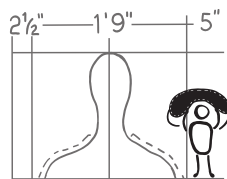
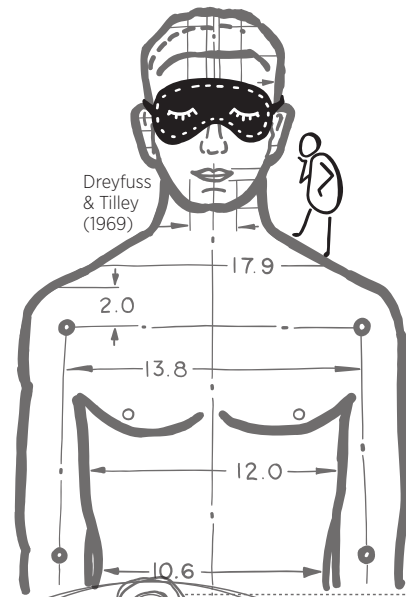


“The idea of **normalcy**... is so **ubiquitous** and mundane that **it's settled into sleep in much of our collective cultural imagination...**”

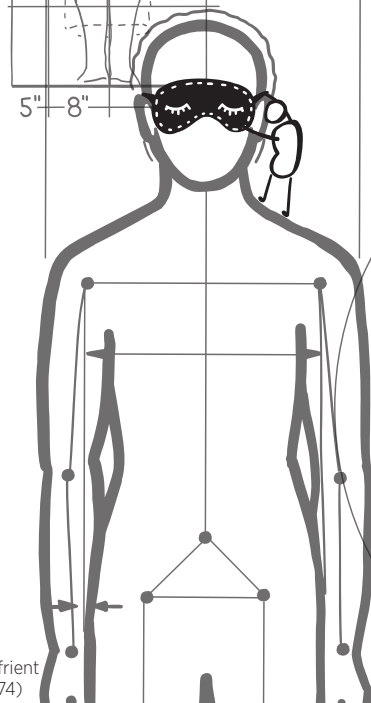
— *What Can a Body Do?*
by Sara Hendren



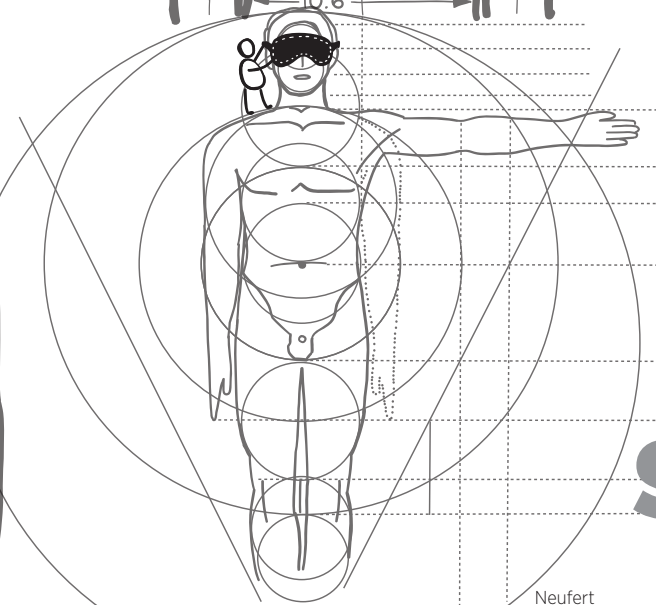
Schroeder & Repetto (1954)



Dreyfuss & Tilley (1969)



Diffrient (1974)



Neufert (1938)



Bell Curve Pharmacy
Dr. Galton
Rx No: 300417
Body Norm Sedative
Dose: One tablet, daily
REFILLS: unlimited

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**

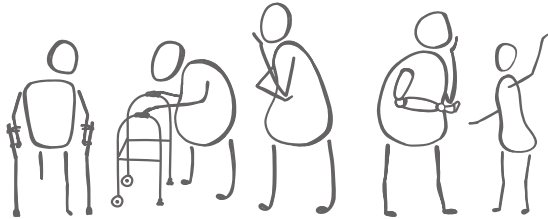
Rx: one cultural sedative

so how can we wake up?

reimagine bodies complexly

“but it’s always
been this way!”

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 able in one context and disabled in another. **A fixed binary oversimplifies this reality.**

**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?”)

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”.

*** 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 arguably beneficial to change the conceptualization of disability to something less fixed, the identity is still valuable to cope with the present.

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.**

modern echoes

“measuring up”
“on track”
“ahead of the curve”

☞ comparison to a normal body and mind, with tracking of developmental milestones, test scores, or achievement 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”.

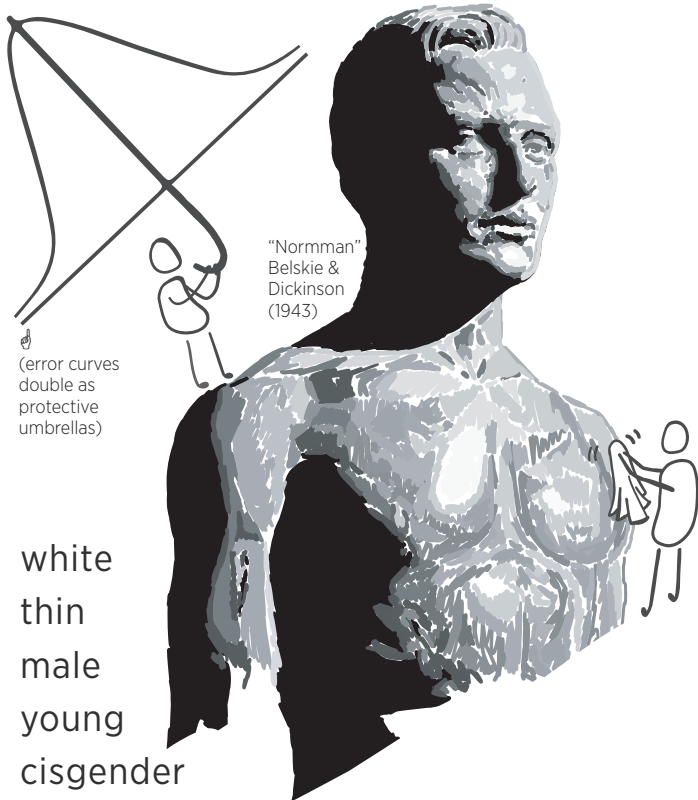
*Within disability culture, “crip time” refers to the different experience with time due to living in a **body that does not meet normative chronologies** or industrial time, and/or to the way a disability can rewind or fast forward your position in life.

deconstruct assumptions

how has it
endured?

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”.



“Normman” Belskie & Dickinson (1943)

(error curves double as protective umbrellas)

are you normal? (for the U.S.)

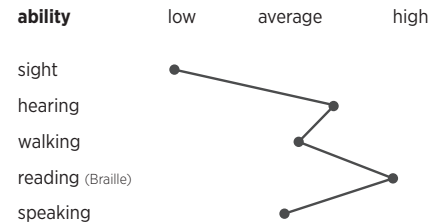
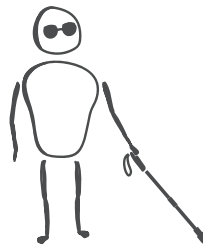
- ☞ white
- ☞ thin
- ☞ male
- ☞ young
- ☞ cisgender
- ☞ heterosexual
- ☞ Christian
- ☞ financially secure
- ☞ non-disabled

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)

☞ ability is jagged



☞ 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.



They are **able to enjoy the video**.

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

☞ 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.

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.

reconstruct understanding

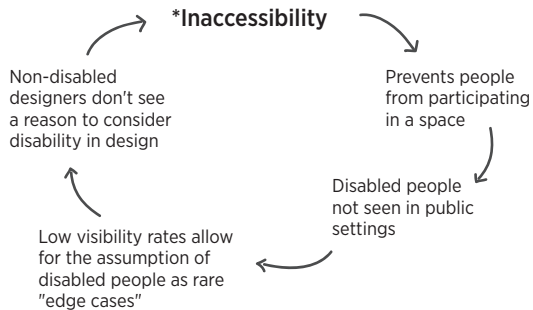
able-bodiedness is only temporary

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.**



practices to avoid

the cycle of inaccessibility*

- ☞ 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

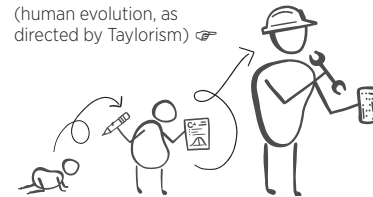
- ☞ looking at the bell curve and **falsely believing that the middle represents 80% of both the population and 80% of problems worth solving**
- ☞ sees the remaining 20% as outliers or "edge cases" that are then neglected as cases of extreme abnormality
- ☞ designing for as assumed average majority 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

*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.

(human evolution, as directed by Taylorism)



TL;
DR

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.

1880s - Frederick Winslow Taylor

- ☞ created **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 interchangeability 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.

capitalist influences

harmful habits

and so a norm was born

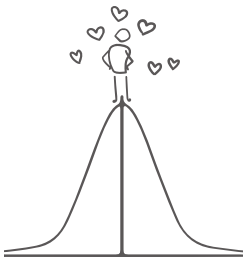
how the norm came to be

BE Interestingly, “norm” and “normal” were not
FO used to reference bodies in European languages
RE 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.

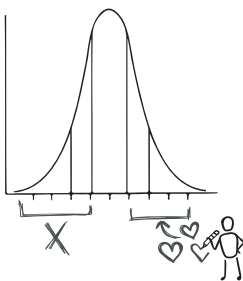
*Error theory states that the average of a set of measurements represents the true value of that set. **Quetelet took this to mean that the average of a human measurement must be its true ideal.**



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”.**

***“Rank-ordering” cut “the normal distribution” curve (aka **the bell curve**) into percentiles. Error became “**standard deviation**”.



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.

***This narrow-minded assumption that disability requires correction in order to have a good life is referred to as the “**curative imaginary**”.

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)

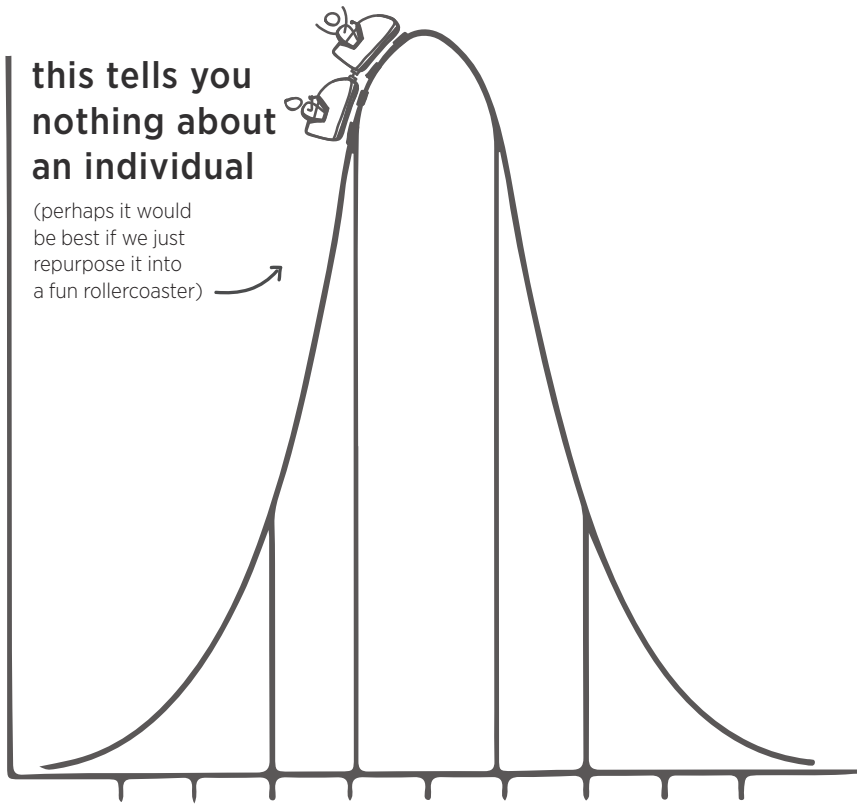
better practices

eugenic influences

design with not for.

this tells you
nothing about
an individual

(perhaps it would
be best if we just
repurpose it into
a fun rollercoaster)



**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 minority"

image credits: The drawing of Normman on the "meet the minority" page is a recreation of the real statue. The drawings of the standardized measured men on the *What Can a Body Do?* quote page are handmade copies of the original diagrams. All drawings were then added to with my original drawings/concepts to adapt to the message of the zine. Any image with elements based directly on another work has the original maker's name and year next to the image and is being used under Fair Use guidelines that allow for transformative and commentary-based uses of others' work.

Body Language

created by Lynn Priestley

we need to talk about
how we talk about
bodies.

**peeking behind
the curtain**

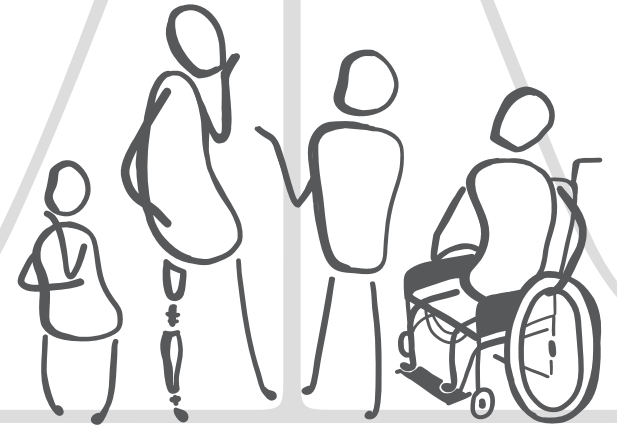
the men behind
the myth poisoning
our present day

**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

“NORM”