

# Studying Human Sexuality: Biological or Social?

Waseda University, SILS,  
Science, Technology and Society (LE202)

# A case study of the social and political nature of science

Human sexuality is a topic that makes many people uncomfortable and about which most people have both preconceived ideas and little evidence.

Moreover, *sexuality*, *gender* and *human relationships* are both highly social and political so it is very difficult to be “objective” when studying these things.

- Discussions of gender relations, sexual orientation, sexual appropriateness, etc., are often loaded with terms like *normal* or *natural*, but how do we know what these mean?

When we look at the historical development of scientific and medical approaches to studying human sexuality, we see an interesting case study of the social and political nature of science. Indeed, it is possible to see the social, political and ideological stance of the various scholars reflected in their work.

We are going to use this as an example to explore the **socially constructed nature of scientific knowledge**.

## What Darwin didn't know

- Darwin had no real **evidence** about what sexual relations were like in our evolutionary past, so he extrapolated from what he saw around him in *Victorian England*, and assumed that this was representative of the species.
  - “Judging from the social habits of man as he now exists, and from most savages being polygamists, the most probable view is that primeval man aboriginally lived in small communities, each with as many wives as he could support and obtain, whom he would have jealously guarded against all other men.”
  - “The female ... with the rarest exception, is less eager than the male ... She requires to be courted; she is coy, and may often be seen endeavoring for a long time to escape the male.”
- Despite the fact that Darwin believed humans had evolved as a type of ape, he neither studied the sexual behaviors of apes, nor did he do a comparative study of human sexual behavior.

## What Darwin thought about sex

- Along with *natural selection*, the most important mechanism of evolution, Darwin proposed a secondary mechanism: **sexual selection**.
  - Darwin, *Origin*: “It is certain that amongst almost all animals there is a struggle between males for the possession of females...”
- Sexual selection acts on the development of a species through the mechanism of individuals making choices about their mates based on sexual preferences, which may be physical, social, emotional, behavioral, etc.
  - For example, the coloring of certain birds, or the courtship patterns of certain animals are the result of *sexual selection*.
- In this way, Darwin could argue that the sexual habits of the people he saw around him were the result of sexual selection.
- As usual, Darwin's ideas were “ahead” of his time, but in the 1970s they would be taken up again in sociobiology.

## Krafft-Ebing's theories of sexual dysfunction

- Richard von Krafft-Ebing (1840 –1902) was an Austro–German psychiatrist who became well known for his studies of the psychology of human sexuality based on detailed case studies, published in *Psychopathia Sexualis*, 1886.
- Krafft-Ebing defined “normal” sexual practice as **procreation** and any other act as a “perversion.” He invented many new words for these “perversions”:
  - Paradoxia — Sexual desire at the wrong time of life
  - Anesthesia — Insufficient sexual desire
  - Hyperesthesia — Excessive sexual desire
  - Paraesthesia — Sexual desire for the wrong goal, e.g. homosexuality, sexual fetishism, sadism, masochism (in men), bestiality, paedophilia, etc.
- He considered women to be sexually passive and recorded no cases of sadistic or fetishistic women.
  - However, a woman masochist was not classed as a deviant because her behavior did not prevent pregnancy.

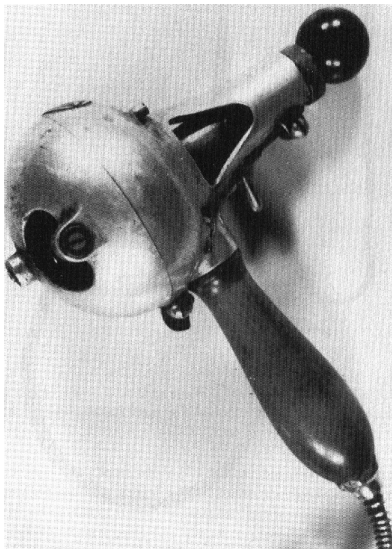
# Hysteria

- Since ancient times, Western doctors had diagnosed a condition in female patients that they called *hysteria*, with the following vague grouping of symptoms: anxiety, sleeplessness, irritability, nervousness, erotic fantasy, swelling in the pelvis.
- In the late 19th century, there were various theories about what was causing hysteria, but as a treatment, patients were generally either given genital massages, or told to have sex with their husbands. In the case of genital massage, this was done until the patient experienced “hysterical paroxysm” or “convulsions.”
- Because 19<sup>th</sup> doctors thought of women as having no sexual feelings, they regarded this practice as purely medical and the “paroxysm” as a purely nervous reaction.
  - Krafft-Ebing: “Woman... if physically and mentally normal, and properly educated, has but little sensual desire.”

## The electric vibrator

- The electromechanical vibrator was invented in the 1880s by a British physician to save himself the trouble of manually massaging his hysterical patients. [Movie: *Hysteria*, 2012]
- Originally, treatment was administered at the doctor's office. This was a lucrative business, because "hysterics" required periodic treatment.
- By 1905, portable versions were available, with an array of "vibratodes," that could be used on house calls.
- In the 1910s, the vibrator began to be marketed as a home appliance in various women's magazines.
  - One ad read: "All the pleasures of youth... with throb within you."
- In the 1920s, the vibrator disappeared from public view. This may have been due to a greater understanding of female sexuality by physicians. Starting in the late 1960s, the vibrator was again marketed, now as a sex toy.

## An early 20<sup>th</sup> century vibrator





[illegible]

# Neurasthenia

- In the 19<sup>th</sup> century, a new nervous disorder, *neurasthenia*, was recognized in various countries, which primarily affected men.
- Like hysteria, it was a vague disease with a range of symptoms such as paleness, loss of appetite, forgetfulness, melancholy, low work efficiency, and weakening of the body and mind.
- The causes were unknown but they were thought to include masturbation, “sexual immorality” (esp. homosexuality), sexual abstinence and overwork.
  - It was noticed in Germany in the beginning of the century and subsequently in other countries.
  - An American, George Beard, named it neurasthenia and referred to it as the “American disease.”
  - For Japanese physicians, the rise of cases of neurasthenia (神経衰弱) was taken as an unwelcome indication that the country was modernizing.

## Freud's theories about sex

- Sigmund Freud (1856–1939) has been highly influential on modern ideas about sexuality. *Three Essays on the Theory of Sexuality*, 1905 (80 pages), 1925 (120 pages).
  - In “The Sexual Aberrations,” he argued that hysteria, neuroses, and other psychological problems arise from perversions of the sexual object (who) and the sexual aim (what).
  - In “Infantile Sexuality,” he argued that “children are born with sexual urges, which undergo a complicated development before they attain the familiar adult form.”
  - In “The Transformations of Puberty,” he discussed the difference between childish sexuality – innocent and focused on “fore-pleasure” – and adult sexuality – experienced and focused on “end-pleasure.”
- Freud argued that human sexuality is **molded and repressed by social factors**. He claimed that there is no fundamental difference between “normal” and “perverse” sexual impulses – the difference lies in how these are expressed.

# Suffragettes, birth control and eugenics

- In the early part of the 20<sup>th</sup> century, the technologies of birth control entered into the politics of women's liberation and racial selection (eugenics).
- A number of the suffragettes, such as Margaret Sanger (1879–1966), Marie Stopes (1880–1958), Shidzue Katō 加藤シツエ (1897–2001), became involved in birth control and abortion issues as part of the overall scope of **women's rights**.
- They advocated the use of birth control as a way to give women more *political* freedom, but they were not advocating *sexual* freedom.
- “Every normal man and woman has the power to control and direct his sexual impulse. Men and woman who have it in control and constantly use their brain cells thinking deeply, are never sensual.”



*Mrs. Margaret Sanger, the great birth control advocate, and her two sons*

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**PART OF CONTENTS**

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The Struggle for Freedom	of Domesticity
Two Classes of Women	Contraception or Abortion
Importance of Unwanted Large Families	Are Prevention means capital?
Gloss of Despair	Regulation of Unwanted Babies
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# Medicine takes on birth control: IUDs and the Pill

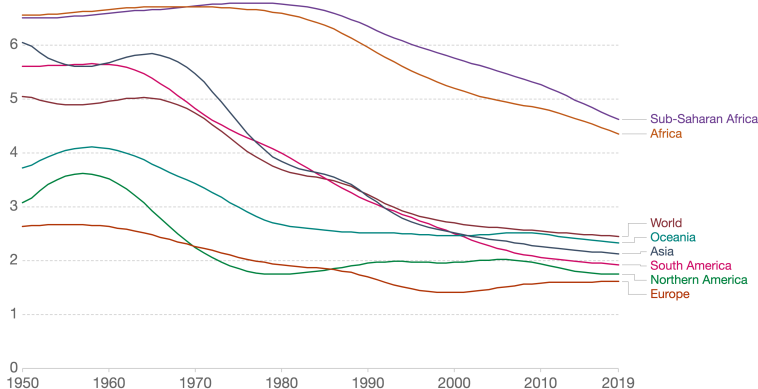
- In a period when sex and sexuality were still taboo, it was only the social authority of the medical establishment that could give legitimacy to the development of birth control.
- In the late 1920s, Dr. Ernst Gräfenberg developed the first intrauterine device (IUD). But this requires a minor a medical procedure to insert it, and it was not widely available.
- In 1951, Margaret Sanger persuaded Dr. Gregory Pincus to begin research on the use of sex hormones to develop a “universal contraceptive” that could be of use to all women. This research led to the first contraceptive pill.
  - The pill, however, also has a limited range of effectiveness: (a) there must be a health-care infrastructure, (b) the user must be accustomed to prescription drugs, (c) the user must be “free” to negotiate the use of contraceptives.
- Nevertheless, in developed countries, the pill is widely seen to have given women more control over their private lives.

# Total fertility rate by region

## The total fertility rate by world region including the UN projections through 2100

Our World  
in Data

Total Fertility Rate is defined as the average number of children that would be born to a woman over her lifetime if the woman were to experience the exact current age-specific fertility rates, and the woman were to survive from birth to the end of her reproductive life.



Source: United Nations – Population Division (2019 Revision)

[OurWorldInData.org/future-population-growth/](https://OurWorldInData.org/future-population-growth/) • CC BY

## The Kinsey reports

- In the 1940s-50s, Alfred Kinsey (1894 –1956), an American zoologist, began to study human sexuality as a purely biological function. *Sexual Behavior in the Human Male*, 1948, and *Sexual Behavior in the Human Female*, 1953, known as the The Kinsey reports. [Movie: *Kinsey*, 2004]
- Kinsey defined sexuality as both physical contact as well as purely psychological. He noted that it is prone to change over the course of an individual's lifetime.
- Kinsey argued that sexuality is *shaped*, not merely repressed, by *social norms*.
- Kinsey's work was based on face-to-face interviews.
  - Is there any reason why people might not be completely truthful about their sexual activity in an interview? (Example: He found that men have more heterosexual sex encounters than women – a mathematical impossibility.)

# The Hite report

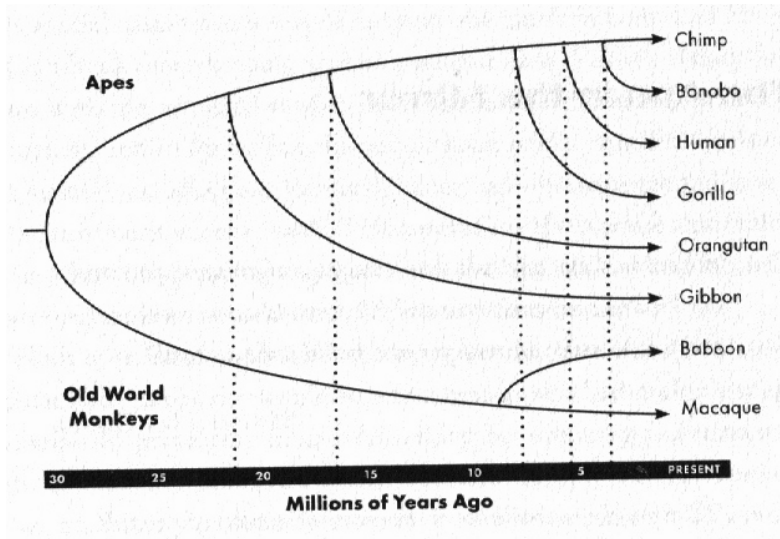
- In 1976, Shere Hite (1942–) published *The Hite Report on Female Sexuality*.
- This study focuses on how individual women regard sexual experience and the meaning it holds for them.
- Hite, a feminist, argued that many of the **definitions** used by scientists studying sexuality had been constructed by men.
  - She claimed that the majority of women experience sexuality in a way that is different from men, and hence female sexuality should be studied as an independent field.
- Of the women questioned, 98% reported dissatisfaction in their marriages, and 75% reported having had extra-marital affairs.
- The report has also been criticized for its methods. The data was collected by anonymous questionnaires. There was only a 4% return rate on the questions.

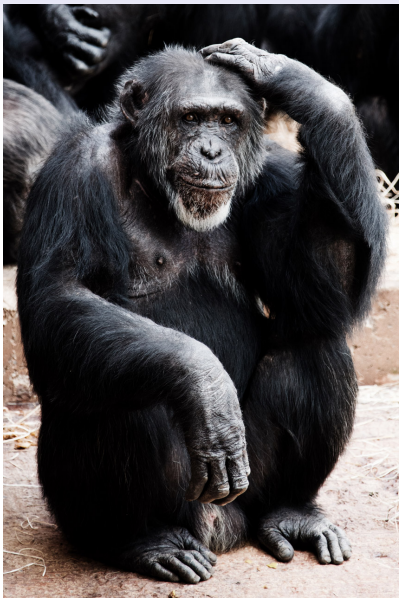


## Humans as a type of ape

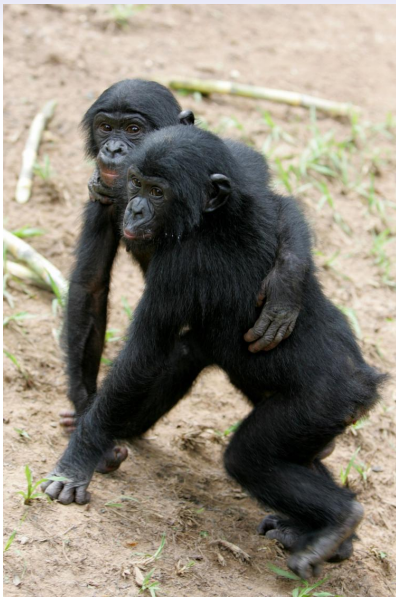
- In the 1960s-70s, scientists began to draw parallels between humans and other members of the ape family. The basic idea was to simply regard humans as one ape among others and to try to understand human traits as determined by our biological nature.
- In the 1960s, Jane Goodall observed that chimpanzees share a number of traits with humans: cooperative hunting, tool use, organized “warfare,” power struggles involving coalition-building, etc.
- In 1967, Desmond Morris (1928–) published a popular book called *The Naked Ape*, which looked at the human species as a type of ape.
  - He argued that we are distinguished from the other apes in our habit of *pair-bonding*, but he never asked if this were universal.
- In the 1970s, primatologists began to study bonobos, which have matriarchal social structures, do not appear to fight much, and settle their social problems through sex.

# The ape family





A chimp



Two bonobos

# Sociobiology

- The term was popularized by E.O. Wilson in *Sociobiology: The New Synthesis*, 1975.
- Sociobiology takes an evolutionary perspective on human behaviors and argues that (a) certain behaviors are due to inherited traits, (b) these will have been effected by natural selection, hence (c) they were probably adaptive in the evolutionary past.
- Sociobiologists focus on similarities, rather than differences, between individuals in different human cultures and argue that these similar traits were selected for in the evolutionary past.
- Because human sexuality has obviously been a major factor in sexual selection, sociobiologists have developed a model of human sexuality.

# Sociobiological model of human sexuality

- A potential couple assess one another's **mate value** from different perspectives:
  - A male looks for signs of youth, fertility, health, absence of previous sexual experience and likelihood of future fidelity.
  - A female looks for signs of wealth (or the potential for future wealth), social status, physical health, and likelihood that the male will be able and willing to stay and protect and provide for their children.
- If they meet each other's criteria, they mate, and form a *long-term pair-bond*. (How long term?)
  - The female is sensitive to signs of her mate forming **emotionally** intimate relations with other women, while occasionally (especially when ovulating) having a quick fling with a genetically "superior" man.
  - The male is looking for signs of his mate's **sexual** infidelity, which would reduce his certainty that the children he is raising are, indeed, his own, while often seeking short-term sexual encounters with other women.

## Issues with the sociobiological model

- The standard model is meant to give a scientific explanation for “normal” human sexuality. How normal is this? What is our evidential basis? How does this model account for “abnormal” behavior?
- The standard model attempts to give scientific justification to limited heterosexual monogamy, which is considered to be mainstream in the societies in which modern sociobiologists live and work. To what extent are their social views shaping their concept of what is “normal” or “natural?”
- The most glaring **issue** with the standard model is that it attempt to give *scientific justification* to a fairly small set of human sexual behaviors.
  - If this narrow set of behaviors is the really the result of natural and sexual selection then it must be a key component of “human nature.” How then it is possible that so many people are living contrary to their nature?

# New Approaches

- In order to address these issues, we need to look at two fundamental issues: (1) how do we extend our evidential basis? and (2) how do we acknowledge and handle the *essentially* political character of any approach?
- What constitutes human sexuality?
  - (1) People are likely to lie about their sexual behaviors; (2) people are likely to be in “ignorance” of their behaviors; (3) the behaviors of one society are not representative of all societies; (4) the behaviors and views of one historical period are not representative, etc.
- What is “normal?”
  - The assumption of normalcy generally implies a *judgment about right and wrong*. Without a strong evidential basis, this is almost always a **political** judgment. This means we have to be extremely cautious about making arguments based on what we think is “normal.”

## New Approaches

- From 1976–1984, Michel Foucault (1926–1984) published three volumes of his *History of Sexuality*, arguing that sexuality is essentially *socially constructed*, has changed over time and is closely associated with political power.
- Starting from the late 1970s, various zoologists began to reassess the social and sexual behaviors of chimpanzees and bonobos.
- Anthropologists are producing a growing body of data about the sexual behaviors of pre-industrial and pre-agricultural human societies.
- Psychologists are developing experimental techniques to try to overcome the tendencies of “human error” in collecting data about sexual behaviors.



## New behaviors and new norms

- One of the biggest changes to take place in the behaviors of human sexuality in the post-war period was the so-called sexual liberation, which started in the 1960s, and perhaps continues to now.
  - The normalization of contraception and the pill, premarital sex, homosexuality, masturbation, alternative forms of sexuality, pornography, and the legalization of abortion.
- Starting in the 21st century, the proliferation of the internet and the dating apps also began to significantly change people's sexual behaviors.
  - Simple access to pornography without age restrictions; sexual relationships with people outside of, and unknown to, one's social group; sharing of sexual images, which are sometimes then distributed without consent.
- Dating apps collect data on their users and sell this to 3rd-party companies and researchers.
  - This has allowed for study on users' preferences.
  - There have also been hacks and data breaches.

## Social Construction

We notice that the views of scholars like Darwin and Kinsey are radically different with regard to the nature of human sexual behavior. There are two main reasons for this: (1) the assumptions and prejudices that they bring to their work are different, and (2) the evidential basis of the object under study is different.

Hence, in the case of the social sciences, because of the socio-political nature of the objects under investigation, both the fields of study and the objects investigated are produced by social construction. Socio-political forces (1) inform the assumptions and outlooks, methods of the practitioners, and (2) they change the very nature of the subject under investigation. Indeed, this change often occurs in response to contemporary theories. (Darwin and Kinsey assumed that human sexuality was fundamentally different and the actual sexual behavior of the subjects they studied was almost certainly different.)

## Interactive, indifferent or both?

- In the previous lecture, we encountered Hacking's indifferent and interactive kinds.
  - Indifferent kinds are indifferent to any discourse about them. They may react to the way we intervene or measure (such as microbes, or photons), but they do not react to classifications and discourses.
  - Interactive kinds, being composed of human actors, are influenced, perhaps even coerced, by the discourses about them. We are affected by the way we are conceived of and described, both by ourselves and by the networks in which we live.
- Is sexuality an interactive kind, an indifferent kind, or both? It seems that this may be a more complicated type of kind, involving an interaction with various interactive kinds and underlying indifferent kinds that are both quite varied and also, perhaps, changing over time.

## Final Remarks

- We have looked at the theories of a number of scholars who have addressed human sexuality.
- We have looked at some of the changing medical and scientific ideas of what constitutes the “normal” and “pathological” in sexual behavior and we have seen that these change from place to place and from time to time.
- We have looked at some of the social and political forces that have lead to actual changes in sexual behavior in the 20<sup>th</sup> century.
- We have confronted the fact that both human sexual behaviors and the study of these behaviors are thoroughly socio-political despite the fact that they are closely related to our biological existence.
- This forms a clear example of the social construction of scientific knowledge.