

# CARSTONE:

SEPTEMBER 11, 2009

"BRING THE OUTDOORS, INDOORS."  
 ... HOW ARE SOME LACS PEOPLE DO THIS COURTEOUSLY?



OUTDOOR CALENDARS



DATE CALENDARS  
 "TEAR THE DATE"



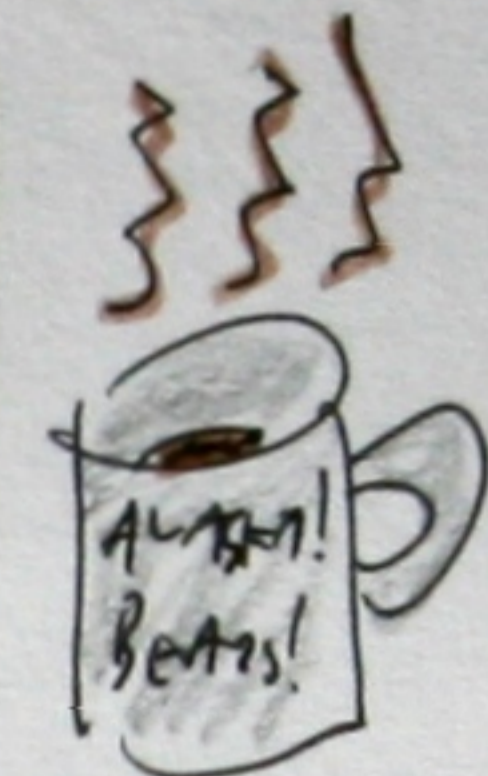
NEWSPAPER WEATHER PAGE  
 (LOCAL, REGIONAL, NATIONAL, GLOBAL)



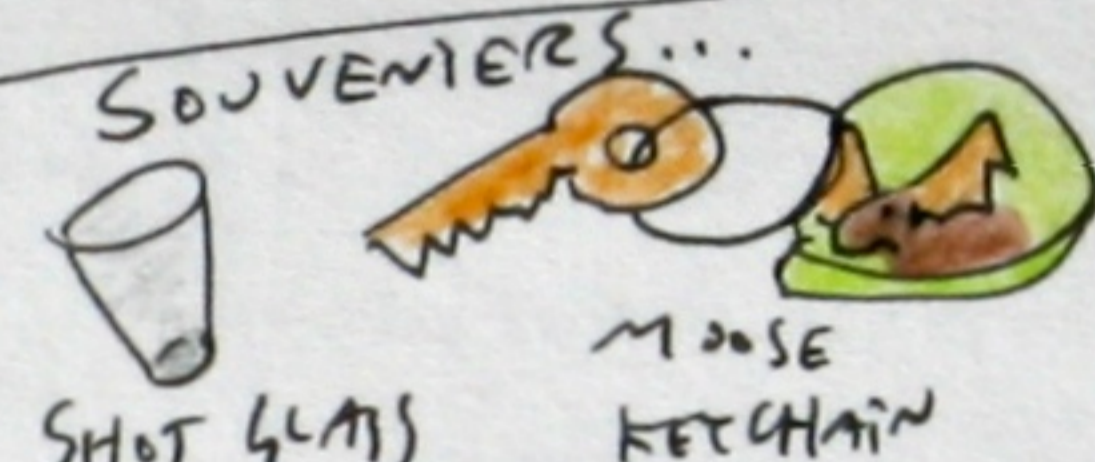
TU METEOROLOGIST  
 (SVEN SUNDRAND)



PAINTING, ROOM COLORS, WALL ART, ETC...



COFFEE MUGS



SOUVENIRS...  
 SHOT GLASS MOOSE KEYS



HOUSEPLANTS



NATURAL LIGHT LAMPS  
 (SEWING, MUSEUM, ETC.)



WINDOWS!  
 (EVEN W/ SHITTY VIEWS) → SAN FRANCISCO.

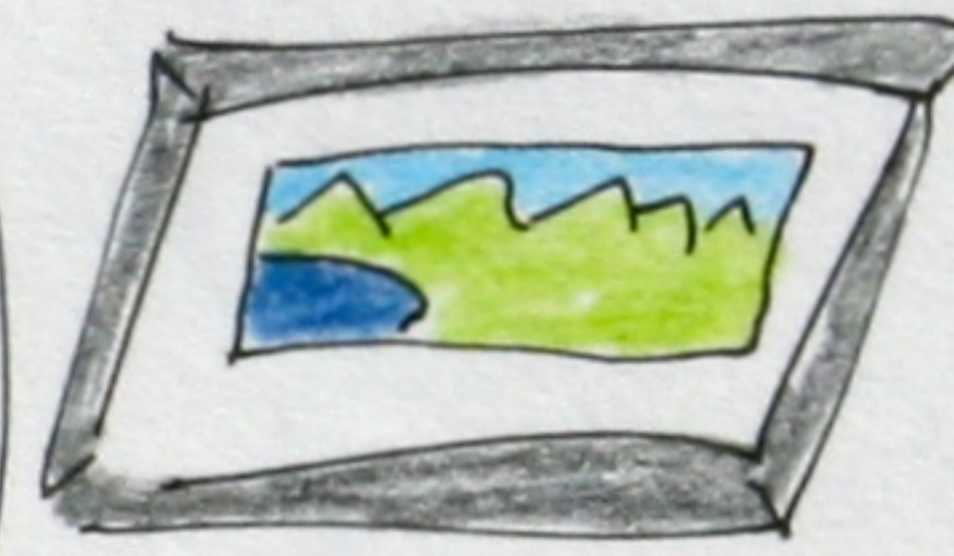


SKYLIGHTS

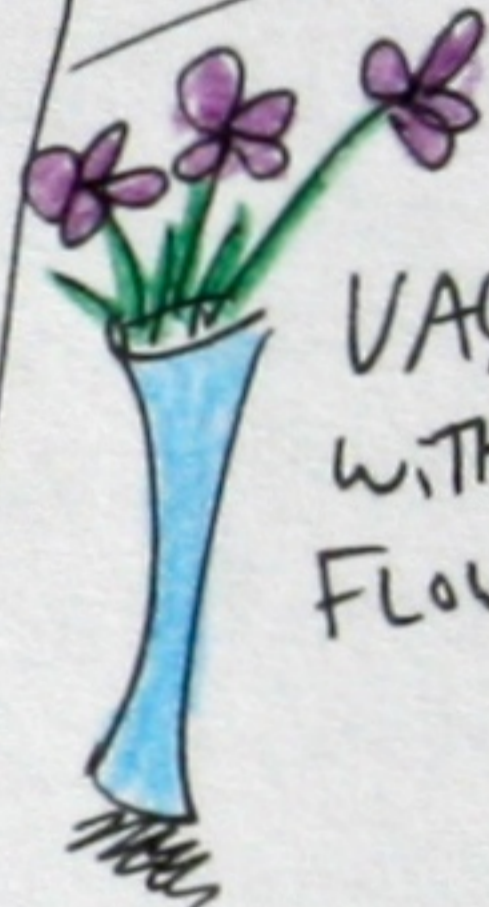


FRAMED PICTURES, PHOTOGRAPHS FROM TRIP, PEOPLE, ETC.

*PERSONAL*



PROFESSIONAL FRAMED PHOTOGRAPHY



VASE WITH FLOWERS



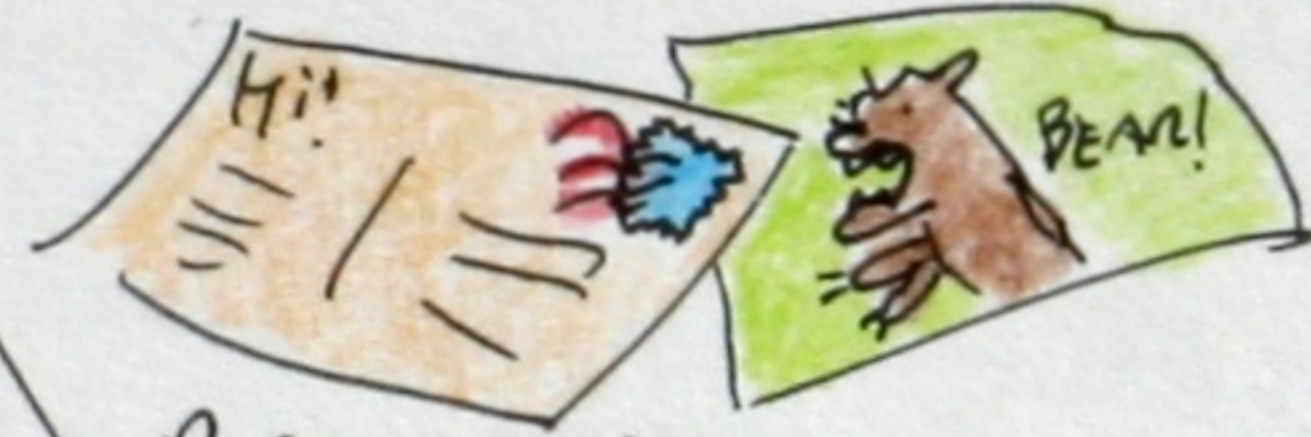
NATURAL BUILDING MATERIALS... EXPOSED RAFTERS, WOOD FLOORS, ETC.



THERMOMETERS



INDOOR/OUTDOOR DIGITAL THERMOMETER



POSTCARDS

T-SHIRTS



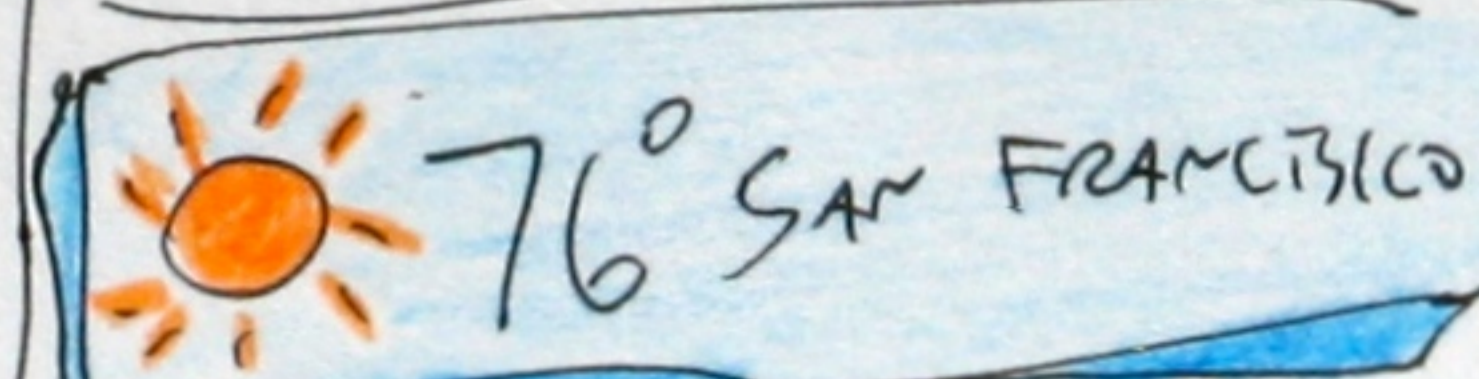
PAINTS, WOODLOTS, ETC...



INCENSE, "HIPPIE" STICKS

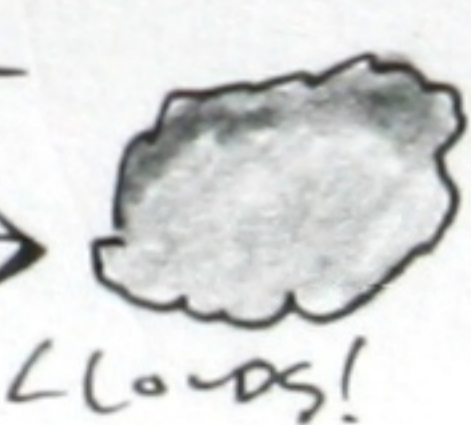


MEMORABLE/REGIONAL/HISTORICAL FOODS...



WEATHER WIDGET

WEATHER RADAR



CLOUDS!



RAIN!



MUSIC, SONGS...

# CAPSTONE:

## OTHER THOUGHTS:

WEATHER, DATA, INFORMATION, KNOWLEDGE, QUANTITATIVE VS. QUALITATIVE, VISUALIZATION (WARM COLORS VS. COOL COLORS, TEMPERATURE BY NUMBERS, ETC.), SUNLIGHT, PERSONALITIES (WEATHER PERSON, METEOROLOGIST, ANTHROPOMORPHISM, GARDENING, ~~METAL~~ MOWING THE ~~LAW~~ LAWN, SHOVELING, \*SNOW DAY!\*, SNOW DAY TICKET, MID '90S SCHOOL, SHARED EXPERIENCE, HEARING YOUR FAVORITE BAND ON THE RADIO, "EVERYONE IS HEARING THEM RIGHT NOW!" AND TAKING PRIDE IN THAT, EXPERIMENTALLY HOW IT FEELS TO BE OUTSIDE, VITAMIN D DEFICIENCIES, SUNBURN, "DON'T LIKE THE SUN!", TEMPERATURE, CLOUDY/NOT CLOUDY, "IS IT GOING TO RAIN?", REMEMBERING TRIP/FAMILY VACATIONS, REMEMBERING HOW THAT FELT... REMEMBERING JUNE IN THE DEPTHS OF DECEMBER, RECEIVING MEMORIES, HEALTH, COMPENSATION FOR NOT BEING ABLE TO BE OUTSIDE, ENVIRONMENTAL/HEALTHY PEOPLE GET OUTSIDE MORE, SNOW PORN, SNOWBOARD/SKIING VIDEOS, MOVIES, BANK FILM FESTIVAL (HOLE STITCH HOW THAT WATER YOU FEEL), NATURE PATTERNS, ~~FEEL~~ PASSION OF THE DAY, SUNRISE/SUNSET, NOON, NIGHT, DUSK, PASTURE OF SEASONS, (SOMETHING BESIDES WALMART TO TELL ME THAT HALLOWEEN OR CHRISTMAS OR EASTER IS COMING), CHANGING PHASES OF THE MOON, THE STAR, POLARIS, ORION IN THE SKY, OR NOT... TREES, ROCK, DIRT, WATER, AIR, SKY, CLOUDS, RAIN, SNOW, BARK... ALL THE SENSES... MEMORY... LIVE HORIZONS...

## WHAT 'BOUT HCI?

... 'BOUT IT?

... AMBIENT COMPUTING, PERSUASIVE COMPUTING, PERSUASIVE COMPUTING, SMART DUST, AFFECTIVE COMPUTING, EXPERIENCE + EMOTION, ANALOG INTERACTIONS, PHYSICAL COMPUTING, TANGIBLE COMPUTING... DEVICES, LIGHTS, SOUND, MUSIC, TOUCH, TASTE, SMELL, EMBEDDED, ENVIRONMENTAL, REMOTE/LOCAL, SENSORS, FEEDBACK, WEB CAMS, LIVE DATA STREAM, DATA FROM SENSORS, DATA VISUALIZATIONS, DELIGHT, FUN, ENJOYABLE, USEFUL... MOUNT HOOD WEBCAM, IIMOSURF WIND MAPS, MOUNT HOOD SNOW CONDITIONS (BASE/NEW), CLOCK, TIME, PAGES, WATCHES, DRINK WATCHES, ANALOG WATCHES/CLOCKS, RADIO, SMEARING, ITUNES, INTERNET RADIO, IPHONE, DIRECT/INDIRECT, BIOMETRIC SENSORS, INPUTS + OUTPUTS, EXPERIENCE DESIGN, MUSEUM EXPERIENCES, ENVIRONMENTAL (ATTITUDE OF SCIENCE CITIZENS), LEDS, TELEGRAPH, BEAUTIFUL DISPLAYS, SCREENS, KIOSK, LEVERS/SWITCHES, EMOTIONS, ANTHROPOMORPHISM, COGNITION, RATIONALITY, EMOTIONS, THE ID, THE EGO, THE SUPER EGO, INTERNAL STRIFE, ARGUMENTS BETWEEN THE DIFFERENT SELVES, HUMANS AS A THINKING/FEELING RATIONAL/EMOTIONAL BEING, WHAT IT MEANS TO BE + TO EXIST (MEMORABILITY?) SATISFACTION + QUALITY OF LIFE, VIRTUAL FURTHER WINDOWS, REAL WINDOWS, SQUIRRELS, MUSIC, WALKING, IMMERSIVE INTERACTIONS, ZEN, MEDITATION, LETTING GO, LETTING GO, SURRENDERING, SOMETHING BETTER + BETTER + MITIGATION THAN YOURSELF, UNGOVERNED BY TECHNOLOGY, INSERTING, UNDER THE SKIN, HEADS UP DISPLAY, MOLDABLE, VIRTUAL REALITY, TWITTER, ETC...

SEPTEMBER 11, 2009

## WHAT IS MAN'S RELATIONSHIP WITH NATURE? WITH THE OUTDOORS?

ONE OF SYMBIOSIS? ONE OF DOMINANCE? ONE OF DEMOCRACY? RESPECT? GIVE + TAKE? FEAR? POWERLESS? AWE? JE NE SAIS QUOI? OMNISCIENCE? OMNIPOTENCE? REFUGE? ~~ESCAPE~~ ESCAPE? HIDE? AVOIDANCE? PROCRASTINATING? SELF-DENIAL? LITERAL? METAPHORICAL? FRIEND? SLEEP W/ MOTHER + KILL FATHER? OEDIPUS COMPLEX? ACTIVITY? ACTION? PASSIVE?

## WHAT DO WE GO INTO THE WILD FOR?

PLAY? RECREATION? BUSINESS? WORK? RECOMPENSE? FIND ONESELF? DISCOVERY? EXPLORATION? ADVENTURE? RISK? ANTHROPOMORPHISM? FAITH? BELIEF? (COME TO JESUS?) "COMMUNING WITH NATURE." GOSAMEL THREATS... PLEASURE? SOCIABILITY? FUN? HUNT? FISH? FEED ONESELF? PROTECTION? SPIRIT, SOUL...

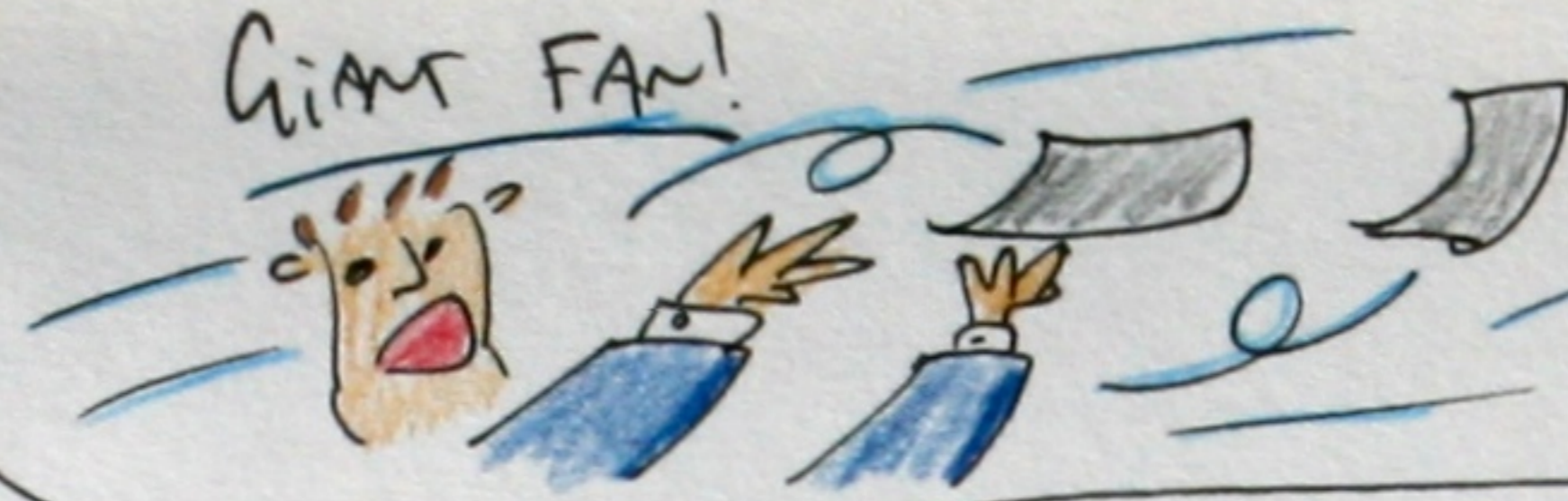
## Passion...

PASSION OR SOMETHING... THOUGHT? EMERSON? WHAT IS THE VALUE OF THE NATURAL, PHYSICAL WORLD? WHAT IF I CAN DOWNLOAD MY BRAIN TO A COMPUTER?

# CAPSTONE

... IDEAS?

Giant Fan!



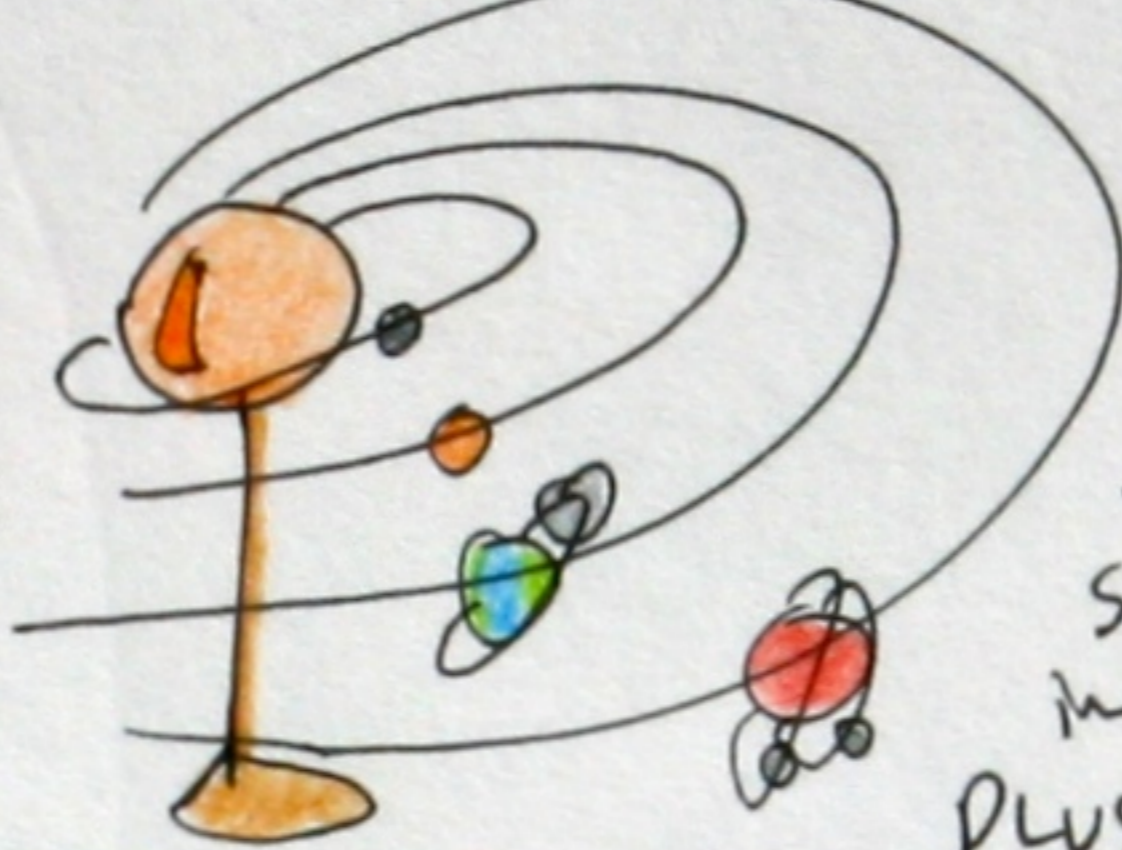
Blows your SHIT all over the place!

SEPTEMBER 11, 2009



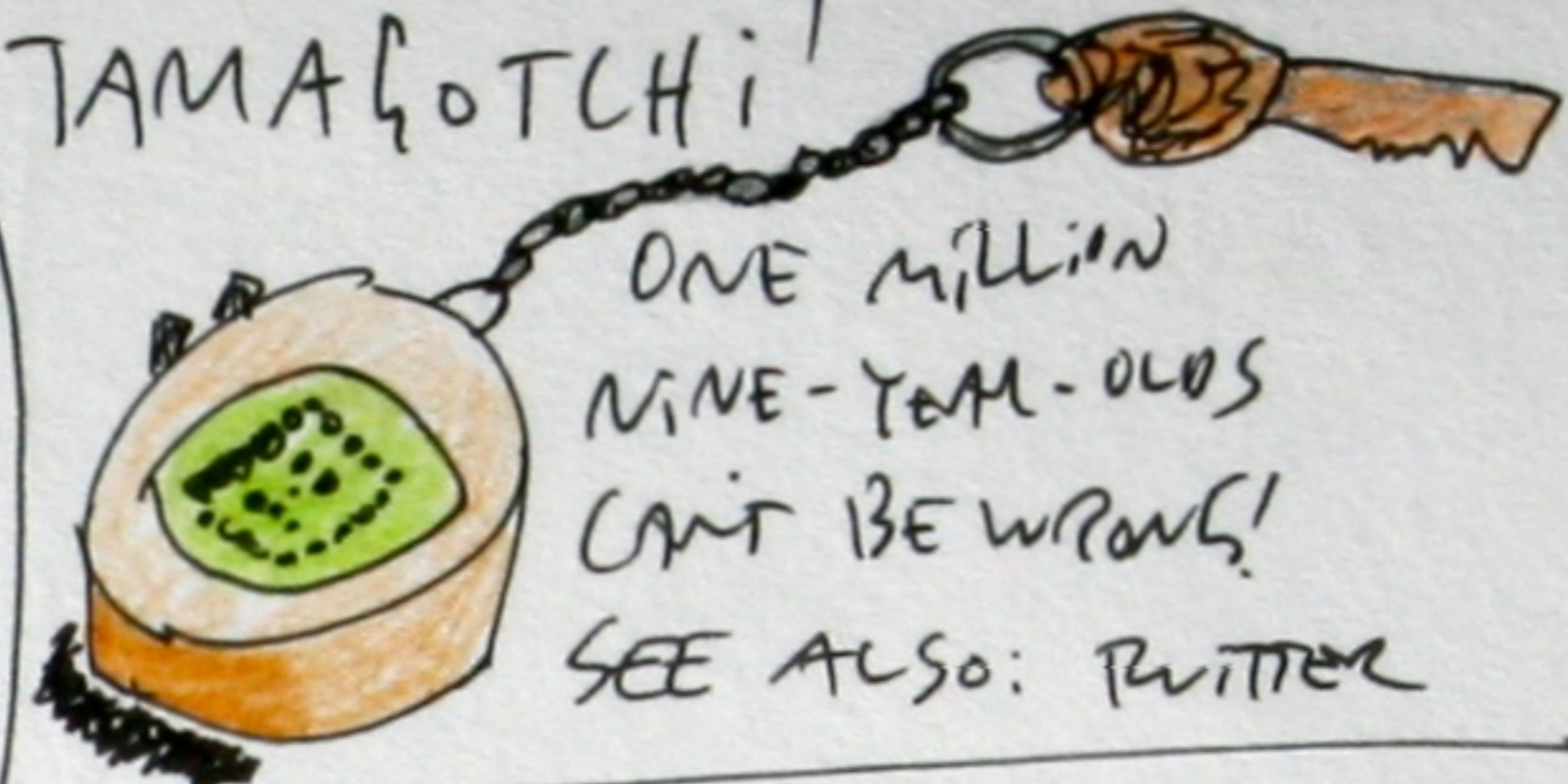
**SNOW GLOBE!**  
NETWORKED TO SENSORS IN A PARTICULAR LOCATE, SNOW GLOBE RESPONDS TO CURRENT WEATHER/SEASONAL/TIME OF DAY CONDITIONS!

INFERNAL SOLAR SYSTEM!



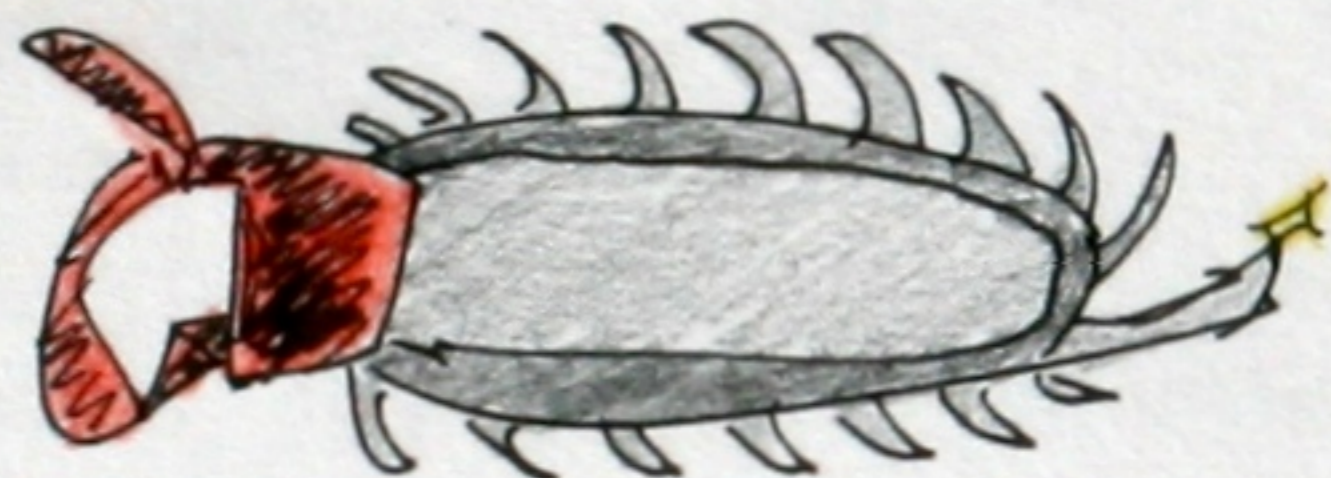
UNDULY COMPLEX AND EXPENSIVE, IT DISPLAYS THE LOCATIONS OF PLANETS + MOONS RELATIVE TO SUN. PLAN TIME NEXT INTERSTELLAR GETAWAY. PLUS IT'S BRASS!

TAMAGOTCHI!



ONE MILLION NINE-YEAR-OLDS CAN'T BE WRONG!  
SEE ALSO: TWITTER

CHAINSAW!



PUTS A WINDOW OR SKYLIGHT ANYWHERE!

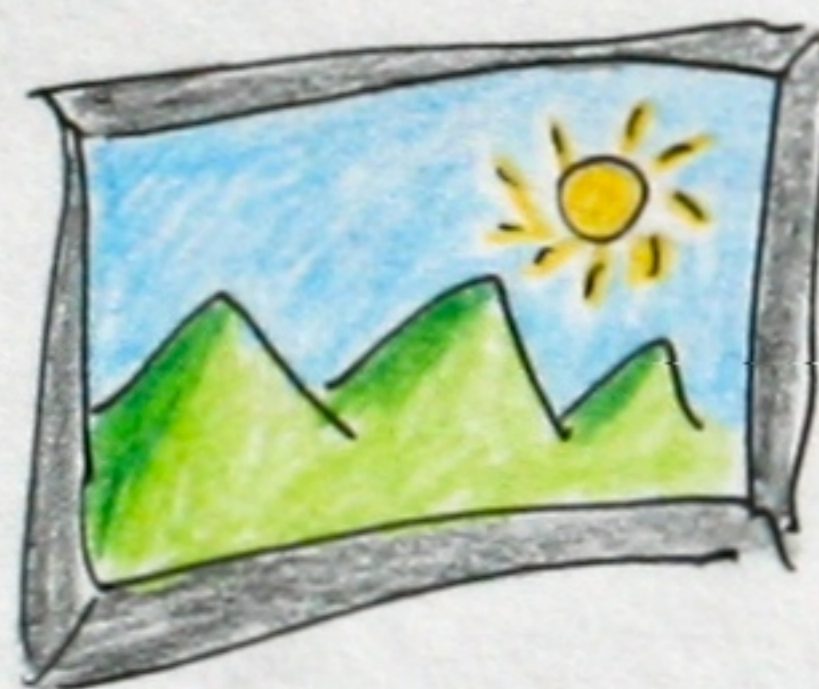


INFERNAL EARTH!  
DISPLAYS CURRENT SUNLIGHT + DARKNESS, LOCATION OF MOON, + PHASE OF MOON.  
- ATEE! MOON, + PHASE OF MOON.  
↳ SMOG, ALL YOUR FRIENDS IN ANTARCTICA HAVE BEEN CRUSHED.



DAYLIGHT CLOCK! KATE APPROVED!

LIKE YOUR PERSONAL PRODUCTIVITY, IT DOESN'T GIVE A FUCK ABOUT HOW MANY OBJECTIVE MINUTES ARE IN THE DAY. JUST DARKNESS + LIGHT.



DIGITAL WINDOW!  
AN HD LCD SCREEN, IT DISPLAYS A LIVE VIDEO FEED OF A LOCATE... OR YOUR BOSS' WINDOW!



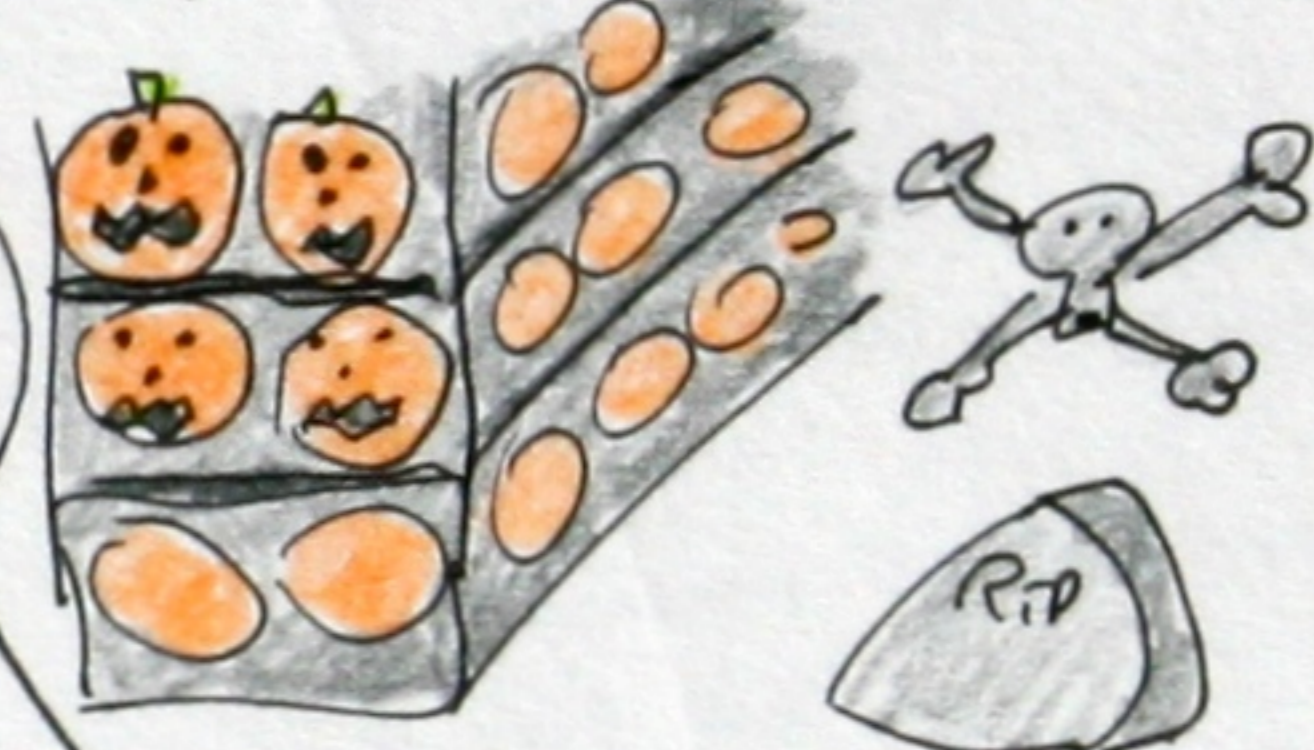
LED FLOWER!  
LIKE AN OFFICE PLANT, FOR IDIOTS!

LIFE SCAPES CD!



IT'S WAAVE SOUNDS + LUTES, TOGETHER AT LAST!

MINIATURIZED SEASONAL ASBLE AT WAL-MART!



HALLOWEEN, CHRISTMAS, LAWN CARE, FERTILIZER SNOW SHOVES... ALL THE PASSAGES OF THE SEASONS, FINALLY MINIATURIZED + PLACED ON YOUR OFFICE DESK!

(SHOPPING CART + SASSY CHECK OUT CLOCK SOLD SEPARATELY)

OFFICE SQUIRREL!



RUNS AROUND!  
FUCKS WITH YOUR SHIT!  
THE CHAIRS OF THE OFFICE, FINALLY AVAILABLE IN DOORS!  
ALSO SEE: GIANT FAN.

HARRY POTTER ENCHANTED CEILING!



BECAUSE LET'S FACE IT, J.K. ROWLING HAS ALREADY TAKEN ALL THE BEST IDEAS.

# CAPSTONE

SEPTEMBER 18, 2019

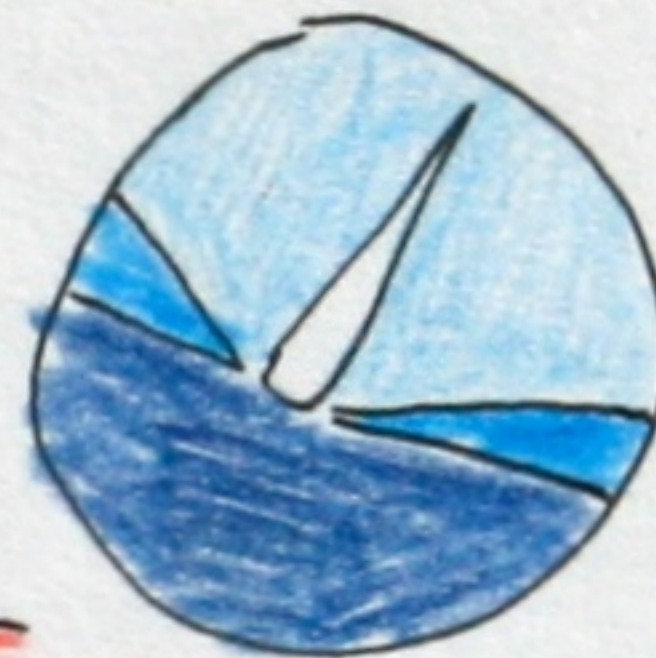
"LET'S FOCUS ON CYCLES RIGHT NOW."

## CYCLES:

SEASONS, HOLIDAYS, DAYLIGHT, DUSK, TWILIGHT, SHADOWS, LONG SHADOWS, SUNRISE, SUNSET, WEATHER, RAIN, SNOW, SLEEP, HAZ, THUNDERSTORMS, HUMIDITY, STORMS ROLLING IN, STORMS ON THE HORIZON, PENDING DOOM, SKY BLUE SKY, THUNDERHEADS, CUMULONIMBUS, SUNSHINE, WARM FRONTS, COLD FRONTS, HEAT WAVES, SUN HIGH IN SKY, SUN LOW IN SKY, ORION'S BELT, MOVEMENT OF CONSTELLATIONS, ROTATION OF EARTH "SUN RISE, SUNSET", LONGER DAYS, SHORTER DAYS, EQUINOX, VERNAL, AUTUMNAL, SOLSTILE, EQUATOR, NORTHERN/SOUTHERN HEMISPHERE, SWAMPY, ARCTIC CIRCLE, ALASKA "LAND OF MIDNIGHT SUN", ANTARCTICA, SUN LOW IN SKY BLINDS YOU WHEN DREAMING!, CIRCADIAN RHYTHM, DAILY, WEEKLY, MONTHLY, PHASES OF MOON, WEATHER, MOVEMENT OF MOON, MOVEMENT OF PLANETS, MORNING STAR (VENUS), HUMAN CLOCK, SEASONS, AXIAL TILT, PASSAGE OF TIME, CYCLES, MIDNIGHT SHADOWS, ETC... TIDES, ECLIPSES, LUNAR,

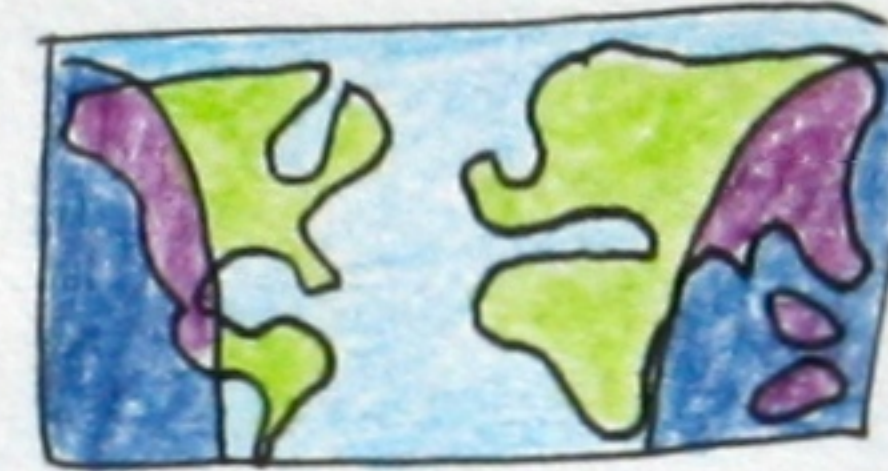


SUNRISE ALARM CLOCK.



"SOL" OS X WIDGET. SHOWS DAYLIGHT, DATE, DAWN + DUSK.

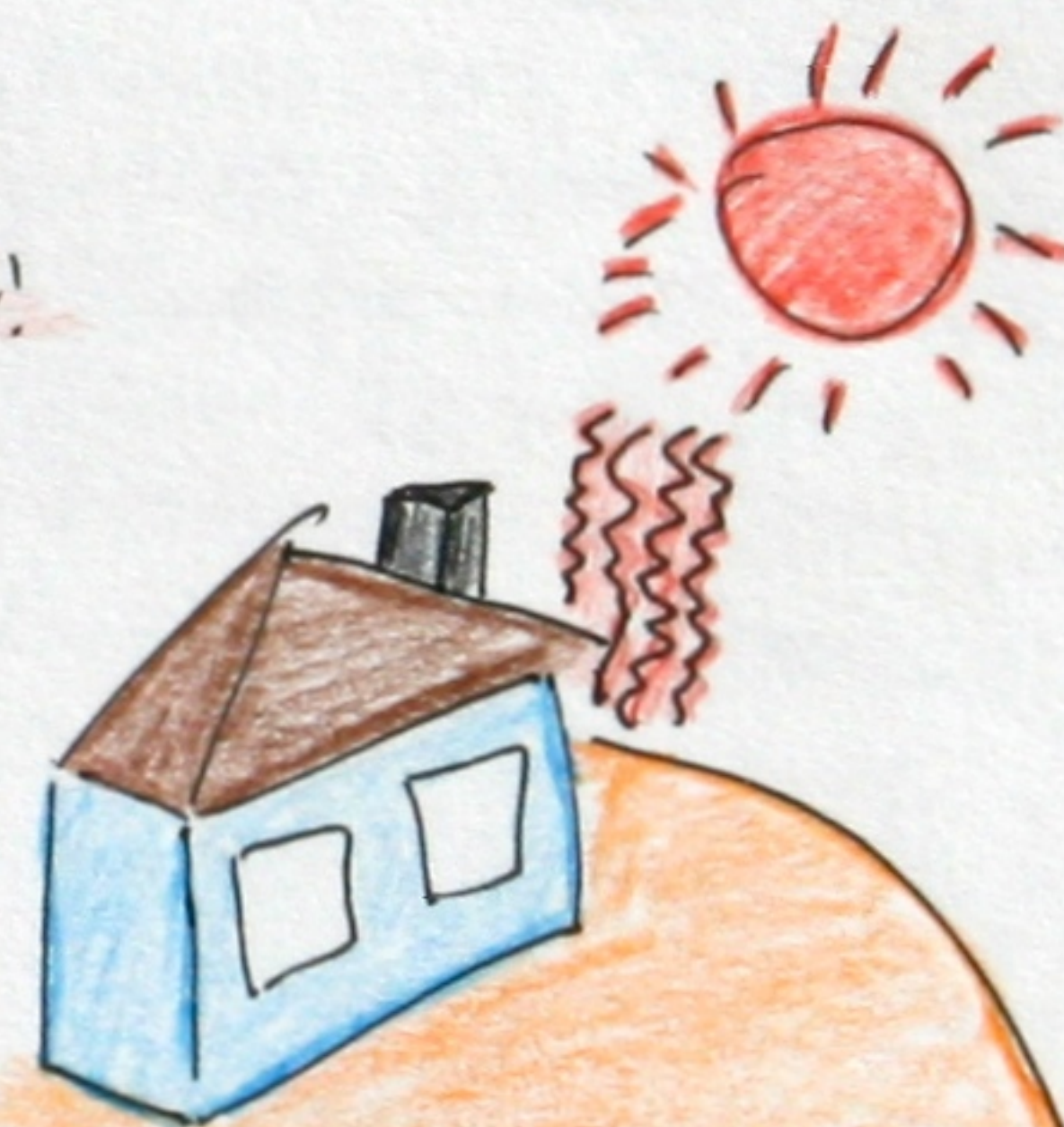
"SUNLOCK" OS X WIDGET.



PEOPLE CAST LONG SHADOWS, + YOU CAN'T MAKE OUT WHO THEY ARE CUZ:  
1) THEY'RE BACKLIT  
2) THE SUN BLINDS YOU!



IN THE WINTER, WHEN THE SUN IS LOW, YOU GET LOTS OF SUNLIGHT IN YOUR LIVING ROOM (ANGLE OF SUN). KEEPS IT BRIGHT + WARM!



IN THE SUMMER, WHEN THE SUN IS HIGHER, YOU DON'T GET AS MUCH DIRECT SUNLIGHT. KEEPS YOUR LIVING ROOM COOL.

## THOUGHTS:

PEOPLE FOLLOW THE WEATHER OF PLACES THEY'VE BEEN, PLACES THEY'VE VISITED, PLACES THEY'RE GOING, PLACES THEY LOVE, PLACES WHERE FRIENDS + LOVED ONES LIVE, ETC. WEATHER IS A WAY OF STAYING IN TOUCH WITH NOT ONLY A PLACE (WHICH, I SAY, IS STILL EXTREMELY IMPORTANT), BUT WITH PEOPLE.

FIELDS, COUNTRYSIDE TO NATURE, TO THE ELEMENTS. YOU CAN'T CHANGE OR INFLUENCE IT, YOU CAN ONLY RESPOND TO IT.

## CIRCADIAN RHYTHM

"THE SQUARES ARE ACTING DIFFERENTLY NOW!" HUMAN FOOD FOR THE WINTER, ETC.

ARE WE OUT OF TOUCH NOW SIMPLY BECAUSE WE HAVE CONTROL AIR? DOES THAT ALLOW OURSELVES TO BE STUPID, LUNATIC + INEFFECTIVE IN HOW WE BUILD OUR ARTIFICIAL ENVIRONMENT IN RELATION TO THE LAND?



# CAPSTONE!

SEPTEMBER 22, 2009  
SEPTEMBER 26, 2009

## NETWORKED STONE.

... The networked stone lives in your home, office, wherever, & connects wireless to the internet. It is linked to a "sensing" stone in another part of the world, & responds to the conditions being experienced by THAT STONE.

SENSING STONE					
NETWORKED STONE					
	HOT!	DARK.	* * SNOW!	DRAPS OF RAIN	POOR!

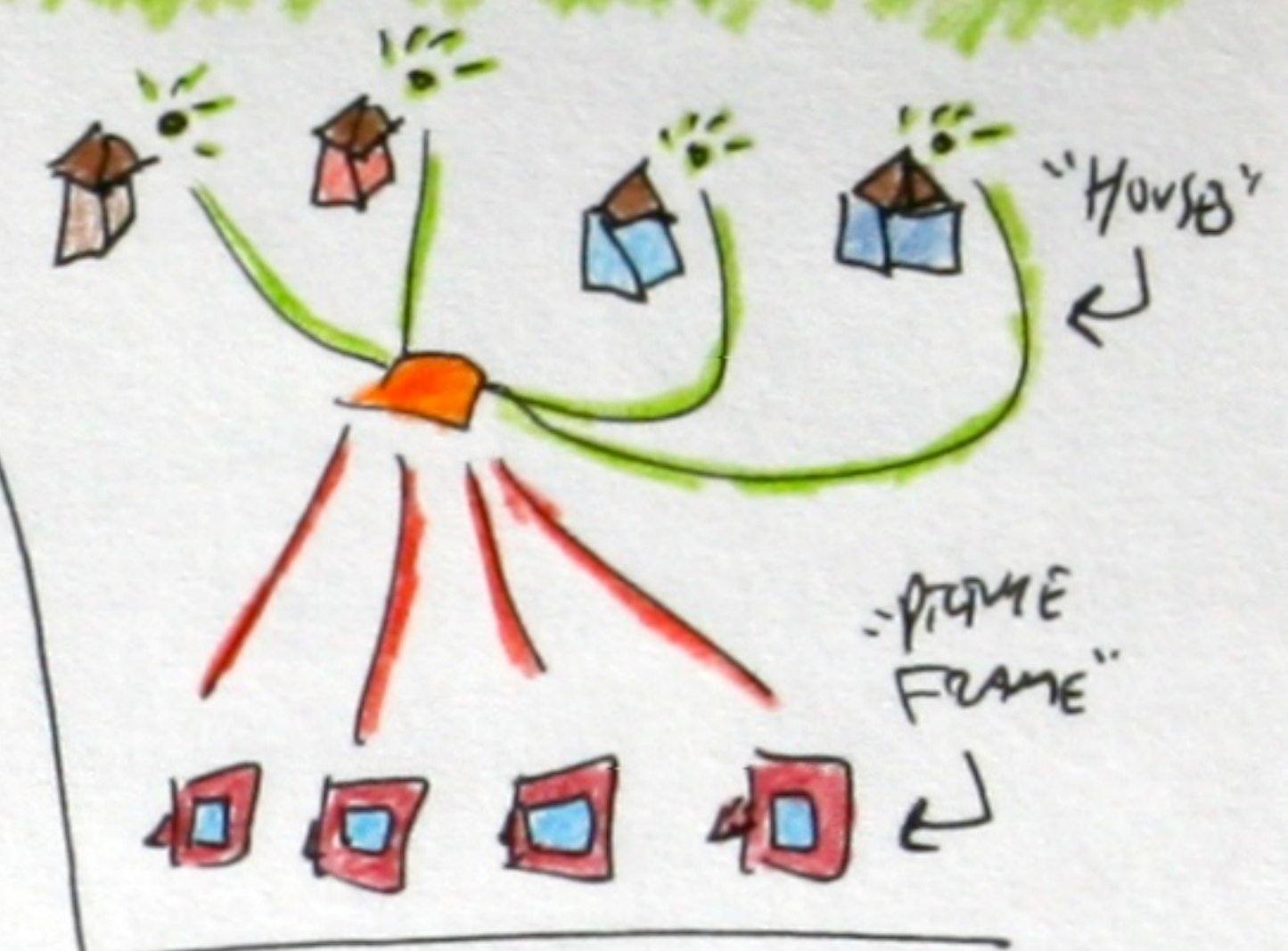
## SENSES

Does the sensing stone have a microphone? Heat up? Cool down? Show light? Show shade? Record smells? Get wet? Dry out? Get dark? Get sun? Seek shelter? Get hungry?

## HOW CAN WE HELP WITH PLANNING?

MORE ACTIVE USE & CONSEQUENTS, THAN JUST CYCLIC AMBIENCE? SNOW CONDITIONS, WIND CONDITIONS, WEATHER CONDITIONS, "A NICE WEEKEND COMING UP", A GOOD DAY TO SUMMIT A MOUNTAIN, A GOOD WEEKEND TO GO CAMPING, "CHANGE THROUGH THIS WEEK, 'CZ FRIGID'S GONNA BE BETTER!", ROAD CONDITIONS (SNOW, LEAVES, ICE, TRAFFIC, ETC.), GETTING FIRST CHAIR, CHUTE MORNINGS, OPPRESSIVE HOT AFTERNOONS, DUSTY YEARS, FULL MOON SNOW SHOE HIKES, PITCH DARK NEW MOON "GREAT FOR SEEING THE STARS", MAGNETIC ACTIVITY, NORTHERN LIGHTS PROBABILITIES, METEOR SHOWERS, COMETS, SEEING THE PLANETS, CLOUDLESS NIGHTS, "CRUNCH!" SNOW BECAUSE IT'S SO COLD, BURNSIDE LAKE FREEZING OVER (ONE NIGHT A SEASON!), ICE COMING IN, ICE GOING OUT, LEAVES TURNING, BEARGRASS IN BLOOM (CERULE CYCLE... MULTI-YEAR CYCLE!), MILDNESS, BIRD/BUTTERFLY Migrations, "THE FIRST ROBIN, WILDFLOWERS IN BLOOM, EARLY SPRING IN ZION, LATE SLIMES, SWOOLEN CREEKS, CANTONNEERING, FLASH FLOODS, "BLUEBIRD DATE", SHADE ON HOT DAYS, SUN ON COLD DAYS, FARMING INTO THE SUN/OUT OF THE SUN, SUNRISE/SET, DAWN PATROL, ALARM CLOCK, ROOSTER...

... SKINNED NETWORK OF SENSORS AMONGST FRIENDS...



REMOVE OBJECTIVE NOISE OF WEATHER?

... PUT SENSORS IN DIRECT SHELTER...  
... PUT THEM WHERE THEY'LL GET WET.

"WHAT'S THE WEATHER LIKE @ THE CABIN?"  
... FOG, SNOW, DAYLIGHT, CLOUDS, DARK/WET/AMBIENT, ETC.

COMMUNICATE WIRELESSLY...  
WIFI, ZIGBEE, ETC...

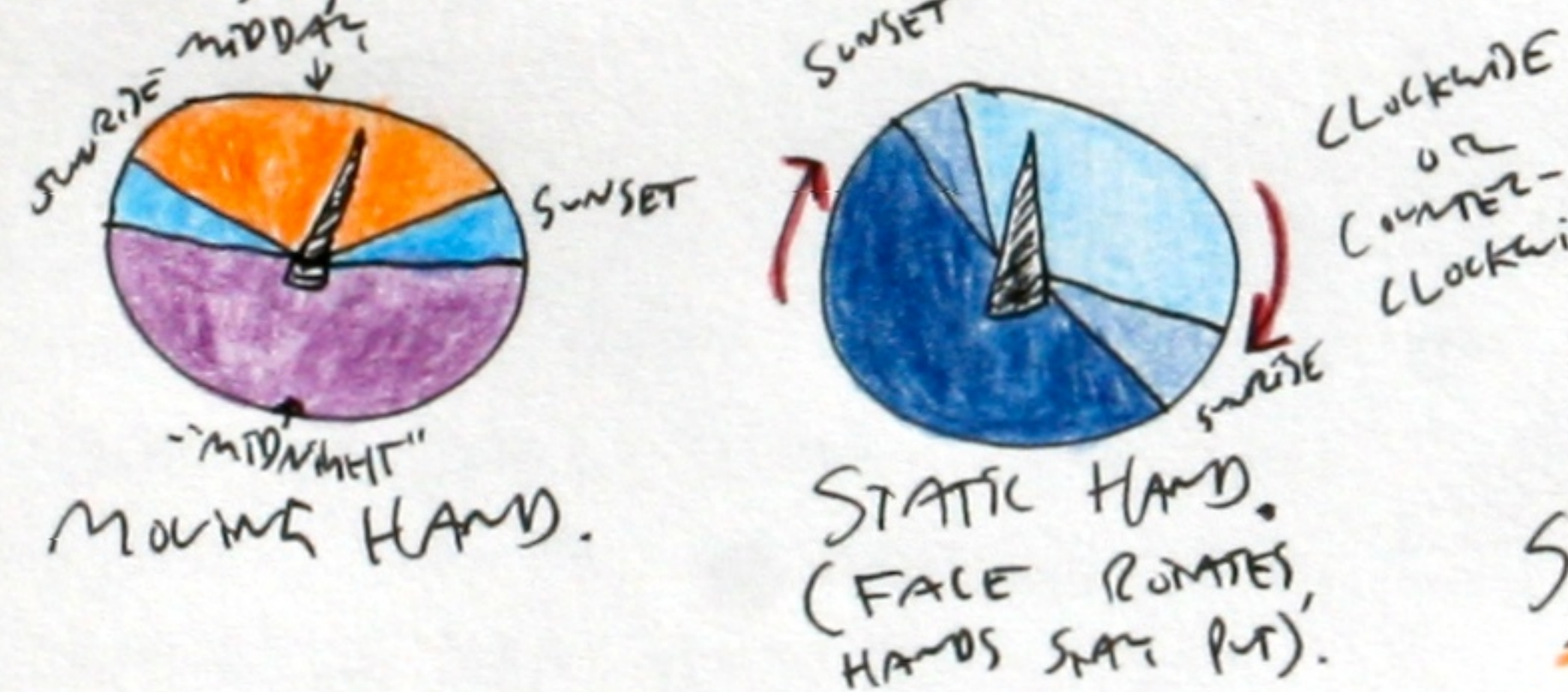
DID THE "CABIN" HAVE WIFI, THOUGH?

CONNECT PEOPLE AND SUBJECTIVE, HUMAN-LOCAL TRAILS COLLECTION, TRANSMISSION & FEEDBACK OF WEATHER INFO. TRIANGULATE W/ ZIPCODE "OFFICIAL" WEATHER "VOICE"?



## DAYLIGHT CLOCK.

The daylight clock does not display hours or minutes, but the amount of daylight (or darkness) in the day.

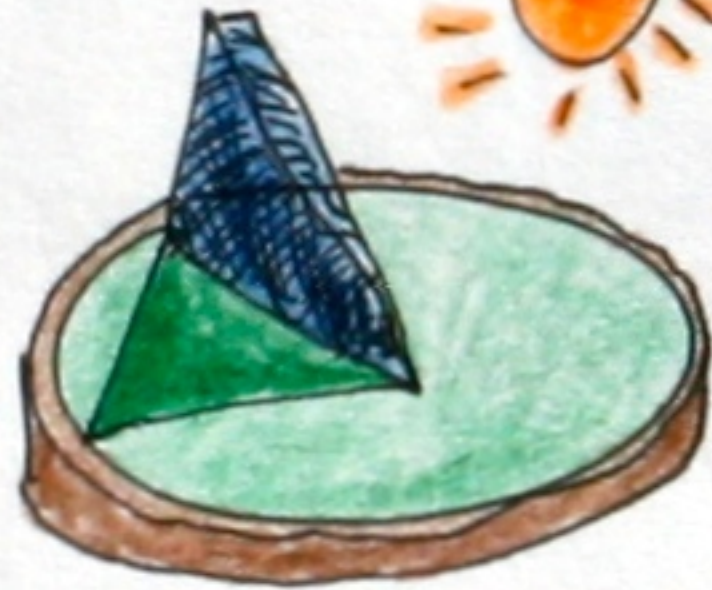


... HEAVILY INSPIRED BY THE "SOL" WIDGET...

## MAKE IT PHYSICAL?

WOODEN MIREN?  
GRADIENT DISCS?

## SUNMILK?



## SUNFLOWER?



# GAPSTONE

## "STAYING CONNECTED."

SEPTEMBER 26, 2009

SO. HERE'S A THOUGHT, BITCHES.

THE "WEATHER" IS NOT AN OBJECTIVE THING. IT IS PHENOMENOLOGICAL. IT IS HOW YOU FEEL. WHAT YOU FEEL. IT IS SENSUAL. IT COMES IN THRU YOUR SENSES. IT IS HOT OR COLD OR CHILL OR HUMID OR MUSHY OR SUNNY OR DEPRESSIVE OR DRIZZLY, ETC. WE TELL STORIES ABOUT WEATHER, WHAT IT FEELS LIKE. YES. WHAT IS IMPORTANT IS HOW IT FEELS. NOT THE TEMPERATURE OR RELATIVE HUMIDITY OR WIND SPEED IN KILOMETERS AN HOUR OR PERCENTAGE OF CLOUDS. IT IS THE SUN ON YOUR SKIN OR IN YOUR EYES OR THE SMALL BREEZE A STRAW ... IT IS WHAT YOU SENSE, MORE THAN WHAT THE OBJECTIVE MEASUREMENTS ARE.

SO. WE WANT TO SHARE WHAT THESE LOCUSES, THESE SPATIO-TEMPORAL "THINGS", THESE WEATHERS + SEASONS + PLACES + HOMES AND DAT AND WHAT WE TELL STORIES + SHARE HOW THEY FEEL, AND HOW THEY MAKE US FEEL. WE NEED TO DESCRIBE THIS MAGIC OF EXPERIENCE, RECORD + SHARE OURSELVES. GOT IT? GOOD.

A TRIP TO...

### J.L. WATERS...

"CANOE, KAYAK, FLI FISH! CAMP, HIKE, SKI!"

### "ADVENTURE OUTFITTERS" SINCE 1973.



### ACTIVITIES:

HIKING, CAMPING, BACKPACKING, CANOEING, KAYAKING, FLI FISHING, ROCK CLIMBING, SKIING, SNOWBOARDING, MOUNTAINEERING, MOUNTAIN BIKING, CYCLING (ROAD BIKING), RUNNING, TRAIL RUNNING, WINDSURFING, KITE BOMBIING, SURFING, SUP'ING, SLACK LIVING, FRISBEE, CAMPAIGNING, CAN CAMPING, TELEMARK, X-C SKIING, SNOWSHOEING, BACKCOUNTRY SKIING, WINTER CAMPING...

HELP PEOPLE FEEL ENGAGED IN THESE ACTIVITIES WHEN THEY WANT/CANNOT DOING, DO THEM? HELP PEOPLE PLAN + EXECUTE THESE ACTIVITIES BETTER? SOCIALLY - NETWORK W/ LIKE-MINDED INDIVIDUALS? (YUCK). HELP PEOPLE FEEL/STAY CONNECTED W/ THESE ACTIVITIES, THESE DEFINITIONS OF SELF, WHEN THEY ARE NOT DOING THEM?

(PHOTOGRAPHS, LOGS, TRIPS, MAGAZINES, CATALOGUES, PLANNING, MAPS, SICK, CALENDARS, DESKTOP WALLPAPER, ETC...)

### STAYING CONNECTED:

- WITH ONE'S DEFINITION OF SELF.
- WITH THE OUTDOORS
- WITH THESE ACTIVITIES ONE LOVES...

### PLANNING BETTER:

WEATHER, CONDITIONS (WATER, DUST, TIDES, ETC.), TEMP, PRECIP, WORK, ORGANIZATION OF GEAR/FOOD, TRIP/ROUTE, ACTIVITIES, NEW PLACES, MAPS, RECOMMENDATIONS, ETC.

# CARSTONE

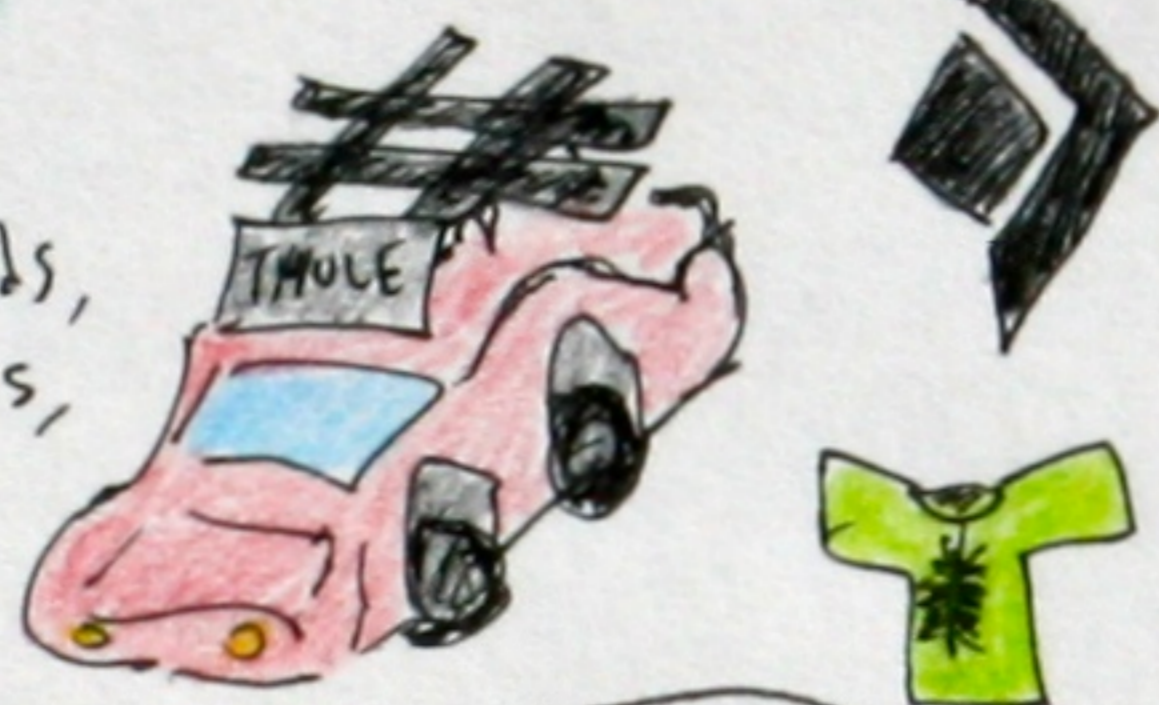
SEPTEMBER 29, 2007

## WHAT ARE OUR DIFFERENT CLASSES OF SYSTEMS?

### 1) SYSTEMS OF SELF-IDENTITY...

key chains, water bottles, stickers, bumper stickers, clothes, t-shirts, brands, sports, gear, photographs, hobbies, hats, shoes, buttons, pins, ties, cufflinks, car racks... names, signatures, email addresses, tattoos

TELLING OTHERS, BUT ALSO REMINDING YOURSELF.



## WHAT WOULD IT LOOK LIKE IF IT WAS MAGIC?

ENCHANTED NETWORK STONE FREEMAN.

...REACTS TO TEMP, WEATHER, SEASON, AGE + MIND OF THE FAVORITE PLACE.



ENCHANTED T-SHIRT:



HYPERLOCAL? NETWORKED TO LOCALE...



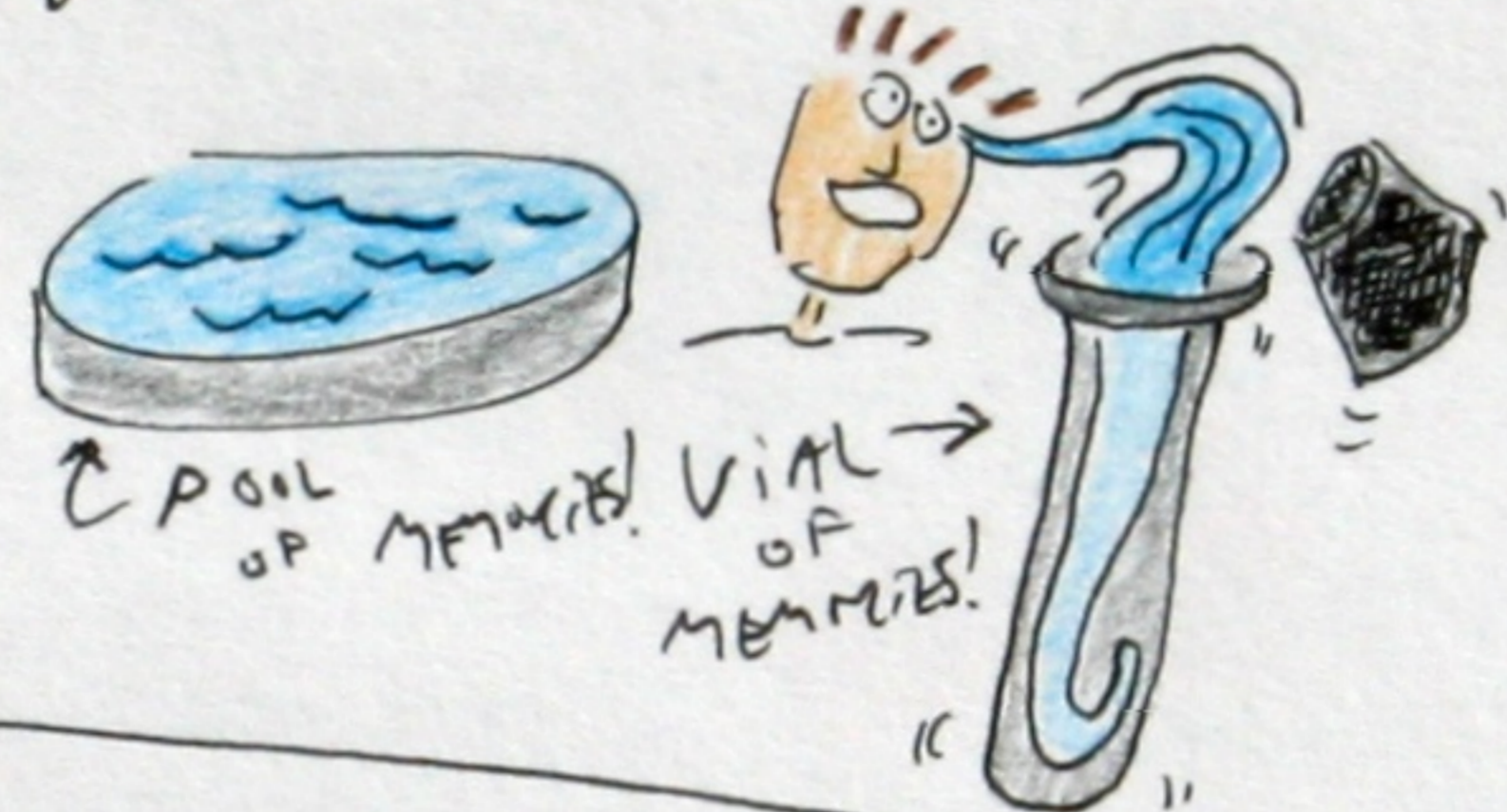
...THESE CONCEPTS ARE WEAK...

### 2) SYSTEMS OF MEMORY...

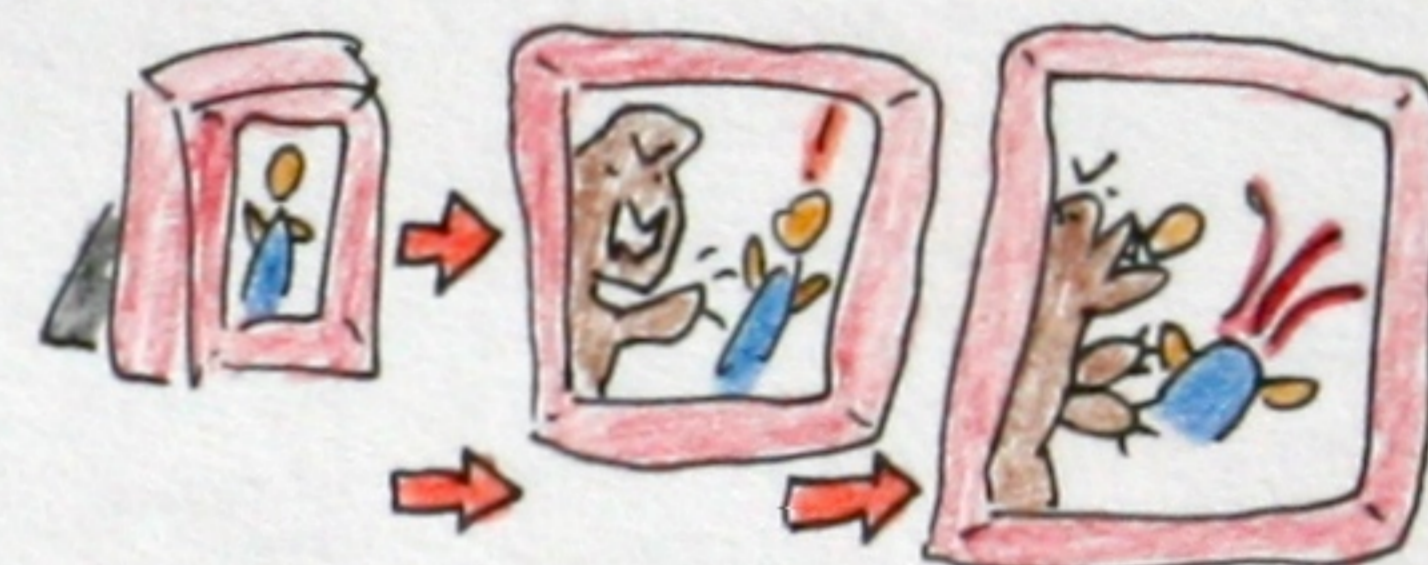
Remembering experiences in the outdoors, souvenirs, photographs, photographs in front of signs, "the same picture everyone takes", rocks, branches, dirt, muddy boots,



## DUMBLEDORES MEMORY VIAL THING:

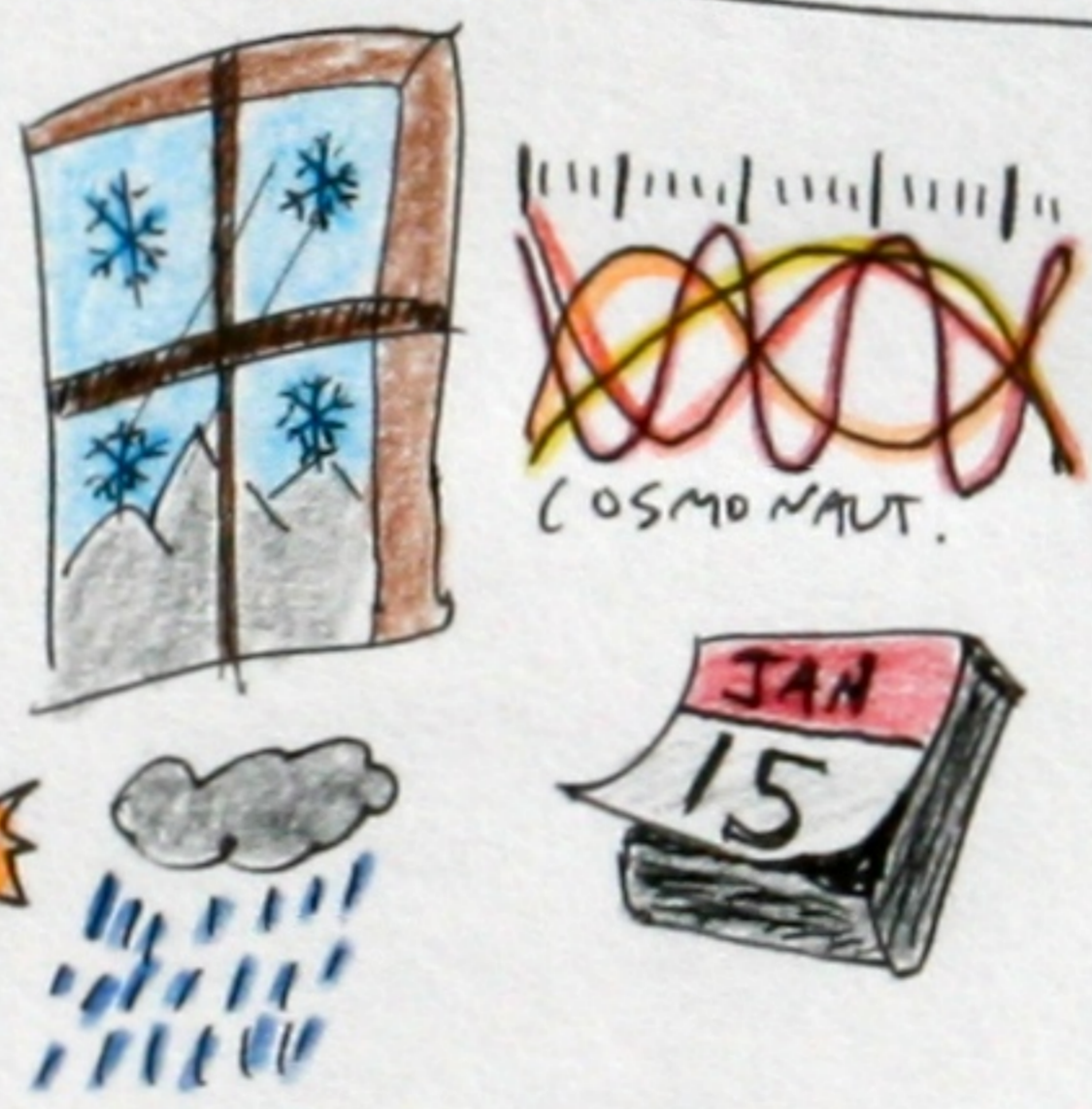


## VIDEO / LIVE / REALTIME / RECORDED / KAYAKHATERS PICTURE FRAME:



### 3) SYSTEMS OF PROCESSES... (NATURAL)

Seasms, earth's rotation, axial tilt, clocks, calendar, moon phases, tides, snow/rain, weather, climate, sunrise/sunset, sun breaking through clouds, first frost, equinox, solstice, eclipse, migratory birds, species nature almanac, FARMERS ALMANAC,



## ENCHANTED SNOW GLOBE: CHANGES IN REAL-TIME DEPENDANT ON CONDITIONS IN A LOCALE



## ENCHANTED CEILING:



Self-identity, remembering yourself

Showing yourself to others, participating in your tribe, bumper stickers, "oh yeah, THAT'S what I'm about." "THAT'S what's most important to me,"

what it means to connect with nature, Thoreau, Emerson,

why it means something to us, meaning + memory-making, conversation.

starter, self-worth, taking pride, THE SUBLINE, "comparing" nature, feeling smaller

(or bigger than we are, + being proud of that, doing + undergoing,

Flow, challenging ourselves, achieving goals, reaching goals, making goals, breathing fresh air, celebratory or physical selves, stretching muscles, ~~ARE ACCOMPLISHMENTS~~, celebrating our next bodies, acting on the world, + the world acting on us, pushing, pushing back, yawl, pleasure in challenge + hardship... etc...

# CAPSTONE

OCTOBER 5, 2009

## Research on Recreation Plan

CON NAME (CON.)  
 WORKING TITLE: "OUTSIDE IN"  
 INTEREST GROUP: OUTDOOR ENTHUSIASTS  
 ADVENTURE SPORTS? OUTDOOR SPORTS?  
 OUTDOOR RECREATION? WHAT ABOUT  
 THE HELL ALL THESE NAMES  
 IN AN REI CATALOG ARE O.K.?

PROBLEM STATE... what is important?  
 HEALTH, SELF-IDENTITY, MEMORIES, EXPERIENCE,  
 MEANING + MEANING, INTENSITY, RICH + SPARKING  
 EXPERIENCE, ALLEGATION, SEDATION FROM WHAT  
 WE LOVE... DEPRESSION, STAFF INTELLIGENT, RAMP  
 SEASON IN ORDER, LOSS OF COMPETITION +  
 AWARENESS + CONSCIOUSNESS OF NATURAL  
 PROCESSES... NATURAL PROCESSES, ETC.

POTENTIAL IMPACT:  
 ECONOMIC: Sales of these "solutions", sales of  
 recreational companies associated with solutions,  
 sales of gear, sales of permits + passes +  
 such as people "get out" more, etc. Also,  
 improved productivity, improved workplace mood,  
 longer workdays, less depression, less sick  
 days, happier + better balanced employees.  
 SOCIAL: connecting outdoor enthusiasts, improved  
 expansion of self-identity, happier people  
 @ work, connecting friends + family from  
 remote locations, across distances +  
 geography + time zones (like we do w/  
 weather, etc.), etc.

SUMMARY OF IMPACT: improved quality  
 of life, new means of embracing/communicating  
 celebrating self-identity (w/ outdoors, not w/  
 a product or brand!), increased awareness +  
 familiarity with natural processes.

## Research Plan

THEMES: People who want  
 to be "in tune" with  
 nature. People who work  
 indoors.

LIT REVIEW... CHI, OCHI,  
 EMBODIMENT, AMBIENT,  
 OUTDOORS, RECREATION,  
 MEANING, IDENTITY,  
 NATURE, OUTDOORS,  
 OUTSIDE, WELL-BEING,  
 SPACE + PLACE,  
 N.P.S., RECREATION,  
 HERMENEUTICS, INTERACTION,  
 PROVISION (CAMPING, DANCING,  
 OUTDOOR "USERS" (FROM  
 RECREATION THEORY), etc...

Timeline for literature review,  
 observations (user studies), insights,  
 concepts, prototype, usability  
 studies, business or commercial strategies.  
 ... BUT... THE OUTPUT OF THIS  
 IS A RESEARCH PAPER. Planning  
 in RESEARCH PHASE FOR SPONSORS  
 BULLSHIT!

USER RESEARCH...  
 SURVEYS, INTERVIEWS, FOCUS GROUPS,  
 FORUMS, GROUPS DATA FROM  
 FORUMS, DIRECT SURVEYS,  
 AFFINITY DIAGRAMMING, (CAMPING  
 INQUIRY, ONLINE SURVEYS,  
 COMPETITION w/ J.L. WATERS,  
 STATE PARKS, PARK RANGERS,  
 PEOPLE, ETHNOGRAPHIC  
 RESEARCH/OBSERVATION...

EXPERIENCE PROTOTYPE?  
 SNOWFLAKE?  
 ROCK ON DESK?  
 "MUSIC" ROCK? ...  
 WHAT DO YOU WANT  
 IT TO DO?

EDUCATIONAL: Familiar w/ natural processes,  
 seasonal phases of moon, etc. Better knowledge  
 + awareness of natural sciences... tides,  
 weather, etc... (connection + awareness of  
 other localities broadens the immediate,  
 improved understanding + appreciation of  
 earth/nature/outdoors/wilderness/etc...

ENTERTAINMENT: improved traffic/visitation/  
 whether for parks, outdoors, recreational  
 facilities, campgrounds, etc... Nature herself  
 becomes a form of entertainment (hunting,  
 snowing, seasons, high, (ice, etc...))


RE-DESIGNING...  
 sustainability, recreation  
 ambient computing, pervasive computing,  
 embedded computing, T.U.I., tangible  
 bits, ... Not attempting to create  
 the outdoors indoors, but distill it down  
 to its core essence, some characteristics,  
 and communicate THAT. SIMPLY, REFINELY, PLACED.

CELEBRATING: Hiyoshi Ishii in  
 tangible bits, 1997...  
 Nicole Bidwell et al. have  
 published some helpful work  
 in OCHI regarding experience,  
 phenomenology(?), as it applies  
 to natural places...  
 EMBODIMENT

Downish + space + place  
 Leisure + calm technology  
 resource management,  
 recreation, etc...

RE-THINKING THE ORDINARY  
 IMPROVES THE POINT.  
 COLORADO STATE IN FOOT  
 PUBLICATIONS OR PART. OF RESEARCH  
 N.P.S. etc. ... natural resource  
 recreation + tourism

Artificial daylight,  
 artificial lengthening of  
 THE DAY... it's not  
 artificial, it's just the  
 daylight for someone at  
 a different ~~latitude~~  
 LATITUDE THAN YOU!  
 EQUIVALENT DAYLIGHT!

... REQUIRES BEST ARTIFICIAL  
 WINDOW: BLINDS, ~~AND~~ CLOSED  
 blinds, with a fake sun  
 scheme them. 


... I don't you can try to  
 change your time to a  
 different time zone...  
 "MOVE THE SUN."

COUNTING THE # OF  
 CRICKET CRICKETS TO  
 COMPUTE THE TEMPERATURE

A BABBLING STREAM... SOUND,  
 REFLECTION, MOTION, MOVEMENT,  
 ETC... CONTEMPLATIVE?

SITUATED TEMPORALITY

THE SMELL OF FALL LEAVES.

MICRO COSM...  
 AN ENTIRE WORLD,  
 CONTAINED WITHIN  
 A DROP OF WATER. 



# CAPSTONE

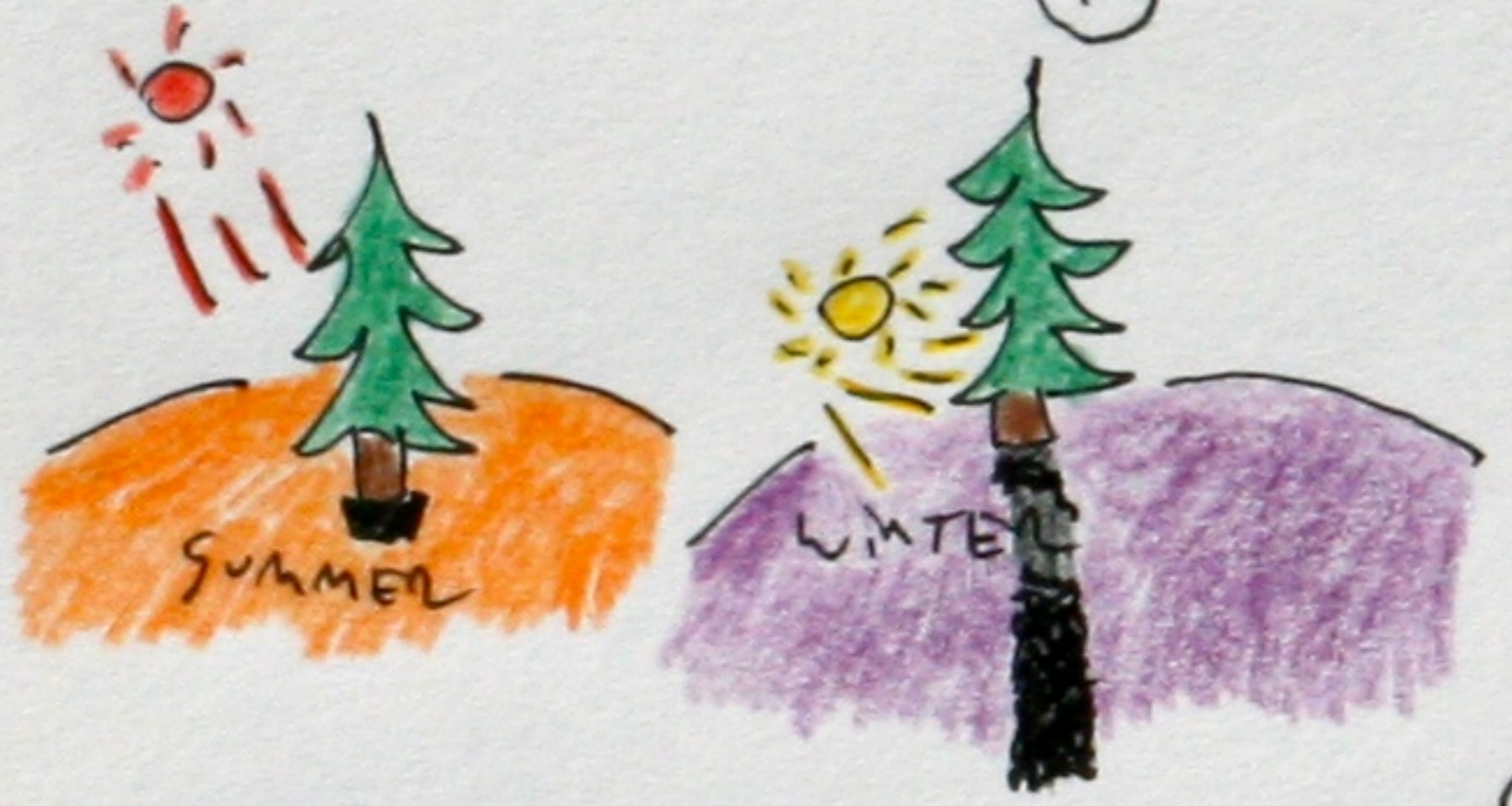
SHIFTING (MANU)SCRIPTS OF LIGHT



...SUN MOVES OVER A WOODEN FLOOR OVER THE COURSE OF THE DAY

LONG WINTER SHADOWS, SHORT SUMMER SHADOWS

"NOON" → ... OR, THE HALFWAY POINT BETWEEN SUNRISE + SUNSET, MIDDLE OF ACTUAL TIME?



MICROUSM:

"THE WORLD IS A DROP OF WATER..."



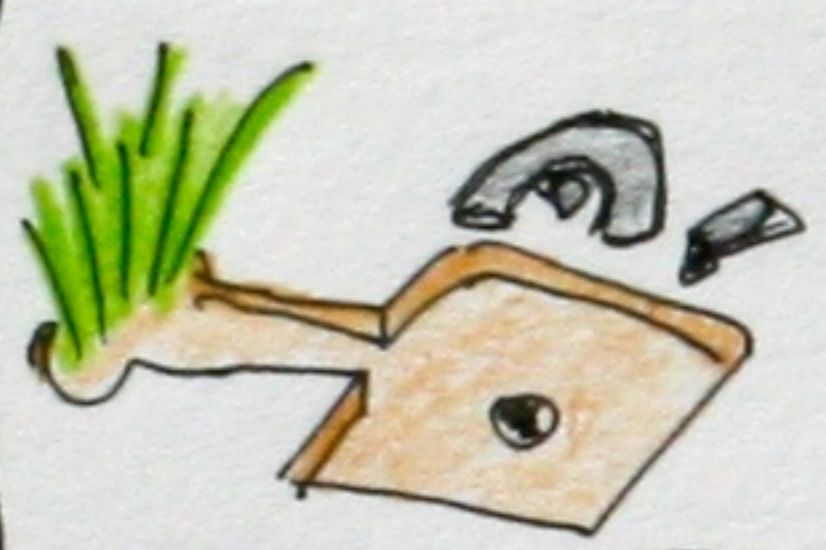
SEALOUST ENGINE:  
"Dinks" every time someone passes by a sensor on your favorite mountain bike trail!



ACOUSTIC ENVIRONMENT?

Grain context...  
TALKING, MEETING, PHONE, GONE, LUNCH, THINKING, MOUNTAIN, WINDING, MOVING IN MOUNTAIN, ETC.

ZEN SINK...

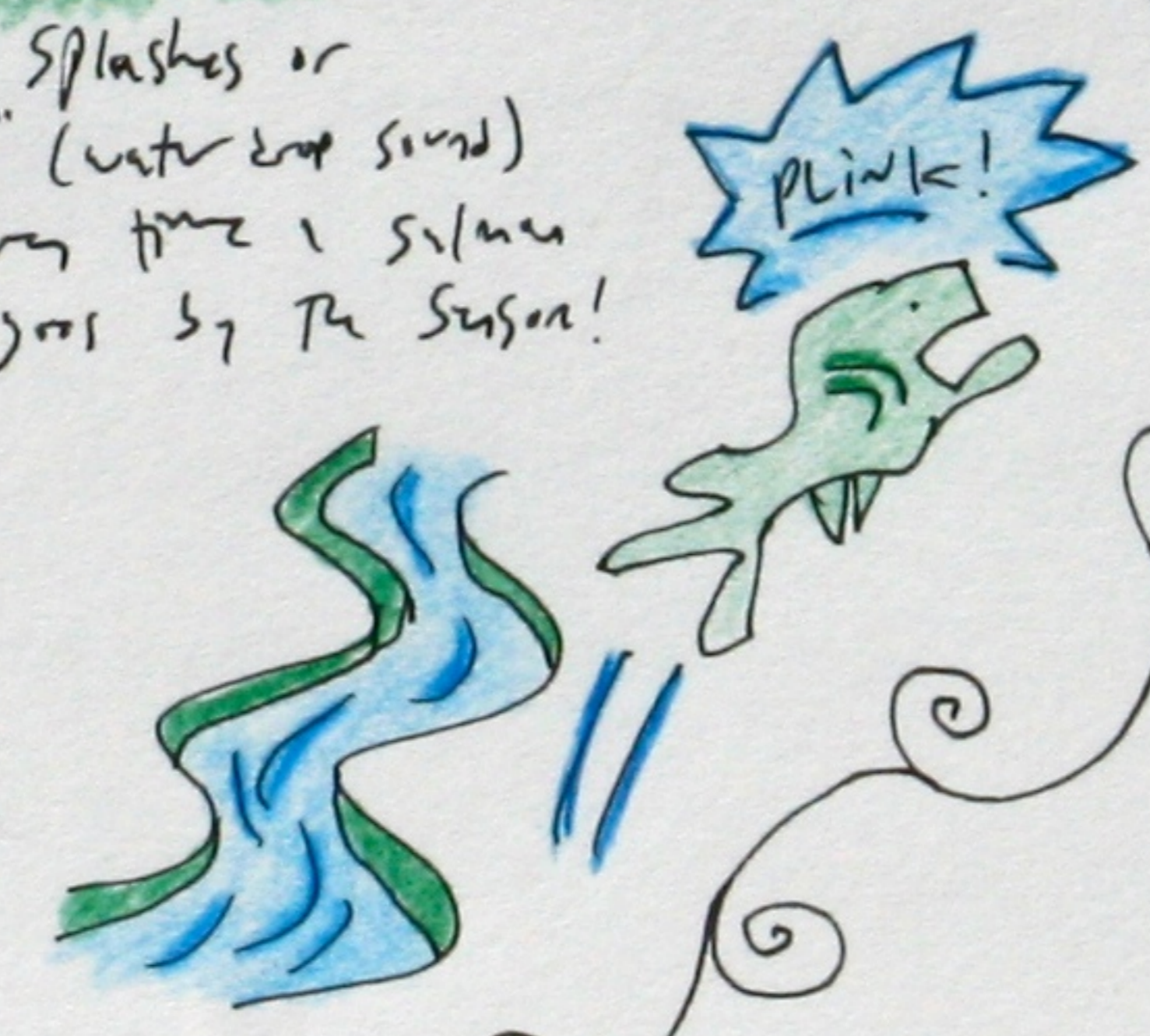


ZEN GARDEN...



SALMON DETECTOR:

Dings or splashes or "drops" (water drop sound) every time a salmon goes by the sensor!



# CAPSTONE

OCTOBER 21, 2009

## THE LATEST IDEAS:

- INDOOR AIR QUALITY
- HUMIDIFIERS
- DEHUMIDIFIERS
- SMELLS, SCENTS
- IT'ENSE
- GLADE PLUGS
- BATHROOM SPRAY
- FEBREEZE
- SMELL OF MCDONALD'S FRIES!
- HUMIDITY
- AIR FLOW/FANS
- THE FARMER'S ALMANAC:
  - FIRST/LAST FROSTS
  - LATITUDE
  - TIME ZONES
  - PLANTING SCHEDULES
  - SUNRISE + SUNSET...
  - EARTH AIR IF TEM!

DIETEL RAYS... ARTIFICIAL,  
BUT SOMEHOW NATURAL!  
DISNEY'S "SUNSHINE CALIFORNIA"  
- "AUGH! IT SMELLS LIKE ME!"

- SPACE TRAMPERS
- AIR FRESHENERS
  - TWIST, PULV-M, ETC... STRIKE UP
  - LITTLE TREES, MR. CLEAN, TOILET PAPER ROLL, ETC...

- OUTDOOR STAIRS ALERTS:
  - LEAVES CHANGING COLOR
  - THUNDER/LIGHTNING
  - NORTHERN LIGHTS
  - ETC... COMMUNICATING THE "STATUS" OF THE NATURE WORLD

PARTICLES OF DUST SUSPENDED IN AIR IN SUN LIGHT.  
THUNDER + LIGHTNING + MISCELLANEOUS  
GROUNDED STONE PRODUCE ATISLE

SUN MOVING THRU FAKE WINDOW BLINDS... COLORS OF LIGHT, NORTH/EAST/SOUTH/WEST FACIAL WINDOW, TIME OF DAY, ETC...

SUN ON A "CHARLIE" MOVIE THRU THE "SKY" OF THE OFFICE

TOSSABLE HANDFUL OF MEMORABLE SENSORS... NOTES, SMART DUST, ETC...

- NET WIRES
- TEMPERATURE
- WATER TEMPERATURE
- GROUND TEMPERATURE
- HUMIDITY
- NOISE
- WEATHER
- ... MEMORABLE! = IMPRINT!

FRIGGE BODS = LITTLE SWEDISH SHEDS  
PHILIPS + LIGHT... POSITION, COLOR, PITCH, BRIGHTNESS, SUN BEHIND + OUT FROM BEHIND CLOUDS, ETC.

PLATE TECTONICS, EARTHQUAKE SENSORS...  
... SLOW/SUBTLE/IMPERCEPTIBLE (RUMBLE)...  
MAGNETOSPHERE...

MODEL TRAINS? AS A MODEL FOR MINI WORLDS  
MICROSCOPES  
DIORAMAS  
TERRARIUMS

FERNS + FRAGMENTS (SCALABILITY)  
... SCALE OF DESIGN, PATTERN, ETC...  
LAS VEGAS CASINO W/ THIN DRES!  
... A DATE PARTY HOUR...  
PEOPLE IN COSTUMES HEAR FASTER IF THEY CAN SEE TREES.



9 AM



11 AM



NOON



4 PM

OR



WINTER



THOUGHTS:

SUN MOVES THRU OFFICE THRU DAY. CASTS SHADOWS, ETC. LOWER IN SKY IN WINTER, HIGHER IN SUMMER... REFLECTS/NOTES POSITION OF SUN OUTSIDE.  
COLOR/QUALITY OF LIGHT?  
MORNING: BLUE + FRESH  
NIGHT: YELLOW + WARM + (OFT)



FAVORITE OUTDOOR PLACE!



SMART DUST SENSORS!

FRIGGE BODS: TINY SWEDISH SHEDS...



OFFICE "UBICLES" A LA PIXAR...



EVERYONE GETS A LITTLE PERSONAL, VARIOUS STATE. OUTFIT FOR "LAMP" VIEW HOW YOU SEE FIT... POSTERS.

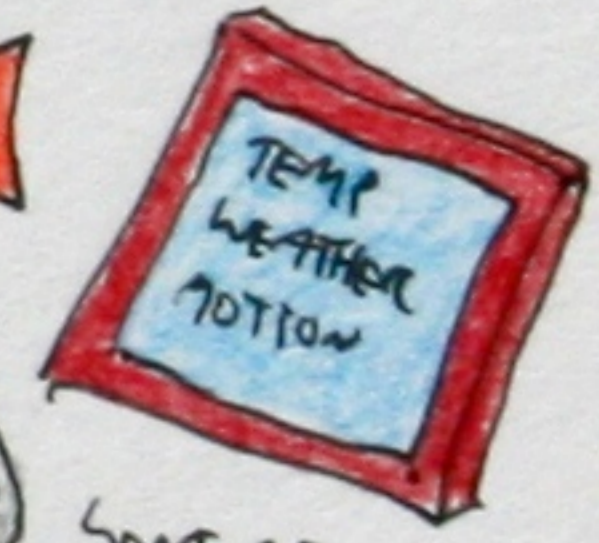


DELETE!

LEAVE... TIME LASSES!



BACK AT WORK!



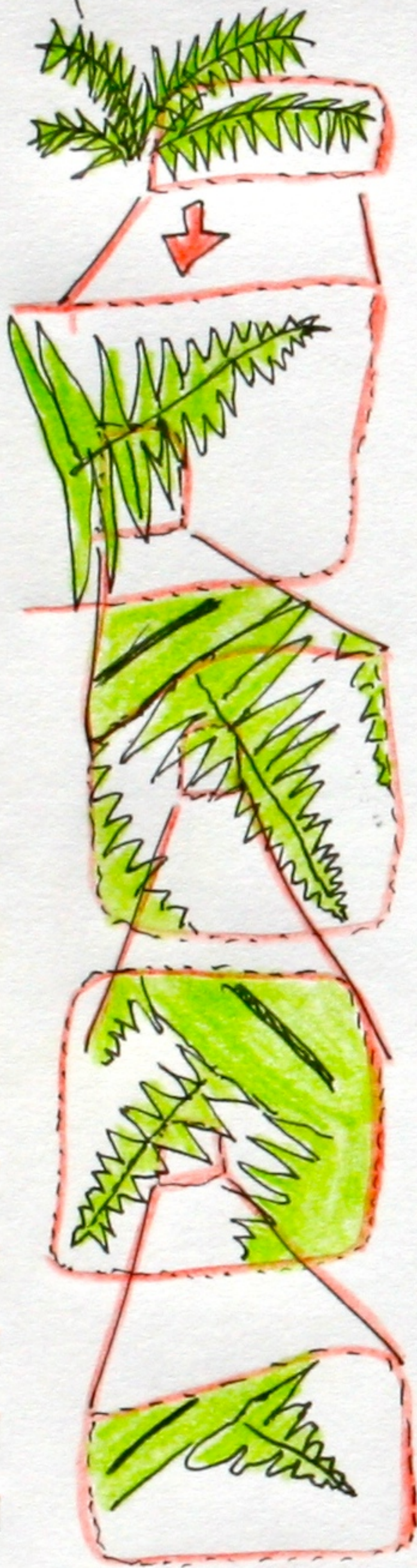
SENSORS REPORT BACK!

# Capstone...

OCTOBER 21, 2009

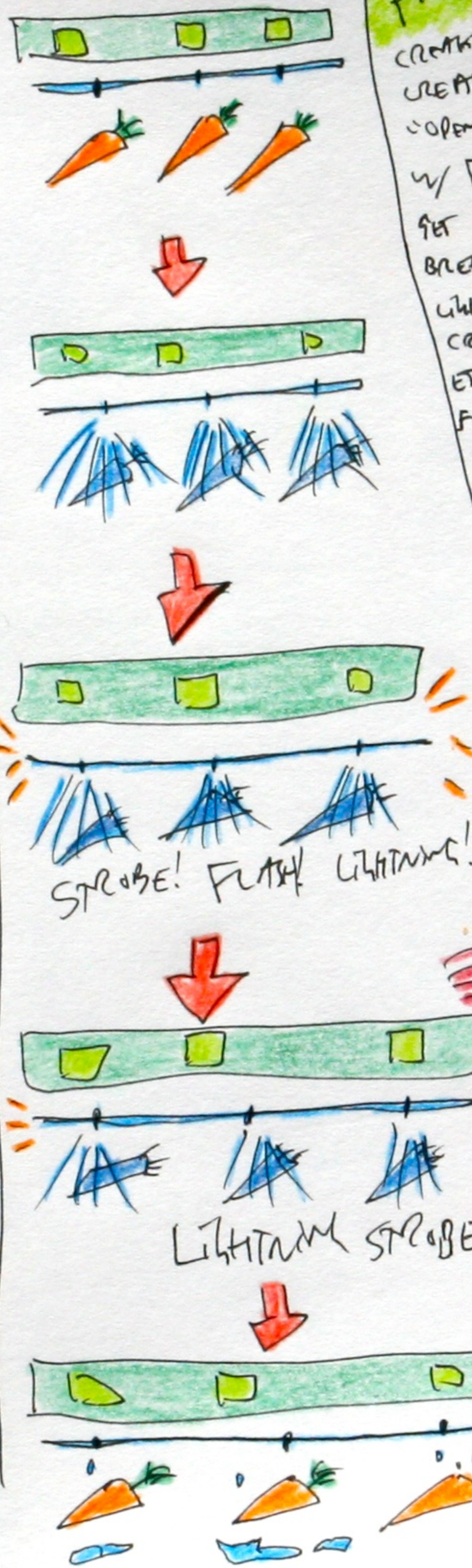
November 6, 2009

Ferns...



FRactal

PERDULE SECTION:



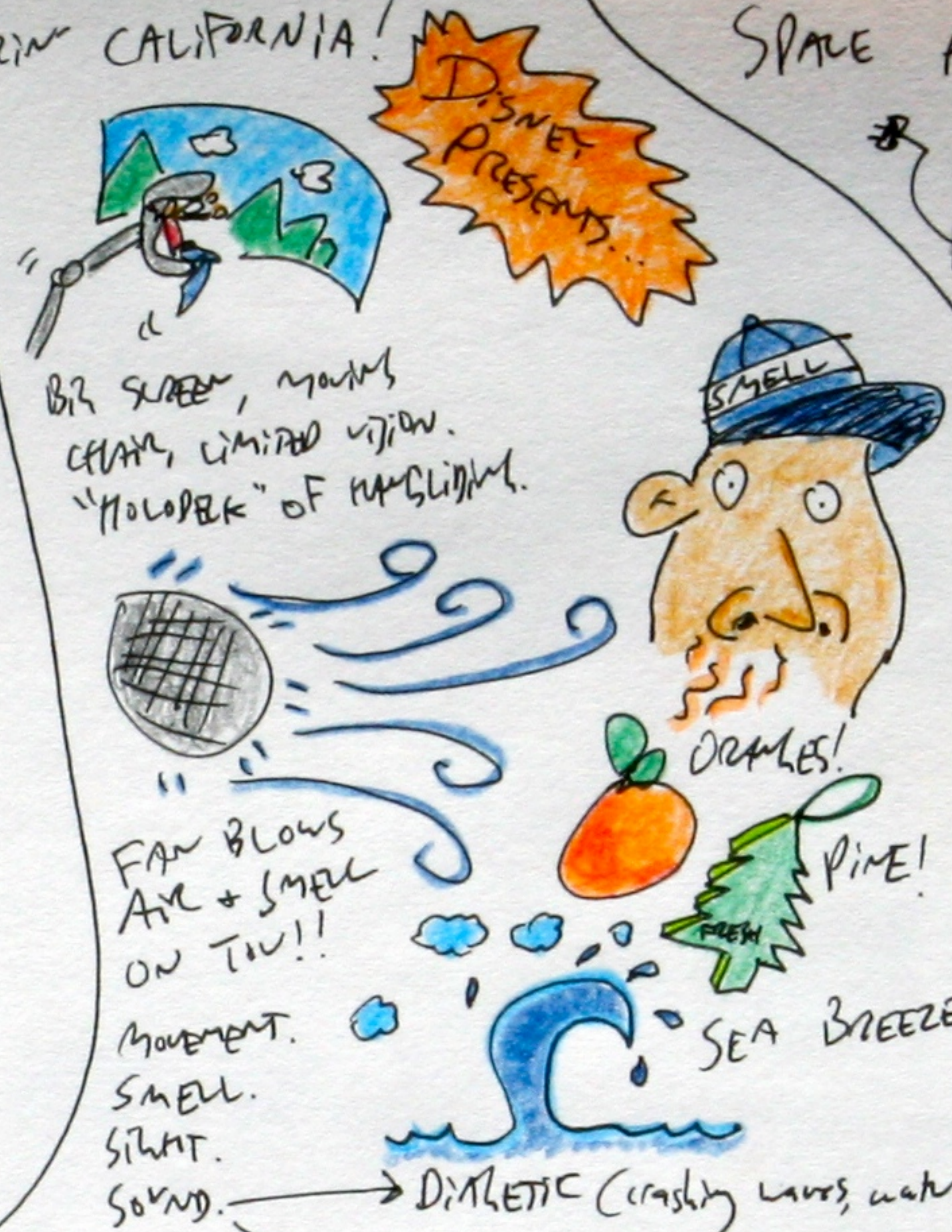
MIME ON FREEBODS

CRACKY WOOD FLOORS,  
CRACKY WALLS,  
"OPENABLE" WINDOWS  
w/ FAN AS THRU IN  
GET A SIFT ALPINE  
BREEZE, INTERIOR LIGHTS,  
LIGHTS FROM WINDOWS,  
CRICKETS, NIGHTTIME,  
ETC... MIMICRY!  
FAN RUM ON ROOF,  
CONDITIONS + WEATHER  
MEMORIZED TO TOUR  
FAVORITE LOCATION...  
"How much do you  
SPEND ON A CABIN?  
How much TIME do  
you SPEND THERE?"  
... How much TIME  
do you SPEND AT  
YOUR DESK?"  
... NUFF SAID."

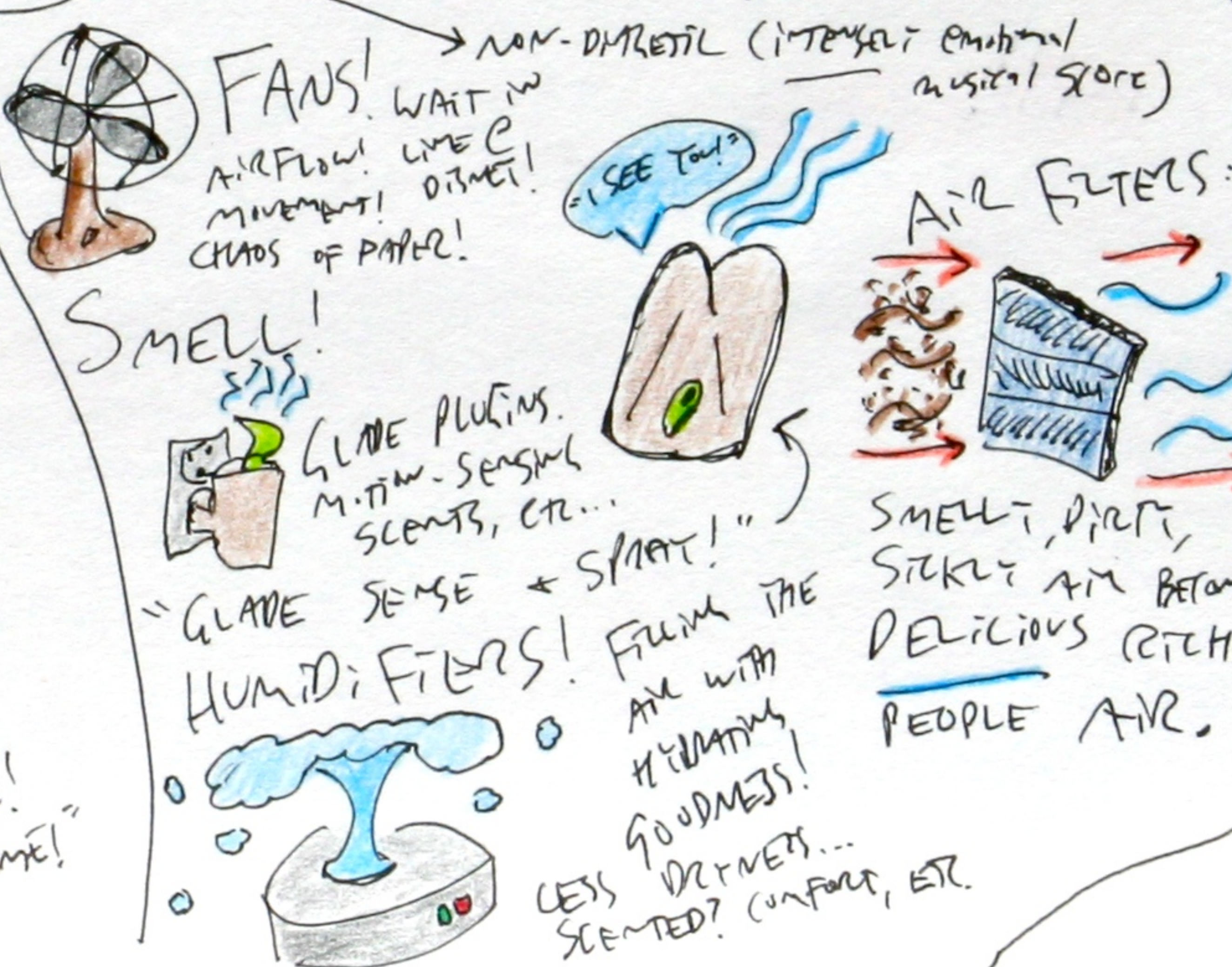
BOOM!  
THUNDER  
CRASH!  
LIGHTNING STROBE!

"Slow's OVER!  
Now go HOME!"

MULTI-SENSORY:  
SCARING CALIFORNIA!



SPACE HEATERS?



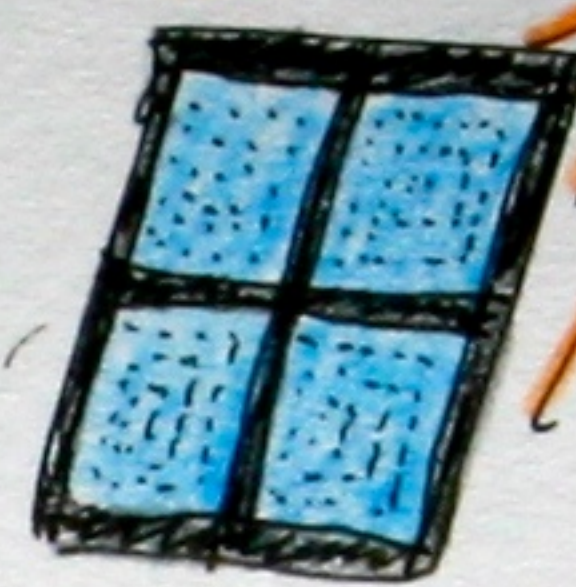
# Capstone

WEATHER FROM YOUR HOME TOWN  
(OR THE TOWN OF A FRIEND/  
FAMILY MEMBER, LOVED ONE)...



November 6, 2009

## PRECISION WINDOW SUNLIGHT DETECTOR



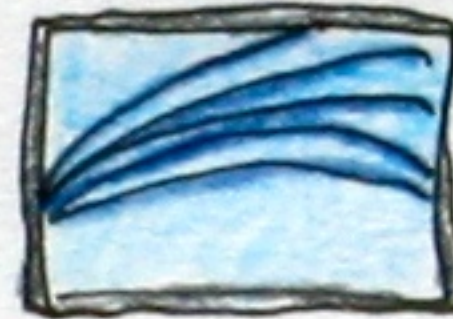
WINDOW KNOWS PRECISE  
INTENSITY, ANGLE, COLOR  
OF SUNLIGHT.

CORRELATES WITH EXACT  
TIME (ASTRONOMICAL, NOT  
DATE/TIME STAMPS AND ALL THAT), IT KNOWS  
PRECISELY HOW THE ANGLE + TIME OF DAY  
+ POSITION OF SUN CHANGES.

1. PARALLEL BEAMS OF LIGHT.

2. DATE/TIME CLOCK.

3. TRAILING ROUTINE.



WINDOW SHOWS HOW SUN  
TRACES DIAPHRAGM PATHS  
EVERY DAY... CHANGE OVER  
TIME.

4. SUNDIAL.

... SHADOWS, LOWER ANGLE, HIGHER  
ANGLE, ETC.

TIME OF DAY AS  
DETERMINED PRECISELY BY THE  
LOCATION, ANGLE + POSITION OF THE  
SUN, NOT A CLOCK. TIME OF  
YEAR AS DETERMINED BY ANGLE  
OF SUN'S PATH, NOT A CALENDAR.

(ANTI-KITARA MECHANISM)

"getting" intimate with the sun?  
... could do it for the room, too.  
ISSAC NEWTON + BLOOMING BUBBLE +  
PROMS + VENUS.

Climbing HANDHOLDS?



DELICATE STRIPES.

"GRIPABLE"  
DESIGNED FOR HUMAN  
EMBODIMENT.

ARTIFICIAL MATERIALS MADE  
TO LOOK/FEEL REAL.

NICROS MAKES

REALISTIC PLAYGROUND BOULDERS, TOO.



TREES INDOORS?

NICHES ARCHITECT,  
GOOGLE OFFICE, ETC...



"work  
in a  
FOREST!"

FARMERS' ANNUAL: NETWORKED TERRARIUM



CRASH FACT.  
LOCAL INFORMATION



PLANTING TABLES...

FIRST + LAST  
FROSTS... LATITUDES.

"LOW RAIN"  
FREEZING  
WARMTHS!

ALUMINUMS  
WITHIN  
THERMOSERS



EXPERIENCES THE SAME WEATHER  
& CLIMATE AS A REMOTE LOCATION:

- TEMPERATURE
- DATE/TIME
- RAIN/PRECIPITATION
- HUMIDITY/MOISTURE
- NIGHT... MOON...
- CLOUD COVER

AQUARIUMS, LITTLE WORLDS,  
ROCKS W/ PLANTS...

AIR PLANTS/  
SUCCULENTS...

FAXTON'S GATE.  
BLENDING OF SCIENCE + LIFE +  
NATURE + OUTDOORS + INDOORS +  
SKELETONS + COPPER...

ALCHEMY.  
POND? WATER?

SHOES THAT MAKE SOUND:



RUSTLING OF  
LEAVES IN FALL...

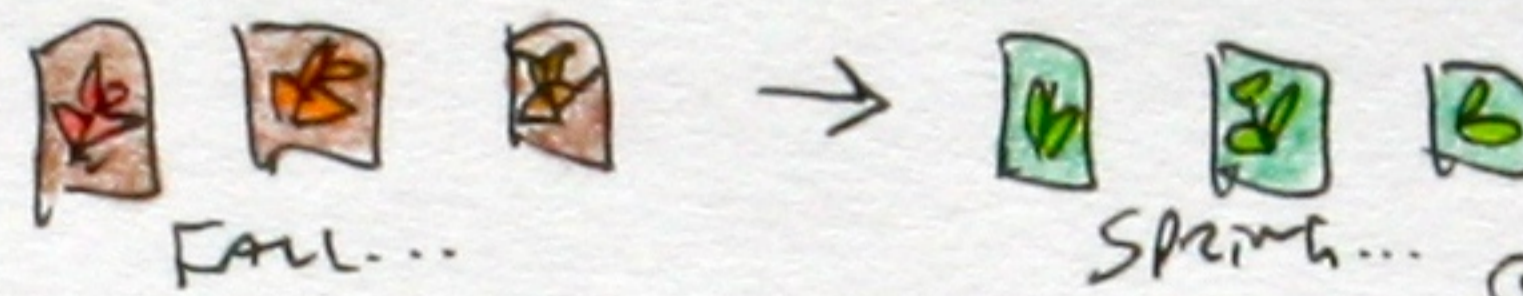
CRUNCHING OF SNOW  
IN WINTER...

# DATA POINTS

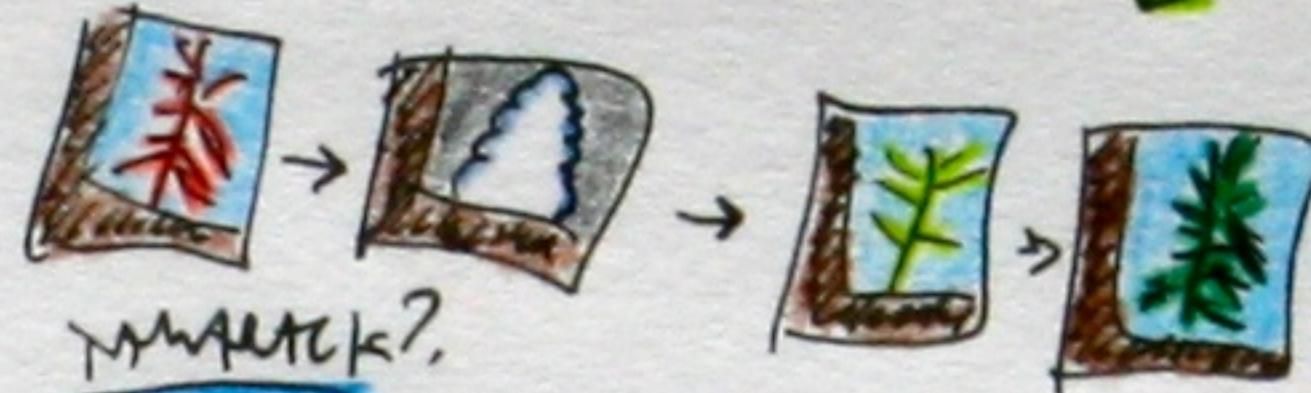
HISTORICALLY, COMPUTERS WERE USED TO TRACK THE HARBORS... computing day of year, time of day, phase of moon, etc... good for HARVESTING & PLANTING, GOOD FOR RELIGIOUS OBSERVANCES.



ART OR WORKS THAT CHANGE, DEPENDING ON TIME OF YEAR... NETWORKED!



365 DAYS OF PHOTOS, FROM THE SAME LOCATION... NETWORKED TO PHOTO FRAME.



... NEW IMAGE DISTINGUISHABLE EVERY DAY... OR... SIM BLENDED... CHASING THE LIGHT.

ONE IMAGE, ONE, ONCE A DAY. EVERY DAY. UNIFORM MT. SYMBOL OR THAT SPREADS OUT. CHECKS + EXERCISES WHY THAT IT MOVES AGAIN!

November 6, 2009

LATITUDES? MICRO-CHANGES IN ELEVATION? EARTHQUAKE SENSORS? MAGNETIC FIELDS? AURORA BOREALIS?

TEMPORAL SITUATION: -PUSH ON A MEMORIE TO REVERSE TIME, + LOOK BACK ON THE DATA PROCESS...



... HOW CAN WE ENCOURAGE THAT KIND OF REFLECTION?

## SOSKUL MEEDEEH...

FLICKR (EDITING) FOR AUTO-NATURALLY UPDATES ART OF FAVORITE PLACE!

1. PICK A LOCATION ON THE MAP!
2. NETWORK TO FLICKR...
3. FLICKR UPDATES YOUR PHOTO FRAME, PICTURE BACKGROUNDS, ETC... TO REFLECT THAT PLACE TODAY!

## RELATIVE THERMOMETER



Does "yesterday" mean yesterday @ this time, this time compare to this time yesterday, this time compare to all day yesterday, this average compare to yesterday's average or what?

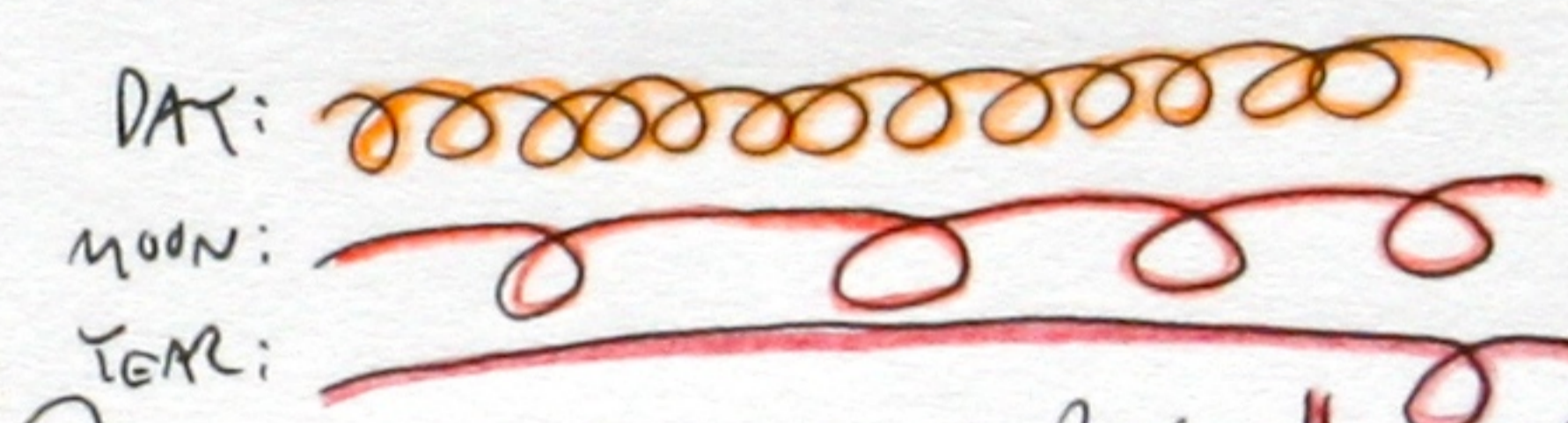
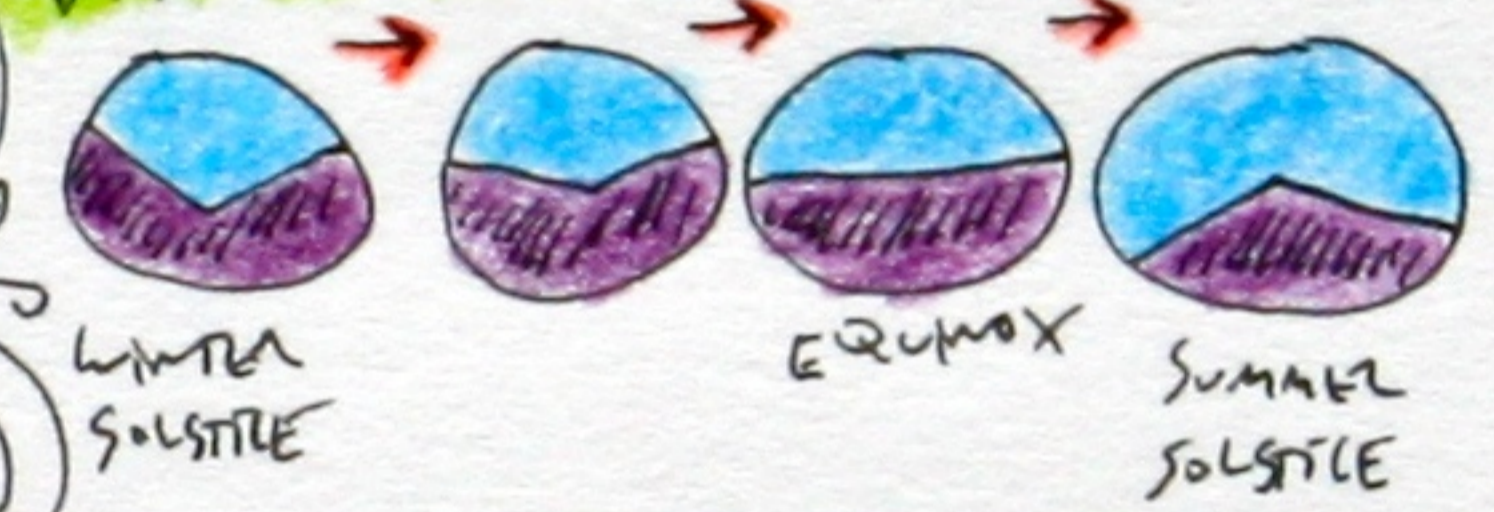
4. DETERMINED BT...
  - 1. TIME OF DAY (DAY, NIGHT)
  - 2. LOCATION (GEOGRAPHY)
  - 3. WEATHER @ LOCATION TODAY (SUNNY, CLOUDY, RAINY, ETC...)
  - 4. TIME OF YEAR (WINTER, SUMMER, ETC...)
  - 5. CLIMATE (DAY)
  - 6. PHASE OF MOON (IF NIGHT...)

DEVIATIONS FROM NORMAL... FASCINATE US... Remember the highs + lows, not the mediums (in life, as well as outdoors)

CHANGE OVER TIME.

IS THIS EVENING COLDER THAN YESTERDAY EVENING? ...if there's a wind, though, why do they CARE about the medium? "Should I rush to finish work + enjoy a nice day, or drag my feet coz it's lousier outside?"

## DAYLIGHT CLOCK



LENGTHENING + SHORTENING OF DAYS. PHASES OF THE MOON. PASSAGE OF THE SEASONS/YEAR. WEATHER SYSTEMS...

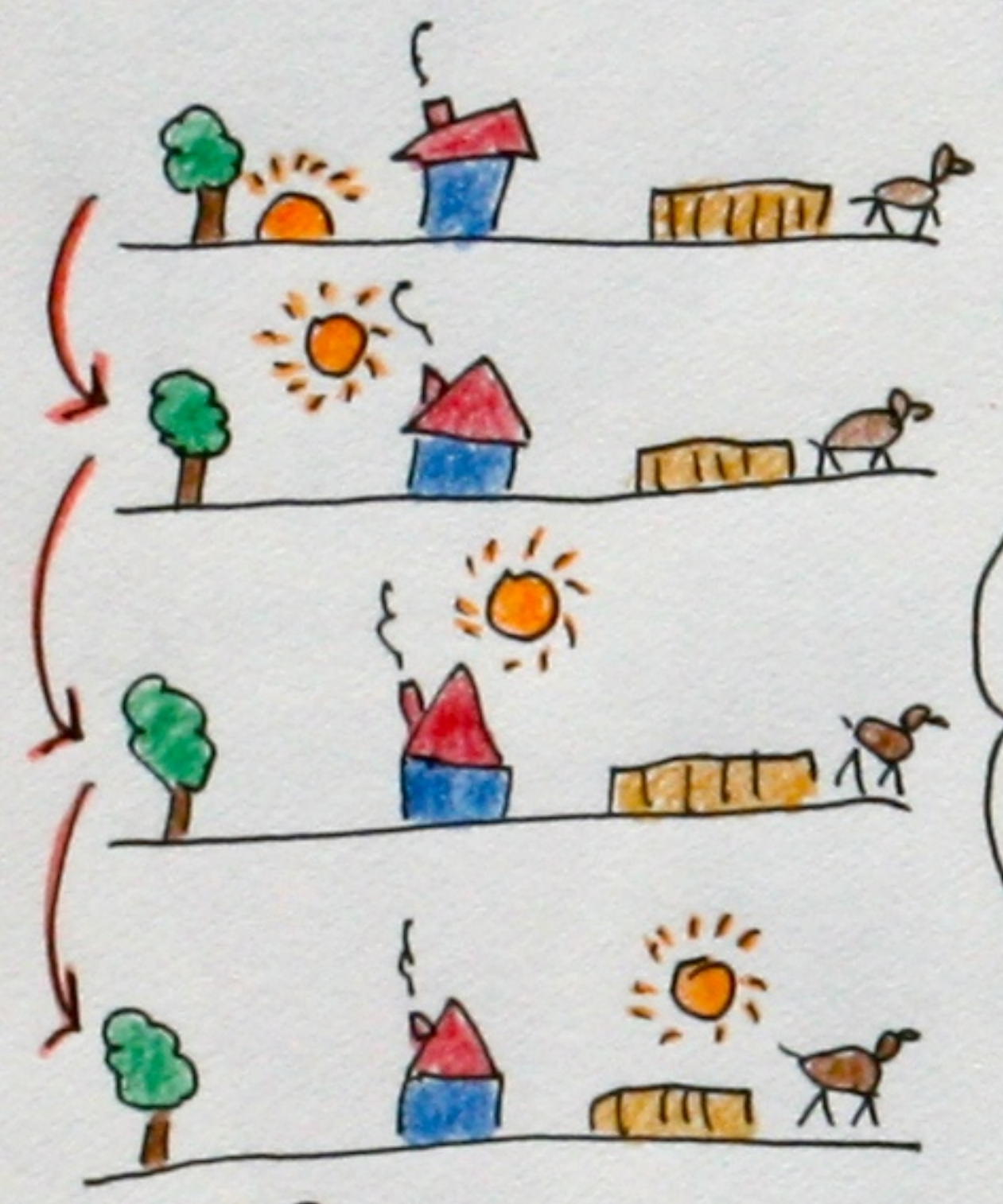
## FRAMING RHYTHMS

"IS IT GOING TO BE DARK WHEN I GET OUT OF WORK, OR NOT?"

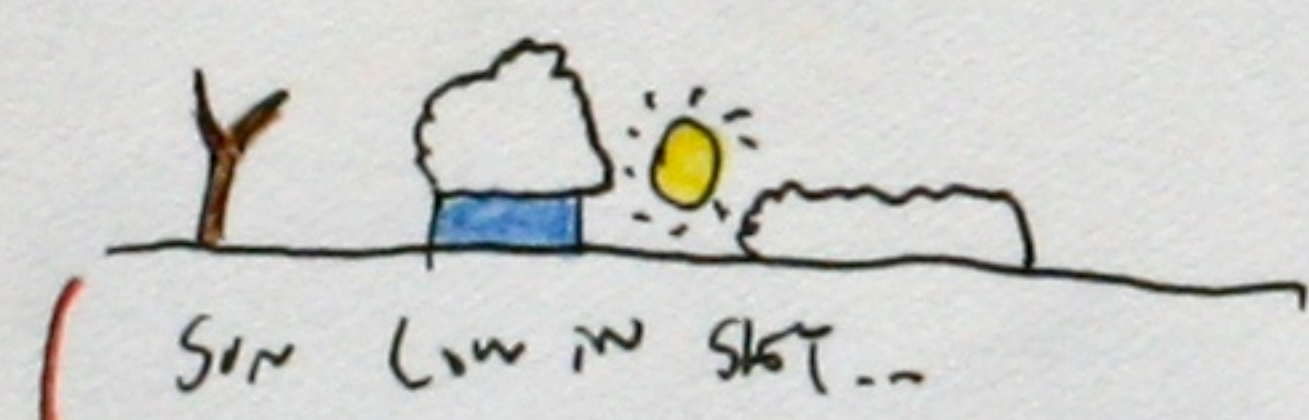
November 8, 2009

# Capstone.

"DAYLIGHT" CLOCK:  
IMAGE OF SUN MOVEMENT?



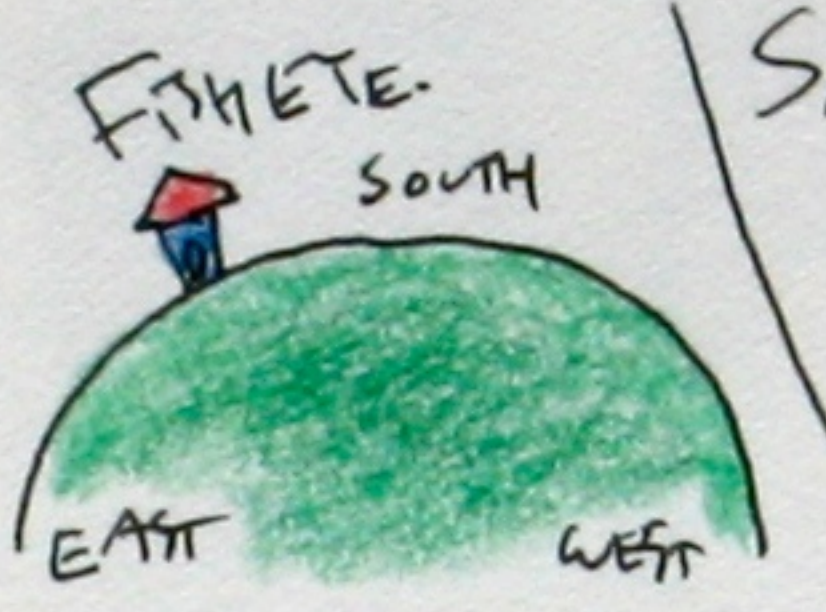
WINTER...



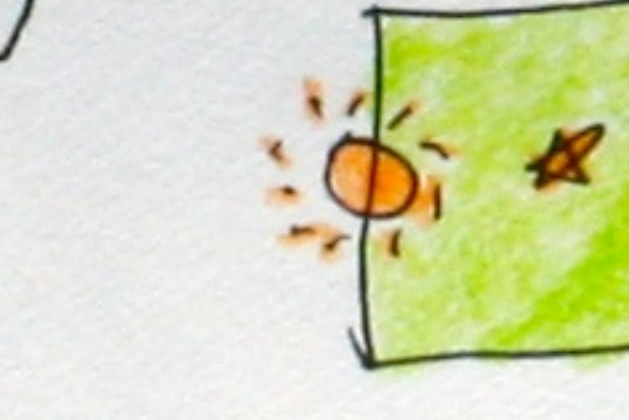
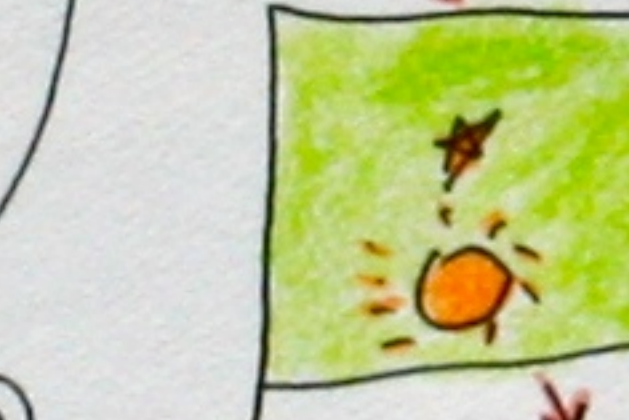
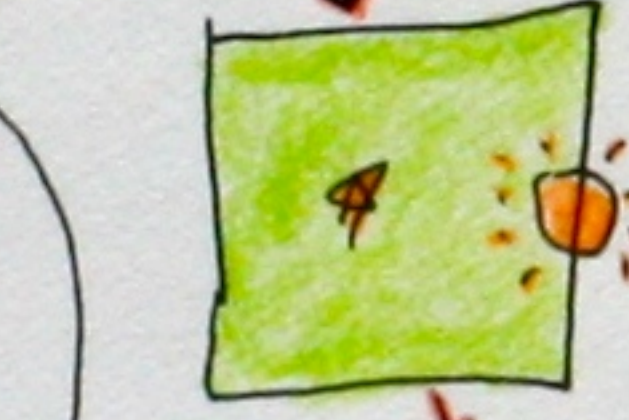
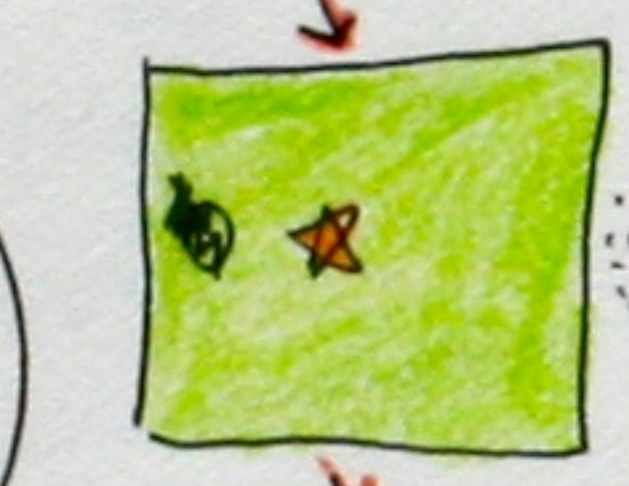
IS THIS LOOKING EAST?  
WEST? SOUTH? WHAT?

FOCAL LENGTH?

SUN RISES IN EAST,  
SETS IN WEST...  
MORE SOUTHERN @  
NORTHERN LATITUDES  
ARISE WINTER.  
HOW DO WE SEE THAT?



BIRD'S EYE:



How Do You Do  
NOON, THOUGH?  
DIRECTLY OVERHEAD?

SNOW GLOBE:



COMPASS?



STATIC?

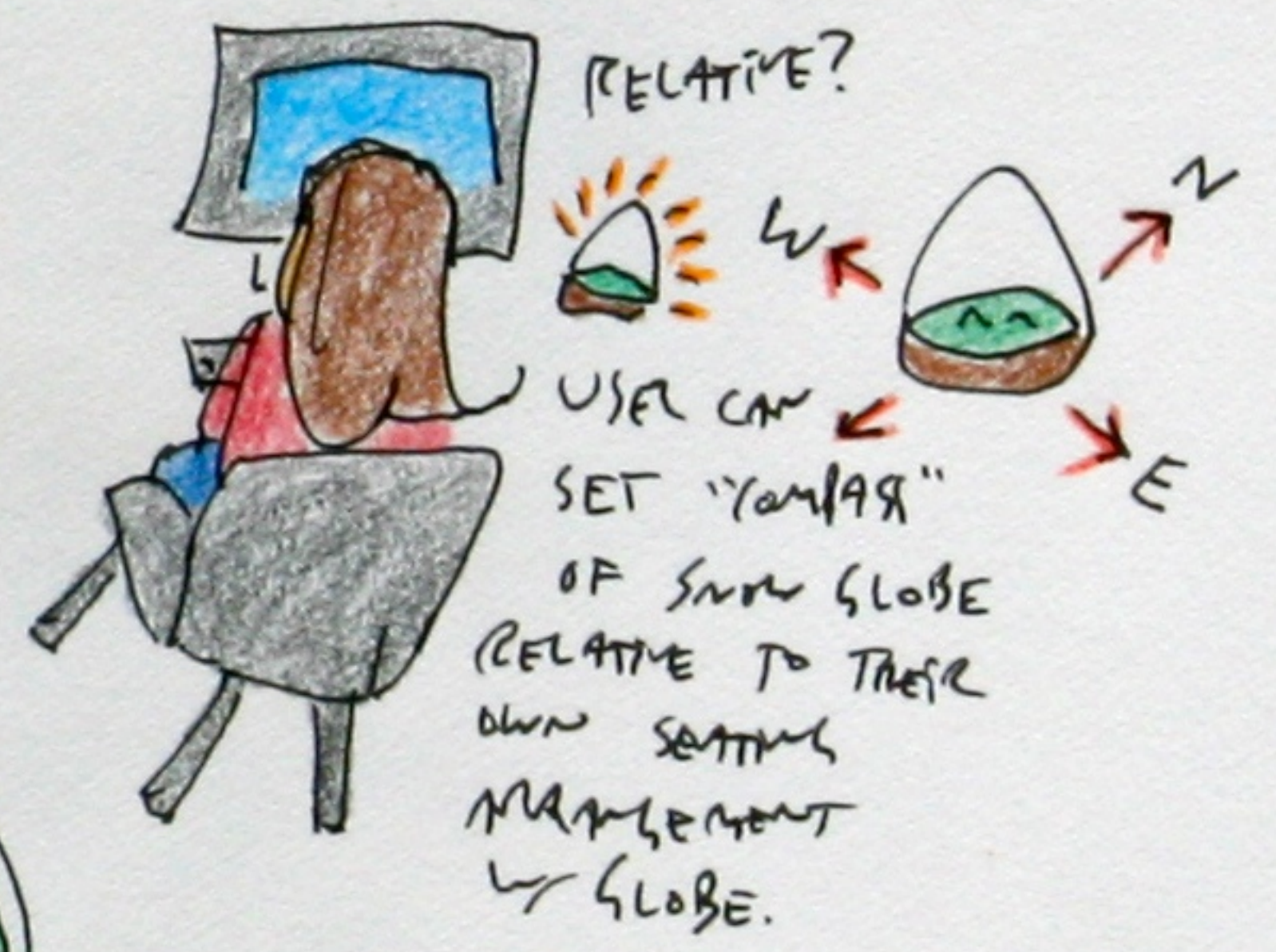


SNOW GLOBE HAS A  
BUILT IN COMPASS SO IT  
ALWAYS POINTS NORTH.

ACCURATELY  
REPRODUCING YOUR OWN  
SPATIAL ARRANGEMENT  
TO THE SUN, ONLY  
INDOORS.

(Snow globe depicts  
actual location of  
sun relative to you)

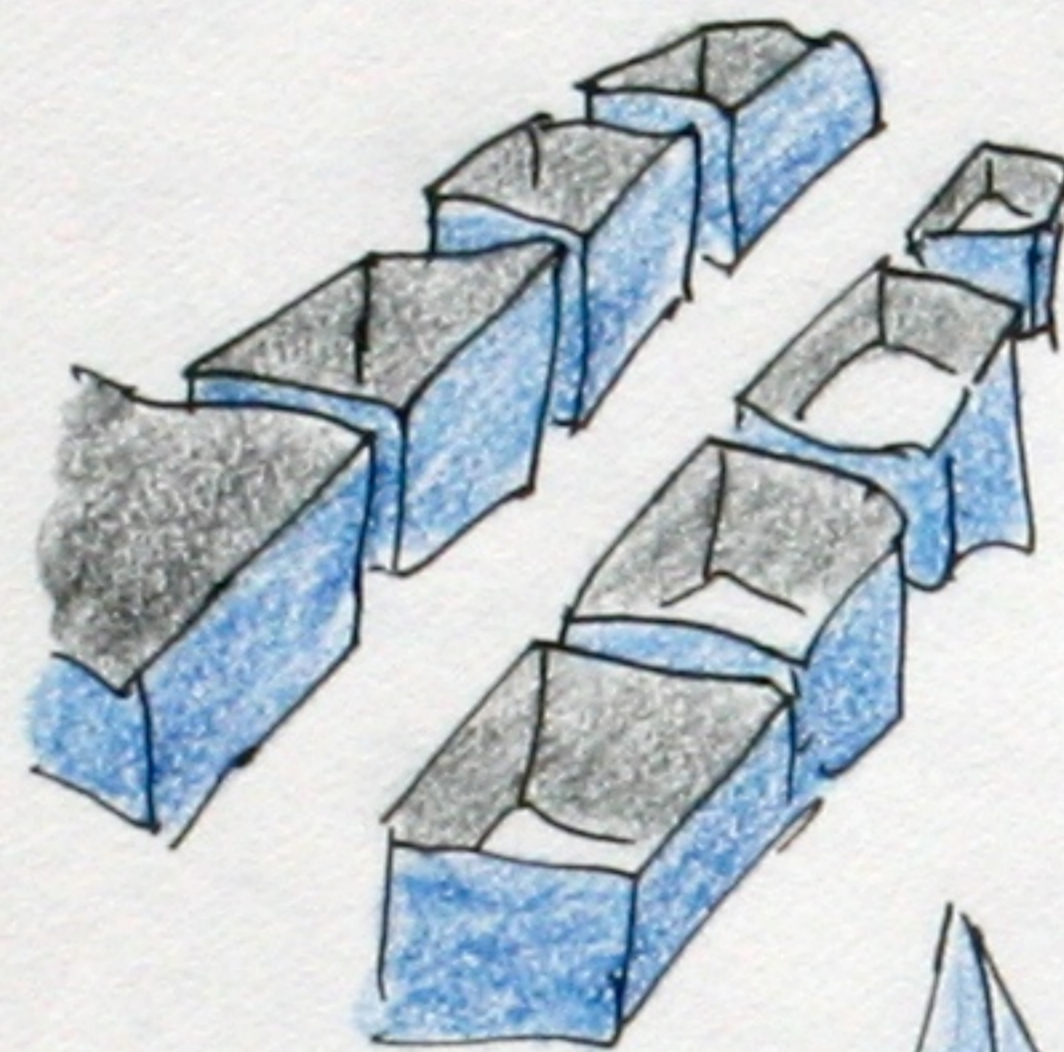
RELATIVE?



# capstone.

NOVEMBER 8, 2009.

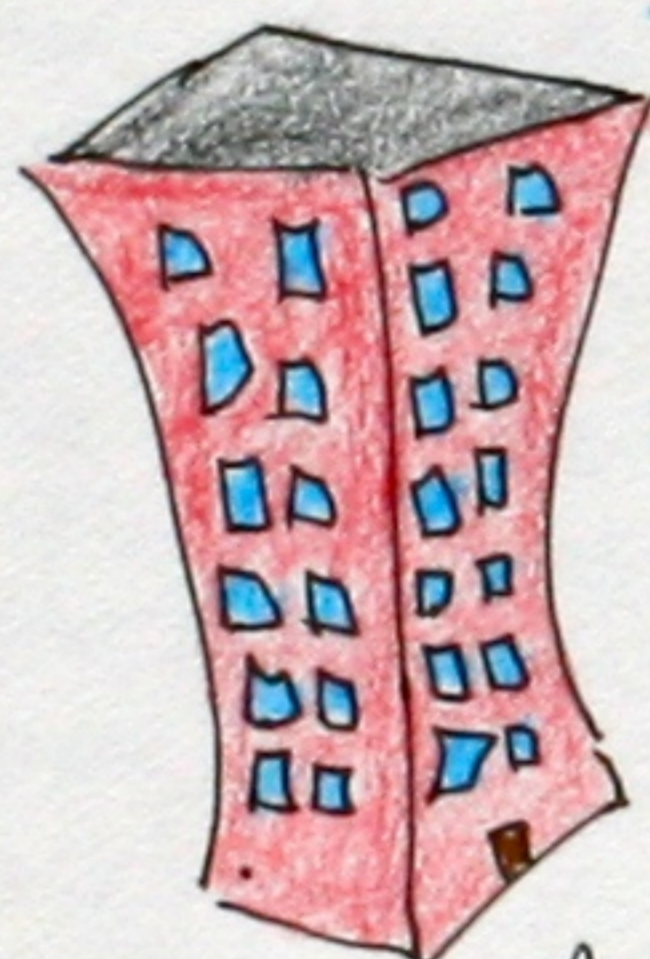
OPPORTUNITIES FOR INTERVENTING.  
--- (CONTEXTS OF USE ---



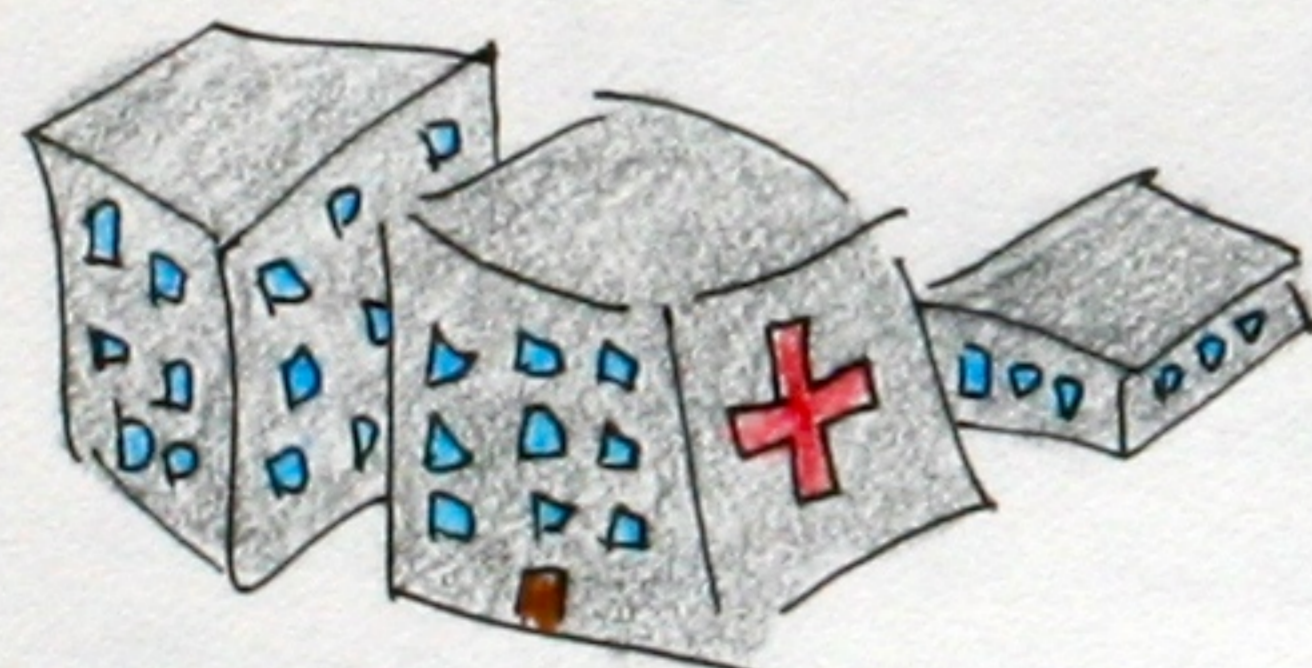
CUBICLES.



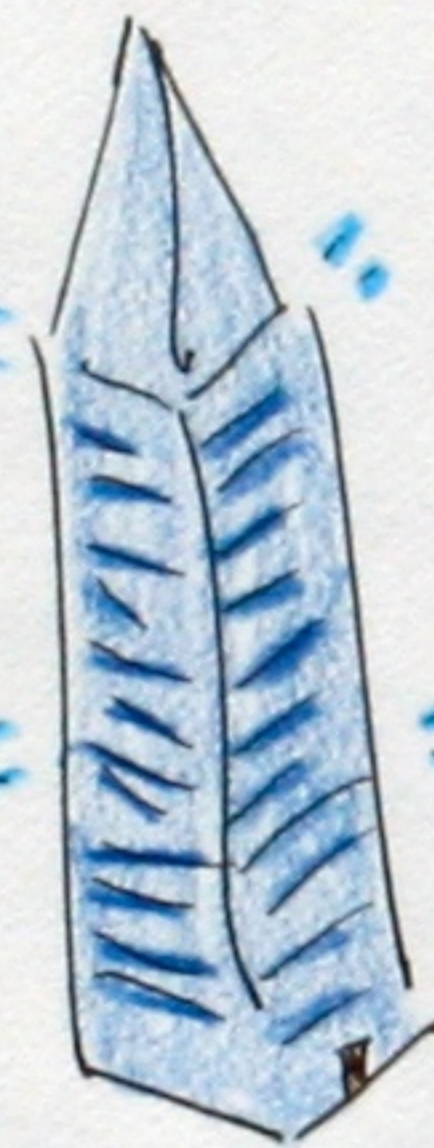
WELLS LIBRARY.



SKYSCRAPERS,  
HIGH RISES.



HOSPITALS.  
(WORKERS + PATIENTS)



HOME-BOUND  
PERSONS...

PLACES:



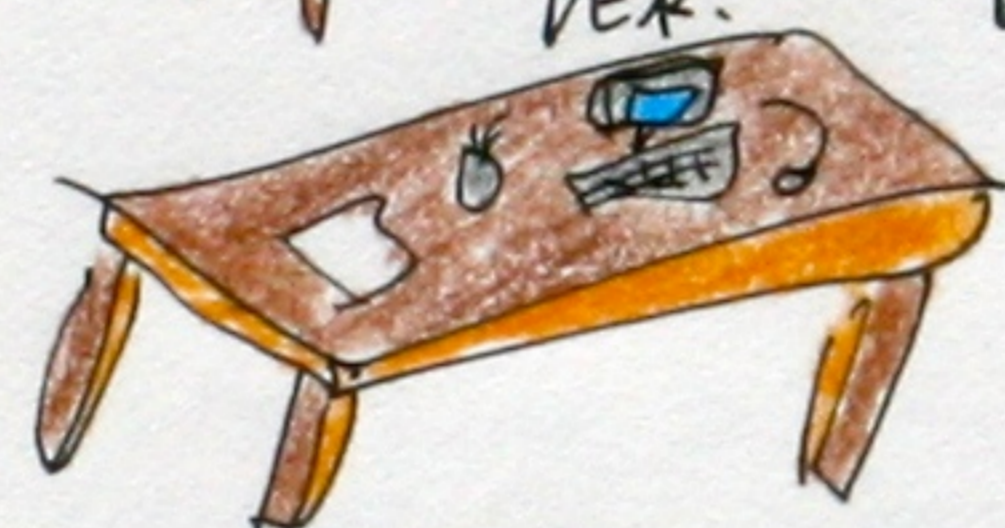
COMPUTER.



CUBICLE/  
WORKSPACE.



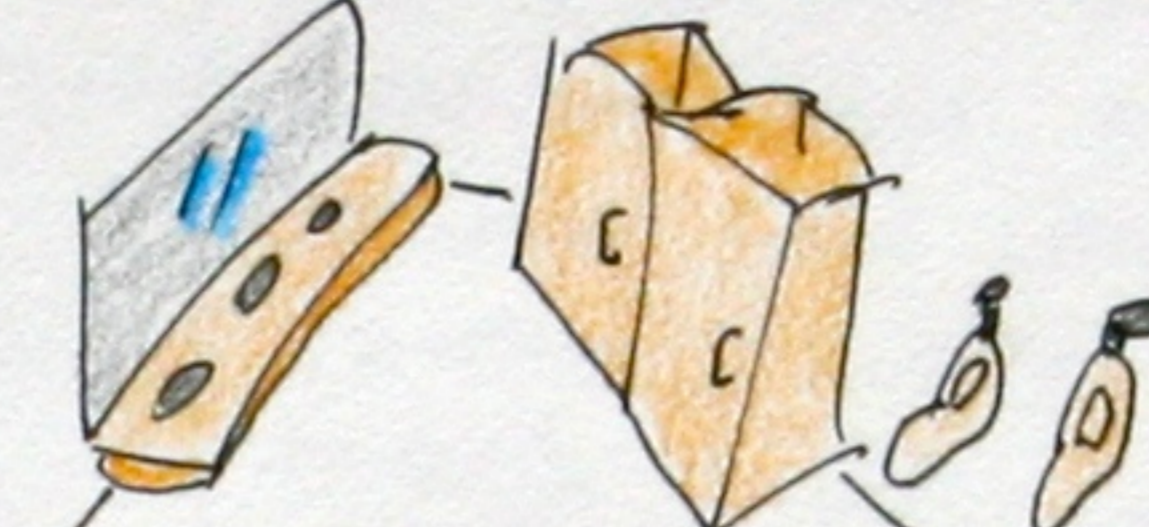
CHAIR.



DESK.



WHEREVER THE  
COFFEE IS.



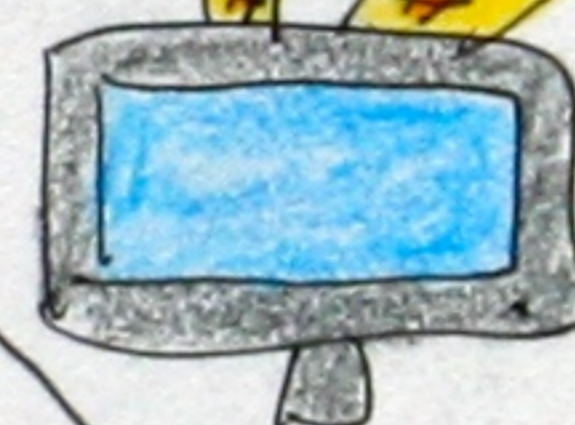
DESK LAMP.



BATHROOM SINK/  
MIRROR.



THE KEYBOARD.



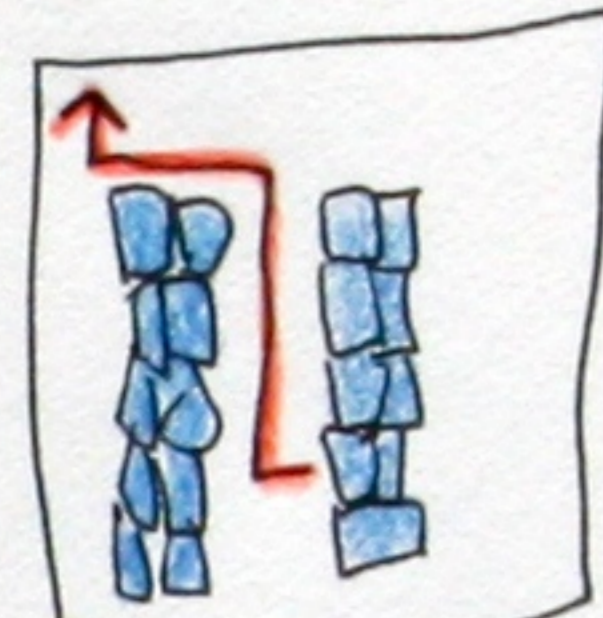
THE  
MINUTE/  
ON THE  
MONITOR.



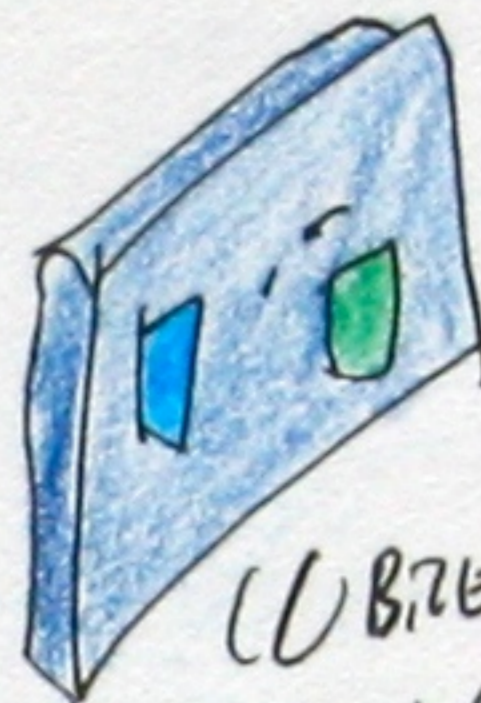
THE CEILING.  
THE LIGHTS.



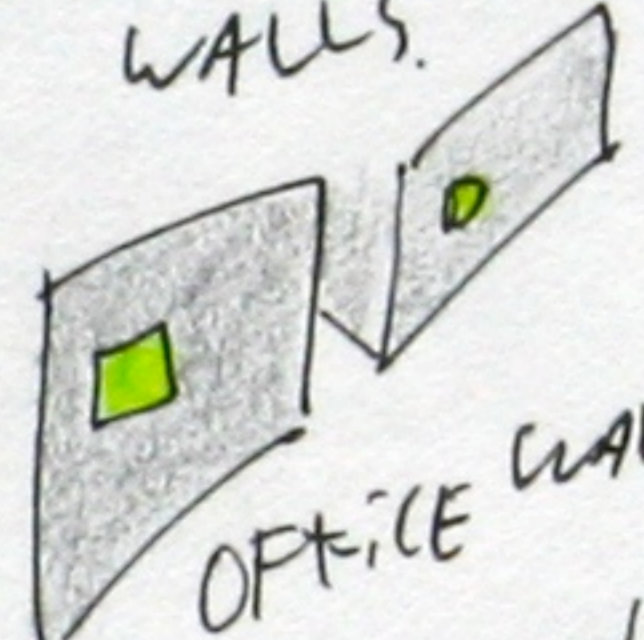
MEETING  
ROOMS.



ONE'S PERSONAL  
PATH TO THE  
BATH ROOM.



CUBICLE  
WALLS.



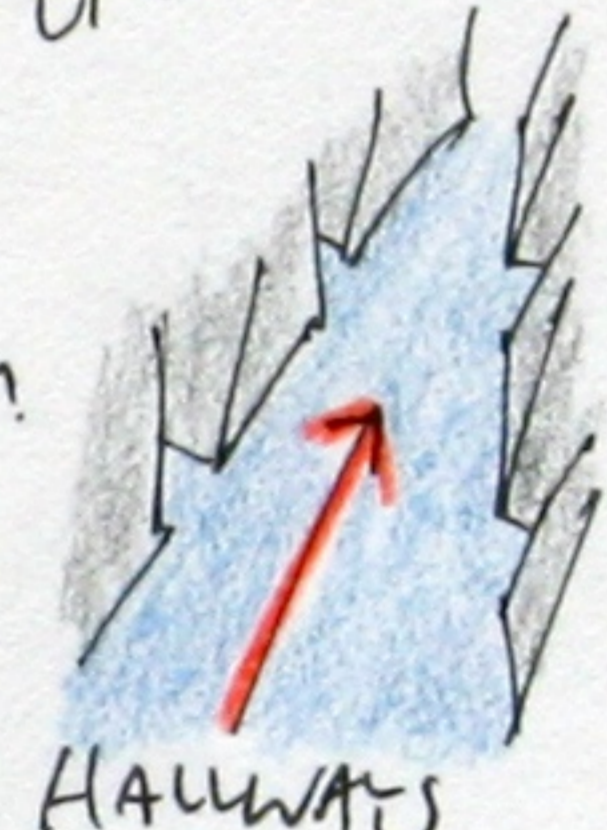
OFFICE  
WALLS.



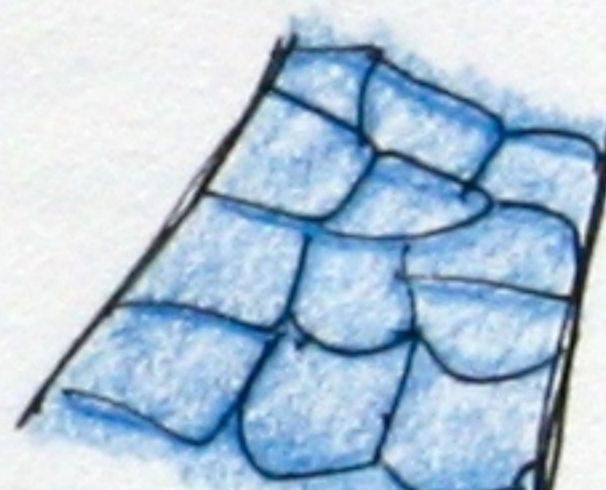
OFFICE  
ART.



DOOR TO  
THE BATHROOM.



HALLWAYS.



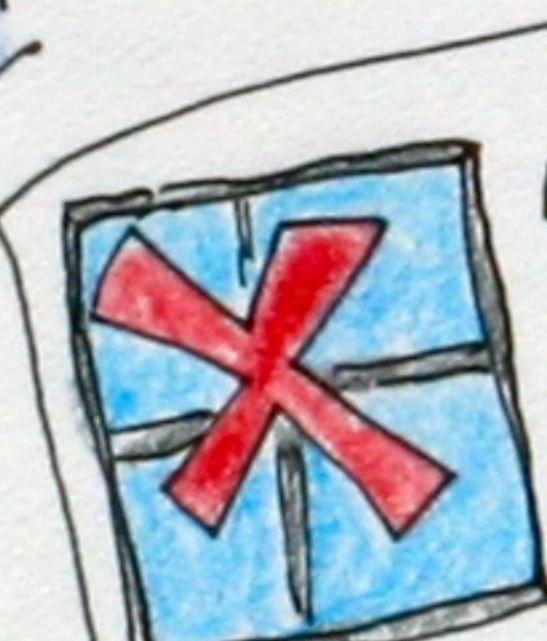
THE FLOOR/  
CARPET/HARDWOOD/  
LINOLEUM.



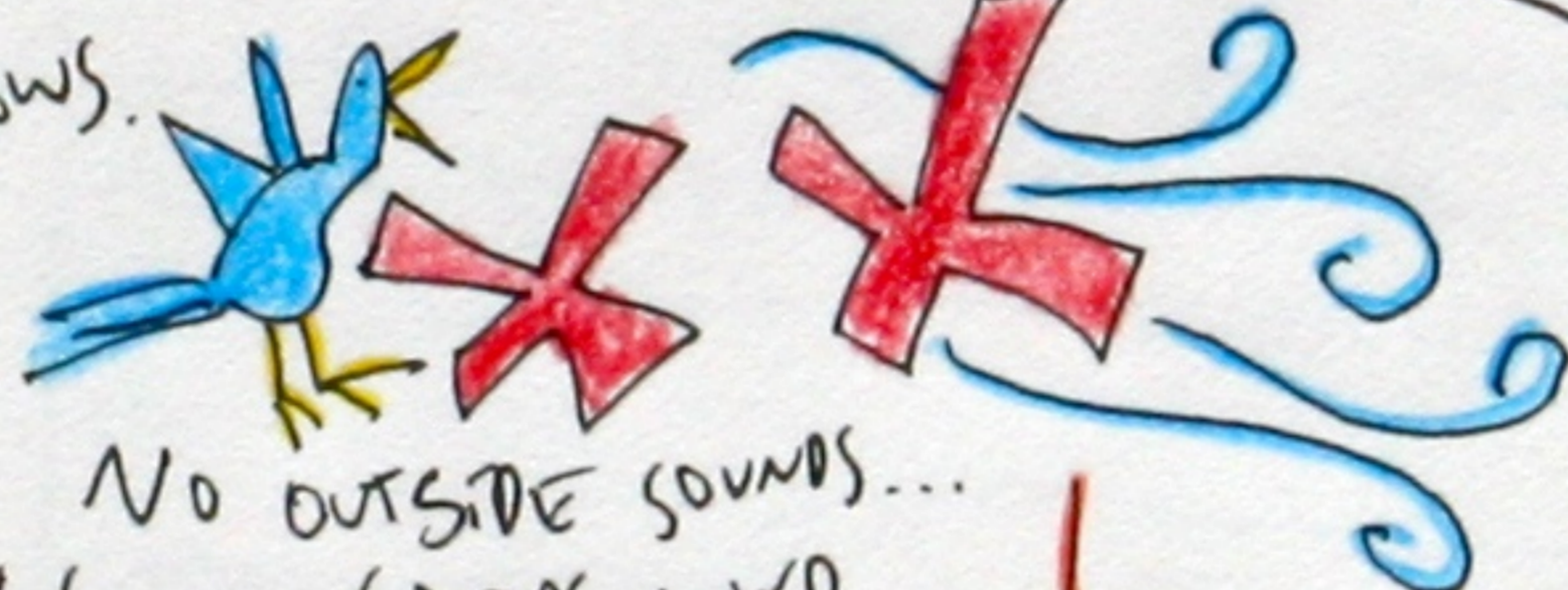
THE BASEBOARD OF THE WALL



EVERY ~~SINGLE~~ SINGLE  
OPEN OUTLET IN  
EVERY SINGLE HALLWAY.

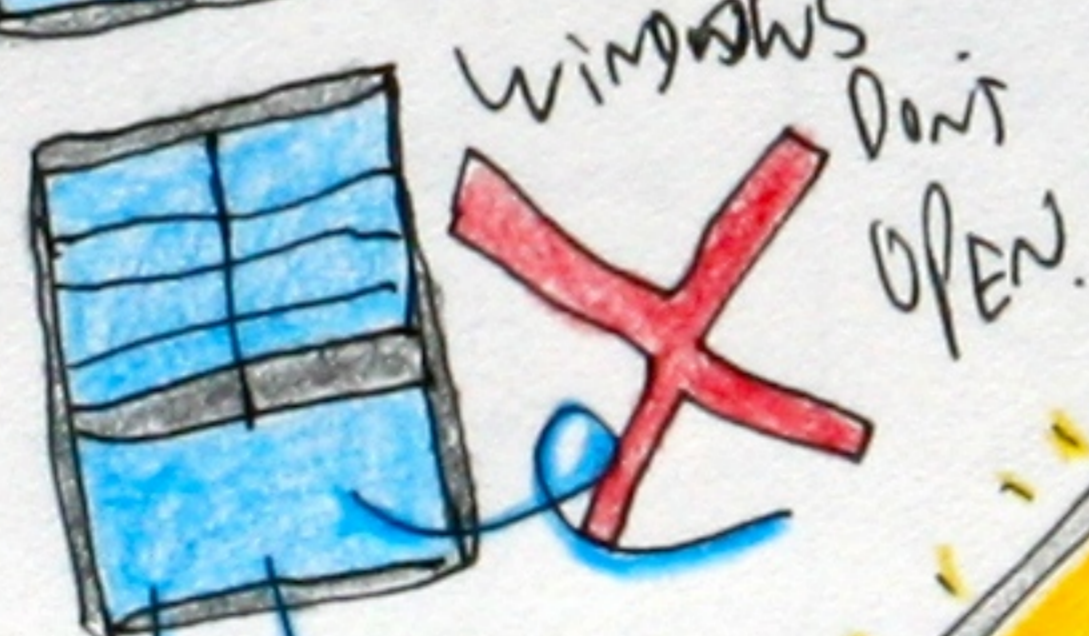


NO WINDOWS.



NO OUTSIDE SOUNDS...  
(BIRDS, WIND,  
RAIN, ETC...)

NO AIRFLOW.



WINDOWS  
DON'T  
OPEN.



HARSH  
FLUORESCENT  
LIGHTING.

BZZZZ...

COLD, IMPERSONAL,  
UNNATURAL BUILDING  
MATERIALS  
(WHITE CARPET, WHITE  
LINOLEUM, ETC...)

# Capstone

November 11, 2009  
November 17, 2009

"I'm on a MUTHA-FUCKIN' PLANE!"  
... How technology redefines our social boundaries, our context, how we define space + place, etc...  
Location in self near plane outlets.  
Location/looking in self where you cellular reception is good.  
Stretching the screen on the plane from the sun with your hand.  
Location in self where you can see the television. OR NOT.

**Outdoor Sensors**  
Mittens. Mitten with. Length with the (carnies or the trees that are overgrown (parks) or are now ten feet off the ground that's a "mark" that's a sensor. Trap wires. Rock slides. Slow weathering/loss + tree animals moving. Migration. Looking. Flying. Burrowing. Plants growing. Moving in the breeze. Absorbent the sun. Photosynthesis. Burrow. Land forms off. Balm. Entry. Animals entry. Digestion. Sleeping. Courtship. Etc. Umbrellas... Uh... Frying. Ut. Teeth, Go without water plants. Swamp still. Evaporation. Evapotranspiration. Lakes. Ponds. Rivers. Waterfalls. Clouds. Rain. Oceans. Humidity. Etc.

FANTASY FOOTBALL? How about...  
FANTASY PHOTOSYNTHESIS!  
Position of sun in sky. Angle of sun. Strength of sun (clouds, etc.). Atmosphere. Ground. Groundwater. Underground. Soil. Direct. Roots. Branches. Leaves. Needles. Pine. Antlers. Bark. Heartwood. Sap. Maple Syrup. Aphids. Infestations. Honeybees. Honeybees. Honeybees. Frogs. Snaps. Crickets. Wind rushing. Marmot whistling.

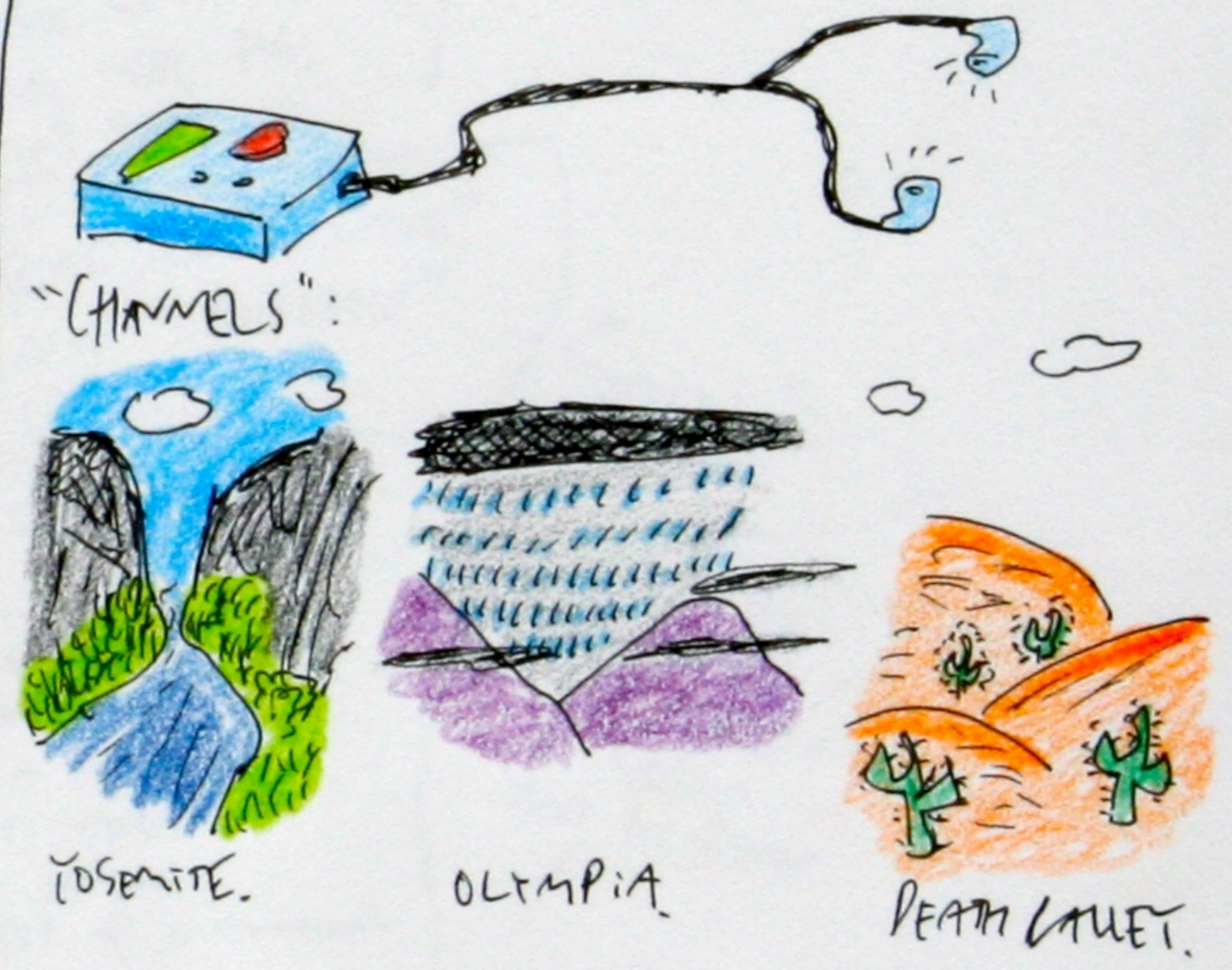
Color/quantity of light.  
Amount of light.  
Stillness of pond. Mirror?  
Light mirror? Rough?  
Not mirror at all?  
Waters. (Latin movement).  
Glimmer movement! A tumult under the scale melt.  
Water. Intermittent streams.  
The melt. The first frost.  
The last frost. Below freezing  
Quantity of snow. Quantity of snow is determined by temp.  
Ice. Ponds of water. Fog.  
Fog. Mist. Muffled sound.

MUSIC. The late snow pos is shimmer, cold, high, tinkly, snappy, icy... ~~water~~ like, just that symbolizes the weather?  
A system that records outside weather (wind, birds, etc.), edits out non-musical noise (cars, etc.), translates it into music, includes weather information + forecast.  
LIGHT  
\* \* \* FALLING SNOW.  
MUSIC, WINDY, PELLET SNOW

Different Animations.  
Different = Music.

Ability to "listen in" on the conditions outside... like "listening" to meteors burn up in the atmosphere over Texas.  
Microphones  
+  
Temperature  
+  
Precipitation  
+  
Wind speed  
+  
Humidity  
+  
UV levels  
+  
Light levels  
→ 'THE SOUND OF THE NOW. (OUTSIDE).  
AMBIENT MUSIC.

Different "radio stations" for different locations? (Osemitte, Olympia, Death Valley, etc.)





# CARSTONE

"I'm on a MOTHER-FUCKIN' PLANE."

HYPER-REPRODUCTION OF AIR TRAIL.  
IT'S LIKE A GYM ROOM, ABOUT  
A FEW FEET WIDE ONE, WITH THE  
LIGHTS FLICKER + YOU HAD SOME TUBES  
AND YOU COULD GO ON FOR 40,000 FEET.

BROOKSTONE: OOP (ARTISTE TOUCH) INSIDE  
SIDE OF VIBRA HYPER FRAME.

- ACCURATE. COM. NO-INTERMIT NO-INTER  
WEATHER FORECAST STATION.

... ALSO... ADVANCED INTERFACES OF AIRS,  
A MUTE FROM LIFE... TABLET CAPS  
(SCW DISPLAY, ANIMAL THUMB CONTROLLER  
(A LA PDA-STATION), ETC.

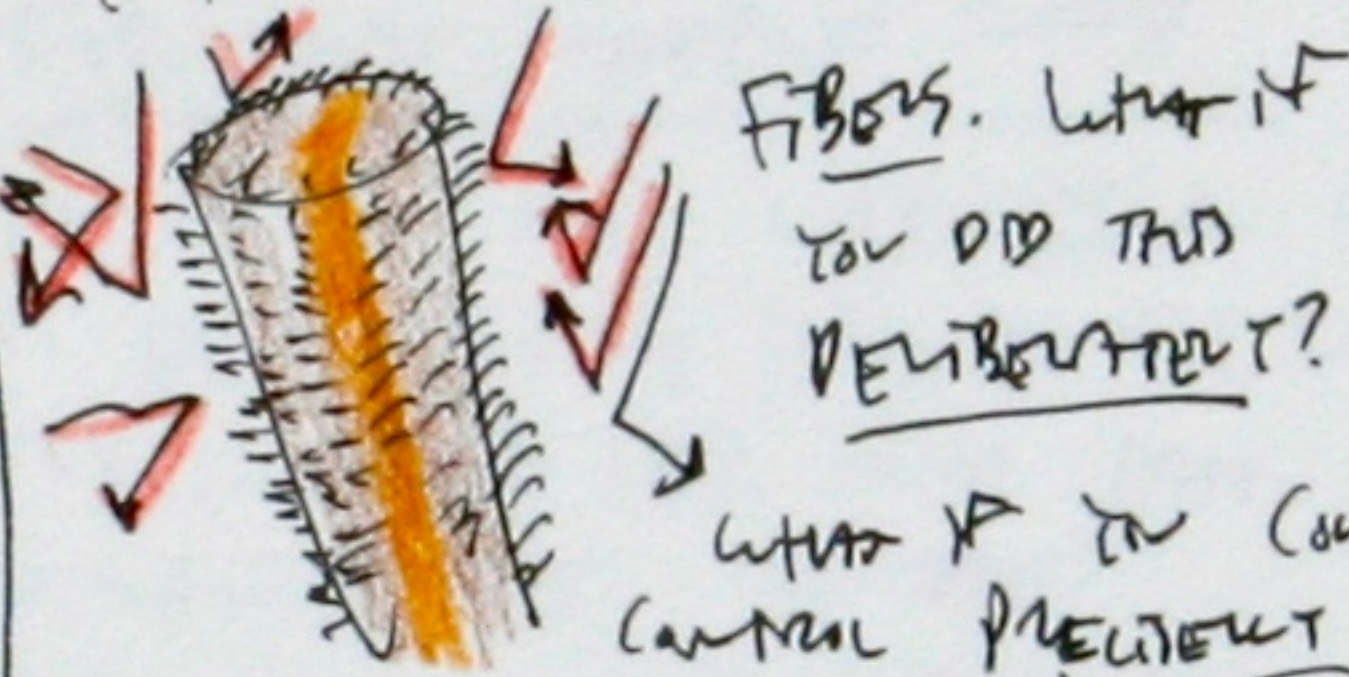
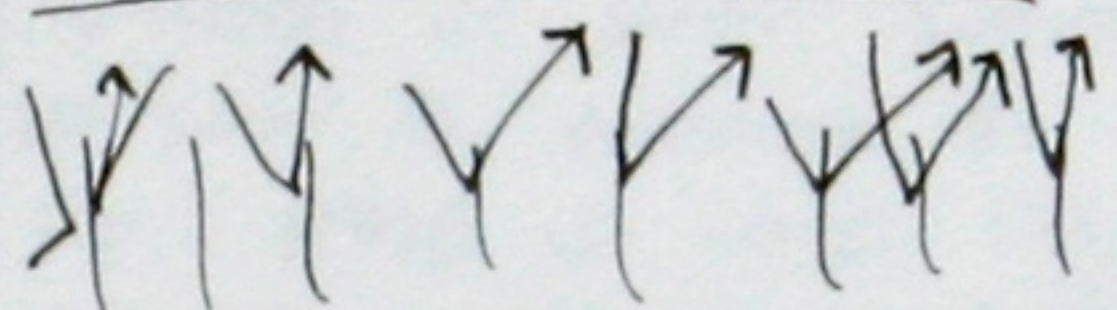
ALSO, @ BROOKSTONE, THOSE ARE HELICOPTERS.  
THAT, LOT, LOT IF WHEN TECHNOLOGY PASSES  
INTO A NEW STATE.

WHAT ABOUT THE MORAL IMPLICATIONS OF THE  
THING WE DESIRE? TRAFFIC LIGHTS. WHAT IF  
THEY'RE COMPLETELY RANDOM? WHAT IF THEY HAVE  
SENSING PROBES? WHAT IF THERE IS A TOWN  
CLOCK? WHAT IF THERE IS A BIKE? WHAT  
IF YOU'RE ENVELOPED BY THEM? SHOULD YOU  
BE ABLE TO CHANGE A CITY IN AN INSTANT?  
AS A PRIVATE CITIZEN? AS AN EMPLOYEED EMPLOYEE?  
WHAT IF YOU'RE LATE TO WORK? WHAT IF  
YOU'RE LATE + YOU'RE A DOCTOR? WHAT IF YOU'RE  
IN A ROMANTIC COMEB? WHAT IF YOU'RE RICH?  
WHAT IF YOU'D OWN A NEW CAR? AN INFINITE  
LIFE? WHAT IF YOU'VE HIT ALL THE PREVIOUS LISTS?  
WHAT IF YOU'RE A LOCAL? A NEW-LOCAL? SHOULD  
YOU HAVE TO WAIT LONGER + GET MORE OFFER?  
OR NOT? HOW IMPORTANT IS YOUR TIME? IS YOUR  
TIME MORE VALUABLE THAN SOMEONE ELSE'S?

"LET'S RATHER THE."

OF THE. A BROAD TECHNIQUE, WHERE  
THE SCREEN ISN'T FLAT, BUT IS  
FIBERS. THEREBY, IT CAN CREATE  
A 3D IMAGE. CLOTHING TECHNOLOGY.  
CAMERAS ON THE FM SIDE.

FIBERS REFLECT LIGHT IN DIFFERENT  
WAYS... REFLECT, CANAL OUT, ETC...



WHAT IF YOU COULD  
CONTROL PRESENT

WHAT WOULD BE SEEN FROM DIFFERENT  
ANGLES? "THE ULTIMATE IN PARALLEL."  
THE ULTIMATE IN HologRAMS.  
HOW WOULD THIS CHANGE OUR COMPUTER-  
MEDIATED INTERACTIONS? FURTHER HOW  
WOULD THIS CHANGE OUR PERCEPTION  
OF REALITY?



VERSUS



DESIGNS HAVE  
MORALS IN USE.  
AFFORD CERTAIN  
SOME ACTIVITIES, PROMOTE  
OTHERS.

NOVEMBER 4, 2009

GLASS-BOTTOMED AIRPLANE.

## OUTDOOR SENSORS.

AIR TEMPERATURE. SOIL TEMPERATURE. LIGHT LEVELS.  
INFRARED LEVELS. HEAT. SOUND VIBRATION. PRESSURE.  
MAGNETIC FIELD (MAGNETIC EFFECT, REED SENSOR). POSITION.  
PROXIMITY. LOCATION (GPS). DISTANCE (SONAR RANGE  
FINDER). MOTION SENSOR. PATTERNED MOVEMENT.  
TIME OF DAY. LIGHT LEVELS. HISTORICAL DATA.  
CHANGE OVER TIME. MOVEMENT OF EARTH'S CRUST.  
EARTHQUAKES. TIDES. MOVEMENT OF WATER. RIVERS.  
WAVES. AMPLITUDE + FREQUENCY OF WAVES.  
HUMIDITY. OXYGEN CONTENT OF AIR. PARTICULATE  
IN AIR. ALLERGENS. ORGANIC MATTER. MYCOGEN.  
MOISTURE OF SOIL. POLLUTION LEVELS. CO2.  
CO2 IN A ROOM. GAS VAPORS. FIRE. FIRE SMOKE.  
CARBON DIOXIDE. MINOXIDE. SMOKE. VOLCANIC ASH.  
METEORITES. NORTHSTAR LIGHTS. SUN WIND. WIND  
ACTIVITY OF SUN. SUN SPOT. MAGNETIC ACTIVITY OF  
EARTH. ATMOSPHERIC TILT. SUNRISE. SUNSET. AMOUNT OF  
DAYLIGHT. AMOUNT OF NIGHT. LENGTH OF DAY.  
ELEVATION. AIR PRESSURE. CHANGES IN AIR PRESSURE @  
ELEVATIONS. CHANGES IN WEATHER. BAROMETER. WATER  
PRESSURE. WATER DEPTH. UV INDEX. CLOUD COVER.  
CHANGES IN CLOUD COVER. HEIGHT OF CLOUD COVER. CEILING.  
CUMULUS, STRATUS, CIRRUS, ETC. LIGHT POLLUTION.  
STARS. CONSTELLATIONS. BIOLOGICAL RELEASES.

SPRING/NEW GROWTH. MATURATION. FAUN. DEATH. RAIN.  
PRECIPITATION. SNOW. SNOW COVER. LEAF COVER. INVASIVE  
SPECIES. BARK BEETLES. INTENSITY OF PRECIPITATION. ELECTRICITY  
IN ATMOSPHERE. THUNDER. LIGHTNING. WIND. WIND DIRECTION.  
CAMPASS. COMPASS BEATERS. WIND SPEED. GUST. LULLS. WIND  
CONSISTENCY. REFLECTION OF SUN OFF WATER. ANGLE OF SUN  
IN SKY. POSITION OF STARS. SEPTANT. DETERMINING LONGITUDE  
+ LATITUDE. SUN FILTERING THROUGH TREE CANOPY. LEAF  
MOVING IN BREEZE.

"MIND PAUSES."  
MOMENTARY, QUICK,  
MOMENTS OF REFLECTION.

PHONE APP. SOUNDS OF  
THUNDER. KOI POND.  
OCEAN, BIRDS, ETC.

CERTAIN MUSIC DEEPLY  
ASSOCIATED w/ PARTICULAR  
PLACES. DJ SPINNA,  
MEOW BIBLE.

LEARNING TO IDENTIFY BIRDSONGS.  
CONCEPT-CENTRIC. STAMLOW.  
WHAT'S DEEP? WHAT'S THE  
WELL BEHIND IT?

CHALLENGE. ADVENTURE.  
"AM I MISSING ADVENTURE?  
IS THAT WHAT PEOPLE NEED?"  
PIRATES OF THE CARIBBEAN:  
"I don't want a ship, I want  
freedom."

→ FIREFLY. SERENITY.  
KAYLEE. "I'm trapped on  
this planet."  
→ TRAPPED TENSION @ DESK.

SMELLS. EVEN DIRT smells  
good. Healthy soil has  
something to it. Feel the  
sunshine.

LIFELINE: Moss terminology.  
YES! SMEL. A SCENT.

MAYBE A MONTAGE SUNSET?  
meta pos of outside. Develop a  
relationship with. LIGHTNING  
BUG JAR!

People who watch golf tournaments  
& do nothing but identify birdsong  
and then pan setting upset for  
people who enjoy fake birdsongs!

Different needs... birdwatchers  
watching + sitting, kids  
rock climbs doing pull-ups.

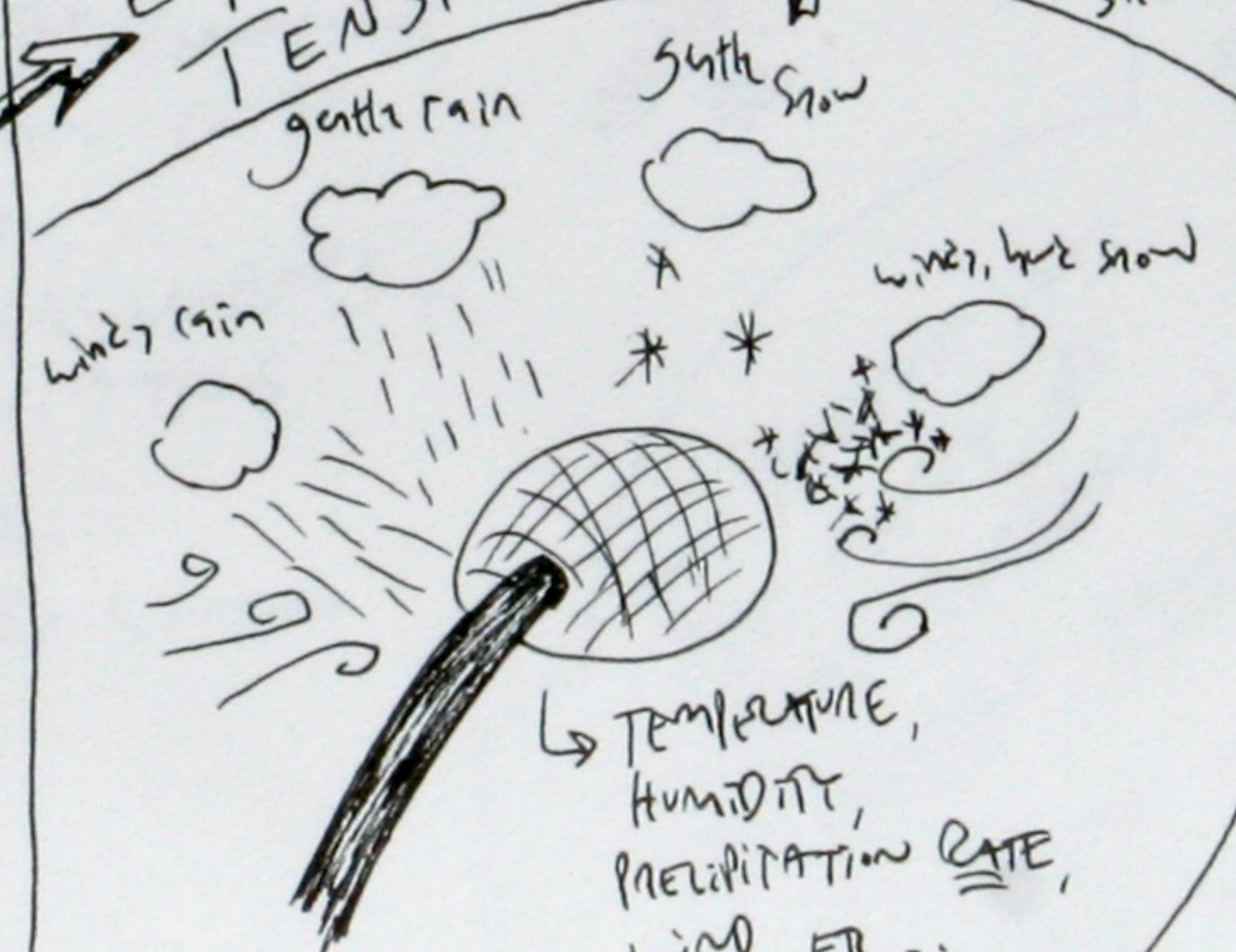
EDUCATION? LEARNING BIRDS?  
LEARNING PLANTS AROUND YOU?

OUTDOOR SPORTS? VERSUS OUTDOORS?

PEOPLE who stay in their cubicle  
all day? People who work (trial)?

"QUALITY" OF  
WEATHER  
MONITOR...  
"hazy rain",  
"sleet", "siccant",  
"snow", etc...

EXPLORING THIS  
TENSION.



AMBIENCE  
via iPhone.

YOU PRESENT FOR  
FIVE MINUTES IN  
2 WEEKS.

↓  
overview of  
what you've done.  
Plan for spring.

QUALITIES OF RAIN...  
HEAVY, LIGHT, WIND, DRIZZLE,  
BIG DROPS, MIST, FOG,  
DRIVING, ETC...

BIRDSONG? FAKE?  
NOT? RETICED?  
LIVE?

EVEN JUST QUALITIES OF  
WIND...  
- IN A BIRCH FOREST  
- IN A PINE FOREST  
- IN A DESERT  
- IN A MEADOW  
- IN A CANYON  
- ON TOP OF A MOUNTAIN

SMELLS.

BEFORE/AFTER  
RAIN. DIRT.  
ETC. Dependent  
ON WEATHER.  
NOT BY REQUEST.

Koi Pond.

grocery (Produce)  
aisle. "MIST THEM  
CARROTS!"

# CAPSTONE.

JANUARY 17, 2010

JEFF + SHAWEN CONVERSATION...  
CULTURAL CONSTRUCTION OF "OUTDOORS" ...  
and arts associations w/ it... EMBRACE  
THE CULTURE, RATHER THAN TRY TO  
ELIMINATE/ISOLATE/MINIMIZE IT?

... LEAF SKITTERING ACROSS PAVEMENT  
IS AN ABSTRACTION... WINTER...  
REQUIRES PAVEMENT, WHICH IS UNNATURAL,  
REQUIRES EXPERIENCE WITH IT.

... RAIN FALLING ON A ROOF... SIMILAR  
TO FRENCH ON LEAFES, BUT SPILL DISCREPANT.  
THAT, REQUIRES MAN'S ~~BE~~ BUILT ENVIRONMENT

... SATURDAY EVENING POST ART...  
INEXPLICABLE "CHRISTMAS" ...  
ART FROM DIFFERENT TIMES  
OF THE YEAR? ERN KITCOY ART?

... A FIRE IN THE FIREPLACE... (OZY  
+ WIMPY... AND WIMPY (UNCOMMON),  
EVEN THOUGH IT'S FAR FROM COLD!  
EMBODIED, SOCIAL, CULTURAL, ...  
EXPERIENTIAL UNDERSTANDINGS +  
ASSOCIATIONS...

NOT NATURAL, NOT OBJECTIVE...  
SUBJECTIVE → INTERPRETED SITUATED  
IN THE INDIVIDUAL.



CONCEPTS OF "NATURE" + WILDERNESS ARE  
CONSTRUCTED INDIVIDUALLY INTERPRETED. SITUATED  
+ INSEPARABLE FROM:

- ① LIFE EXPERIENCES
- ② CULTURE
- ③ SOCIETY
- ④ LIFEWORLD  
- HOPE, ASPIRATIONS, FEARS, ETC...

... RAIN WILL HAVE A DIFFERENT MEANING FOR ONE  
FROM A DESERT THAN ONE FROM THE NORTHWEST.

... LAKES WILL HAVE SOMETHING DIFFERENT FOR SOMEONE  
FROM MINNESOTA THAN SOMEONE FROM HAWAII.

... SNOW MEANS DIFFERENT THINGS IF YOU NEED TO SHovel IT,  
CAN PLAY IN IT, HAVE ONLY SEEN IT IN THE "NEWS," ETC...

THE HUMAN, INTERPRETABLE ELEMENT IS INESCAPABLE.

... WHAT UNITES US? BIOLOGICALLY? CIRCADIAN RHYTHMS.  
HOSPITAL WORKERS (ON NATURAL LIGHT) NIGHT SHIFT WORKERS.  
PEOPLE IN NORTHERN LATITUDES... PEOPLE @ THE EQUATOR.  
PEOPLE IN THE SOUTHERN HEMISPHERE. ETC.

YOU ARE NOT AT  
THE MERCY OF  
YOUR SURROUNDINGS.  
YOU ACTUALLY CONSTRUCT THEM.

... NATURE IS NOT INNATELY  
"GOOD" OR "POSITIVE" ...  
JUST ASK THE PEOPLE  
WHO HAVE BEEN IN IT.  
(COMPUTER CASES, LIGHTNING,  
BEAR ATTACKS, ETC.)

→ HOW CAN WE LIBERATE  
PEOPLE TO ACTUALLY CONSTRUCT  
THEIR WORKPLACE IN A POSITIVE  
MANNER, SIMILAR TO THAT OF  
THEIR RELATIONSHIP WITH NATURE?

→ Rocky Mtn is frightening  
when those ~~stays~~ STAYS  
roll in. AFTERNOON

# CARSTONE

JANUARY 23, 2010.

This is what happens when it hits 32 degrees in January in Minnesota. An endearing and collective joy bordering on insanity.

2:21 PM Jan 16th from web

Cleaning the house in a summer dress with the windows open, listening to Sunshine Melodies, which was recorded in my bedroom by Rick Robot.

2:21 PM Jan 16th from web

It's stunning outside. And my neighborhood smells like pizza. And my hot cop neighbor is singing while he chips ice from his driveway.

2:05 PM Jan 16th from web

CULTURAL SOCIAL --  
ACTIVE CONSTRUCTIONS OF WHAT CONSTITUTES GOOD WEATHER (32°F, SUNNY, ETC...)

"THIS IS A GREAT DAY!"  
"THIS IS A CRUMMY DAY!"

↳ DIRECT MESSAGE OF TWITTER ACCOUNT...  
REMEMBS LOCATION INFORMATION, WEATHER, SUNLIGHT/MEDITATION, TIME OF DAY, PHASE OF MOON, TIDES, ETC... MARKS IT FOR YOU...

RAIN IN A DROUGHT IS WONDERFUL, NOT BAD. A HEAT WAVE AFTER WEEKS OF COLD IS A WELCOME CHANGE.

"Hey, did you know that three weeks ago, there was a day like today you called AWESOME, which today you called CRUMMY?"

INCREASED SENSITIVITY TO THE CHANGING CONDITIONS OF OUR ENVIRONMENT. POSITIVITY? → ENCOURAGING POSITIVE INTERPRETATIONS, WHILE LEAVING ROOM OPEN TO INTERPRETATION.

↳ REVEALING TO PEOPLE THEIR OWN AN-OBJECTIVE CONSTRUCTION OF WEATHER CONDITIONS...

↳ AND THEREBY (REVEAL) TO THEM THEIR CONSTRUCTION OF THE OUTDOORS AT LARGE.

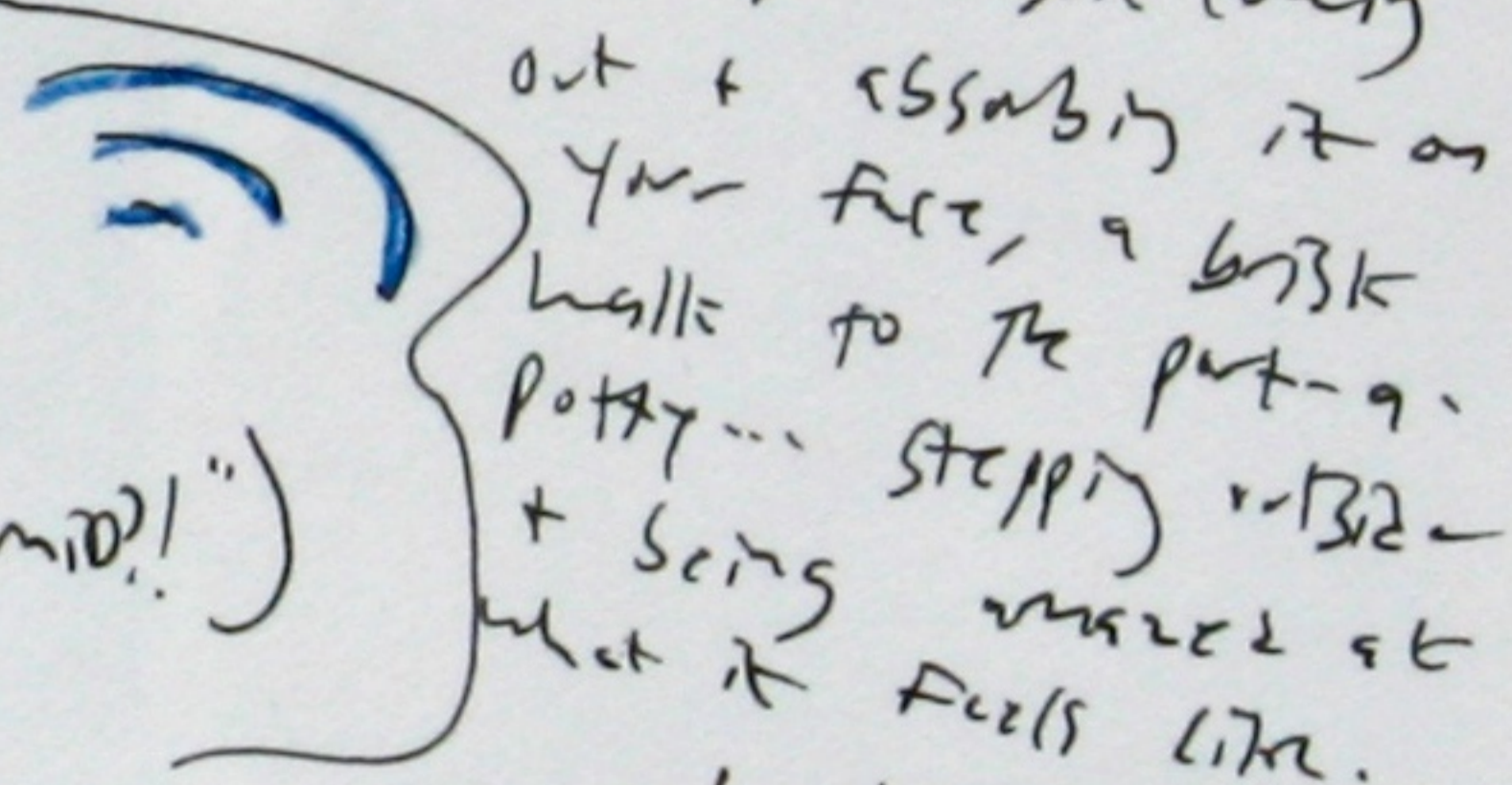
NON-OBJECTIVITY OF WEATHER STATES...

32°F IN SEPTEMBER SUCKS.  
32°F IN AUGUST IS IMPOSSIBLE.  
32°F IN JANUARY IS GREAT...  
32°F IN JANUARY AFTER A TWO-WEEK STRETCH OF 0°F HITS... MAKES PARTY & PEOPLE ECSTATIC.

Well, it doesn't objectively suck... IT'S A METAPHOR. WE SAY IT SUCKS, BUT WHAT WE MEAN IS IT MAKES US SAD OR UNCOMFORTABLE OR DEPRESSED OR KEEPS US INSIDE. WE USE THE WEATHER AS A PROXY FOR OURSELVES.

70°F + HUMID IN AUSTIN IS WONDERFUL ("AT LEAST IT'S NOT 90° + HUMID")

70°F + HUMID IN MINNESOTA IS MISERABLE. ("WHY CAN'T IT BE 70°F + NOT SO MISERABLE HUMID!")



EMBRACING SMALL MOMENTS  
↳ The sun coming out + rubbing it on your face, a brisk walk to the put-a-potty... stepping outside + seeing where it feels like.

How do you RECALL & RECALL THIS?

"THE WEATHER IS BAD," → "THE WEATHER MAKES ME FEEL BAD," ... BUT IT'S NOT JUST FEELINGS OR EMOTIONS... IT'S DEEPER THAN THAT. IT'S NOT THAT SELF-ABSORBED.

IMPROVING THE MENTAL STATE OF PEOPLE WHO WORK INDOORS.

INCREASING/SOLIDIFYING/STRENGTHENING ONE'S CONNECTION TO THE OUTDOORS, EVEN WHEN INDOORS.

RECALLING SMALL MOMENTS OF JOY OUTSIDE--

FACTORS FROM FUTURE COOKIES? TWITTER WEATHER? SPARKLES?

This is champagne powder to make even Utah jealous. You could glow at the stuff and it would blow away.  
10:16 AM Jan 8th from Tweetie

This day, it tastes like Oregon.  
9:42 AM Nov 24th, 2009 from Twitterrific

# CARSTONE

THOSE SMALL SUBLIME EXPERIENCES WE HAVE WITH NATURE ON AN EVERYDAY BASIS... SUN ON A SUMMERTIME PORCH, THE RAIN ON THE FIRE... THESE THINGS CAN BRING TO PREVIOUS MEMORIES + EXPERIENCES. "RETURN" OR "REMEMBER ONESELF" OF THOSE. "THIS DAY TASTES LIKE DREAM." What is it that you mean?

**MAINTAINING** YOUR RELATIONSHIP WITH THE OUTDOORS...  
CSCW WITH NAME, ETC...

EMPHASIS ON THE POSITIVE... "YOU DON'T NEED TO BE OUT THERE ALL THE TIME." YOU DID THIS. IT IS PART OF YOU. EVEN NOW. EVEN AT WORK. ACCOMPLISHMENTS.  
RETAINING YOUR PERSONAL HISTORY. NOTHING CAN TAKE AWAY YOUR LIFE, YOUR EXPERIENCES, YOUR MEMORIES (EXCEPT ALZHEIMER... WHICH SUCKS).

**SUBLIME.**  
**EVOCATIVE.**  
**FLEETING.**

PERSONAL.  
SUBJECTIVE.  
CONSTRUCTED.  
RELATIVE.  
SOCIAL.  
CULTURAL.  
EXPERIENTIAL.  
EMBODIED.  
SENSUAL.

## SUBLIMATE

- SCARF OR NOT?
- SUN OR NOT?
- UMBRELLA OR NOT?
- STARS OR NOT?
- MOON OR NOT?
- FULL MOON?
- CRESCENT?
- SNOW OR NOT?
- CRUNCH - UNDER-FOOT OR NOT?
- SEE MY BREATH OR NOT?
- COAT OR NOT?
- SHOES OR NOT?
- SANDALS OR NOT?
- VEHS OR NOT?
- GLOVES OR NOT?
- HAIR OR NOT?
- GRASS OR NOT?
- BIRDS?
- CROWS?
- SWIMMERS?
- DEER TRACKS?
- FALL LEAVES?
- FLOWERS?
- BUDS?
- SMELLS?
- CLOUDS?
- CUMULUS?
- CIRROSTRATUS?
- HUMIDITY?
- TEMPERATURE?



# CARSTONE...

JANUARY 23, 2010



# CAPSTONE

JANUARY 24, 2010

"TRUE POWER IS RARE & BENIGN."

So, WHAT WOULD YOUR LAST FIVE MINUTES LOOK LIKE?

Big goals. Big Rocks. Mopping people mention a connection to the outdoors when they cannot be outside. Maintaining it, almost like a human relationship. Just as human social relationships take time + effort, + change over time, so do our relationships with the outdoors... reflection, change, attitudes, you love a family, etc... The love isn't necessarily natural, something that is instilled in you but everyone has a natural predisposition to at least some aspect of outdoors... whether it's shimmering stars or stamping in puddles or sunshine or birds or greenery or oceans or beaches... we like that sort of thing. Keep us real, keep us grounded. (Indeed, so much social networking is so self-absorbed... how can we get outside of ourselves? Not beyond ourselves? Remember that there are things out in the world that change independent of us? Also, differences in language + frequencies. Nothing is sudden or immediate with nature... it's our time... ambient... etc. Unlike the jarring immediacy of the office...

Also, there is an asymmetry of value. Memories worth nothing. They are a single cat hair, for instance. Opportunities for reflection... a one-week trip can leave you completely rejuvenated... even just sunshine after weeks of clouds, they make you GRINDY... or perhaps inevitable you need to be indoors. BUT. The point is, I believe you can maintain your relationship w/ the outside world without being there 24/7. You can value it, learn from it, reflect on it, even reminisce, in an abstract manner. But perhaps we actively construct a relationship. So this would be essentially "outdoors" as far as experience goes, but essentially "indoors/outdoors"... what ever that would look like. How can you grow + evolve + progress your relationship your understanding, your personal meaning of the outdoors while you're inside, in a manner that does not distract you from your work, or make you feel DAD for not being outside at a particular moment.

"THE ECTIVE CUESANCE OF NATURAL POWER." How can you progress,

grow along with them, reminisce, when you aren't even there. How can you make it personally meaningful. How can it affect the environment of your workplace, the temperature, the light level, ... your mood, your mental state, even reminisce. How do they wire together? How do we break down the wall, the boundary, even the false boundary between in and out. How do we naturally create it, in such a manner we don't try to recreate the authenticity + meaning of the outdoors, but create NEWLY AUTHENTIC relationships... The meaning of "INDOOR OUTDOORS."

CULTURE + SOCIAL SITUATIONS... PERSONAL MEANING... WEATHER, TIME OF DAY, SOCIAL / LOCAL MOVEMENTS... clouds, weather systems... "THE THAT GREEN STUFF"... Sounds... of rain, of crows, of leaves on pavement, of wind in trees... The Craig Blacklock DVD... Social Power. Local Power. REVERENT VISIBLE TORE INVISIBLE CONNECTIONS TO THE OUTSIDE even when you're inside... air flows... EVEN WINDOWS ARE ARTIFICIAL, AN ABSTRACTION... They're not cave openings. GLASS = "UNNATURAL". TRANSPARENT = UNNATURAL. NATURAL LIGHT IN ENCLOSED SPACES = UNNATURAL.

NATURE AS A RELATIONSHIP. A SIGNIFICANT OTHER. NON-STATE.

IT'S NOT NUMBERS. IT'S NOT PERCEIVED FLOW FEEL. IT'S FELT, EMBODIED EXPERIENCE.

JANUARY 25, 2010

ALMOST AT - REAL-TIME TWITTER TRENDS  
OBJECTIVE 5 / CAPUCHINO...  
COCA PORTED TO SQUASHEXT  
NATIVE-BASED OS X APPLICATION IN BROWSER.

GET INTO THE CRAFTING...  
"ENOUGH THINKING!"

MAKE THE VALUE NOT IMPORTANT, BUT  
THE CHANGE, THE RATE OF CHANGE  
THAT MATTER SOMETHING SIGNIFICANT.  
UNUSUAL

↓  
Current parameters  
emphasize the VALUE,  
not the CHANGE.  
RATE OF CHANGE...  
FAST / SLOW  
minute → minute  
hour → hour  
day → day  
week → week  
etc...

JEFF really had chair to follow the sun in his  
house. When it's sunny all the time he takes  
advantage of it. When it's cloudy, foggy,  
+ still sunny, he notices that.

"SIBERIA." where they kept the programmers.  
BUILDING WITHIN A BUILDING.  
cold warehouse... outdoor environment, but  
it's an old industrial building. No sunlight,  
no outdoor connection, except the TEMPERATURE



↳ Pacing... of  
nature... pacing  
patterns of change.

EVERTIME IS VERY INTERESTED IN SOUND.  
KEEP IT AMBIENT. BUT NOT TOO AMBIENT.

"YOU SHOULD BE DEVELOPING + REFINING."

"YOU KNOW ENOUGH. YOU CAN MAKE  
DECISIONS YOU CAN MOVE FORWARD."

CONTRIBUTING BACK TO THE WORLD,  
NOT JUST INFORMATION (PASSIVE) ABOUT  
THE WORLD... ACTIVE VS. PASSIVE.

COLLECTIVE / COLLABORATIVE REMEMBERS  
OF NATURE. "HIS FISH IS IN  
MY WORKSPACE." CSCW.



CHIMES WHEN THE SUN COMES OUT.  
WHEN THE TEMPERATURE GETS DOWN,  
W, GUL... GUST OF WIND, ETC.



# CAPSTONE.

BRUGHT TO YOU BY  
SUNPOWER, TEMPLE OF HEAVENS,  
PANTERA, SHERMAN BACKUP,  
AND PANTERA. (PANTERA). 1m/1m/

SUNDAY JAN 31 2010

OKAY. WE'RE JUST GOING TO BUILD  
THE FIRST IDEA THAT CAME TO  
OUR MINDS... THE NETWORKED  
SNOW GLOBE.

## Snow globe.



## MOVE FORWARD.

AIR TEMP ~~BELOW~~ BELOW ZERO:  
FROST ON SURFACE OF GLOBE.  
("JACK FROST", etc...)

FOG + PAUKNESS...  
FEELING OF PATH.  
... STARS... ARIANNE POSITIONS?

### INSPIRATION:

- LIMITED. (um) SCENES
- SOL OS X WIDGET
- MOON PHASE OS X WIDGET
- SUNLIT EARTH OS X WIDGET
- "MAC'S" SNOW GLOBE CONCEPT
- DUNSTAN'S PINNACLE HEADER
- 1976 DESIGN.COM ... /blog/
- ↳ 100px image.xml  
WEATHER FEEL FROM AIRFIELD.  
WEATHER, MOON + PLANET INFO.  
XML FEED ... WEATHER.COM
- MICROCOSM FLICKR PRESENTS... DEEP DEEP!
- MAC OS X WEATHER WIDGET
- iPhone OS X WEATHER APP

MOON RISE →  
MOON SET...  
MOON RISES  
THE DAY!!

ARE YOU LOOKING  
NORTH OR SOUTH?  
EAST? WEST?

WHAT SUN  
RISES IN  
EAST, SETS  
IN WEST.

DEFAULT FIVEFOLD MOUSE  
HOME PAGE. HTML5  
PARAMETER CACHING FOR  
INSTANT LOADING?  
CORE iNTER...  
PML LAYERS.

CAN'T "BROWSE" WEATHER...  
CAN ONLY "EXPERIENCE" IT...

SUNSET,  
AFTERNOON,  
PARTIAL  
SUNSET  
PARTIAL CLOUD  
PARTIAL SUNNY  
CLOUDY  
"OVERCAST"  
LIGHT RAIN  
RAIN  
HEAVY RAIN  
LIGHT SNOW  
SNOW  
HEAVY SNOW  
WIND (LIGHT, MILD, STRONG)  
HAIL  
FREEZING RAIN  
SLUSH  
FOG  
SWEETENED HEAT  
FREEZING COLD  
"FREEZE WARNING"  
TIME OF DAY  
DAWN, DUSK...  
SUNRISE, SUNSET  
DAY, NIGHT

### TRANSITIONS

NO NUMERICAL  
TIME OF DAY.  
NO NUMERICAL  
TEMPERATURE  
HUMIDITY  
WINDSPEED  
SUNSET/SUNRISE  
MOONSET/MOONRISE

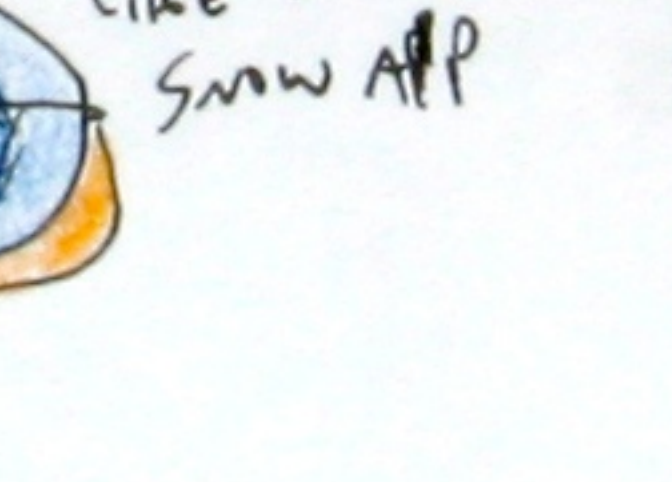
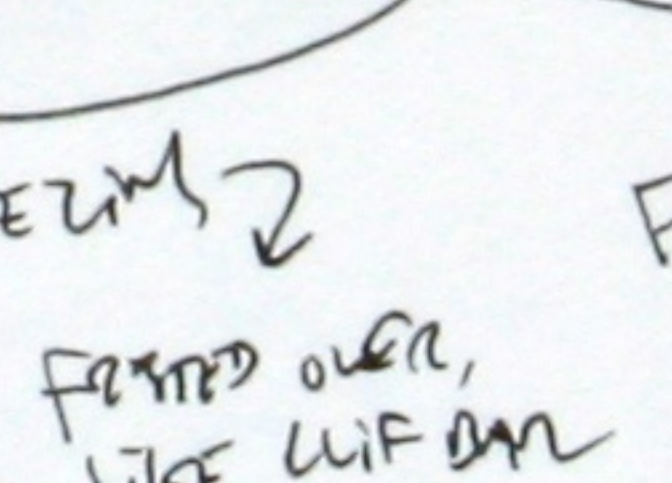
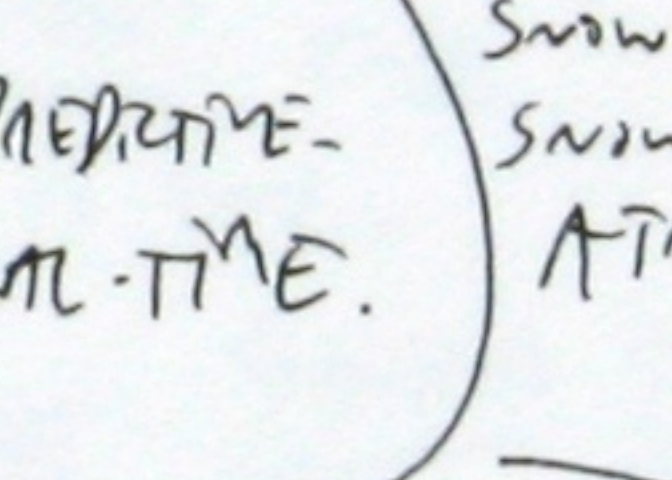
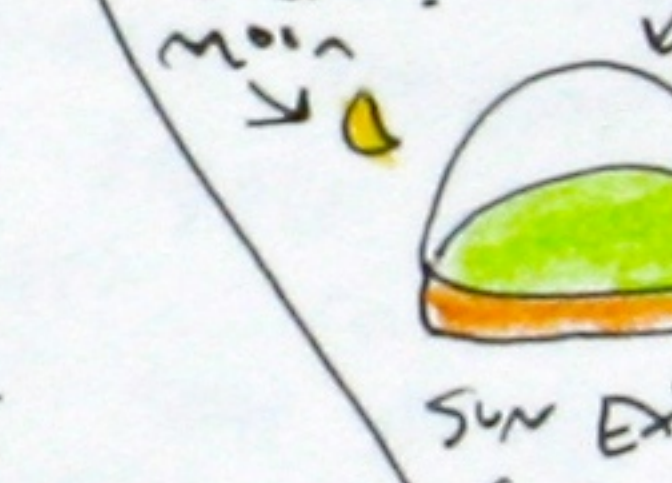
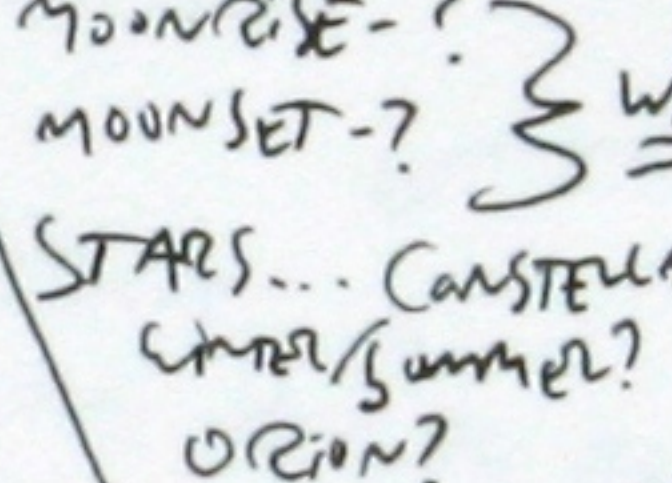
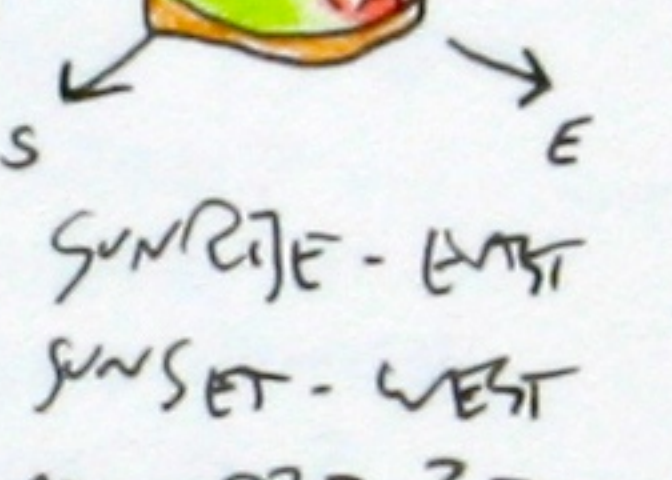
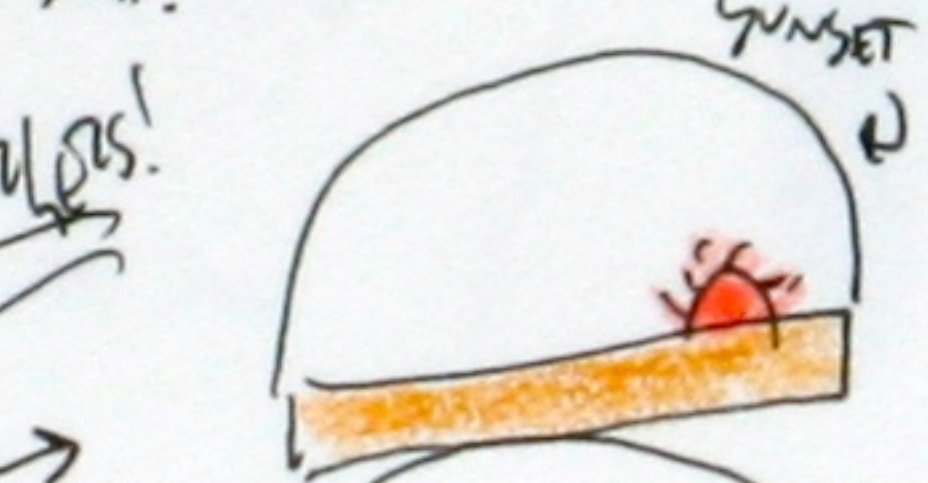
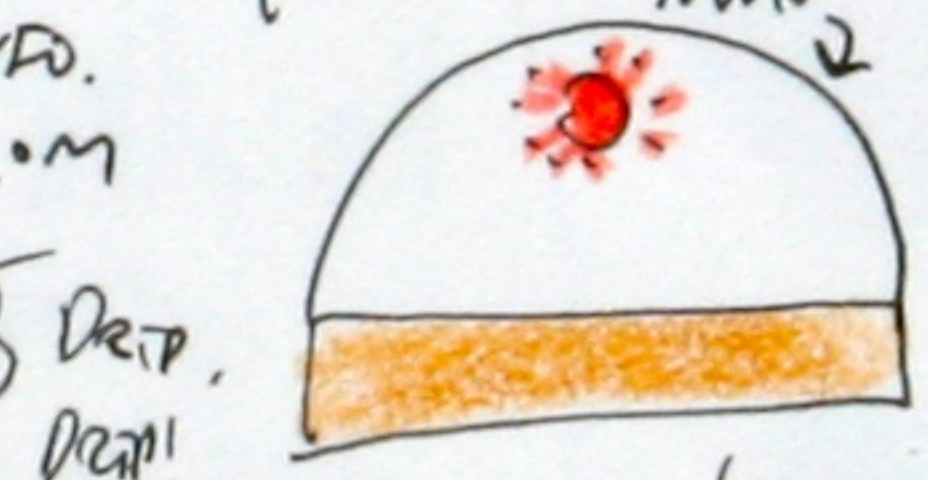
↳ NON-INTERACTIVE  
ONLY REAL-TIME.

BELOW FREEZING



FROST OVER,  
LIKE WIF-DAN  
SNOW APP

FOG:



NOTHING INTERACTIVE.  
NOTHING CLICKABLE.

... JUST... A DEFAULT HOME  
PAGE FOR THE BROWSER.



SEASONS? SPRING, SUMMER,  
FALL, WINTER...  
SNOW? AMOUNT OF SNOW IN  
GROUND...

LENGTH OF DAY... DETERMINED  
BY LATITUDE + LONGITUDE...  
2D CODE LOOKUP (WEATHER  
OS + WIDGET).

... CUSTOMIZE LANDSCAPE?  
COLORFUL STICKERS?  
... ADD MOUNTAINS,  
CABIN, HOUSE, LAKES,  
FIELDS, TREES, ETC.

START w/ BROWNING  
FIRST. + ONLY...  
... build from there.

Yahoo WEATHER API  
... How IS THAT VARIABLE?  
How IS THIS BETTER THAN  
A FORECAST WIDGET?  
FACEBOOK...  
FARMVILLE...

"CUSTOMIZE. MAKE YOUR OWN."

# CAPSTONE

## "WEATHER GLOBE"

... optimize it... general items, etc...  
 PRAIRIE, DECIDUOUS FOREST, CONIFEROUS FOREST,  
 SNOW... SNOW COVER? MOUNTAINS,  
 DESERT, CACTUS, PALM TREE, HILLOWAT...  
 LAKE, CANYON, ET... CLEAN... ARCH...

... MULTIPLE GLOBES FOR "PACKAGE"  
 MULTIPLE PAGES?

PROBLEM: current weather systems are  
 too date-driven... not interpretive...  
 too much detail, etc... JUST VISUAL  
 Reflecting current weather.

WED CAMS? go offline, no view during  
 night, date update, break stuff are  
 less, grainy, ugly photographs, etc...

WED CAMS = GREAT BUT NOT PERFECT  
 LEASER SITES? too much stuff. Too  
 distracting. too many #'s. not interpretable.  
 can't identify trends over time...

TRENDS OVER TIME... PREVIOUS TRENDS, etc.

"is it getting sunnier or cloudier?"

"is the storm coming or going?"

"is it getting warmer or colder?"

... graph data against itself. Sunlight vs temp  
 clouds vs. temp. humidity vs. temp. etc...

"ACHIEVEMENTS": You survived 5 consecutive days  
 with highs below 20!

... Spin + spiral the weather of your  
 location. BRASSIER RELIANT, etc...

TRENDS... "THIS IS YOUR WEATHER,  
 OF WHERE YOU ARE. HEATLINE..."

NIGHT



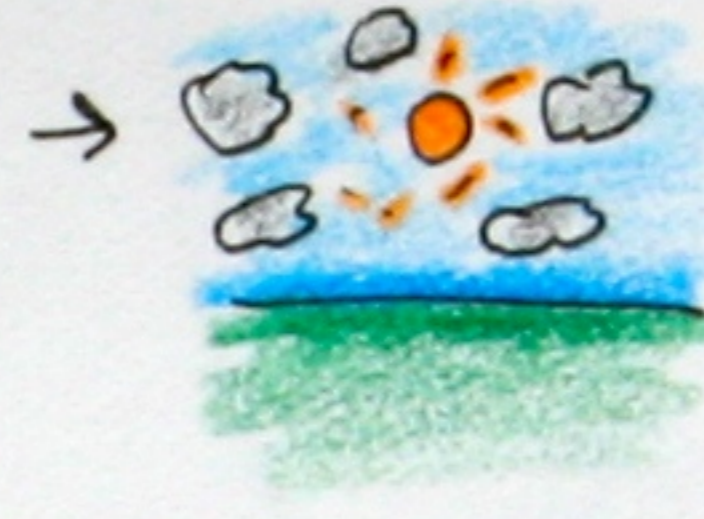
SUNRISE



DAY

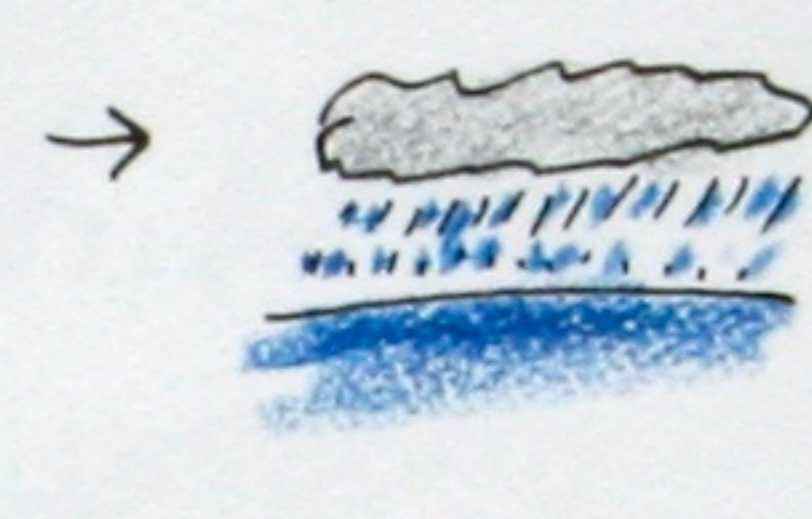


NOON



JANUARY 31, 2010

AFTERNOON



EVENING



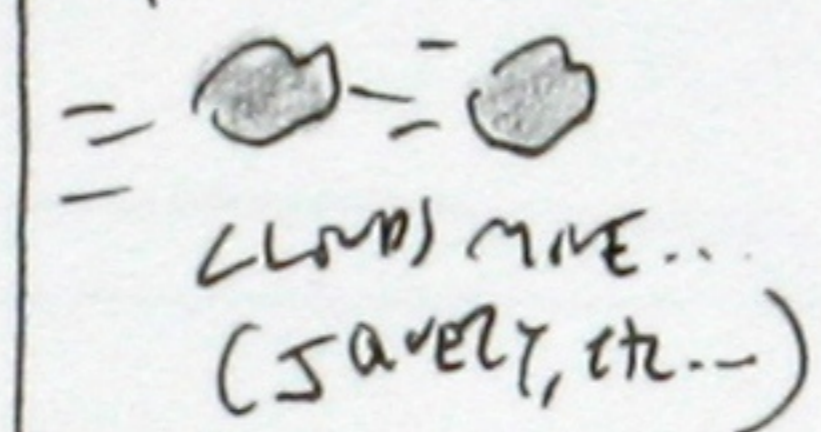
NIGHT



SUNSET



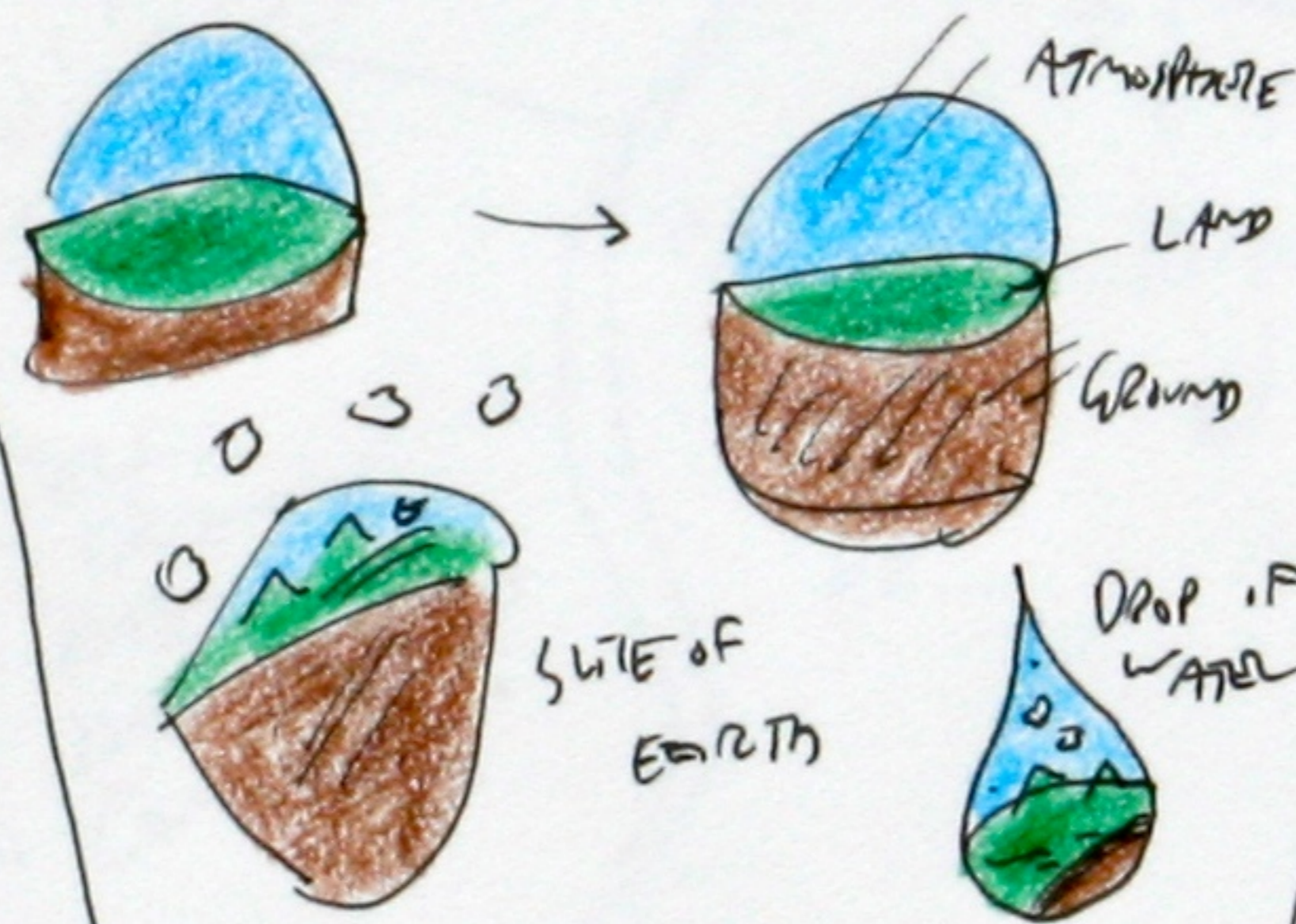
WIND?



SPEED = WINDSPEED...

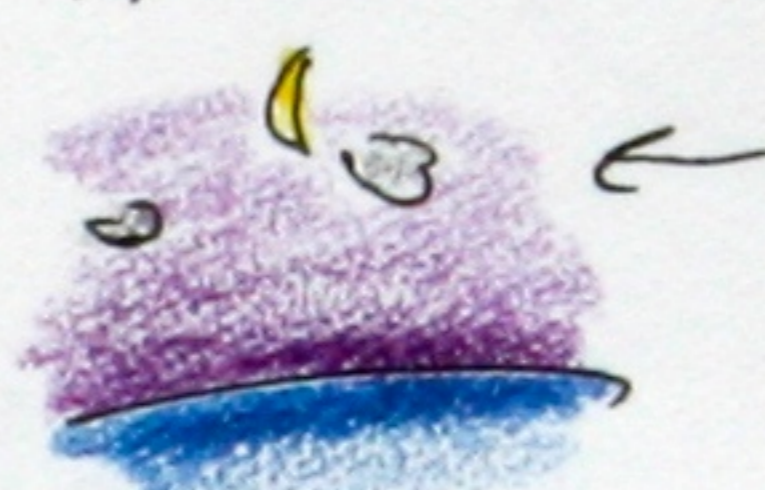
PASSAGE OF TIME ... HMM...  
 ON LAND PAGES?

"How much PARTICULAR is LEFT?"  
 "How long until the sun SETS?"



TRANSITION, ETC... Setting new  
 location, work vs. HOME, etc...  
 context-aware... your presence,  
 PORTABLE EMBODIMENT OF  
 WEATHER (even if you're not  
 out in it) ... HISTORY!

MIDNIGHT



Location of  
 moon similar  
 but of sun to  
 represent progression  
 of night? ...  
 or visual, to  
 represent moonset  
 + moonrise?

WITHOUT A  
 MOON, HOW DO YOU  
 VISUALLY REPRESENT  
 THE PASSAGE OF  
 NIGHT? ... COLOR OF  
 SKY? WHAT IF IT'S  
 CLOUDY? AT ALL...  
 THIS IS HARD...

PARALLEL SPINNING TIME.

... # of hours of daylight  
 you've experienced, etc.

SHIT This is something the  
 SOL widget doesn't have to worry  
 about... ~~SHIT~~ SUNDIAL  
 abstraction of representation of  
 TIME (+ passage of day to night)..

PAL TRANSPARENCY?

EMPHASIZING YOUR PRESENCE  
 STATEMENTS IN THE NATURAL  
 WORLD, YOUR PLACE + LOCATION  
 + LOCATION, EVEN WHILE INDOORS.  
 ("How many inches of rain have  
 you experienced?")

SITUATED IN PLACE. Your locale is  
 important. Prioritizing you, where you  
 are, in relation to the outside world.  
 Nature, etc... DATE-TIME. How many  
 falls? How many sunsets? How many  
 phases of the moon? Full moon? ETC...

# SAPSTONE

AROUND...  
 DRIVE WIND GAMES,  
 BROWSER?  
 PURE DATA...

SNOWGLOBE AS SURFACE  
 COCTAIL vs. GLOBE?  
 ↓  
 AROUND + SENSORS  
 ↓  
 SCRUBBING NOAA

## SHOW GLOBE!

... PURE DATA?  
 ... API?  
 ... "WINE YOUR OWN"  
 CHARACTER WITH THE REDDUP?  
 BROWSER, PHOTOS, "VIEWER", SNOW  
 GLOBE, IMAGES, SOUND, ETC...

HISTORY + CONTEXT...  
 TRENDS...  
 LOCAL INFORMATION?  
 ↳ LIKE, HYPER-LOCAL?  
 TEMP SENSORS, LIGHT  
 SENSORS, HUMIDITY  
 SENSORS, TIME,  
 BAROMETRIC PRESSURE,  
 ETC...

... XML FEED FROM  
 THE AIRPORT...

## PERSONAS.

... CONSUMING THE USES.  
 ... WHAT DO THEY CLICK?  
 START WITH PEOPLE.

## PURE DATA + AROUND.

TEMPERATURE GORGE UP,  
 GORGE DOWN,  
 SUN COME OUT,  
 SUN UP, GORGE  
 DOWN.

FEBRUARY 2, 2010

## THREADS, RATES, RESOLUTIONS...

THREAD: Temp, moon phase, precipitation,  
 sunlight, sun position, moon position,  
 etc...

RATE: ~~FAST~~ FAST RATE OF  
 CHANGE, SLOW RATE OF  
 CHANGE... How often it  
 changes... How much?  
 RESOLUTION: The fidelity  
 of resolution of  
 the rate of  
 change for a  
 THREAD.  
 FREQUENCY  
 ↓  
 AMPLITUDE

minute, hour,  
 day, week,  
 month.

IMPLEMENTED?  
 UNIFIED?

"MIXING":

EMERGENT  
 CHANGE OVER  
 TIME.  
 GOOGLE  
 CHARTS?

## THREADS. RESOLUTIONS.

RATES OF CHANGE  
 ↳ FAST/SLOW  
 EMERGENT/INSTANT

"MONITORING THREADS"  
 ↳  
 TEMP.  
 SUNLIGHT.  
 ETC...

THREAD = ONE  
 DISCRETE SOURCE  
 OF CHANGE (TEMP,  
 HUMIDITY, TIME, ETC...)

RATE = How often it  
 changes / fast it changes  
 ... OR, how you're INTERPRETED  
 in how it changes

MINUTE, HOUR, DAY, WEEK, MONTH, YEAR



SELF-ORIENTED  
 BASED ON  
 THE LOCATION?  
 COMPASS?

SOUND? MUSIC?  
 AMBIENT? SMOOTH JAZZ?

MINUTE					
HOUR					
DAY					
WEEK					
MONTH					
YEAR	SUNLIGHT	TEMPERATURE	SUN POSITION	MOON POSITION	MOON PHASE


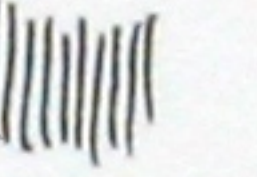
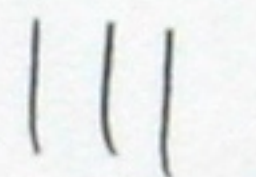


SMART COLLECTOR + SENSORS DATA FROM  
 DUBLIN: TEMPERATURE OVER TIME.  
 GRAPH @ DIFFERENT RESOLUTIONS...

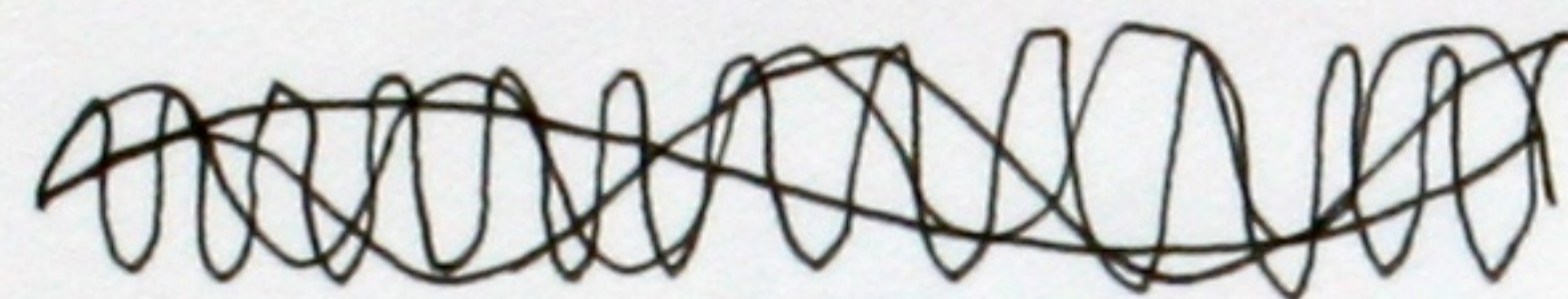
# CARSTOPE.

THREADS.  
 RATES. (OF THREADS)  
 RESOLUTIONS. (OF RATES)  
 MULTI-SCALE

THREAD:     

RATE:   12  

RESOLUTIONS:     



BURHA MACHINE.

GET PRAW IN YOUR GROUP.

# MULTI-SCALAR.

STREAMING? RADIO?  
 LOCALIZED PANDORA? Based on weather?

XML FEED.

LORENZO'S PROJECT... "your life expectancy is directly correlated  
 + how much you sit during the day."  
 "take breaks"  
 "space up + stretch" GYM. (creating a gym. Attaching to gym.  
 STATISTICS. NOT EQUIPMENT. (Limb the work.  
 "WORKS SPEAKS BEST NOW COMPETITION." BACKGROUND TECHNOLOGY.  
 simple things... "getting + fund." motivation. APPROXIMATE TIME,  
 WEIGHT, ETC... Personal records gym records, etc... Ranking systems  
 climbing gym? playing games... challenging people...  $\rightarrow$  social  
 RECENT COMPETITION. accountability?  
 KIDS' ENTERTAINMENT.  
 FRIENDS @ THE GYM.  
 ACCOUNTABILITY.

CHAT ROULETTE.

CLOCKS w/ birds, + they make different  
 sounds @ each hour...

NOT DISCRETE TIME,  
 BUT EARTH TIME.

CIRCADIAN RHYTHM:  
 input THAT? our moods in the  
 morning vs afternoon...

The time the sun sets...

FEEDBACK TO THE SYSTEM when  
 IT DOES SOMETHING YOU LIKE... notifying you of a bird @ your window.

FEBRUARY 2, 2010

IT'S ABOUT EXPERIENCE,  
 NOT INFORMATION...

FOR FOUR PAGES IT WAS SLOW,  
 BUT TODAY IT IS SWIFT! COMMUNICATION  
 (ADAPTING + COMMUNICATING THE <sup>UNIQUE</sup> CHANGES.  
 LOCALIZED CONTEXT.

OUTLIERS!  $\rightarrow$  33° in Jan!

IT'S ABOUT THE LOCATION. IT'S ABOUT THE  
 TIME. JANUARY? 33°? SIDE TOOLBAR IN  
 WINDOWS? POSITION OF SUN + DEGREES.  
 Sun w/ couple of clouds means nothing to  
 Augusto.  
 LINUX 7: Series of wallpapers... really cool! Changes!  
 Fun! Fresh! Desktop that changes...

MOVE OUT OF WEATHER... "WORLD MOVES SLOWER."  
 --change the way my computer works depending on the weather...  
 Computer screens slowing, moving slowly... etc...  
 SUN = WEATHER LIGHT. SENIORITY + CULTURE LOADED.  
 SOUND. CHANGES? Icons better AUGUSTO. CHANGE = GOOD.

DESKTOP AS HABITAT? NO MORE WORDCLIPS + WEBClips...  
 DDDDD-MACHINE.  $\rightarrow$  NOT GOOD @ OFFICE, BUT GOOD  
 FOR HOME. Small program running... don't bother me!  
 I'm concentrating!

WANTING  
 THAT CHANGES  
 DIGITAL IN  
 RESPONSE P...  
 THINKS!

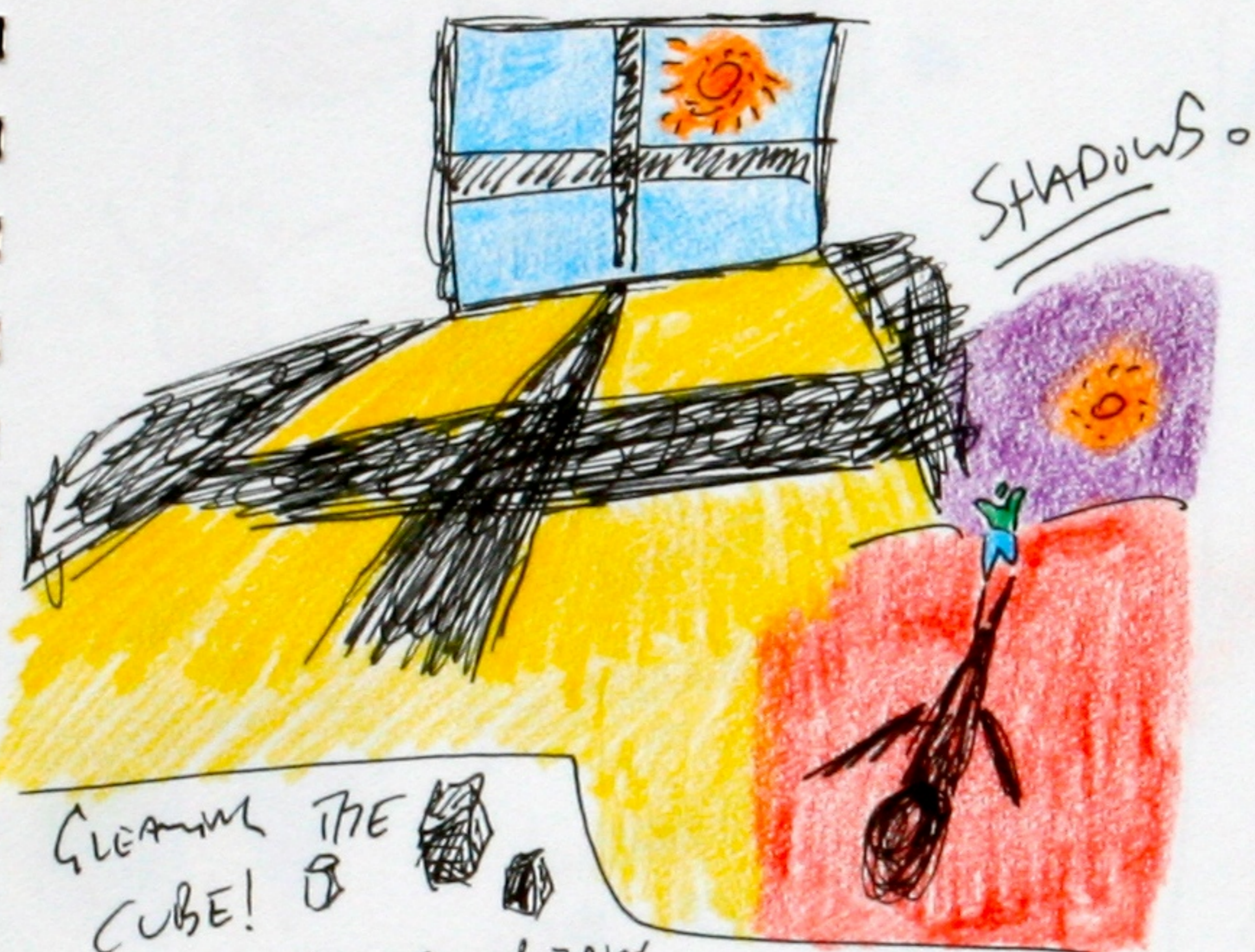
USER SETUP... API? CONTEXT-AWARE. modes for ~~work~~ home,  
 modes for work -- location, sound, etc... OFFICE PROFILE,  
 HOME PROFILE, ETC...

SURPRISE IS GOING TO MAKE THIS SHINE! | HANDBOOK NEXT  
 PAGES... + THEN...  
 NOT TOO EXCITING...

# CARSTONE

... WHAT IF... YOU Focused ONLY ON

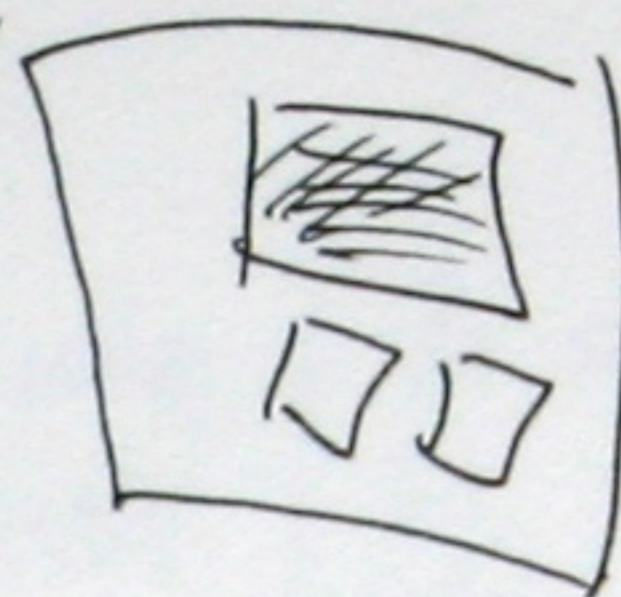
## DAYLIGHT?



CLEANING THE CUBE!

Light on the red building... setting sun... very geometric. Even simple shapes hold a wealth of information. Maybe it's a lit cube, like in 3D computer graphics! how lit each side is tells you what "time" it is... CLEANING THE CUBE. Geometric? Large skate movie. Skateboarding? artwork for movie... cube with light coming out of it, splitting the space. it is the SEAMS in the cube that are meaningful not the surfaces of the cube. Also, space cube occupies... takes up limited space, but casts light + shadow around it... can't make shadow, but can produce REVERSE SHADOWS. DANIEL REBORN!

"LET'S STICK w/ LULU.COM."



indesign?  
photoshop?  
PDF?  
WORD?

HAND-BOUND...  
PAPERBACK...  
HARDCOVER...

PHOTOS? OF  
STUDENTS?

TEXT?....  
SYN TEXT...

SECTIONS? OF CONTENT?

QUOTE, INTERVIEW,  
THINK TANK, ETC.

OR... THEIR OWN  
LAYOUT? ...Will they  
do that? what if  
they include a low-res  
image?

SUBMIT CONTENT?

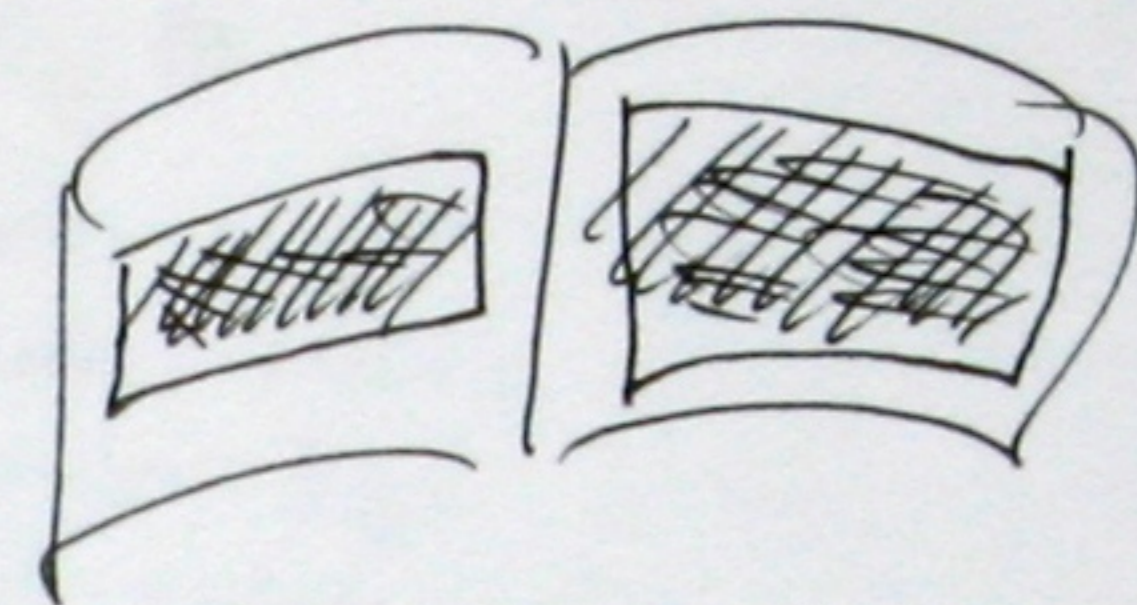
→ IF THEY  
SUBMIT PAGE LAYOUTS?

POST-SECRET?

EACH PERSON =  
1 INDIVIDUAL DATE

→ MATE SAID: NO ONE POINT. EVERY INDIVIDUAL.

FEBRUARY 4, 2010



WE WILL USE LULU.COM.  
↳ FIGURE OUT A SPECIFIC "THING"  
HARDCOVER.

LET'S DO IT IN  
LANDSCAPE.

... BUT WE DON'T KNOW  
WHO TO GET...

LULU, BLEED, MTPUBLISHER...

DIMENSIONS, PRICE,  
QUANTITY OF PAGES

DESIGN ~~FOR~~ COVER, ETC...

HOW TO SUBMIT PDFs, ETC...

COST? \$200?

ALL CONTENT BY MAR. 15.  
SEND TO PUBLISHER BY APR 1.  
BOOKS IN HAND BY APR 15.

HOW DO WE GET CONTENT  
FROM STUDENTS?

POST-SECRET.  
BEAUTY IN THE  
CHAOS.

CHARM.

-- MIE TRAVELMART  
= & SACKET, ETC...

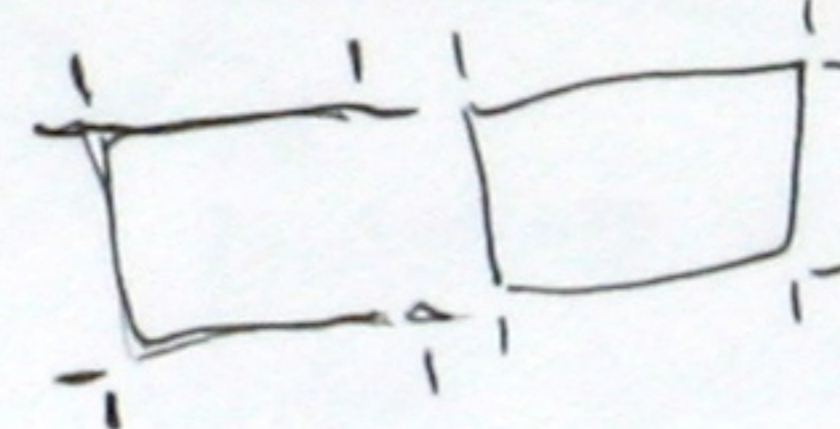
↓  
SUBMIT PHOTOSHOP  
FILES

FULL BLEED.

EACH STUDENT  
GETS A PAGE.

... ADDITIONAL PAGES  
BEYOND THAT??

STUDENTS CAN SUBMIT NON-  
ONE-PERSON SPREAD?



# CARST ONE.

## GLEAMING THE CUBE.

FEBRUARY 3, 2010



FACES LIT?



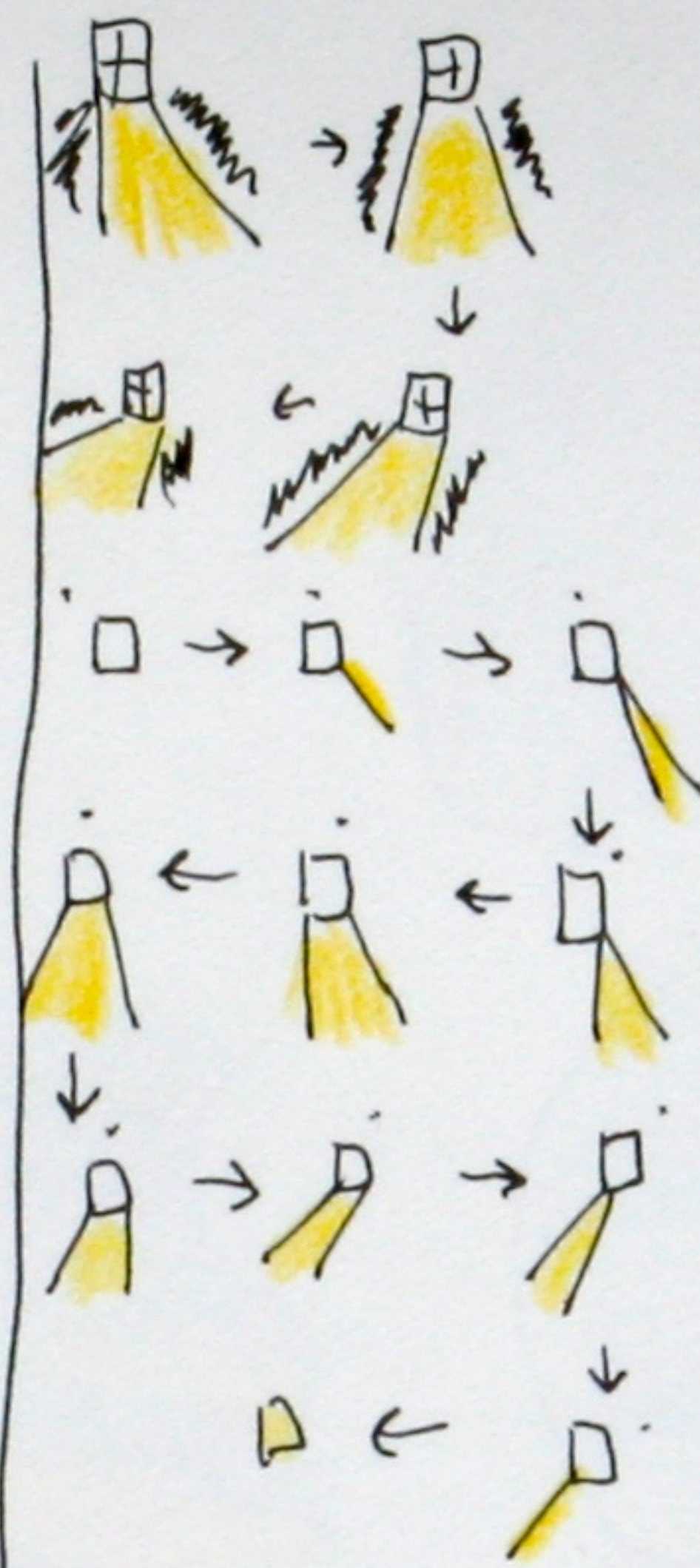
LIGHT COMES FROM SEAMS?



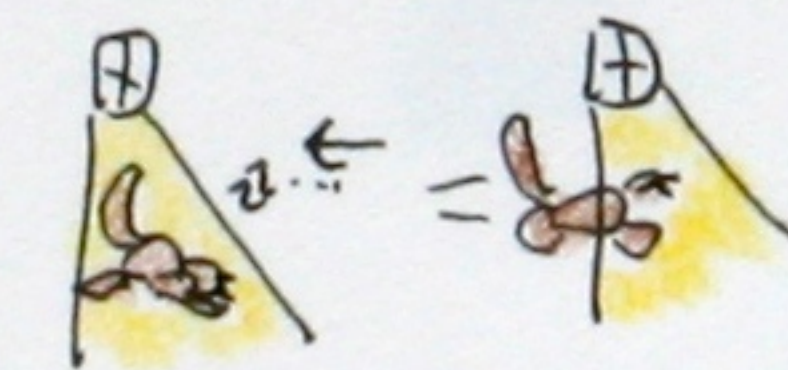
PARALLEL BEAMS OF LIGHT.

LIGHT AS FORM SPACE.  
LIGHT AS OBJECT.

ANTI-ESTABLISHMENT!  
"DAMN THE MAN!  
BREAK DOWN THE CUBICLE WALLS!  
"GLEAM THE CUBE!"

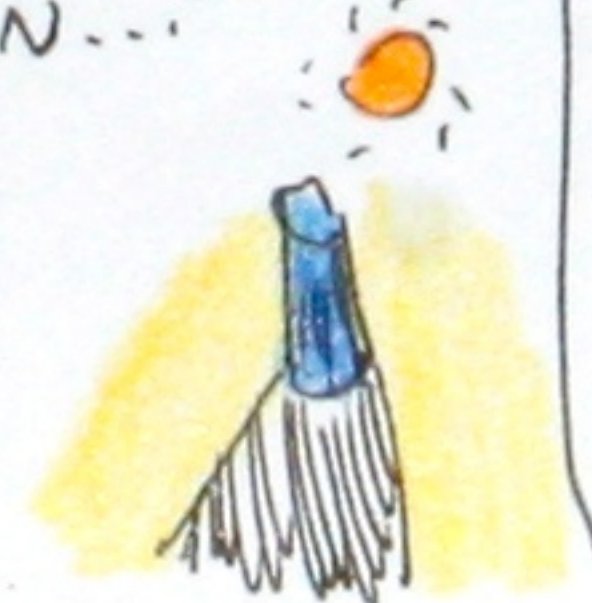


"THE CAT FOLLOWS THE SUNLIGHT."



LIGHT AS OBJECT.  
LIGHT AS REFLECT.  
LIGHT AS FORM.  
LIGHT AS VOLUME. ETC.

"OCCLUSION..."

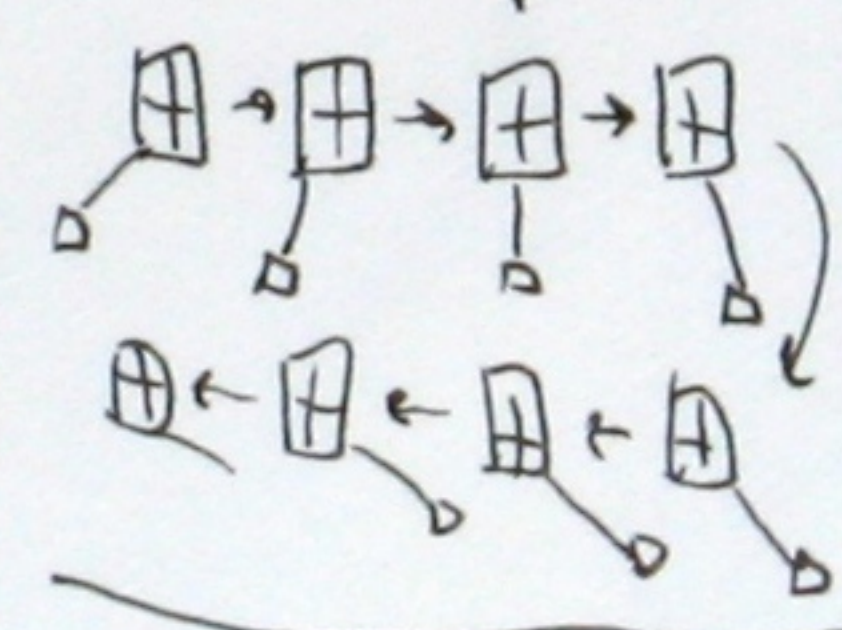


CHANGES ANGLE.  
CHANGES SHAPE.



SHEER,  
SCALE,  
PERSPECTIVE...

CHANGES POSITION



NORTH-FACING?  
SOUTH-FACING?  
EAST-FACING?  
WEST-FACING?

The sun moves slowly + you don't notice it -- but you do notice, suddenly, changes when they catch your attention. Bigger changes than just the movement of sunlight, when like when it casts on something shiny + reflective, + it hits your eye. It's those sublime moments, those "happy accidents", this serendipity, that will make this truly compelling.

"REVERSE SHADOWS." SUNLIGHT. SUN BEAMS.  
"PARALLEL BEAMS OF LIGHT."

TRACKING A BIG SWATH OF SPACE?  
TRACKING UNIFORM + CHANGING SHAPES?



TRACKING A SMALL, MOVING SPACE?  
... LIKE A LASER POINTER?

"FLOOD LIGHT." → big spaces  
"CHARACTER LIGHT." → unique shapes  
"LASER LIGHT." → small + mobile

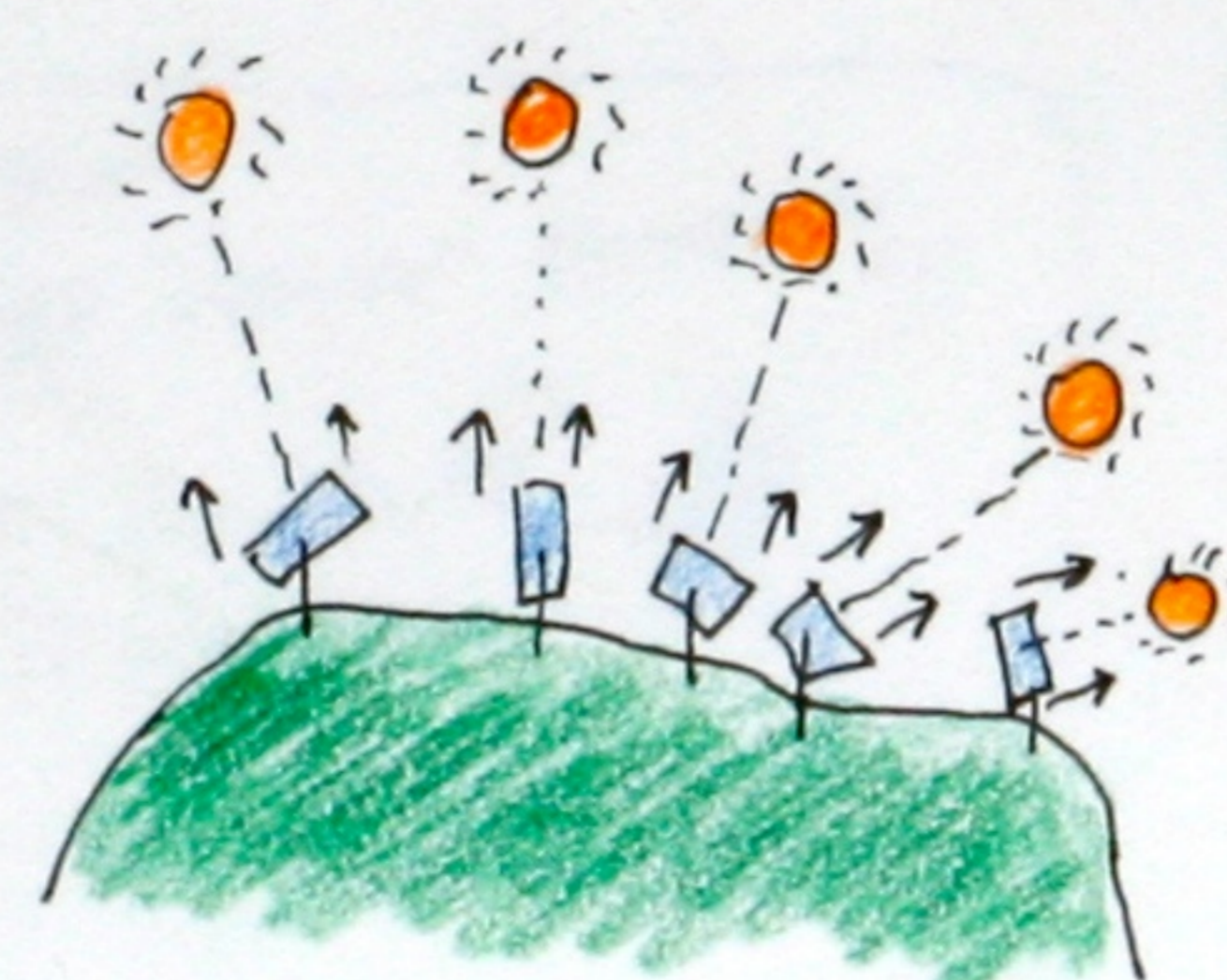
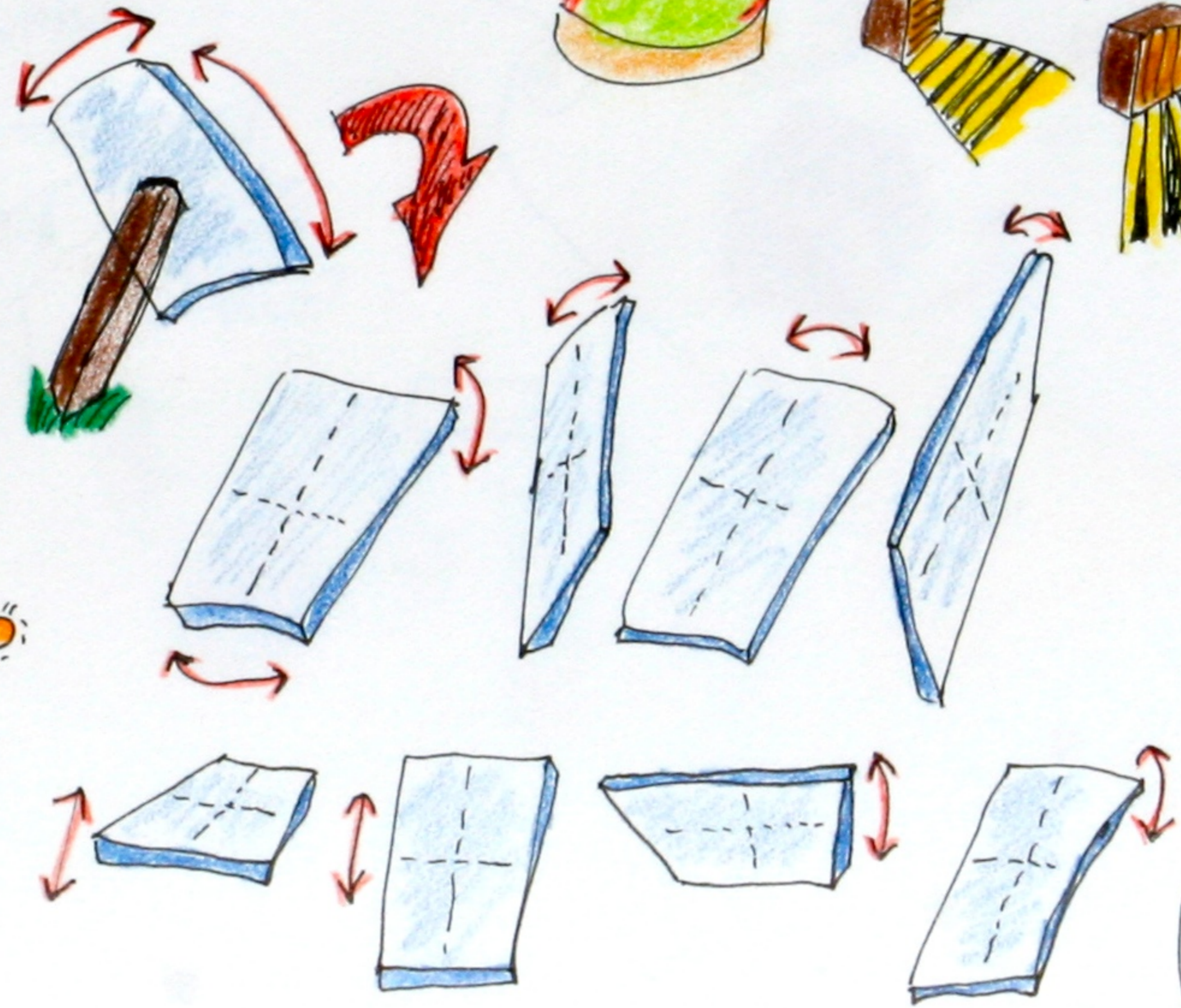
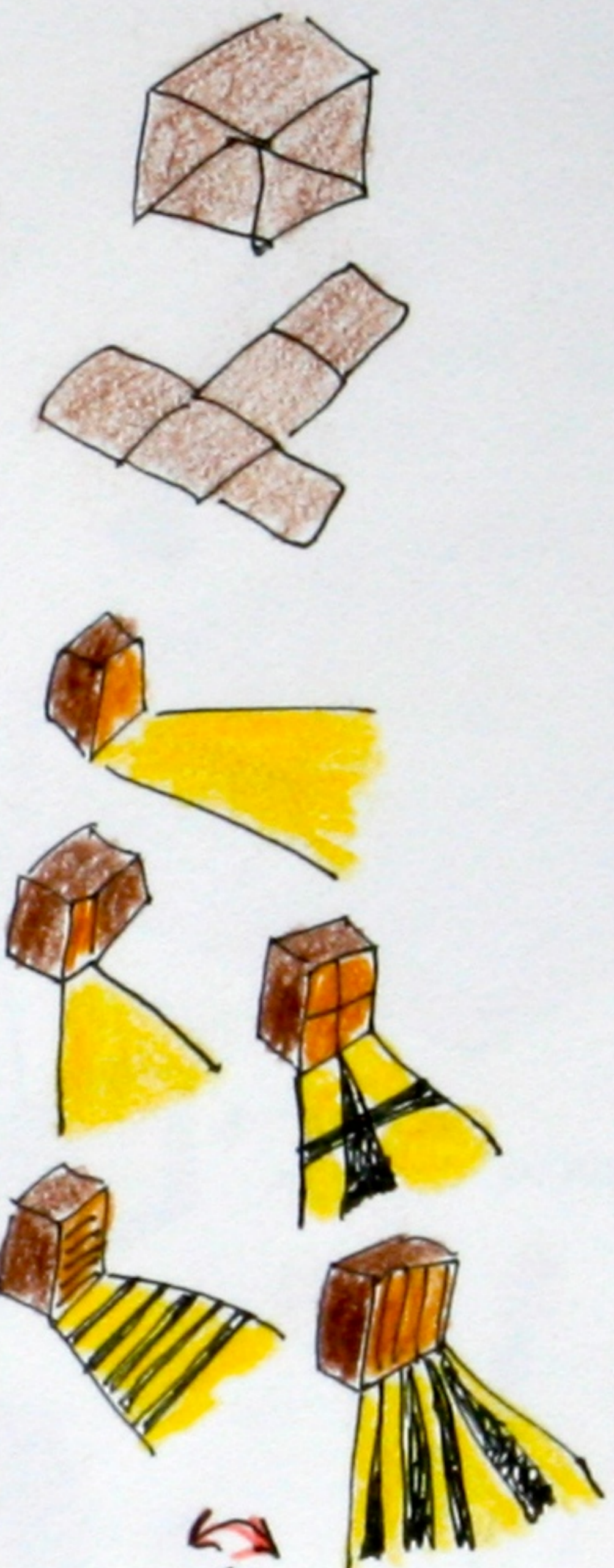
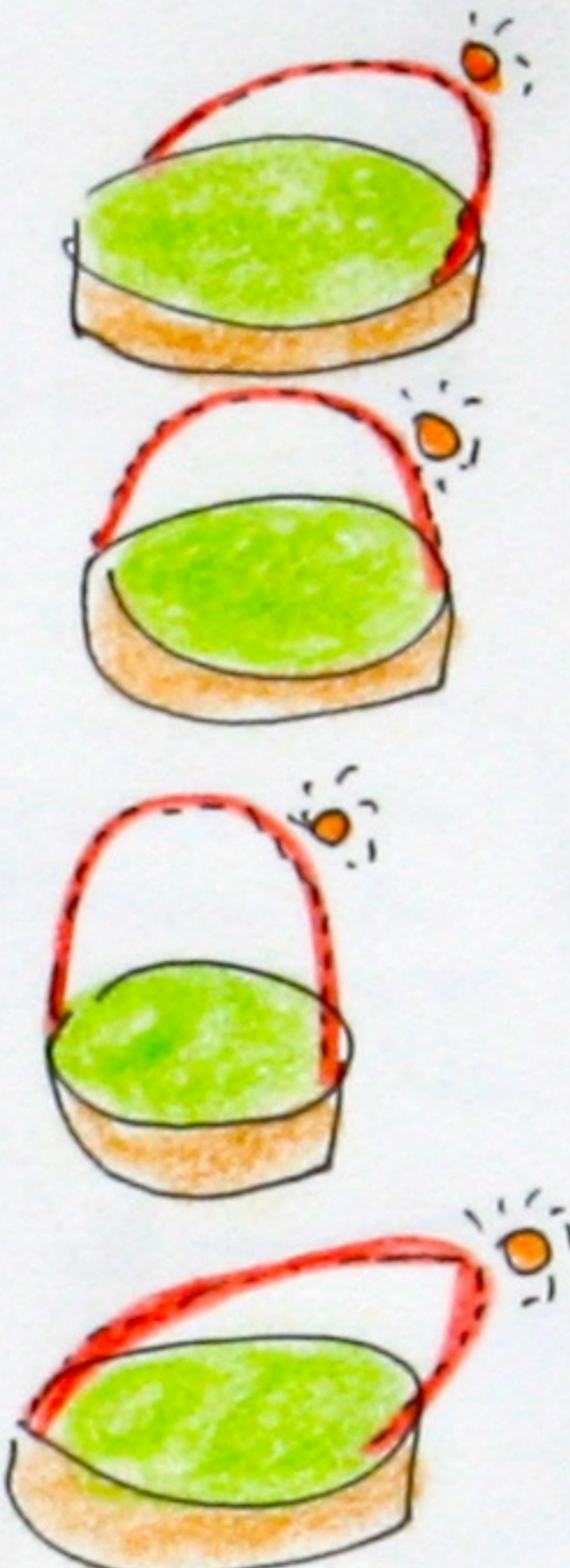
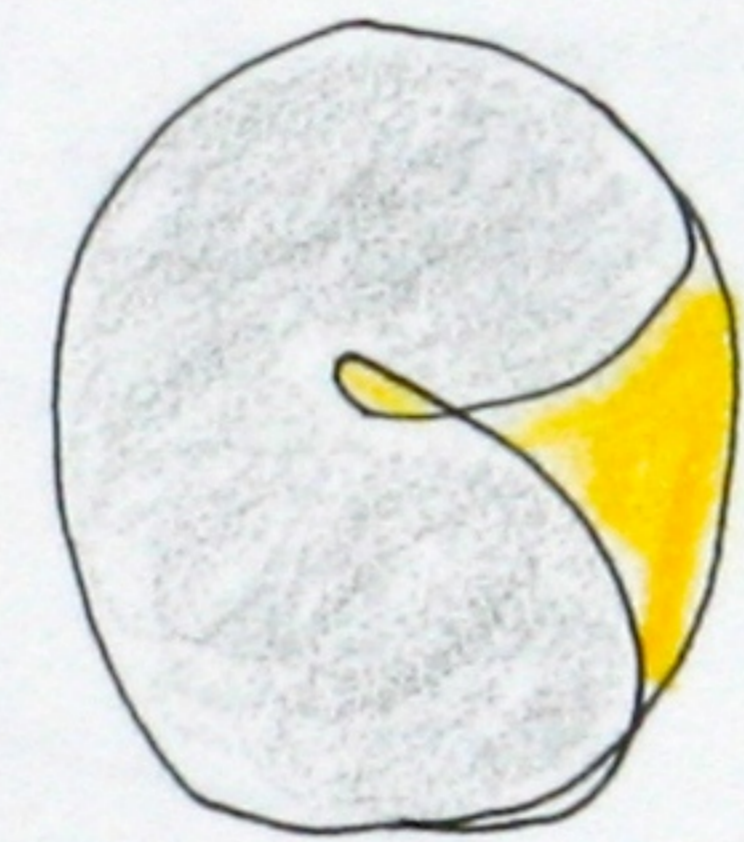
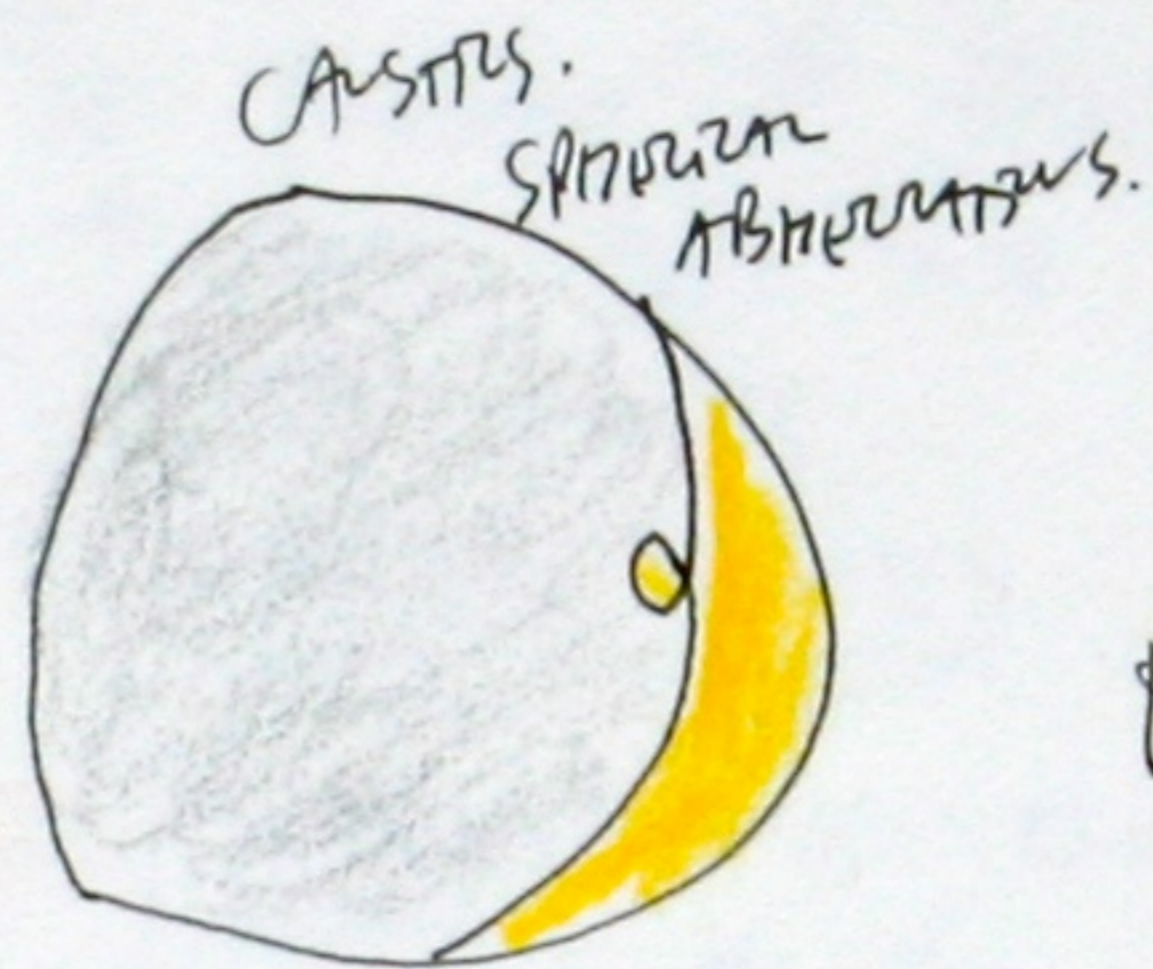
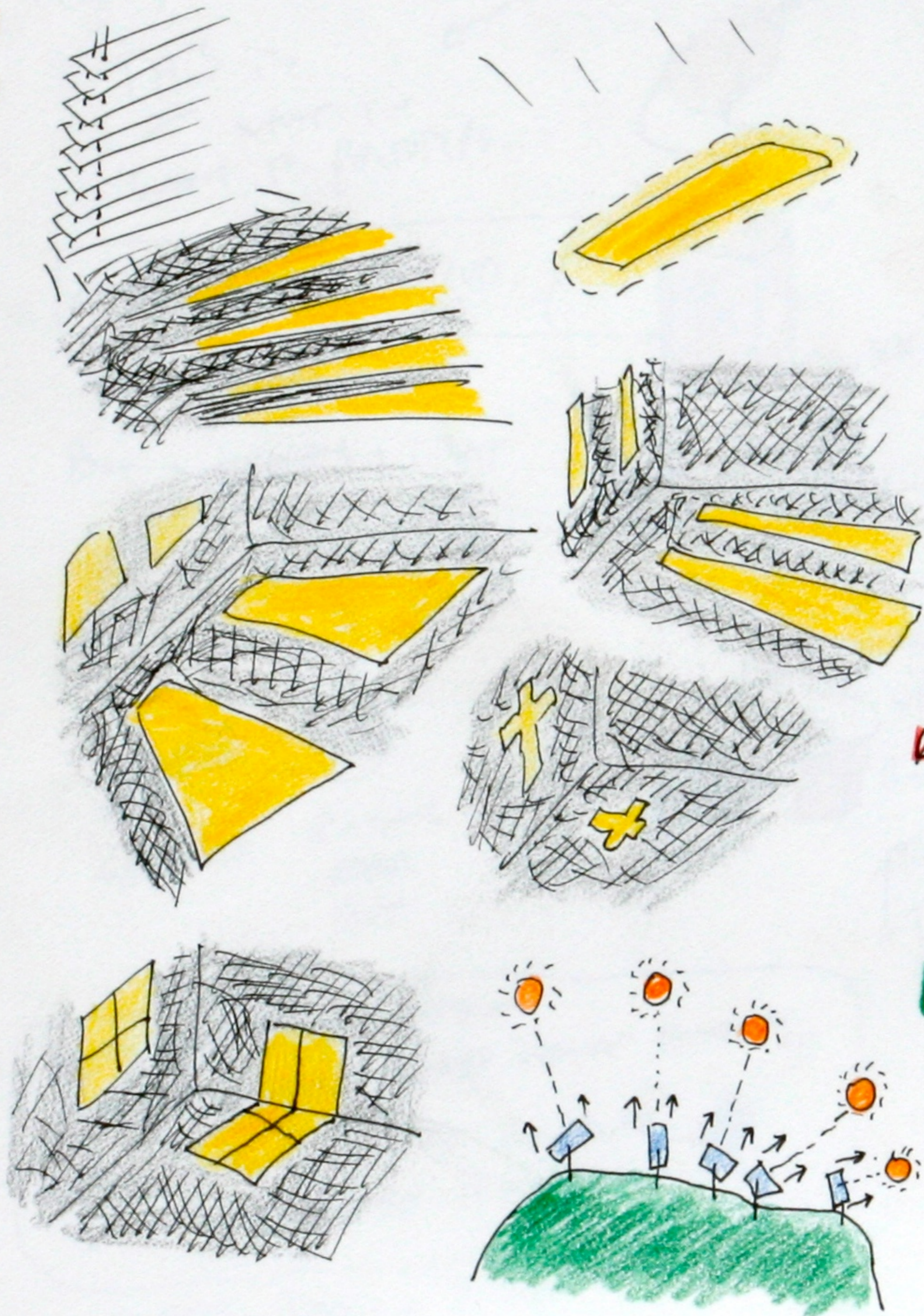


CONCERNED W/  
DIRECT SUNLIGHT,  
NOT AMBIENT  
SUNLIGHT

# CARSTONE!

"NEW RULE: NO THINKING IN WORDS OR LETTERS. ONLY THINKING IN MATRICES."

FEBRUARY 10, 2010



HELIOSTATS.  
 LIGHT AS MATERIAL  
 (OCEAN WAVES)  
 HELIOTROPES.  
 HELIOGRAPH.  
 CAUSTIC.  
 PHILIPS DESIGN  
 LIGHTING.  
 PYRHELIOMETER.  
 PYRANOMETER.  
 SUNSHINE RECORD.  
 DAY ARC.  
 LITRATION.™  
 LITRALUBE LAMP.  
 CASEMENT WINDOW.  
 SASH WINDOW.  
 CAMPBELL-SPENCER RECORD.  
 HELIODON.  
 ARCHITECTURAL  
 TOOL...  
 MAKE YOUR OWN  
 IN MATRICES.  
 ELLIPTIC.  
 APPROX PATH SUN  
 TRACES IN SKY.

PROTOTYPE THIS BIG.  
 BE SMART IN HOW YOU  
 PROTOTYPE. "WHAT ARE YOU  
 TRYING TO TEST?"

# CARSTONE.

Light + Movement.

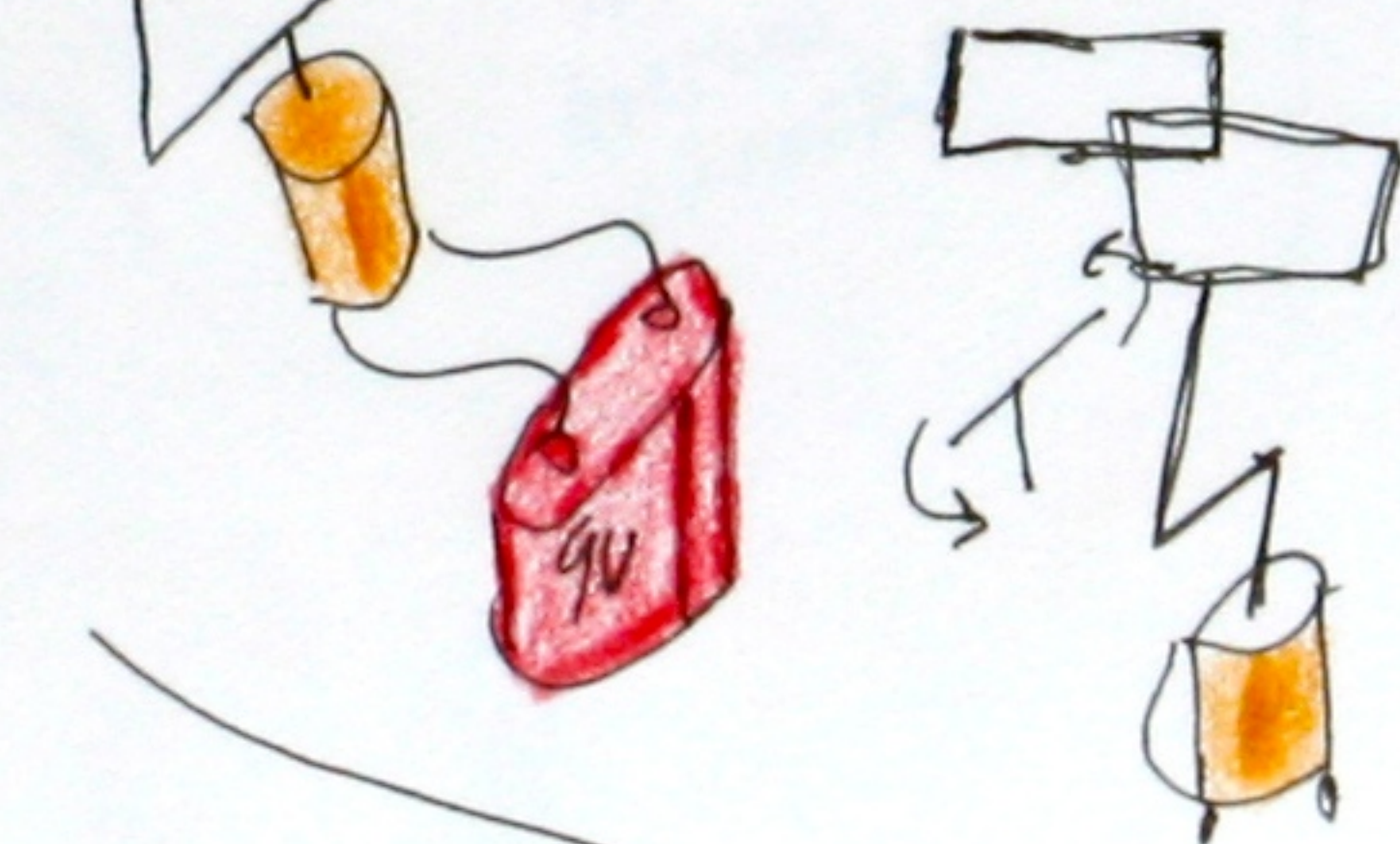
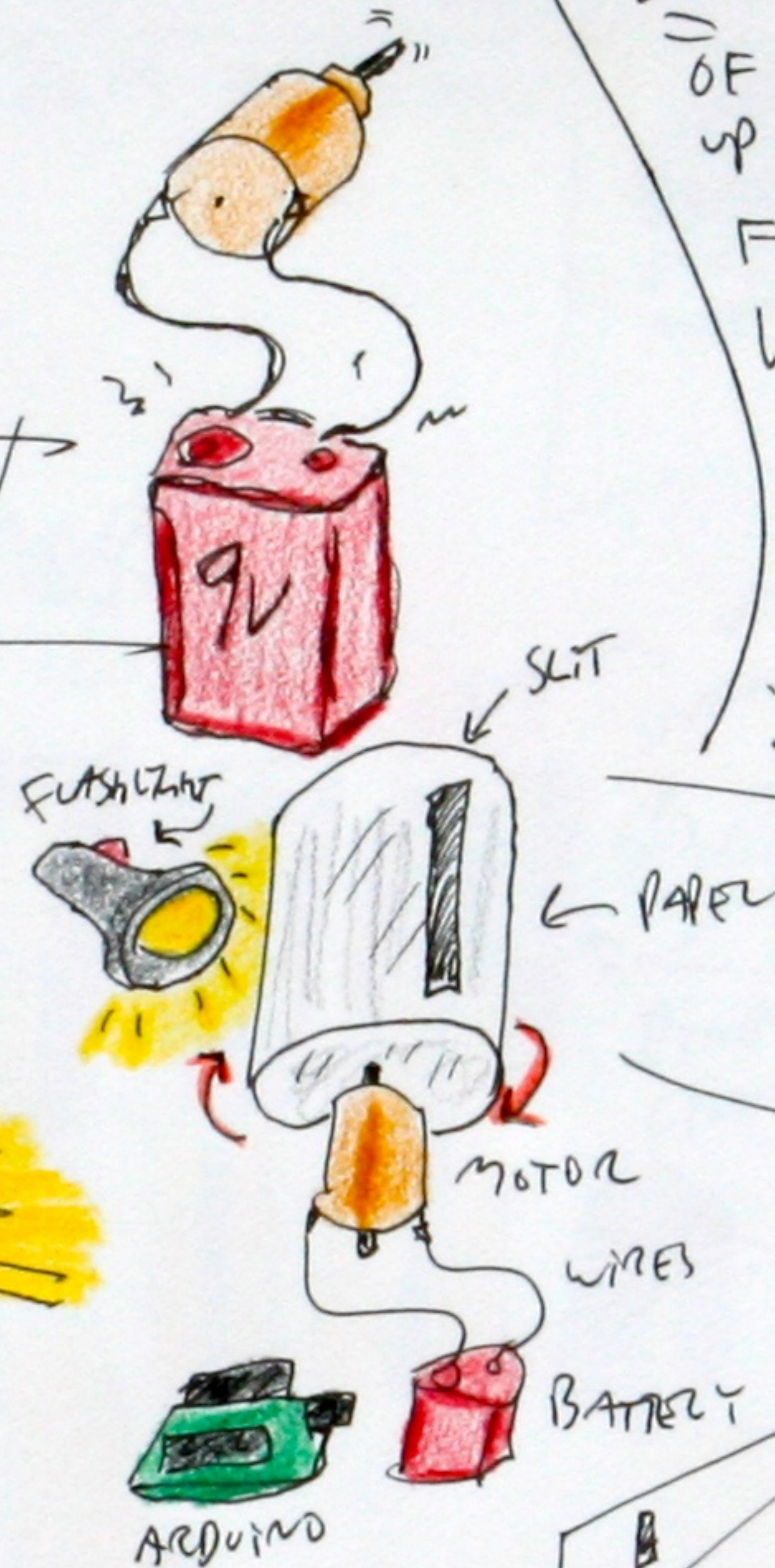
(Better) (Slow)

THIS IS WHAT YOU WANT TO PRODUCE.

MAKE LIGHT + SERVO.

MAKE IT BIZ.

Bot + DRUMS + LIGHT THAT MOVES.



Light MOVES REALLY FAST.

...THROUGHOUT THE PTC.

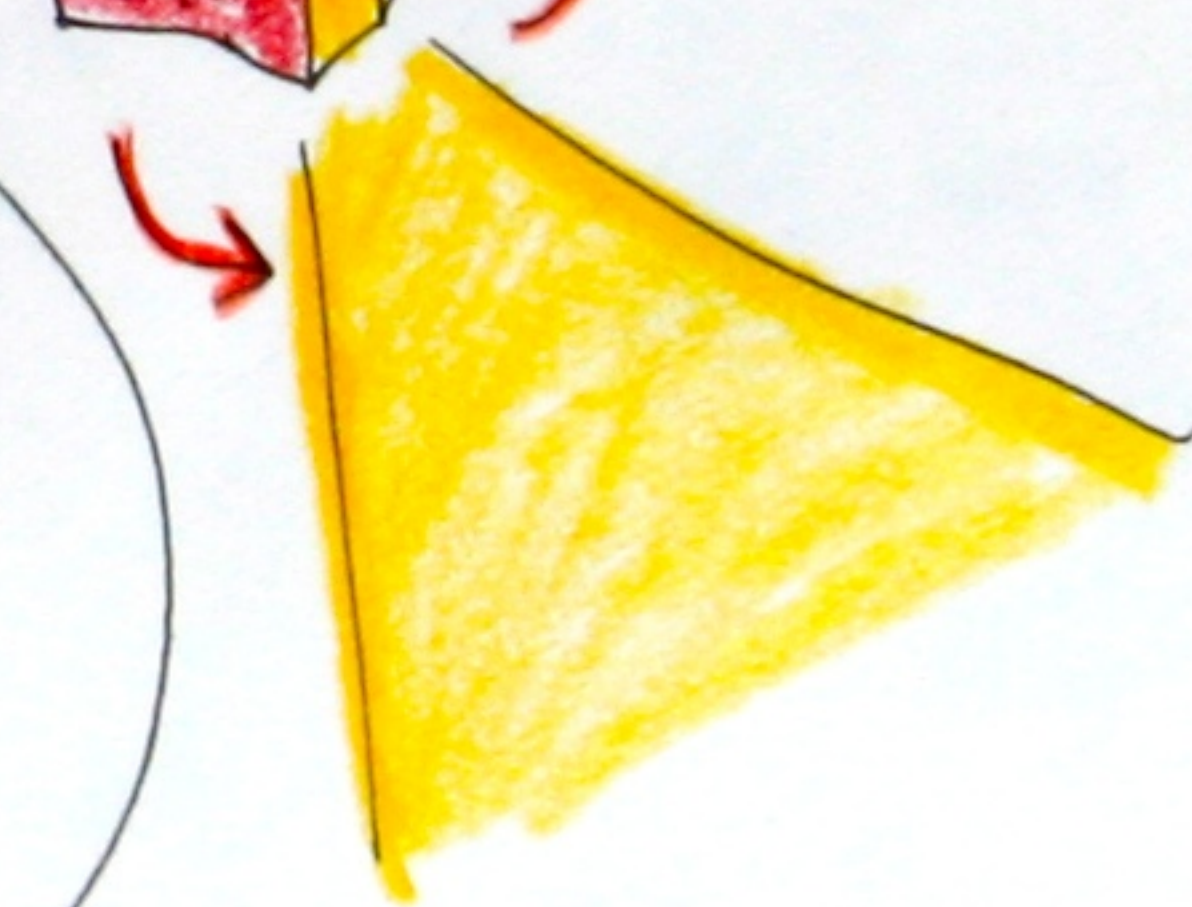
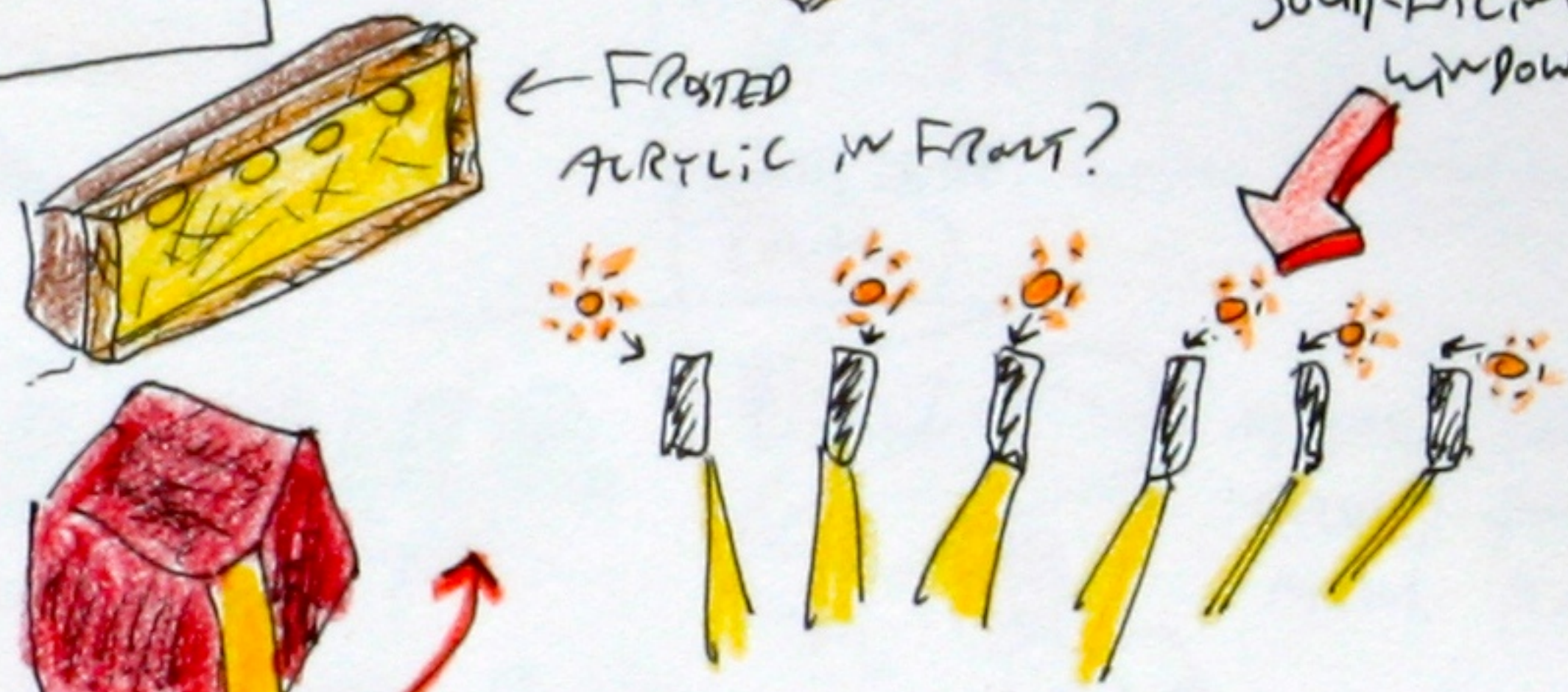
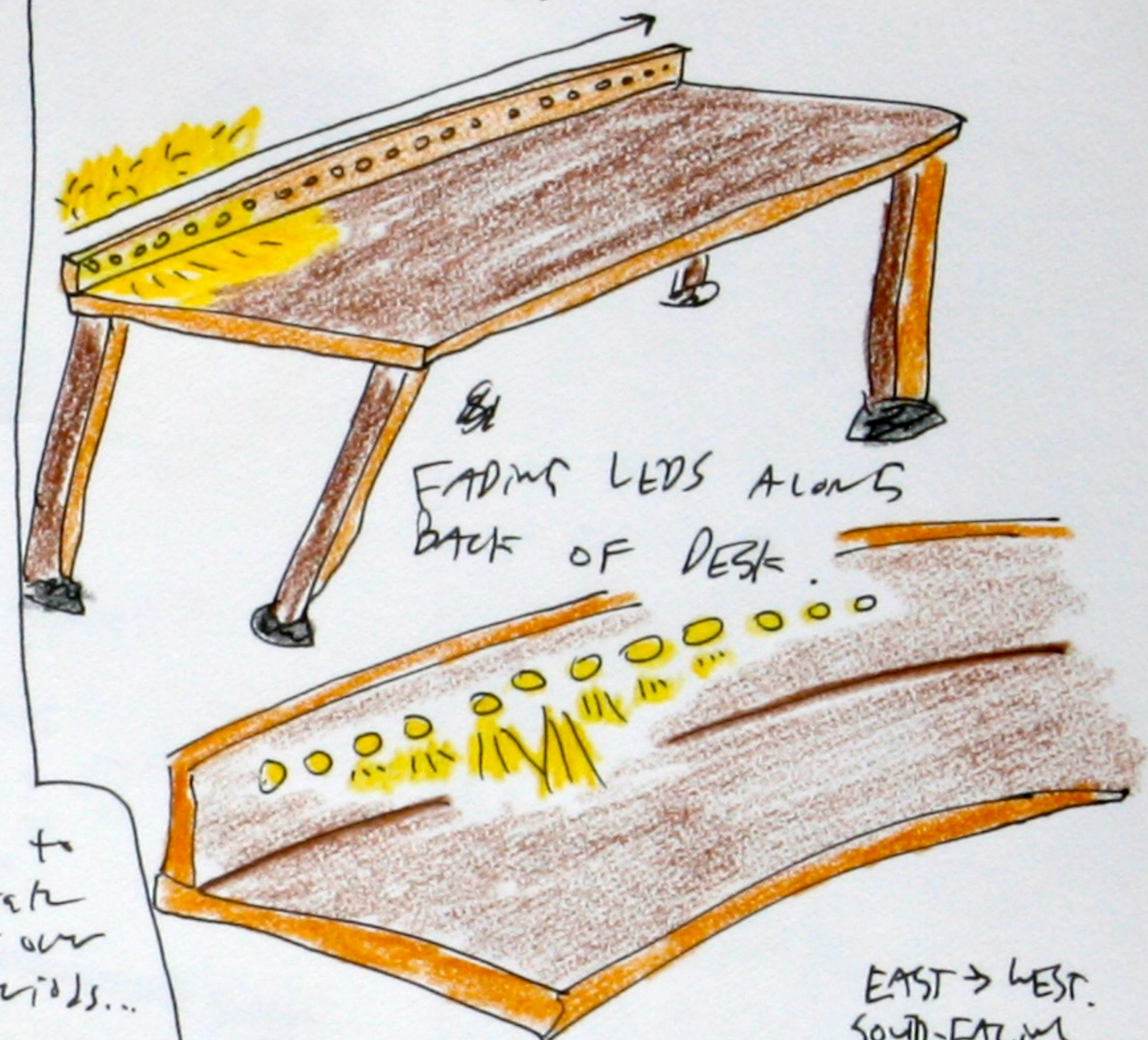
So, you NEED SOME SORT OF PATTERN TO BREAK UP THE DATA INTO FINE POINTS.

WAVES. LINES.

SHAPES. Mapping the trail of the sun. ... the shadows of a single light projection will not be sufficient to

communicate movement over short periods...

FEBRUARY 16, 2016



EAST -> WEST SOUTH-FACING WINDOW MEANS A LIGHT PATTERN THAT MOVES RIGHT -> LEFT.



ADDING ~~SOUND~~ SOUND... PROPER PATTERNS... SOME... SPARED BETWEEN HOUSEHOLDS... WORK HANDS-ON. WORK CONCRETE - YOU WANT NEED MORE RESEARCH. ★

SLIDING BACK + FORTH. RECTANGLE. ROTATING CYLINDER.



# GAPSTONE.

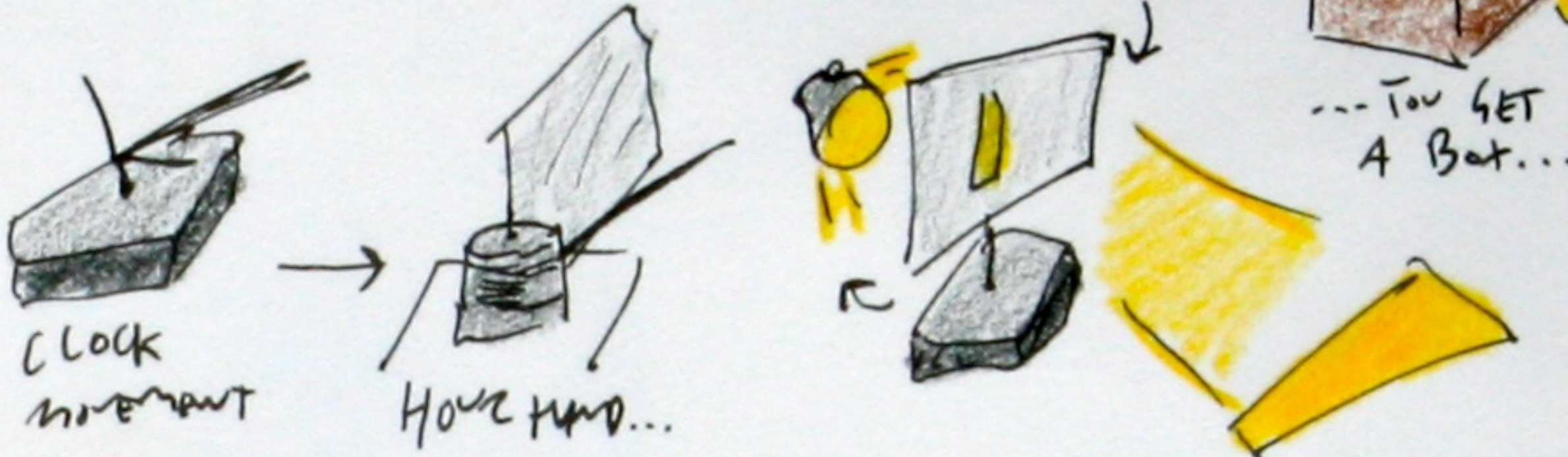
GLEAM THE CUBE. "BRING THE BO'S BACK."  
 TRIANGULATION.  
 PROTOTYPES?

## MAYA RENDERINGS:

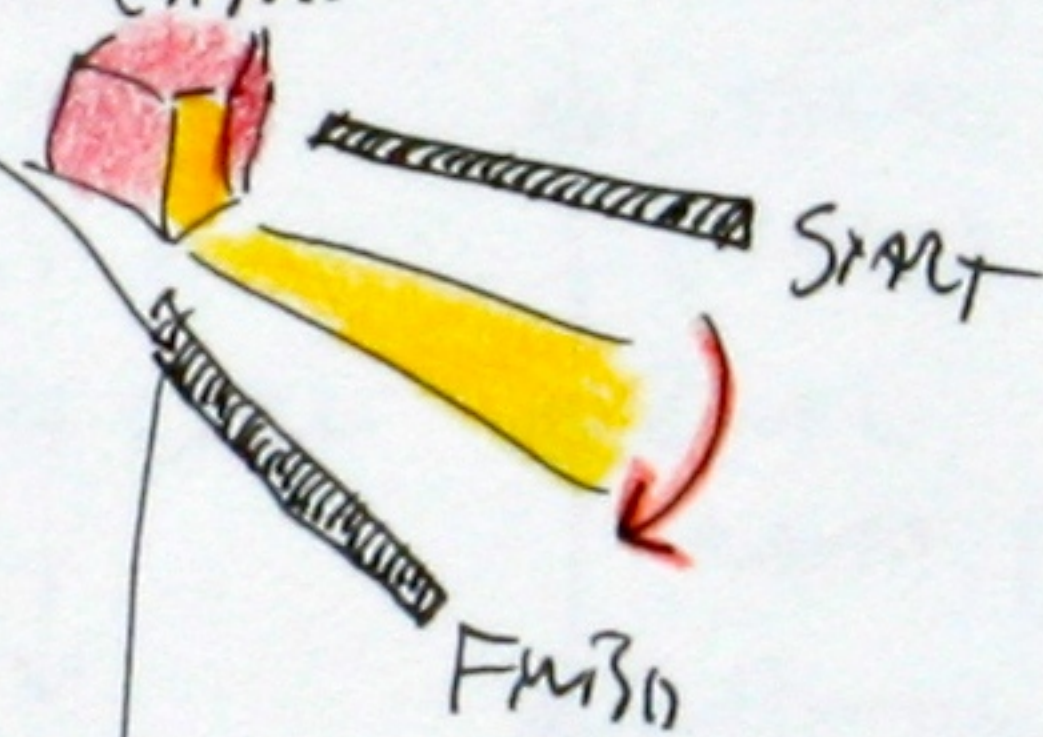
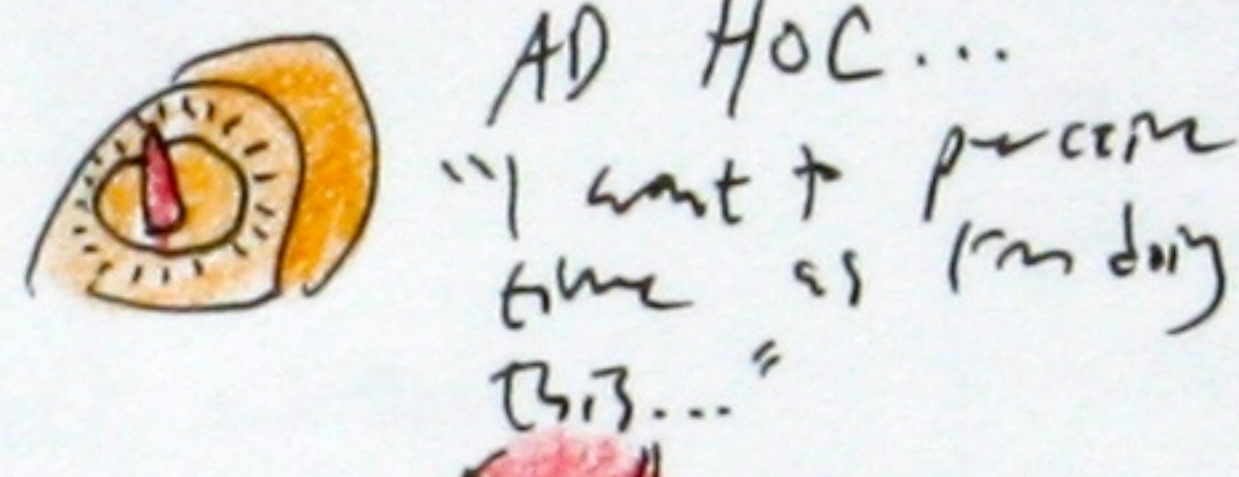
"MATHEMATICAL" REPRESENTATIONS OF LIGHT SHAPES



# CLOCK-BASED:



OOO IS THIS... A TIMER?

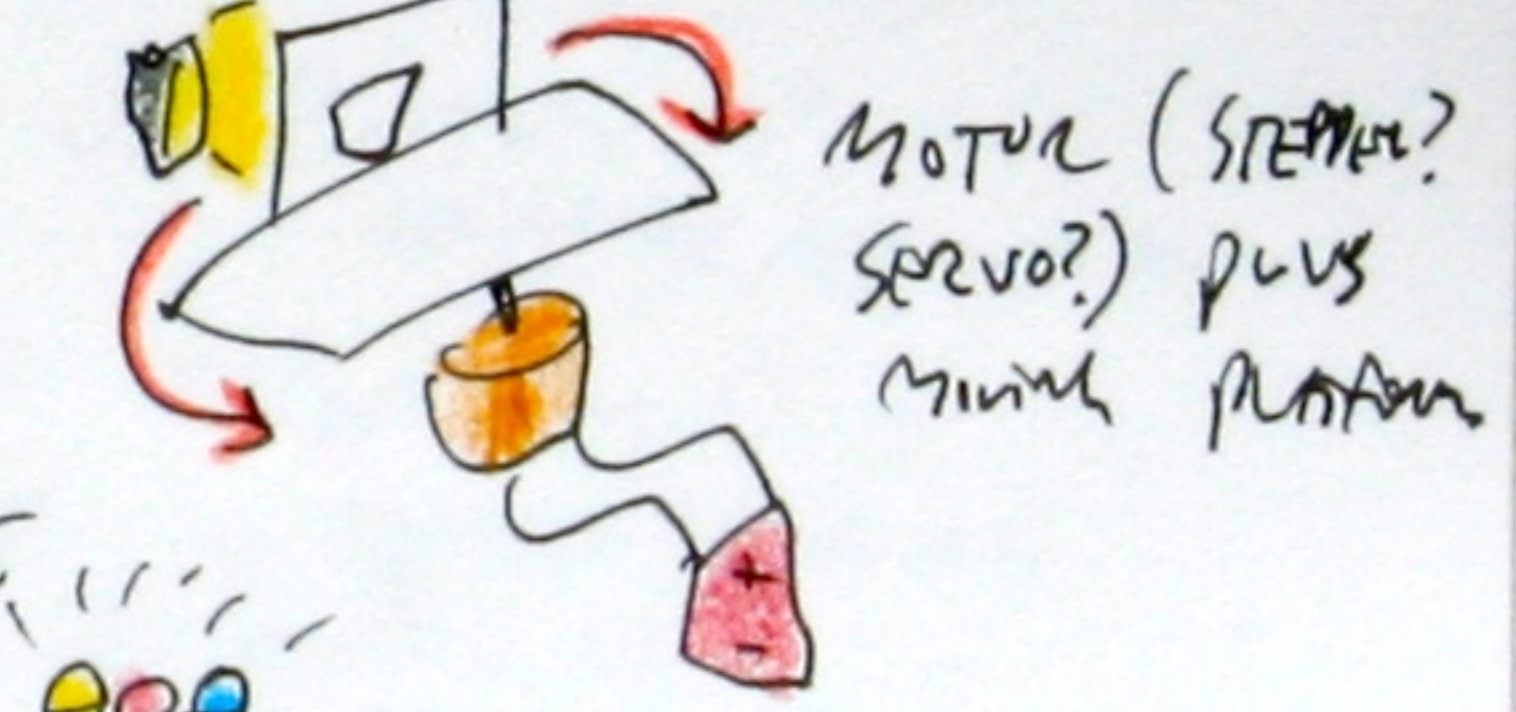


FEBRUARY 19, 2010  
 DESIGNED  
 ARTIFACTS.  
 ...TO AID EXPRESSION.  
 ...TO COMMUNICATE IDEAS.  
 ...TO ~~FOCUS~~ FOCUS THINKING.  
 ...TO REPRESENT/USE IDEAS.

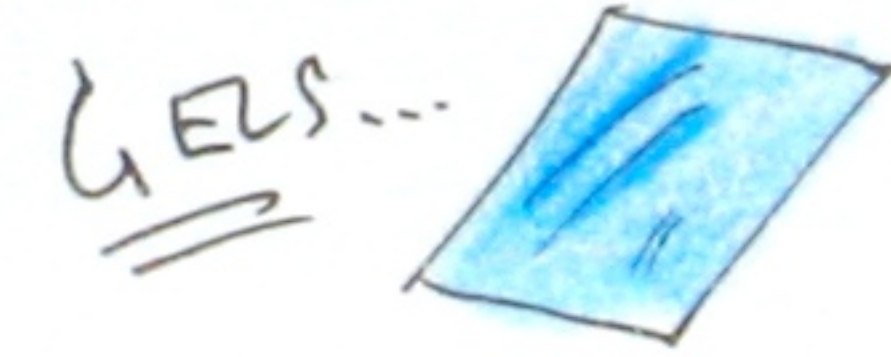
1. PATTERN. (SHAPE)
2. MOVEMENT. (MOTION)
3. TIME. (LONG)
4. LIGHT. (LIGHT, SHAPE, MOTION, TIMEFRAME, COLOR.)

## ARDUINO.

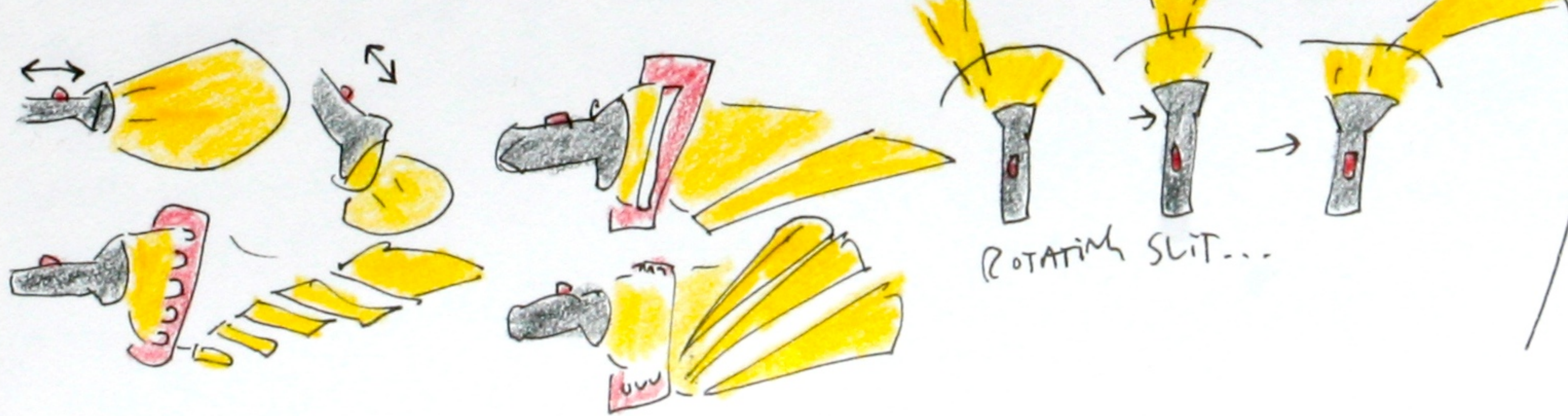
COLOR-MIXER?  
 WHITE + RED + BLUE



QUANTIC OF COLOR...  
 WARM -> COLD.

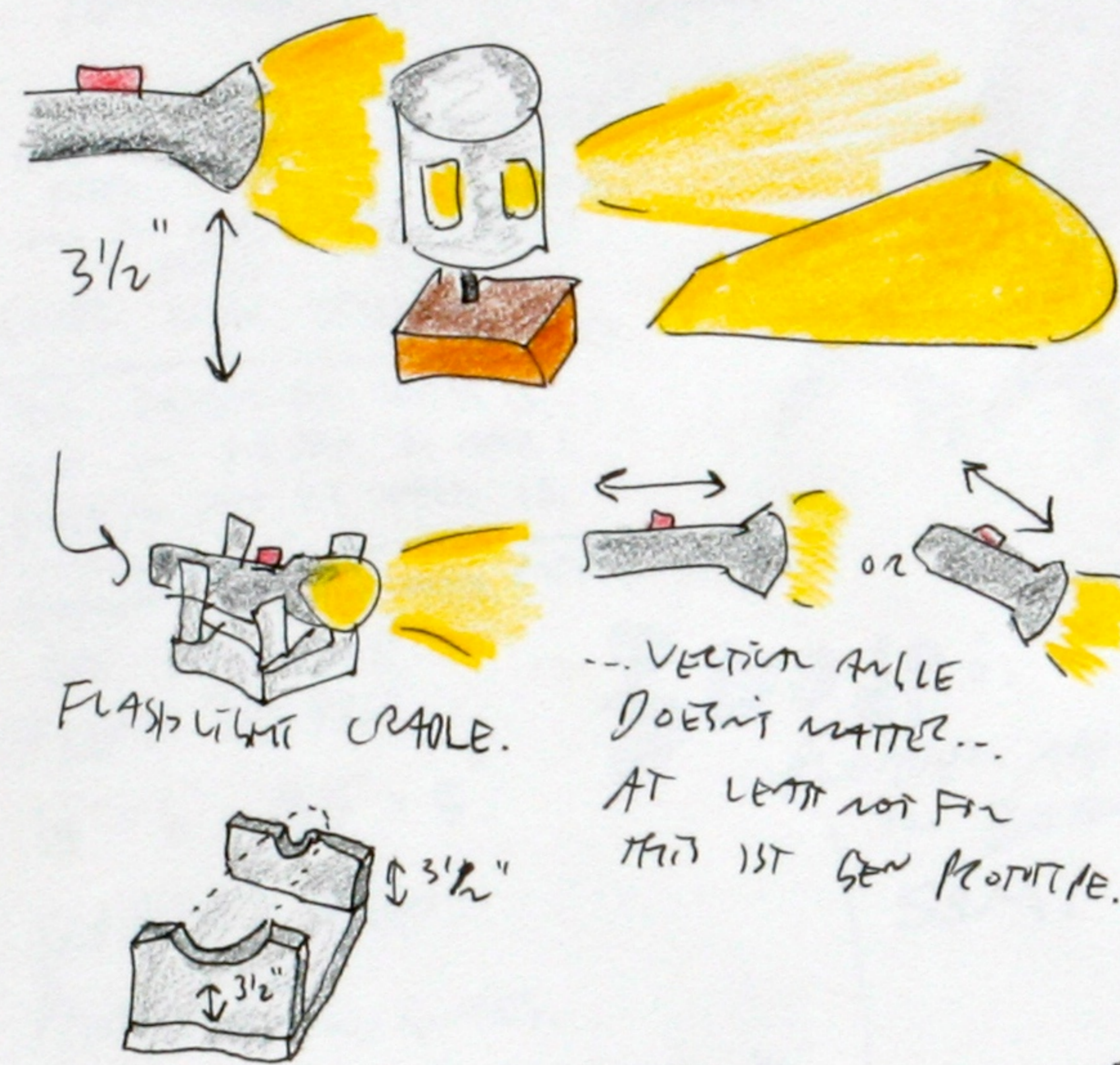


## FLASHLIGHT EXPERIMENTS:



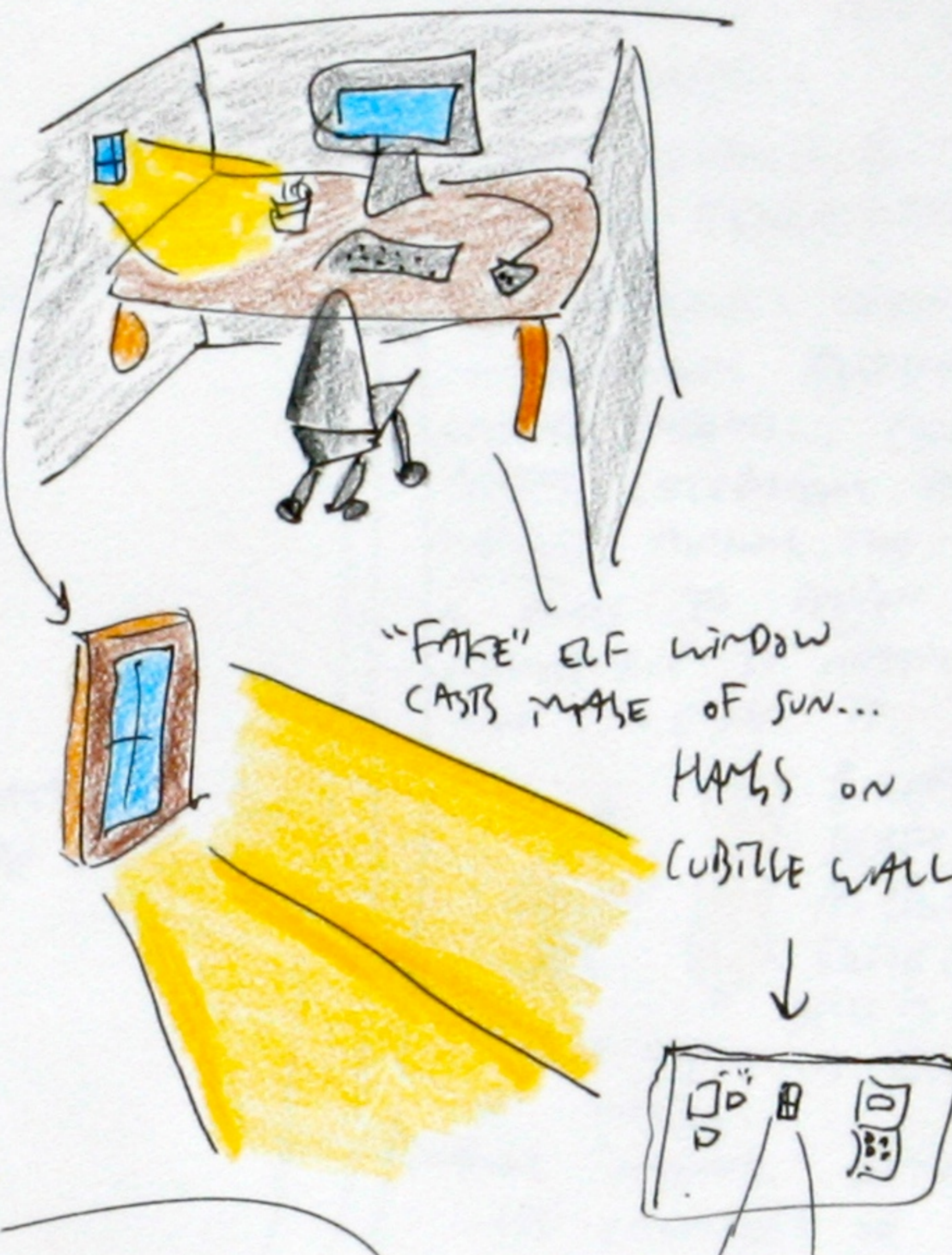
# CAPSTONE.

FEBRUARY 22, 2010



...VECTION ANGLE DOESN'T MATTER... AT LEAST NOT FOR THIS 1ST GEN PROTOTYPE.

## ELF WINDOW?



## DESIGN PRINCIPLES.

CONTINUUM:

AUTHENTIC ("REAL") → INAUTHENTIC/FAKE  
BUT: AUTHENTIC IS CONSTRUCTED. IT IS DONE. IT IS CULTURAL. IT EXISTS BY ASSOCIATION, IN SUBJECTIVITY, IN MEANING + SUBCULTURE, NOT DETACHED OUT THERE IN THE WORLD.

INAUTHENTIC BECOMES AUTHENTIC; AUTHENTIC... CLIMBING HOLDS, FAKE ROCK, ETC.

● LITERAL vs. METAPHORICAL.  
(ROCKS) (ROCK-LIKE).

● REAL vs. FAKE.  
(PLANTS) (STICK PLANTS) (BLUE PLANTS)

● AUTHENTIC vs. INAUTHENTIC

● TOP DOWN vs. BOTTOM UP.  
PHYSICS LIGHTING HELIOLUBE/ELF WINDOW

LEVELS OF "REALISM."

...HARRY POTTER ENCHANTED CEILING.

...CHALLENGES OF PRACTICE, ETC...

...MEMPHAS... MOVEMENT/POSITION OF LIGHT.

MINIMIZING... NOT REPLICATING. NOT SIMULATING. (HELIOLUBE).

NATURAL WINDOW...  
LIGHT WINDOW...  
HELIOLUBE WINDOW...

SLOW CHANGE. NON-BINARY CHANGE.  
REPRESENTING "ORGANIC" PROCESSES. SLOWLY, IMPERCEPTIBLE UNFOLDING.  
"SUN MOVES FAST!"

LIGHT-HOUR WORKDAY.  
"PEOPLE CAN'T LIVE THE OUTSIDE."  
WHY?

WINDOWLESS ENVIRONMENTS.  
FOCUSING ON SOME REPRESENTATION OF THE PASSAGE OF TIME, NOT A JUDICIAL...  
"IT'S ABOUT MORNING." NON-DISCRETE.

USING DIGITAL TECH. TO (RE)INTRODUCE A NATURAL UNDERSTANDING OF NATURE...  
OUTSIDE = WEATHER

TIME = LIGHT  
LIGHT = OUTSIDE

IMPROVE SENSITIVITY?

HEEK TOWN...  
FINE ARTS...  
EXPERIMENTING WITH LIGHT...

USING THESE DIGITAL SYSTEMS TO REPRESENT AN ANALOG PASSAGE OF TIME.  
NO BITS. NOT DISCRETE. IMPERCEPTIBLE (AT GLANCE) BUT PERCEPTIBLE (OVER TIME).

ISSUES OF DETECTION. DETECTING "FADE" LEDS... CHANGE IS UNSURE LIGHT CHANGES.  
COLOR WORKS... FADE COLORS... BRIGHTNESS, MORE NOT SO MUCH. OR IT IT?

# CARSTONE.

"DEVELOPING A SOPHISTICATED VOCABULARY WITH WHICH TO TALK ABOUT USING LIGHT AS A DESIGN MEDIUM."

- THEATRE LIGHTING... GRIPS...
- HOME LIGHTING... → JOHN WATKINS? (CONCEPTUALIZATIONS OF LIGHT?)
- PHOTOGRAPHY... → JOHN WATKINS? (CONCEPTUALIZATIONS OF LIGHT?)
- STEREOVISION

DESIGN PRINCIPLES OF LIGHT... AS A MEANS TO DEEPEN OUR CONNECTION WITH NATURE, NATURAL LIGHT, IN AN IDEAL ENVIRONMENT...

... THAT DIRECTIONAL 2ND SEASON OF COST... FIRST SEVERE, WHERE TO PUT FLOWERS DESIGNING IN UNDERGROUND, BECAUSE OF THE LIGHTING.

IDEAL HORIZON: 90° FROM ZENITH. ORTHOGONAL TO FLAT SURFACE... VERTICAL ORIENTATION OPPOSITE NET CONTINUOUS FORCE.

DAYLIGHT INTENSITY! 120K LUX → 10-25K LUX

- 1000 LUX - OVERCAST
- 320-500 LUX - OFFICE.
- 400 LUX - SUNRISE/SUNSET
- 1 LUX - FULL MOON OVERHEAD, TROPICAL
- 0.27 LUX - TYPICAL FULL MOON

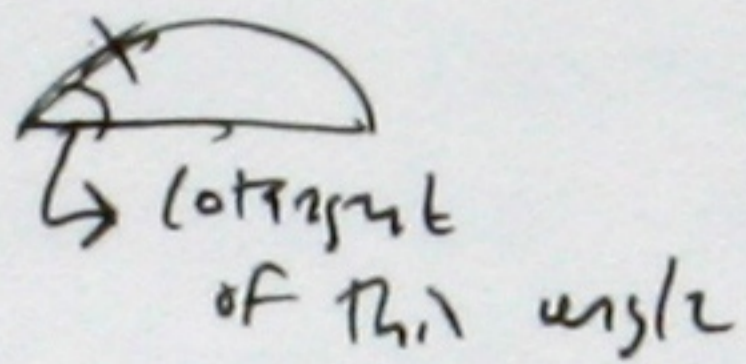
## SHADOW OCCCLUSION.

"WIDER THE LIGHT SOURCE, THE MORE BLURRED THE SHADOW."

LIGHT IS THE ESSENCE OF EVERYTHING WE DO AS INTERACTIVE DESIGNERS. PIXAS. SEEING. DEVELOPING. ETC.

## SHADOW LENGTHS.

"Length of shadow is proportional to cotangent of sun's elevation angle relative to horizon."



MULTIPLE LIGHTS

MULTIPLE SHADOWS... (CONFLICTS WITH NATURAL LIGHT?)

COMPATIBLE EPS ALIGNMENT?



IN THE RIGHT CONDITIONS, MERCURY & VENUS CAN CAST SHADOWS ON EARTH.

... what if we AMPLIFIED THESE MERCURY + VENUS SHADOWS? ... SORT OF LIKE URP, BUT IN REAL LIFE. ... WHAT OF AN OFFICE OUTFITTED LIKE URP? DYNAMIC SHADOWS ON ALL SURFACES...

"WHAT IS LIGHT BUT SEEING?" EMISSIVE SURFACES... VERSUS VOLUMETRIC LIGHTING...

→ bugs, dust, etc... sense of space...

FOR SHADOWS = SHADOW IN 30!

## SHADOW LANES.



## CREPUSCULAR RAYS.

"JESUS RAYS" "GOD RAYS." RAYS OF SUNLIGHT IS IF FROM A SINGLE POINT...

THERMOCLINES? PLANK? ARE PERSISTENT? MIRRORS?

"COLUMNS OF SUNLIGHT ARE" NEAR PARALLEL... LIGHT PERSISTENCE MAKES THEM APPEAR TO DIVERGE... VOLUMETRIC LIGHTING... "ROPE OF MOON"

## GNOMON → BLADE OF Gnomon

PINHOLE CAMERA... smaller hole = dimmer but sharper.

## SOLAR GRAPHY.

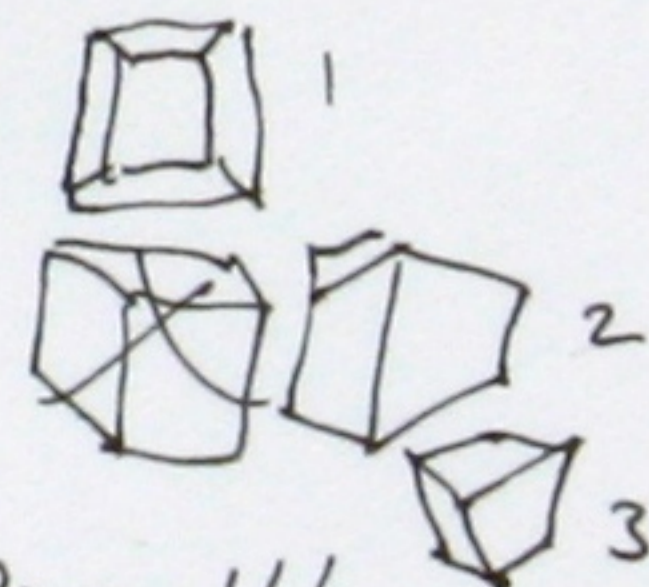
## PINHOLE PROJECTIONS.

PROJECTING THE OUTDOORS INSIDE... HOLE CRAP. GERMAN EXAMPLE.

ONE-POINT vs. 2-POINT PERSPECTIVE... ... OR 3-POINT...

## RADIOSITY ALGORITHM

SHADOWS = HIGH-REAR!!!



## DIFFRACTION

BEAM... CASE... PARALLEL RAYS/WAVES... STRAIGHT REFLECTION. SPECTRA HIGHLIGHTS?

## TYPICAL EFFECT.

↓ VISIBILITY OF A beam of light FROM THE SIDE. SCATTERING OF LIGHT!

↓ VISIBILITY FROM SIDE...

by accidents or purpose... like white shoes, etc...

# CARSTONE.

## RADIANT...

1. DIRECT ILLUMINATION.
  2. SPOT LIGHTING.
  3. AMBIENT LIGHTING.
  4. OMNI-DIRECTIONAL LIGHTING.
- PERMIT ALL THESE

NON-RADIANT AMBIENT.

SPOT - outside window to cast shadows  
 AMBIENT - without which nothing in the room could be lit.  
 OMNI-DIRECTIONAL - no shadows, reduces "flatness" of ambient lighting.  
 STILL LOOKS SAME!

RADIANT ALGORITHMS MAKE ONE SOURCE OF LIGHT & FOCUS ASS. ... colors "bleed" as their reflected light appears on other surfaces! HOLT SHIT, THIS IS MAGIC.

BURNING LENSES. Vases filled w/ water to start fires! String metaphor - the water could stay cool, but it could focus light to start fires! Super-Religious!

... WOW. THAT'S WHAT WE WANT TO DO. Start a fire of love for the inside space. Passion. "Spunk + crush." Remain cool, but focus + start fires! ... WHAT CAN BE OUR BURNING LENSES?

USING MIRRORS... REFLECT LIGHT ON CEILING? SPOTLIGHT... MIRRORS... A WHOLE NEW APPROACH TO OFFICE WINDOWS?

OH SHIT.

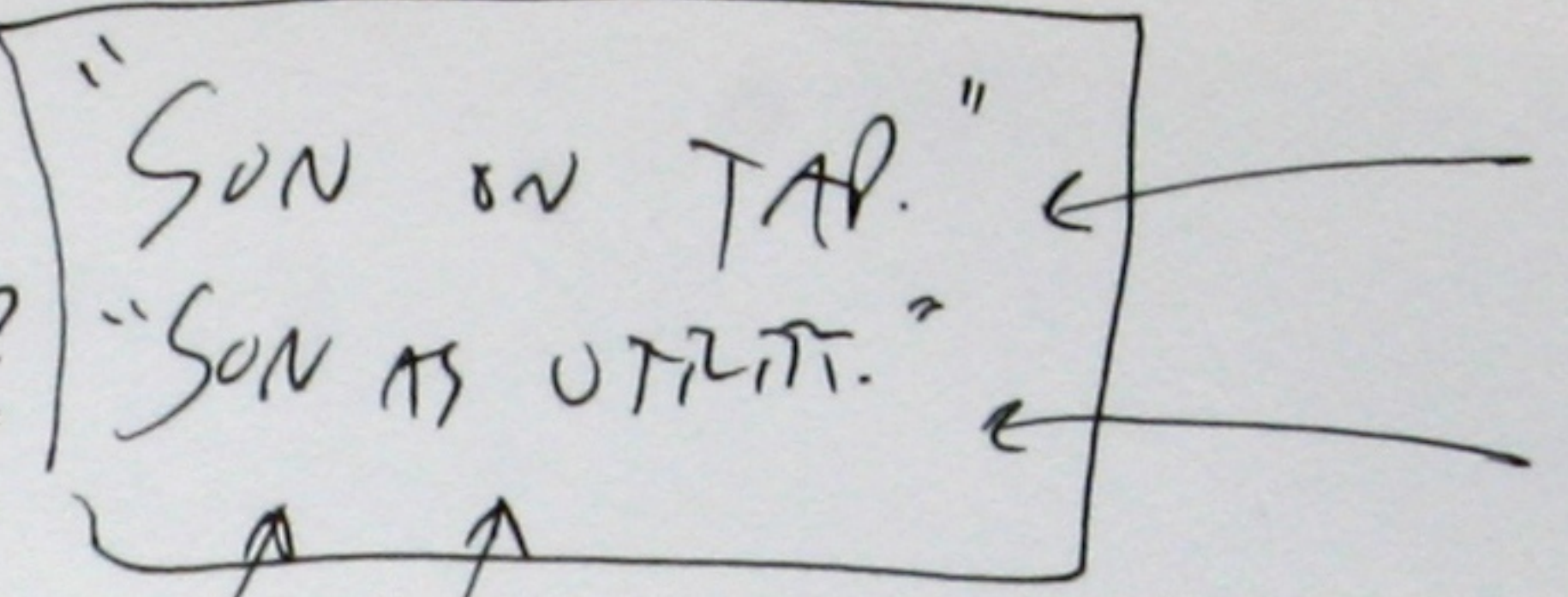
WHAT IF SUNLIGHT IS A RESOURCE IN THE OFFICE, JUST AS ELECTRICITY IS? YOU OPEN A PLUG, & THERE IT IS! YOU CAN PLUG SOMETHING INTO IT... YOU CAN CUP YOUR HAND UNDERNEATH IT... YES!

THIS IS YOUR CARSTONE. SUN AS A CONSUMABLE RESOURCE IN THE OFFICE. "BASKING" IN THE GLOW OF THE WATER COOLER. TURNING ON THE FANCT + EXHAUST SUN COMES OUT. DOING YOUR HANDS IN THE SUN, INSTEAD OF A DIAL.

"WHAT CAN SUN DO FOR YOU?" SUN AS A UTILITY IN THE OFFICE. JUST AS ELECTRICITY, HEATING + COOLING, NETWORK/INTERNET, WATER, SEWER, ETC.

WHAT IF THERE WAS A PERMEABLE DISTRIBUTION SYSTEM, BUILT INTO OUR INFRASTRUCTURE, THAT DISTRIBUTED SUN? ENJOY + SELLING WEATHER. WELL LEAD. "WHERE DO WE GET IT? SEND IT TO OREGON!"

WE BUILT THE NETWORK TO SUPPORT THE INTERNET, BECAUSE IT WAS SO VALUABLE + SO OBVIOUS. I'LL BET ONE DAY PEOPLE THOUGHT ABOUT PLUMBING & WERE CRAZY. ONE DAY, THEY WILL THINK THAT NOT HAVING SUN ON TAP IS JUST AS INSANE!



OMFG.

THE WHOLE POINT OF ELECTRICITY AT FIRST WAS TO GENERATE LIGHT. LET'S GET BACK TO THAT. FUCK ELECTRICITY. FUCK CFLS. FUCK FLUORESCENTS. WE'RE GOING TO CAPTURE, STORE + DISTRIBUTE LIGHT. (MATT COTMAN'S COMPUTATIONAL WOOD)

- ↳ NAME IT, FULL-SPECTRUM SUNLIGHT.
- BURNING LENSES. MAKING LIGHT WORK FOR US. making light do work for us!
- SUN LIGHT BATTERIES (STORE LIGHT, NOT ELECTRICITY, FOR LATER)
- SUN LIGHT SADDLES
- SUN LIGHT HARD DRIVES "EVERYONE LOVES FULL-SPECTRUM SUNLIGHT."
- SUN LIGHT WATER COOLERS Well, let's just GIVE IT TO THEM!
- SUN LIGHT LIGHTS.

MIRRORS. REFRACTION + REFLECTION. A GLASS FUTURE, POWERED NOT BY ELECTRICITY, BUT LIGHT. COMPUTING w/ PHOTONS. NO ELECTRICITY.

A FUTURE POWERED NOT BY ELECTRICITY, BUT LIGHT.

# CARSTONE SUNLIGHT AS UTILITY.

- DANIEL + HERB ANTI-DEPRESSANT SUN LAMP...
- PIERRE + HIS INDOOR VS. SUNLIGHT COLOR-MATCHING CHALLENGES...
- MARLYN AND HER SUNLIGHT SEWING LIGHT...

... anything we build is trying to COMPENSATE FOR a lack of SUNLIGHT in our LIVES!  
 ... WHAT ABOUT SUNBURN?  
 ... WHAT ABOUT FILTERING UV RATES?  
 ... CAPTURING + STORING ~~THE~~ SUNLIGHT...  
 NOT ELECTRICITY, NOT CONVERTING SUN INTO ELECTRICITY. BUT STORING IT AS LIGHT.  
 ... AND EVERYTHING TAPS INTO + DRAWS FROM THAT RESERVE.

PHILIPS DYNAMIC LIGHTING =  
 "JUST THE WAY THINGS ARE DONE NOW."

... what if it's (ind), but I need to see my workspace in full light?  
 ... but it's not just the light that gets a window great... it's the view! The world beyond!  
 BUT REALLY, LET'S THINK ABOUT THIS.  
 WINDOWS ARE ARTIFICIAL. THEY ARE NOT NATURAL (but they do allow us to see something that is...)

... what about TIME? Slow CHANGE?

HEAVILY INSPIRED BY MATT COTTAM'S COMPUTATIONAL WOOD.  
 (VIGNETTES OF DESIGN).

## FIBER OPTICS...

"TRANSPARENT" CONCRETE (LIGHT PENETRATIONS)

SUN TUBES (DEEP SKYLIGHTS)  
 MIRRORS, LENSES, REFRACTION, REFLECTION, OCCCLUSION, SHADOWS, CAUSTICS, TIRAN EFFECT...

DESIGNING WITH LIGHT.

LIGHT AS A RESOURCE.

COLLECT, HARVEST, CAPTURE, STORE, USE.

RAIN BARREL? HOW ABOUT A LIGHT BARREL?



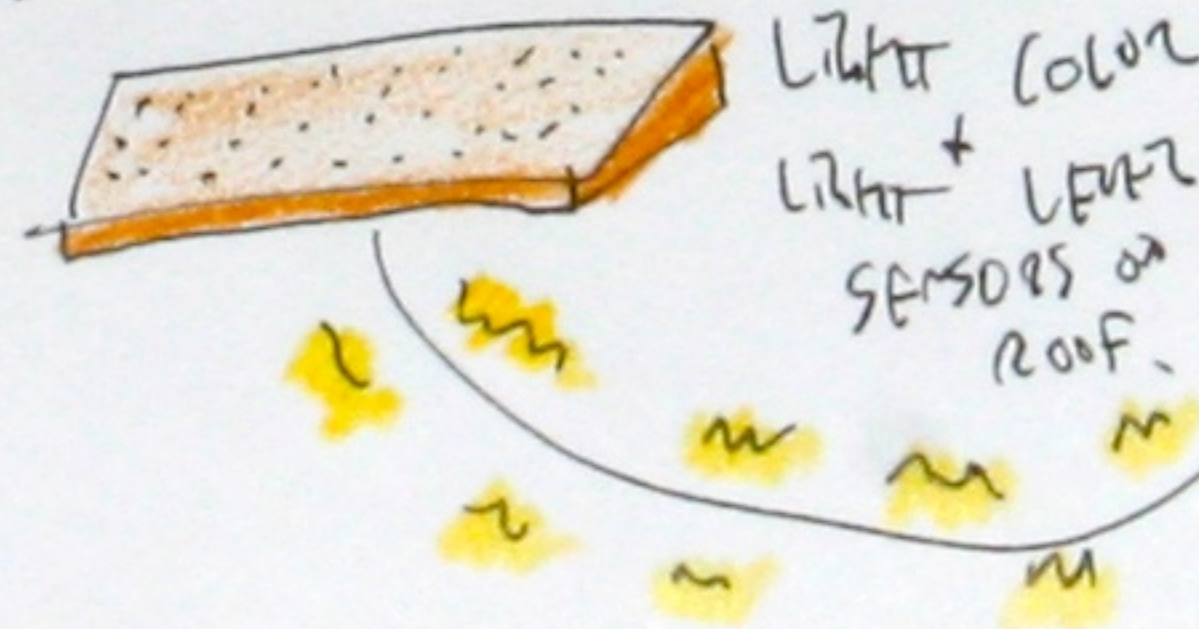
SUN + MOON JARS.  
 LITERALLY.

... CANNING LIGHT FOR USE OVER WINTER...  
 ... JUST AS WE WOULD CAN FRUITS + VEGES...  
 CANNING + STORING LIGHT FOR THE SMALL MONTHS.

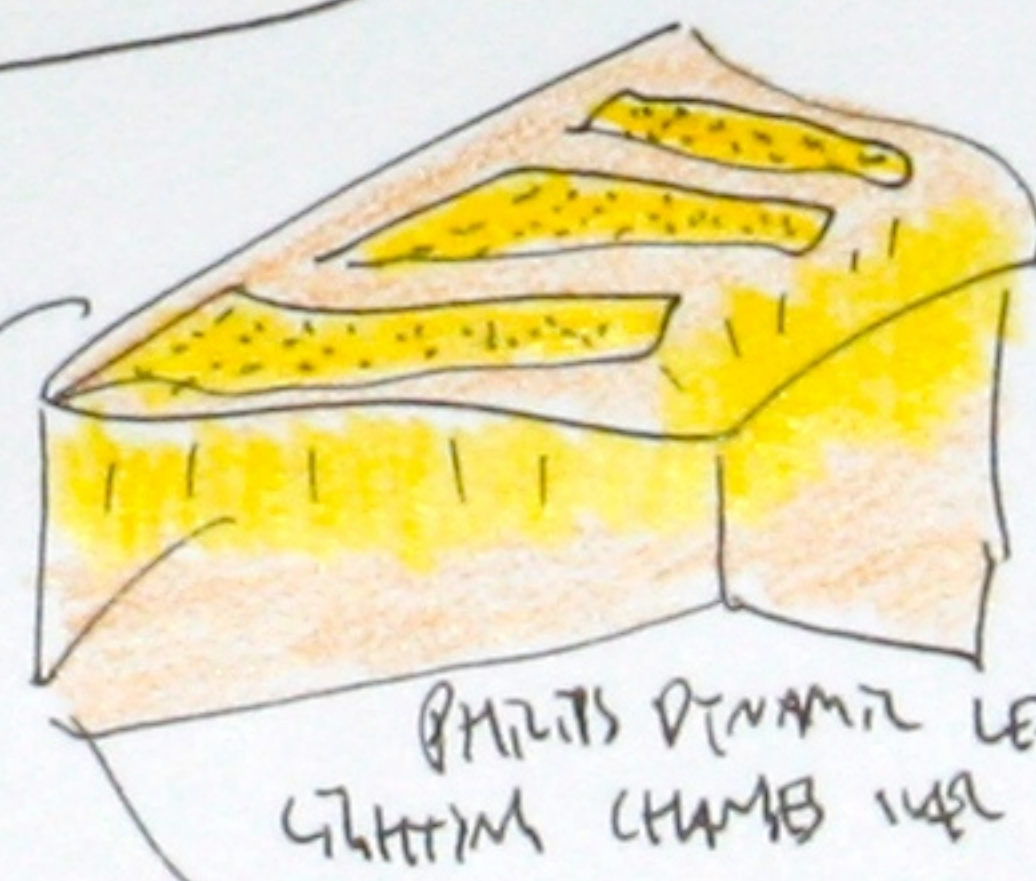
THE METAPHORS WE USE INFLUENCE HOW WE THINK ABOUT THINGS. WHAT HAPPENS WHEN WE THINK OF LIGHT AS A SUBSTANCE, A PARABLE SUBSTANCE, A MATERIAL FOR DESIGN?

LIGHT SABERS CAPTURE THE IMAGINATION!  
 ... BURNING LENSES. ETC.

UNIFORMED FIBER OPTIC CEILING:



LIGHT COLOR  
 LIGHT + LEVEL  
 SENSORS ON ROOF.

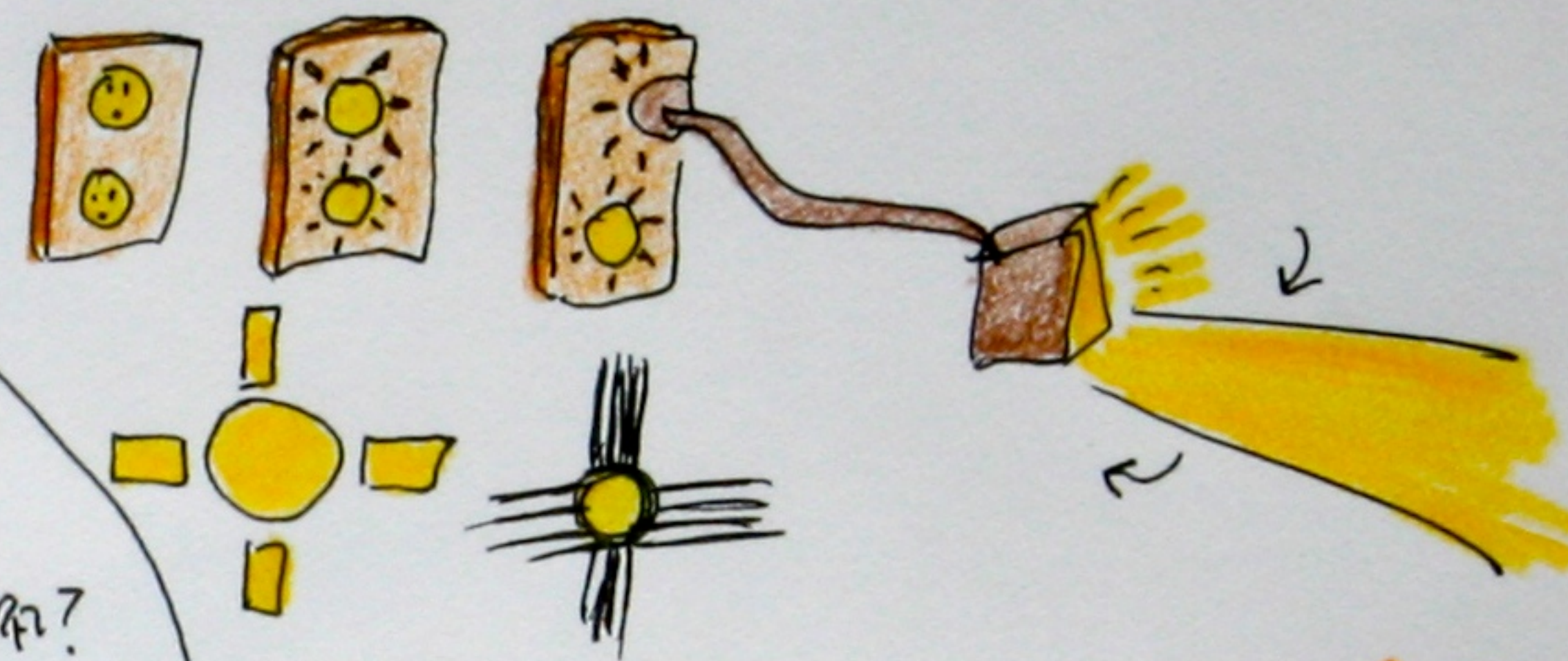


PHILIPS DYNAMIC LED LIGHTING CHAMBER USES TIME IN RESPONSE TO OUTDOOR SENSORS.

MARCH 1, 2010

# Sunlight AND TIME.

"SUNLIGHT" REAL-TIME POWER OUTLETS:



FIBER OPTIC CEILING:



CROSS SECTION, MULTIPLE FLOORS.

# CARSTONE.



Holographic  
maple paper  
magic lamps  
with anastigmat  
+ parallax.

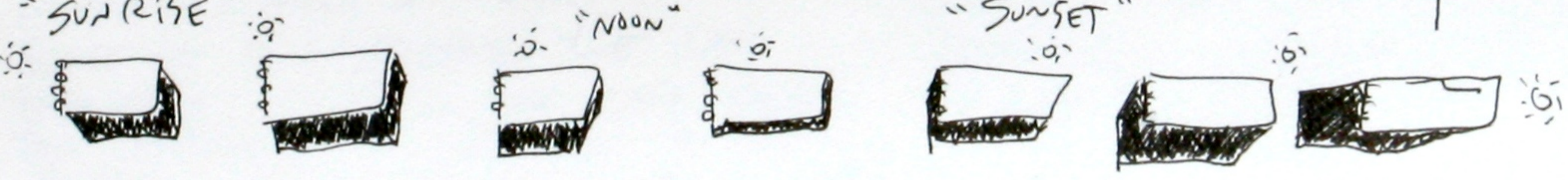
Geoff's office.  
"optimize" an office  
in Alaska.

SEASONS. ANGLE OF LIGHT.

- "WHAT IF IT'S CLOUDY?"
- "WHAT IF IT'S RAINY?"
- "WHAT IF IT GETS DARK AT 3:00 IN THE AFTERNOON?"
- ... CELEBRATING NINE DAYS... (those days that we had on outdoor artists...)

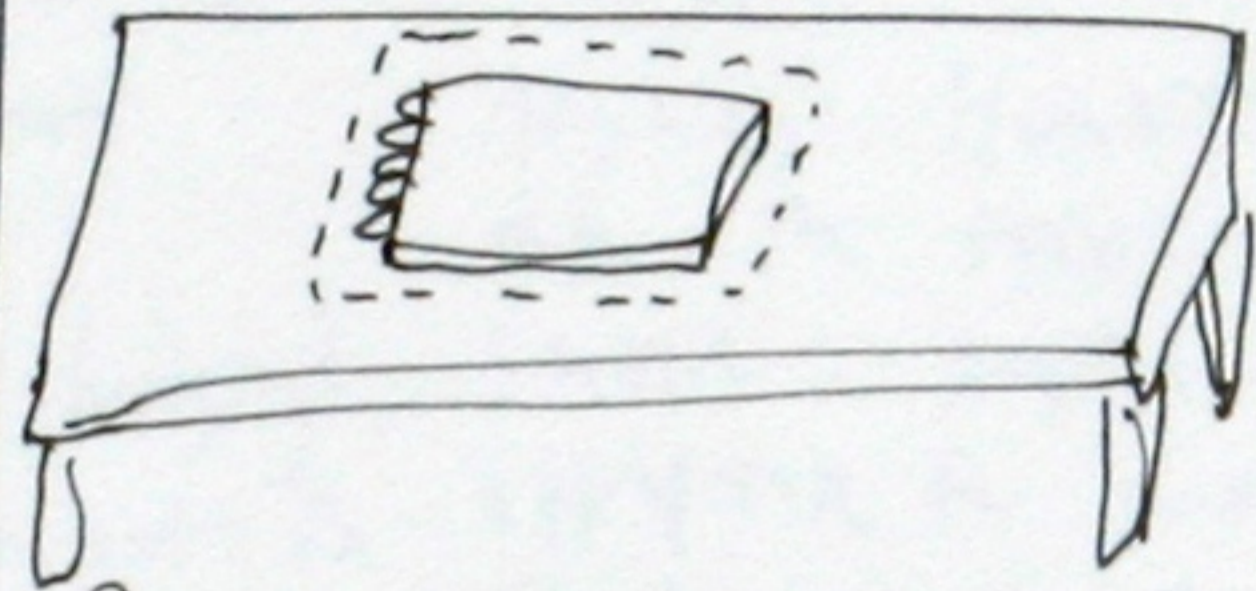
Shadow cast by notebook... WHAT ABOUT THE SHADOW OF THE BRAND?  
 QUALITY OF LIGHT ON TABLE... THAT'S... THAT'S HARD...  
CHANGES THROUGHOUT PRESENTATION?

ORANGE-WHITE → YELLOW-WHITE → BLUE → YELLOW → ORANGE

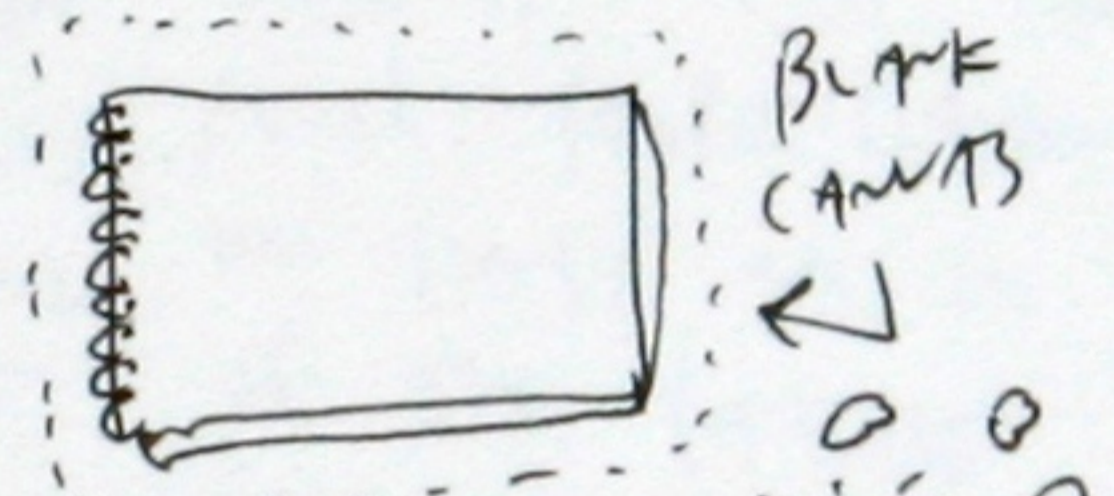


# PRESENTATION THOUGHTS...

YOU SHOULD USE YOUR SKETCHES...  
 SKETCH EACH SLIDE.  
 SLIDE IS YOUR NOTEBOOK, SKETCH  
 PAD... BLUNT PAPER



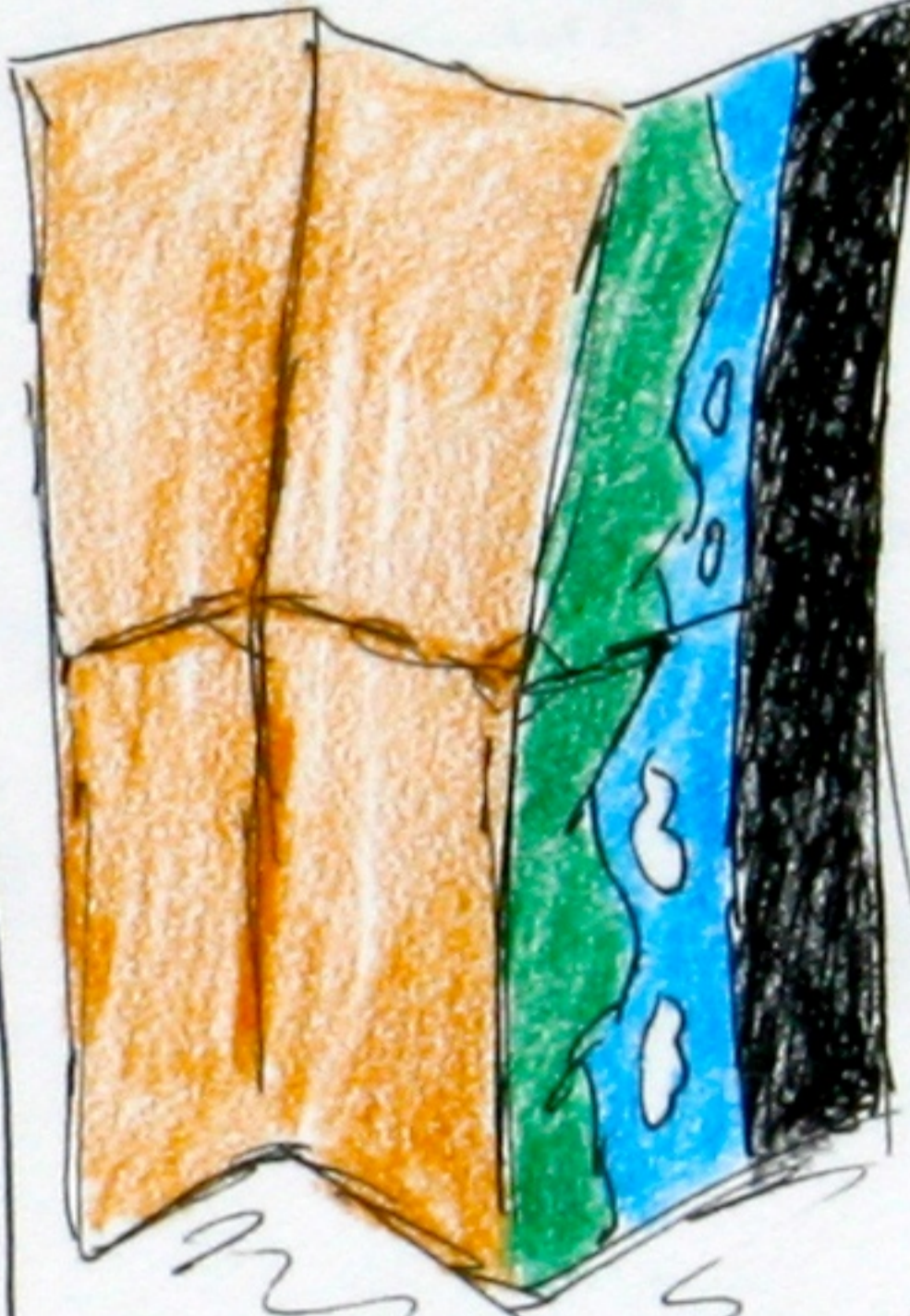
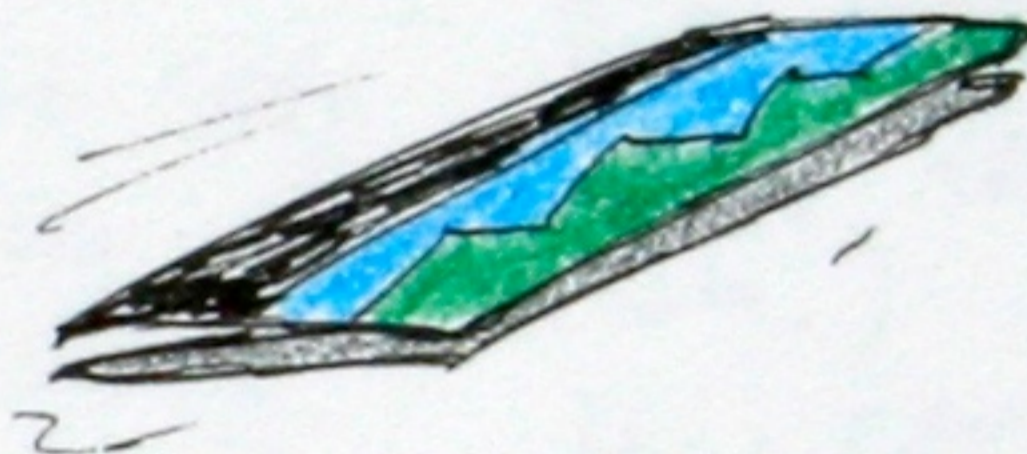
PHOTOSHOP + REAL LIFE.



PHOTOSHOP IN SKETCHES...

TITLE SLIDE = SKETCHES.  
 PHOTOGRAPH + CATEGORIZE ALL YOUR  
 SKETCHES NOWHERE... PENN ON PITTER?  
 AFFINITY DIVIDE THEM?

# SKETCH A NPS BROCHURE?



PERHAPS... YOU SHOULD CONSIDER  
 WHAT TO WANT TO SAY...  
 NOT... WHAT TO WANT IT  
 TO LOOK LIKE.  
 WHAT'S THE POINT?  
 WHAT'S YOUR ARGUMENT?

LEATHERY.  
 CREASES.  
 FOLDS.  
 TEARS.



# Capstone...

"What's your point? Retire?"

Design principles for bridging the outdoors + indoors... that the division between the two is more complex + general than we think it is... it isn't natural + artificial... glass is artificial... keeping the elements out, not necessarily for our benefit, but for the indoor environment's benefit.

...What's the best medium for this bridging? ...Really, the gap between the in + out is subjective. It is not objective. It is open to influence. It can be shaped + adjusted via design. It is a practical accomplishment what is considered "natural" + "outside" and what is considered "inside." That is important. IF THIS IS NOT AN OBJECTIVE MATTER BUT RATHER SOMETHING THAT IS CONSTRUCTED BASED ON OUR RELATIONSHIPS, BASED ON OUR MEMORIES, BASED ON HOW WE MAKE MEANING + MAKE SENSE OF OUR SURROUNDINGS... THEN IT IS OPEN TO INFLUENCE BY DESIGN. It can be deliberately shaped... we can create people for a particular outdoor experience needs, but we can offer opportunities for reflection. The situation in these countries, their feelings regarding being inside vs. outside... we can influence it, however. We can make the environment conducive to more positive outdoor experiences... channel form + reinforce new threads of meaning. SINCE IT IS SUBJECTIVE, WE CAN INFLUENCE IT. WHILE WE CAN'T DESIGN THE EXPERIENCE WE WANT THEM TO HAVE INDOORS, WE CAN DESIGN FOR THAT EXPERIENCE.

But How? What's a good medium for this... the old notebook about the old man... "here is \$1, try to fill this room." The first man tried hay. The second man tried cotton. The third man used a candle. Bam. Filled the room w/ great efficiency. Does anyone talk about the light of the day?

Anyway... Humidity... well... if we want to take the senses... SIGHT, HEARING, TASTE, TOUCH, SMELL... smell = extremely strong, but not really appropriate for workspace. Taste can less so. Touch... well, that's different... what does the outdoors "feel" like means much more than touch. Proprioception... the awareness of where our limbs are in space. Also, our sense of the PACE of time. Also, a rejection of the compartmentalization of the senses... HEARING = really interesting... but not really the direction I want to go. I looked at SIGHT, not specifically LIGHT (and standing, the absence of light too)... and our sense of time.

IMPERCEPTIBLE CHANGE.

★ CHANGE ~~AT~~ OUTSIDE THE REALM OF IMMEDIATE HUMAN PERCEPTION (ONE OF THE CORE CHALLENGES IN UBIQUIT + SUBJECT COMPUTING).

MARCH 3, 2010

SUBTLE CHANGE. LONG CHANGE. IMPERCEPTIBLE MOMENT-TO-MOMENT, BUT DEFINITELY PRESENT MINUTE TO MINUTE, + CERTAINLY PRESENT HOUR TO HOUR... SEASON TO SEASON.

(THE "CLUE" AD @ THE BRITISH ADVERTISING AGENCIES... where they changed things slowly... or the two phone calls, where they slowly added stuff to the room.)

How CAN I PUNK PEOPLE WITH AN SLIDE DESIGN?

USING LIGHT + TIME, LONG-DURATION, AS A MEDIUM FOR COMMUNICATING THE SLOW REVELATIONS OF THE NATURAL WORLD, FOR INTERLUDE THEM (LIKE WOLVES) TO THE INDOOR ENVIRONMENT

THEY GET BORED WITH THEIR SURROUNDINGS. AS DO PEOPLE. SO WHAT DO WE DO? WHAT ABOUT DISTRACTION? ISN'T THIS DISTRACTION? NO! IT'S NOT DISTRACTING BECAUSE IT EXISTS ~~BEFORE~~ AT BEYOND THE EDGE OF HUMAN PERCEPTIBILITY. LIKE THE GREAT PANGLOSS... WE NEED LITTLE THINGS THAT GET KNICKED DOWN TO EVEN ACCEPT THAT IT IS ACTUALLY THERE... THE THINK @ THE SMITHSONIAN...

Remember the compartmentalization of senses...  
Sense ~~of~~ ~~of~~ of sound... how do we  
know how long something is, how a sense  
of time? The sense of time is "sensed"  
with all of our senses... even ~~kind~~ proprioception  
perhaps even balance. If our sense of time  
crosses the senses, why don't other senses?  
How with your eyes, see with your hands...  
LS ~~identify~~ a polaroid camera, even though he  
hadn't held one in, like, 15 years... how did  
he do that, if there is a relationship between  
"touching" images of polaroid cameras with  
our EYES.

We embody these interactions... and so,  
even light, which allows us to SEE, engages  
our sense of touch by revealing textures  
to us... etc.

So, using LIGHT + TIME AS A MEDIUM  
TO POSITIVELY AFFECT PEOPLE'S QUALITY  
OF LIFE IN THE WORKPLACE. BUT what if  
we NEED to be miserable? Well, that resonates  
to the core of this project... without difference,  
without light, there would be no shadow. Without  
light, no shadow. We need these "extremes",  
we need to operate on these gradients. We need  
CHANGE, we need DIFFERENCE, in order to  
interact. So this club isn't "all light all the  
time" nor is it about MORE light. It's about  
the smarter use of an application of light.  
The reason electricity became popular in the first  
place.

For instance, Flash Photography offers a flash of  
light, + it is also absolutely SPOTS.

Clearly, more light does not equal better.  
But a smarter application of light, say  
that done by grips or grips or stage  
lighting managers + what not, can really  
make things pop. And this is just  
communicating from thru light, not even  
time... smarter application of light.

So how do we do that? Philips dynamic  
lighting, transparent concrete, fiber optic  
celling, heliostats, etc... well, there isn't  
necessarily trouble + better use of light...  
but they do tie the indoor lighting of  
a space irrevocably to the outdoor  
lighting. Brooking down that distinction and  
perhaps to a fault. On low light days  
outside, you get low light inside. White,  
what?! That's just the opposite of what  
my users need. They don't get enough  
light in the water, and now we want  
to take any what little extra light  
they have?

Just like coming, just like seeing up for  
the low months... pop open a mesh  
jar for some summer. ~~But~~ can't  
air.

Oh yeah + bottled water. "it comes  
out of the tap!" Arguments against  
bottled water, + why it could run well, let's reduce light spike.  
catch on... but really, it's experience design... and let's do it by lighting  
as well as clean marketing.

ANY ARGUMENT AGAINST PEOPLE BECOMING  
"connoisseurs" of LIGHTING could likely be  
said AGAINST people becoming connoisseurs of  
water. And yet, here we are.

Even cup drink. People pay  
4x as much for ZSI. [ZSI!]  
How does that work? Experience  
design. PERCEIVED, rather than actual,  
value. Sincerity. Perhaps quality...  
but the way a Red Bull ads you  
got certainly would suggest otherwise.  
So. Advanced lighting is bottled water.  
Advanced lighting is Red Bull. Smarter  
application and distribution of a  
resource that is scarce, cheap  
and in ABUNDANCE. Perhaps too  
much in abundance... over-illumination  
and the like.

IT'S NOT THAT THERE'S AN  
SHORTAGE OF LIGHT, IT'S THAT THERE'S  
A SHORTAGE OF INTELLIGENT LIGHT. And  
what defines intelligent light? (we're trying  
that feature) some amount of coherence  
with the natural world. We have  
a million years of evolution, of  
biological history, telling us what is  
"right" in our environment and what  
is "wrong" (TUFTE and recommending  
the usage of NATURAL colors)  
because they have an innate  
coherence to us... reducing effort.  
Let's reduce light spike.  
... and let's do it by lighting  
our spaces in a manner  
or more in line with the  
lighting of the natural world.  
Light THIRMOVES. ABLES.  
CLOUDS. SECTIONS. PAGES.  
★ LIGHT THAT COMMUNICATES THE PASSAGE OF TIME.



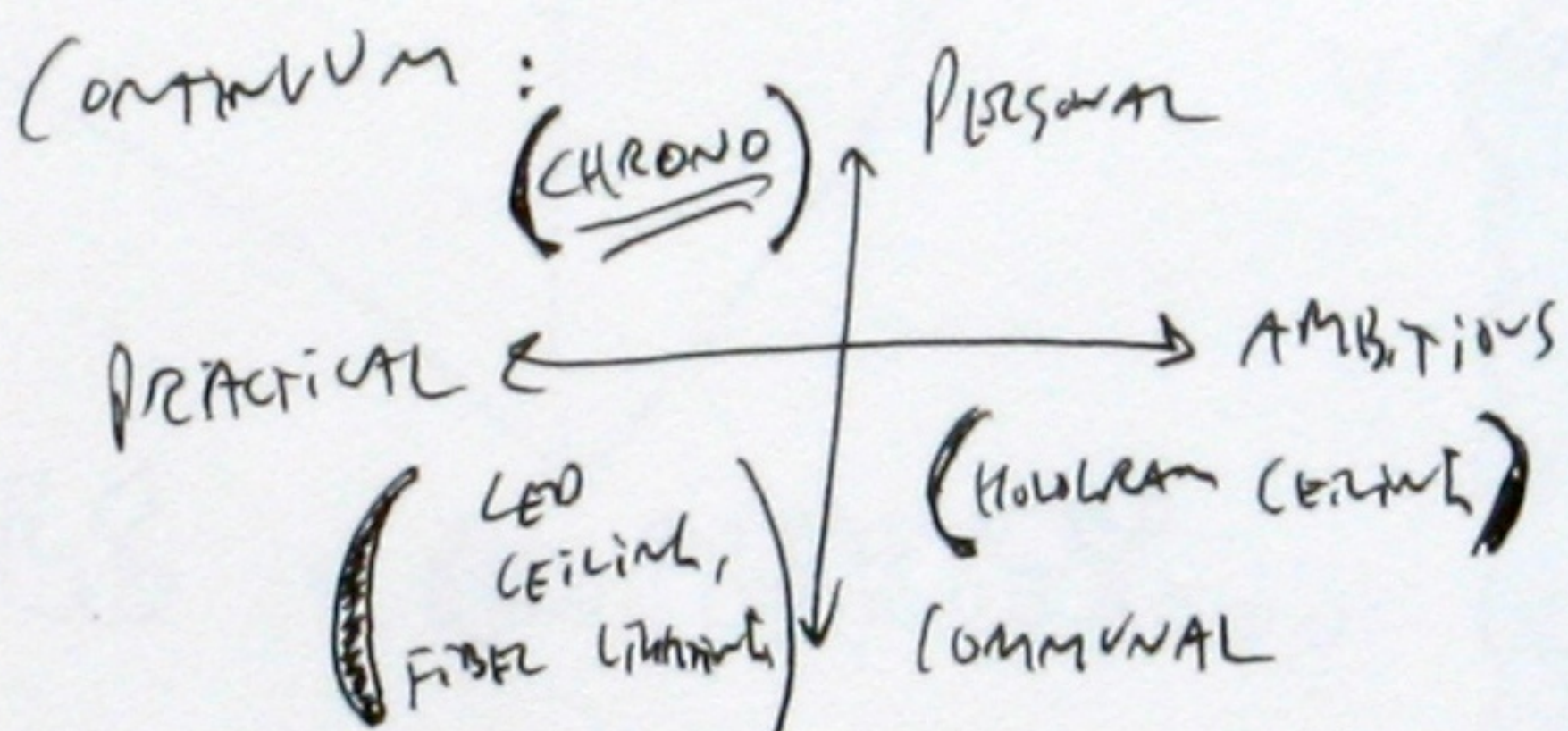
"AND <sup>SUN</sup> LIGHT MOVES FAST."  
 ... Show images of your light studies... Hci lab, wall of apartment, Danick's, etc...  
 "I ALWAYS WORRY UNDERESTIMATES HOW QUICKLY LIGHT MOVES."  
 ... and yet you can't see it moving, perceptually! perceptually!  
 IN THE MOMENT, ITS MOVEMENT IS INVISIBLE...  
 ALSO... THE OFFICE SIMULATION WITH ACTUAL LIGHT...  
 "THIS SHIT DON'T STAND STILL"  
 ... SO WHAT SHOULD I DO WITH LIGHT?  
 LIGHT IS THE CHEAPEST WAY TO CONTINUALLY RECONFIGURE SPACE... BOTH THROUGHOUT THE DAY, AS WELL AS ACROSS THE SEASONS...  
~~USE~~ USE YOUR SKETCHES.

# CAPSTONE.

"THE ROOF, THE ROOF, THE ROOF IS ON FIRE."

- DESIGN PRINCIPLES FOR DESIGNING + WORKING W/ LIGHT.
- DESIGN PRINCIPLES FOR BRIDGING THE PERCEIVED, IRRECONCILABLE, GAP BETWEEN THE INDOOR WORLD + OUTSIDE WORLD.

(SUBTLE CHANGE IN AMBIENT BEHAVIOR THROUGHOUT THE DAY)



- WARM ← → COLD
- BRIGHT ← → DIM
- MOBILE ← → STATIONARY / SPATIAL
- PIVOTAL ← → CONSTANT / CONSISTENT
- INFORMATIVE ← → ILLUMINATIVE
- ← → UNIFORM
- ← → DIRECTIONAL

(CONNOISSEURS OF LIGHT) omni-directional



## CONNOISSEURSHIP.



WATER IN A WINE BOTTLE.

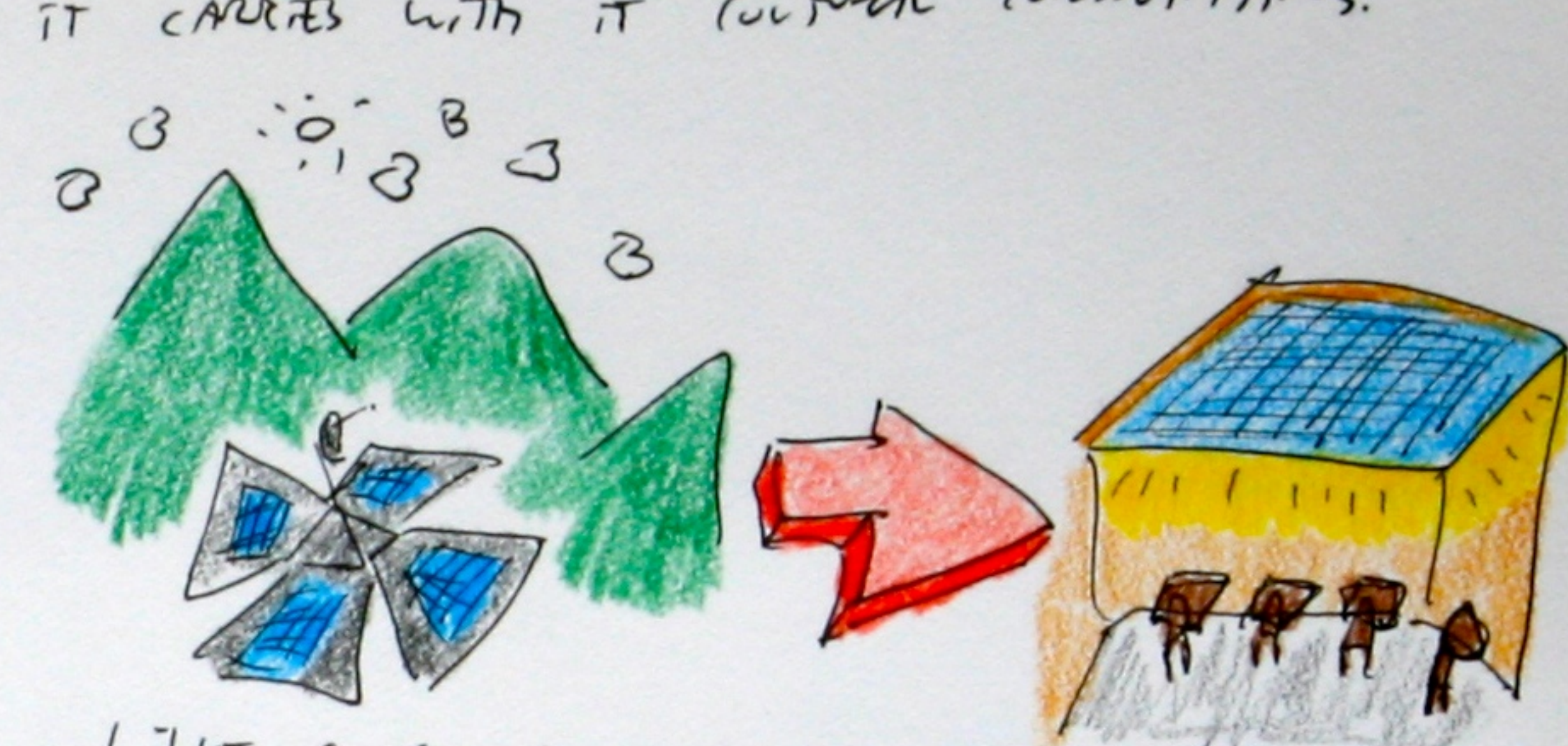


ELEGANT CONSUMABLES.



LIGHT IN A WINE BOTTLE.

THANK SOMETHING THAT WE TAKE FOR GRANTED, THAT WE CONSIDER TO BE OUR JOB. SINCE RIGHT, THAT WE DON'T CAN MOVE, AND ELEVATING IT.



LIGHT SENSER / COLLECTOR IN WILDERNESS AREA ...

BROADCAST REAL-TIME (OR SAME) DYNAMIC LIGHTING INFORMATION TO OFFICE SPACE.

MARCH 7, 2010

PART. ROOM COLORS. PART CHIP NAMES. COLOR. ASSOCIATIONS. CULTURAL/SOCIAL SIGNIFICANCE. NAME OUR LIGHT AFTER PART COLORS!  
 "IT IS MORE THAN JUST THE COLOR OF LIGHT." IT CARRIES WITH IT CULTURAL CONNOTATIONS.



## CREPUSCULAR RAYS.

... or, QUOTE OF LIGHT BENEATH A BRIGHT YELLOW WALK TREE IN THE FALL.

(PAINT CHIPS.)

↓  
 COLOR IS MORE THAN (COLOR).

# CAPSTONE.

... LEARNING THE "CUBE."  
 "HAWAIIAN SCENE DAT?"  
 How ABOUT HAWAIIAN LIGHT DAT?



HAWAII.



OFFICE.

BEVERS OF COMPLEXITY...

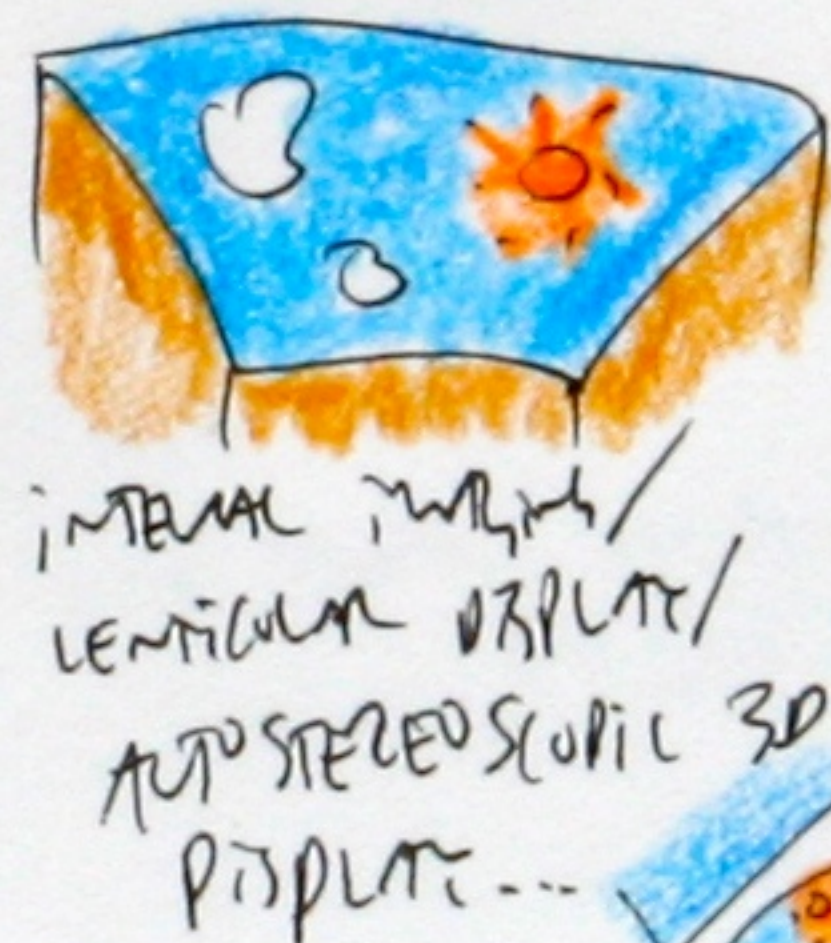


COLLECTOR / REFLECTOR.

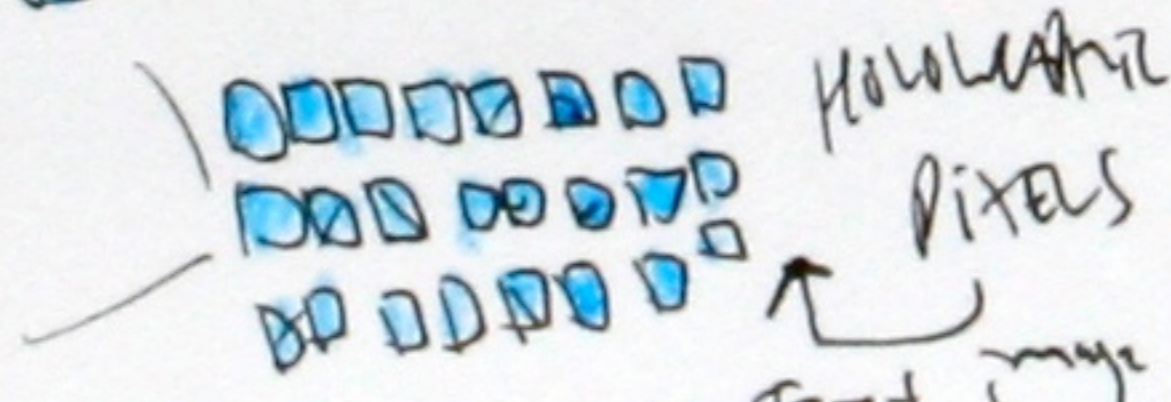
EACH PIXEL  
 CONTAINS INFO  
 TO RECONSTRUCT  
 WHOLE SCENE.



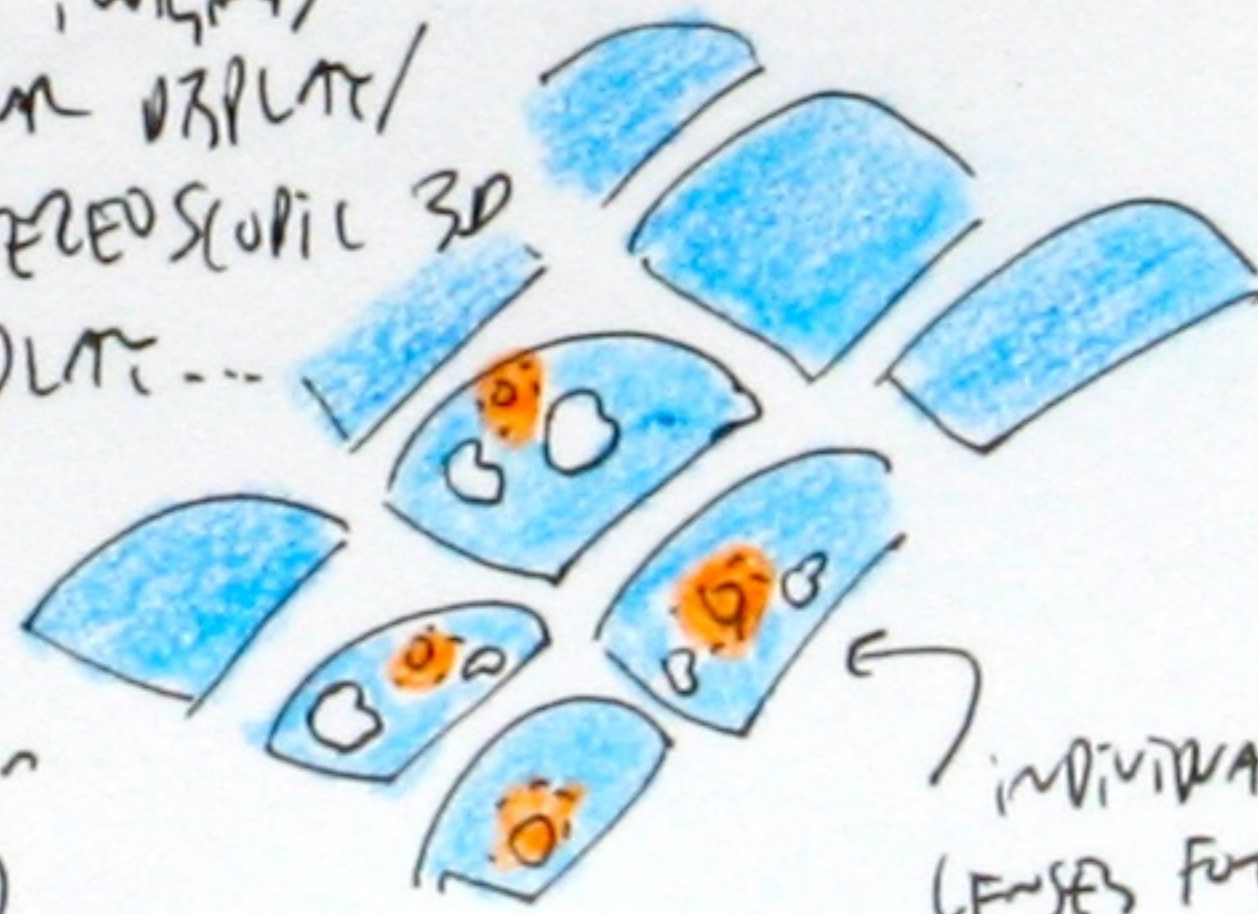
HOLD LENS, REAL-TIME  
 DYNAMIC LIGHTING.



INTERNAL LIGHT/  
 LENTICULAR ARRAY/  
 AUTO STEREOSCOPIC 3D  
 DISPLAY...



HORIZONTAL  
 PIXELS  
 (different image depends on  
 position of user...)  
 SUBJECTIVE OBSERVATION



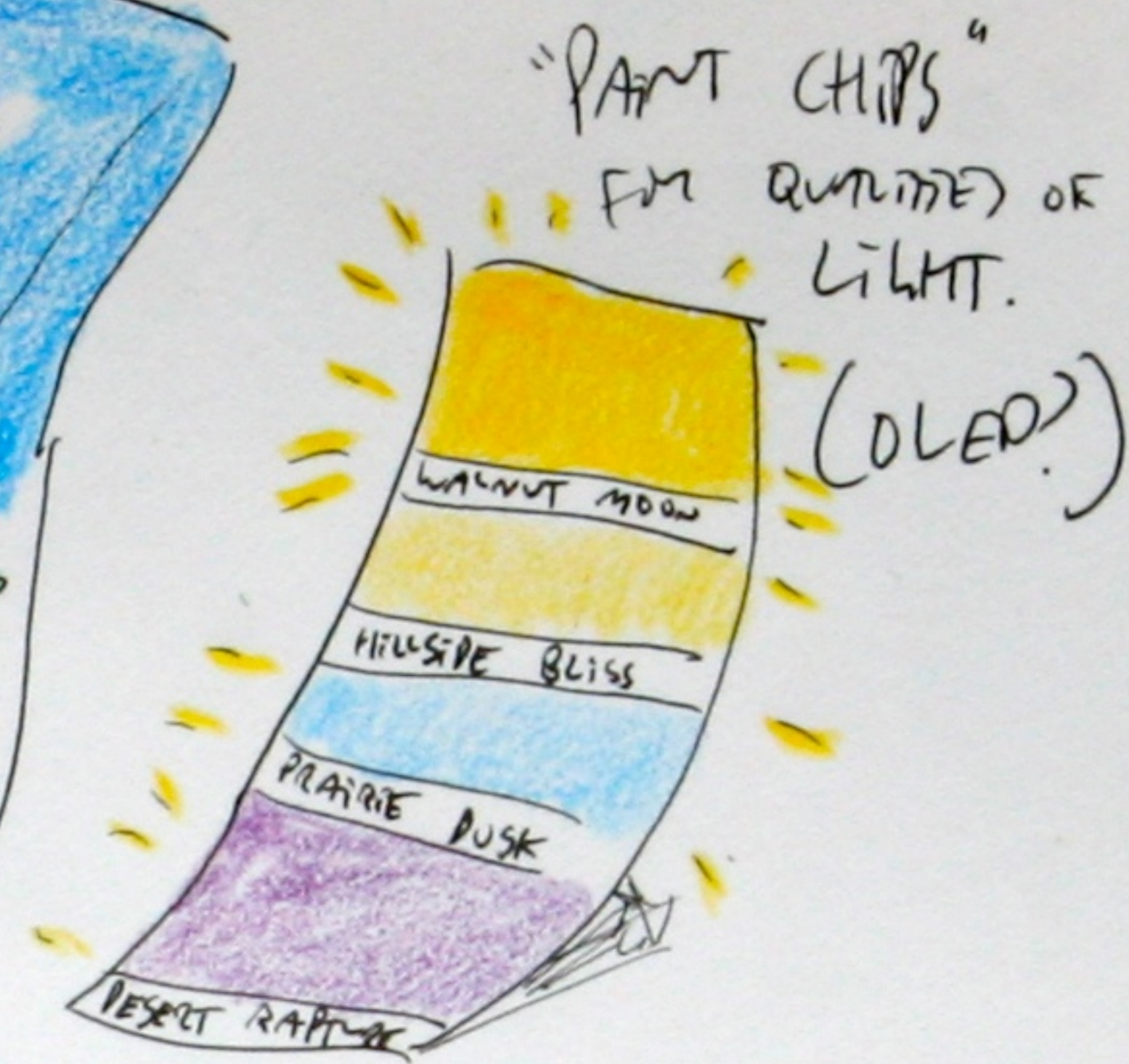
INDIVIDUAL  
 LENSES FOR EACH  
 PIXEL (EACH PIXEL CONTAINS  
 WHOLE IMAGE... LENS DETERMINES  
 WHAT USER SEES DEPENDS ON SUBJECTIVE OBSERVATION.)



BOTTLED  
 WATER?

BOTTLED  
 SUNLIGHT.

... THIS ISN'T ABOUT  
 WORKING OR SAVING,  
 THOUGH. THIS IS ABOUT  
 CERTAINLY HIGH-QUALITY  
 BRIGHTNESS, PERSPECTIVE,  
 DISTINCTION, COMMITMENT.



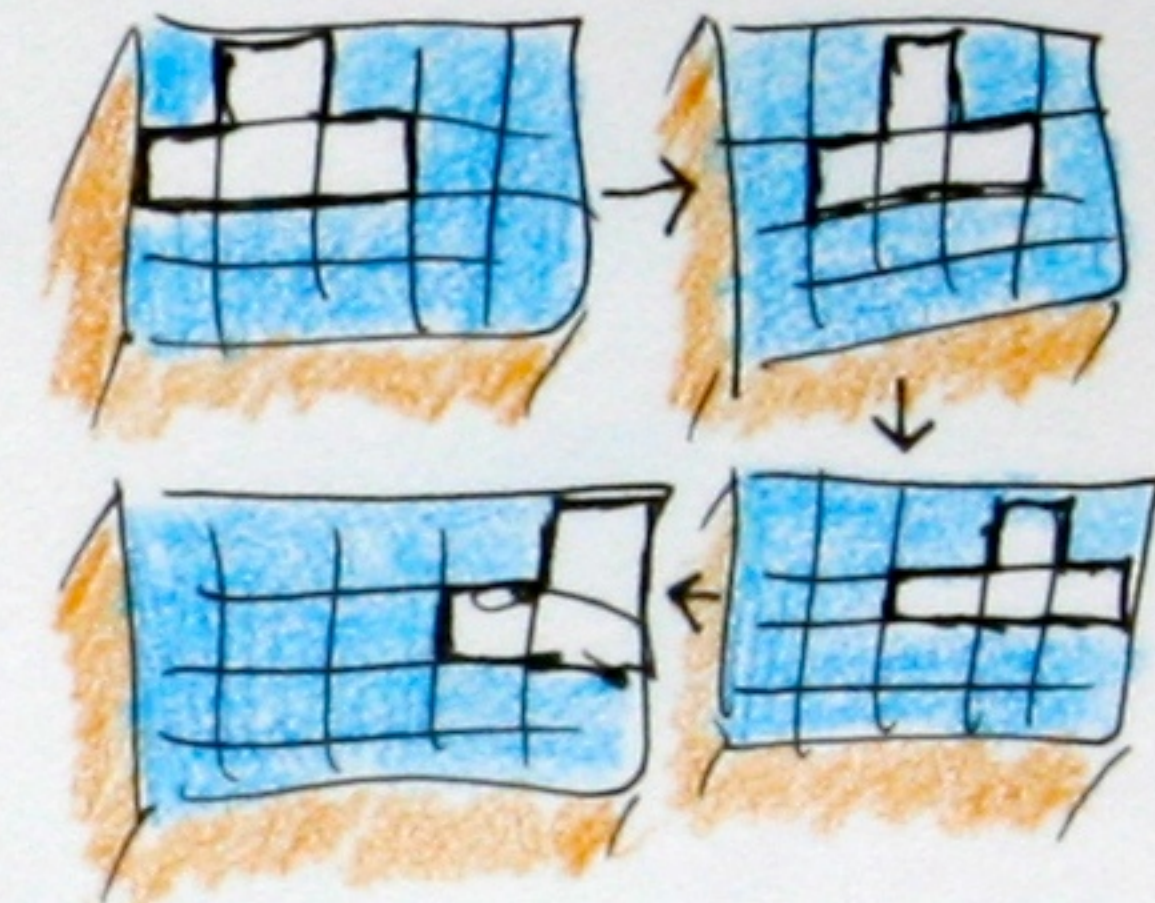
"PANT CHIPS"  
 FOR QUALITIES OF  
 LIGHT.  
 (OLED?)

NOT JUST COLOR,  
 NOT JUST BRIGHTNESS,  
 BUT MOTION. A MOVING  
 SOURCE.

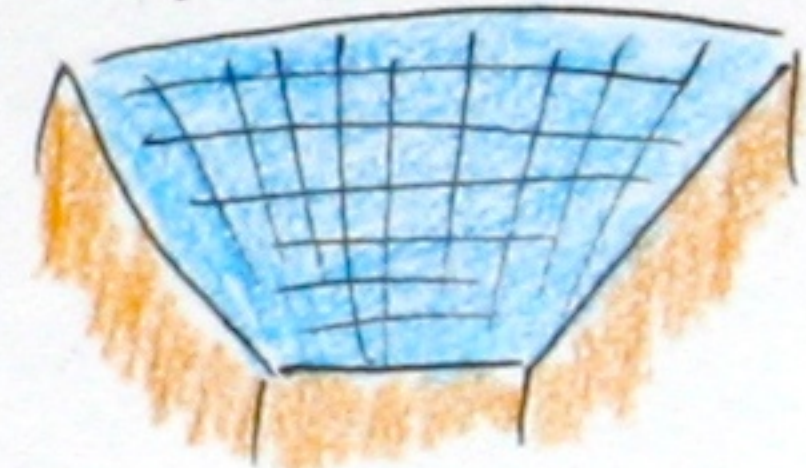
... IS IT JUST... ANGLE?  
 A MOVING PLANE OF LIGHT?



MOVING "TEXTS" CLOUD.



(CHANGING COLOR/  
 BRIGHTNESS... CLOUDS...  
 SIMULATING PASSING CLOUDS.)



CEILING AS NETWORK  
 OF LENS (OR DLP MIRRORS)  
 ... SIMULATE DIRECTIONAL LIGHT.

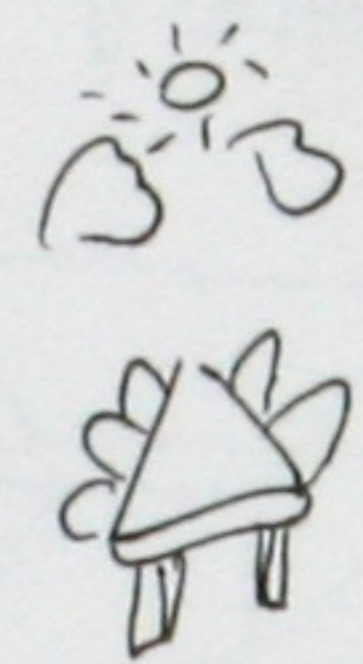


MOVING DIRECTIONAL LIGHT.

D.L.P.

# CARSTONE.

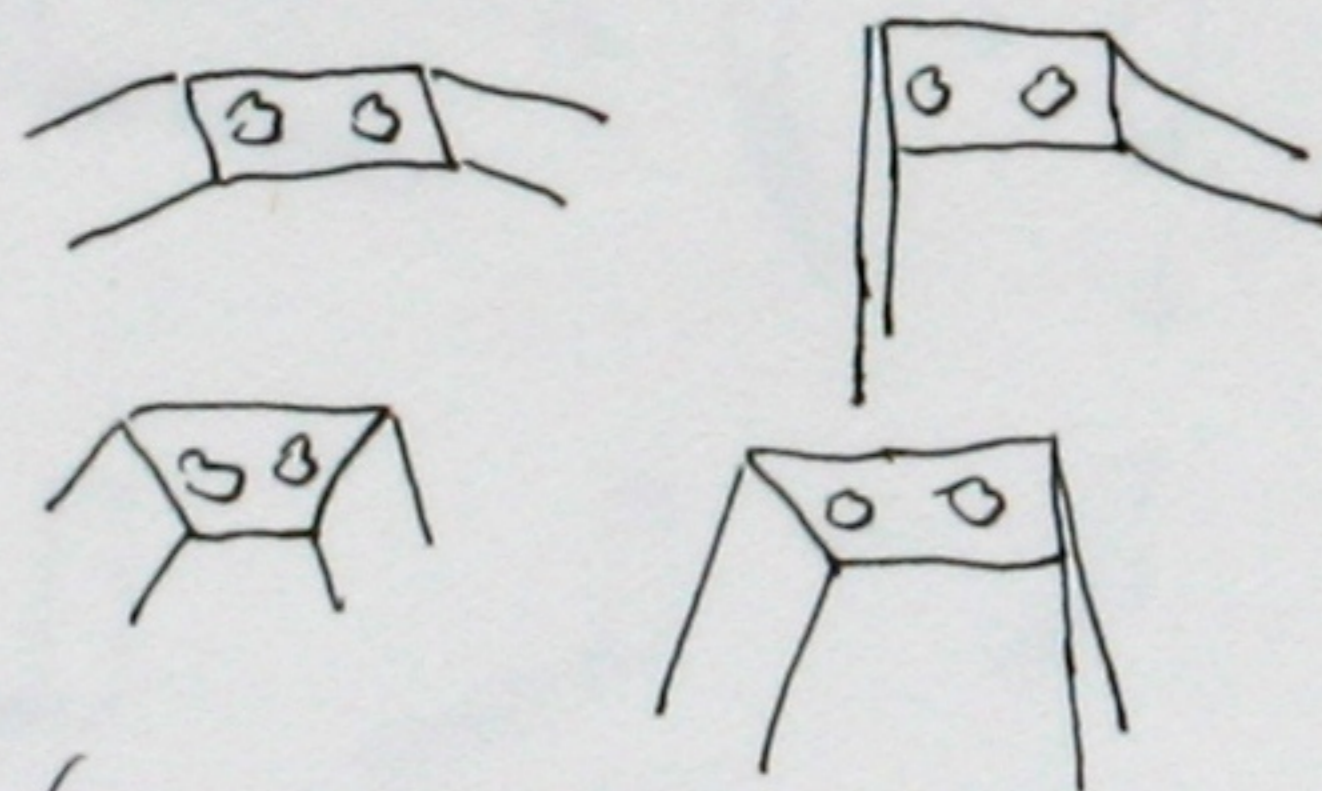
GLEAMING THE COBE.  
 "PRETTY MUCH WHAT THE HARRY POTTER MAGE LEARNED THIS POINT."  
 --- especially... if we're going to live in cities, if we're going to be stuck on top of one another, we need to "lighten" that sense of displacement.  
 Densify Human? ANALOGIES.



AUTOSTEREOSCOPY.  
 ...depth perception. unique view for left + right eye. "THIS ISN'T NEW."  
 --- we've seen doing it since 1900.  
 NO GLASSES? CAMERA LENSES! LENSES!

PHOTON/PIXEL ... IF IT'S A SURFACE, A UNIQUE PIXEL NEEDS TO "GO" TO EITHER EYE ... ALSO ...

PARALLAX. (LITTLE PARALLAX)  
 ... is it ... static? Does it need to appear static?



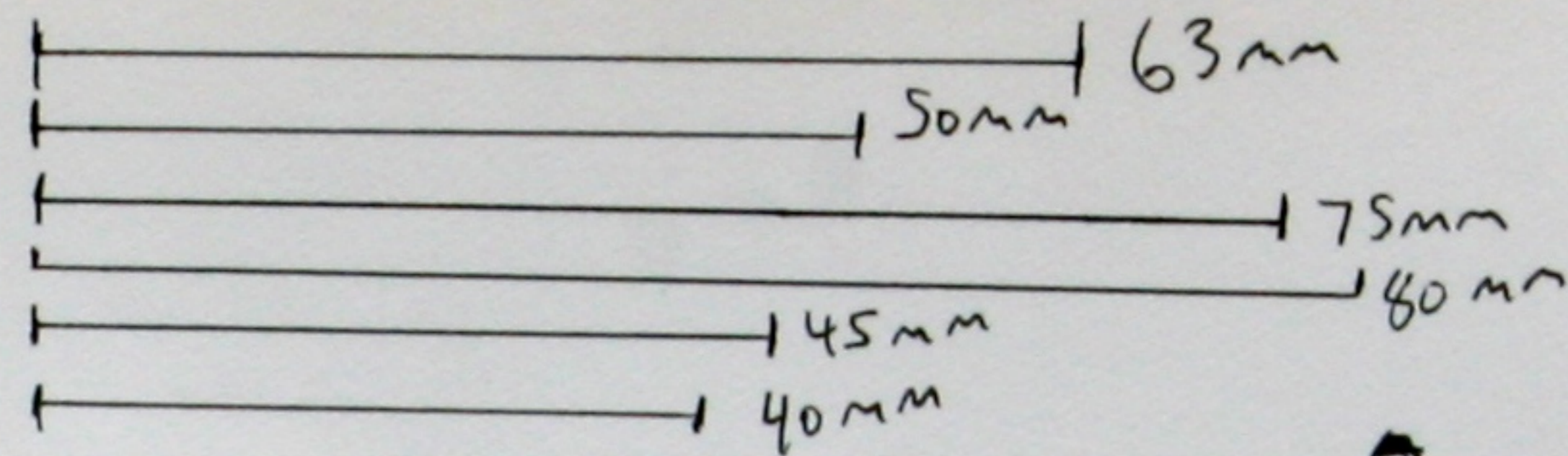
GREEN SCREEN?  
 PHOTO BOOTH?

MOVABLE, DIRECTIONAL LIGHTING.

7-4:3  
 36" range  
 of scene  
 vertically.

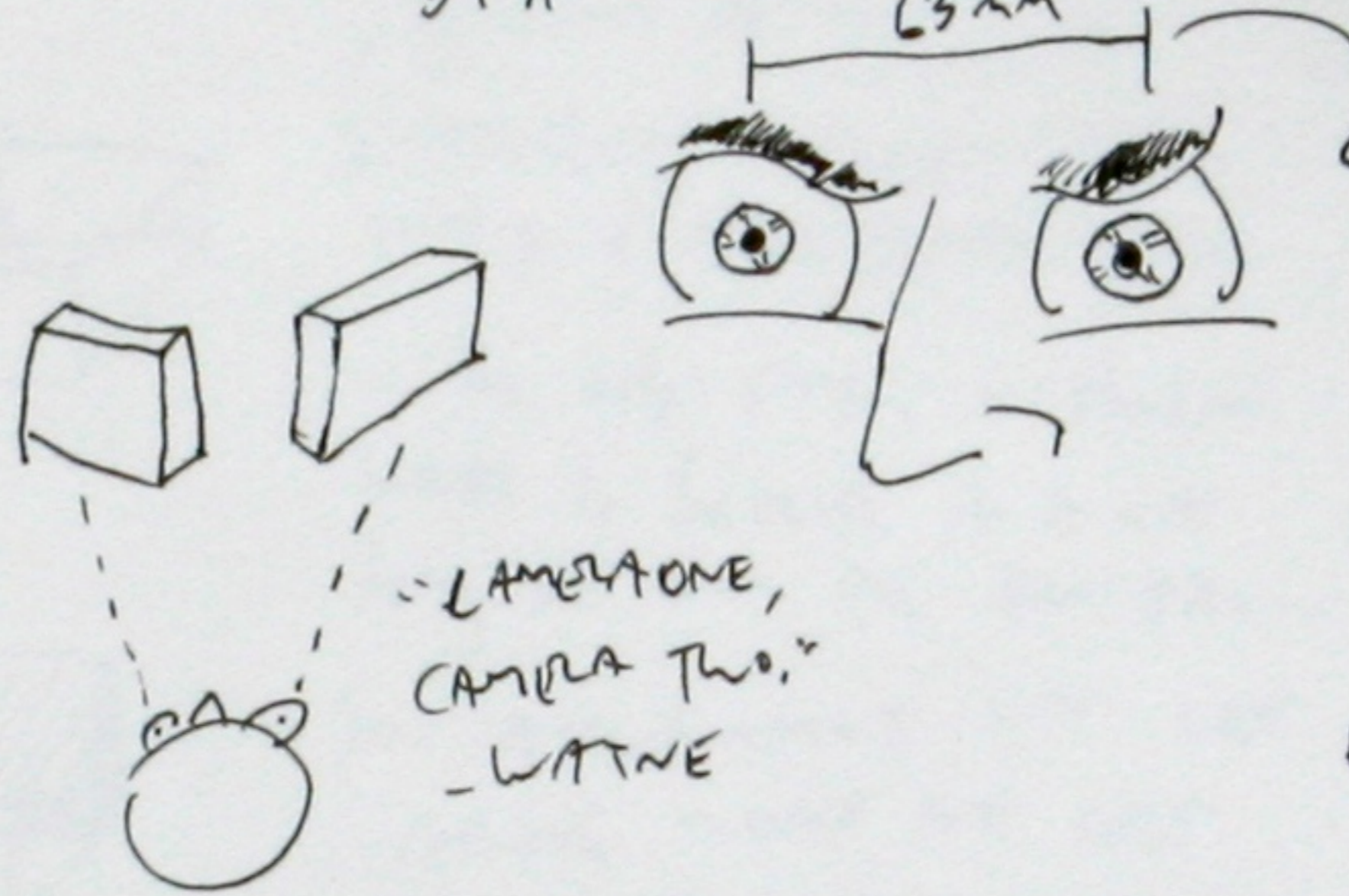
## TWO TWINKS:

- 0. IMAGE ON CEILING.
- 1. MOVING, DIRECTIONAL LIGHT SOURCE.



INTERPUPILLARY DISTANCE ...

DISPERSED SIDEWALK ART ...



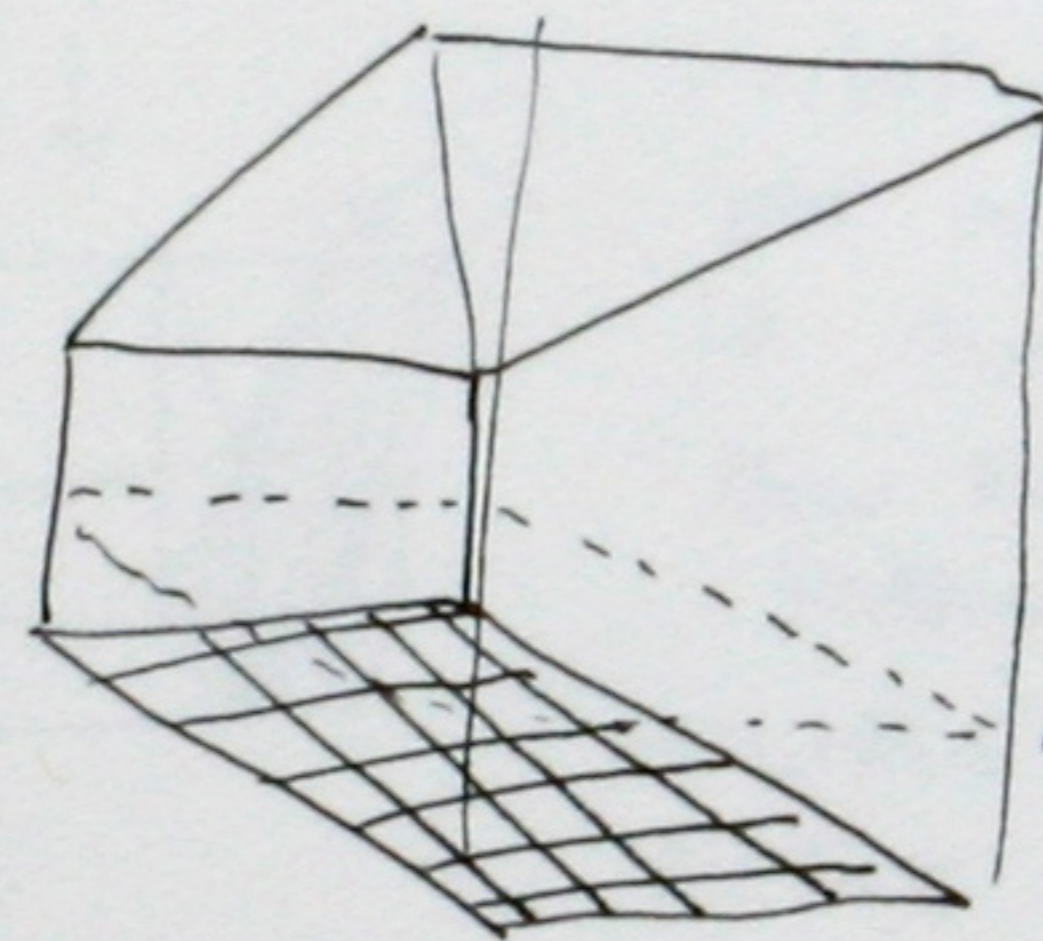
MEAN INTERPUPILLARY DISTANCE: 63 mm.

- 50-75 mm (For human adults)
- 45-80 mm = almost all human adults
- 40 mm = children to age 5.

$10^9$  or 1,000,000,000 = 1 GHz.

a billion hertz.  
 You need 2 trillion hertz to cycle through every color value for every pixel once a second.

"YOU CAN BE MORE CLEAR THAN THIS."



SITTING, STANDING.

HUMAN HEIGHT. ~4'-7'.

50' x 50' OFFICE?  
 25' x 25' ROOM?  
 ... "DESIGN LAB..."  
 20' x 20' ROOM: 400 sq ft.  
 $240'' \times 240'' = 57,600$  sq inches  
 $57,600 \times 36 = 2,073,600$  inches<sup>3</sup>

COINCIDENCE.

So e any given time, there are 2 million possible visual locations, going inch by inch, in a 20' x 20' room. So any pixel needs to be able to display color information for 2 million points.

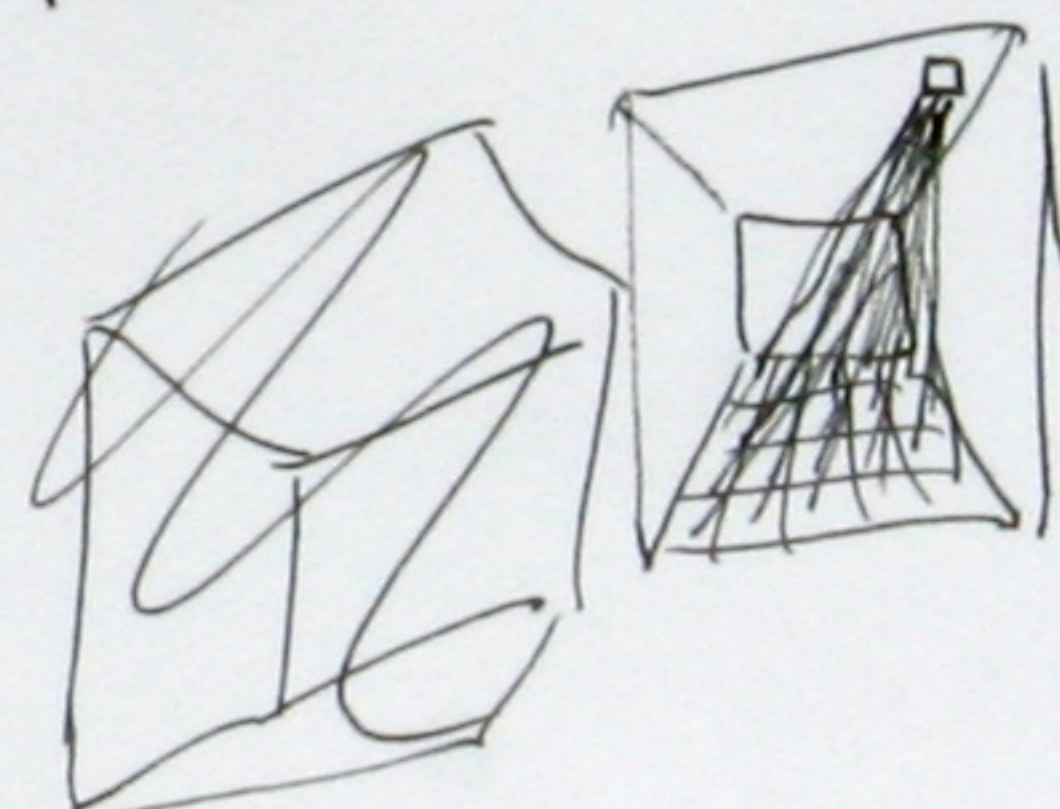
1080p = 1920 px x 1080 px.

2,073,600 PIXELS.

$2,073,600^2 = 42,998,169,600,000$  pixels...

4.2 MILLION PIXELS?

For strict holography... every pixel containing every other pixel.



Each pixel can be viewed from 2 million unique points... each point has a different color value.  
 3 gamma color?

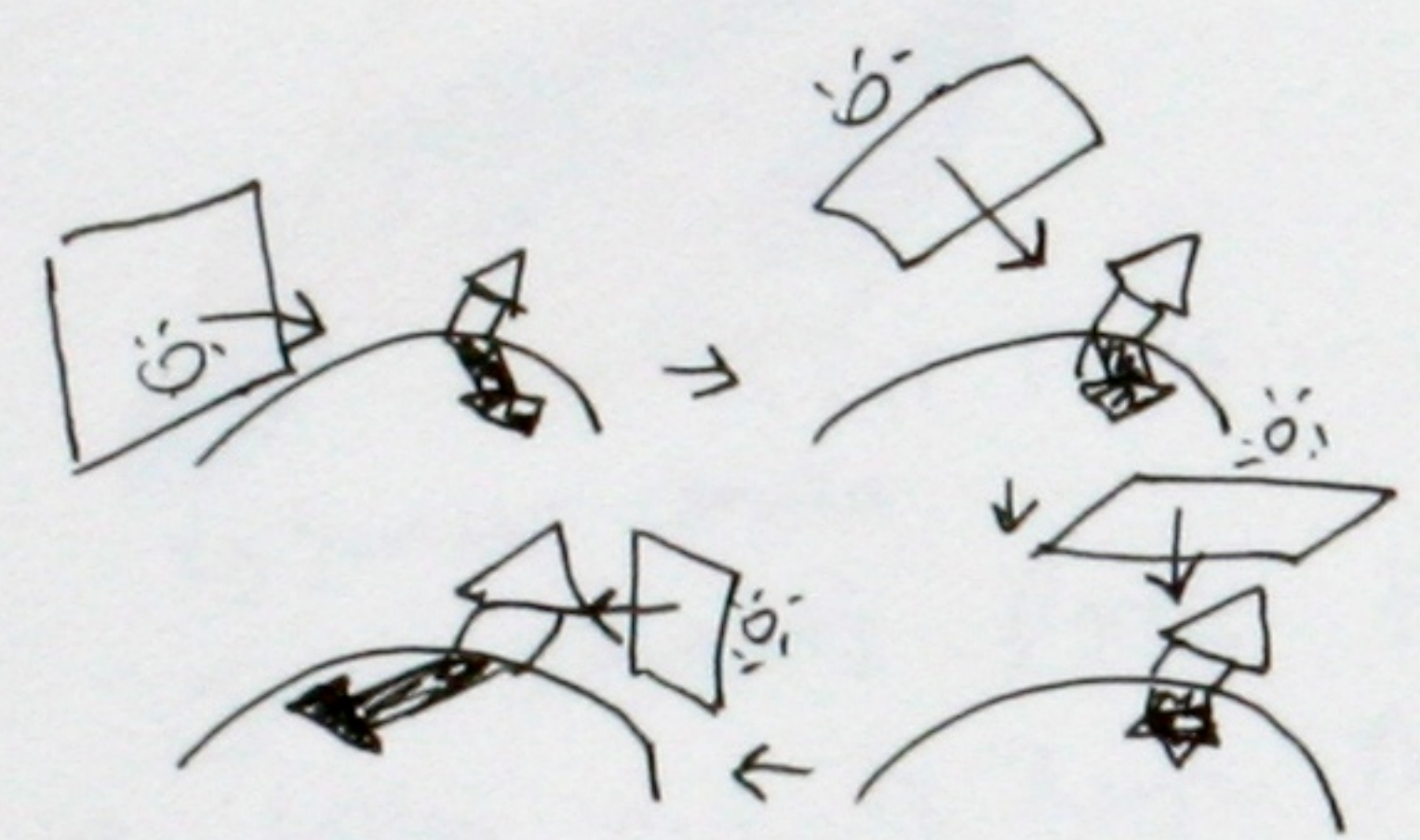


# CAPSTONE

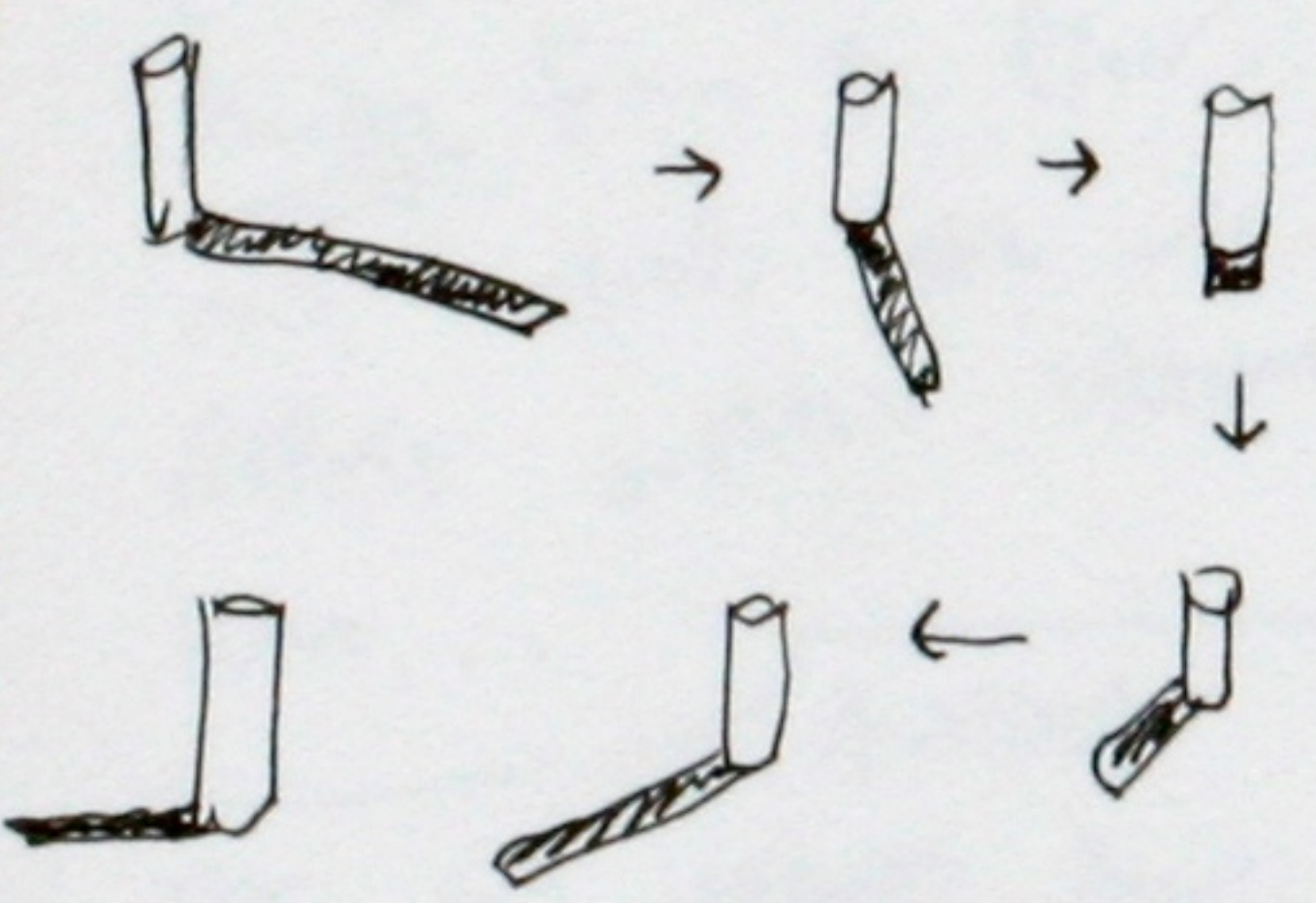
## DYNAMIC SHADOWS.

OLED CARPET?  
URP IN REAL LIFE?  
... How to SIMULATE A  
DISTANT, DIRECTIONAL LIGHT SOURCE.

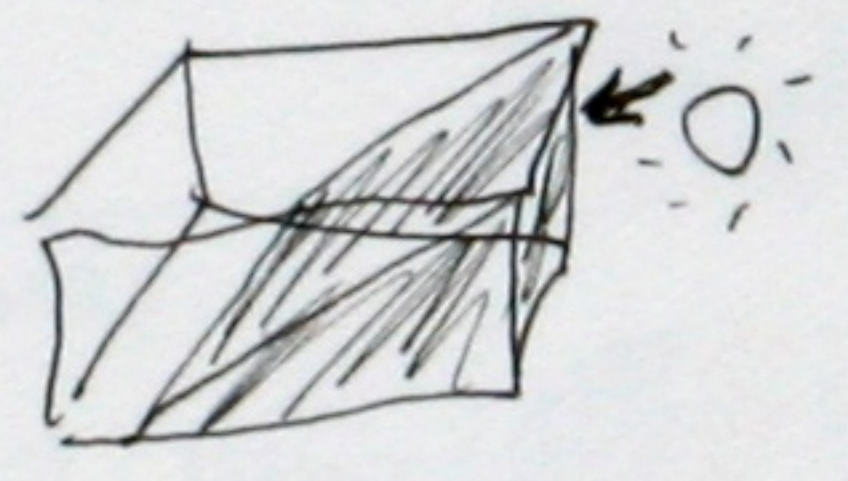
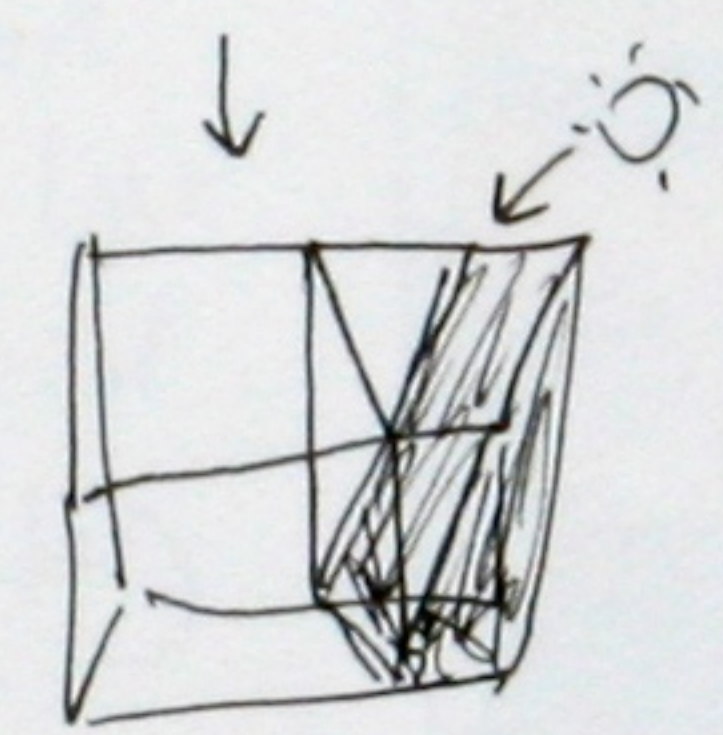
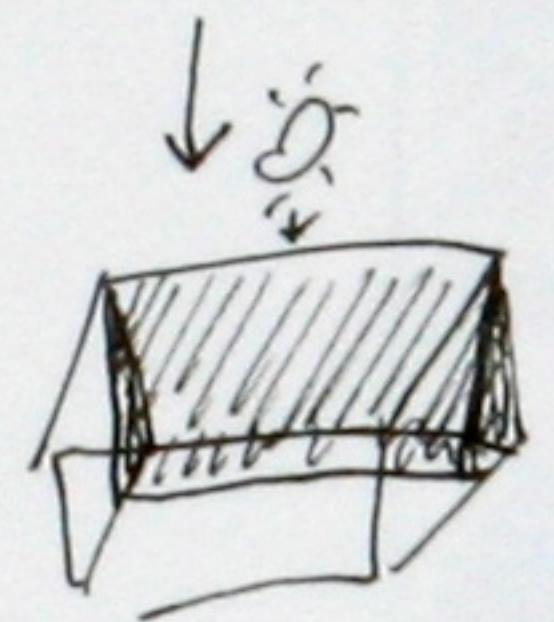
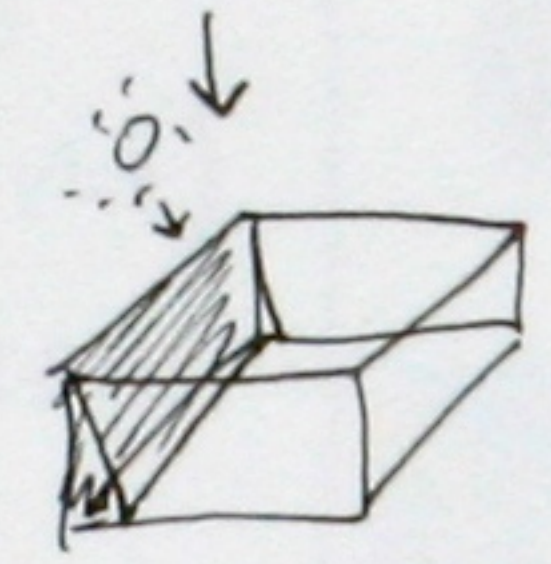
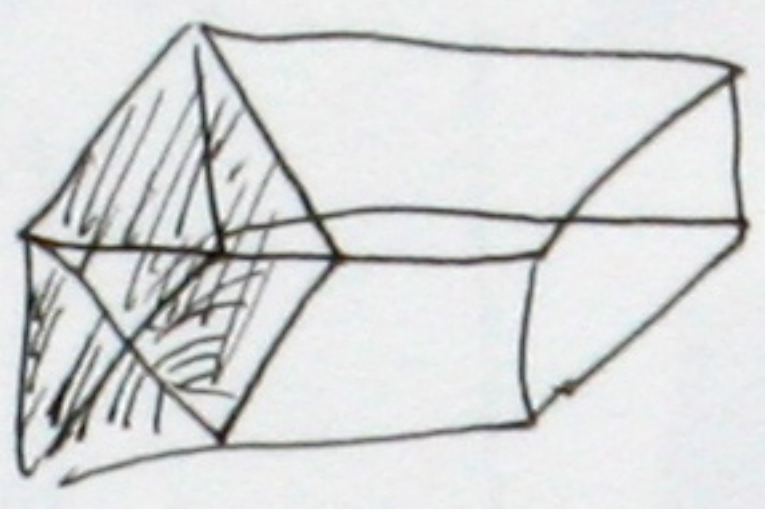
... How DOES THE SUN EMIT LIGHT?  
AS A MOBILE PLANE?



YOU'VE SEEN IT'S NOT JUST THE  
BACK + FRONT, IT'S THE RESINS.



COMMUNICATING TIME,  
BLENDING OUTDOORS + INDOORS,  
IMPERCEPTIBLE MOVEMENTS,  
THROUGH THE USE OF CHANGING.



AND ... YOU CAN'T CAST  
SHADOWS WITHIN THE  
SPACE, YOU CAN'T CHANGE THE  
ANGLE OF A LIGHT, UNLESS  
YOU HAVE SOMETHING TO CHANGE  
IT AGAIN.

UNIFORM LIT  
US.  
SHADOWS...

SHADOWS AS ARCHITECTS.  
INTERACTION BETWEEN LIGHT  
SOURCE + ARCHITECTURAL STATE.

... the only reason a shadow  
works is because it is not  
being lit from the far side...

SO, A UNIFORM LIT LED  
CEILING WOULD NOT CAST  
MANIPULABLE SHADOWS.

... BUT (ROWS OF LIGHTS) WILL  
CAST MULTIPLE, UNIFORM SHADOWS  
IF MIXED.

"How DO WE REMODULE  
SHADOWS INTO THE WORKSPACE?"

MULTIPLE POINT LIGHTS = COMPETING SHADOWS.  
DIFFUSE LIGHTING (CLOUDY DAYS) = LITTLE/NO SHADOWS.

... YOU PROBABLY CAN'T USE OUR "SUN LIGHT"  
FOR OFFICE LIGHTING. ONLY ACCENT  
LIGHTING. SUPPLEMENTARY LIGHTING. LIGHT  
AS SCULPTURE/ARCHITECTURE/ARTIFACT LIGHTING...

... OR SHADOWS.

... DOES THIS MEAN WE'RE BACK  
TO THE BRIGHT BLIND?  
\* WE CAN STILL DO MOOD LIGHTING.  
\* WE CAN STILL DO HOLLOWED CEILING.  
\* ... COOL/WARM/PLANTS/DYNAMIC LIGHT.

MIX OF DIFFUSE, AMBIENT LIGHT  
AND UNIFIED DIRECTIONAL LIGHT?  
CARPET W/ ELECTROLUMINESCENCE WOVEN  
INTO IT, SO IT SIMULATES MOVEMENT  
OF LIGHT ACROSS THE FLOOR FROM A  
WINDOW? ELECTRO LUMINESCENT CARPET/WALL  
PAINT THAT DOES THE SAME THING.

"HOW EFFECTUALLY SUNLIGHT  
GLIDES FROM WALL TO WALL,  
OR FROM WALL TO FLOOR.  
DEFIES LENGTH, ETC."



LIGHT ON WALL + CEILING.

PROGRAMMABLE  
LIGHT WALLS.

PROGRAMMABLE  
LIGHT FLOORS.

WOOD/BAMBOO FLOORS W/  
THOUSANDS OF LAYER-CUT  
HOLES... BACKLIT!



IES.

OMFG.

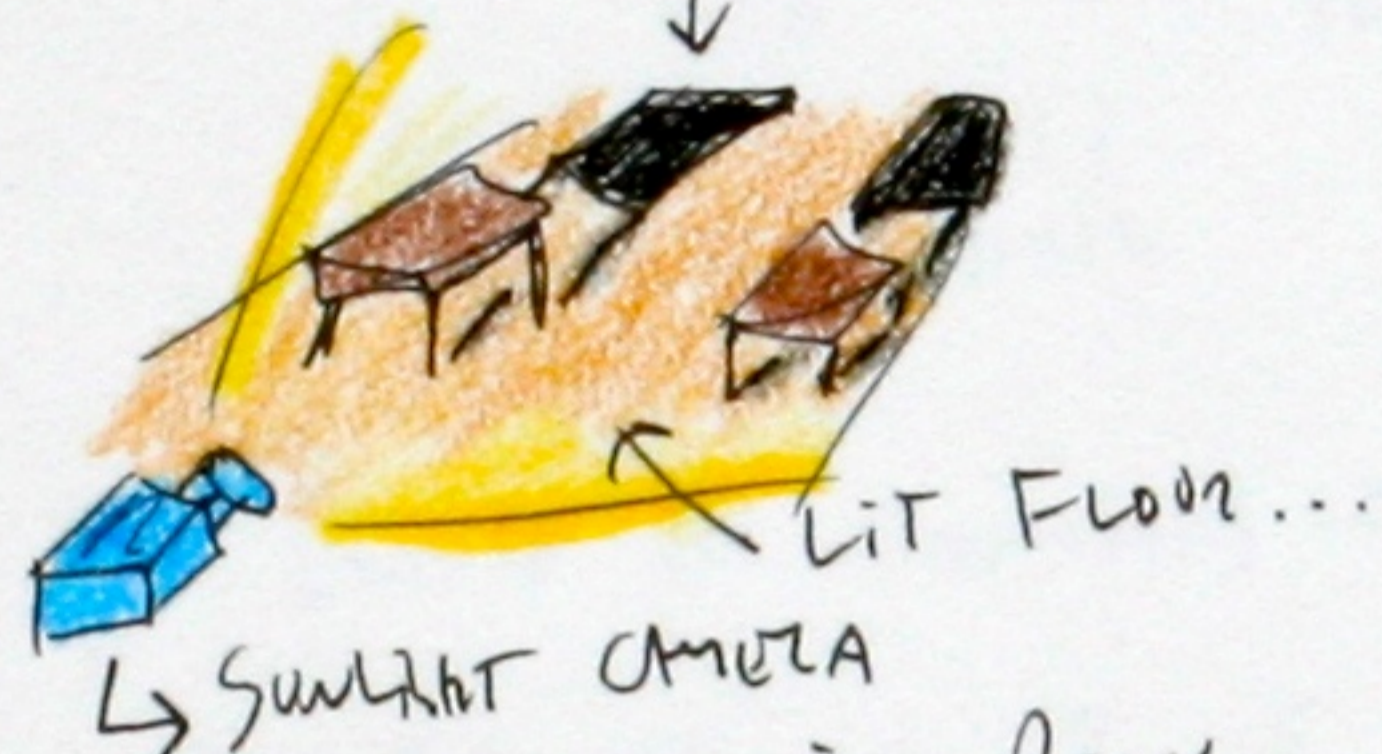
# CAPSTONE

## PROGRAMMABLE LIGHT FLOORS.

simulates projection of sunlight on floor via thousands of laser-cut, tiny perfor. holes.

SIMULATES DEPTH-MAP SHADOWS FROM "FAKE" WINDOW (CAMERA).

DEPTH MAP "OCCLUDED" LITERS



"JOHN KRAMER'S DANCE FLOOR."  
 The problem now is, though, the light that's coming into the rest of the space at all. The light is being emitted from the floor... so you can't actually use it for anything. Reduce overall lighting in response? Hmm...

### ANOTHER CRACKER:

THE SKY APPEARS BLUE, BUT IT DOESN'T EMIT BLUE. A PAPER PITTER CEILING THAT IS BLUE WOULD POSSIBLY EMIT BLUE LIGHT, OR AT LEAST REFLECT AMBIENT LIGHT WITH A BLUE CAST...



PROGRAMMABLE LIGHT FLOOR.

... w/ DEPTH MAP OCCLUDED LITERS CAMERA SYSTEM



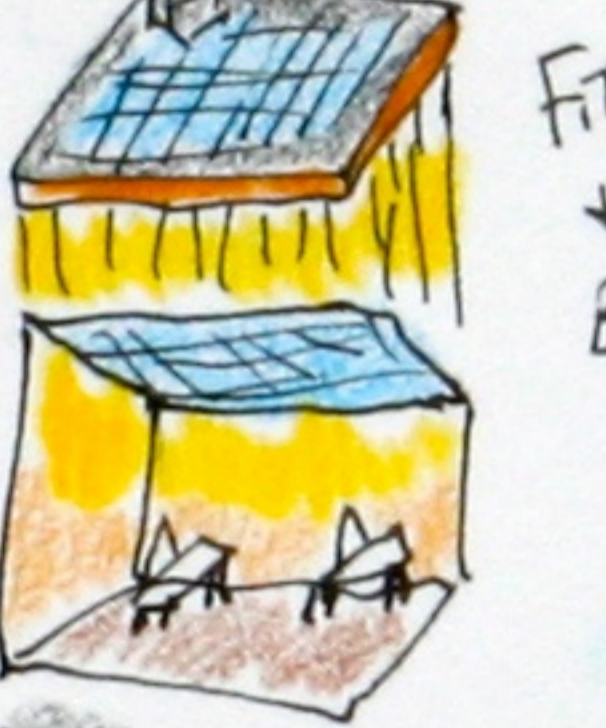
PROGRAMMABLE LIGHT WALL. (COMBINED w/ PROGRAMMABLE LIGHT FLOORS)



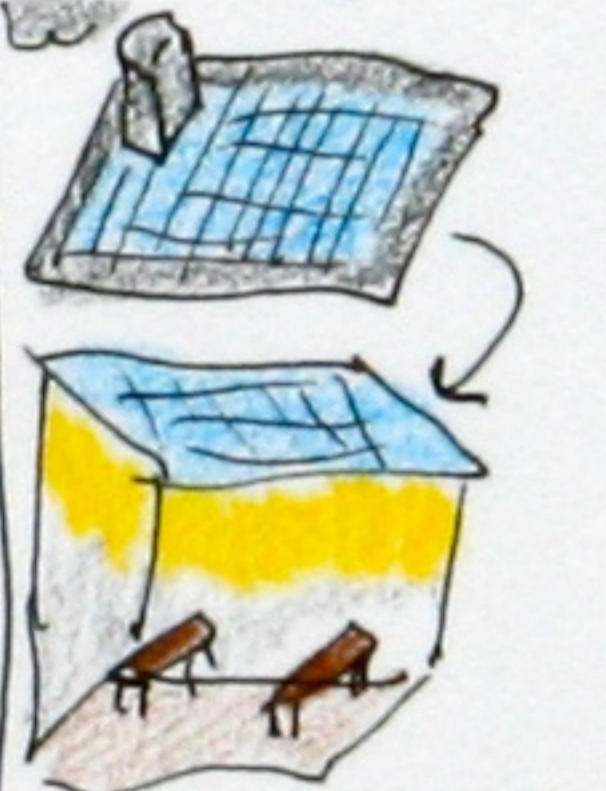
PROGRAMMABLE LED LIGHT CEILING (AMBIENT LIGHT, NOT DIRECTIONAL SHADOWING LIGHT), w/ CLOUDS! w/ COLOR! w/ BRIGHTNESS!



FIBER OPTIC DAYLIGHT CEILING + ROOF NETWORK REAL-TIME BROADCAST THINK!



SENSOR ROOF w/ PROGRAMMABLE LED LIGHT CEILING.



FIBER OPTIC WALLS (LIKE PROGRAMMABLE LIGHT WALL, "LITE" EDITION)

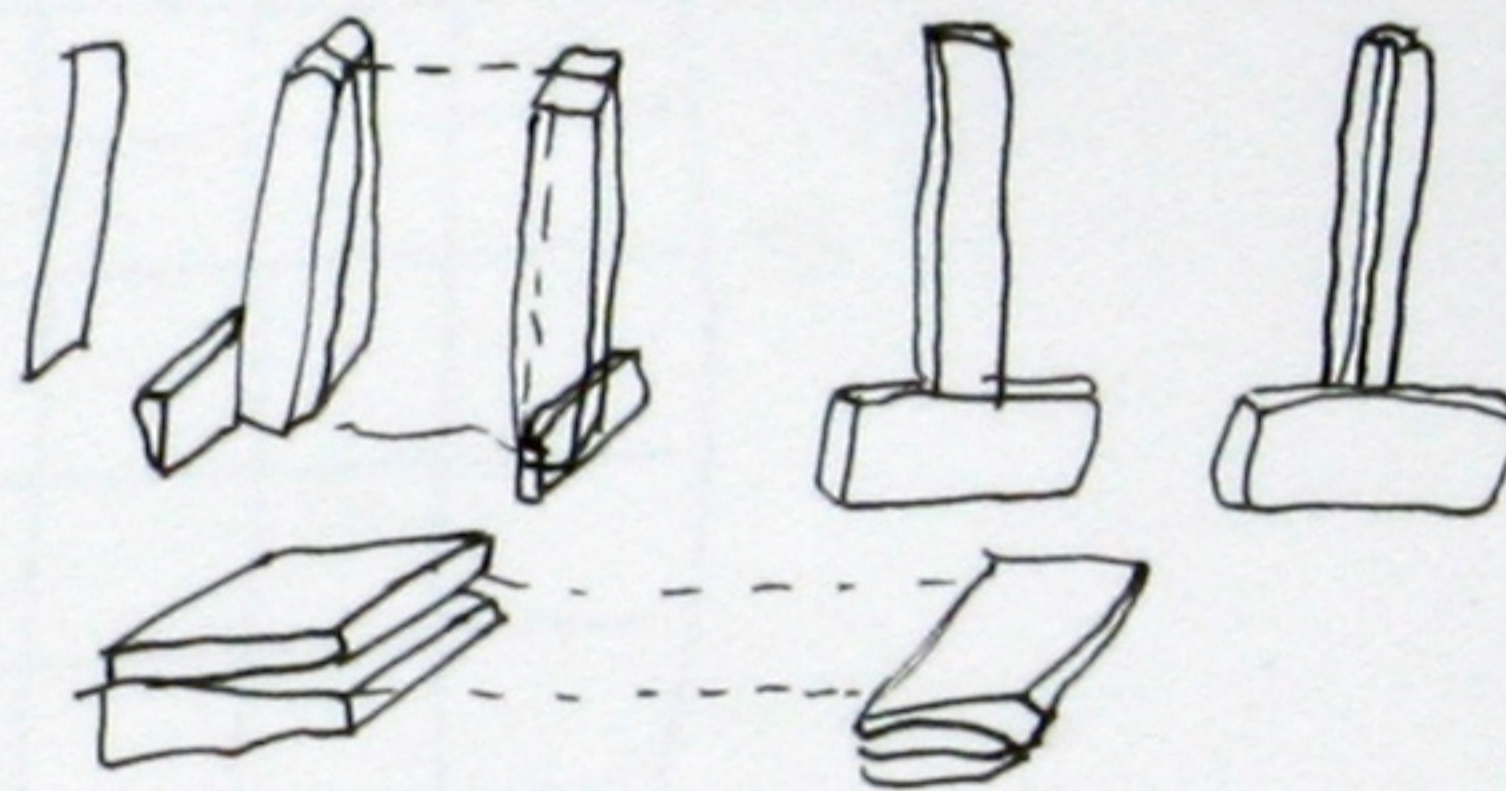
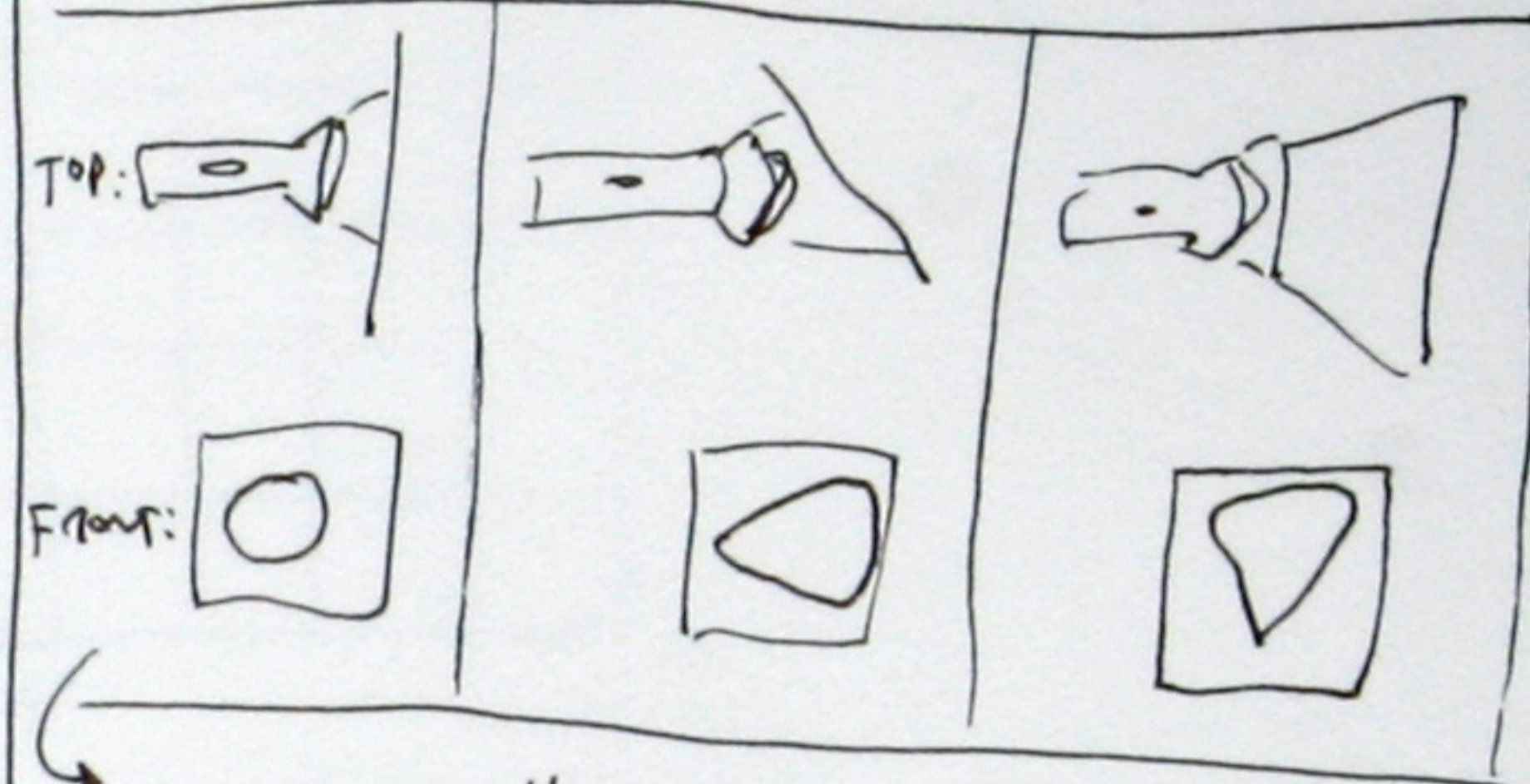


"TUBE GLEAMER" MIMICKS RATE OF SUNLIGHT w/ ION DESK TO REPRESENT TIME... SEASONS... ETC.

## DESIGN ACTIVITY.

8 1/2 x 11 SHEET:

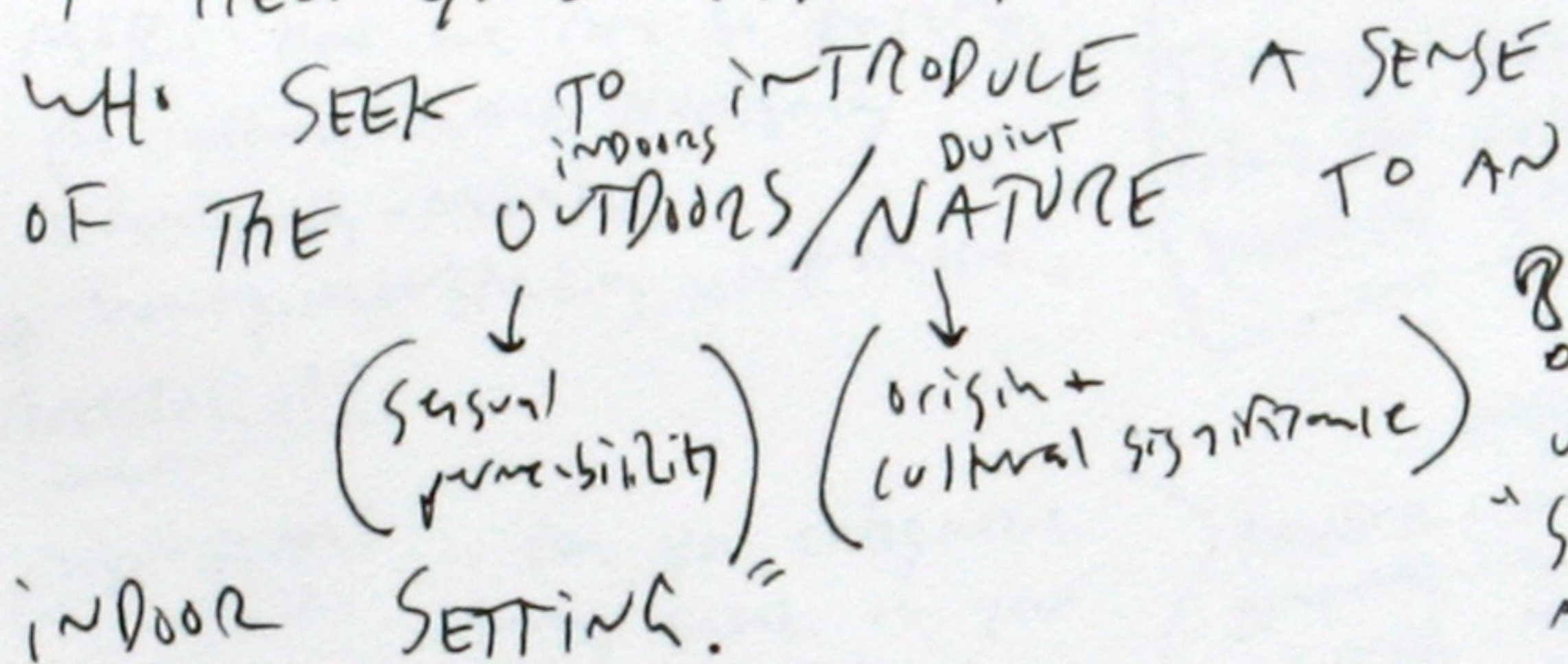
FLASHLIGHT: (OCCLUDED...)



# CARSTONE

"How does what I've written so far mesh with what I'm seeing now?"

"A SERIES OF DESIGN PRINCIPLES TO HELP GUIDE DESIGN PRACTITIONERS WHO SEEK TO INTRODUCE A SENSE OF THE OUTDOORS/NATURE TO AN INDOOR SETTING."



... THEN, SPECIFICALLY REVERING THOSE PRINCIPLES IN USING LIGHT AS A DESIGN MEDIUM ...

... THEN SEEING HOW THOSE DISCOVERIES APPLY TO OTHER MEDIUMS, OTHER SENSES, ETC.

## THREADS:

1. BIOLOGICAL ... our senses, circadian rhythm, perceptual capacities, spectrum of light we see, etc.
2. CULTURAL ... personal experiences, social constructions, meaning, cultural computation, CONVENTIONS we establish, PLACE.
3. PERCEPTUAL ... "that which can be perceived." Different senses, different levels, ambient + peripheral vs. Focused + foregrounds ... senses, detecting, etc... LEVELS.

"Built" environments.  
"Embodied experience" of being outside.

"Outdoor enthusiasm."  
"Authentic" vs. "Artificial"  
... authenticity.  
"The experience of being outside."  
"The experience of outside."  
"... but what is outside?"  
"Deeply evocative solution."

"HCI can dissolve the barrier between inside + outside."

"What is inside + outside?"  
Ubicomp, Ambient displays, Cam Tech...  
Surroundings as informational "resource."  
AESTHETICS, EXPERIENCE DESIGN, REFLECTIVE... new symbols!

No larger design solution, but offering design principles.

"Adornment + methodology."  
of design activities! Explorations! Reflections!  
Personal: it's DESIGN, not research! SKETCHING!  
Change what you DID.

Information that streams persistent MANIPULATED AMBIENT technology.  
"Active interpretation central for interacting info."  
"OUR BODIES MEDIATE OUR EXPERIENCE."

Embodiment + Phenomenology  
SPACE + PLACE

Physical Cultural/Social  
INTERPRETATION.

Interpretation + meaning evolve over time. Not static!  
Authenticity too. Practical accomplishment.  
ENJOYMENT. AFFECTIVE CONNECTION.  
LOGIC DESIGN.

Ubicomp, TUI, Cam Tech, Ambient Disp, Info APPLIANCE-DRIFT TABLE!

★ Ubicomp: "Interactions should be free-flowing, + should resemble our interactions w/ the physical world!"  
EMBEDDED ENVIRONMENTS.

Phil-Human can process multiple streams of rich information...

★ Ambient computing = NATURAL PHENOMENA!

"Invisible" computing?  
Ignoring us, not making out.

★ CALM TECHNOLOGY.

Emphasis + background.

THRESHOLD OF PERCEIVABILITY

★ SLOW TECHNOLOGY.

↳ DURABLE INTERACTIONS.

↳ AMPLIFYING THE MESSAGE OF THE NATURAL WORLD'S SLOW PROCESSES.

SLOWNESS OF APPEARANCE

AESTHETICS OF MATERIAL

↓

GANSON

MARCH 22, 2010

THRESHOLD DEVICE = PERMEABILITY.

... INCREASING THE SENSUAL PERMEABILITY OF OUR INDOOR SPACES.

... but it's not as easy as making a glass house! has to serve other functions, too... WATER!

AVASCAPES =

THE SHIT.

↳ contact the outdoors?

"EXTENDING OUR VISION."

↳ gazer + video window...

# CARTOON.

MARCH 22, 2010

"Blurring boundary between people + nature, or natural + artificial." → built.

GERMS + PRIMITIVE SERVICES = PIMP.

"technology should reflect + express our own physicality."

MORI - How we come to perceive the natural world necessarily technologically-mediated.

→ meaning, understanding, interpretation... MICROSCOPE.

EXAMPLES... (can you categorize them, based on your principles? why? why not? compelling? why? why not? inspiring?)

ADAM FRANK'S SUNGATE = MAKE POTTER OIL... touchably ENCHANTED CEILING. make that connection!!!

ARTHUR GANSON. SENSUALITY.

SLOW TECHNOLOGY. TIMESCALES.

MATERIALITY. SENSUALNESS.

REFLECTION...

DON'T OFFER A DESIGN, OFFER DESIGN PRINCIPLES.

...are design principles for those who trip @ the finish line? For those who make sketchy design?

Window = "PRIME REAL ESTATE." ... STEVE'S WORDS, ALSO JAMES' EXPERIENCE.

LIFE Resonance noise + SWEET DUST

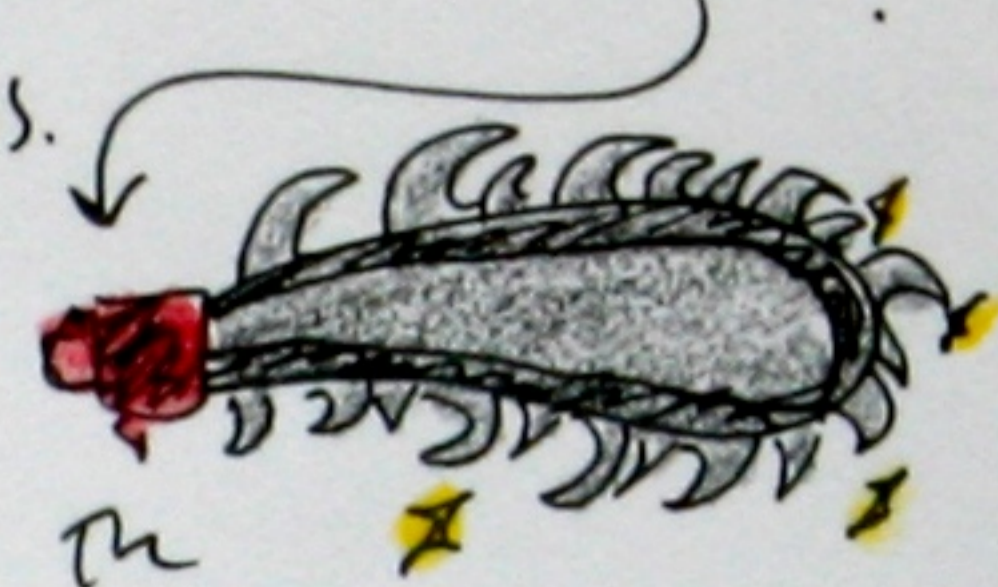
SKETCHES → CONCEPTS. ... CAN YOU RELATE YOUR DESIGN PRINCIPLES TO YOUR CONCEPTS? what are your design principles, anyway?

TUFTE: Natural colors = good colors for data visualization. INNATE COHERENCE.

EMBODIMENT. MEANINGFULNESS OF NATURAL WORLD.

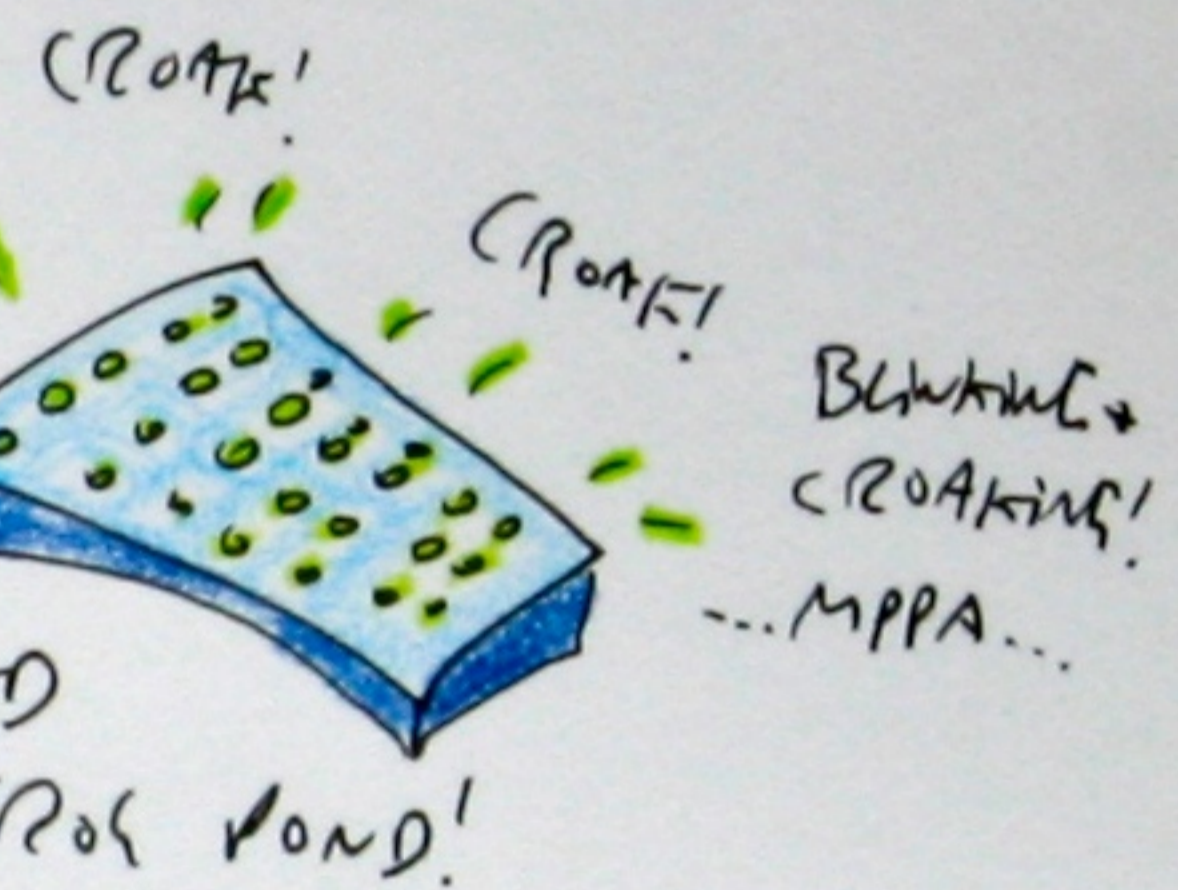
## CHRISTOPHER ALEXANDER?

DESIGN PATTERNS.



Thus, it would seem the imperative is to leverage the tactics of calm, technology, slow technology + reflection design, as a means to communicate natural systems and processes on a timescale (perceptual scale, spatial scale... all your "THRESHOLD" needs), that more closely relates to that of the outdoors.

AQUARIUM WALL (JO FISH) w/ FISH...



THRESHOLDS THRESHOLDS THRESHOLDS.

Diagram... PERMEABLE - levels TEMPORAL - rhythms CULTURAL - meanings BIOLOGICAL - biophilia? SPATIAL - positions

SYSTEMS OF NATURAL PROCESSES.

BLOOMING STICK, MORN LAMP, EDIFICE, HOLLOWAYS... ALL COMMUNITY PROCESSES. POROUS BLOOMING BETWEEN INSIDE + OUTSIDE

VIRTUAL 3D WATERFALL HOLOGRAPHIC STEREOSCOPIC SCRATCH 'N' SNIFF!



(TIMESCALES BEYOND THE WORKPLACE. THRESHOLD DEVIATES!!)

80% DONE...

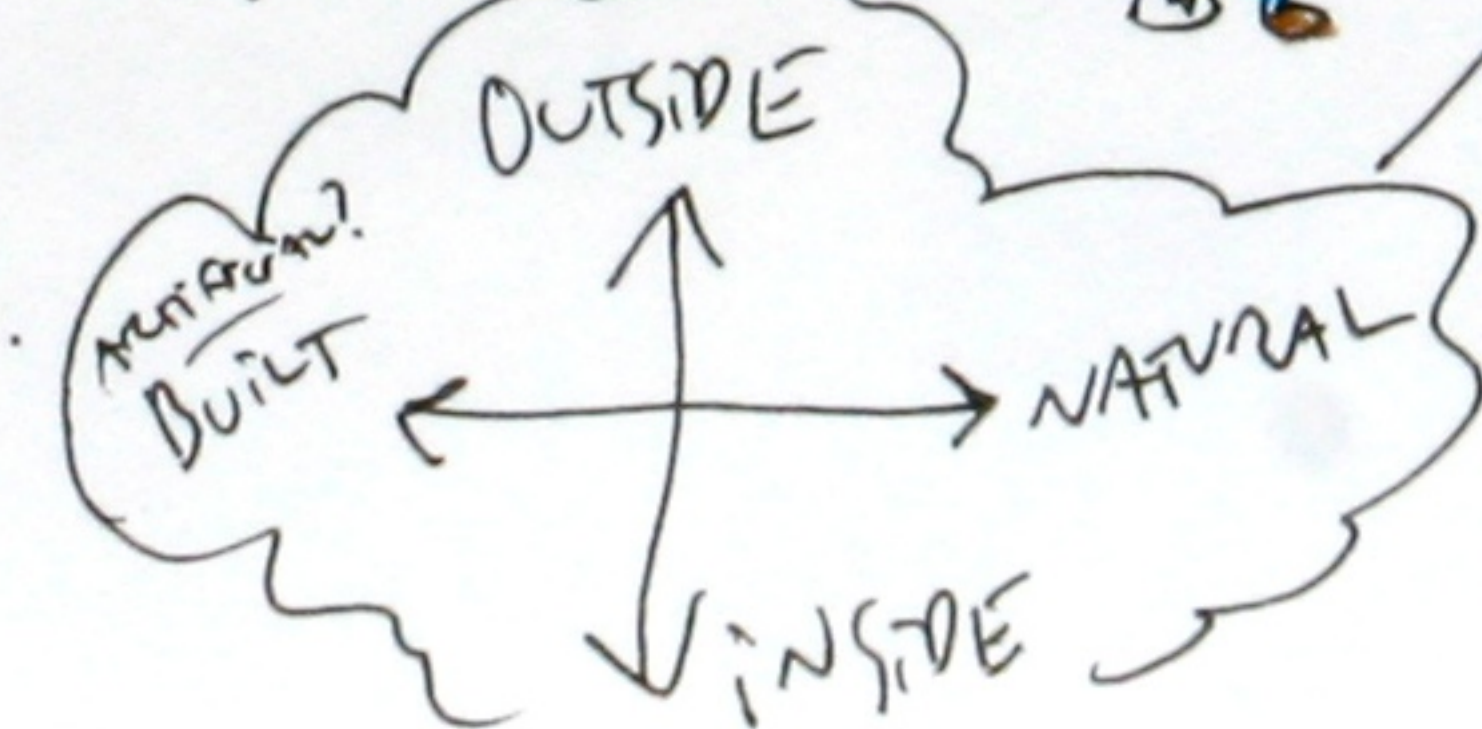
2 WEEK

BEFORE PRESENTATION DAY! 1. POSTER 2. REPORT 3. PRESENTATION → IMPROVE IT!

~~AVOIDANCE DECISIONS!~~ NO MORE RESEARCH! MAKE DECISIONS!

"RECONNECT w/ THE WORLD."

... WE CAN'T JUST MAKE SUB HOUSE. "POPPIN' A SEWAGE" GETS AWKWARD!



WORK ON TOM MEETING! WORK ON TOM STRUCTURE! TOM RATIONALE! PRESENT! LOL!!

20 MINUTES!

# CAPSTONE

## THE DELIVERABLES!

- 1) REPORT/THESIS (ELECTRONIC, THEN PHYSICAL)
- 2) PRESENTATION (SLIDES SUBMITTED) → Your Argument, Your Rationale, Your Log, etc.
- 3) POSTER 36" x 48"
- 4) CAPSTONE SUMMARY → WORK BACKWARD FROM THE END!

FILED: TITLE. 150-300 WORD ABSTRACT. PROMPT.

- PRINTED:
- 2 printed copies of thesis
  - 1 printed copy of poster
  - 1 printed copy of presentation
  - CAPSTONE SUMMARY
  - WD w/ EVERYTHING TOO.

"DESIGN PRINCIPLES FOR CROSSING, DISSOLVING, PERMEATING, THE BOUNDARY BETWEEN NATURAL + ARTIFICIAL."

SELL, DON'T JUST SHOW YOUR PROCESS.

CONCLUSION = KNOWLEDGE CONTRIBUTION  
REFLECTIONS, BIOGRAPHY, ACKNOWLEDGEMENTS, REFERENCES  
SPECIAL FORM ON INFORMATIONAL WEBSITE.

DMFC?! POSTER REVIEW SESSION NEXT WEEK?!

POSTER → NATIONAL PARK INTERPRETIVE SIGN!

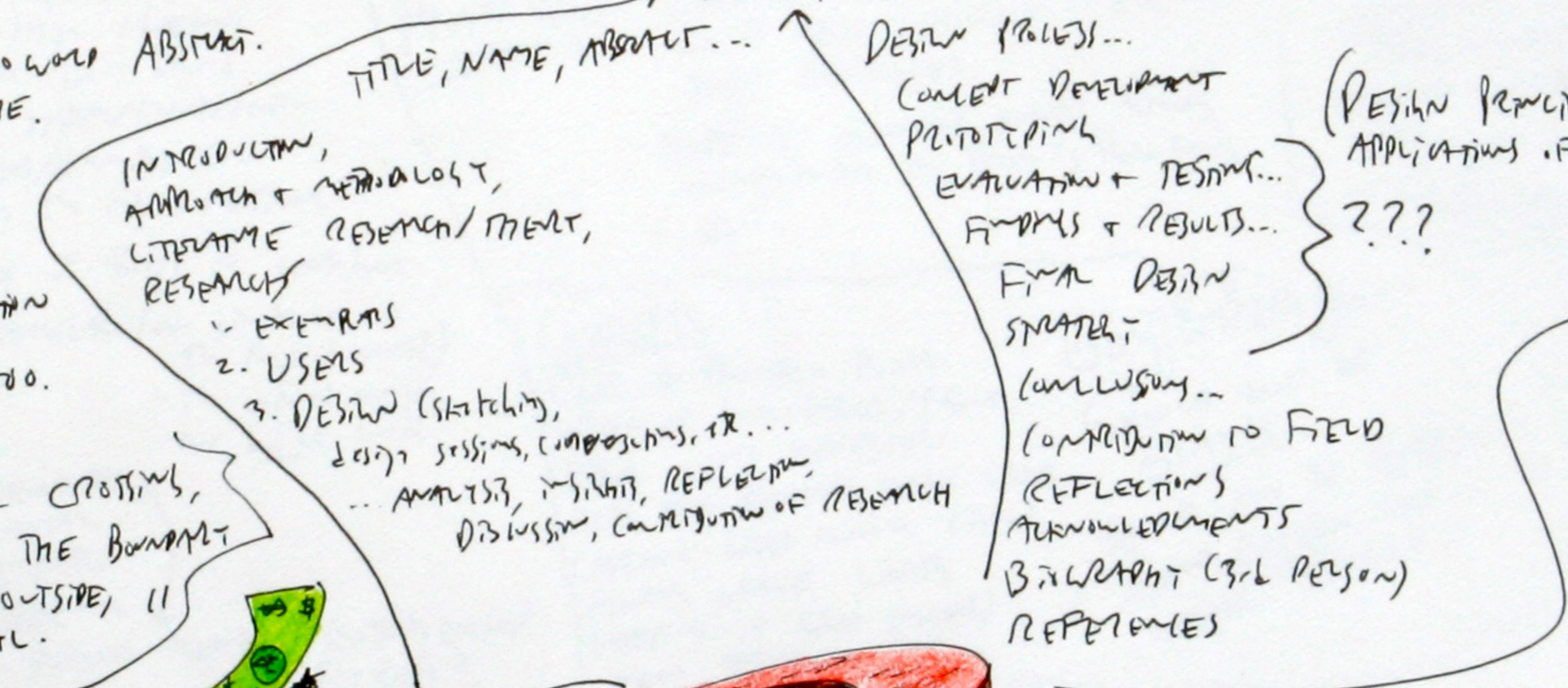
"DESIGN PRINCIPLES FOR BRINGING THE OUTDOORS INDOORS."  
→ LIT. REVIEW, SKETCHES, USER RESEARCH, CASE STUDIES.  
→ BIO  
→ TIME  
→ SPACE  
→ CULTURE  
→ SENSES

"WHAT ARE INDUOUS VS. OUTDOORS?" → SENSATION PERMEABILITY  
"WHAT ARE ARTIFICIAL/BUILT VS. NATURE?" → CULTURE/ORIGIN/PERCEPTION

THREATS: BIOLOGICAL, TEMPORAL, SPATIAL, CULTURAL, PERCEPTUAL  
↓  
circulation, time, inside/out... associations, transient, slow, fast, media, etc...  
embodiment, resolutions, air... rendering space explicit.

APPLYING THESE DESIGN PRINCIPLES TO LIGHT. (CASE STUDIES (SKETCHES, PROTOTYPES, EXPERIMENTS, ETC.))

REINTERPRETING THE FINDINGS w/ LIGHT FOR OTHER MEDIA (SOUND, IMAGES, PLANTS, ETC...) BUT SPACE OTHER EXAMPLES...



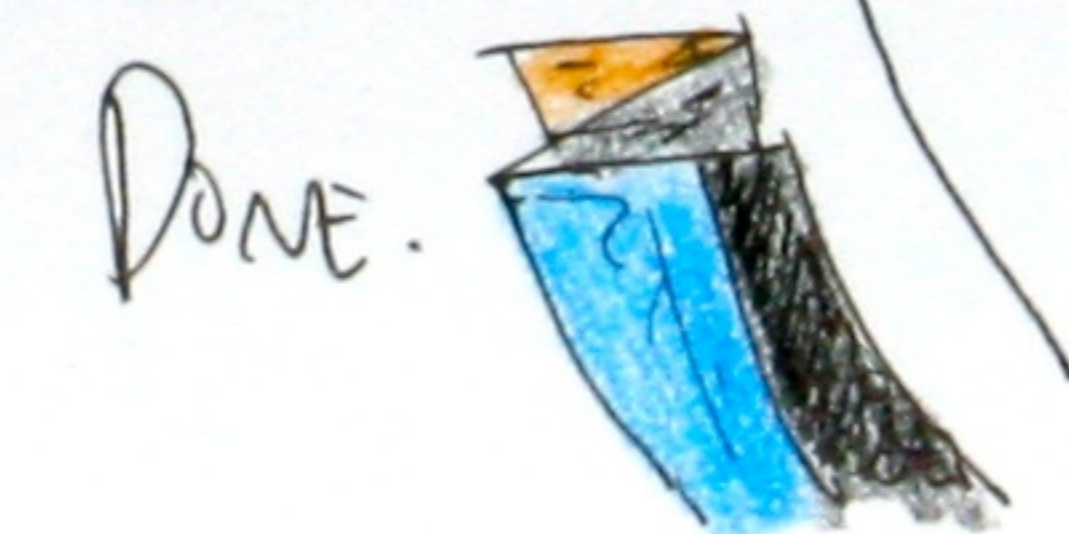
INTRODUCTION, APPROACH + METHODOLOGY, LITERATURE RESEARCH/THREAT, RESEARCH  
1. EXAMPLES  
2. USERS  
3. DESIGN (sketching, design sessions, compositions, etc...)  
... ANALYSIS, INSIGHT, REFLECTION, DISCUSSION, CONTRIBUTION OF RESEARCH

DESIGN PRINCIPLES...  
CONTEXT DEVELOPMENT  
PROTOTYPING  
EVALUATION + TESTING...  
FINDINGS + RESULTS...  
FINAL DESIGN STRATEGY  
(CONCLUSION...)  
(CONTRIBUTION TO FIELD)  
REFLECTIONS  
ACKNOWLEDGMENTS  
BIOGRAPHY (3-6 PERSON)  
REFERENCES

(DESIGN PRINCIPLES APPLICATIONS OF PRINCIPLES.)  
???

POSTER?  
HIGHER PHOTO, BROCHURES, PART + PHOTOGRAPH PICTURES  
"ACTIVATED FROM THE FUTURE" OF TOM BRILLIANT OFFICE!  
(NAT'L PARK BROCHURE)

"IF YOU BRING THE SNOW INSIDE, I'M GOING TO HURT YOU."  
"NATURE" IS NOT INHERENTLY GOOD. ANARCHY, WILD FIRE, UPTOWN STRIKE, HURRICANES, FLOODS, ETC.



DONE.

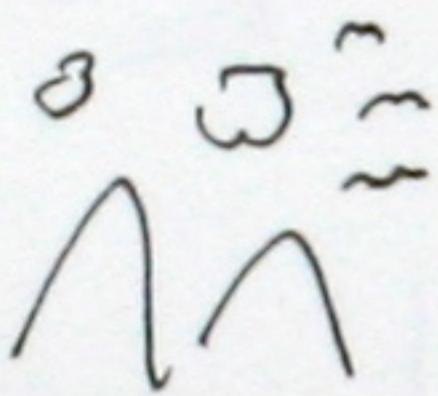


# CAPS TONE

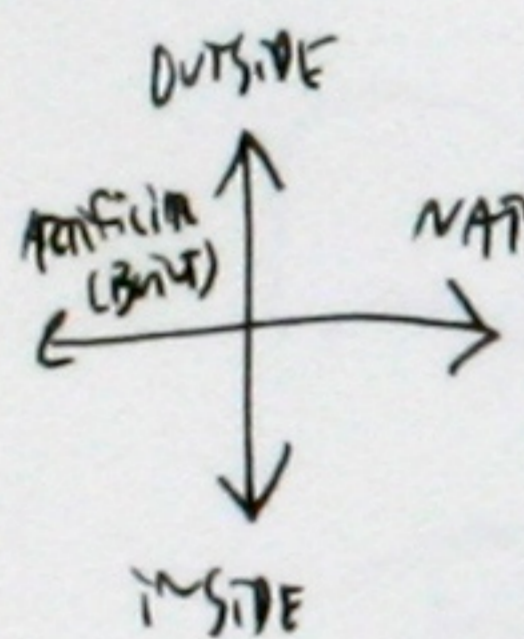
working backwards...



-TALKING for example sound, lets see how these discoveries with light with these design principles for "bring the outdoors indoors", could help to create regions...



"we can see how these design principles can help design practitioners better understand the issues behind designing a THRESHOLD system/product/device that blurs/crosses/eliminates the THRESHOLD between the indoors + outdoors."



"There are a # of factors @ work here."  
 THEMES: 1. BIOLOGICAL (our similarity to the physical world)  
 - the natural world  
 - our built world

2. Socio-cultural
3. ASIAN
4. TEMPORAL
5. PERCEPTUAL

PERSONAL THEMES? SKETCHING LEADER? FIREPLACE? CHRISTMAS?

OUTRIM: Sensory permeability. Perception of space beyond the space.

BUILT WARM: meaning, interpretation, origins, cultural, social, life experience, etc...

**Light!** LET'S SPECIFICALLY LOOK @ LIGHT...

- EXAMPLES:
- DANIEL LIBESKIND
  - ADAM FRANK
  - PHILIPS DYNAMIC LIGHT
  - BUNTERS LIGHT TABLE
  - ANDRE SCAPES
  - DRICHT BLEND

- HARRY POTTER CEILING
- ARTIFICIAL WINDOWS? → NOPE
- CONCRETE LIGHT
- DYNAMIC LUMINESCENCE

HELIOSTATS  
 COLOMBE  
 (WINDOW VIEW, OR JUST LIGHT?)

SOCIO-CULTURE:  
 SOCIAL SITUATION  
 CULTURAL SITUATION  
 LIFE EXPERIENCE (PERSONAL)  
 VALUES, MEMORIES, ETC...

FROM LIGHT, IDEAS THAT BUBBLE UP:  
 PARTICULAR (Harry Potter) holonyms, etc. (EXAMPLES)  
 ABSTRACTION (Bright Side → Harry Potter)  
 MULTI-SENSE: ANDRE SCAPES  
 PERMEABILITY: LITRA (CONCRETE)  
 RESIDUAL LIGHT: BUNTERS LIGHT TABLE  
 TIME: PHILIPS DYNAMIC, ADAM FRANK SWART

PROTOTYPES: CHRONO... movement, use of space, representation of time, etc...  
 SLOW TECHNOLOGY.  
 SHAPE-O: movement, personal meaning, interpretation, sun filtering thru trees, etc...

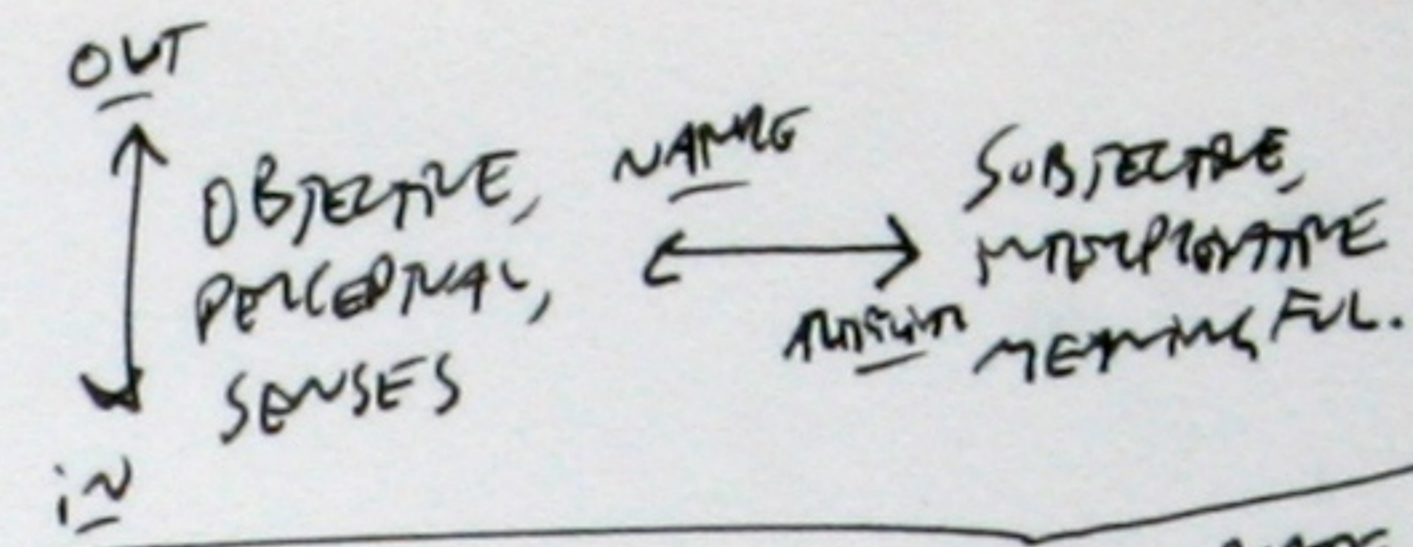
CONCEPTS:  
 LIGHT-UP BAMBOO FLOOR.  
 LIGHT-UP WALLPAPER/PAPER.  
 FIBER OPTIC WALLPAPER.  
 REAL-TIME DYNAMIC SENSING LIGHTS.  
 CHRONO LIGHT MOVING THING.  
 MOVING OFFICE LIGHTS.  
 PATTERNS OF LIGHT (MOVING) FROM FAKE WINDOWS...  
 "REAL" HARRY POTTER WALL CORNER...  
 SUNLIGHT POWER OUTLETS  
 SUNLIGHT AS UTILITY.  
 (CANNED HAWAIIAN AIR)  
 RAIN BUREAU → SUNLIGHT BUREAU  
 SIMULATED CEILING LIGHTING CLOUDS.  
 PROGRAMMABLE LIGHT FLOORS, LIGHT WALLS.

**Brighten Up!**  
 SHOULD NOT BE STATIC.  
 SHOULD NOT BE BINARY.  
 SHOULD REFLECT THE NATURAL WORLD...

APPROACH:  
 phenomenological.  
 Focused on senses, sensory input.  
 Focused on indoor process.

WANTY-PEPPING LIGHT!

OTHER IMPORTANT NON-LIGHT EXAMPLE:  
 ARTHUR GANSON: FIBER + SENS



LEVELS OF PERCEPTION:  
 ABSTRACT → REAL  
 SUBJECTIVE → HARRY POTTER

PAINT CHIP NAMES:  
 "YOU'RE MORE THAN COLOR"  
 CULTURAL, PERSONAL CONNOTATIONS...  
 UNKNOWN MEANING.  
 COMMISSIONERS OF LIGHT.

MOTIVATE YOUR WORK, NOT JUST DOCUMENT THE PROCESS!

3. LITERATURE + THEORY  
 CALM TECH, SLOW TECH, REFLECTION, EXPERIENCE, PHENOMENOLOGICAL...  
 and nature-specific HCI work...

LIGHTING STUDIES:

Fog, Windows, Windows w/ Blinds, ETC...

DESIGN ACTIVITIES...

4. RESEARCH  
 users  
 exemplars  
 design activities  
 \* YOUR APPROACH + INSIGHT... \*  
 ...NATURAL/BUILT, OUTDOOR/INDOOR...  
 SKETCHES.  
 sketching, etc...

...SELL YOUR DESIGN PRINCIPLES...

DON'T JUST COMMUNICATE YOUR PROCESS...

5. DESIGN  
 concepts, sketches...  
 ↳ SPECIFICALLY LIGHT  
 ...sketches, concepts...  
 ...prototypes...

6. FINAL PRINCIPLES.  
 ...as they apply to LIGHT  
 ...as they apply to OTHERS (Sound).

7. CONCLUSION/IMPLICATIONS  
 ...FOR INDOOR/OUTDOOR DESIGN  
 ...FOR TECH  
 ...FOR UX...

# capstone.


G.S.G.W.

MARCH 28, 2010

THE MEANING WE ASCRIBE TO THE OUTDOORS IS MEDIATED, SITUATED IN OUR:

- PERSONAL LIFE EXPERIENCES... (growing up in a city, in the country, four-wheeling, camping with your family, etc...)
- CULTURE... (our notions of nature, man's relationship to it... a force to be pushed back + dominated or to be preserved + saved)
- SOCIETY... (associations we make, leaves skidding in the fall, stuff we do in + do with snow, shoveling it, riding it, driving through it... how we sit - ourselves to things in the outdoors...)
- ... someone in the Pacific Northwest will have a different relationship with the Sun than someone in Phoenix.
- LIFE WORLD... (that random substrate of experience... of life... the best things we do not, or cannot, consciously attend to).
- OUR BEING... (the fact that we are physical beings in a physical world)
- OUR EMBODIMENT... (the fact that all our experiences are mediated by our bodies, that embodied cognition states that our body is necessarily tied to the way we think about + process the world, that affordances matter + make sense because we have hands of a particular shape + size, that even our reasoning is embodied, that we think in metaphors, that we arrange ourselves in relation to the world, both literally + conceptually, with our bodies)
- OUR BIOLOGY - we perceive light only in a narrow range of wavelengths, we evolved + exist in accordance to the behaviors + rhythms of the planet, there are measurable attributes of our existence that are unique + specific to THIS PLANET, THIS LENGTH OF DAY, THIS TYPICAL LENGTH,

NATURAL 

BUILT 

→ Social structures, social computing, conversation, social accomplishment, that our capacity for socialization may form the basis for how we interact with artifacts (we anthropomorphize objects, talk to them, see faces in them, get angry with them, etc...)

BIOPHILIA HYPOTHESIS  
"PEOPLE ♥ NATURE"



Disembodied Cognition



Embodied Cognition



Evolutionary Psychologist

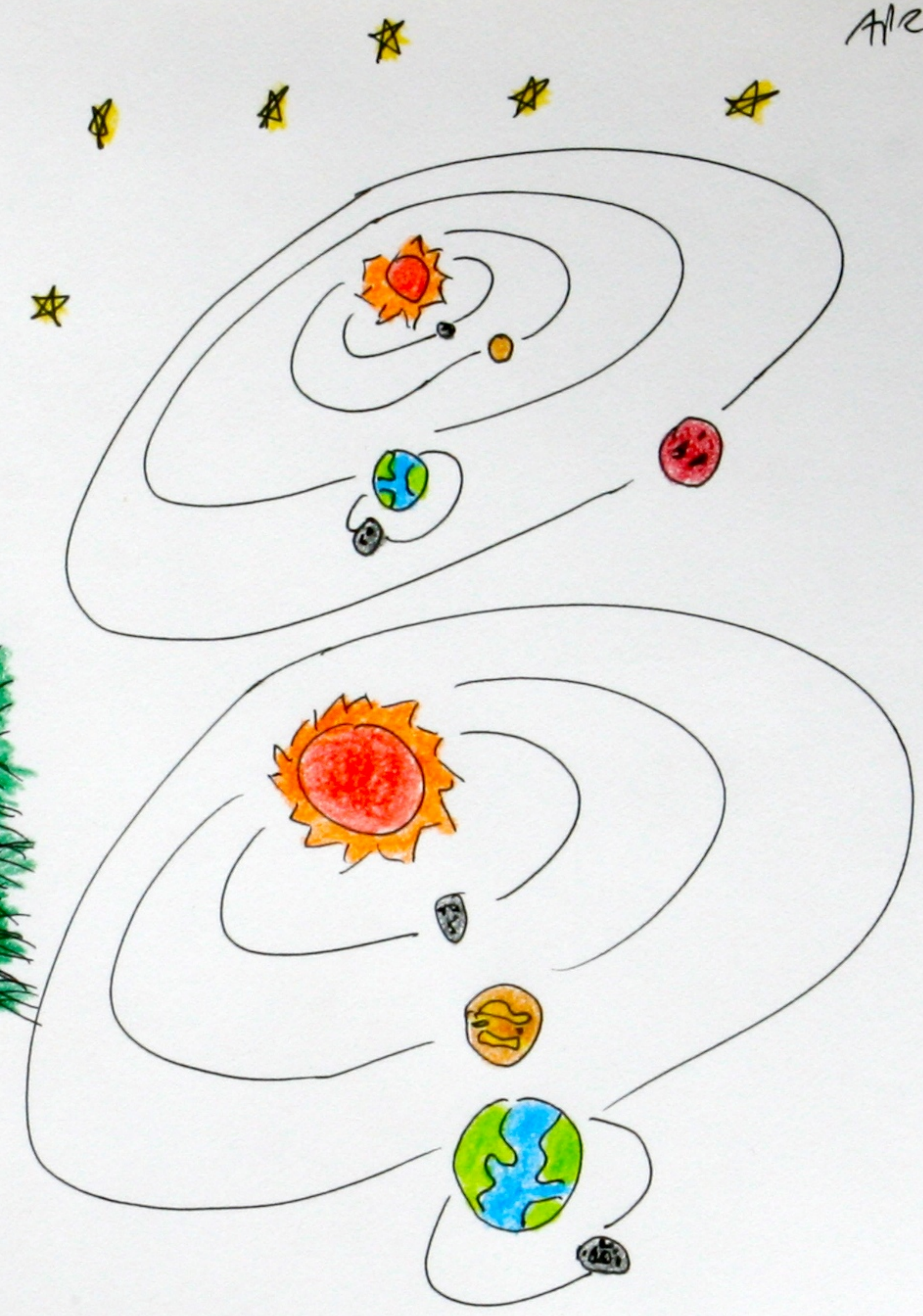
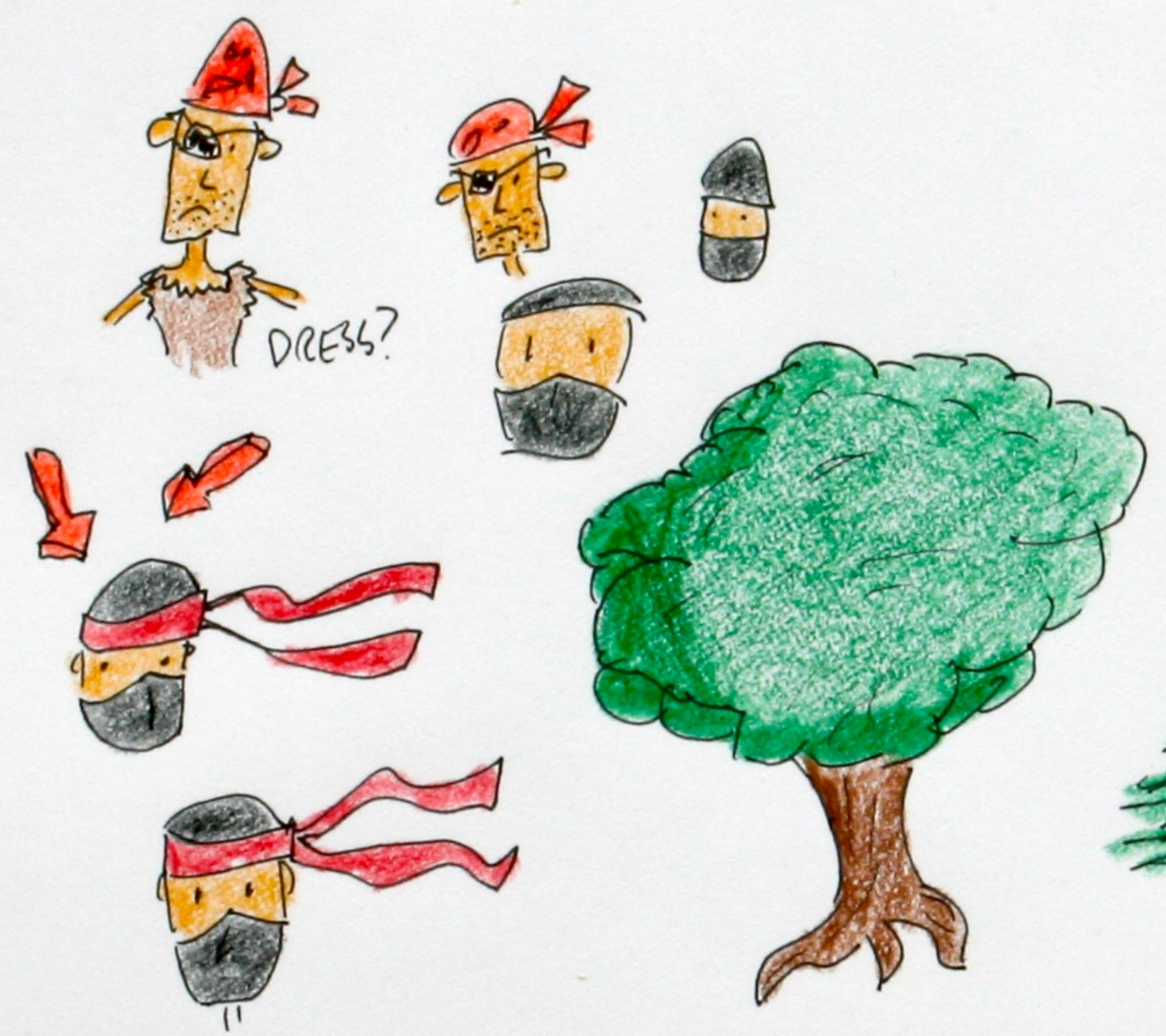
→ THESE SENSORS, THIS SUNLIGHT. WE EXIST IN A SPECIFIC WORLD w/ SPECIFIC ATTRIBUTES, CERTAIN EVENTS OF OXYGEN IN THE AIR, ~~AND~~ NOT IN AN ABSTRACT WORLD. "IT IS IMPORTANT TO DELIBERATELY CONSIDER OUR OWN BIOLOGICAL RELATIONSHIP TO THE UNIQUE PROPERTIES OF THIS PLANET - GRAVITY, WEATHER, ETC..."

↳ ~~PREPARE~~ ENTHUSIASM, REAFFIRMING, MAINTAINING RELATIONSHIPS WITH GROUPS + INDIVIDUALS AND POINT THAT WITH OUR RELATIONSHIP WITH THE OUTDOORS NATURE.

Dwellable Interactions

# GAPSTONE.

APR 8, 2010

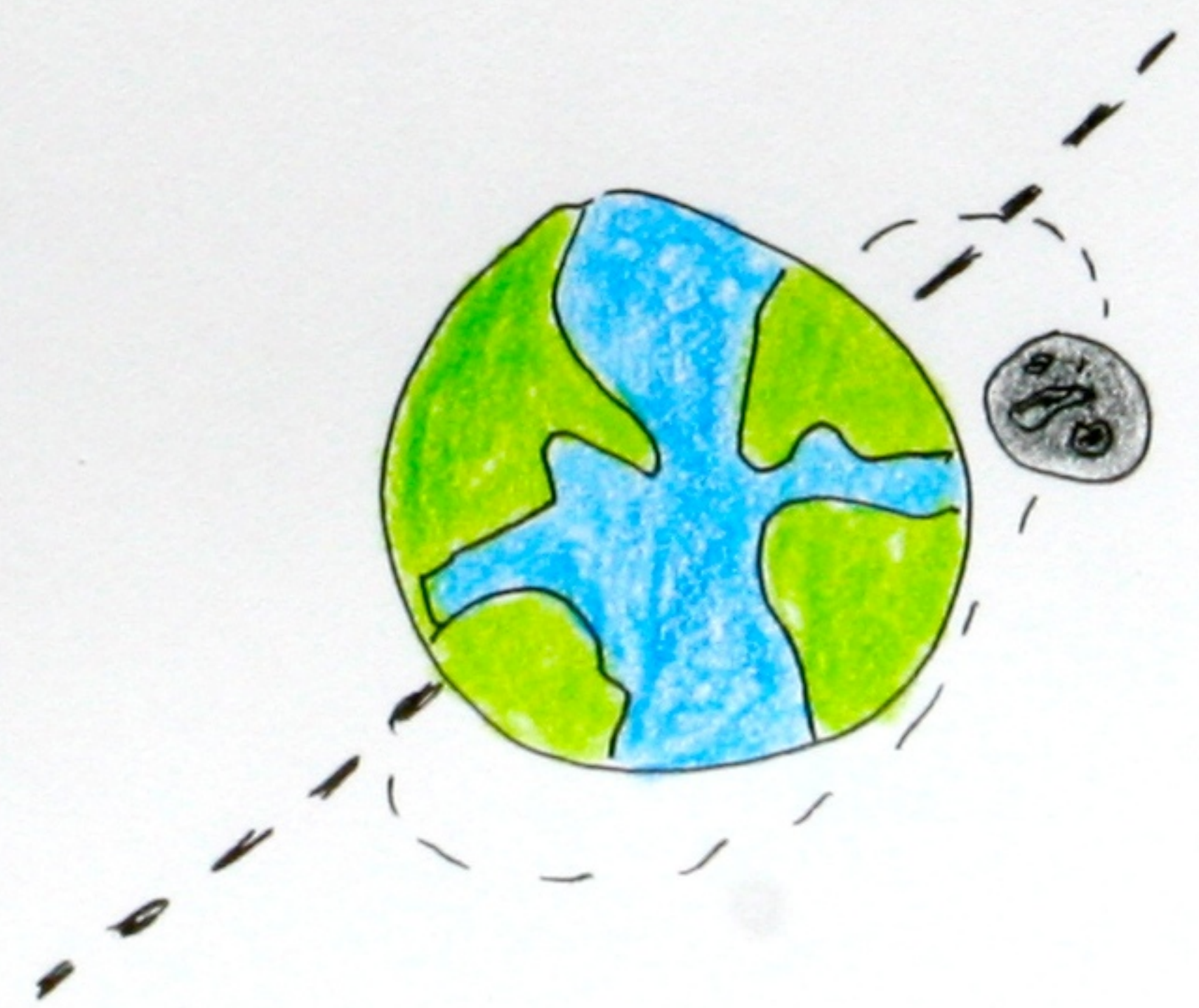


ANTIKYTHERA MECHANISM ...



ASTROLABE.

"THE EARLIEST COMPUTERS WERE USED TO DERIVE MEANING FROM THE NATURAL WORLD. CELESTIAL MOVEMENTS."



PI-METEORLOGY.  
BIOCHEMISTRY.

QUALITIES OF OUR WORLD THAT SIMULATE OUR MATHS:  
TIDALLY-LOCKED MOON  
AXIAL TILT: 23.5°  
AIR / ATMOSPHERE.