## Chapter 7: Dimensions of attraction

So what do the data tell us? Let’s begin with the basics.

The 2015 U.S. Census estimated that only 3.8% of Americans are LGBT, but for a variety of reasons— likely including concerns about anonymity— this number falls well short of reality. The 2017 Gallup poll found that 4.5% of adult Americans identify as LGBT— 5.1% of women, and 3.9% of men. This “1 in 20” number has been widely cited, and is roughly comparable with the way older Americans respond in our survey. However, when we look across ages, we see a sharp decline in traditional heterosexual norms among the young. While nearly 95% of 65 year olds report being heterosexual, only 76% of 18 year olds do. This is an enormous change, and alarming to some: from 19 out of 20 at the older end to only 3 out of 4 young people!

This graph and others like it illustrate why it’s so important to break down statistics like these by age, and where possible, to use smaller age bins at the younger end of the scale, where the changes are often most rapid. Especially in highly developed countries like the U.S., the population is heavily skewed toward older people. Averages will thus be dominated by those older people, and won’t reveal how different the numbers are among the young. Yet arguably, the statistics of the young tell us more about the shape of the future.

For younger women, it’s not even clear that sexual and romantic attraction exclusively to men (abbreviated as “heteronormative attraction” here) is a majority at all. The data show this figure falling all the way to 50%, with the error bars suggesting that the real number might be even lower. As a 29 year old woman from Alpharetta, Georgia wryly put it, “Nowadays, being heterosexual is in the minority. Just an observation.” Although the numbers for men aren’t quite so dramatic, a 58 year old bemoaned that he was “VERY unusual. I am a male that was born a male and is heterosexual. You never [hear] of people like that anymore. No really.”

You may find these numbers hard to believe, especially if you’re over 40. There are two obvious reasons why our intuitions can lead us astray here. First, we tend to associate with people in our own age cohort. Second, unlike hair length or height, you can’t generally tell someone’s sexual orientation at a glance. Talking about it outside a close friendship can be socially taboo, and, as we’ve seen, a minority status generally carries stigma. These things will hold especially among older people, which amounts to a recipe for making the minority invisible, much as for non-monogamy.

Despite this, in recent years, we’ve seen high-profile public debates about topics such as the legalization of same-sex marriage, the status of gay people in the military, and trans rights. It’s easy, then, to see how someone in an older or more conservative cohort might harbor the impression that a lot of fuss is being kicked up by a tiny but vocal minority. Within such a cohort, even a person belonging to one of these minorities might feel this way, since they’re likelier to be closeted and not know— or not *know* that they know— anyone else like them. This puts in context occasional comments like this one, from a 58 year old in North Carolina:

Yes, I am normal. I just wanted to mention this to the researchers as this represents 97% of the general population. I think the Trans/gender fluid people blew their wad and lost because of after 20 years of being beat over the head by the homosexual agenda, people are sick of the brain washing. I want the researchers to know just how normal [people] feel about this gender foolishness. These people are mentally retarded and they need to shut up and get out of everyone’s face with their personal problems. People just want them to shut up and get out of the way. Enough of them and their idiocy. They are mentally ill people who need to be slapped back into their proper place of being and that is not catering to their stupidity and allowing these fools to set public policy. We don’t care what they want. They should be institutionalized.

This jeremiad against the “homosexual agenda” ends with a cheery “Great survey.//Thanks.” Such hateful responses are less common than bemusement or plain bewilderment, like that of a 63 year old straight man from Pulaski, New York, attracted exclusively to women, who wrote “I don’t know exactly what many of these terms mean. I am a definite no on those. [N]othing that needed extra explaining thanks.”

Hatred and moral judgment aside, in making assertions about what is “normal,” the numbers do matter. It’s far easier to think of a 3% minority as requiring “extra explanation” or needing to “be institutionalized” than to think of this applying to the far larger numbers of young people we observe to fall outside the supposed historical norm when we survey anonymously and break the results down by age.

Despite overwhelming heterosexual majorities among older people, the “heteronormatively attracted” curve never goes above 80% at any age— that is, there are clearly significant numbers of people who identify as heterosexual but don’t report being exclusively sexually and romantically attracted to the opposite sex.

Some of them aren’t sexually attracted to either men or women; though these numbers are comparatively small, they aren’t negligible, amounting to about 3.5% among the young and gradually dropping to under 2% by age sixty.

While both the overall percentage and the difference between men and women shrink with age, it’s notable that at every age, more women than men report a lack of sexual attraction to anyone. We see a similar pattern when we ask about asexuality, meaning a low or absent sex drive.

In this area as in some others, asexual respondents often express different views about whether they see their minority status as a medical abnormality, an identity, or somewhere in between. A 22 year old woman from Illinois wrote of her asexuality, “I’m tired of people saying I’ll grow out of it or thinking there’s something wrong with me.” Contrast this with the way an asexual 27 year old from Florida characterizes *her* asexuality as a dysfunction: “I have hormone issues and thus greatly reduced sex drive.” Of course it could be said that all of us have sexual urges influenced by our hormone levels, and these hormone levels can be inconvenient in any number of ways. We can believe these hormonal settings are normal or abnormal, wish they were different or embrace them, think of them as a malady or as part of our identity. There’s no objectively right answer.

Evidently asexuality is less common— or, judging by the previous graph, less acknowledged— among the youngest cohort, even among those who don’t find themselves attracted to anyone. Identifying a *lack* of something may be tricky for a young person, in that it’s hard to distinguish not having the psychological or hormonal “circuitry” for strong sexual attraction from simply not having experienced it yet: “I think I’m asexual, but I don’t even know.”[[1]](#footnote-21) Or, as a 23 year old woman from Michigan explained,

I’ve identified myself as aromantic/asexual on this survey because I have never been attracted to anyone in my life. However, I am constantly questioning this and am unsure if this is influenced by my lifestyle/health issues, and if this will change in the future.

For a 24 year old from New York, this is precisely what happened:

If it’s worth anything, I’ve mistaken myself for asexual. Turns out I’m just a late bloomer and I hate it. I mean, it feels good, but it’s so much easier not having sex on my radar much at all.

Asexuality peaks in the early twenties at about 4% of men and nearly 5% of women, then settles down to about 3% by age thirty. The gap between women and men is large between ages thirty and forty, though, when twice as many women report being asexual.

There are multiple factors in play here. Some older people lose interest in sex or romance, despite still thinking of themselves as heterosexual; their identity hasn’t changed, but their drives have. As a woman from Oregon explained,

The older I get (67) I seem to feel less and less emphasis on how I look and more emphasis on how comfortable I am as in comfortable clothes, less fuss about how I look. Of course ones libido takes a hit after menopause, but for me that is not a great loss as my husband has lost his too due to illnesses and medications. One finds in old age that sexual orientation and its importance gives way to what matters in your life more such as love for life in general and those around you.

A 70 year old woman from East Hartford, Connecticut put it more succinctly: “no longer interested in men or anyone in that way.” On the other hand, younger people may identify as asexual despite having some sexual or romantic feelings, or engaging in sex, per this 23 year old woman from Michigan:

I am asexual but have sexual relations with who I love/am in a relationship with. I do not have sexual urges though.

Like any other identity, asexuality is defined socially, based on the labels and norms of a peer group. These expectations change with age, and for a 23 year old American woman today, lacking sexual urges is notable, while for a 70 year old, it may not be.

Interestingly, some young respondents identify as both asexual *and* as bi- or pansexual.[[2]](#footnote-22) This can be confusing to those of us who think of sexuality in terms of a simple knob, with “gay” at one end, “straight” at the other end, and “bi or pan” somewhere in the middle. In the 1940s, pioneering sexologist Alfred Kinsey and his collaborators came up with just this model, which came to be known as the Kinsey Scale. To this day, it’s often invoked as a counterargument to the idea of attraction being binary, either strictly homosexual or heterosexual (“I’m around kinsey 4 lol,” wrote a 20 year old from Poquoson, Virginia). The Kinsey Scale may be the archetypal “spectrum.”

Although more nuanced than a simple dichotomy, there are many ways in which this model falls short, especially in presuming that everybody can be assigned a number on a one-dimensional scale. Even when gathering their data, Kinsey and collaborators found that they had to define a special off-scale category that they simply called “X”— which today we’d associate with asexuality. The need for this “X” category illustrates a problem with thinking about orientation one-dimensionally: being less attracted to the same sex doesn’t automatically make you more attracted to the opposite sex, or vice versa.

A two-dimensional sexual attraction scale accounts for asexuality more naturally, and doesn’t presume a tradeoff between same-sex and opposite-sex attraction:[[3]](#footnote-23)

This two-dimensional model, like any model, is still incomplete (for instance, it presumes that same and opposite sexes can be clearly defined, which as we’ll explore further in Chapters 8-9, isn’t always the case), but at least it allows us to place an asexual “X” on the map— somewhere near the lower left— rather than awkwardly off it. It also reveals the way asexuality and bisexuality can themselves be regarded as a continuum, ranging from the lower left to the upper right. Describing his position near the asexual end of this continuum, a 39 year old from Moorhead, Minnesota wrote,

I could very easily see myself as registering as either asexual— which is a thing, or possibly pan. It’s not quite as clear cut as all that. I don’t really have a preference, except that I’d rather avoid sex altogether.

A shortcoming of both the Kinsey scale and its more nuanced two-dimensional cousin is that they both assume a person can be pinned down to a fixed point on the map. However, even setting aside daily ups and downs, life is long, and for most people, sexual attraction waxes and eventually wanes; a life is better described as a trajectory than as a fixed point. They way we identify tends to remain more stable than our actual feelings or behaviors, though; this may be due to the way, especially in WEIRD societies, having a stable and consistent model of ourselves independent of time, place, or context is socially valued.[[4]](#footnote-24) Given the stigma of asexuality as a minority identity, it’s unsurprising, then, that many older people with little or no libido don’t identify as asexual, or, indeed, as anything other than “normal”— so, usually, heterosexual.

This presumption of heterosexuality by default also holds for many older women despite non-heteronormative impulses or inner lives, even if unrealized or long-buried. A 67 year old woman from Mohawk, New York reminisced,

I have had sexual relationships with women three times when I was in college, but I don’t know if that qualifies me as bisexual or not? It hasn’t happened since.

In another characteristic comment, a 41 year old woman from Salt Lake City wrote,

I am married and only recently realized an attraction to women, also. Wonder if religion of my upbringing held that part of me back and so I never really experimented.

The frequency with which women, especially, express these feelings when asked anonymously is a topic we’ll return to in the next chapter.

In addition to sexual attraction, the survey also asks questions about romantic attraction. Although they’re often in alignment, sexual and romantic attraction work differently for some people. The breakdown of romantic attraction by age and gender certainly looks very different from sexual attraction.

As with lack of sexual attraction, the numbers converge to roughly 2% for older respondents, but in this case, at younger ages a lack of romantic interest is far more prevalent among men— rising above 10% for the youngest men. Men appear to become more interested in romance as they get older, while women become less so.

Differences like these between younger and older people can be explained in two very different ways: as a effect of the respondent’s age at the time of the survey (which we can call the “age hypothesis”), or as an effect of intergenerational differences (the “generational hypothesis”). According to the age hypothesis, the variations we see are a function purely of the respondent’s age, so if we ran the survey again in 20 years, we’d see the exact same graph. As a 57 year old from Cold Brook, New York put it,

We were once the younger generation and some of us were wild and crazy but not all. In so many ways the different generations are more alike than people want to believe.

It’s hard to imagine this isn’t the case at least to some degree, and for some variables. For instance, declines in sex drive over time must be at least partly due to the biology of aging, and intuitively, it seems likely that young American men have always been more interested in sex than in romance.[[5]](#footnote-25)

The “generational hypothesis,” on the other hand, would hold that each individual’s response to a survey question will remain constant as they age— in which case, if we were to rerun the survey on the same population in 20 years, we’d expect to see the whole graph shifted to the right by 20 years, alongside a new cohort of younger respondents on the left with potentially different answers. This is what we’d intuitively expect from variables we assume measure essential, changeless properties of a person’s body, identity, or personality, such as race, gender, or sexual orientation.

Guesswork aside, though, we can’t disentangle age and generation effects by looking only at the kinds of graphs we’ve seen so far. For this, we need to make measurements over time as well as across ages.

Unfortunately, I don’t have 20 year old survey data— I was barely out of college 20 years ago, and my research interests were very different back then. However, I’ve been working on this project long enough to have been able to run the gender and sexuality survey four times at yearly intervals, in December 2018, December 2019, December 2020, and December 2021. This still covers a relatively short period, and can only give us a local, noisy perspective on trends. Nonetheless, the results are interesting. For variables like height and weight, the data precisely follow the age hypothesis, with the 2018, 2019, 2020, and 2021 curves plotting these variables as a function of age lying right on top of each other. The age distribution over these four years was also virtually identical.

I should note here that Mechanical Turk allows the experimenter to create and assign “qualifications” to workers, as well as offering an option to specify qualification requirements for performing a task. By assigning a qualification to everyone who took the survey in a given year, I was able to screen out those respondents in subsequent years; that is, Mechanical Turk didn’t offer them the survey if they’d already taken it in a previous year. Hence the 2018, 2019, 2020, and 2021 cohorts don’t overlap.[[6]](#footnote-26) Nonetheless, I was able to verify that the basic demographics of respondents were unchanged over these four years, i.e. behaved according to the age hypothesis. While the individual respondents each year were all different, the basic demographics of the population they were drawn from remained (up to my ability to measure it) the same.

So, if we compare heteronormative attraction over these four years, do we observe (a) a pure function of age, or (b) a purely generational change? Or, perhaps, (c) a mixture of the two? For many variables, including heteronormative attraction, the answer turns out to be a surprise: (d), none of the above.

To simplify this comparison, I’ve combined the 2018 and 2019 data into one pool, and the 2020 and 2021 data into another, as well as using coarser age bins. This lets us compare two curves with smaller error bars, rather than four curves with larger ones. We can see that heteronormativity across age ranges is significantly lower in 2020-21 than it was in the previous two years, 2018-19. Incidentally, this suggests another reason the literature tends to overestimate heteonormativity in the US. Since survey data are always historical, their numbers— along with our perceptions— lag reality on the ground. The question is, how fast is that reality changing?

*Any* change over time is incompatible with the age hypothesis, which would hold that lower heteronormativity among the young is just about *being* young (i.e., perhaps experimenting or questioning more, before “figuring it out”). However, the data are *also* incompatible with the generational hypothesis, under which we’d expect the 2020-21 curve to look like the 2018-19 curve shifted right by two years. So, it’s not (a) or (b). What about (c)? That can’t be the case either, because if we were merely seeing a mixture of age and generational effects, we’d expect to see a rightward shift over this period somewhere between the zero years predicted by the age hypothesis and the two years predicted by the generational hypothesis. Instead, the 2018-19 curve would need to shift to the right by *almost two decades* to lie on top of the 2020-21 curve. It’s as if we were looking at a version of the generational hypothesis in which time itself is fast-forwarding by nearly 10x. What could this mean?

For one thing, it means that any preconceptions we might have about the essential or unchanging nature of people’s responses to questions like these— about same- and opposite-sex attraction— are wrong. In fact, it’s very difficult to find questions relating to identity or behavior where the slower shift predicted by the generational hypothesis actually holds. Yes, the youngest people are different from year to year, but older people are changing their answers over time too, presumably in response to a shifting social environment. What we’re seeing is evidence of *social contagion*. While this effect may be strongest among the young, perhaps because their uncertainty, plasticity, or susceptibility to changing social inputs is highest, such changes are evident at all ages.

To return briefly to the previous chapter’s topic, we can see a similar pattern in the shift away from monogamy between 2018-19 and 2020-21 (though here, younger people may be reaching a lower plateau at about 75%; given the error bars, more years of observation will be needed). The shift across this two year gap would correspond to around 15 years’ worth of change under the generational hypothesis. Much like the decline in heteronormativity, the decline of monogamy (we might call it “Morning Glory’s Prophecy”) can be attributed to rises in a number of alternative models, all of which chip away at the historical norm, with the young leading the way.

These effects highlight the power of modern human sociality as a kind of accelerated evolutionary engine. The generational hypothesis can be understood as an upper limit on the speed of genetic evolution, since once we’re born, we’re stuck with the genes we’ve got.[[7]](#footnote-27) In traditional societies, most social learning involves younger people learning from their elders during a period of apprenticeship, as we’ve discussed; while this allows humans to evolve skills and accumulate knowledge in ways that far exceed the bounds of our genetic inheritance, it doesn’t allow us to break the generational speed limit. When we become lifelong learners, though, and especially when older people can learn new tricks from the young, generational turnover no longer limits the rate of cultural evolution. Urbanization, cafes, journals and newspapers, TV, the web, social media, and many other features of modern life seem almost tailor-made to boost cultural evolution both within and across age cohorts.

A comment on evolution is in order here. A survey respondent I quoted at the beginning of this book, both bigoted and perhaps honestly alarmed by this same trend, wrote, “What would happen to a animal species that went gay, I’ll tell you, they would all go extinct.” While my own feeling is that the ongoing human population explosion is a root cause of the greatest current threat to our survival— hence, if most of us did indeed “go gay” (or at least stop reproducing) now, we’d be *improving* our collective odds— there’s a valid observation lurking under the surface here.

Prodigious cultural transmission, together with intense competition between societies at every scale for thousands of years, has certainly boosted human fitness in the Darwinian sense; so much so that we’ve now achieved something like escape velocity from Planet Darwin. With very low mortality among the young and calories freely (perhaps, for many of us, too freely) available, individual survival no longer depends so much on individual Darwinian fitness. Nonetheless, the mechanisms of accelerated cultural evolution are still busily at work, tinkering with our sexuality along with our politics, our languages, our diet, our technologies, and everything else. These forces operate much faster than genetic evolution, and have a far larger palette of tools to work with: consider how long it took genetic evolution to develop bird flight, compared with how long it took us to invent airplanes.

This brings us in a full circle back to the question posed by the previous chapter, of how rational or productive genetic and cultural evolution really are. We’ve already seen the dangers of teleology, and they can cut both ways here, with conservative people often arguing that evolution, typically framed as the “natural world,” is inherently rational because only the fit survive, while cultural evolution, unfettered by the survival imperative, is prone to all sorts of irrational excesses. Those making this argument tend to be reacting to a cultural development they disapprove of, whether recreational drugs, gay nightclubs, or selfie sticks.

From the progressive or techno-optimistic perspective, the emphasis is instead on how we can now engineer rationally, correcting the arbitrariness (and, often, cruelty) of nature by inventing antibiotics, birth control, and perhaps eventually seizing control of our own genome. It would be nice to edit out Huntington’s disease, sickle cell anemia, and other obviously undesirable legacies. This might mark the start of a takeover of genetic evolution *by* cultural evolution!

When one looks dispassionately at these mirror-image arguments, it becomes clear that they both cherrypick “rational” and “irrational” examples based on appeals to personal taste or values. My own sense is that while there’s no real boundary between “nature” and “culture”— an argument I’ll develop in Part III— “rationality” isn’t a particularly meaningful distinction in either case. Arguing that cultural evolution is always “rational” neglects the overwhelming number of cultural developments that really can’t be said to serve some grand purpose. But the same is true of genes. Though genetic evolution is much slower, the idea that in other species it works more “rationally” is flawed, or much of the strangeness, beauty, and impracticality of nature— its orchids, sea dragons, and peacock tails— would be far more utilitarian. And that would make the world a more drab place.

1. A 27 year old woman. [↑](#footnote-ref-21)
2. Pansexuality is a more recent term for attraction to all people regardless of gender. [↑](#footnote-ref-22)
3. Something close to this idea was also proposed in 2019 by Anne Hale, Lindsay B. Miller, and Jason Weaver in their paper *The Dual Scales of Sexual Orientation*, in the Journal of Bisexuality, 19:4, 483-514. [↑](#footnote-ref-23)
4. Ref Joseph Henrich, WEIRD. [↑](#footnote-ref-24)
5. As these examples hopefully make clear, the age hypothesis *doesn’t* imply that individuals are all the same; they vary, and for an individual, there may be strong correlations over time. For instance, someone who is tall for their age at 18 will probably still be tall for their age at 80. [↑](#footnote-ref-25)
6. “Cheating” is possible. Workers are anonymous and can make up multiple identities, using them to bypass this mechanism. I didn’t find evidence of this occurring any statistically significant number of times, though. Workers on Mechanical Turk generally unlock tasks by acquiring qualifications, reaching milestones, and earning good reputations, which tends to disincent switching identities. [↑](#footnote-ref-26)
7. In reality evolution is much slower, since there are also limits on how much a generation can differ genetically from the previous one. [↑](#footnote-ref-27)