BOOLS OF THE STREET OF THE STR

we need to talk about how we talk about bodies.

peeking behind the curtain

the men behind **the myth** poisoning our present day

exposing the mythical norm

the **norm checklist** and why the **norm persists**

reimagining bodies

how we can
de- + re- construct
our cultural
understandings

designing a better future

fitting of **individuals**, **not averages**



issue 1: the body ff NORM 77

eugenic influences

how the norm came to be

Interestingly, "norm" and "normal"were not used to reference bodies in

RE European languages before the 1800s.

"Norm" meant carpenter's square, and "normal" meant perpendicular.

1835 - Adolphe Quetelet

- * applied error theory* (used for measuring stars) to the human body & introduced his Average Man, saying that any deviation from his average was a moral or physical flaw of the individual.
- This is the beginning of average as ideal.

1869 - Francis Galton

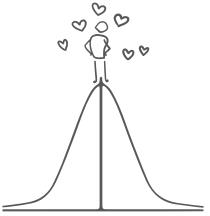
- introduced "rank-ordering methods"** into statistics, looking for math that would scientifically "legitimize" eugenics and rank people on their "civic and genetic worth"
- believed that everyone had "definite endowments" at birth that determined how talented they were, with most people middling
- The new ideal was being "ahead of the curve".

early 1900s - eugenics

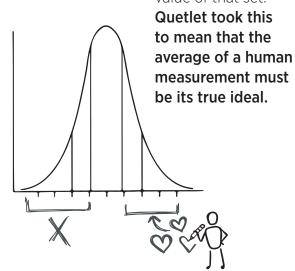
- eugenic societies were common in most Western countries, backed by the above "scientific" reasoning
- Britain incentivized the middle class to breed to "improve" country's genetics
- U.S. compulsory sterilization of disabled people
- Germany's eugenics first targeted disabled people

late 1900s - the medical model of disability

- approached cases of disability with the mentality of "normalization", implying that something was lost by existing outside of the norm***
- The disabled body was pathologized for deviating from the norm, regardless of the condition's impact on the individual's life.



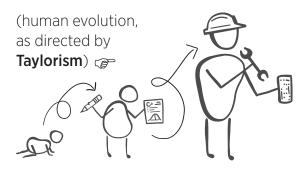
*Error theory states that the average of a set of measurements represents the true value of that set.



**"Rank-ordering"
cut "the normal
distribution" curve
(aka **the bell curve**)
into percentiles.
Error became

"standard deviation".

***This narrowminded assumption that disability requires correction in order to have a good life is referred to as the "curative imaginary". *Taylorism seeped into the student life via **standardized education**, designed to make **Average Students** who could become Average Workers.



**Thorndike was the Galton to Taylor's Quetelet. Taylor idealized the average, while Thorndike emphasized the idea of being like everybody else, but just a bit better.

***Unfortunately,
universal design
is a myth, because
accessibility needs for
different disabilities can
directly conflict.

The desire to have a set norm to design for is **too reductive** to handle the wide variety of human bodies.

1880s - Frederick Winslow Taylor

- reated **industrial organization** around the idea that the system comes before the man
- conceptualized "the Average Worker", who followed standard methods to maximize efficiency*
- The average or normal body was ideal because of its interchangability in Taylorism.

1920s - Edward Thorndike**

- wanted to rank-order and separate students
- believed that learning speed was innate, so resources should be spent on the children with the most "natural potential"
- designed standardized tests and entrance exams to rank students.
- The system rewarded those who were ahead of the curve, shutting out those behind the median.

1938 - 1974 - the "Standard" Body in Design

- multiple attempts to standardize body measurements so designers could efficiently mass produce one product for "normal bodies"
- Anyone outside of the body norm was forced to either adjust themselves to the product if they could, or be shut out.

1960s - 1970s - Universal Design Movement

- push for universal design began with the growing disability rights movement
- universal design wanted to design products that everyone could use in a one-size-fits-all fashion***
- Instead of normalizing bodies, this normalization was aimed at the environment. Still, the result was creating a norm that could absorb disabled bodies and decrease visibility of difference.

TL; Quetelet and Galton fueled eugenics with the mathematic construct of the ideal body, which later evolved into **medicine**'s notion of there being a normal body.

Taylor and Thorndike brought the average into the **workforce** and **education**, creating a sense of normal productivity expected of the body and mind.

and so a norm was born

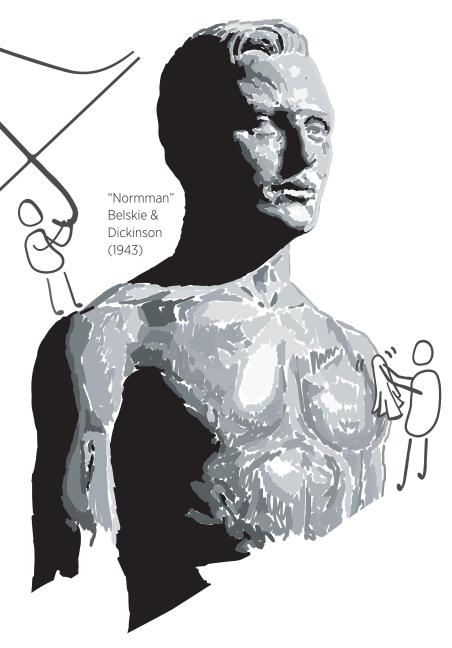
meet the minormity

According to Rosemarie
Garland-Thomson, the
"normate" contrasts and
constructs itself from the
disabled body. The normate is
unmarked by the stigma of
difference, which is what gives
the normal body power. It is able
to neutralize itself under the
guise of "normal" to feed an
illusory notion of "meritocracy".

(error curves double as **protective umbrellas**)

- white
- thin
- male
- young
- cisgender
- heterosexual
- Christian
- financially secure
- non-disabled

if you couldn't check every box, you're not normal. but how many of us actually fit this full list* (that claims to be the default)?



Looking at this list, it's easy to see that the norm is a case of intersectionality that could be viewed from any number of lenses, such as race or class. This zine uses a disability lens, given the history of medical normalization of disabled bodies.

*Just ask the contestants of Cleveland Health Museum's 1945 Norma contest, or 1940s USAF pilots — no individual fully fits the norm. (Refer to readings on back cover for those stories)

you normal? (for the U.S.)

"measuring up"
"on track"
"ahead of the curve"

comparison to a normal body and mind, with tracking of developmental milestones, test scores, or acheivement pathways.

Comparisons to the middle of a rank-ordering bell curve are driven by the myth that how close we are to normal is a sign of how close we are to a good health, intelligence, or success.

"quick study"
"getting ahead"
"developmental delay"

comparison to a normal clock (with "proper" timelines set by capitalism's industrial clock).

Disability challenges these timelines*, threatening the norm with its demonstrable difference.

"high functioning" vs.
"low functioning"

comparing cognitive disability to determine who is closer to normal, and therefore likelier to lead a "good life."

This mentality of a good life requiring normalcy is at the base of the "curative imaginary".

*Within disability culture,
"crip time" refers to the
different experience with
time due to living in a
body that does not meet
normative chronologies
or industrial time, and/
or to the way a disability
can rewind or fast forward
your position in life.

how has it endured?

"The idea of **normalcy...** is **so ubiquitous** and mundane that it's settled into sleep in much of our collective cultural imagination..." - What Can a Body Do? by Sara Hendren 21/2"----1'9"---+5" 2.0 Schroeder & Repetto (1954)12.0 Drevfuss & Tilley (1969)Diffrient (1974)Neufert (1938)



Bell Curve Pharmacy

Dr. Galton

Body Norm Sedative

Dose: One tablet, daily

REFILLS: unlimited

Rx No: 300417

Rx date: 1869

[Tablet form]

*SIDE EFFECTS

ingredient list for a cultural sedative

guise of neutrality

[300mg]

- norms remain invisible, and become defined only when contrasted by difference.
- visible difference threatens norms and destabilizes the illusion of clear boundaries.
- society will try to eliminate, assimilate, or exclude difference to keep norms invisible and stable

binary bias

[250mg]

- we are prone to dichotomizing data into binaries like normal/abnormal or abled/disabled
- allows us to reduce the complexity of a situation to make quicker judgments
- sacrifices quality and nuance in the process

aggregative fallacy

[175mg]

- * taking the average to be a representation of any one individual within the group is aggregative fallacy
- what is true of the average is not necessarily true for the individual
- aggregative fallacy used in science encodes bias against non-normative bodies

good adjustment

[260mg]

- when there is a normal group and a stigmatized group, "good adjustment" is expected of the stigmatized
- requires the stigmatized individual to assimilate himself to the norms he can adjust to and stay away from situations where he cannot assimilate
- keeps the normals comfortable and unthreatened by difference, perpetuating the norm

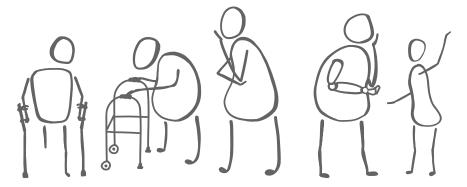
so how can we wake up?

'elmagine bodies
"but it's always been this way!"

Complexiy

Norms are taken for granted, in everything from testing to childhood development. We forget the constructed roots*, so we forget we can de- and re- construct these cultural understandings.

*Creating a "normal" and "abnormal" is a DIY project for society (just with much less glitter and enjoyable outcomes than most crafts).



ability isn't one dimensional

Ability is multidimensional (and each dimension doesn't have much impact on another), therefore, we cannot apply one-dimensional thinking to a complexly jagged experience.

ability isn't fixed**

Mismatches that result in experiencing disability come from complex interactions between the body and environment. It is not merely body pathology or the environment. It is possible to be abled in one context and disabled in another. A fixed binary oversimplifies this reality.

disability isn't negative

Individuals are **not always "suffering from" their condition.** Disabled individuals, like those in the Deaf community, can find meaning through their Deaf identity*** and thus **do not always desire to be "fixed"** by medical procedures like cochlear implants. The curative imaginary pops up in this language of "suffering" and "fixing".

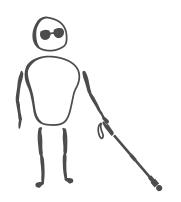
🕝 normal isn't natural

"Normal" tries to pitch itself as synonymous with natural, but normal isn't natural. **Consider how few fit the full mythical norm.** **This mentality offers a productive direction for design (rather than the essentialist thinking of "a person is disabled no matter the context, and therefore is unable to do X, so why bother to design anything to do with X with them in mind?")

*** note about disability as an identity: This proposal of disability as fluid isn't meant to invalidate those who find meaning through the disability label. The identity ties people together based on the common experience of living in a world that thinks of their bodies as abnormal and experience stigma as a result. While it would be argubaly beneficial to change the conceptualization of disability to something less fixed, the identity is still valuable to cope with the present.

reconstruct understanding

ability is jagged



ability low average

sight
hearing
walking
reading (Braille)
speaking

ability is contextual*

example: a Deaf individual wants to enjoy a video



The content has only video/audio available.



They are unable to enjoy the video.

The video has subtitles and a transcript available.

high



They are able to enjoy the video.

disability is inevitable**

Whether **by birth, age, illness, or injury**, everyone will experience disability at some point in their lives.

disability can be neutral

Stigma and otherness are results of cultural construction. Disability can be neutralized if we **end the curative imaginary** that assumes a normal body is a prerequisite for a good life.

** 15% of the world population, or 1 billion people, currently live with disability according to a 2011 WHO report. Disability isn't rare.

what's natural is...

- interdependence***
- vulnerability
- the body-plus****
- adaptation
- bodily variation

*** despite American individualism pushing the myth of the "self-made" man

**** Whether it's glasses or shoes or pencils or prosthetics, humans coexist with tools to augment their abilities.

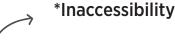
able-bodiedness is only temporary

the body of design

The average can be useful in certain situations, like comparing two groups. But as soon as you need to decide anything about an individual, the average doesn't provide any insight, only the illusion of insight. We are designing things to be used by individuals, so the concept of a normal or average user is not a solution to simplify the process.



** you are not the user.

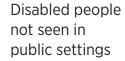


Non-disabled designers don't see a reason to consider disability in design





Low visibility rates allow for the assumption of disabled people as rare "edge cases"





the cycle of inacessibility*

- reduces visibility of disability
- allows the guise of the norm as neutral to remain unopposed by difference

ability bias**

- the tendency to use ourselves and our abilities as the framework or lens for problem solving
- leaves blindspots in the design process

the 80/20 misconception

- looking at the bell curve and falsely believing that the middle represents 80% of both the population and 80% of problems worth solving
- sees the remaining 20% as outliers or "edge cases" that are then neglected as cases of extreme abnormality
- designing for as assumed average majority forces most people who are close-to-average to adapt themselves to the design in some way and excludes those too far outside the norm to be able to adapt themselves



why inclusive design > universal design

Inclusive design is design for one, extend to many (based on shared needs), whereas universal design believes in the impossibility of designing a single solution that meets everyone's needs (which, given contradictory accessibility needs of certain conditions, is not possible).

*example persona spectrum for dexterity







permanent one arm

temporary injured arm

situational holding baby

inclusive design practices

seeking advice from exclusion experts

- relying on those most likely to be excluded by a product to give feedback on usability and practicality of designs to make a design more inclusive
- The 20% can be a source of richly adaptive ideas that can extend to the 80% experiencing similar needs on a temporary or situational basis (see the persona spectrum)

the persona spectrum*

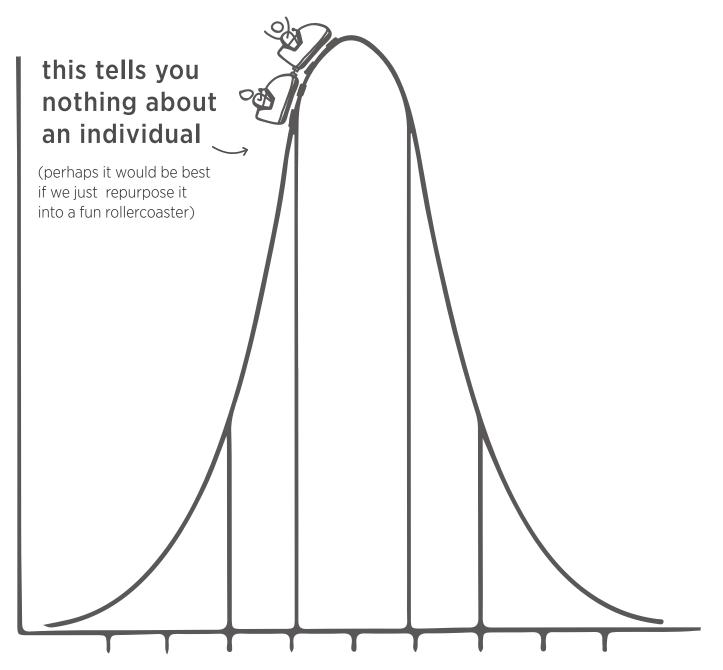
(from *Mismatch*)

- alternate to using a singular persona
- identifies a common experience of mismatch ranging from permanent to temporary to situational
- considers context and human diversity throughout the design process

designing multiple ways to experience a product

- allows a multitude of equally valid contribution pathways
- ☞ offering choice increases how many people can participate
- (in contrast, fixing a singular way to participate with a design can create artificial impairment to contribution)

design with not for.



normal is a myth.

the zine stops here... but the reading can go on

Hendren, S. (2020). What can a body do?: How we meet the built world. Riverhead Books.

Holmes, K. (2018). *Mismatch: How inclusion shapes design.* The MIT Press. Rose, T. (2015). *The end of average.* Harper Collins.*

Thomson, R. G. (1997). Extraordinary bodies: Figuring physical disability in american culture and literature. Columbia University Press.



* Contains the Cleveland Health Museum's Norma contest and 1940s USAF stories mentioned with "meet the minormity"