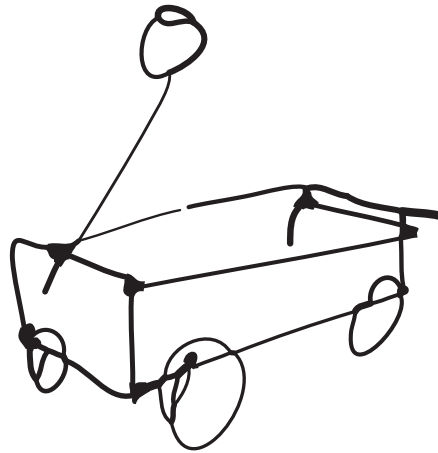


okwagon

GATHERING AND MAKING IN NEW WAYS



With the economy entering recession and the forecast looking even more grim, there is opportunity for small “bottom-up” companies to have a greater impact on their immediate environment and the local economy.

By recognizing the potential parties, where the opportunities might lie, and giving the information necessary for ideation, there is an opportunity for greatly affecting our local system in truly “sustainable” ways.

This project investigates the current network of production, and looks at the ways of communicating and entering the system for new makers. It will propose possible tools that will allow for better efficiencies and possibilities of working for these local companies that might have a positive impact on the local economy.

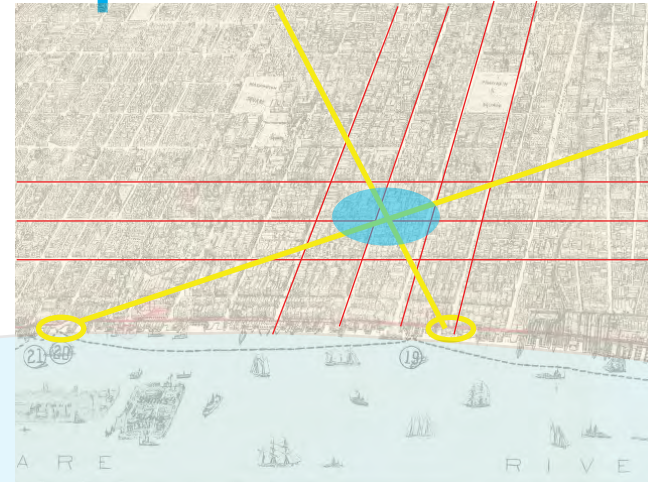
Context: Philadelphia

Before the Civil War, most masters lived close by their shops and mills, whether in densely settled Kensington or Northern Liberties or in the hollows of Germantown.

Shared problem solving was as routine matter, as was contracting out jobs to “competitors” when a rush of business arrived, “calling into service others’ machinery” as it was termed. In

such relations lay one key to Philadelphia’s special genius, its flexibility and specializations, its endless versatility, for the firm was not a closed box but a unit in a constantly shifting web of interconnected activities.

New products, ideas, solutions percolated through the city (some patented, most not) generating productive “external economies” that made the districts as a whole far more than the sum of their parts.

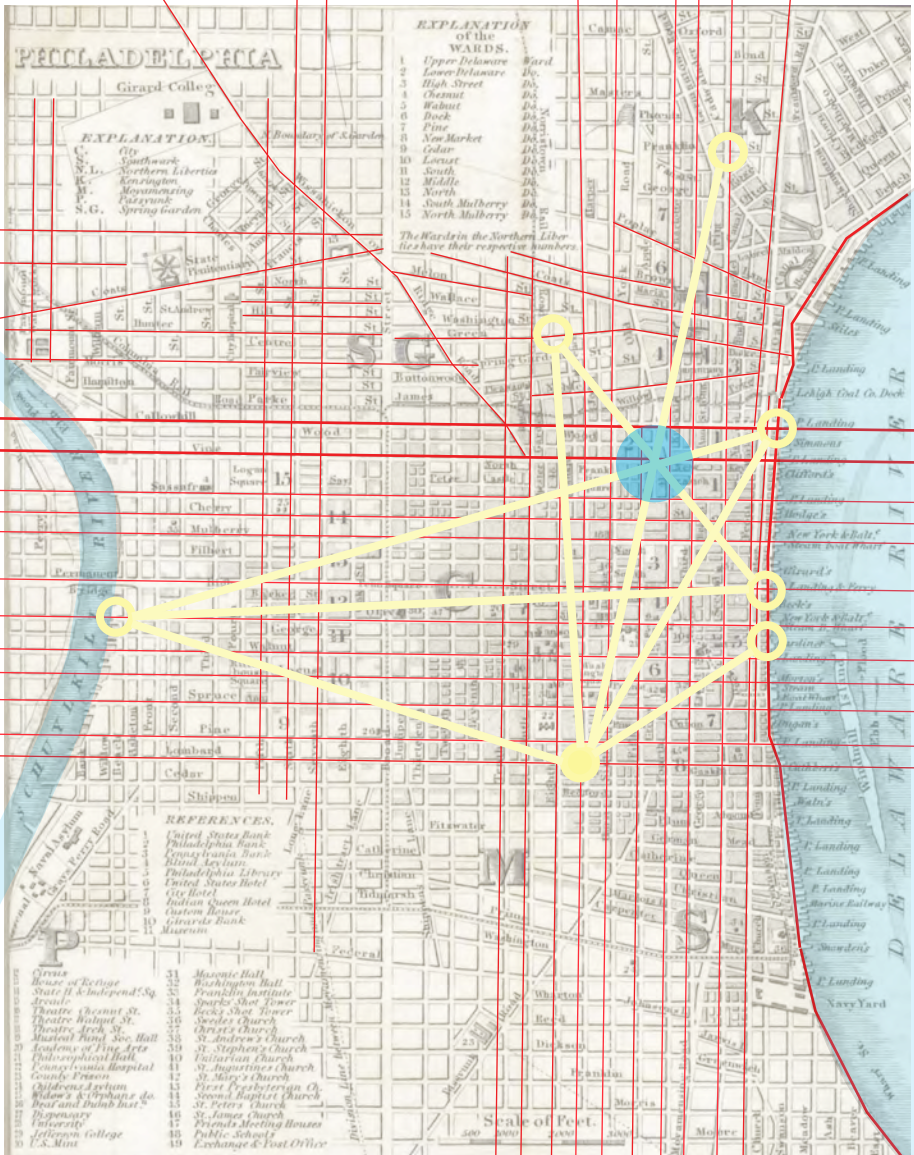


WORKSHOP OF THE WORLD—A Selective Guide to the Industrial Archeology of Philadelphia
© Oliver Evans Press, 1990; adapted for the internet in 2007.

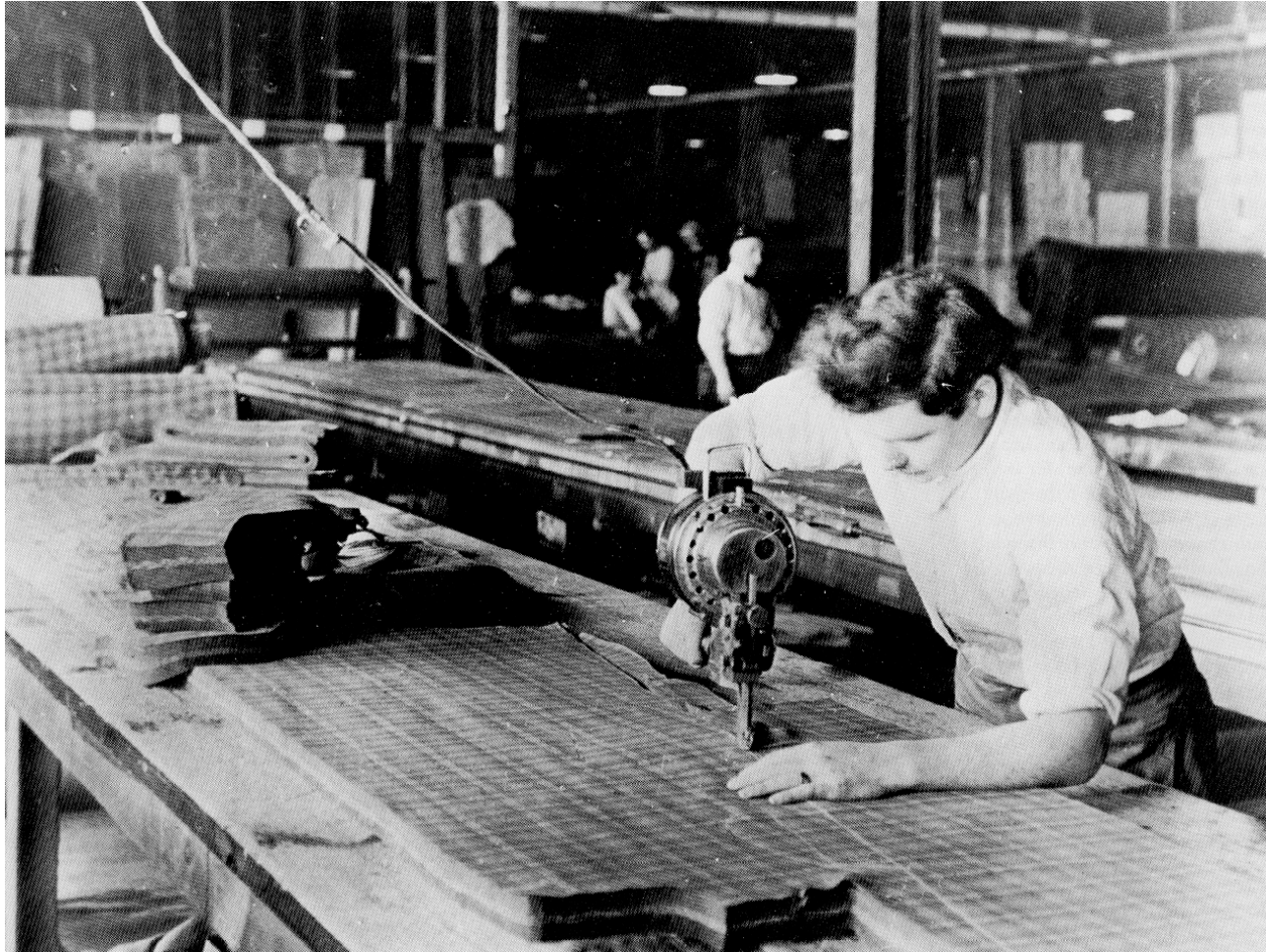
1888-1920's

Textiles: 60,000 people

- laces
- socks
- carpets
- blankets
- rope
- cordage
- men's suitings
- women's dress goods
- silk stockings
- upholstery
- tapestries
- braids
- bindings
- ribbons
- coverlets
- knit fabric
- sweaters
- surgical fabrics
- military cloths and trimmings
- draperies
- yarns of every description



Map of Philadelphia: 1888 Burk and Mcfetridge, <http://memory.loc.gov/ammem/gmdhtml/gmdhome.html>



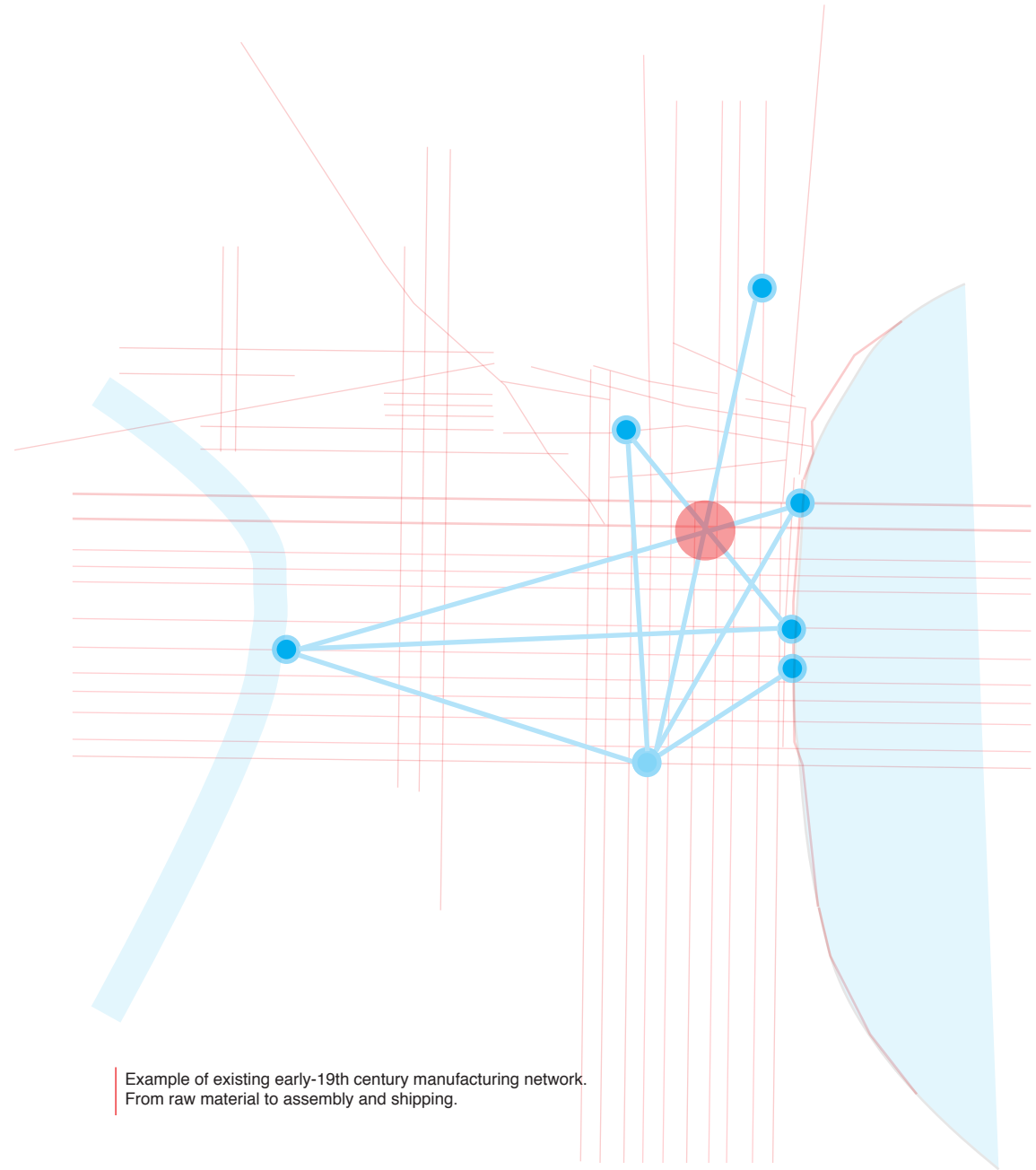
WORK SIGHTS: Industrial Philadelphia, 1890-1950 Scranton, Licht

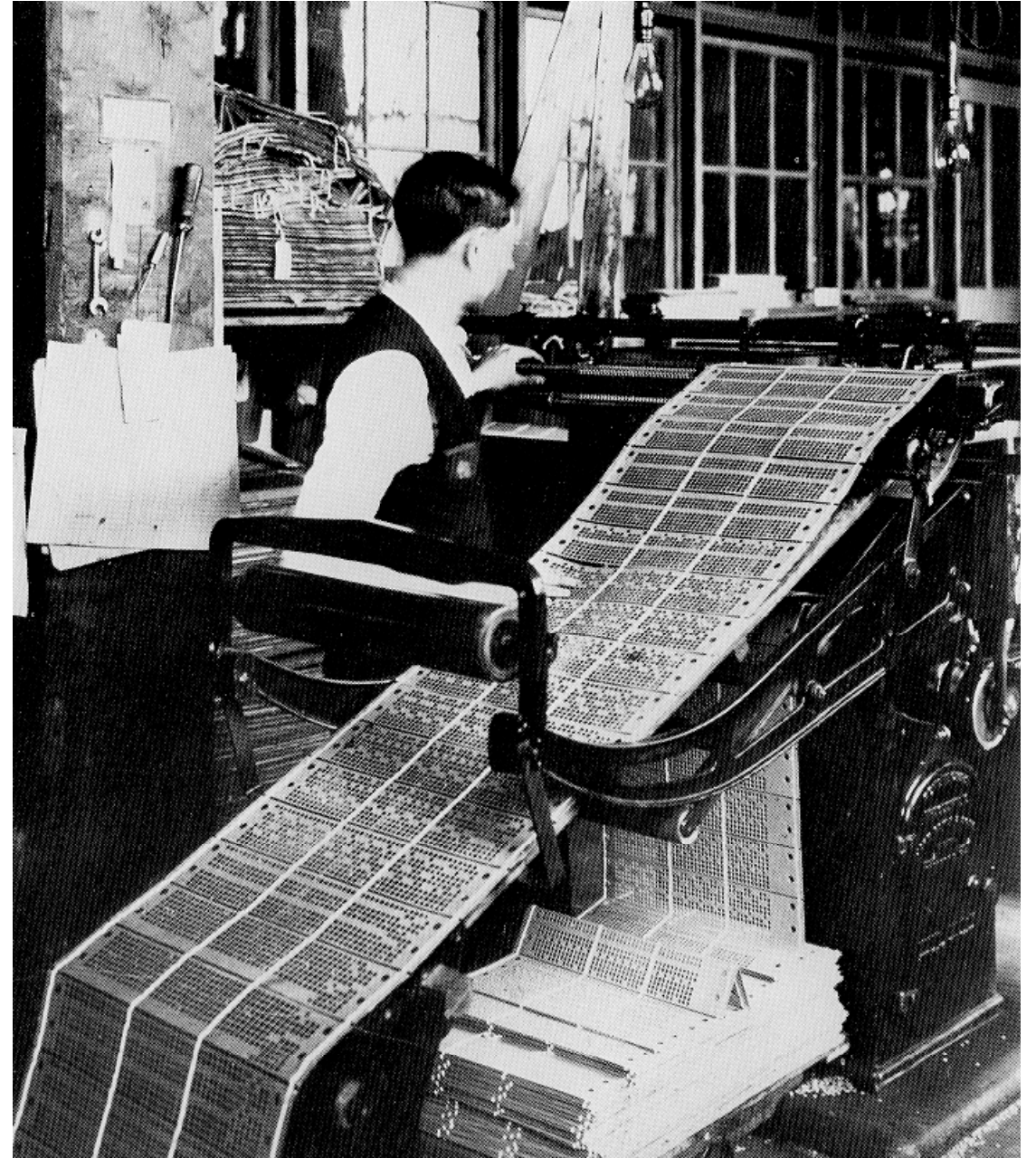


WORK SIGHTS: Industrial Philadelphia, 1890-1950 Scranton, Licht

Philadelphia's thousands of modest scale firms were linked together through contracts and trade in elaborate ways that make it possible to view the city as a vast workshop as well. Carpet makers purchased yarn from one firm, had it dyed at a second, bought pattern designs from a third, punched cards to control the weaving process (Jacquard) from a fourth. The card makers got coated paper stock from specialist paper manufacturers in Manayunk; the dyers bought special machinery from Procter and Schwartz which in turn purchased metal castings from various city foundries. Even at the level of the biggest establishments, such connections were frequent. Midvale Steel, makers of everything from armor plate to ship's cannon and drive shafts, bought its yard locomotives from Baldwin and commissioned special machines for metal cutting from William Sellers, the city's most venerable machinery building plant. Some of Midvale's plate doubtless found its way to the Navy Yard or to Cramp's, shipbuilders for a century along the Delaware. Baldwin Locomotive long operated as a network of workshops complete with internal contracts upon which shop masters might turn efficiency into a profit. The presence of hundreds of firms with every sort of capacity so close to hand encouraged Philadelphia mill men to value and use nearby talent, thereby deepening the web of interconnections.

WORKSHOP OF THE WORLD—A Selective Guide to the Industrial Archeology of Philadelphia
© Oliver Evans Press, 1990; adapted for the internet in 2007.



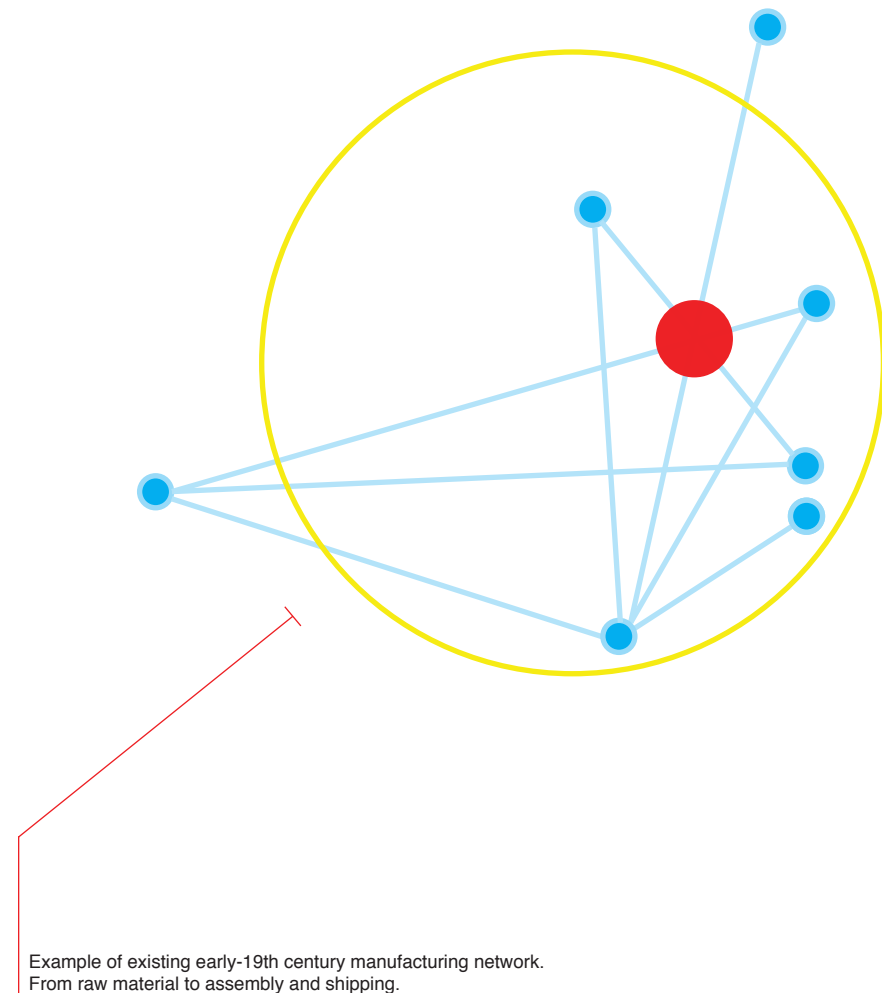


WORK SIGHTS: Industrial Philadelphia, 1890-1950 Scranton,

From roughly 1880 through the 1920s, Philadelphia's industrial districts supported an array of mills and plants whose diversity has scarcely been matched anywhere in the history of manufacturing. When the U. S. Census charted some three hundred categories of industrial activity, surveys of Philadelphia showed firms active in nearly ninety percent of them. No city had a wider range of textile products, for example, as Kensington, Germantown, Frankford and Manayunk churned forth laces, socks, carpets, blankets, rope and cordage, men's suitings and women's dress goods, silk stockings, upholstery, tapestries, braids, bindings, ribbons, coverlets, knit fabric and sweaters, surgical fabrics, military cloths and trimmings, draperies, and yarns of every description. At the turn of the century, roughly seven hundred separate companies operated in textiles alone, employing some sixty thousand people. Yet this immense workforce amounted to only one quarter of the city's industrial workers. Unlike New England centers that often focused on a single sector (for Massachusetts, textiles in Lowell, Lawrence, Fall River and New Bedford, paper in Holyoke, shoes in Lynn), Philadelphia could and did do nearly everything across the spectrum of transforming materials into products.

Moreover, though it hosted some huge facilities, Philadelphia was known far better as an incubator for small enterprises, as a city packed with workshops and mid-size firms begun in many cases by workers or supervisors who "graduated" from employment to entrepreneurship. In Lawrence, Pittsburgh, or Detroit in its Ford era, a tiny number of great firms were the major employers (American Woolen, U. S. Steel) and dominated the landscape as well as local economic and political life. Yet in Philadelphia, even the eight to ten thousand workers engaged at the Baldwin Locomotive Works were a minuscule fragment of the city's quarter million industrial employees. Hence the city was dependent neither on one manufacturing trade nor on any cluster of giant corporations for its economic health. Nor however could the rapid rise of a leading firm or sector produce a city-wide growth boom, as autos did for Detroit. Diversity was unspectacular, but it avoided the high-wire act of being dedicated to a single industry. It was such reliance that turned the textile and shoe cities of New England into "ghost towns" during the 1920s, and more recently has ground down Detroit and Pittsburgh. By contrast, Philadelphia's decay like its advance was spread across half a century, a pattern that robbed it of sudden drama and made it difficult to perceive or reverse.

WORKSHOP OF THE WORLD—A Selective Guide to the Industrial Archeology of Philadelphia
© Oliver Evans Press, 1990; adapted for the internet in 2007.





WORK SIGHTS: Industrial Philadelphia, 1890-1950 Scranton, Licht

One kind of crisis, easily visible, is marked by the realization that existing institutions no longer secure a workable match between the production and the consumption of goods; these institutions must be supplemented or replaced...

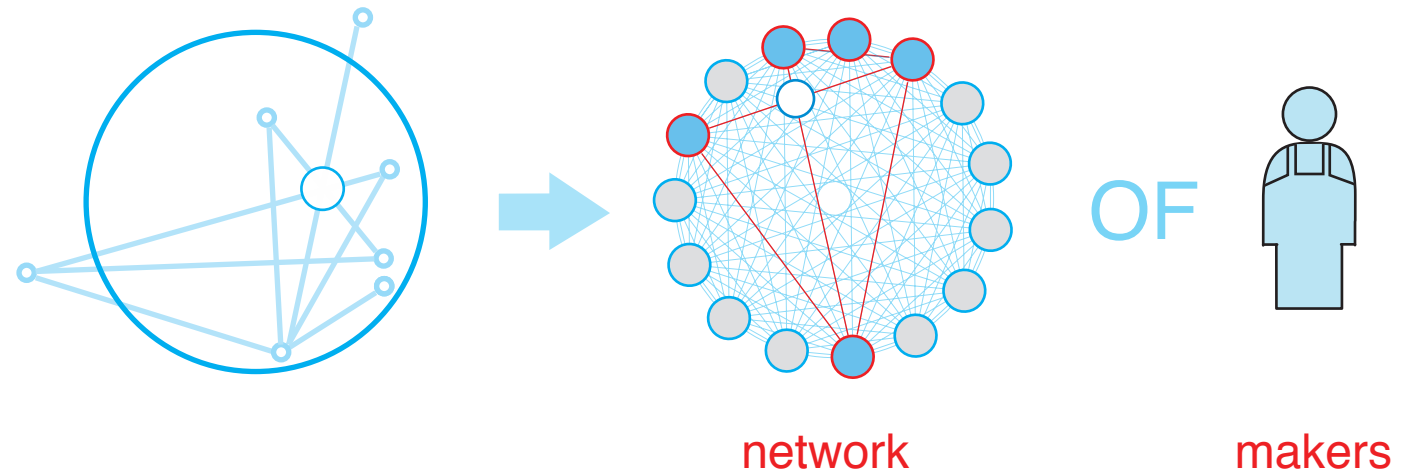
The first industrial divide came in the nineteenth century. At that time, the emergence of mass-production technologies limited the growth of less rigid manufacturing technologies...These less rigid manufacturing technologies were craft systems...Skilled workers used sophisticated general-purpose machinery to turn out a wide and constantly changing assortment of goods for large, but constantly shifting markets. Moreover- in contrast to mass production- economic success in these industries depended as much on cooperation as on competition.

Under somewhat different historical conditions, we argue, firms using a combination of craft skill and flexible equipment might have played a central role in modern economic life- instead of giving way, in almost all sections of manufacturing, to corporations based on mass production. Had this line of mechanized craft production prevailed, we might today think of manufacturing firms as linked to particular communities, rather than as independent organizations that, through mass production, seem omnipresent.

Prolonged confusion in the advanced world increases the risk of international economic collapse. Paralysis in any one country can mean national economic disaster... The choices in the coming years could define the way we work long in to the coming century...

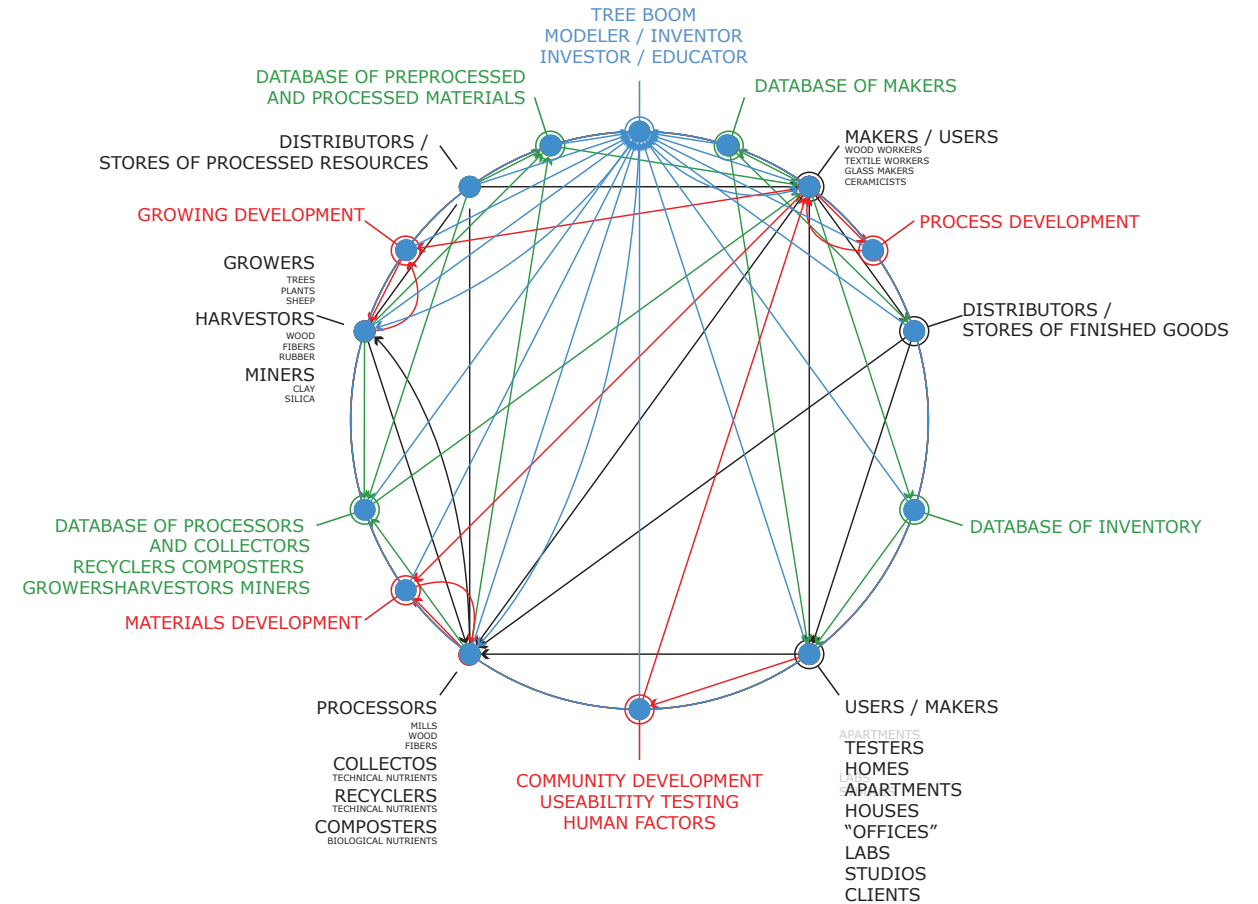
The choices that are made will be of particular interest to blue and white collar workers in the advanced countries...They will probably bear the largest share of the costs of adjusting to the new economic order...But though any of several strategies could lead to a viable economic order, these workers often lack the resources to even conceptualize the solution that is most favorable to their interests.

From: *The Second Industrial Divide*, Piore and Sabel



The idea of networks has not changed since the early 19th century, they have just become more complex and sometimes harder to recognize.

contextual manufacturing

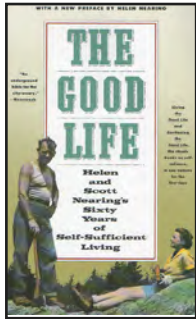


“Contextual Manufacturing” Diagram by Andrew Dahlgren,

What is Contextual Manufacturing?

Andrew Dahlgren , in his UArts MID Thesis, states that **Contextual manufacturing is about producing human biological and psychological necessities within the specific context of the community enacting the production processes.** Contextual production is accomplished by engaging in fulfilling work, not labor, and constantly evaluating the effects of actions.

He shies away from the term sustainable due to it's semantically being tied to keeping things the way they are- He acknowledges that it offers change in thinking, but not true change, due to its not altering the system itself. **He relates contextual manufacturing more to the Permaculture movement, where there is the simple the choice of operating in a system defined by rules outside of the governance of man- that of biological systems.**



“Our second purpose was to make a living under conditions that would preserve and enlarge a joy in workmanship, would give a sense of achievement, thereby promoting integrity and self-respect; would assure a large measure of self-sufficiency and thus make it more difficult for civilization to impose restrictive and coercive economic pressures, and make it easier to guarantee the solvency of the enterprise.”

-Helen and Scott Nearing
The Good Life

The number of collectives and initiatives that are based on fundamentally changing or altering the current system are too numerous to count.
It is more fruitful to look at the more general approaches to enacting these changes.

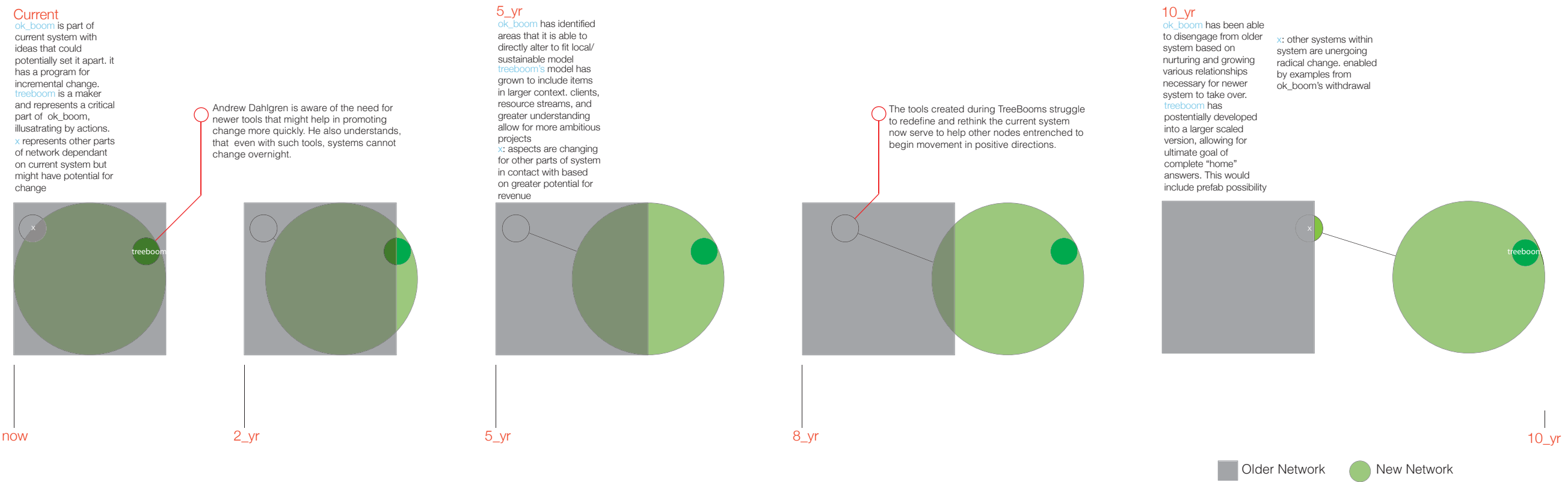
What are the common denominators underlying Bike Shares, CSA's, Slow Food Movement, Communal/ Sustainable Living, and any of the other various forms of proactive engagement?

Community
Quality of Life
Sustainable behavior
Rethinking accepted Social Systems
and related Economic Behavior.
A non-Industrial approach

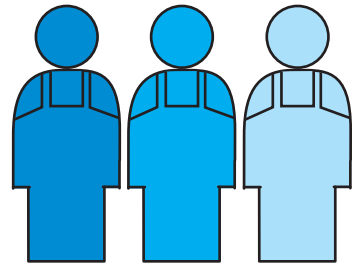
Is there a way to take Andrew's Thesis and engage the ideas more actively.
He stopped at defining the alternative system, using one small project to simply help qualify his definition of Contextual Manufacturing.

Can we take this further. Can we map these various initiatives to see where the common ground lay?
As designers, can we create working tools to challenge our current system, tools others can use and build on?

A possible example of a small network creating change



A consistent updating and re-evaluation of what the long term goals are/ were is critical to adapting company to any new insight



Who are the
stakeholders
in this
project?

you are.

as well as:

- _ anyone interested in making.
- _ existing local small business owners.
- _ the “working” class.
- _ families that want to spend more time with there families.
- _ those with concerns about maintaining a sustainable existence.

intro



I began this studio working with **Andrew Dahlgren**, helping develop his concept for a new company: **TreeBoom**. The concept for the company came from his theses work on “**contextual manufacturing**.”



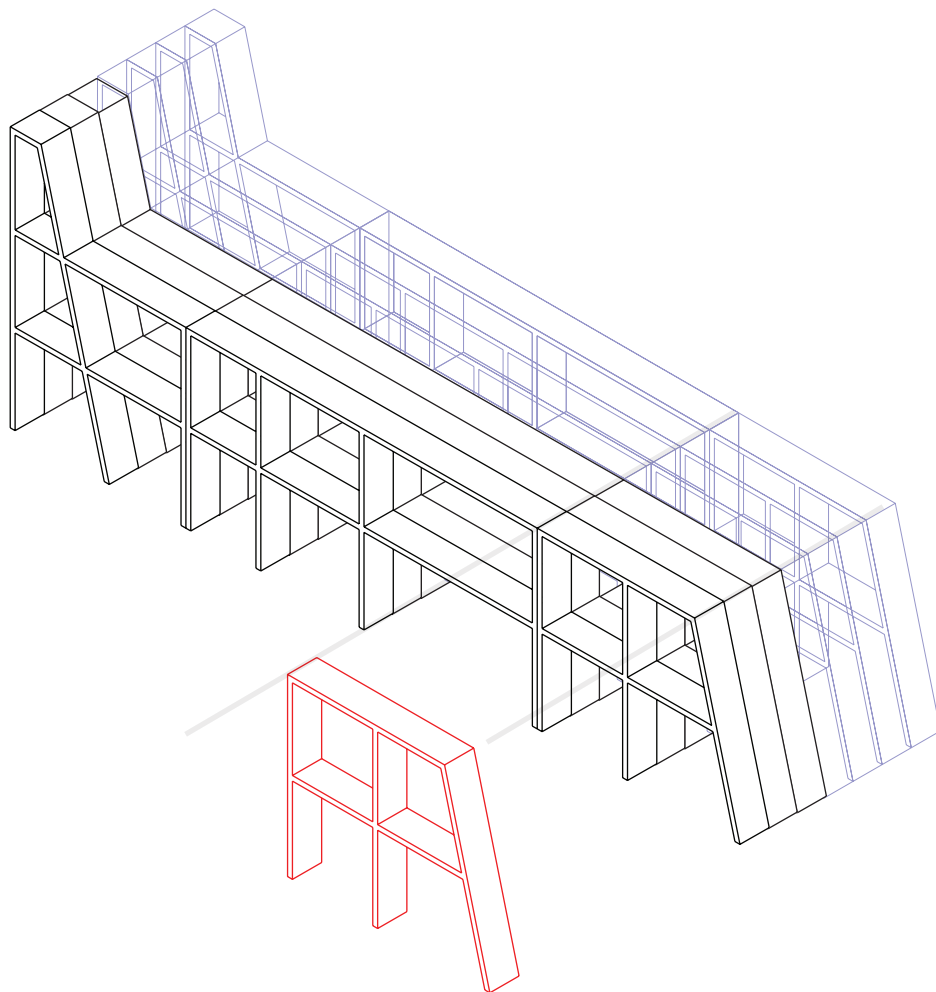
treeboom

TREE BOOM IS LOCATED IN PHILADELPHIA, PA AND IS BASED ON THE PRINCIPLES OF **CONTEXTUAL MANUFACTURING**. WE ARE IN THE EARLY STAGES OF DEVELOPMENT. THE WHO, WHAT, WHERE, WHEN, AND HOW OF THE COMPANY, THE COMPANY IN RELATION TO THE COMMUNITY(IES), AND OUR PRODUCTS ARE AND WILL ALWAYS BE IN DEVELOPMENT. TREE BOOM'S PRODUCTS WILL BE CREATED BY CONSTANTLY FINDING INNOVATIONS IN THE PROCESSES OF DESIGNING, PRODUCING, EXCHANGING, AND COLLABORATING WITHIN THE CONTEXT OF OUR LIVE AND WORK ENVIRONMENT.

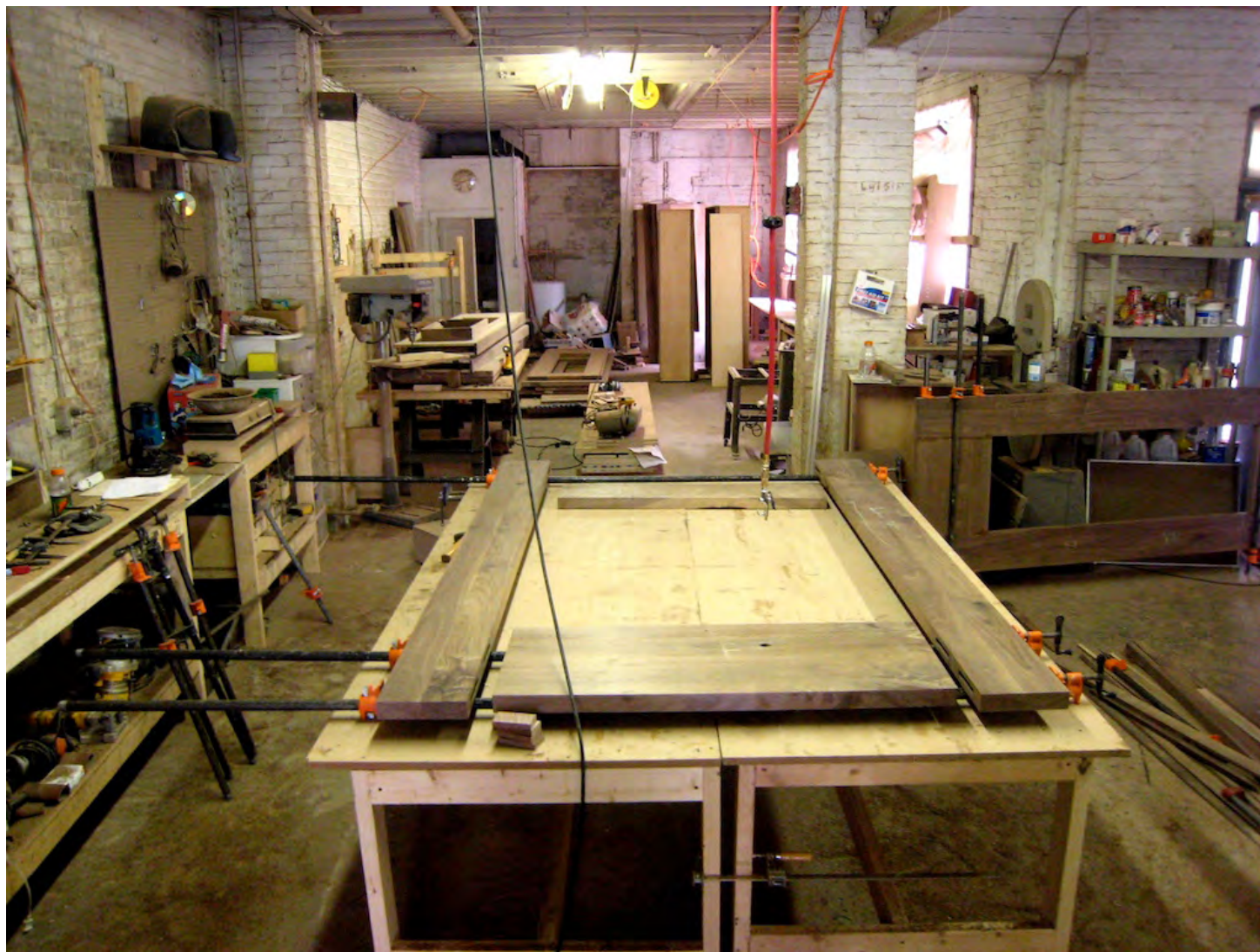
From www.treeboom.com

early goal:

An early goal was to map some possible scenarios of production for a TreeBoom product. The idea was to highlight some of the critical points of the manufacturing stream, using that information to point out difficulties or inefficiencies in the current system.



SOLID WOOD	MOLDED	CNC
Regional lumber from local services that are possibly pre-milled. Construction would be using traditional joinery techniques	Unusual but possible production method based on local resources and craft labor	Using Computer Numerical Controlled Technology, and low impact resin ply and composites, one could streamline and offer possible customization with relatively low impact.



SOLID WOOD

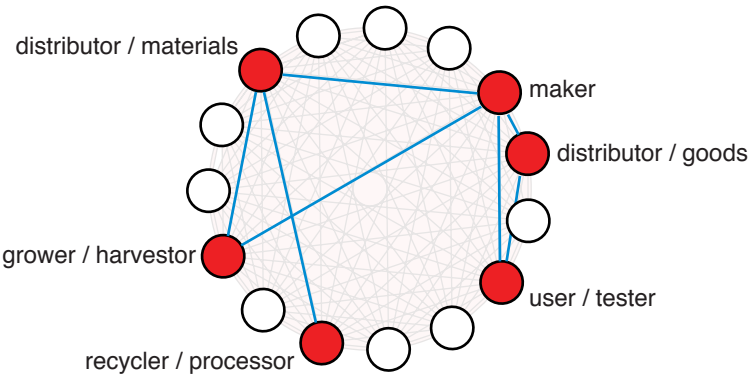
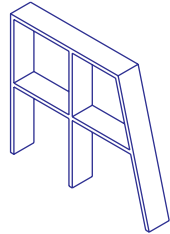
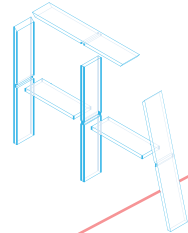
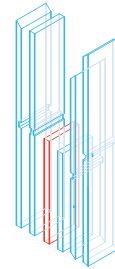
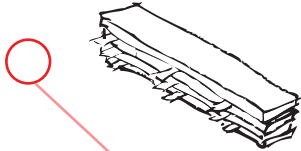
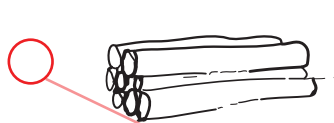
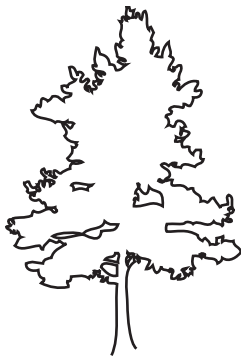
Reclaimed



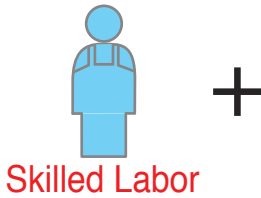
Library Bureau of Herkimer, NY.
The Herkimer plant produced furniture to library standards.
It went through several mergers and ended up as Mohawk Valley Community Corporation. [More than 85,000 board feet of heavy timber was salvaged from the structure.](#)

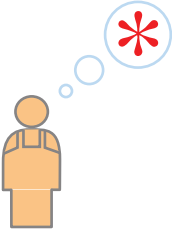
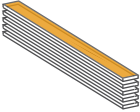
FSC Certified

The **Forest Stewardship Council** was created to **change the dialogue about and the practice of sustainable forestry worldwide**. This impressive goal has in many ways been achieved, yet there is more work to be done. **FSC sets forth principles, criteria, and standards that span economic, social, and environmental concerns**. The FSC standards represent the world's strongest system for guiding forest management toward sustainable outcomes. Like the forestry profession itself, the FSC system includes stakeholders with a diverse array of perspectives on what represents a well-managed and sustainable forest. While the discussion continues, the FSC standards for forest management have now been applied in over 57 countries around the world.



The tighter the system and the more each party is aware of the others- there is increased opportunities for efficiencies and understanding of processes



	 		MATERIAL	class raw recycled location finish
			TOOLS	CNC traditional hand automated
			LABOR	skilled unskilled craft type
			SPACE	work storage distribution assembly
			TRANSPORTATION	raw material stock material finished goods people
		ways of using exponents to make		complexity / definition

Notes

How does one source vendors for Reclaimed and FSC Certified Lumber?

ThomasNet, Sustainable Business Network?, GoogleMaps / Search?
Room for a more specific Tool

How Does locate a local shop capable of this type of work?

Web search & cold calling, ThomasNet
Room for a more specific Tool

Could the different parts of the “making of” be done by different people in different locations locally with the idea of specialization and a higher standard for their specific part?

Possibly. A possible intervention / creation of working parts of system.

Assemblers with special tools, milling specialists that concentrate on machine work, and finishers that work in safe conditions with environmentally friendly paints and finishes.

There are already existing components like this locally, but the number of sustainably minded vendors are small in number.

Reclaiming Process:



Raw Material



Nail / Metal Extraction



Saws, Planars, Resaws



Kiln



Sorting



Storage



Packaging

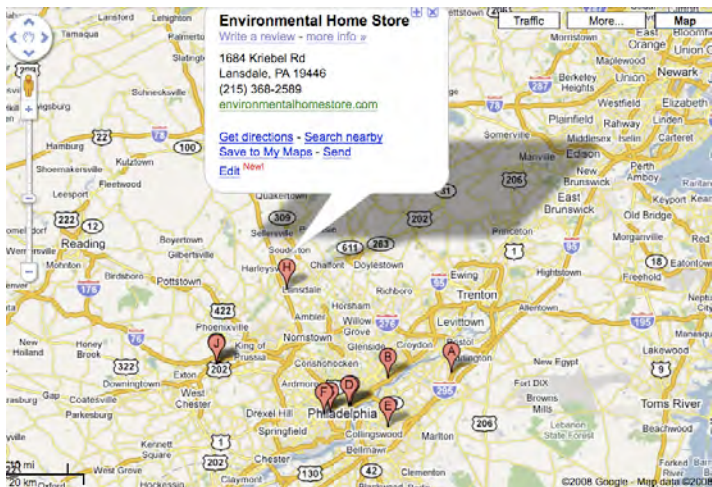


Shipping

ThomasNet Search for FSC certified Wood:

The search in both Western and Eastern PA yielded a total of two results- Universal Forest Products, and Industrial Hardwood Inc.
Neither company mentions anything on their web sites about FSC certified product...

and a Google Maps Search by Zip Code



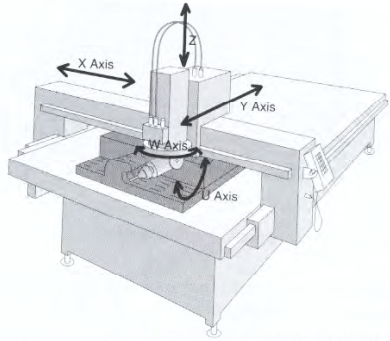
The search yielded two actual wood suppliers, one mentioned nothing about FSC certification and the other- The Environmental Home Store is a first successful search.. Though the lumber is already milled for flooring purposes. You would have to keep searching to find a distributor that carried dimensionally different lumber.



MOLDED

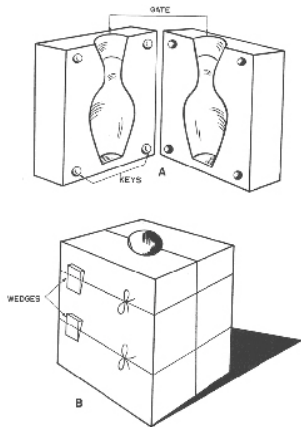
Making the Mold:

1. CNC used to cut mold based on a CAD file.



This process could be used for “under pressure molds”. Rotational molding and injection molding are usually higher priced and too costly for low runs of product, but if Tooling and CNC costs are mitigated through lower costs and more abundant machines, there could be opportunities for smaller business to enter this production stream and possibly create alternative methods..

2. A negative mold can be made using a prototype and casting it in the necessary number of pieces. The prototype, or blank, would have to be fabricated by a woodworker or skilled craftsman.

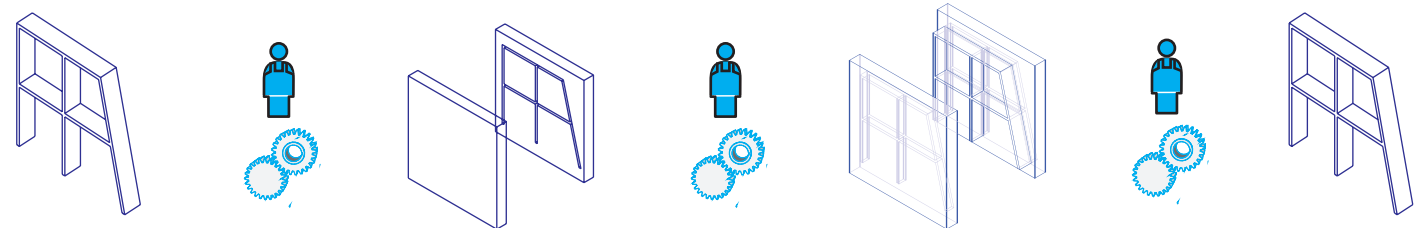


This is a process usually reserved for smaller items, and driven by “craft”. There is possibility with experimentation though. There are ways to rotational mold smaller runs without a costly CNC Mold for example. It would be about experimenting with process. To do this it helps to know all of the resources that might be available, including skilled minds and appropriate machines.

Aluminum
Thermoset Plastic
Wood
Plaster
Hydrocal

Material

The materials vary greatly depending on which direction one takes with the casting and molding process. All phases of it require an understanding of craft specific to that technique. If one is planning on experimentation and a process driven product, then it would be ideal to be able to have communication with representatives from several streams of production to gain more complete insight into what is possible and what changes might be appropriate.



* Who are the makers for these different processes? Where do you find people to “work” with?

Notes

How does one determine the viability or truly sustainable nature of a process or material stream?

It appears that one must cross reference multiple searches and tools to evaluate this. It would be good to have a more concentrated and locally contextual information on specific topics. Possibly open source.

How do you locate a local shop capable of this type of work?

Web search & cold calling, ThomasNet.

Room for a more specific Tool

With this process there is an understanding that there is much greater room for variation with materials, labor, and actual details of process.

How does one go about processing this using accurate and appropriate information?

This is the most difficult thing to do as of yet. Simply locating manufacturers and material streams are not sufficient. There is room for more ways of accessing information. More simplified ways of processing it and collecting/ archiving it. And there is possibility of a tool that can help one determine the overall equation of the “sustainability” of an idea.

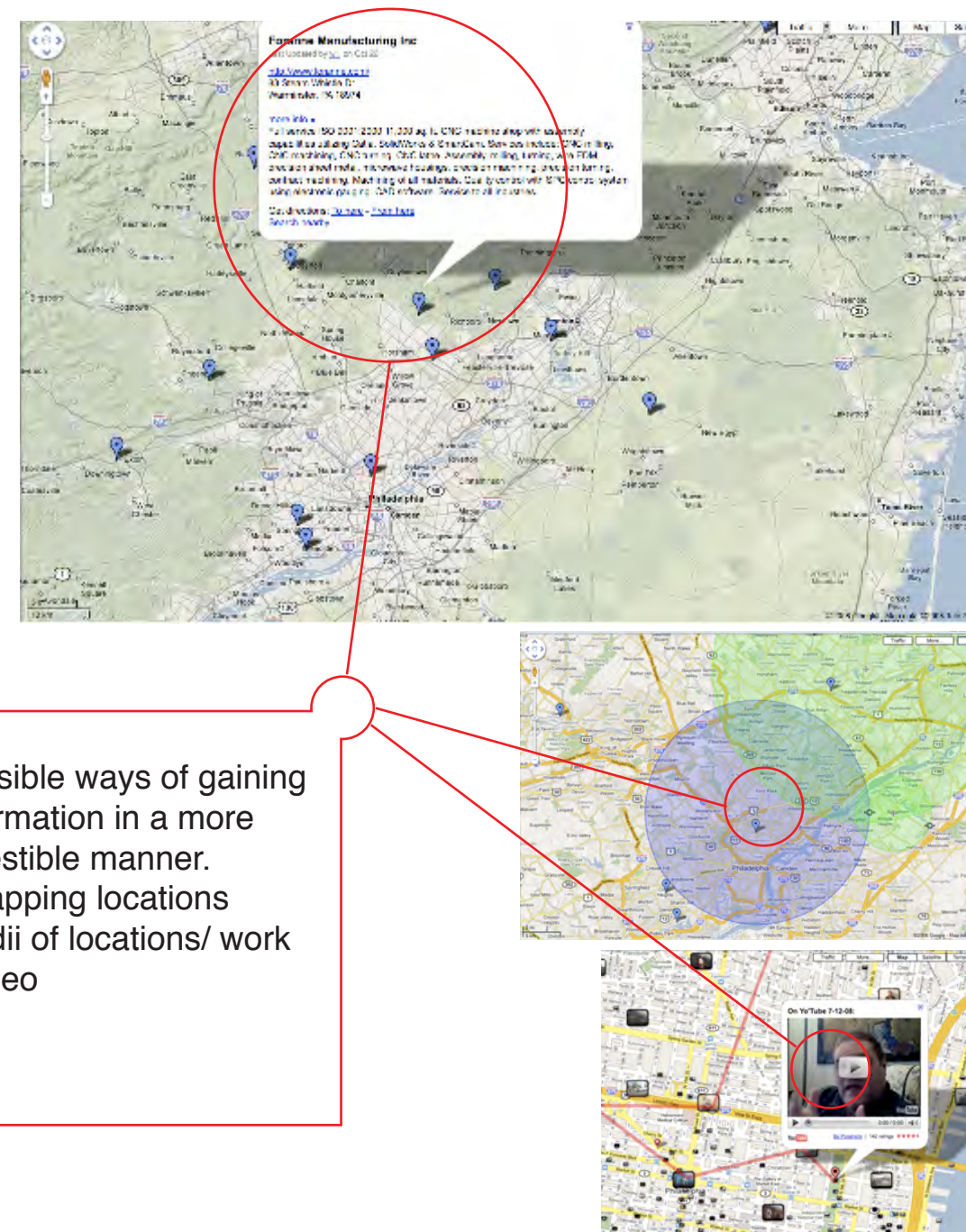
The variation in possibility in this specific stream leads to the question of what already exists on the local level that would aid the process. If there are gaps in a possibly viable process, is there a way to spur the community to act on this?

This would be a question for existing smaller makers. What roadblocks to productivity have they run into, and what are there suggestions for dealing with this.

Where does one begin?

CNC shops can supply traditional raw materials needed for molds, but finding the right shop- one willing to experiment or work with untraditional materials is challenging. To find the information at right, ThomasNet information was uploaded into Googlemaps.

Plaster or hydrocal would be available from completely different sources. They were not easy to find using either ThomasNet, Google. They are known on a more local level- word of mouth from Craft studios and Art Supply Stores.



Possible ways of gaining information in a more digestible manner.
+mapping locations
+radii of locations/ work
+video



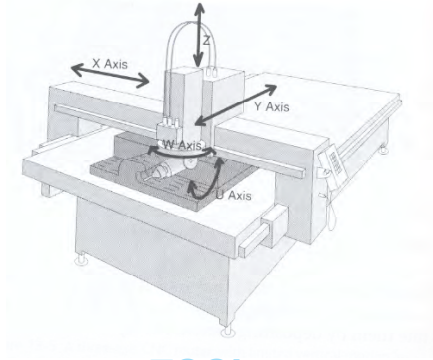
CNC

1



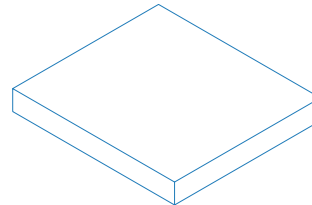
PROGRAMMER

2



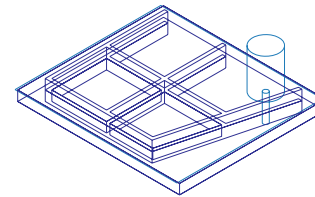
TOOL

3



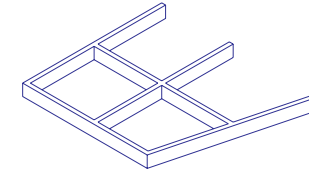
MATERIAL

4



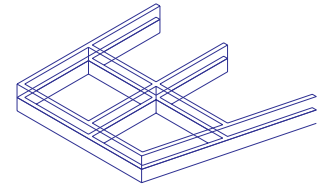
PROCESS

5



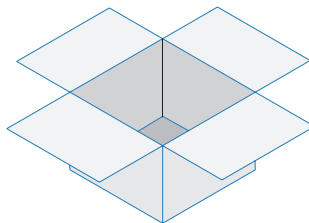
FINISHING

6



PRODUCT

7



PACKING

8



SHIPPING



8+ STEPS

With each decision there is an increases in complexity, increased difficulty of determining truly sustainable processes, and increased chances of operating on misinformation.

How does one make informed decisions in each of these steps? Where does one get information that is current and process appropriate?

Notes

Are there local CNC shops?

Yes

Knowledgeable of different materials and sustainable practices?

This information was unavailable. Would require calling each facility.

What about assembly and packaging? Are the local CNC vendors capable of this?

Information was not available either. One shop called was willing to put together a quote if there was enough product.

Where does one find CAD designers?

This would seem obvious, but the search would be different.

Coroflot was an option, but it is not as easy to source local work from.

Where does one begin?

The CNC shops are helpful, but they vary on their willingness to experiment with material, and their willingness to sustain a conversation about alternative ideas.

It becomes more and more apparent that the ability to be informed and aware of one's choices is paramount to understanding the complexity of any design / making project. It is with this information that we must determine what process or method is truly the most contextual and sustainable. **Where and How?**

new goal:

The information I have gathered up to this point has been informative, but somewhat predictable. There is a need for more examples- more sincere feedback from more parties. I will be creating a questionnaire that I will be handing out to project advisors as well as a sample selection from local industry that has had enough experience to give informed feedback.

I will also be including more case studies to derive information and questions from.

case studies



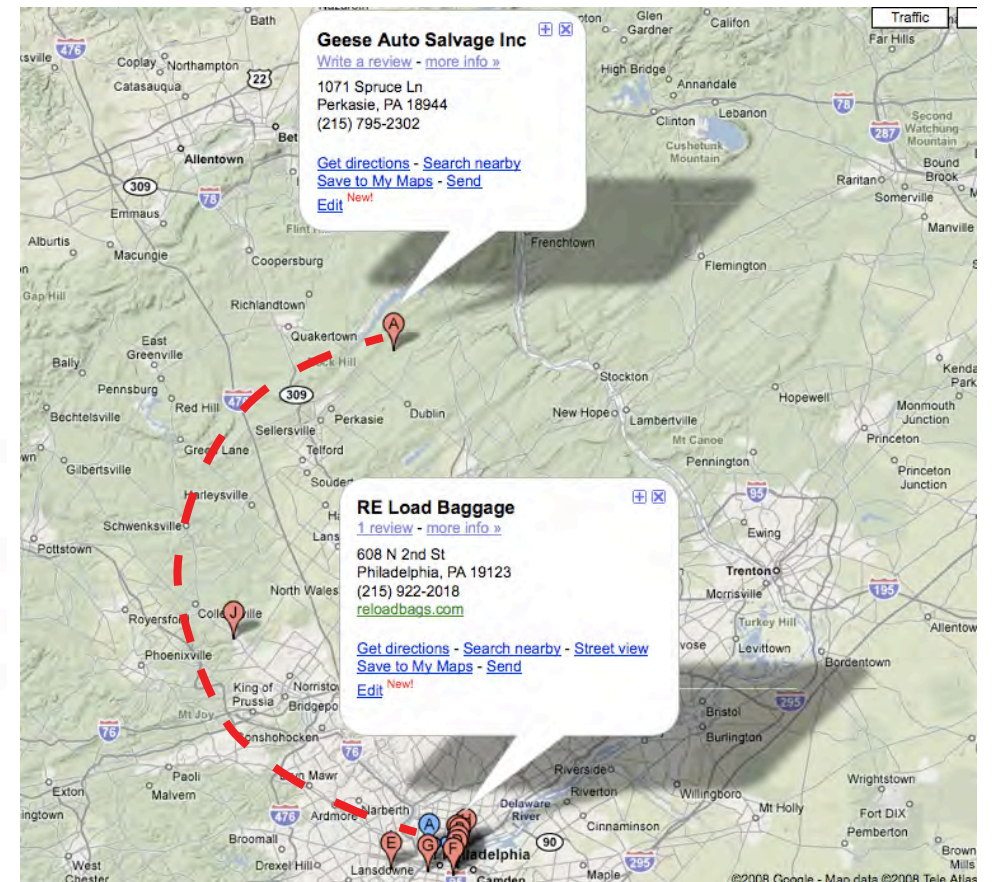
FABRIC HORSE



Fabric Horse uses reclaimed seat belts from the automobile industry as an integral part of one of their bag designs. They tried different approaches, but none that worked until they found a salvage yard in Perkasie PA named Geese Salvage. They formed a relationship with the Yard. Once a month they take Philly Car Share out to Perkasie to pick up seat belts that have been removed and kept by the Yard for Fabric Horse.

Fabric Horse has also formed a mutual relationship with a similar bag maker named ReLoad Bags. Carrie works at ReLoad once a week, and helps manage production, in return for the scraps from the textiles ReLoad uses- primarily rip-stop and Cordura. She is able to produce most of her work from these scraps.

The Seatbelt bag is pretty great. It's the perfect size for everyday things and also for an overnight or weekend trip. It clips across the chest with an old belt buckle. The buckle and straps are both ripped from local junk yards. The bag itself is also made of either reused or recycled materials in conjunction with new fabrics. This includes waterproof vinyl scraps from **RELoad**, recycled banners, and really all kinds of random material. These bags are presently made to order only. Please feel free to **contact us** with any questions. The Seatbelt Bag retails at \$99.





Monome

monome is brian crabtree and kelli cain.

we aim to refine the way people consider interface.

we seek less complex, more versatile tools: accessible, yet fundamentally adaptable. we believe these parameters are most directly achieved through minimalistic design, enabling users to more quickly discover new ways to work, play, and connect. we see flexibility not as a feature, but as a foundation.

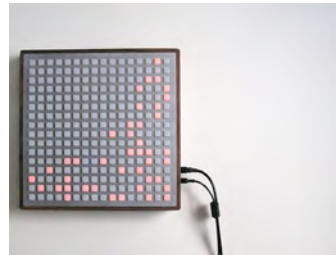
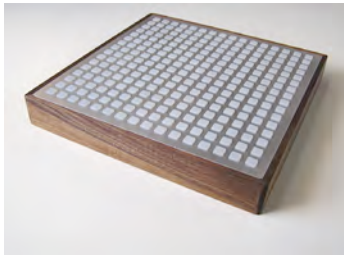
we strive for economic and ecological sustainability. careful design practice allows us to contribute to culture and preserve the environment by choosing domestic, high-quality, and responsible providers and production facilities. we acknowledge that our future will depend on our ability to support and maintain a local, regenerative economy.

we choose not to outsource production in cases where it supports controversial governments, exploits workers, and leads to destructive environmental practices. by working with small, local companies we hope to foster long-term relationships, gain more insight and control over production, and actually witness our products' progression. as a result we engage in continuous and responsive design. we choose to support companies who share our values; companies who provide living wages, clean and safe working environments, and high quality goods.

careful, minimalist design and durable materials ensure our objects will survive throughout their creative potential. packaging is kept to a minimum and is recyclable.

we seek to actively facilitate community participation and encourage sharing.

we are always learning.



monome docs

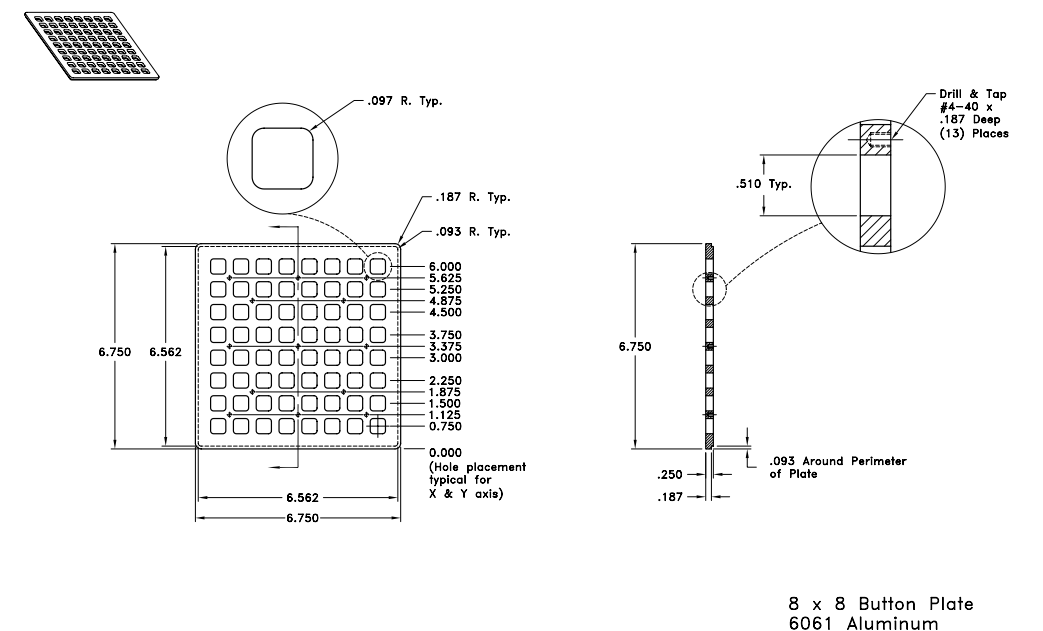
news post

Trace: / world / docs / grid_layout / tech / 40h / thrulogic_schem
here: tech:source_files:40h:thrulogic_schem

tech/source_files/40h/thrulogic_schem.txt · Last modified: 2008/02/23 19:39 by matthew

Show pagesource
Old revisions
Login
Recent changes
Index
Back to top

we believe that open source is commercially viable and mutually beneficial for our collective and the consumer. in opening our software we eliminate wasteful, redundant coding for ourselves by incorporating proven libraries and frameworks. we in turn provide these same benefits to others who wish to incorporate our development efforts into their projects. we believe distributed development leads to more stable software and more creative application design. we believe open applications provide more flexibility for users to adapt tools to their specific needs, encourage creative use of software and hardware, and produce a greater diversity output from users.



40h

Serials 0-400

Serial	Owner	Country	Note
4	lobobelga	BXL, Belgium	bought from Alien9 in Italy
16	makingthenoise	Cambridge, MA, USA	
24	scarab		
45	miaouxmiaoux		
57	aardvark	Boston, MA	
59	zero		
82	enjo	Melbourne, AUS	added accelerometer
89	t1mp		bought from momo_the_monster
93	soundcyst	Bay/LA, CA, USA	added accelerometer
115	stephen	Exeter, UK	added accelerometer
150	gchang		
161	naven	Liège, Belgium	bought from oramas
200	bean	USA, NYC	
203	olivier lasso	Paris, France	
215	dby	Västerås, Sweden	
221	bean	USA, NYC	
242	kafi-d	CH,St. gallen	
251	mrlee		
256	calm	Scotland	
262	stigi	Germany,Dresden	bought from arp1618; with accelerometer
298	linusislost	San Francisco, Istanbul	
311	wingo	Los Angeles, CA	original owner
312	oldanalogger	Worce, UK	Bought from eBay - vexpensive..!
325	corporation	USA	
336	nickshelestak		
374	rcutz	rio, brazil	
379	restlessboy	Cardiff, UK	used to own 256-071 but part-exed for this little fella

Though Monome is Philadelphia based and concerned with local production, they have a much wider user group. This brings up the idea of **Inter-Local:** The concept of community existing on a global scale- like minded initiatives connecting with one another. This can trump the demands of existing in an isolated local manner, by offering greater context and understanding.

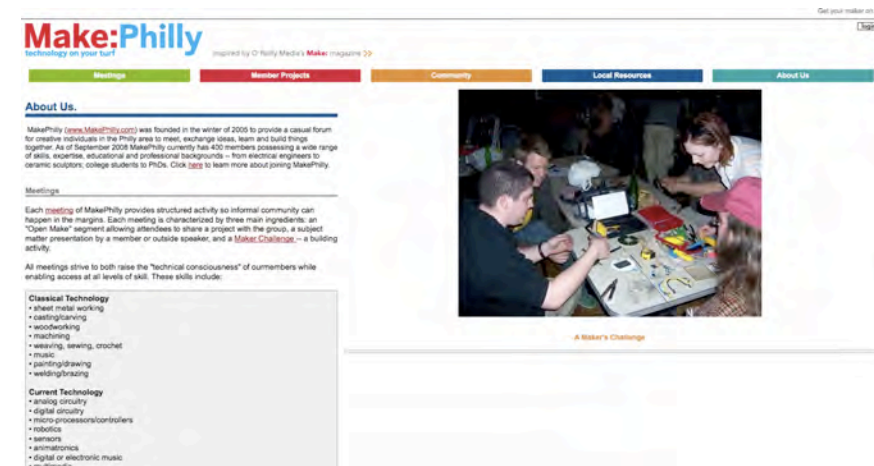
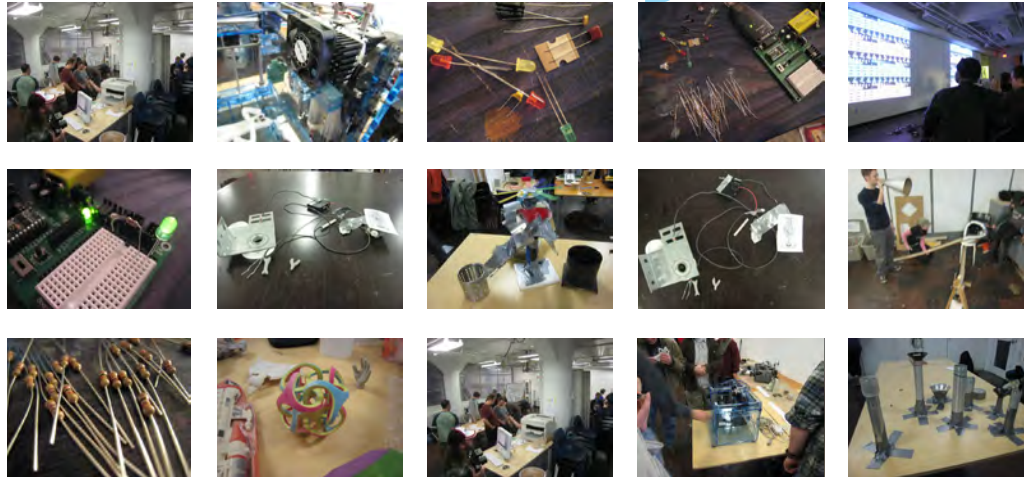
Monome is a modern example of Piore and Sabel's Flexible Specialization. They spoke about the Lyonese Textile industry of the early nineteenth century: "they.. constantly altered the goods, partly in response to changing tastes, partly to change tastes, in order to open new markets... their flexible use of increasingly productive, widely applicable technology and their creation of regional institutions that balanced cooperation and competition among firms, so as to encourage permanent innovation. Monome's open source commitment is a more advanced modern equivalent of this stance.



MAKE and CRAFT magazine both represent what is a growing movement among the current younger generation. There is an increased dissatisfaction with not being part of the creation/ making process, and a growing ability to address this by “hacking” and “making” -using some of the same tools that industry has taken for granted. The success of this movement is based on the close-knit community that makes it up. Skills are learned and shared with the same open source mind-set that Monome believes in. This gives the community control over what they use again. It empowers them, allowing design interventions at every turn.

Both groups have homes in most every major city. Philadelphia is home to one of the larger ones: MAKEPhilly. They meet at our own University of the Arts on the same floor as the ID Department. There is also an extension of MAKEPhilly called, The Hactory. It picks up where MAKEPhilly leaves off, offering a physical home to the community that it represents..

MAKEPhilly:



Fertik's Electronics Remembered



(Not actually a picture of Fortik's but pretty darn close)

I was pressing my face as hard as I possibly could against the backseat window of my dad's car. I knew it was only a matter of minutes now before he would call it quits. We had been driving around (without a map, as usual) looking for this "junk store", as he called it, for easily a half hour. And now it was starting to snow. I needed a small miracle and I needed one fast.

"ELLASTREET!" - I shouted, "We found it", I was nine. The year was 1985 and my most favorite place on earth, the surplus store in the back of Edmund Scientific, was about to meet its match.

The windows in the back were fogging up faster than I could wipe them (and, Snowflakes be damned, I was rolling mine down to get a better view.

We pulled into a gravel parking lot that ran right up to an old dirty white shed. I immediately eyed something with circuit guts hanging out of it. I started kicking the back seat. "Come on let's go!" I pleaded. "Don't get your hopes up", my dad said, "It looks like it may be closed. There's only one other car here."

"No way" I told him. And before the car had fully stopped I hit the gravel running. That thing I sponged turned out to be a dozen things — machines of all sorts. None of which looked like anything I had never seen before. They had the coolest dials and gauges and old levers and switches were. "I wish at all this moment!" I shouted. "Maybe it's all done!" I shouted. "A few all. It's been left outside."

maybe they're throwing it away?"

I heard my dad knocking on the stud door. I skipped over to him but began to fear the worst as each knock went unanswered. At last, we heard a muffled voice on the inside: "Just a second..."

The door creaked open and wonderful old machine smells poured out. A scruffy old man appeared and was trying to say hello to me but all I wanted was to get a better look inside. From what I could see the place had to end. "It goes on forever I shouted!" Leon Smith smiled smugly. "Come on, in here, we can watch and take a look around."

Battered army green colored shelves and tables of every height and size formed the aisles in this tinkerer's woodland. Upon them were wooden bins overflowing with treasure. Giant potentiometers, jet fighter vacuum gauges, turn of the century mercury switches...

of me. It was Loom. I remember wanting so badly to tell him that I knew about mercury switches but the wind had just been knocked out of me.

"My son just wants to look around for some parts... parts for his spaceship." "No Dad! - Don't tell him that!" I suffered in silence.

There is much to tell in this 30-sec. spot about the way that the world's most dangerous countries behave and why. We found that in the first half of

This list of resources on the MAKEPhilly web site is as complete as I have come across concerning local accessible resources. It is only accessible through there web site though. It is obvious that the maker community is aware of the power of knowing your network.

Dana Schloss, co-chair of MAKEPhilly was willing to join my research committee. She is an Exhibit Designer in Baltimore who still comes to Philadelphia to participate in the MAKE activities.. She currently teaches at UArts in the Exhibit Design Program.

I will be contacting her after break.

The Hactory:

The Hacktory promotes the use of technology in the arts through:

- * Classes
- * Community Events
- * Shared Facilities and Equipment
- * Artist in residence program
- * Art and Technology promotion
- * Materials Exchange

Harris Romanoff, one of the founders of the workspace as well as the monthly social group it extended from, Make Philly (makephilly.com), likens hacking to recycling. “It’s very much about taking something that someone else has discarded, something that they view as a piece of junk, and saying, ‘You know what? There’s good parts in there. There’s motors, there’s circuit boards, there’s plastics. There’s metals that I can hack out, save, salvage and use in a new way to create something that I’d like to build.’”

Clarifying, he says hacking is about “taking that which has already been made and repurposing it.”

The idea to gather such like-minded people together first occurred to Romanoff a couple of years ago, after reading the debut of the do-it-yourselfer quarterly Make magazine. He says he and a friend were kicking back over beers, daydreaming of how great it would be to find others who were into the magazine and into building things.

It’s serving as a forum for people to connect, to discover that maybe they could team up with this person on a creative project, that, oh, that person knows something that they’ve been looking to learn more about,” Romanoff says. “Really, at the end of it all, **Make Philly is about connecting folks who are looking to do creative things, things with their hands, things with their minds, and just come together, and have a common place to do that.**”

questionnaire.

some possible questions:

What is the name of your organization, business, or collective?

What is it that you make?

How long have you been active?

How long have you been in Philadelphia?

What was the most difficult hurdle to getting to where you are today?

What types of tools do you use on a daily basis?

Where do you use these tools?

Does anyone else have access to them?

Who do you regularly work with?

Do you produce product for sale?

What materials do you regularly use?

Where do you get these materials?

Did you have trouble initially finding these sources?

Is there a tool that you do not have, but could use?

Where are you located in Philadelphia?

What is your general mileage radius?

Do you own a car?

How do you receive your tools / materials that you work with?

What information tools do you regularly use?

Do you rely on the internet for specific services?

If So, What are these?

If you could start over, what would you do differently?

So..
What am I designing?

one possibility: an accessible online network

philadelphia making again:

In any city now, in any part of the country there are more than likely going to be more than a few people actively engaged in creating/ making/ designing, etc.

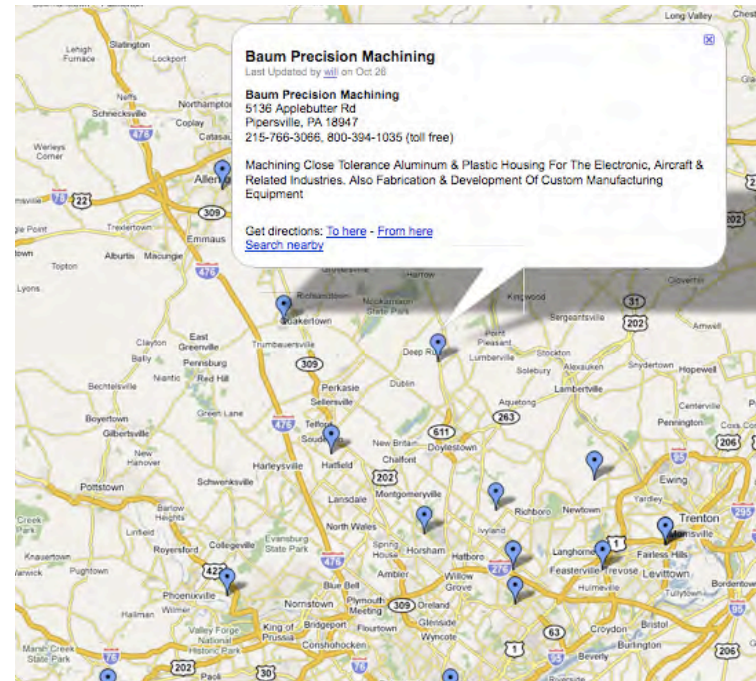
One of the common hurdles in these types of activities is understanding the current network of [getting things done]. This could be anything from building a graffiti generating robot, to a printing building size image on a weather proof material- how and who would be best involved in these endeavors.

There are more people who are more involved in the current environment. People who are not comfortable with just having products and services, but want to have a hand in the “making of” and “the how.” They want to know more and do more.

Philadelphia used to be a notable maker in the world. Can we put Philadelphia on the map again- from the bottom up. The smallest producer/ maker should be integral to the map. It will be about the network. Where paths and needs cross, and most importantly, a potential community and way finding system for any proactive citizen.

I will be working with Jeremy Beaudry and his Sophomore Multimedia studio to explore some of these possibilities.

I am not settled on this as a design project. I am simply allowing it to mature further, to see what it might afford once I have more information.



bottom up
key word based
manufacturing information
materials information
product information
people information
business information
available work
work needed
documentation
available tools
barter system
profiles

etc..

or another:

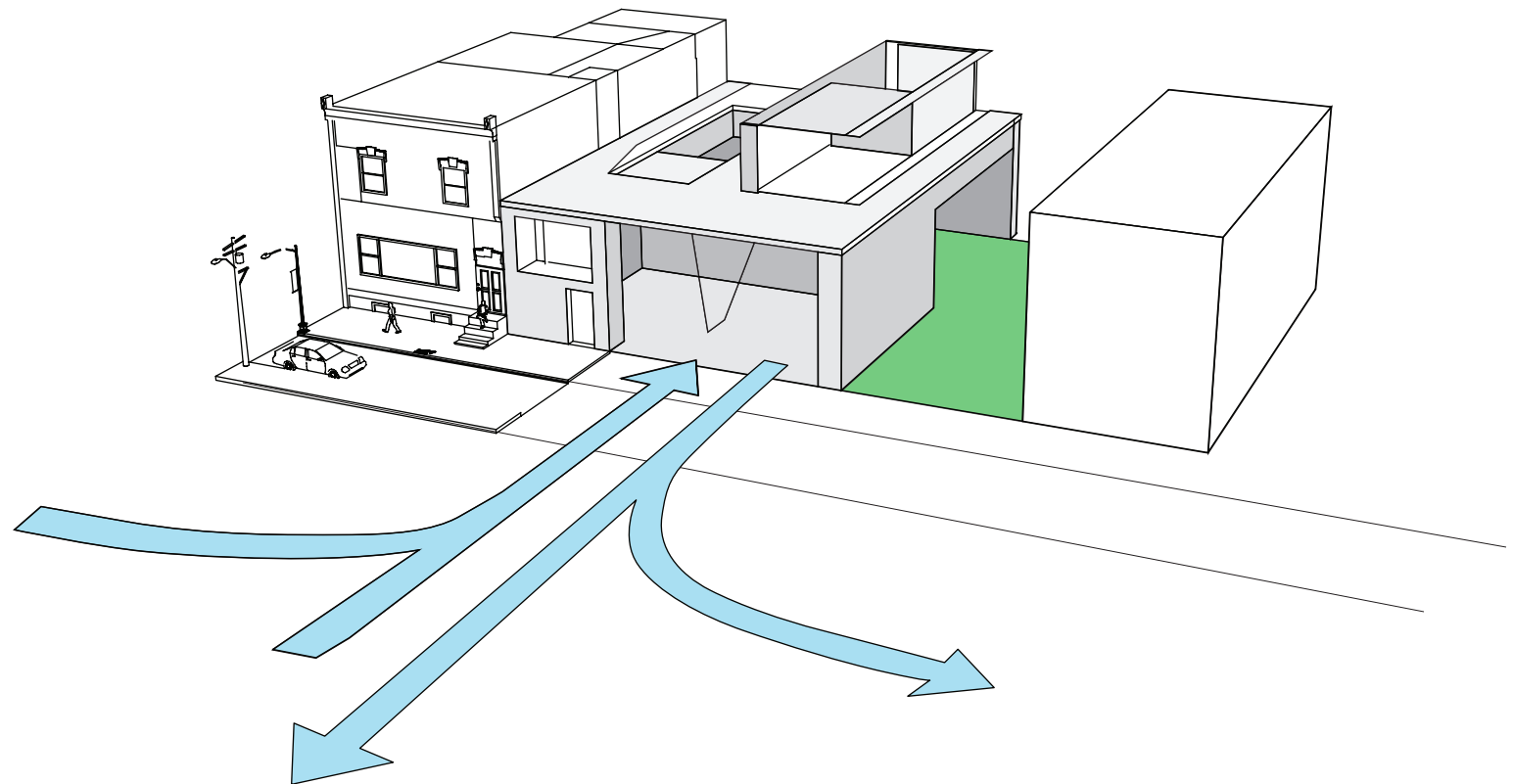
a place.

a physical network. where work might be exchanged, and tools shared.

where

information is ready.

not so much a building as what traffics through it.



next steps:

_secure thesis advisors:

multimedia
information architect (Avencia?)
industry representatives
technology representatives
craft: wood, ceramics, fibers
ThomasNet
Monome
MakePhilly: Dana Schloss
Hactory: Far McKon

_secure a primary thesis advisor

_quickly process new feedback

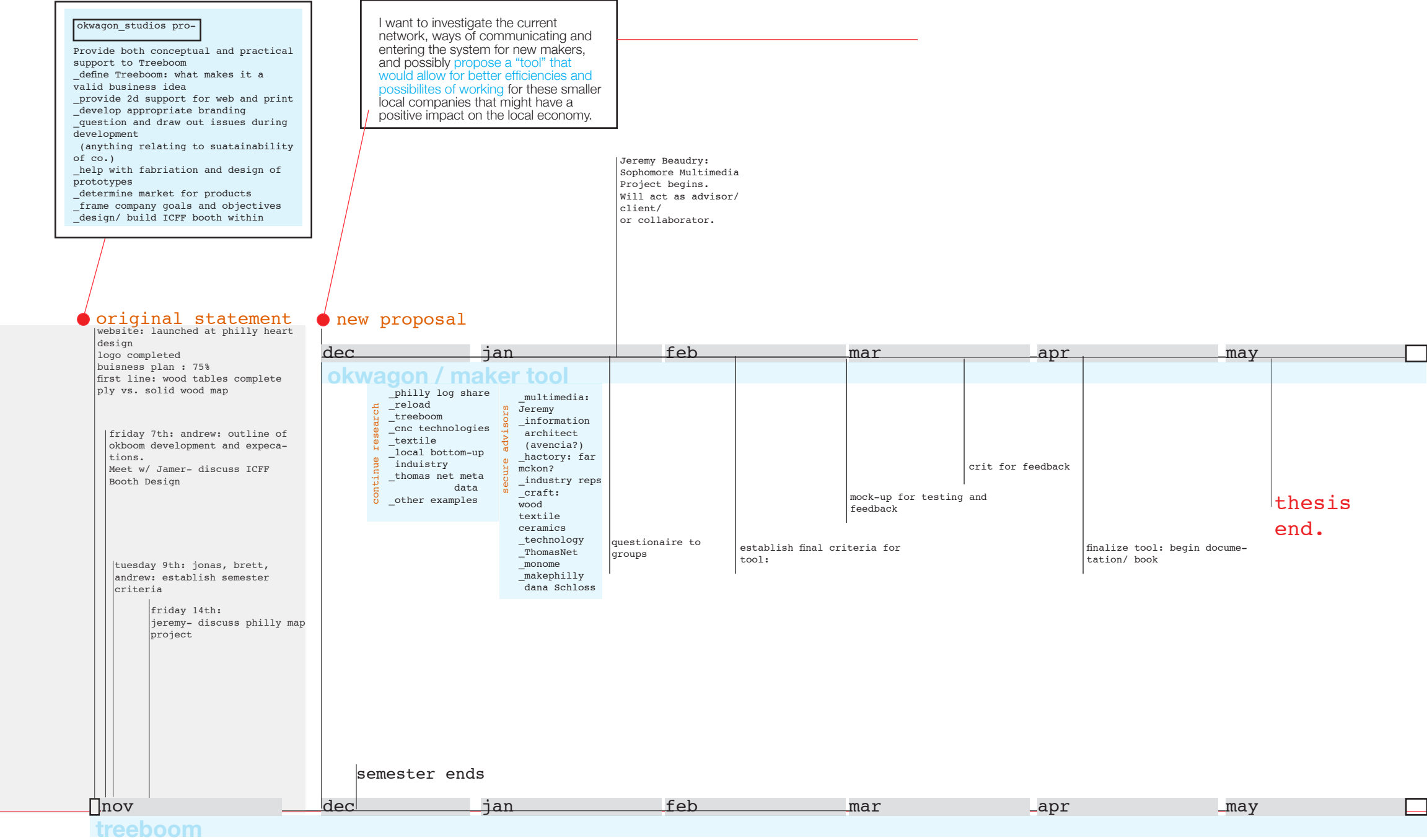
_generate more quantitative data.

_map types of businesses / stakeholders

_qualify final criteria for “tool”

**_have mock-up to generate further
feedback by march**

thesis calendar



thank you.

