

Philosophizing about Sex

Ronald de Sousa

VIC ONE Feb 4 2009



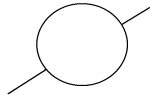
Plan:

1. What's "Philosophical"?
2. Two Domains of Sex: Dimorphism and Eros
3. Sex, gender, and Biology
4. Can we tell "What Nature intended"?
5. Erotic Sex, good and bad:
 - Sexual norms are not "what nature intended."

2

1. What's Philosophical? (one view)

- The vision of religion, and the rigour of science.



- By changing the caption, change the picture.
- People slot themselves into conceptual prisons
- Seeing the possibility of a "rainbow" of sex may change our conceptions of self and world.

3

2. Two domains of sex:

- Sex as dimorphism, as in "sex and gender"
- Erotic sex: "having sex"; "sexual desire."

4

Some typical philosophical questions

- What do we *mean* by sex?
- What is the *justification* for recognizing just two sexes?
- How does nature relate to norms?
 - Is whatever is natural normal?
 - Is whatever is normal good?
 - Is whatever is good moral?
- **THESIS: Quit thinking Nature=Good.**

5

3. Sex, Gender and biology

- Sexual reproduction is a **minority** "choice".
- It's **risky**: every new organism is new.
- It's **costly**: it takes two to make one.
- Its **advantages** are still debated.
 - Promoting diversity, useful when things change;
 - Fighting an "arms race" with parasites.

6

The net effects of sexual reproduction:

- to promote **complexity**
- **To guarantee the death of individuals**
- But don't forget that most living things by far are unicellular organisms.

7

Four linked features of metazoans

- Differentiated multi-cellular organization
- Segregation of sexual and somatic cells
- Sexual reproduction; and
- Death of all individuals
 - Only unicellular organisms have (potentially) eternal life....
- Cellular aggregation requires **cooperation**.

8

Cooperation involves division of labour

- Somatic cells take care of the individual life of the multicellular organism
- Sexual cells just have the job of preserving the identity and identity of the genes.
- Nothing that affects the organism in its lifetime affects the genes in the sex cells.
 - (this is the "fundamental dogma" of genetics)

9

DoL condemns individuals to death

- Individuals are "vehicles" that transmit the genetic information protected in the sex cells.
- They are therefore expendable
- The only somatic cells that are, like sex cells, in principle immortal are cancer cells.
- Cancer cells ignore signals to commit "cell suicide" (apoptosis).
- **Why does any of this require just two sexes?**

10

Strictly speaking, it doesn't.

- Some organisms change sex in the course of their lives.
- Others come in more than two sexes.
- Yet others are isogametic (as opposed to having 2 types of sex cells, big and small).
- In heterogametic species, a complicated cascade of processes generates two typical organism types we call "male" & "female".

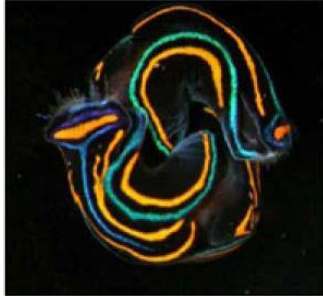
11

So how many sexes are there?

- Sex (biological) vs gender (psycho-social)
- Are just 2 sexes linked to 2 genders?
 - Two sorts of gametes: large and small.
 - Two sex-related chromosomes: XX, XY
- These don't actually explain much:
 - The sex ratio at conception is not exactly 1:1
 - There are enormous complications

12

First complication: hermaphroditic organisms



13

Twelve steps to "dimorphism"

1. **Gametic sex:** Large-small polarization form an ESS (evolutionary stable strategy).
 - This is sometimes said to spread dimorphism by extending from species to sexes.
 - But in the animal world as a whole, there can be any amount of variation.

14

More factors largely relevant to sex:

2. **Chromosomes** (hetero-, homogametic: XY, XX).
 - But male birds, for example, are homogametic: by Olympic standards, male birds lay the eggs.
 - There are XXX's, XYY's, "male" XX's, "female" XY's....
3. **Fetal hormones** (acting on the fetus, but also originating from the fetus)—partly determined by chromosomal sex, but able to fall out of step.

15

4. **External anatomy** (controlled first by fetal hormones). Can fail to match chromosomal sex.
5. **Gonadal sex (internal functional-anatomy:** ovaries, uterus). Doesn't always match (4).
6. **Physiological reproductive functions** (ovulation, menstruation, lactation, erection, ejaculation). Can also come apart from previous and following factors.
7. **Hormonal factors in adolescence** affect the next items but can vary in terms of environment and effectiveness

16

Factors largely relevant to gender:

8. **Secondary sex characters:** beard, voice, breasts....
 - variable, depending on levels of hormone receptors and receptivity and other factors
9. **Social roles** in partnership, childraising
 - highly dependent on cultural factors,
 - Implying deep differences in emotional dispositions.

17

Politically significant determining factors

10. **Social roles:** "glass ceiling", etc.
 - Often attributed to emotional differences (unwillingness to sacrifice family life, etc.)
11. **Gender identity** and style
 - Paradoxical: formed by 18-24 mo, far earlier than awareness of actual sex differences.
 - Fails to match sex identity (e.g. cross-dressing: independent of sex identity and orientation.)
 - Attested by the strength of transsexual's insistence on the claim that they are stuck in the "wrong sex".

18

12. Sexual Orientation

- Not invariably tied to any of the other factors.
- A model – because of its history of being regarded as “deviant” – for considering the status of intersex persons.
- In civilized societies, we have already understood that statistical prevalence of heterosexuality doesn’t entail normative force.
- . . . On the contrary:

19

“Deviance” is likely more authentic.

- The difficulty of homosexual life – in all but rare recent liberal societies – guaranteed that “deviant” sexual orientation is the more reliably authentic.
- Similarly, the difficulty of intersex life, sex changes, etc. guarantees that deviant sexual identity is more reliably authentic than “default” sexual identity.

20

The five sexes (or more)

(A Fausto-Sterling, *Sexing the Body* 2000)

- A. Fausto-Sterling: 5 stages on continuum.
- Based on gonadal & external anatomical sex:
 1. Male: testes and penis
 2. Female ovaries and vagina
 3. True hermaphrodite (1 testis+1 ovary)
 4. “Merm”: testes, some fem. genitalia, no ovaries
 5. “Ferm”: ovaries, some male genitalia, no testes.

21

The case of Lynn Edward Harris

- True hermaphrodite at birth
- “Assigned” to “female”
- Formed male 2^{dary} sex characteristics
- Successfully sued at the age of 33 for a birth certificate registering him as “Male”

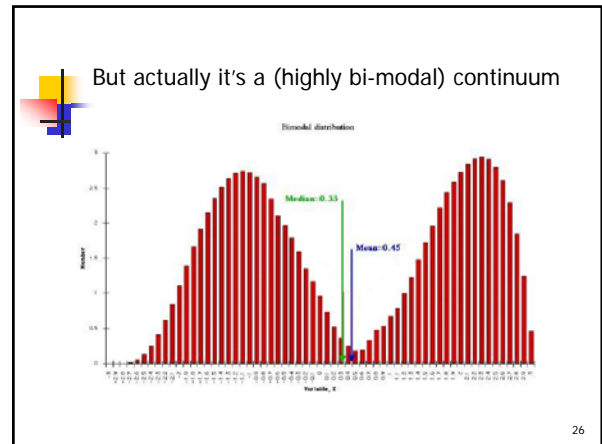
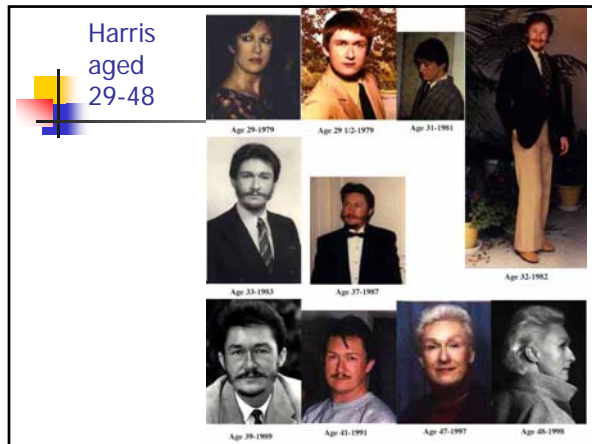
22

Harris in early life



Harris aged 17-28





- How much does this matter?
- According to critic Leonard Sax, true intersex—on a narrow definition—is “less than 0.02%”
 - **But that's some 60,000 in N. America.**
 - In most cases, these people are forcibly “reassigned” to M or F.
 - This condemns many to a miserable life.

- How many genders are there?
- Sexual dichotomy seems to support gender dichotomy.
 - But strict sexual dichotomy is a myth.
 - It therefore gets cultivated and enforced.
 - (NB: no one **enforces** the law of gravity)

4. Can we tell “what nature intends”?
-
- For Aristotle, each natural object O has a natural function.
 - You discover it by watching the effects O has “always or for the most part”.
 - Thus you read off Nature’s “intentions”.
 - And you can then **help Nature along**.
 - (The rationale for “norms” of both sorts.)

- That’s the way Aquinas argues:
- “ ‘vice against nature’: every venereal act from which generation cannot follow”
 - Entails enforceable standards proscribing “unnatural”masturbation, homosexuality, etc.
 - But **evolution is not providence**. It cares nothing for the individual, society, or species.
 - Its effects benefit only genes.

The "natural" has no evaluative force.

- Arguments from nature are never better than the airline passenger's in Gardner Rea's (*New Yorker*) cartoon:



"No, thank you. I don't think nature intended us to drink while flying."

After Darwin, Aristotle's scheme fails.

- It assumes fixity of species: the natural is also what is normal.
- It assumes that nature works *for us*, or that there is some intrinsic value in the natural.
- But every biological innovation on the road to *homo sapiens* was once an exception.

32

If all your ancestors had been normal, you would be an ameoba.

- Each step on to *homo sapiens* was a rare genetic change.



We all descend from millions of freaks.

33

So the issue for us is:

- Not: is it "natural"?
- Not: is it the most common?
- Not: is there some natural process that fosters it?
- BUT: should we value it? Is it compatible with our ethical ideal of fundamental equality of claims and rights?**

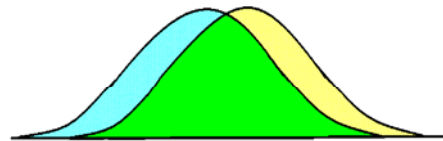
34

That goes for both aspects of "sex".

- The dimorphism of sex is actually a statistical fact based on bimodal distributions of a number of factors that vary continuously.
- "Essentialism"--making the resulting gender differences into norms--requires justification.
- It entails painful discrimination against the "untypical".

35

Sex dimorphism is really just mild bimodality



In sex and gender characters the overlap is vast.

36

Groups you belong (or don't belong) to:

- Blue-eyed people
- People whose name begin with a K
- Canadians
- Kind or cruel people
- Chess players
- Philosophers
- Readers of Homer
- Tall people
- Women or men
- How is a fact about "my" group a fact about me?

37

- I'm already where I am regardless of where the other members of my group may be.
- I need to make an additional effort to *identify* myself with the group.
- (Actually I don't even have to belong to it.)
- But why make that effort, and how do we pick the group we identify with?

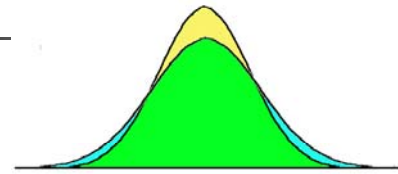
38

Compare: the novelist who "uses" me.

- My friend "put me in his novel", under a different name. I complain that he's maligned me.
- But if I'm **not like** that character, then shouldn't I conclude instead that **the character is not me?**
- If there are subtle satiric intentions, or evidence that he meant me but really got me wrong....
- But that can't be so with the bell curve for my group.

39

On some things, one sex has a flatter curve



- The tails are longer on both sides.
- We're all most likely to be in the green zone.
- It's absurd to identify with "blue" or "yellow".

40

Non Human Transsexualism: the Bat Bug



- Male bat bugs inseminate by direct piercing of the female's abdomen
- As a defense, females develop imitation penises.
- Males, in turn, develop the female ("imitation") form for protection against piercing by other males.
- In turn, 84% of females developed the male "imitation" form of the female genital!

41

"Males ... evolved the female defensive genitals. As this reduced the amount of penis damage they were getting, females evolved the male version of the female genitals."

(from "Bat bugs turn transsexual to avoid stabbing penises", *New Scientist* Sep. 21 2007)

42

5. Norms and normal in erotic sex

- The starkest illustration of the irrelevance of nature's "norms":
- **There is a good sociobiological case to be made for the biological normality of rape.**
- Responses to this have confused nature's norms and ours.
- (Perhaps a theological vestige?)

43

Again, essentialism distorts self-conception

"Suppose a particular woman desires sex more often than her husband. **If this is a typical pattern** that characterizes most relationships, **she should probably accept** her greater desire as a standard fact of life.... In contrast, **if the typical pattern is the opposite** (greater desire among husbands), then **she may more appropriately wonder why her situation is different**. Undoubtedly the worst outcome is if a woman reaches a self-critical view based on a false understanding of what the **actual norms and typical patterns** are such that she thinks something is wrong with her..." [Baumeister 2001]

44

But why should I care what "most" do?

- **The statistically normal is not a norm.**

45

Almost as provocative as 'rape is natural'

- Sociobiology (or "Evolutionary Psychology") predicts that "mild polygyny" is to be expected to go with "mild dimorphism".
- In the plain English of William James' dream:
Woman is monogamous
Hogamus Hogamus
Hogamus Hogamus
Man is polygamous

46

It's not clear which is more annoying:

- The implication that men have a Darwinian excuse for being sexual cheaters,
- Or the implication that women can't give as good as they get in the adultery game.

47

Research suggests that perhaps they can

"If women do experience oestrus, this would explain why in the most fertile phase of their cycle they also seem to prefer partners with "good genes", such as taller men and those with more masculine or dominant behaviour. Outside their peak fertility they prefer men with traits indicating willingness to invest in child-rearing - even if this means the man might be raising another man's child." (New Scientist, Sept 15 2007)

48

"Sperm wars" and what they mean

"It has been called sperm, semen, ejaculate, seed, man fluid, baby gravy, jizz, cum, pearl necklace, gentleman's relish, wad, pimp juice, number 3, load, spew, donut glaze, spunk, gizzum, cream, hot man mustard, squirt, goo, spunk, splooge, love juice, man cream, and la leche."

- Camille Paglia comments "What mesmerizing vernacular poetry!" <http://tinyurl.com/as3utx>

49

The Kamikaze Sperm Hypothesis

- Like bat bugs, spermatozoa have evolved to deal with sex conflict – in the vagina.
- Different sperm shapes perform differently
- Some may be unsuited to fertilizing, instead functioning to block sperm from other males.
- Hypothesis: this evolved in response to expectations of multiple couplings. (Baker & Bellis '95)

50

Unconscious emotional drives

- Monogamy is a "societal norm".
- But polyandry favoring "sperm wars" may be a biological "norm".

"a female, by soliciting copulation with her partner at infertile stages of her cycle but with the most favored male at the most fertile stages, could contrive to retain her partner's services as a parent while having offspring with the more favored male" (Baker & Bellis 1995, 151)

51

Some evidence:

"There is a significant positive association between EPC [extra-pair copulations] incidence and probability of conception (P=0.018)"

(Baker & Bellis 1995, 161).

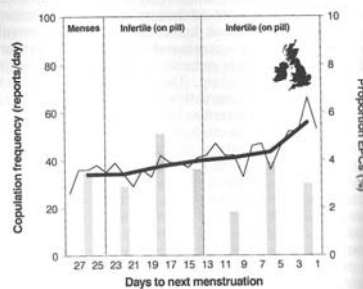
52

On the pill

[gray bars=Extra-Pair Copulation frequency]

Box 6.10 The timing of in-pair (IPCs) and extra-pair copulations (EPCs) in relation to fertility during different phases of the human menstrual cycle

When females take oral contraceptives there is, of course, no peak of fertility during their 'menstrual' cycle. They copulate more with their partners (IPCs) later in their cycle and EPCs are not significantly more frequent before day 16 than after (P = 0.233).

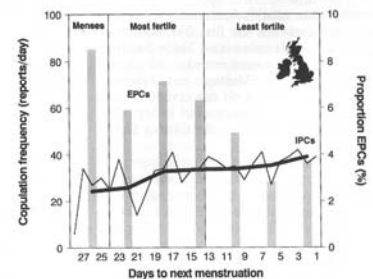


Off the pill

[gray bars=Extra-Pair Copulation frequency]

Females not taking oral contraceptives copulate more with their partners (IPCs) during the infertile luteal phase but more with extra-pair males during the fertile pre-ovulatory phase. There is a significant positive association between EPC incidence and probability of conception (P = 0.018).

Conception data from Jochle (1973; Table 2). USA copulation data from Udry and Morris (1977); UK data expanded from Bellis and Baker (1990).



Is there a common-sense explanation?

- The emotion gives us an intuitive sense of understanding the behavior.
- But that just shifts the need for explanation: Why do EPC's have the greater emotional urgency?
- On the basis of the objective concept of natural function, there is an objective biological value here, disjoint from the "social norm" of our culture.
- The intensity of sexual emotion constitutes "enforcement" of that discrepant value.

55

Conclusion

- Taking stock of what it means to be evolved animals:
- Nature has "designed" us craftily, but...
- not "for the best" for individuals of society.

56

Some morals:

- On sex, we often start with what OUGHT to be, and and deplore the way they ARE.
- You can't just "infer ought from is".
- But you can decide what ought to be **in the light of facts**.
- And the crucial facts are:

57



58

Some references:

These slides:

www.chass.utoronto.ca/~sousa/vicone.slides.pdf

- tinyurl.com/am2ayn [Humboldt U, DE]
- Soble, Alan, ed., *Sex from Plato to Paglia: a Philosophical Encyclopedia* (2005)
- Einstein, Gillian (ed.) *Sex and the Brain*
- Fausto-Sterling, Anne, *Sexing the Body* (2000)
- Robin Baker, *Sperm Wars* 1996.
- Bat Bugs, human oestrus: *New Scientist*, Sept 15, 22
- Camille Paglia: tinyurl.com/as3utx
- **MY WEBSITE:** www.chass.utoronto.ca/~sousa

59