasquachismo presents a subversive threat to the history of fine art, which is bound up in Kantian notions of uselessness and beauty, which rasquache tends to undermine through “beautifully” idiosyncratic and visually creative techniques to make things useful again.

For our purposes in this class, Rasquache can serve a dual function: to pay homage to debt that as Californians we all owe to a shared Chican@ visual culture, and to help us think about creative ways to make useful the tiny scraps and remnants that metal fabrication often leaves behind.

Project requirements:

1. Identify a collection of steel remnants or cast-offs. Document these in their initial state (photos).
2. Identify a need that you or a friend has that you could solve by combining these remnants: this “need” could be silly or absurd, conceptual or aesthetic, or quite serious and functional.
3. Develop techniques for combining these remnants into something that solves the need in #2 above.
4. Document the finished piece **BOTH** as an “art object” (ie a sculpture, devoid of context) and as it is used to meet the identified need.
5. Write a 300+ word statement about the work that reflects the manner in which Rasquachismo and bricolage have been incorporated into your arts practice.

Sources of inspiration: Pepón Osorio, Ruben Trejo, Amelia Mesa-Bains, Tomás Ybarra-Frausto, Maria Magdalena Campos-Pons, Ken Gonzales-Day, Eamon Ore-Giron, Carlos Motta, Zach Lihatsh (<http://www.zachlihatsh.com/home.html>), Troy Niaman (<https://troyneiman.wordpress.com/>).

## ASSIGNMENT #3: The Dialectics of Usefulness and Uselessness

The German Enlightenment Philosopher Immanuel Kant, found himself grappling with questions of what the role of Art and the Artist might be (*Critique of Judgement*, 1790). His conclusion, in the most simple terms, was that for a thing to be beautiful, it must not have a use other than beauty (there are other criteria as well, but this is the famous one). In other words, a thing cannot be beautiful if it has a practical, non-aesthetic use. It must be useless.

Ever since then, this idea, which we might call “art for art’s sake” has held sway in the western tradition. Initially, the idea of “art for art’s sake,” was quite liberatory for artists; it meant that artists ought to be free to make whatever struck their fancy, rather than simply whatever their wealthy patrons asked for, and it tended to valorize Artists as great thinkers, “geniuses” even, rather than lowly craftspeople as they had appeared in the centuries preceding. The concept of “art for art’s sake” is the philosophical heart of what was called “formalism” in the 20th century, and continues to dominate our assumptions about the role and scope of art practice today.

While questions about “art for art’s sake” and “uselessness” apply to all manner of art making today, they are particularly relevant to our study of metal fabrication because the overwhelming majority of metal fabrication, outside of the Art World, is clearly designed to be “useful.” Art metal fabrication shares many tools and discourses with non-art metal fabrication, and yet the assumption remains that our task in Art metal fabrication is to make objects of “beauty”—ie, objects without “use.”

For this assignment, you can choose either of the following tasks:

- A) make an object which is marked by its usefulness, and thus reflects principles of design-thinking, ergonomics, and user-studies, OR,
- B) make an object which comments on the themes of usefulness and aesthetics through its form and content.

Sources for inspiration: Rebecca Horn, Matthew Barney, Dara Birnbaum, Anthony Gromley, Wim Delvoye, Ann Hamilton and Richard Long.

**KEYWORDS:** embodiment, prosthetics, body extensions, performance, cybernetics, biotechnology, affect, process, entanglement.