Considering Tradecraft

If you've read the craft journals and seen exhibits at major craft and design museums like MAD, you'll notice a strong interest in handwork in industry. It's easy to think that mechanization eliminated all aspects of handwork in industry, but that's just not true. Handwork has a strong presence in many kinds of manufacture, from making bathtubs to prototyping cutting-edge design. Of course, some craft processes, from paste-up to die-sinking, have recently vanished with the onslaught of digital technology, just as many more were killed during the industrial revolution. But the hand has not completely disappeared from industry, and historians are starting to take notice.

Why? One reason is that the subject of craft in industry has been overlooked for half a century. In the days of the Arts & Crafts Movement it was a hot topic, in which industry was always presented as the archnemesis of all that was good and true. Division of labor and mechanization were the great hobgoblins of the Movement, despite the fact that both were practiced in segments of almost all of the crafts. The idea that industry was inherently evil faded away as the Arts & Crafts Movement declined in the 1910s.

With the advent of Modernism, industry was reframed as a legitimate partner of craft. The new model came out of the Bauhaus, with the trained craftsperson serving as a prototype-maker and designer for mass-production. It was a very hot idea in the late 40s and 50s. Designers like Charles and Ray Eames became embodiments of the notion that craft and industry should collabotate. The Eames's developed their process of bending plywood in a setting that was basically a craft studio, with all the work done by hand. The Eames's became the paradigm for a new, more positive view of the partnership between craft and industry.

But the idea didn't last. When aggressively individualistic artist-craftsmen like Peter Voulkos became culture heroes, the designer-craftsman quickly became irrelevant. The rise of Industrial Design programs also contributed to the death of the idea, because companies could hire employees trained specifically to design, instead of potters and silversmiths. By 1970, the notion that a progressive college-educated crafter was an artist, not a designer-in-training, became received wisdom, and has remained so until the present.

So, from a scholar's point of view, the concept of craft in industry seems fresh and new. And, I might add, fashionable. Virtually every new issue of Craft magazine, the British publication, has another feature article on handwork within industry. American scholars like Ezra Shales and Glenn Adamson have devoted considerable ink to the subject. Do I detect a trend here?

At this point, I must bring up terminology. Most of the articles and books on the subject of handwork in industry don't use any particular name. The lack of a name causes confusion, because suddenly studio craft and craft-in-industry appear to be

the same thing. For clarity's sake, I call handwork in industry "tradecraft." It could be two words – trade craft – but I like the simplicity of a single word. It's a neologism, but I prefer it.

As I noted, there is a certain fuzziness in current writing about tradecraft. It is presented as continuous with studio craft, and maybe even identical. After all, both pursuits involve making objects by hand, right? Therefore, they're pretty much the same, right?

I have been saying for decades that there are different kinds of craft. This categorical distinction can be traced back to Arthur Danto. He writes about kinds of things. The key is what is, or what is not, commensurable; that is, what can or cannot be reasonably compared. It's an extremely useful concept. If, at some fundamental level, two things cannot be compared, they are two different kinds of things. You have apples and oranges. Comparisons can still be made, but once a determination of incommensurability is made, you are obligated to state which aspects of one thing can be compared to another, and which cannot. To do so is intellectually honest. To not do so is evasive.

Obviously, both studio craft and tradecraft involve handwork. But that fact does not render the two activities identical, or even very similar. They are not the same, and comparisons between the two are limited. This essay is about the many differences between tradecraft and studio craft. My purpose is to question the degree to which the two enterprises are commensurable.

To perceive these differences, it's useful to be a maker with wide experience. Studio craftspeople bump up against tradecraft all the time. Teachers often encourage their students to get jobs in trades that are closely related to the craft they studied in college. My own experience is mostly within jewelry, which has a strong commercial component. Jewelry also has ancillary trades like silversmithing, modelmaking, costume jewelry production, and jewelry design. I have not done real trade work myself, but many of my friends and former students have. I have visited trade jewelry shops in the U.S. and abroad, and I almost took a job as an industrial modelmaker. I have modest experience in several skills normally associated with trades, like machining, welding, plumbing, electrical wiring, drywall installation, and car repair. I know something about the subject.

So, what are the characteristics of tradecraft?

I think tradecraft necessarily involves handwork in the service of making or repairing something. Some trades, like fixing cars, are marginal to my definition of tradecraft. Other trades, like heavy equipment operation, do not qualify at all. Nonetheless, it's interesting to note that some very fine handwork is still practiced in factories and shops all over the world.

Tradecraft is always work for hire; work done in a state of employment for a larger (usually corporate) entity. Let's be clear: these are jobs. Generally, these jobs are blue-collar jobs, in the realm of physical labor rather than clerical, sales, or administrative activity. It's the meeting of commercial employment and work involving the hand. Furthermore, most of this work is understood as a specific occupation that deals with a highly codified set of skills and narrowly repetitive patterns of labor. Skills are learned for particular jobs, not for leisure activity, nor for art. Pleasant and satisfying labor is not the primary concern.

Being a job, tradecraft is always part of a business. It exists within the merciless world of competition. Profit is the first concern. All other considerations are usually secondary. Occasionally, other interests may be coequal with profits, but the motive to make money is always primary. After all, if a business doesn't turn a profit, it will vanish.

The profit motive dictates that the interests and opinions of the client cannot be ignored. In this, the artistic autonomy of the maker – which is one of the central precepts of modern art – can be compromised. Both the technical requirements of the job and the restrictions imposed by the client dictate constraints that an artist would not normally be subject to. Of course, many designers have worked brilliantly within such constraints. Think of the Eames's LCW chair, for instance. Still, such constraints always exist in tradecraft. Nobody gets a completely free hand.

Trades come and go. Industrialization eliminated many trades and created others. History is littered with dead trades. The automobile killed off a slew of old trades, like wheelwrighting and making buggy whips. At the same time, however, new trades like automotive repair proliferated.

Some tradesmen work alone, on their own schedules and of their own volition. The ancient craft of building dry stone walls is pretty independent. But most tradecraft is work done under the supervision of a boss. The normal condition of tradecraft is that the worker produces somebody else's designs. He or she is not independent in this respect. Their place is to follow orders.

Tradecrafts vary in the skill they demand. Some trades, like roofing, ask little from the laborer. Others require a tremendous amount of training and skill, like steel engraving or violin-making.

It's important to note that tradecraft can be quite creative. The skilled tradesman is often called upon to solve technical problems that come up in fabrication; problems the designer often does not anticipate. Designers sometimes make plans that cannot be executed with conventional means. Something new has to be invented. The creative problem-solving aspect of tradecraft is often very satisfying to workers.

Welders, for instance, are given measured drawings, but the plans don't specify how the object is to be made. Sometimes the guys in the shop have to surmount very

tricky technical problems: how to get around the limitations of a press, or how to join dissimilar materials effectively. These solutions sometimes demand a deep knowledge of process and material, knowledge that even the designers may not have. The worker's arena for independent action lies within the execution, but not the plan itself.

Many trades are highly bound by convention. There are known ways to do things that have been refined over decades by hundreds, or even thousands, of workers performing the same task. Drywalling, for instance, has a series of very specific tools and techniques to get the job done quickly, efficiently, and to a high degree of finish. Anyone who has installed, spackled and sanded drywall as a home handyman would be stunned by how fast a good professional team can do the job. That efficiency can only be achieved by hewing closely to standard methods of execution. In such trades, there's zero room for creativity.

When convention is privileged over adaptation, it leads to hidebound ignorance. George Sturt's The Wheelwright's Shop (Cambridge University Press, first published 1923), a delightful account of the old Surrey way of making wooden farm waggons, recounts the stories of a few old guys who would never, ever change their ways. If it was good enough for their fathers, it was good enough for them. The irony is that Sturt wrote the book just as wheelwrighting was about to disappear from the English countryside forever. I witnessed a similar story about 20 years ago, in an unlucky man who worked as a pasteup artist. He was a knife and glue guy, and he watched as his workload shrank and shrank. All of it was being digitized. He never bothered to learn how to use a computer, and eventually his business died. I wonder where he is today.

(Sturt, however, was adaptable. By 1919, he had converted part of his business into an automotive repair shop.)

Any account of tradecraft must confront the fact that tradecraft is sometimes done very badly. There's a lot of careless work out there. Crappy car mechanics are everywhere. Ditto for crappy electricians, crappy heating system installers, or crappy house painters. I have personally had to endure the maddening incomptetence of men in all of those trades, and they have cost me dearly in frustration, unnecessary expense, and wasted time. The truth is that lots of tradesmen have no honor at all. They are happy to take your check and leave, secure in the knowledge that there is always another sucker. The Ruskinian ideal that handwork must ennoble its practitioners is pure hokum.

I am waiting for the first article in The Journal of Modern Craft about bad tradecraft. What are the theoretical implications of bad work? I really want to see a fresh young PhD tackle the issue.

Despite closed minds and sloppy work, there are also thriving trades that require tremendous dexterity, in which there is simply no room for error. From jet engine

assembly to flute making, certain trades continue to function at the highest level. For instance, a recent blind test of the sound of violins, some made by Stradivarius and some made by contemporary craftsmen, concluded that the new violins sounded just as good as the legendary old ones. Tradecraft of extraordinary skill still survives.

Over centuries, tradecraft has been doubly stained, first by commerce, and second by the attitude that physical labor is inferior to thinking. There's a temptation to think that labor for pay is somehow degraded. And we still pay chief executives hundreds of time better than we pay our factory workers. However, both conceptions are fundamentally false. Unpaid labor is no more ennobling than work for hire. Both have the same potential for quality, and both have the same potential for screwups. As for the notion that brainwork is inherently more valuable than handwork, that's nothing but an excuse for the continuing injustice that people who are closest to the purse strings must get paid the most. Neither idea should have any standing in a serious consideration of tradecraft.

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I suspect that the reason for this newfound interest in tradecraft is partly to throw new light on studio craft. That was precisely the design of Glenn Adamson's The Invention of Craft (Bloomsbury, 2013). Adamson wanted to prove that craft was never really under threat from encroaching industrialization. The conventional narrative is that craft was in dire danger of annihilation from unchecked mechanization, and only the efforts of William Morris and his disciples pulled it back from the brink of extinction. To refute that hoary old story, Adamson concentrated exclusively on tradecraft to say that craft was doing just fine, thank you very much. But to make his argument apply to studio craft, tradecraft must be commensurate with studio craft.

Obviously, both studio craft and tradecraft involve skilled handwork. That is incontrovertible. But as I have noted, skilled handwork is only part of what constitutes studio craft, and there are crucial aspects of tradecraft that render it fundamentally unlike studio craft. The two can be compared only in limited ways.

I can boil these differences down to four basic attributes of studio craft: agency, lineage, what I call aestheticization, and discursiveness. Tradecraft is very different in all four categories.

Agency is about the empowerment of the maker. Can she design for herself? Can she control the conditions under which she works? Are the products of her labor truly hers, or are they the primary responsibility of the business owner? Does the maker get the most significant portion of the profit? Does the maker pay when things go bad? Did the maker get credit; does her name appear on the product? In studio craft, the answer is generally "yes," in tradecraft it is typically "No."

Studio craft has always been attentive to factors besides the object itself. Conditions of production – the circumstances under which the object is made – and reception – how an object is bought and used – have tremendous significance in studio craft. These concerns can be traced back to Ruskin's "The Nature of Gothic," which served as the founding document for the whole Arts & Crafts Movement. These concerns have never diminished.

Foremost among concerns about conditions of production is the degree of decision-making power exerted by the maker. How much does she get to call the shots? How much control doe she have? This is agency, also known as self-empowerment. Studio craft has always been vitally interested in maximizing the agency of the maker. That's why it's generally a matter of principle that the studio craftsperson design his or her own work. (Those who make but don't design are typically employees or apprentices.) Without conceiving and designing the object, a crucial part of the studio craft project is missing.

True agency is usually (though not always) missing in tradecraft. The tradecraft worker follows instructions. These instructions are imposed by a higher authority (a boss, a designer) or by tradition. Lack of agency for the maker in tradecraft is a basic point of incommensurability between the two fields.

The empowerment of the laborer was central to Ruskin's view of both art and craft. Ruskin was horrified by Neo-Classical architecture, in which the carved capitals, moldings, and other embellishments were absolutely formulaic. No room was left for the creativity of the carvers. To Ruskin's mind, these handworkers were reduced to human machines, without dignity and without agency. Ruskin contrasted the slavish precision of the men who carved Neo-Classical decorations with the old Gothic masons, who were sometimes allowed great freedom. In the Gothic churches that Ruskin loved, sometimes every capital was different, and the carvings of gargoyles and other ornaments showed considerable invention. Ruskin attributed this creativity to the masons, not the architects.

To Ruskin, the empowered, creative laborer was fully human, not a machine in flesh and blood. The old stonecarvers that Ruskin admired were all tradesman, which was no accident.

In most (but not all) kinds of tradecraft the power the worker has to make independent decisions is curtailed. He is bound on one side by standard trade practices, tools, and materials. He is rarely – and sometimes never – allowed to deviate. Furthermore, he usually must follow a design (originated by someone else) with great accuracy. Invention and creativity are limited to problem-solving in matters of execution. As for personal expression? Forget it.

Even when a tradesman works for himself, his practice is usually highly prescribed. Take Matthew Crawford, the author of Trade Craft as Soul Craft.. His job is to fix motorcycles. The standards of his task are fixed and stringent: make the machine

run properly. Crawford has no input into the goal. It's a given. Nor does he get to design any aspect of the machine. That was done by the manufacturer. Crawford's agency is limited to solving the (sometimes very difficult) problems of diagnosing the problem and then coming up with a workable fix.

A more creative trade having to do with motorcycles is the custom fabrication business. These guys get to design a unique motorcycle from the ground up. The greatly increased agency of their work makes their trade more akin to studio craft, albeit with a lineage that is quite different from any of the traditional crafts. It's precisely the greater agency of custom bike fabrication that makes it commensurate with studio craft. Significantly, material and technique matter less than self-empowerment.

Lineage is a fundamental attribute of studio craft. I first heard about lineage from Gary Griffin, when he was teaching at the Cranbrook Academy of Art and trying to determine how metalsmithing was fundamentally different from sculpture. Lineage was his solution to the question. Every craft, studio or trade, has a lineage: a collection of techniques and histories that set a precedent for contemporary practice.

Typically, these lineages are very particular. Consider musical instrument making. While most instruments are now made in factory-like conditions, in which every product is exactly like the next, there are still custom shops for the building of every kind of instrument. Violin makers still ply their trade in much the same way as Stradivarius: same tools, same techniques, same woods. Finger planes haven't changed for centuries, because they remain the best tool to accurately hollow out the curved fronts and backs of violins. The tools and techniques constitute a lineage. The violins themselves are also part of the legacy.

But the lineage of a trumpet-maker is different in every respect. Different tools, different materials and techniques, and an entirely different product. Thus: different lineages. And accordingly, limited comparisons. How much is violin-making like trumpet-making? Not much, other than the fact that both trades produce musical instruments.

The various studio crafts each have their own lineage, along with a larger common inheritance. Studio ceramics has a long history of throwing on the wheel, formulating clay bodies and glazes, kiln-building and firing. There's also an enormous body of clay objects going back to preliterate times. Some of these lineages are shared with industrial ceramics (clays, glazes) but others are not. Manufactured ceramics have nothing to do with wood-firing, or hand-throwing. Nor do industrial ceramics have anything to do with an individual maker arriving at her own decisions. Because trade and studio ceramics do not share many important lineages, the comparisons that can be made between the two fields are severely curtailed. Again, the most important aspect has to do with agency, but the long

history of tools and techniques that belong to studio ceramics are an important factor.

I should mention that there is a lineage of thought in studio craft, too. Not only does studio craft depend on Ruskin's concept of dignified labor and Morris's notions about pleasure in work – ideals that have no place in industry – but each medium has a specific history of ideas. Contemporary studio ceramics must confront Bernard Leach's notions of healthy form and a "taproot" of tradition, whether the modern ceramist accepts or rejects them. Furthermore, there is a long history of comparing pots to the human body: mouths, lips, shoulders, and feet. You cannot talk about a handmade pot without considering the long discussion about body and pot, and the great commentators like Philip Rawson who brought these ideas to our attention. It is not possible to speak intelligently of studio pottery without considering this lineage of discourse. And this fundamental difference between discourses in trade and studio applies across the board.

The third area of difference between studio craft and tradecraft is aestheticization. It's an awkward word, I know, but it will have to suffice.

From the very beginning of the Arts & Crafts Movement, emerging from William Morris in the early 1860s, the idea that art had to be involved in the project was crucial. Morris expounded on the merging of art and life in the practice of craft and he frequently called for "Art for all." Morris wasn't proposing that everybody should be able to buy a painting or a sculpture. He meant that ordinary people should be able to buy household goods that had some measure of beauty to them. Morris was convinced that English industry was incapable of making goods that were truly beautiful, largely because they weren't made with the care and consideration that was possible only with handmade goods. To Morris, art, beauty, and the handmade were inseparably linked. He devoted most of his life to proving the point.

In Morris's time, beauty and aesthetics were pretty much the same thing. To make an object beautiful was to give an aesthetic gloss to it, whether it be a carpet, a chair, or a stained-glass window. Morris never departed from his view that the things he designed for Morris & Co. – even if they were made in a factory, like some of his carpets – must be beautiful. The household fixtures that his company made had to be beautiful; they had to have an aesthetic component. What we now call the studio crafts have followed Morris's lead ever since.

Needless to say, the notion of what is aesthetic transformed completely in the 20th century. Beauty has been largely abandoned. Now art is "embodied meaning," in Arthur Danto's paradigm. It should be no surprise that the studio crafts, committed to the aestheticization of objects, has followed suit. We now have craft-as- concept, craft-as-installation, craft-as-performance, and craft-as-video. All these forms update Morris's insistence that craft must unite with art. The kinds of art have changed, as have the intentions, but the impulse has not.

Tradecraft has been completely left behind in this reformulation of the aesthetic. While some trades might aspire to beauty, I have yet to see one that thinks a performance piece would be good for business. Or that conceptual craft would contribute to the bottom line.

All studio craft, one way or another, represents an effort to add an aesthetic component to the object at hand. I don't know of any studio craft that doesn't. The linkage between studio craft and the aesthetic is incredibly durable. In fact, it would be hard to conceive of a studio craft that completely avoids some aspect of the aesthetic.

Plenty of tradecrafts do, though. Being businesslike and profit-oriented, the vast majority of tradecrafts have little or nothing to do with aesthetics. Try to imagine what aesthetic electrical wiring would look like. And even when a tradecraft has a flavor of the aesthetic, it's usually the designer who's adding the art, not the laborer.

In all three ways – agency, lineage, and aestheticization – tradecrafts are fundamentally different from studio craft. There are exceptions, but they must be dealt with on a case-by-case basis. In general, however, the commensurability of tradecraft and studio craft is limited. It is not reasonable to assume they are alike.

However, as I mentioned before, there is one way in which the two fields are commensurate: both involve handwork. That's true by definition.

There's a great deal that can be said about handwork. (See my "The Hand: At the Heart of Craft" for an introduction.) Furthermore, it's clear that handwork retains a vital role in contemporary culture, even if all citizens don't participate in it. Not everybody can make music either, but we still regard music as important to any cultured life.

What if handwork is the only commonality between studio craft and tradecraft? Are there different kinds of handwork, too?

It's a perplexing question.

I have a hobby: German HO-scale model trains. In this hobby, the main goal is to build a layout that you can drive your trains around. A good layout has trains, track, sophisticated electronic controls, buildings, landscapes, and tiny people walking around doing tiny things. Most hobbyists buy mass-produced locomotives and cars, and don't mess with them very much. But the rest of the layout must be built. Slowly, by hand. The model railroader must be a designer, a carpenter, an electrician, and a miniaturist all at once. I think building a layout is like building a small house without a roof, windows, plumbing, or heating. But pretty much everything else you'd find in a house is in a layout. It is surely a kind of craft.

The best train layouts are quite marvelous, and the guys who build them – and it's almost always men –are very good at what they do. (Try searching Josef Brandl in Google Images and see what comes up.) But building a layout has nothing to do with anything larger than the immediate goal, which is to imitate a real railroad in small. It has no greater reach or reference. Layouts exist for their own reward, but have no larger meaning. Therefore, the hundreds of hours on handwork invested in them have no larger meaning, either.

Personally, I like that. My model railroad is free from any expectation. It's strictly for my own pleasure. I can make a lousy layout and it doesn't matter. As studio jeweler with an international reputation, it's nice to make something that will never be judged. I'm off the hook. Here is a form of handwork that has no larger import.

My layout isn't art. Why? Because it's so self-contained. I'm not making a statement to anybody or about anything. The layout is not discursive in any meaningful way. And the handwork that went into it isn't discursive either.

When Ruskin critiqued the mind-numbing labor of Neo-classical carving, and by extension all of the labor going on in the most dismal of Victorian factories, he was implicitly proposing a new kind of meaningful labor. The new work would self-consciously insist on being dignified; on standing for the empowerment that Ruskin advocated. Thus, the new handwork would be discursive. It would say something about the larger culture. Properly done, handwork was public resistance.

I would modify Ruskin's insight somewhat. I would say that handwork, IF discursive in nature, is connected to studio craft. No discourse? No public message? No connection.

How do you tell if handwork is discursive? This is unclear. Sometimes the context provides the meaning, as in most studio craft. In tradecraft, you could ask the worker. Occasionally, trade workers know they are asserting a position vis-a-vis the larger society, and that their work has a larger meaning. And sometimes handwork can make a statement without the worker necessarily meaning it to. When a laborer does his job better than he has to, on purpose, it carries a meaning that attentive customers understand.

However, the normal state of tradecraft is not discursive. Tradecraft is about getting the job done (sometimes doing it well, sometimes not) and collecting the check at the end of the week. 95% of the time, tradecraft not about saying something to the public.

That other 5%, when the worker is actually saying something that speaks to concerns beyond the requirements of the job – those are the cases when tradecraft has a strong connection to studio craft. That's what I'd say. But it doesn't happen all the time. You'd have to examine the situation on a case-by-case basis. Some tradecraft is, in fact, commensurate with studio craft, but much is not.

So, where do we stand?

In The Invention of Craft, Glenn Adamson cites a variety of interesting trades. His purpose is to show that craft wasn't under threat from industrialization, contrary to conventional wisdom. What he proves is that tradecraft wasn't under threat. In fact, many new trades involving highly skilled handwork were invented specifically for industrial processes. For instance, diesinking is the craft of hand-carving steel dies, in the negative, for cutting and stamping. The trade barely existed before the industrial revolution. But with the invention of massive steam-powered presses, the trade flourished.

In contrast, many of the trades that are the precursors to modern studio crafts were in deep trouble. Some had nearly disappeared in Morris's day. Coloring textiles with natural dyes had been pushed the brink of extinction, and Morris revived the craft single-handedly. Ditto manuscript illumination, tapestry weaving, printing wallpaper by hand, and hand-printing and binding books. Morris contributed to the revival of each of these trades. Without him, they may have gone the way of tortoise-shell combs and toleware: antiquated forms considered irrelevant to the modern age.

What does it matter for studio craft if diesinking prospered? Die-sinking has none of the agency, none of the lineage, and none of the aestheticization of the studio crafts. Nor was diesinking discursive in the way throwing a pot by hand is. Yes, it was a difficult skill to master, but it has no immediate relevance to studio craft.

Adamson's thesis is marred by the fact that he makes none of the case-by-case comparisons between tradecraft and studio craft. The trades he cites are of limited commensurability to the studio crafts, and the book is thus weakened.

We saw more of this fascination with tradecraft in Adamson's "Made in New York" exhibit at MAD. Actually, it was interesting seeing handmade cigars and axes displayed next to studio ceramics and glass. Some of these trades were fascinating because we weren't aware of their existence, and some were compelling visually. A few were examples of superb craftsmanship. Adamson's idea is to expand our understanding of what craft is today. That's good, and probably necessary. But the exhibit still elided the commensurabilty – or lack thereof – between the two types of craft.

I suspect that this confusion between tradecraft and studio craft is intentional. I think the design is to expand our understanding of what craft is, an agenda that seems open-minded and forward-thinking. I'm skeptical. If proposing an expanded field for craft is of such importance, why are other kinds of craft still being overlooked? What of custom cars and bikes? What of the many kinds of repair, from automobiles to computers? What of improvised shelters? What of couture? And

especially, what of hobbies? Why aren't we seeing scholarly articles on grannies knitting sweaters and guys making birdhouses?

I'll tell you why. Not only are these forms of craft irredeemably low (or implicated in commerce), but the incommensurability between them and studio crafts are too obvious to ignore. Nobody would buy it. Not yet, anyway.